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SYNTHESIS AND ASSESSMENT REPORT ON THE GREENHOUSE GAS INVENTORIES SUBMITTED IN 2007

Note by the secretariat

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I. MANDATE

1. The Conference of the Parties (COP), by its decision 19/CP.8, adopted the revised guidelines for the technical review of greenhouse gas (GHG) inventories from Parties included in Annex I to the Convention[1] (Annex I Parties) to be applied from the year 2003. It also determined that the revised reporting guidelines on annual inventories adopted by decision 18/CP.8 should be used for the inventory beginning in 2004.

2. The COP, by its decision 13/CP.9, completed the tables of the common reporting format for reporting on the Land Use, Land-use Change and Forestry (LULUCF) sector and decided to use these tables for a trial period covering inventory submissions due in 2005.

3. The COP, by its decision 14/CP.11, updated the UNFCCC reporting guidelines on annual inventories[2], including the revisions to the tables of the common reporting format for reporting on the LULUCF sector and decided that Annex I Parties shall use these tables for the purpose of submission of the annual inventory due in and after 2007. For the inventory submissions due in 2007, Parties used the updated UNFCCC reporting guidelines adopted by decision 14/CP.11, however some Parties continued to use the tables of the common reporting format included in decision 13/CP.9 (FCCC/SBSTA/2004/8).

4. As part of the inventory review process, the COP, by its decision 19/CP.8, requested the secretariat to conduct an annual synthesis and assessment of GHG inventories for all Annex I Parties. The purposes of the synthesis and assessment are to facilitate the consideration of inventory data and other information across Parties, and to identify issues for further consideration during the reviews of individual inventories. The synthesis and assessment is to be prepared in two parts. Part I is to provide information to allow comparisons across Annex I Parties, as well as descriptions of common methodological issues. Part II is to provide a preliminary analysis of individual Annex I Party inventories, in particular to identify outstanding issues requiring clarification during the individual review stage of the process.

5. In accordance with decision 19/CP.8, Part I of this synthesis and assessment report has been sent to Parties for comment prior to publication on the UNFCCC web site. Part II will be sent to the respective Party for comments and, together with the comments from the respective Party, will be provided to the corresponding expert review team as input for the individual review; Part II will not be published on the UNFCCC web site.

II. COMPARISON OF GHG INVENTORY INFORMATION

A. Approach

6. This document contains Part I of the synthesis and assessment report, covering the 2007 submissions of the national GHG inventories of Annex I Parties, in accordance with the UNFCCC reporting guidelines adopted by decisions 14/CP.11 and 13/CP.9.

7. This document covers only the inventory information submitted in the CRF in the 2007 submission. It does not cover information contained in the national inventory reports, or information contained in inventory submissions from previous years. Information in this document is not intended as a judgment of whether inventory problems exist, but as an indication of potential issues that need to be considered further during the third stage of the review process (individual review) by the expert review teams.

8. The completeness of this report is limited by the fact that only 38 out of 41 Annex I Parties submitted their inventory at the time of the preparation of this report (30 October 2007). Accordingly, this report covers inventories submitted by: Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Estonia, European Community, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, the Netherlands, New

[1] The full text of the guidelines is contained in document FCCC/CP/2002/8.
[2] The full text of the guidelines is contained in document FCCC/SBSTA/2006/9.

Zealand, Norway, Poland, Portugal, Russian Federation, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom and the United States. In this report, the inventory information for Denmark corresponds to the Kingdom of Denmark (Denmark, Greenland and Faroe Islands).

9. This synthesis and assessment report contains greenhouse gas inventory information from those Parties, compiled in tabular format. The tables provide comparisons of implied emission factors and activity data as reported in the CRF, data from international sources, emissions, information on methods used and emission factors as reported by Parties in Summary table 3 of the CRF, and other information relating to GHG inventory estimates. Where possible, this information is provided for all 38 Parties for both the base year and for the year 2005. For some categories, however, trend comparisons across all Parties were not possible due to the lack of data or use of notation keys for some or all of these years.

10. The inventory data were analyzed according to the sectors, subsectors and categories specified in the CRF, which correspond to those of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the Revised 1996 IPCC Guidelines) and the *IPCC Good Practice Guidance for Land Use, Land-use Change and Forestry* (hereinafter referred to as the IPCC good practice guidance for LULUCF).

11. To facilitate the analysis of the inventory data, the secretariat considers, for each individual Party, those categories that are *key* in terms of their absolute level of emissions and impact on the trend, applying the tier 1 level and trend assessment as described in chapter 5.4 "Methodological choice – Identification of key categories" of the IPCC good practice guidance for LULUCF and chapter 7 "Methodological choice and recalculations" of the *IPCC Good Practice Guidance and Uncertainty Management*. This identification has been performed at the level of detail recommended in that guidance and includes the LULUCF sector.

B. Explanatory notes to the tables

12. Blank cells in a main table indicate that a Party did not report information for a given category and gas in the appropriate table of the CRF. Where a Party's value is very small compared to that of other Parties, it has been rounded to zero (0.0 or 0.00) for this report. Where a Party reports a zero numerical value in the corresponding CRF tables, a zero value (0) is shown in this report. In some cases, when a Party's value is exceptionally small compared to that of other Parties and the numerical format used for these values is not including decimal places, the Party's value has been rounded to zero (0).

13. Blank cells in a trend table indicate that a Party did not provide information for two consecutive years. Very small positive or negative inter-annual changes are shown as zero (0.0) for this report. When no change of numerical values between two consecutive years (or between base year and the latest reported year) is occurring, the inter-annual change between these years is shown as zero value (0). When there has been a change from notation key to a numerical value or vice versa between two consecutive years or two consecutive years both contain notation keys, the symbol "*" is shown in this report.

14. The differences in activity data between the CRF and international data sources were calculated as percentage deviations from the activity data provided in the CRF. A positive number indicates that the data from the international data source are higher than the data reported in the CRF. Similarly, a negative number indicates that data from the international data source are lower than the data reported in the CRF.

15. References to the base year refer to 1990, except for the following Parties with economies in transition which, in accordance with decisions 9/CP.2 and 11/CP.4, use base years other than 1990: Bulgaria (1988), Hungary (average 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986).

16. Key categories identified by the secretariat's analysis are indicated by "L" for level and "T" for trend assessments in the "key category" columns.

17. The column "Share of national total" in main tables indicates the contribution of that category to the Party's national total of GHG emissions in terms of CO_2 equivalent, excluding emissions and removals from LULUCF.

18. In tables, where shares or contributions of categories, gases, activity data or other parameters to a total are shown (e.g., contribution of specific fuel type to the total emissions of a combustion category), blank cells indicate that a Party did not report information for a given category, gas, activity data or parameter in the appropriate table of the CRF. Where the value of share or contribution is very small, it has been rounded to zero (0.0) for this report. Where a Party reports a zero numerical value for a given category, gas, activity data or parameter in the corresponding CRF tables, its share or contribution is shown as a zero value (0). Where a Party reports a notation key for a given category, gas, activity data or parameter in the corresponding CRF tables, its share or contribution to the total is shown using the symbol "-". Where a Party reports notation keys for two parameters (e.g. implied emission factors) in the corresponding CRF tables, their ratio is shown using the symbol "-".

19. Where Parties used notation keys (NO, NE, NA, IE, C) these have been reproduced verbatim from the CRF tables provided by Parties. The notation keys, as described in the UNFCCC reporting guidelines (FCCC/SBSTA/2006/9), are as follows:

NO	Not occurring	IE	Included elsewhere
NE	Not estimated	C	Confidential
NA	Not applicable		

20. Tables on energy indicate whether implied emission factors (IEFs) given in the CRF are based on gross calorific value (GCV) or net calorific value (NCV). The difference between the NCV and the GCV for each fuel is the latent heat of vaporization of the water produced during combustion of the fuel. For coal and oil, NCV is 5 per cent less than GCV, and for most forms of natural and manufactured gas the difference is 9 to 10 per cent. Australia, Canada, Japan, New Zealand and the United States reported energy data on a GCV basis. The IEFs included in the energy section of this report for these Parties have been converted into NCV-based values (using 5 per cent of difference for liquid, solid, other fuels and biomass and 10 per cent for gaseous fuels) and are not reflecting the reported IEFs.

21. The following chemical formulae or abbreviations for greenhouse gases are used in the synthesis and assessment report:

C	carbon
CF_4	perfluoromethane
C_2F_6	perfluoroethane
C_3F_8	perfluoropropane
C_4F_{10}	perfluorobutane
c-C_4F_8	perfluorocyclobutane
C_5F_{12}	perfluoropentane
C_6F_{14}	perfluorohexane
CH_4	methane
CO_2	carbon dioxide
HFCs	hydrofluorocarbons
N_2O	nitrous oxide
PFCs	perfluorocarbons
SF_6	sulphur hexafluoride

22. To indicate the methods and emission factors used by Parties the following abbreviations have been used (see also footnotes to Summary table 3 of the CRF) in the synthesis and assessment report:

Methods:		Emission factors:	
D	IPCC default	D	IPCC default
RA	Reference approach	CR	CORINAIR
T1	IPCC tier 1	CS	Country specific
T1a, T1b, T1c	IPCC tier 1a, tier 1b, and tier 1c, respectively	PS	Plant specific
		M	Model
T2	IPCC tier 2	OTH	Other
T3	IPCC tier 3		
CR	CORINAIR		
CS	Country specific		
M	Model		
OTH	Other		

23. The following units have been used in the synthesis and assessment report:

kg	kilogram (10^3 grams)
Mg	megagram (10^6 grams) – same as tonne
Gg	gigagram (10^9 grams)
Gg CO_2 equ.	Gg of CO_2 equivalent
t	tonne (10^6 grams)
kt	kilotonne (10^9 grams)
Mt	megatonne (10^{12} grams)
TJ	terajoule (10^{12} joules)
PJ	petajoule (10^{15} joules)
km	kilometer
ha	hectare
kha	thousand hectares
Mha	million hectares
m^3	cubic meter
l	liter
Bbl (oil US)	barrel of oil (United States)
ft^3	cubic feet
Btu	British thermal unit

24. The following other abbreviations have been used in the synthesis and assessment report:

A	actual emissions
AD	activity data
CRF	common reporting format
dm	dry matter
EF	emission factor
FAO	Food and Agriculture Organization of the United Nations
$Frac_{BURN}$	fraction of crop residue burned
$Frac_{FUEL}$	fraction of livestock nitrogen excretion in excrements burned for fuel
$Frac_{GASF}$	fraction of synthetic fertilizer nitrogen applied to soils that volatises as NH_3 and NO_X
$Frac_{GASM}$	fraction of livestock nitrogen excretion that volatises as NH_3 and NO_X
$Frac_{GRAZ}$	fraction of livestock nitrogen excreted and deposited onto soil during grazing
$Frac_{LEACH}$	fraction of nitrogen input to soils that is lost through leaching and run-off
$Frac_{NCRBF}$	fraction of nitrogen in N-fixing crop
$Frac_{NCRO}$	fraction of nitrogen in non-N-fixing crop
$Frac_R$	fraction of total above-ground crop biomass that is removed from the field as a crop product

GCV	gross calorific value
GHG	greenhouse gas
GWP	global warming potential
IEA	International Energy Agency
IEF	implied emission factor
L	level (key source applying the IPCC good practice guidance tier 1 level assessment)
LPG	liquefied petroleum gas
LTO	landing and take off cycle
N	nitrogen
NCV	net calorific value
NGL	natural gas liquids
NH_3	ammonia
NIR	national inventory report
NMVOC	non-methane volatile organic compounds
NO_X	nitrogen oxides
P	potential emissions
T	trend (key source applying the IPCC good practice guidance tier 1 trend assessment)
yr	year

C. List of tables in Part I

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	CO_2 emissions (Gg)
	Relative change (%)

Table G.1

Submmissions used in the S&A report: Part I

Party	Initial submission date	CRF for years	NIR	CRF submission date and version	CRF Reporter version	Sources of data for the trend tables[a]
Australia	8 May 2007	1990-2005	√	26 June 2007 (v. 1.4)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
Austria	13 April 2007	1990-2005	√	13 April 2007 (v. 1.2)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
Belarus	25 May 2007	1990-2005	√	15 August 2007 (v. 1.2)	CRF Reporter v. 3.2.0	**1990-2005**: S2007
Belgium	18 April 2007	1990-2005	√	18 April 2007 (v. 1.1)	CRF Reporter v. 3.0.38	**1990-2005**: S2007
Bulgaria	23 May 2007	1988-2005	√	23 May 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1988-2005**: S2007
Canada	25 May 2007	1990-2005	√	25 May 2007 (v. 1.3)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Croatia						
Czech Republic	17 April 2007	1990-2005	√	17 April 2007 (v. 1.1)	CRF Reporter v. 3.0.37	**1990-2005**: S2007
Denmark	15 April 2007	1990-2005	√	15 April 2007 (v. 1.1)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
Estonia	13 April 2007	1990-2005	√	21 August 2007 (v. 3.1)	CRF Reporter v. 3.2.0	**1990-2005**: S2007
European Community	15 April 2007	1990-2005	√	27 May 2007 (v.1.3)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
Finland	13 April 2007	1990-2005	√	15 August 2007 (v. 1.5)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
France	11 April 2007	1990-2005	√	11 April 2007 (v. 1.1)	CRF Reporter v. 3.0.38	**1990-2005**: S2007
Germany	2 May 2007	1990-2005	√	2 May 2007 (v. 1.2.)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Greece						
Hungary	20 April 2007	1985-1987, 1985-2005	√	7 June 2007 (v. 2.1)	CRF Reporter v. 3.0.38	**1985-1987, 1985-2005**: S2007
Iceland	24 April 2007	1990-2005	√	24 April 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Ireland	13 April 2007	1990-2005	√	13 April 2007 (v. 1.1)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
Italy	13 April 2007	1990-2005	√	2 August 2007 (v. 2.1)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Japan	26 May 2007	1990-2005	√	26 May 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Latvia	12 April 2007	1990-2005	√	12 April 2007 (v. 1.3)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
Liechtenstein	10 May 2007	1990-2005	√	10 May 2007 (v. 1.1)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
Lithuania	17 April 2007	1990-2005	√	30 August 2007 (v. 2.2)	CRF Reporter v. 3.0.37	**1990-2005**: S2007
Luxembourg	17 May 2007	1990-2005	√	17 May 2007 (v. 2.1)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Monaco	10 July 2007	1990-2005	√	10 July 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Netherlands (The)	13 April 2007	1990-2005	√	13 April 2007 (v.1.3)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
New Zealand	4 May 2007	1990-2005	√	4 May 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Norway	13 April 2007	1990-2005	√	25 May 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Poland	10 April 2007	1988-2005	√	10 April 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1988-2005**: S2007
Portugal	13 April 2007	1990-2005	√	13 April 2007 (v. 1.2)	CRF Reporter v. 3.1.10	**1990-2005**: S2007
Romania	12 April 2007	1989-2005	√	12 April 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1989-2005**: S2007
Russian Federation	22 April 2007	1990-2005		22 April 2007 (v. 1.1)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Slovakia	16 April 2007	1990-2005		3 July 2007 (v. 1.1)	CRF Reporter v. 3.2.0	**1990-2005**: S2007
Slovenia	13 April 2007	1986-2005	√	27 July 2007 (v. 1.5)	CRF Reporter v. 3.2.0	**1986-2005**: S2007
Spain	24 April 2007	1990-2005	√	24 April 2007 (v. 1.3)	CRF Reporter v. 3.0.38	**1990-2005**: S2007
Sweden	17 April 2007	1990-2005	√	17 April 2007 (v. 1.2)	CRF Reporter v. 3.1.11	**1990-2005**: S2007
Switzerland	13 April 2007	1990-2005	√	13 April 2007 (v. 1.1)	CRF Reporter v. 3.0.38	**1990-2005**: S2007
Turkey						
Ukraine	14 June 2007	1990-2005	√	27 June 2007 (v. 2.1)	CRF Reporter v. 3.2.0	**1990-2005**: S2007
United Kingdom	13 April 2007	1990-2005	√	13 April 2007 (v. 1.4)	CRF Reporter v. 3.0.38	**1990-2005**: S2007
United States	11 April 2007	1990-2005	√	11 April 2007 (v. 1.1)	CRF Reporter v. 3.1.10	**1990-2005**: S2007

[a] Legend: S200x - submission in year 200x; T200x - trend tables from submission in year 200x.

Table G.2

Key categories[a]: base year[b]

Source categories	Australia	Austria	Belarus	Belgium	Bulgaria	Canada	Croatia	Czech Republic	Denmark	Estonia	European Community	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan	Latvia	Liechtenstein	Lithuania	Luxembourg	Monaco	Netherlands	New Zealand	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	United States
Energy																																								
1.Stationary Combustion - Liquid Fuels - CC_2	L	L	L	L	L	L		L	L	L	L	L	L	L		L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L		L	L	L
1.Stationary Combustion - Liquid Fuels - CI_4																																								
1.Stationary Combustion - Liquid Fuels - N_2O				L															L																L					
1.Stationary Combustion - Solid Fuels - CC_2	L	L	L	L	L	L		L	L	L	L	L	L	L		L	L	L	L	L	L		L	L	L	L	L	L	L	L	L	L	L	L	L	L		L	L	L
1.Stationary Combustion - Solid Fuels - CI_4								L																																
1.Stationary Combustion - Solid Fuels - N_2O								L						L																						L				
1.Stationary Combustion - Gaseous Fuels - CC_2	L	L	L	L	L	L		L	L	L	L	L	L	L		L		L	L	L	L	L	L	L		L	L	L	L		L	L	L	L	L	L		L	L	L
1.Stationary Combustion - Gaseous Fuels - CI_4																																								
1.Stationary Combustion - Gaseous Fuels - N_2O																																								
1.Stationary Combustion - Other Fuels - CC_2		L		L						L	L	L	L	L																		L			L	L				
1.Stationary Combustion - Other Fuels - CI_4																																								
1.Stationary Combustion - Other Fuels - N_2O												L																												
1.Stationary Combustion - Biomass - CC_2																																								
1.Stationary Combustion - Biomass - CH_4													L																											
1.Stationary Combustion - Biomass - N_2O																																								
1.A.3.a Civil Aviation - CO_2	L					L					L		L														L	L						L	L	L				L
1.A.3.a Civil Aviation - CH_4																																								
1.A.3.a Civil Aviation - N_2O																																								
1.A.3.b Road Transportation - CO_2	L	L	L	L	L	L		L	L	L	L	L	L	L		L	L	L	L	L	L	L	L	L	L	L	L	L	L	L		L	L	L	L	L		L	L	L
1.A.3.b Road Transportation - CH_4																																								
1.A.3.b Road Transportation - N_2O						L																																		L
1.A.3.c Railways - CO_2						L										L					L																			L
1.A.3.c Railways - CH_4																																								
1.A.3.c Railways - N_2O																																								
1.A.3.d Navigation - CO_2	L					L				L	L	L					L		L	L								L						L	L			L	L
1.A.3.d Navigation - CH_4																																								
1.A.3.d Navigation - N_2O																																								
1.A.3.e Other Transportation - CO_2					L	L						L																L				L						L		L
1.A.3.e Other Transportation - CH_4																																								
1.A.3.e Other Transportation - N_2O																																								
1.A.5.b Mobile - CO_2								L						L								L					L	L						L	L			L	L
1.A.5.b Mobile - CH_4																																								
1.A.5.b Mobile - N_2O																																								
1.B.1.a Coal Mining and Handling - CC_2																																		L						
1.B.1.a Coal Mining and Handling - CH_4	L				L			L		L	L		L	L		L												L		L	L	L	L	L			L	L	L
1.B.1.a Coal Mining and Handling - N_2O																																								
1.B.1.b Solid Fuel Transformation - CO_2																																								
1.B.1.b Solid Fuel Transformation - CH_4																																								
1.B.1.b Solid Fuel Transformation - N_2O																																								
1.B.1.c Other - CO_2																																				L				
1.B.1.c Other - CH_4																																								
1.B.1.c Other - N_2O																																								
1.B.2 Oil and Natural Gas - CO_2	L					L					L		L						L								L	L			L			L				L	L
1.B.2 Oil and Natural Gas - CH_4	L	L			L	L				L	L		L	L		L			L							L		L	L		L	L	L			L		L	L	L
1.B.2 Oil and Natural Gas - N_2O																																								
Industrial processes																																								
2.A.1 Cement Production - CO_2	L	L		L	L	L		L	L	L	L	L	L	L		L	L	L	L	L	L		L	L				L	L	L	L	L	L	L	L	L		L	L	L
2.A.1 Cement Production - CH_4																																								
2.A.1 Cement Production - NO2																																								
2.A.2 Lime Production - CO_2		L		L							L			L					L	L										L		L	L		L				
2.A.2 Lime Production - CH_4																																								
2.A.2 Lime Production - N_2O																																								
2.A.3 Limestone and Dolomite Use - CO_2																			L	L												L			L				L		
2.A.3 Limestone and Dolomite Use - CH_4																																								
2.A.3 Limestone and Dolomite Use - N_2O																																								

Table G.2 (continued)

Key categories[a]: base year[b]

Source categories	Australia	Austria	Belarus	Belgium	Bulgaria	Canada	Croatia	Czech Republic	Denmark	Estonia	European Community	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan	Latvia	Liechtenstein	Lithuania	Luxembourg	Monaco	Netherlands	New Zealand	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	United States
Industrial processes																																								
2.A.4 Soda Ash Production and Use - CO_2																																								
2.A.4 Soda Ash Production and Use - CH_4																																								
2.A.4 Soda Ash Production and Use - N_2O																																								
2.A.5 Asphalt Roofing - CO_2																																								
2.A.5 Asphalt Roofing - CH_4																																								
2.A.5 Asphalt Roofing - N_2O																																								
2.A.6 Road Paving with Asphalt - CO_2																																								
2.A.6 Road Paving with Asphalt - CH_4																																								
2.A.6 Road Paving with Asphalt - N_2O																																								
2.A.7 Other - CO_2		L																					L																	
2.A.7 Other - CH_4																																								
2.A.7 Other - N_2O																																								
2.B.1 Ammonia Production - CO_2		L			L	L					L		L			L		L					L			L		L	L	L	L				L				L	
2.B.1 Ammonia Production - CH_4																																								
2.B.1 Ammonia Production - N_2O																																								
2.B.2 Nitric Acid Production - CO_2																																								
2.B.2 Nitric Acid Production - CH_4																																								
2.B.2 Nitric Acid Production - N_2O		L		L	L			L	L		L	L	L			L		L	L				L			L		L	L	L	L		L		L	L					
2.B.3 Adipic Acid Production - CO_2																																								
2.B.3 Adipic Acid Production - CH_4																																								
2.B.3 Adipic Acid Production - N_2O						L					L		L	L					L	L																			L		
2.B.4 Carbide Production - CO_2																												L												
2.B.4 Carbide Production - CH_4																																								
2.B.4 Carbide Production - N_2O																																								
2.B.5 Other - CO_2														L																										
2.B.5 Other - CH_4																																								
2.B.5 Other - N_2O													L				L									L														
2.B.5 Other - HFCs																																								
2.B.5 Other - PFCs																																								
2.B.5 Other - SF_6																																								
2.C.1 Iron and Steel Production - CO_2	L	L		L	L	L		L			L	L	L	L					L					L		L	L		L		L	L			L	L			L		L
2.C.1 Iron and Steel Production - CH_4																																								
2.C.1 Iron and Steel Production - N_2O																																								
2.C.2 Ferroalloys Production - CO_2																	L											L												
2.C.2 Ferroalloys Production - CH_4																																								
2.C.2 Ferroalloys Production - N_2O																																								
2.C.3 Aluminium Production - CO_2																	L										L	L												
2.C.3 Aluminium Production - CH_4																																								
2.C.3 Aluminium Production - N_2O																																								
2.C.3 Aluminium Production - PFCs	L	L				L							L				L									L	L	L			L			L		L				
2.C.4.a SF_6 used in Aluminium Foundries - Sl_6																																								
2.C.4.b SF_6 used in Magnesium Foundries - Sl_6																												L												
2.C.5 Other - CO_2																																								
2.C.5 Other - CH_4																																								
2.C.5 Other - N_2O																																								
2.C.5 Other - HFCs																																								
2.C.5 Other - PFCs																																								
2.C.5 Other - SF_6																																								
2.D Other Production - CO_2																																								
2.D Other Production - CH_4																																								
2.D Other Production - N_2O																																								
2.E.1.a Production of HCFC-22 - HFC-23																										L								L						L
2.E.1.b Other - F-Gases				L							L																											L	
2.E.2 Fugitive Emissions - F-Gases													L																											
2.E.3 Other - F-Gases																																								
2.F(a).(1-6) ODS Substitutes - HFCs																																								
2.F(a).(1-6) ODS Substitutes - PFCs																																								
2.F(a).(1-6) ODS Substitutes - SF_6																																								

Table G.2 (continued)

Key categories[a]: base year[b]

Source categories	Australia	Austria	Belarus	Belgium	Bulgaria	Canada	Croatia	Czech Republic	Denmark	Estonia	European Community	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan	Latvia	Liechtenstein	Lithuania	Luxembourg	Monaco	Netherlands	New Zealand	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	United States
Industrial processes																																								
2.F(a).7 Semiconducters - HFCs																																								
2.F(a).7 Semiconducters - PFCs																																								
2.F(a).7 Semiconducters - SI_6																																								
2.F(a).8 Electrical Equipment - HFCs																																								
2.F(a).8 Electrical Equipment - PFCs																																								
2.F(a).8 Electrical Equipment - SI_6																																								
2.F(a).9 Other - HFCs																																								
2.F(a).9 Other - PFCs																																								
2.F(a).9 Other - SF_6																																								
2.F(p) Potential Emissions - HFCs																				L																				
2.F(p) Potential Emissions - PFCs																																								
2.F(p) Potential Emissions - SI_6																				L																				
2.G Other - CO_2						L																																		
2.G Other - CH_4																																								
2.G Other - N_2O																																								
2.G Other - HFCs																																								
2.G Other - PFCs																																								
2.G Other - SF_6																																								
Solvent and other product use																																								
3 Solvent and Other Product Use - CO_2																																				L				
3 Solvent and Other Product Use - CH_4																																								
3 Solvent and Other Product Use - N_2O																																									
Agriculture																																								
4.A Enteric Fermentation - CC_2																																								
4.A Enteric Fermentation - CH_4	L	L	L	L	L	L		L	L	L	L	L	L	L		L	L	L	L	L	L	L	L			L	L	L	L	L	L	L	L	L	L	L		L	L	L
4.A Enteric Fermentation - N_2O																																								
4.B Manure Management - CC_2																																								
4.B Manure Management - CH_4		L		L	L				L		L		L	L		L		L	L		L		L			L	L			L	L			L	L		L		
4.B Manure Management - N_2O		L		L		L			L		L	L	L			L			L		L		L						L	L	L	L	L	L	L	L		L		
4.C Rice Cultivation - CO_2																																								
4.C Rice Cultivation - CH_4																																								
4.C Rice Cultivation - N_2O																																								
4.D.1 Direct Soil Emissions - CO_2																																								
4.D.1 Direct Soil Emissions - CH_4																																								
4.D.1 Direct Soil Emissions - N_2O	L	L	L	L	L	L		L	L	L	L	L	L	L		L	L	L	L		L	L	L			L	L	L	L	L	L	L	L	L	L	L		L	L	L
4.D.2 Pasture, Range and Paddock Manure - CC_2																																								
4.D.2 Pasture, Range and Paddock Manure - CI_4																																								
4.D.2 Pasture, Range and Paddock Manure - N_2O	L			L	L	L					L		L				L	L			L					L	L			L	L				L				L		
4.D.3 Indirect Emissions - CO_2																																								
4.D.3 Indirect Emissions - CH_4																																								
4.D.3 Indirect Emissions - N_2O	L	L	L	L	L	L		L	L	L	L	L	L	L		L	L	L	L		L	L	L			L	L	L	L	L	L	L	L	L	L	L		L	L	L
4.D.4 Other - CO_2																																								
4.D.4 Other - CH_4																																								
4.D.4 Other - N_2O																																				L				L
4.E Prescribed Burning of Savannas - CC_2																																								
4.E Prescribed Burning of Savannas - CH_4	L																																							
4.E Prescribed Burning of Savannas - N_2O																																								
4.F Field Burning of Agricultural Residues - CC_2																																								
4.F Field Burning of Agricultural Residues - CI_4																																								
4.F Field Burning of Agricultural Residues - N_2O																																								
4.G Other - CO_2																																								
4.G Other - CH_4																																								
4.G Other - N_2O																																								

Table G.2 (continued)

Key categories[a]: base year[b]

Source categories	Australia	Austria	Belarus	Belgium	Bulgaria	Canada	Croatia	Czech Republic	Denmark	Estonia	European Community	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan	Latvia	Liechtenstein	Lithuania	Luxembourg	Monaco	Netherlands	New Zealand	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	United States
LULUCF																																								
5.A.1 Forest Land remaining Forest Land - CO_2	L	L	L	L	L	L		L	L	L	L	L	L	L		L		L	L	L	L	L	L			L	L	L	L	L	L	L	L	L	L	L		L		L
5.A.1 Forest Land remaining Forest Land - CH_4																																								
5.A.1 Forest Land remaining Forest Land - N_2O																																								
5.A.2 Land converted to Forest Land - CO_2											L		L					L	L		L		L				L			L					L	L			L	
5.A.2 Land converted to Forest Land - CH_4																																								
5.A.2 Land converted to Forest Land - N_2O																																								
5.B.1 Cropland remaining Cropland - CO_2		L	L					L	L		L	L		L					L			L					L	L	L			L	L		L	L		L		
5.B.1 Cropland remaining Cropland - CH_4																																								
5.B.1 Cropland remaining Cropland - N_2O																																								
5.B.2 Land converted to Cropland - CO_2	L					L					L		L																										L	
5.B.2 Land converted to Cropland - CH_4																																								
5.B.2 Land converted to Cropland - N_2O													L																											
5.C.1 Grassland remaining grassland - CO_2				L							L	L		L			L	L				L				L		L	L				L			L				
5.C.1 Grassland remaining grassland - CH_4																																								
5.C.1 Grassland remaining grassland - N_2O																																								
5.C.2 Land converted to Grassland - CO_2	L	L									L		L														L									L	L			L	
5.C.2 Land converted to Grassland - CH_4	L																																								
5.C.2 Land converted to Grassland - N_2O																																								
5.D.1 Wetlands remaining Wetlands - CO_2																	L																							
5.D.1 Wetlands remaining Wetlands - CH_4																	L																							
5.D.1 Wetlands remaining Wetlands - N_2O																																								
5.D.2 Land converted to Wetlands - CO_2						L																																		
5.D.2 Land converted to Wetlands - CH_4																																								
5.D.2 Land converted to Wetlands - N_2O																																								
5.E Settlements - CO_2						L					L		L								L		L							L					L	L			L	L
5.E Settlements - CH_4																																								
5.E Settlements - N_2O																																								
5.F Other Land - CO_2								L																								L								
5.F Other Land - CH_4																																								
5.F Other Land - N_2O																																								
5.G Other - CO_2	L																L							L																L
5.G Other - CH_4																																								
5.G Other - N_2O																	L																							
Waste																																								
6.A Solid Waste Disposal on Land - CO_2																																								
6.A Solid Waste Disposal on Land - CH_4	L	L	L	L	L	L		L	L		L	L	L	L		L	L	L	L	L			L			L	L	L	L	L			L	L	L	L	L			L	L
6.A Solid Waste Disposal on Land - N_2O																																								
6.B Waste-Water Handling - CO_2																																								
6.B Waste-Water Handling - CH_4	L				L											L			L		L		L							L		L	L	L	L					
6.B Waste-Water Handling - N_2O																														L										
6.C Waste Incineration - CO_2																				L																				
6.C Waste Incineration - CH_4																																								
6.C Waste Incineration - N_2O																																								
6.D Other - CO_2																																								
6.D Other - CH_4																																								
6.D Other - N_2O																																								
Other																																								
7 Other - CO_2									L								L																							
7 Other - CH_4																																								
7 Other - N_2O																																								
7(a) Other - F-Gases																																								
7(p) Other - F-Gases																																								

[a] Source: UNFCCC secretariat key category analysis.

[b] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table G.3

Key categories[a]: 2005

Source categories	Australia	Austria	Belarus	Belgium	Bulgaria	Canada	Croatia	Czech Republic	Denmark	Estonia	European Community	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan[b]	Latvia	Liechtenstein	Lithuania	Luxembourg	Monaco	Netherlands	New Zealand	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	United States
Energy																																								
1.Stationary Combustion - Liquid Fuels - CO_2	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L	L, T	L, T	L	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T
1.Stationary Combustion - Liquid Fuels - CH_4																																								
1.Stationary Combustion - Liquid Fuels - N_2O				L													L, T	L																	L, T					
1.Stationary Combustion - Solid Fuels - CO_2	L, T	L, T	L, T	L, T	L, T	L		L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	T	L, T	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T
1.Stationary Combustion - Solid Fuels - CH_4								T						T																		T	T					T		
1.Stationary Combustion - Solid Fuels - N_2O								L												T															T					
1.Stationary Combustion - Gaseous Fuels - CO_2	L, T	L, T	L, T	L, T	L	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T		L, T	L, T	L, T	L, T	L, T	L	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L
1.Stationary Combustion - Gaseous Fuels - CH_4						T			T																															
1.Stationary Combustion - Gaseous Fuels - N_2O																																								
1.Stationary Combustion - Other Fuels - CO_2		L, T		L, T					L, T	T	L, T	L, T	L, T	L, T					L, T							L, T						L, T		T	L, T	L, T				T
1.Stationary Combustion - Other Fuels - CH_4																																								
1.Stationary Combustion - Other Fuels - N_2O												T																								T				
1.Stationary Combustion - Biomass - CO_2																																								
1.Stationary Combustion - Biomass - CH_4	T					T				T			T								L, T		T							T				L, T					
1.Stationary Combustion - Biomass - N_2O												T									T														L, T					
1.A.3.a Civil Aviation - CO_2	L, T	T			T	L, T					L, T		L	T					L, T	L, T						L	L, T				T			L, T	L	T			T	L
1.A.3.a Civil Aviation - CH_4																																								
1.A.3.a Civil Aviation - N_2O																																								
1.A.3.b Road Transportation - CO_2	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T		L	L, T	L, T
1.A.3.b Road Transportation - CH_4																																				T	T			
1.A.3.b Road Transportation - N_2O				T				L, T	T		L, T	L, T	L, T			L, T	L, T	T	L, T		T			L, T				T	T	L, T			L, T	L, T				L, T	L, T
1.A.3.c Railways - CO_2			L			L, T										T					L		L, T						T		T	T					T		L
1.A.3.c Railways - CH_4																																								
1.A.3.c Railways - N_2O																																								
1.A.3.d Navigation - CO_2	T				T	L			L	T	L	L, T	L, T				T		L	L, T					T	T		L, T	T		T				L	L			T	L	L, T
1.A.3.d Navigation - CH_4																																								
1.A.3.d Navigation - N_2O																																								
1.A.3.e Other Transportation - CO_2		L, T			L, T	L, T						L	T															L, T				L, T				T	T		L		T
1.A.3.e Other Transportation - CH_4																																								
1.A.3.e Other Transportation - N_2O																																								
1.A.5.b Mobile - CO_2								L, T			T	T		T								L						L, T	T							T	L, T			L, T	T
1.A.5.b Mobile - CH_4																																								
1.A.5.b Mobile - N_2O																																								
1.B.1.a Coal Mining and Handling - CO_2																																		T						
1.B.1.a Coal Mining and Handling - CH_4	L				L	T		L, T		L, T	T		T	L, T		T				T								L, T		L, T	L, T		L, T	T				L, T	L, T	L, T
1.B.1.a Coal Mining and Handling - N_2O																																								
1.B.1.b Solid Fuel Transformation - CO_2																																								
1.B.1.b Solid Fuel Transformation - CH_4																																								
1.B.1.b Solid Fuel Transformation - N_2O																																								
1.B.1.c Other - CO_2																																		T		L, T				
1.B.1.c Other - CH_4	T													T																										
1.B.1.c Other - N_2O																																								
1.B.2 Oil and Natural Gas - CO_2	L, T					L, T			L, T		L	T	L						T						L, T	L, T	L, T		L, T		L, T			L, T				L	T
1.B.2 Oil and Natural Gas - CH_4	L, T	L, T	L, T		L	L, T				L, T	L, T			L		L, T			L, T		L		L		L, T		L, T	L, T	L, T	L, T	L, T	L, T			T		L, T	L, T	L, T
1.B.2 Oil and Natural Gas - N_2O																																								
Industrial processes																																								
2.A.1 Cement Production - CO_2	L	L, T	L, T	L	L, T	L		L	L, T	L, T	L, T	L, T	L, T	L		L	L	L, T	L	L, T	L		L, T	L			L	L	L	L, T	L	L	L, T	L	L, T	L, T	L, T		L	L	L, T
2.A.1 Cement Production - CH_4																																								
2.A.1 Cement Production - NO2																																								
2.A.2 Lime Production - CO_2		L		L	L, T						L	L, T	L	L					L	L	T							T	T	L		L	L, T		L, T			L, T		
2.A.2 Lime Production - CH_4																																								
2.A.2 Lime Production - N_2O																																								
2.A.3 Limestone and Dolomite Use - CO_2						T		L, T												L	T										L, T	L, T		L				L, T		
2.A.3 Limestone and Dolomite Use - CH_4																																								
2.A.3 Limestone and Dolomite Use - N_2O																																								
2.A.4 Soda Ash Production and Use - CO_2																																								
2.A.4 Soda Ash Production and Use - CH_4																																								
2.A.4 Soda Ash Production and Use - N_2O																																								

Table G.3 (continued)

Key categories[a]: 2005

Source categories	Australia	Austria	Belarus	Belgium	Bulgaria	Canada	Croatia	Czech Republic	Denmark	Estonia	European Community	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan[b]	Latvia	Liechtenstein	Lithuania	Luxembourg	Monaco	Netherlands	New Zealand	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	United States
Industrial processes																																								
2.A.5 Asphalt Roofing - CO_2																																								
2.A.5 Asphalt Roofing - CH_4																																								
2.A.5 Asphalt Roofing - N_2O																																								
2.A.6 Road Paving with Asphalt - CO_2																																								
2.A.6 Road Paving with Asphalt - CH_4																																								
2.A.6 Road Paving with Asphalt - N_2O																																								
2.A.7 Other - CO_2		T																					T									L, T								
2.A.7 Other - CH_4																																								
2.A.7 Other - N_2O																																								
2.B.1 Ammonia Production - CO_2		L		L, T	L, T	L							T	L, T		L, T		T	T				L, T			L		L, T	L, T	L, T	L, T	L						L, T		T
2.B.1 Ammonia Production - CH_4																																								
2.B.1 Ammonia Production - N_2O																																								
2.B.2 Nitric Acid Production - CO_2																																								
2.B.2 Nitric Acid Production - CH_4																																								
2.B.2 Nitric Acid Production - N_2O		T		L, T	L, T			L	T		L	L	L, T	L, T		L, T		T					L, T			L, T		L, T	L, T	L, T	L, T		L, T		T	L, T				
2.B.3 Adipic Acid Production - CO_2																																								
2.B.3 Adipic Acid Production - CH_4																																								
2.B.3 Adipic Acid Production - N_2O						T					T		T	T					L, T	T										T							T	T	T
2.B.4 Carbide Production - CO_2																											T													
2.B.4 Carbide Production - CH_4																																								
2.B.4 Carbide Production - N_2O																																								
2.B.5 Other - CO_2				L, T							T			L, T																										
2.B.5 Other - CH_4																																								
2.B.5 Other - N_2O													T				T									T														
2.B.5 Other - HFCs																																								
2.B.5 Other - PFCs																																								
2.B.5 Other - SF_6																																								
2.C.1 Iron and Steel Production - CO_2	L, T	L, T		L, T	L	L, T		L, T			L, T	L, T	L, T	L, T					T					L, T		L, T	L	L	T		L, T	L, T	L, T		L, T	L, T		L, T		L, T
2.C.1 Iron and Steel Production - CH_4																																								
2.C.1 Iron and Steel Production - N_2O																																								
2.C.2 Ferroalloys Production - CO_2																	L, T											L, T			T									
2.C.2 Ferroalloys Production - CH_4																																								
2.C.2 Ferroalloys Production - N_2O																																								
2.C.3 Aluminium Production - CO_2	L	T				L, T											L, T											L, T					L, T			T				
2.C.3 Aluminium Production - CH_4																																								
2.C.3 Aluminium Production - N_2O																																								
2.C.3 Aluminium Production - PFCs	T	T				T					T		T	T			T		T							T	T	L, T			T	L, T		L, T	T	T	T			T
2.C.4.a SF_6 used in Aluminium Foundries - Sl_6														T																										
2.C.4.b SF_6 used in Magnesium Foundries - Sl_6		T																									T								T					
2.C.5 Other - CO_2																																					T				
2.C.5 Other - CH_4																																									
2.C.5 Other - N_2O																																									
2.C.5 Other - HFCs																																									
2.C.5 Other - PFCs																																									
2.C.5 Other - SF_6						T																																			
2.D Other Production - CO_2																																									
2.D Other Production - CH_4																																									
2.D Other Production - N_2O																																									
2.E.1.a Production of HCFC-22 - HFC-23	T										T		T													T						T			T					T
2.E.1.b Other - F-Gases				T							T																											T		
2.E.2 Fugitive Emissions - F-Gases													T							T																				
2.E.3 Other - F-Gases														T																										
2.F(a).(1-6) ODS Substitutes - HFCs	L, T	L, T		L, T		L, T		T	L, T		L, T	L, T	L, T	L, T		L, T		T	L, T	T		L, T		L, T	L, T	L, T	L, T	T	T			T	T	L, T	L, T	L, T		L, T	L, T
2.F(a).(1-6) ODS Substitutes - PFCs																				T																				
2.F(a).(1-6) ODS Substitutes - SF_6																																								

Table G.3 (continued)

Key categories[a]: 2005

Source categories	Australia	Austria	Belarus	Belgium	Bulgaria	Canada	Croatia	Czech Republic	Denmark	Estonia	European Community	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan[b]	Latvia	Liechtenstein	Lithuania	Luxembourg	Monaco	Netherlands	New Zealand	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	United States
2.F(a).7 Semiconducters - HFCs																																								
2.F(a).7 Semiconducters - PFCs																				T																				
2.F(a).7 Semiconducters - SF_6																				T																				
2.F(a).8 Electrical Equipment - HFCs																																								
2.F(a).8 Electrical Equipment - PFCs																																								
2.F(a).8 Electrical Equipment - SF_6						T						T																												T
2.F(a).9 Other - HFCs																																								T
2.F(a).9 Other - PFCs																																								
2.F(a).9 Other - SF_6																																								
2.F(p) Potential Emissions - HFCs					T												L, T																						
2.F(p) Potential Emissions - PFCs																																								
2.F(p) Potential Emissions - SF_6																																								
2.G Other - CO_2	L, T					L, T																							T										
2.G Other - CH_4																																								
2.G Other - N_2O																										T														
2.G Other - HFCs																																								
2.G Other - PFCs																																								
2.G Other - SF_6																																								
Solvent and other product use																																								
3 Solvent and Other Product Use - CO_2		T																				T													T	T				
3 Solvent and Other Product Use - CH_4																																								
3 Solvent and Other Product Use - N_2O																																					T	T				
Agriculture																																								
4.A Enteric Fermentation - CC_2																																								
4.A Enteric Fermentation - CH_4	L, T	L, T	L	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L	L, T	L, T	L, T	L		L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L	L, T
4.A Enteric Fermentation - N_2O																																								
4.B Manure Management - CC_2																																								
4.B Manure Management - CH_4		L, T		L, T	T				L, T		L		L			L		L, T	L, T		L					L, T	L	L	L, T	L, T	L, T			L, T	L, T	L, T	L, T		T		L, T
4.B Manure Management - N_2O	T	L, T		L		L			L	T	L	L, T	L, T			L, T			L		L, T		L, T					L	L, T		L, T	L, T	L, T	L, T	L, T	L, T				
4.C Rice Cultivation - CO_2																																								
4.C Rice Cultivation - CH_4																														T										
4.C Rice Cultivation - N_2O																																								
4.D.1 Direct Soil Emissions - CO_2																																								
4.D.1 Direct Soil Emissions - CH_4																																								
4.D.1 Direct Soil Emissions - N_2O	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L	L, T	L, T	L, T	L		L, T	L, T	L, T	L, T		L, T	L, T	L, T			L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L	L	L, T
4.D.2 Pasture, Range and Paddock Manure - CC_2																																								
4.D.2 Pasture, Range and Paddock Manure - CH_4																																								
4.D.2 Pasture, Range and Paddock Manure - N_2O	L, T				T			T			L		L, T				L	L, T			L, T					T	L, T			L	L					L			L	
4.D.3 Indirect Emissions - CO_2																																								
4.D.3 Indirect Emissions - CH_4																																								
4.D.3 Indirect Emissions - N_2O	L, T	L, T	L	L	L, T	L		L, T	L, T	T	L, T	L, T	L, T	L		L, T	L, T	L, T	L, T		L, T	T	L, T			L, T	L	L	L	L, T	L, T	T	T	L	L, T	L, T	L, T		L	L, T
4.D.4 Other - CO_2																																								
4.D.4 Other - CH_4																																								
4.D.4 Other - N_2O																																				L					L, T
4.E Prescribed Burning of Savannas - CC_2																																								
4.E Prescribed Burning of Savannas - CH_4	L																																								
4.E Prescribed Burning of Savannas - N_2O																																								
4.F Field Burning of Agricultural Residues - CC_2																																								
4.F Field Burning of Agricultural Residues - CH_4																																								
4.F Field Burning of Agricultural Residues - N_2O																																								
4.G Other - CO_2																																								
4.G Other - CH_4																																								
4.G Other - N_2O																																								

Table G.3 (continued)

Key categories[a]: 2005

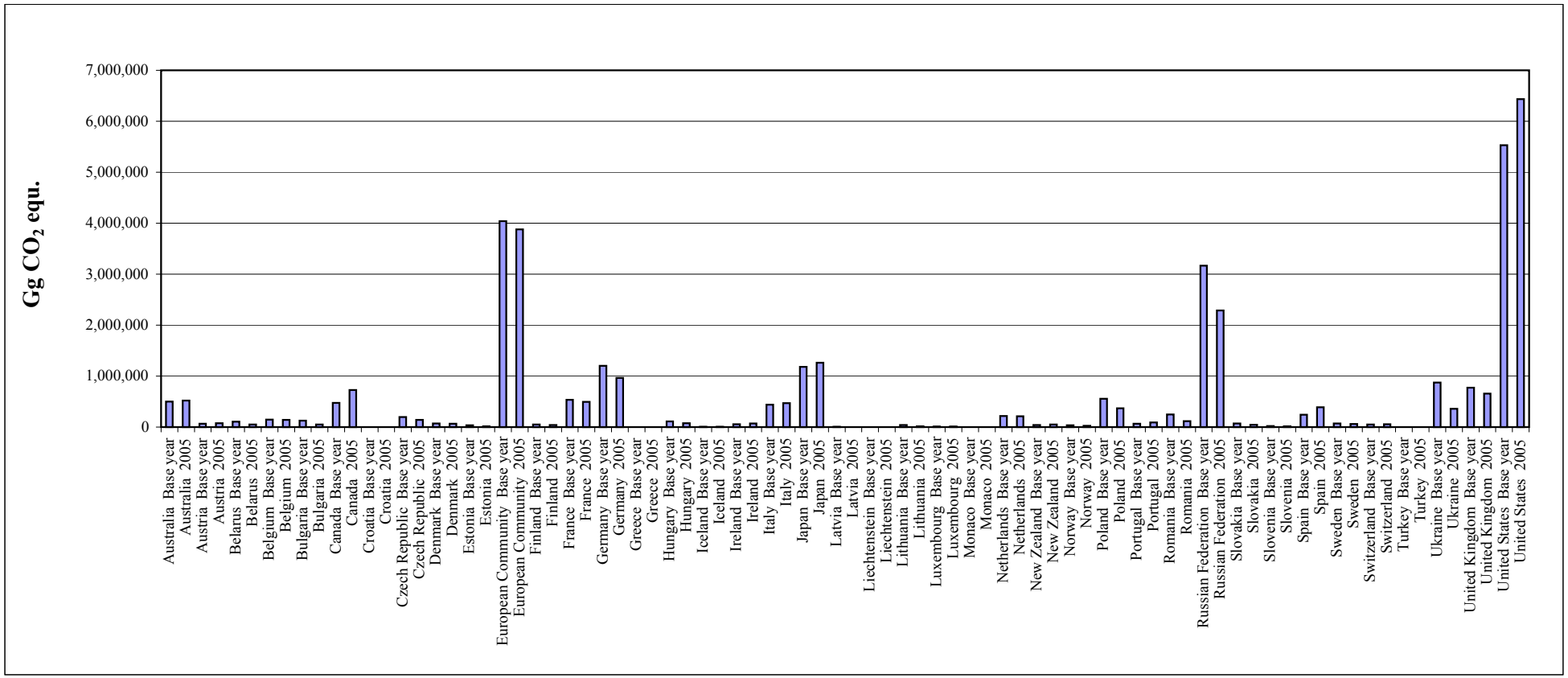
Source categories	Australia	Austria	Belarus	Belgium	Bulgaria	Canada	Croatia	Czech Republic	Denmark	Estonia	European Community	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan[b]	Latvia	Liechtenstein	Lithuania	Luxembourg	Monaco	Netherlands	New Zealand	Norway	Poland	Portugal	Romania	Russian Federation	Slovakia	Slovenia	Spain	Sweden	Switzerland	Turkey	Ukraine	United Kingdom	United States
LULUCF																																								
5.A.1 Forest Land remaining Forest Land - CO_2	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T			L, T	L, T	L, T	L, T	L, T		L, T	T	L, T	L, T	L, T	L, T		L, T		L, T
5.A.1 Forest Land remaining Forest Land - CH_4						L																																		
5.A.1 Forest Land remaining Forest Land - N_2O																																								
5.A.2 Land converted to Forest Land - CO_2	L, T										L, T		L, T	T		L, T		T	L	T	L, T		L, T				L, T		T	L, T			L, T		L, T	L, T			L, T	L, T	
5.A.2 Land converted to Forest Land - CH_4																																								
5.A.2 Land converted to Forest Land - N_2O																																								
5.B.1 Cropland remaining Cropland - CO_2		T	L		L, T	L, T		T	L, T		T	L, T		L, T					L, T			L, T							L, T			T		L	L		T		L, T
5.B.1 Cropland remaining Cropland - CH_4																																								
5.B.1 Cropland remaining Cropland - N_2O																																								
5.B.2 Land converted to Cropland - CO_2	L, T					L, T					L, T		L, T							T															L, T	T			L, T	
5.B.2 Land converted to Cropland - CH_4																																								
5.B.2 Land converted to Cropland - N_2O													T																											
5.C.1 Grassland remaining grassland - CO_2				L							L	L, T		L, T			L	L, T			L, T					L		L, T	T			T			L, T			L, T		T
5.C.1 Grassland remaining grassland - CH_4																																								
5.C.1 Grassland remaining grassland - N_2O																																								
5.C.2 Land converted to Grassland - CO_2	L, T												L, T					T		T		T					L, T						L, T			T	L, T		L, T	L, T	
5.C.2 Land converted to Grassland - CH_4	T																																							
5.C.2 Land converted to Grassland - N_2O																																								
5.D.1 Wetlands remaining Wetlands - CO_2					L, T												L																							
5.D.1 Wetlands remaining Wetlands - CH_4																	L																							
5.D.1 Wetlands remaining Wetlands - N_2O																																								
5.D.2 Land converted to Wetlands - CO_2		T				T						L, T	T																											
5.D.2 Land converted to Wetlands - CH_4																																								
5.D.2 Land converted to Wetlands - N_2O																																								
5.E Settlements - CO_2						L, T							L								L, T		L, T					L, T	T	L, T					L, T	L, T			L	L
5.E Settlements - CH_4																																								
5.E Settlements - N_2O																																								
5.F Other Land - CO_2								L								L, T					T					L							T							
5.F Other Land - CH_4																																								
5.F Other Land - N_2O																																								
5.G Other - CO_2	L																L, T							L			L, T											T	L, T
5.G Other - CH_4																																								
5.G Other - N_2O																	L																							
Waste																																								
6.A Solid Waste Disposal on Land - CO_2																																								
6.A Solid Waste Disposal on Land - CH_4	L, T	L, T	L, T	T	L	L, T		L, T	L	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L	L	T	L, T		L, T			L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T	L, T		L, T	L, T	L, T
6.A Solid Waste Disposal on Land - N_2O																																								
6.B Waste-Water Handling - CO_2																																								
6.B Waste-Water Handling - CH_4	T				L, T					T				T		L					L, T		L, T						L, T	L, T	L	L	L	L	L					
6.B Waste-Water Handling - N_2O																															L					L				
6.C Waste Incineration - CO_2								T									T			L, T										T				T						
6.C Waste Incineration - CH_4																																								
6.C Waste Incineration - N_2O																																								
6.D Other - CO_2																																								
6.D Other - CH_4																																					T			
6.D Other - N_2O																																								
Other																																								
7 Other - CO_2									L, T								L, T																							
7 Other - CH_4																																								
7 Other - N_2O																																								
7(a) Other - F-Gases																																								
7(p) Other - F-Gases																																								

[a] Source: UNFCCC secretariat key category analysis.

[b] Japan has not reported a complete time series of actual emissions for 2.F 'Consumption of halocarbons and SF6', but has reported a complete time series of potential emissions. The potential emissions have been aggregated to total national emissions in the base year, while actual emissions have been aggregated to total national emissions in the latest year. Therefore only actual emissions are considered for the trend assessment.

Figure G.1

Total GHG emissions (including LULUCF): base year[a] and 2005

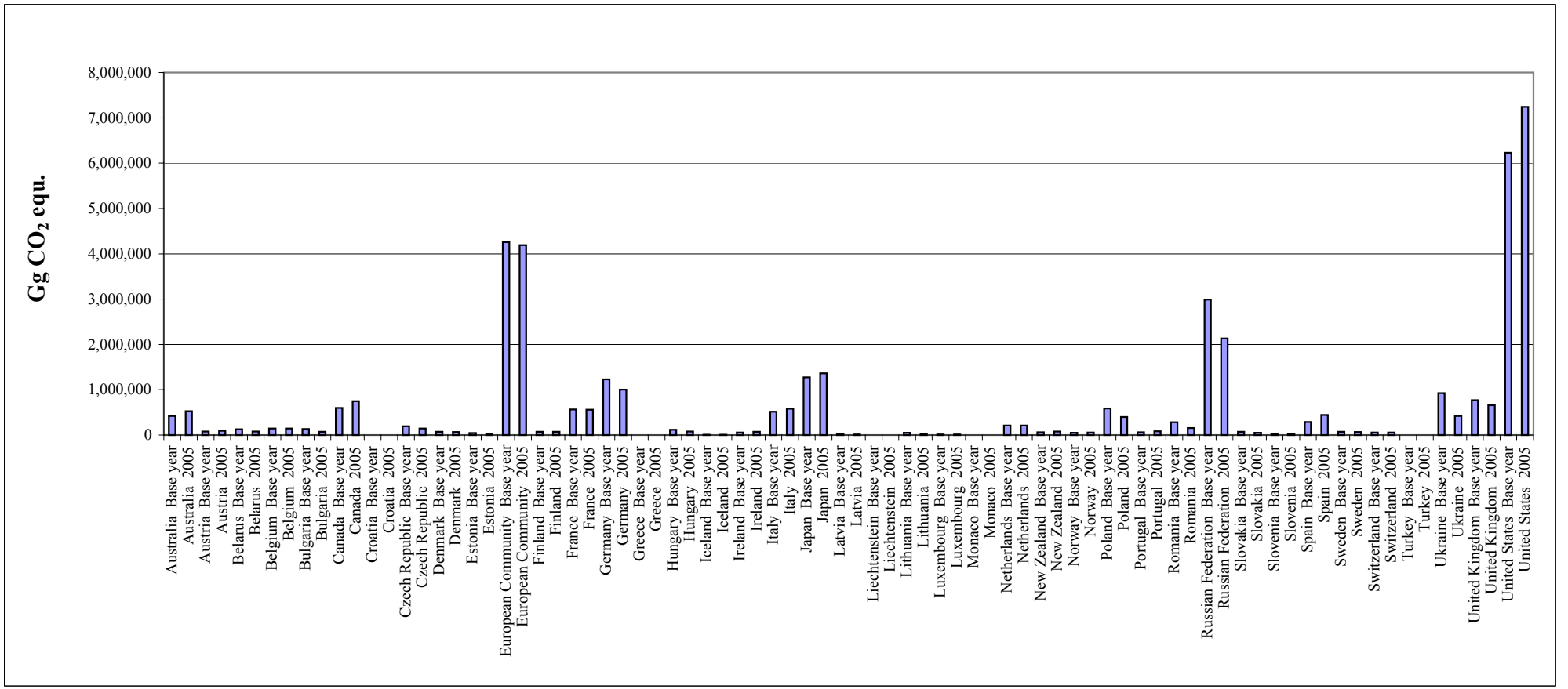


Note: This figure includes Annex I Parties which reported LULUCF emissions/removals in accordance with decision 13/CP.9 or 14/CP.11.

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Figure G.2

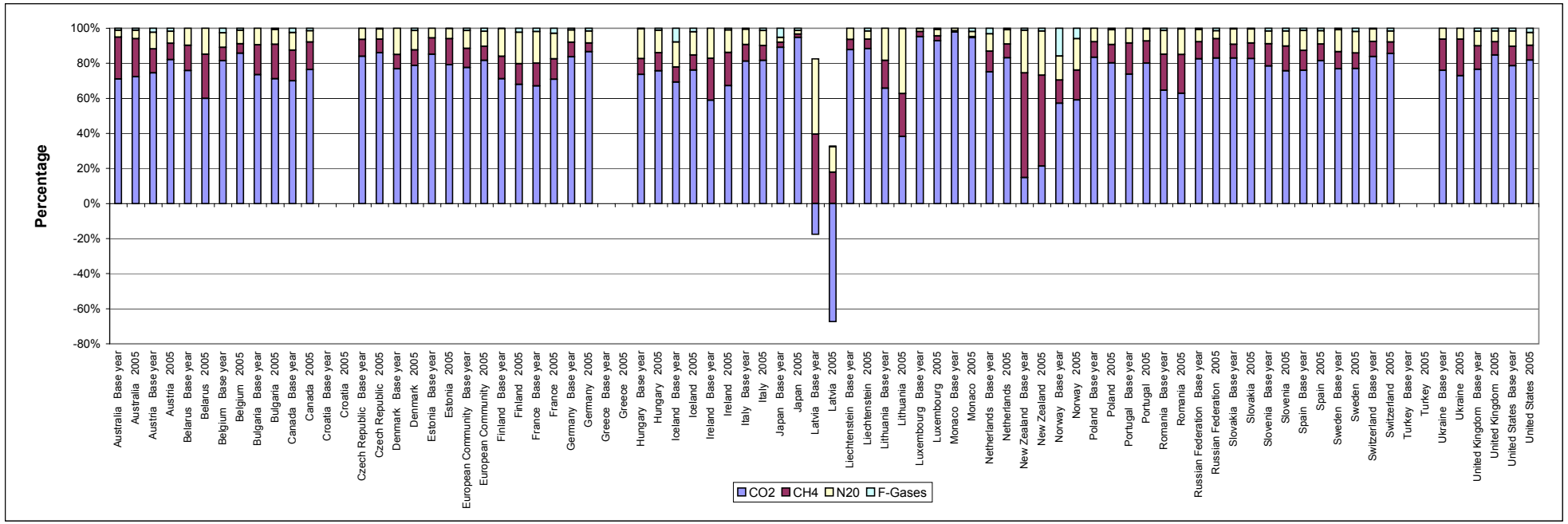
Total GHG emissions (excluding LULUCF): base year[a] and 2005



[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Figure G.3

GHG emissions by gas (including LULUCF): base year[a] and 2005

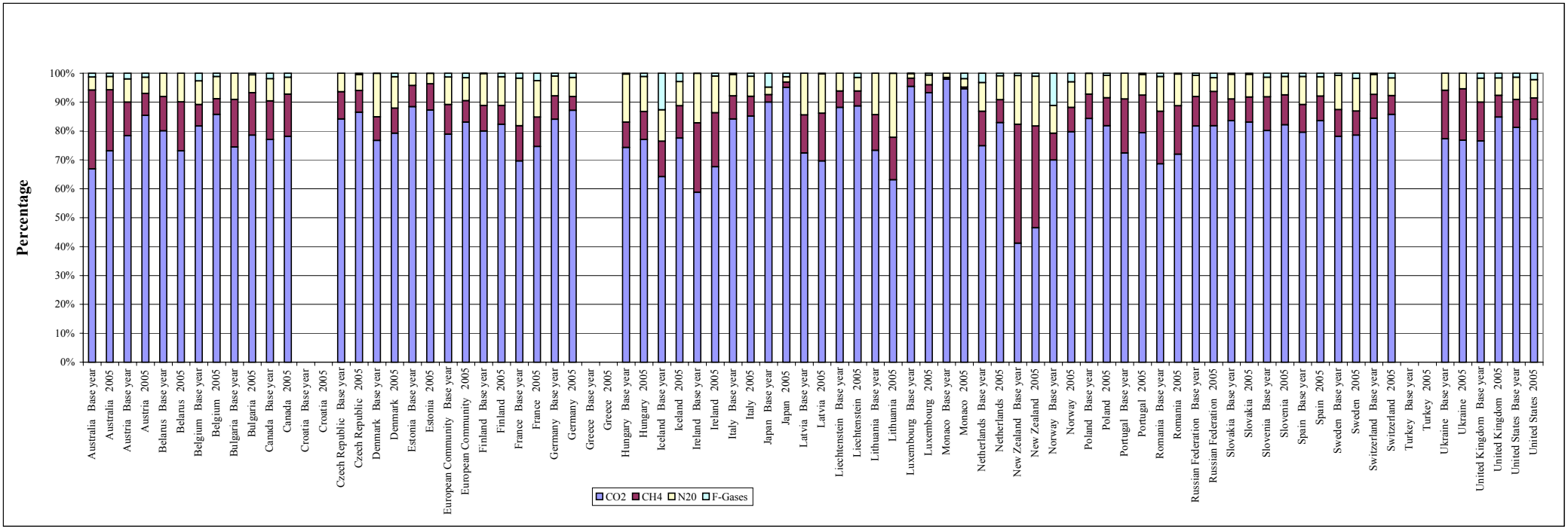


Note: This figure includes Annex I Parties which reported LULUCF emissions/removals in accordance with decision 13/CP.9 or 14/CP.11. Latvia reports total net removals in its inventory and the contributions of GHG gases to this total are showed in this figure only for illustrative purposes.

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Figure G.4

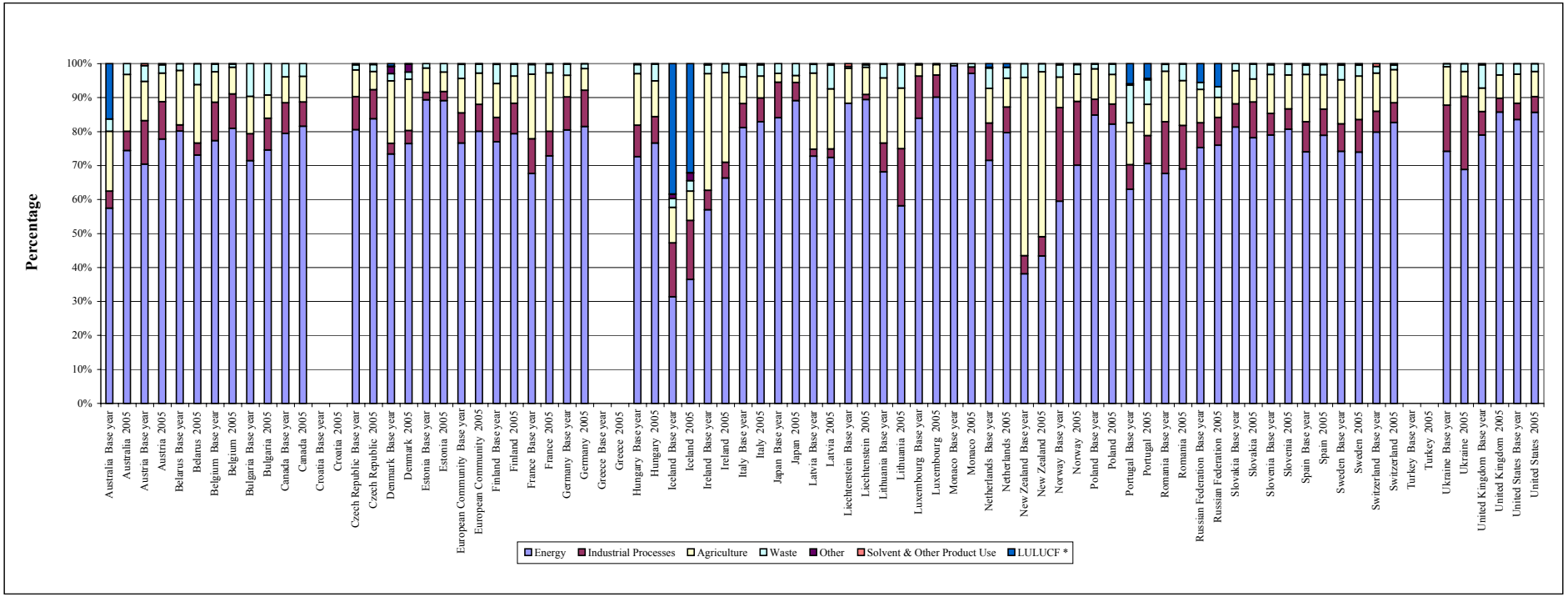
GHG emissions by gas (excluding LULUCF): base year[a] and 2005



[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Figure G.5

GHG emissions by sector: base year[a] and 2005



* In this figure emissions from the LULUCF sector are included only if this sector is a net source of emissions.

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table G.4

Reported recalculations by year for total GHG emissions excluding LULUCF

Percentage (%)	Base year [a]	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Australia	-1.13	-1.13	-1.18	-1.26	-1.30	-1.33	-1.24	-1.41	-1.21	-1.29	-1.47	-1.31	-1.61	-1.70	-1.09	-1.07
Austria	0.12	0.12	0.12	0.12	0.11	0.11	0.07	0.07	0.07	0.03	-0.06	-0.20	-0.10	-0.21	0.46	-0.17
Belarus	-0.01	-0.01			0.00		0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	-0.09	-0.07
Belgium			-0.03	0.01	0.11	0.01	-0.08	-0.07	-0.10	0.00	0.06	0.08	0.07	-0.02	0.21	-0.06
Bulgaria	0.23	1.86	3.14	3.35	3.72	4.32	4.91	5.24	6.06	6.11	5.12	4.57	4.09	3.79	3.01	2.36
Canada	-0.49	-0.49	-0.43	-0.35	-0.35	-0.50	-0.47	-0.35	-0.46	-0.49	-0.47	-0.57	-0.64	-0.71	-1.17	-1.41
Croatia																
Czech Republic	0.00	0.00		0.00				3.60	-3.61	0.00	0.00	-0.09	-0.08	-0.07	-0.04	0.01
Denmark	-0.01	-0.01	0.04	0.07	0.14	0.03	-0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.01	0.13	0.17
Estonia	-3.51	-3.51	-0.58	-1.56	0.32	0.81	0.69	0.85	-1.10	-2.25	-1.64	0.69	0.04	-2.79	-1.64	-1.82
European Community	-0.13	-0.13	-0.06	-0.08	-0.07	-0.12	-0.04	-0.10	-0.17	-0.09	-0.03	0.05	0.09	-0.04	0.17	0.01
Finland	-0.13	-0.13	-0.32	-0.12	0.00	0.12	0.09	0.11	0.04	0.35	0.21	0.07	-0.38	-0.35	-0.49	-0.66
France	0.04	0.04	0.05	0.07	0.08	0.14	0.17	0.20	0.22	0.19	0.22	0.47	0.83	0.37	-0.05	-0.29
Germany	-0.08	-0.08	-0.14	-0.17	-0.15	-0.19	0.09	-0.04	-0.18	-0.19	-0.25	-0.30	0.18	-0.11	0.63	0.95
Greece																
Hungary	-6.06	-5.75	-6.39	-5.95	-5.33	-5.83	-6.10	-6.22	-6.38	-6.54	-5.99	-5.58	-6.46	-5.56	-4.84	-5.66
Iceland	-0.10	-0.10	-0.12	-0.11	-0.06	-0.06	-0.09	-0.08	-0.10	-0.13	-0.11	-0.14	-0.09	-0.47	-0.18	-0.79
Ireland	-0.43	-0.43	1.15	-0.04	0.95	0.57	0.76	1.16	-0.76	0.17	-0.07	0.58	0.53	-0.02	0.65	0.29
Italy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.02	-0.02	-0.01	0.00	-0.04	-0.08	-0.07	-0.04
Japan	0.00	0.00	0.04	0.09	0.13	0.13	0.12	0.12	0.14	0.14	0.15	0.16	0.13	0.14	0.14	0.13
Latvia	2.12	2.12	4.94	4.93	0.48	3.01	2.46	0.83	0.96	0.91	1.08	1.22	0.77	0.90	0.88	-0.29
Liechtenstein	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	-0.23	-0.26	-0.41
Lithuania																
Luxembourg																
Monaco																
Netherlands														0.37	0.53	0.16
New Zealand	0.01	0.01	0.16	-0.03	-0.11	-0.12	-0.12	-0.13	-0.06	-0.07	-0.04	0.02	0.03	0.03	0.16	0.04
Norway	-0.08	-0.08	-0.11	-0.16	-0.15	-0.10	-0.08	-0.02	0.00	0.04	0.14	0.09	0.13	0.10	-0.17	-0.07
Poland																
Portugal	-0.05	-0.05	-0.04	-0.04	-0.04	-0.04	-0.08	-0.08	-0.09	-0.05	-0.02	-0.13	-0.15	-0.22	-0.28	0.36
Romania							0.00									0.00
Russian Federation	-7.04	-7.04	-75.71	-5.92	-5.76	-5.95	-4.79	-4.86	-6.42	-3.70	-3.87	-0.68	-2.51	-2.69	-2.49	-3.07
Slovakia	-1.78	-1.78	-2.00	-2.07	-2.24	-1.77	-1.50	-1.38	-1.18	-1.08	-1.56	-3.91	-3.53	-3.51	-3.93	-4.76
Slovenia	0.75	0.70	0.69	0.73	0.69	0.65	0.61	0.58	0.59	0.59	0.58	0.57	0.50	0.55	0.57	0.19
Spain	0.07	0.07	0.30	0.12	0.13	0.15	0.13	0.11	0.13	0.12	0.09	0.05	0.07	0.03	0.32	
Sweden	-0.24	-0.24	-0.27	-0.23	-0.21	-0.22	-0.20	-0.20	-0.17	-0.17	-0.16	-0.11	-0.13	-0.17	-0.25	-0.24
Switzerland	0.00	0.00	0.00	-0.01	0.01	0.00	-0.02	-0.04	-0.04	-0.05	-0.05	-0.02	-0.06	-0.05	-0.10	-0.05
Turkey																
Ukraine	-0.16	-0.16	0.21	0.13	0.27	0.42	0.33	0.36	0.34	0.32	-0.03	-0.14	-1.18	-0.12	-0.21	-0.01
United Kingdom	-0.61	-0.61	-0.34	-0.27	-0.37	-0.62	-0.59	-0.76	-0.82	-0.46	-0.05	0.26	-0.39	-0.35	-0.27	-0.74
United States	2.06	2.06	1.83	2.21	1.71	2.10	1.29	2.02	2.11	2.10	1.56	2.15	1.85	1.99	1.97	1.73

Note: The values included in this table are those reported by Parties in CRF table 8(a). An empty cell can either depict that a Party did not recalculate its inventory for a given category-gas combination (i.e. 0 per cent difference), or that it has reported for the first time, or ceased reporting, emissions for a category-gas combination (i.e 100 per cent difference).

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table G.5a

Reported recalculations by gas: base year [a] and 2004

Percentage (%)	Energy						Industrial Processes						Solvents			
	CO_2		CH_4		N_2O		CO_2		CH_4		N_2O		CO_2		N_2O	
	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004
Australia	0.13	-0.17	-3.30	-2.55	-0.29	7.40	0.14	0.95								
Austria	0.00	-0.03	0.02	-0.55	0.27	1.06	-0.01	0.84						-4.30		-20.27
Belarus	-0.01				0.00											
Belgium		-0.01		-2.93		-0.71		1.67		34.20		0.00				-0.05
Bulgaria	0.00	0.03	1.50	7.62	0.00	2.99	6.47	3.23								
Canada	-0.33	-1.87	-1.90	-1.07	-0.04	-5.75	-0.03	1.73			2.05	10.18			-58.08	-56.19
Croatia																
Czech Republic				0.01		1.01	0.00		-0.04							
Denmark	-0.02	0.09	2.61	2.43	-0.68	1.36		0.00					3.77	0.31		
Estonia	-3.53	-2.33	-0.02	0.05	-2.07	0.23	0.29	1.07								
European Community	0.00	0.17	-0.05	-4.56	-0.30	-0.03	-0.12	0.29	0.38	6.05	-4.37	-0.97	-0.89	-0.95	0.00	-1.53
Finland	0.04	-0.76	-6.33	-3.93	-7.84	0.33	-0.07	-0.44					0.56			
France	0.00	-0.12	-0.16	-13.26	1.56	1.28	0.43	3.18	50.84	2,567.22		-0.01	-3.73	-5.69	0.02	0.26
Germany	-0.01	1.38	0.02	-8.07	0.80	2.75	-0.41	-0.27								
Greece																
Hungary	0.25	0.17	-15.68	-3.05	-71.51	-69.83	3.08	5.76		0.05						
Iceland	0.00	0.21	0.00	1.98	0.00	0.34		0.00								
Ireland	-0.02	1.11	-5.61	3.88	-3.93	-4.44	0.00	0.20					-0.10	1.64		
Italy	-0.01	0.22	0.00	-0.05	-0.02	0.38								-0.76		
Japan	0.01	0.19	0.01	0.10	0.01	0.45		-1.12		0.07						
Latvia	2.99	0.39	1.44	-0.73	2.29	-1.12	0.00	-4.53	-0.02	0.60						
Liechtenstein														0.01		
Lithuania																
Luxembourg																
Monaco																
Netherlands		0.20		-0.34		-2.75										
New Zealand	0.05	0.05	-11.16	4.62	-0.64	1.15	2.87	-0.14								
Norway	0.08	-0.35	0.64	-0.64	18.13	21.14	0.07	0.06								
Poland																
Portugal		0.47	0.11	-0.82	-2.34	4.18	-0.34	1.62						1.52		
Romania																
Russian Federation	-2.81	1.96	-53.94	-40.21	42,693.12	20,500.11	-4.39	-4.63		1.72					0.93	0.93
Slovakia	-0.55	-5.88	-0.01	-0.44	-11.72	-21.01		0.45			129.67	45.97				
Slovenia	0.80	0.06		-0.04		-0.02	0.02									
Spain																
Sweden	0.00	-0.06	1.96	-0.72	0.17	-0.13	-3.95	-2.68						19.58		
Switzerland	0.00	0.00	0.00	0.00	0.00	0.00		0.04		0.01				0.00		
Turkey																
Ukraine	-0.45	-0.09	0.09	0.43	-1.50	-0.35	-2.11	-1.25								
United Kingdom	0.00	-0.81	-0.02	-1.25	-1.92	-1.53	0.08	-0.69	0.67	0.59	-15.81	-11.38				
United States	1.15	1.31	-0.79	-0.54	0.51	-2.63	0.41	0.10	-11.60	-16.89		-2.63			0.00	-10.10

Note: The values included in this table are those reported by Parties in CRF table 8(a). An empty cell can either depict that a Party did not recalculate its inventory for a given category-gas combination (i.e. 0 per cent difference), or that it has reported for the first time, or ceased reporting, emissions for a category-gas combination (i.e 100 per cent difference).

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table G.5b

Reported recalculations by gas: base year [a] and 2004

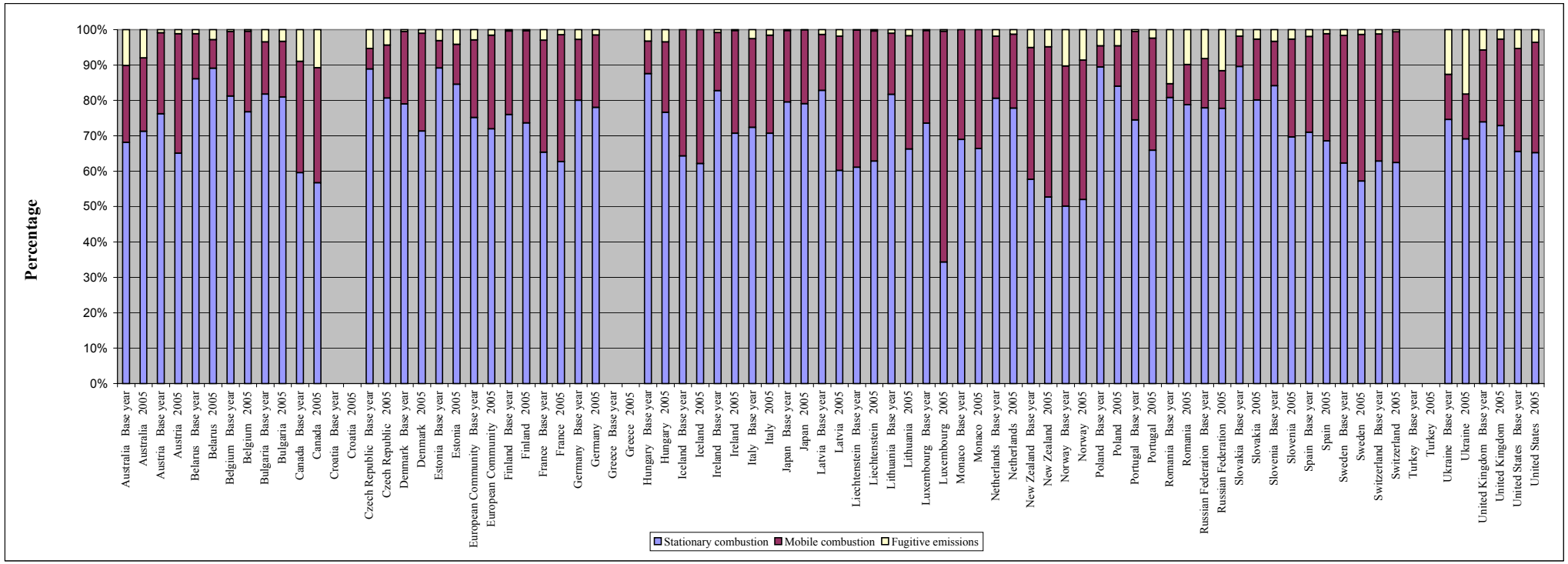
Percentage (%)	Agriculture				LULUCF						Waste					
	CH_4		N_2O		CO_2		CH_4		N_2O		CO_2		CH_4		N_2O	
	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004	Base year[a]	2004
Australia	-4.88	-4.85	1.49	0.69	-2.82	124.96				-8.40	73.90	64.26	-4.96	-10.56		
Austria	0.00	-0.03	0.03	-0.18	-0.49	2.00			-0.29	-0.14			0.05	-8.13	222.20	19.66
Belarus					94.70	99.14			-53.13	-8.22				0.04		
Belgium		0.03		1.07	0.00							-70.99		6.42		3.21
Bulgaria		-0.58		-0.43	-80.14	-63.03							-1.23	22.97		
Canada	-0.16	0.01	4.18	4.82	46.24	3.72			-8.14	-10.25	-0.01	-9.14	-6.12	-3.68	-31.60	-30.50
Croatia																
Czech Republic					-0.97	-0.83	3.58	6.26	3.58	6.26		0.00				
Denmark	-0.01	0.04	-0.02	0.59	0.00	34.53			99.97	99.36		17.99	0.07	0.75		0.01
Estonia	-3.97	4.24	-2.22	-2.19									-16.91	4.55	-10.90	-3.24
European Community	-0.24	-0.14	-0.14	-0.06	5.90	5.06			-0.46	-2.09	-0.14	-7.33	0.20	0.17	1.80	1.62
Finland	-0.05	1.05	0.13	-1.04	0.00	0.00			-2.11	-0.64			-0.36	0.00	0.00	0.42
France	0.00	0.19	0.00	0.06	38.87	15.93	-9.52	-9.81	-0.01	-9.27	-0.20	5.93	0.45	-1.21	5.14	1.73
Germany	-1.78	-1.84	-0.18	0.98	0.00								-0.01	-0.82	0.00	2.72
Greece																
Hungary	-1.27	-4.57	-15.63	-22.25	13.75	-19.42	-0.28	-0.36	0.12				-48.24	-24.82	30,000.00	39,411.76
Iceland			-1.16	-11.13	-0.50	-5.11			0.58	0.83			0.00	-3.15	0.00	0.00
Ireland	0.76	0.77	-3.45	-3.16	11.69	171.77							0.00	-2.44	0.00	0.00
Italy	0.00	-0.05	0.00	0.28	0.10	-1.02			-37.22	11.84	8.17	-5.39	0.00	0.01	0.05	0.01
Japan	0.00	-0.28	-0.77	0.71	23.42	7.95			41.89	68.73	0.00	0.19	-0.09	-0.58		-0.21
Latvia			0.00	-0.13									0.00	-5.77		1.23
Liechtenstein		-7.09		-3.32	-0.04	0.00								0.00	0.00	0.00
Lithuania																
Luxembourg																
Monaco																
Netherlands																
New Zealand		-0.25	-0.02	-0.23	-1.77	-7.05				11.06			0.43	4.13		
Norway		0.19		0.21	0.91	-3.06			-10.29	-1.00			-6.56	-2.71	0.00	0.00
Poland																
Portugal	0.00	-0.01	-0.25	-4.81	0.03	-185.03			158.06	225.03		13.87	0.02	0.60	0.07	0.56
Romania																
Russian Federation				-0.01	-7.35	9.49							13.42	7.90		
Slovakia	-16.05	-1.64	-10.96	-22.36	0.00								-28.33	5.81		
Slovenia		0.00	2.80	2.94										-2.60		7.18
Spain			0.00		85.71						-4.41		4.86		-0.31	
Sweden	0.00	0.00	0.00	0.00	-83.45	-66.33			-13.44	-2.89		-36.63	0.00		0.00	-0.99
Switzerland	0.00	0.01	0.00	-0.98	0.00	0.00								-5.29		-0.77
Turkey																
Ukraine	6.02	5.85	0.02	0.02	52.15	90.36			0.00				8.80	4.27		
United Kingdom	0.00	0.01	0.00	0.86	-1.16	-0.36	-10.18	16.86	-10.20	16.87	0.10	-0.06		0.32		0.45
United States	-1.55	-1.09	32.95	24.67	-21.70	5.73			3.98	2.49			-5.73	-11.26	-50.61	-50.63

Note: The values included in this table are those reported by Parties in CRF table 8(a). An empty cell can either depict that a Party did not recalculate its inventory for a given category-gas combination (i.e. 0 per cent difference), or that it has reported for the first time, or ceased reporting, emissions for a category-gas combination (i.e 100 per cent difference).

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Figure 1.1

Contribution of subsectors to total GHG emissions in the Energy sector [a]



[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.1

CO_2 emissions from Fuel combustion: reference approach and sectoral approach

	Reference approach	Sectoral approach	Difference	Explanation of the differences as reported in table 1.A(c) of the CRF
	($Gg\ CO_2$)		(%)	
Australia Base year	250,678	254,154	-1.37	1.AA Fuel Combustion - Sectoral Approach:Estimates are based on Gross Calorific Values (GCV). 1.AC Difference - Reference and Sectoral Approach:Three main reasons there is a difference between the Reference Approach and the National Approach as displayed in the above table and Table 1A(b): 1) Partly an artefact caused by deficiencies in the design of Tables 1.A(b) and 1.A(d). The CRF does not allow for the subtraction of the energy content of the fuels whose carbon is sequestered. It only allows for the subtraction of the sequestered carbon and carbon emitted elsewhere, i.e. in other sectors. Therefore, the energy consumption reported using this method for the Reference Approach includes energy which is netted out of the national approach. The energy consumption for the Reference Approach and the National Approach will therefore never balance using the CRF tables in their current format. This explains why the extent of non-reconciliation is different for energy and for CO_2. 2) The large discrepancy for liquid fuels is caused by the unreliability of the Reference Approach figure, which in turn derives from the crude oil density values used to convert reported indigenous production and imports in volumetric units into energy units, as required by the CRF.
Australia 2005	361,041	355,538	1.55	3) The defect described under point (1) also leads to slight discrepancies in both emission factors and oxidation factors between the two approaches for a number of individual fuel types.
Austria Base year	56,568	53,940	4.87	1.AA Fuel Combustion - Sectoral Approach/1990:Usage of "NO" notation keys in table 1.A(a)s1 to s4 : Energy statistics does not inquire all consumers but is limited to statistical samples. In the case that a statistical inquiry results in zero consumption of a specific sector and fuel group it is not always possible to decide if there occurs a consumption of a specific fuel category in a specific sector and year. However, as the energy statistics is based on a top down/bottom up approach it is assured that total national fuel consumption is equivalent to category 1A fuel consumption. Thus "NO" may be sometimes interpreted as "included elsewhere". 1.AC Difference - Reference and Sectoral Approach/1990:Solid fuels: CO_2 emissions: Reference Approach includes process emissions from blast furnaces which are included in category 2 C 1 and process emissions from carbide production which are included in category 2 B 4. Liquid fuels: CO_2 emissions: Heat values and carbon contents are sector and fuel specific. The reference approach considers a share of feedstocks used for plastics production and solvent production as non-carbon-stored. In the sectoral approach a share of emissions from waste incineration of plastics and solvents use (including imported products) is included in category 1A1a and category 3. In the sectoral approach a share of municipal solid waste without energy recovery is considered in category 6C for the years 1990 and1991. Gaseous fuels: CO_2 emissions: National aproach uses sector specific carbon contents and heating values (different from IPCC reference factors). Process emissions from ammonia-production are included in category 2 B 1. Other fuels: The sectoral approach considers waste as an additional fuel type (e.g. municipal solid waste and industrial fuel waste).
Austria 2005	74,049	70,567	4.93	1.AA Fuel Combustion - Sectoral Approach/2005:Usage of "NO" notation keys in table 1.A(a)s1 to s4 : Energy statistics does not inquire all consumers but is limited to statistical samples. In the case that a statistical inquiry results in zero consumption of a specific sector and fuel group it is not always possible to decide if there occurs a consumption of a specific fuel category in a specific sector and year. However, as the energy statistics is based on a top down/bottom up approach it is assured that total national fuel consumption is equivalent to category 1A fuel consumption. Thus "NO" may be sometimes interpreted as "included elsewhere". 1.AC Difference - Reference and Sectoral Approach/2005:Solid fuels: CO_2 emissions: Reference Approach includes process emissions from blast furnaces which are included in category 2 C 1 and process emissions from carbide production which are included in category 2 B 4. Liquid fuels: CO_2 emissions: Heat values and carbon contents are sector and fuel specific. The reference approach considers a share of feedstocks used for plastics production and solvent production as non-carbon-stored. In the sectoral approach a share of emissions from waste incineration of plastics and solvents use (including imported products) is included in category 1A1a and category 3. In the sectoral approach a share of municipal solid waste without energy recovery is considered in category 6C for the years 1990 and1991. Gaseous fuels: CO_2 emissions: National aproach uses sector specific carbon contents and heating values (different from IPCC reference factors). Process emissions from ammonia-production are included in category 2 B 1. Other fuels: The sectoral approach considers waste as an additional fuel type (e.g. municipal solid waste and industrial fuel waste).
Belarus Base year	100,080	100,071	-0.13	
Belarus 2005	54,180	53,196	1.67	
Belgium Base year	109,150	110,199	-0.81	
Belgium 2005	NA, NE	113,741	-100.00	
Bulgaria Base year [a]	91,159	90,726	0.48	
Bulgaria 2005	49,966	49,879	0.17	
Canada Base year	463,422	417,796	10.92	1.AB Liquid Fuels:Stock change includes the following line items from Statistic Canada's RESD: 5- Stock Variation; 6- Interproduct transfers; and 7 Other adjustments. 1.AB Solid Fuels:Stock change includes the following line items from Statistic Canada's RESD: 5- Stock Variation ;and 7 Other adjustments for primary solid fuels. It also includes 6 Inter-product transfers for the secondary solid fuels. 1.AB Gaseous Fuels:Stock change includes the following line items from Statistic Canada's RESD: 5- Stock Variation; 6- Interproduct transfers; and 7 Other adjustments.
Canada 2005	548,916	527,752	4.01	1.AC Difference - Reference and Sectoral Approach:The sectoral approach in the table does not include non-energy use or feedstock CO_2 emissions whereas they are included in the reference approach CO_2 emissions. When the non-energy use and feedstock CO_2 emissions are added to the Sectoral Approach CO_2 Emissions, the total CO_2 emissions approaches those of the Reference Approach and the percentage difference between the two decreases. Please refer to section 3.5.1 and Annex 4 of the NIR for Reference and Sectoral Approach discusssion and comparison. 1.AC Liquid Fuels:Refer to section 3.5.1 and Annex 4 of the NIR for Reference and Sectoral Approach discusssion and comparison. Refer to Annex 4 of the NIR for a discussion of SA & RA comparison.
Croatia Base year				
Croatia 2005				
Czech Republic Base year	162,922	146,808	10.98	1.AC Difference - Reference and Sectoral Approach:Detailed comparison of the results from Sectoral and Reference Approach (SA and RA), respectively, is given in NIR
Czech Republic 2005	124,581	114,673	8.64	
Denmark Base year	51,172	51,198	-0.05	1.AC Difference - Reference and Sectoral Approach:Non-energy use of fuels is not included in the Danish National Approach. Fuel consumption for non-energy is subtracted in Reference Approach to make results comparable. CO_2 emission from plastic part of municipal wastes is included in the Danish National Approach.
Denmark 2005	47,659	48,214	-1.15	CO_2 emission from the plastic part of municipal wastes is added in Reference Approach to make results comparable. (Other fuels of sources 1A1, 1A2 and 1A4)

Table 1.1 (continued)

CO_2 emissions from Fuel combustion: reference approach and sectoral approach

	Reference approach	Sectoral approach	Difference	Explanation of the differences as reported in table 1.A(c) of the CRF
	(Gg CO_2)		(%)	
Estonia Base year	35,894	36,732	-2.28	1.AA Fuel Combustion - Sectoral Approach:to the "f.Other" in the Table 1.A(a)s2 are included "Machinery"; " Mining"; "Production of transport equipment"; "Production of non-ferrous mineral products", "Wood industry"; Construction"; "Textile, lether and clthing industry" and Other industry. 1.AA Fuel Combustion - Sectoral Approach/1990:Energy Balance of the Statistics of Estonia 1.AA Liquid Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AA Solid Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AA Gaseous Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AA Other Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AB Fuel Combustion - Reference Approach/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AB Liquid Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AB Solid Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AB Gaseous Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Difference - Reference and Sectoral Approach/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Liquid Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Solid Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Gaseous Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Other Fuels/1990:Energy Balance, Yearbook of the Statistics of Estonia
Estonia 2005	16,772	17,718	-5.34	1.AA Fuel Combustion - Sectoral Approach:to the "f.Other" in the Table 1.A(a)s2 are included "Machinery"; " Mining"; "Production of transport equipment"; "Production of non-ferrous mineral products", "Wood industry"; Construction"; "Textile, lether and clthing industry" and Other industry. 1.AA Fuel Combustion - Sectoral Approach/2005:Energy Balance of the Statistics of Estonia 1.AA Liquid Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AA Solid Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AA Gaseous Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AA Other Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AB Fuel Combustion - Reference Approach/2005:Energy Balance of the Statistics of Estonia 1.AB Liquid Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AB Solid Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AB Gaseous Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Difference - Reference and Sectoral Approach/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Liquid Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Solid Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Gaseous Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia 1.AC Other Fuels/2005:Energy Balance, Yearbook of the Statistics of Estonia
European Community Base year	3,113,325	3,109,673	0.12	
European Community 2005	3,217,687	3,238,151	-0.63	
Finland Base year	54,661	53,111	2.92	1.AC Difference - Reference and Sectoral Approach:The relatively high difference in liquid fuels CO2 emissions is due to statistical differences in national oil balance.Allocation of Peat is different in SA ('Other fuels') compared to RA ('Solid fuels'). 1.AC Liquid Fuels:The relatively high difference in liquid fuels CO_2 emissions is due to statistical differences in national oil balance.
Finland 2005	52,587	53,139	-1.04	1.AC Solid Fuels:Allocation of Peat is different in SA ('Other fuels') compared to RA ('Solid fuels') 1.AC Other Fuels:Allocation of Peat is different in SA ('Other fuels') compared to RA ('Solid fuels').
France Base year	358,502	362,756	-1.17	
France 2005	IE,NA,NO	389,870	-100.00	
Germany Base year	-13,430,569	948,191	-1,516.44	
Germany 2005	885,866	795,211	11.40	
Greece Base year				
Greece 2005				
Hungary Base year[a]	80,095	79,716	0.48	
Hungary 2005	57,986	58,034	-0.08	
Iceland Base year	1,678	1,673	0.32	1.AA Fuel Combustion - Sectoral Approach:1A2f Other manufacturing industries & construction includes: mineral industry, construction and other industries
Iceland 2005	1,881	1,914	-1.72	not included above.
Ireland Base year	30,427	30,238	0.62	
Ireland 2005	44,325	44,603	-0.62	
Italy Base year	396,171	402,038	-1.46	
Italy 2005	460,388	462,894	-0.54	
Japan Base year	1,047,665	1,059,144	-1.08	
Japan 2005	1,195,730	1,202,828	-0.59	
Latvia Base year	18,773	18,555	1.17	1.AA Fuel Combustion - Sectoral Approach:Activity data are taken from Energy balance 2004 Central Statistical Bureau of Latvia and Annual Questionnaires prapared by Central Statistical Bureau for EUROSTAT.CO_2 emission factors are taken from local expert research, other emission factors are taken from IPCC Guidelines 1.AB Fuel Combustion - Reference Approach:Activity data are taken from Energy balance 2004 Central Statistical Bureau of Latvia and Annual Questionnaires prapared by Central Statistical Bureau for EUROSTAT.
Latvia 2005	7,217	7,272	-0.97	1.AC Difference - Reference and Sectoral Approach:Difference of the Reference approach over the National approach is due to statistical differences.
Liechtenstein Base year	NA, NO	202	-100.00	
Liechtenstein 2005	NA, NO	239	-100.00	
Lithuania Base year	32,870	32,672	0.61	
Lithuania 2005	12,994	12,597	3.16	
Luxembourg Base year	10,504	10,529	-0.24	1.AA Other Fuels:Though the use of this type of fuel is not estimated yet with precision, it is expected to be very low for this activity in Luxembourg. Hence, the emissions are estimated being equal or very close to zero.
Luxembourg 2005	10,962	11,106	-1.30	1.AB Fuel Combustion - Reference Approach:(1) Data for the Reference Approach are coming from Eurostat databases on energy. The data have been extracted from Eurostat's web site on 13 and 14 February 2007. (2) The unit for the Conversion factor is Eurostat's default since we use Eurostat's default factors. (3) The unit for the fraction of carbon oxidized is the default one too.
Monaco Base year	105	105	-0.02	1.AB Solid Fuels:M
Monaco 2005	98	98	0.05	1.AC Difference - Reference and Sectoral Approach:Some little differences in the net calorific values and in the carbon emission factors between both methods.

Table 1.1 (continued)

CO_2 emissions from Fuel combustion: reference approach and sectoral approach

	Reference approach	Sectoral approach	Difference	Explanation of the differences as reported in table 1.A(c) of the CRF
	(Gg CO_2)		(%)	
Netherlands Base year	155,641	149,980	3.77	1.AB Fuel Combustion - Reference Approach: NE; NOT INCLUDED IN ENERGY STATISTICS IE: Ethane INCLUDED IN LPG Petroleum Coke INCLUDED IN Other oil Refinery Feedstocks INCLUDED IN the other primary and secondary fuels Anthracite INCLUDED IN Other Bit. Coal Coking Coal INCLUDED IN Other Bit. Coal Lignite INCLUDED IN Other Bit. Coal 1.AC Difference - Reference and Sectoral Approach:In 1A but not in RA
Netherlands 2005	172,103	167,269	2.89	1A1a-other fuels: CO_2 from fossil waste incineration (AVIs) Not in NA-1A: CO2 fossil fuel sources in sector 1B: 1. B. 1. b. Solid Fuel Transformation 1.B.2.c Flaring CO_2 fossil fuel sources in sector 2: 2A4 Soda Ash Production 2B1. Ammonia production 2B5. Other chemicals, excl. activated carbon 2C1. Coke and coal inputs in blast furnace (net) 2D1. Pulp and Paper 2G. Process emissions in other economic sectors After these corrections, the differences are between -1.2% and +0.7%
New Zealand Base year	21,082	22,098	-4.60	1.AB Gaseous Fuels:The gas emission factor is based on a weighted average of the emission factors for all gas streams where the weightings are the amount og gas produced at each field (info from the Energy Data file). The emission factors for Maui and Kapuni treated gas are based on gas composition data provided yearly by NGC.
New Zealand 2005	31,570	31,451	0.38	Most of the other gas emission factors are from NZEIH.
Norway Base year	29,372	25,975	13.08	
Norway 2005	52,037	33,909	53.46	
Poland Base year[a]	476,964	471,636	1.13	
Poland 2005	310,024	309,720	0.10	
Portugal Base year	40,892	38,963	4.95	1.AC Difference - Reference and Sectoral Approach:Differences between Sectoral and Reference approach (CO2 from fuel combustion): the sectoral approach CO2 estimates depends partially on combustion information from point sources, and the reference approach results from national energy balances. Futhermore, feedstock emissions were estimated differently in the two approaches: in the sectoral approach, emissions were estimated from production activity data; in
Portugal 2005	60,561	60,156	0.67	the reference approach, a global percentage of carbon stored (e.g. lubricants, naphta) was used. In the sectoral approach, emissions from lubricants may not have been totally estimated, because it is uncertain if road traffic emission factors take into account these materials.
Romania Base year[a]	192,424	160,838	19.64	1.AC Difference - Reference and Sectoral Approach:The difference betwen RA and SA is caused by the fact that the Reference Approach treats the non-energy use of fuels
Romania 2005	94,245	94,271	-0.03	as if it were combustion. A correction is done by the carbon stored from non energy fuel use, but the information related to this area are limited in the national energy balance.
Russian Federation Base year	2,378,299	2,175,647	9.31	1.AA Fuel Combustion - Sectoral Approach:Explanation of lacking data and notation keys to be added in the following inventory submissior
Russian Federation 2005	1,561,905	1,530,259	2.07	1.AB Fuel Combustion - Reference Approach:Explanation of lacking data and notation keys to be added in the following inventory submission
Slovakia Base year	55,534	56,737	-2.12	
Slovakia 2005	37,538	36,017	4.22	
Slovenia Base year[a]	15,038	15,164	-0.83	
Slovenia 2005	15,634	15,612	0.14	
Spain Base year	206,498	205,415	0.53	1.AB Other non-specified:No information on other fuels, not specified in the CRF Reporter, is available.
Spain 2005	335,178	337,908	-0.81	
Sweden Base year	52,162	50,852	1.21	1.AC Difference - Reference and Sectoral Approach/1990:The Reference approach includes all fuel consumption in Sweden since it is not possible to separate fuels consumed in CRF 1B and 2 on this level. The large differences between approaches are mainly due to the fact that a lot of fuel in Sweden is consumed and thus reported in CRF 1B and 2. Since this table does not take CRF 1B and 2 into account, it is not fully applicable for swedish conditions. For more information, see chapter 3.3.6 .
Sweden 2005	48,897	46,952	1.09	
Switzerland Base year	41,516	41,122	0.96	1.AB Fuel Combustion - Reference Approach:Documentation Box to table 1.A(b): The fraction for carbon oxidized is consequently set to 1.0 due to the following reason: combustion installations in Switzerland have very good combustion properties; combined emissions of CO and unburnt VOC lie in the range of only 0.1 to 0.3 percent of CO2 emissions for oil and gas combustion. Since most of the coal used in Switzerland goes to the cement industry, also for coal a fraction factor of 1.0 was chosen. The conversion factors are country specific (see Swiss Energy Statistics 2004, on the back cover). The carbon emission factor for crude oil stems from the 1996 IPCC reference manual; the other carbon emission factors are country specific. Internet adress for the Swiss Energy Statistics: http://www.energie-schweiz.ch/internet/00008/index.html?lang=en
Switzerland 2005	44,044	43,563	1.11	1.AC Difference - Reference and Sectoral Approach:Differences in energy consumption: allocation problems: Only bitumen production from national refineries is shown in table 1.A(d). It is a refinery product and included in the crude oil amount. In the Swiss inventories bitumen emissions (NMVOC) appear under industrial processes and not under energy use. Gaseous fuels: gas distribution emissions (including emissions from compressor stations) are shown in table 1.B.1 and do not appear in the column "National approach" above. Liquid fuels/Solid fuels: in the national approach, petroleum coke is subsumed under solid fuels (cement industry use; there, petroleum coke is treated as coal). Other: Waste fuels from waste incineration (energy use) and waste fuels from cement production (energy use). In the refernce approach subsumed in "Solid fuels" (Other oil):
Turkey Base year				
Turkey 2005				
Ukraine Base year	586,494	592,613	-1.03	1.AA Fuel Combustion - Sectoral Approach:In 1991-1997 emissions for each fuel type were estimated according to category 1.A «Fuel Combustion». Disaggregating to IPCCC categories is impossible, since there is insufficient disaggregated data on activity 1.AC Difference - Reference and Sectoral Approach:See NIR Chapter 3.5.1 1.AC Liquid Fuels:See NIR Chapter 3.5.1 1.AC Solid Fuels:See NIR Chapter 3.5.1
Ukraine 2005	259,144	234,492	10.51	1.AC Gaseous Fuels:See NIR Chapter 3.5.1

Table 1.1 (continued)

CO_2 emissions from Fuel combustion: reference approach and sectoral approach

	Reference approach	Sectoral approach	Difference	Explanation of the differences as reported in table 1.A(c) of the CRF
	(Gg CO_2)		(%)	
United Kingdom Base year	565,400	567,560	-0.38	1.AA Liquid Fuels:The liquid fuel allocation is as follows: gasoline, diesel oil, residual fuel oil, orimulsion, kerosene, LPG, refinery gas, waste oils, petroleum coke, lubricants, naphtha, other oil products. Liquid fuel emission factors for methane in 1A1, 1A2, 1A4 are mainly from CORINAIR. 1.AA Solid Fuels:The solid fuel allocation is as follows: coal, coke, anthracite, patent fuel, blast furnace gas, coke oven gas. Solid fuel emission factors for methane are mainly based on Brain et al (1994). Emission of VOC from Coal Fired Appliances, DTI, Coal R&D, Report No COAL R033. Solid fuel emission factors for N2O are from Fynes et al (1994) Emissions of Greenhouse gases from coal fired Plant, British coal, CRE. Contract JOUF 0047-C(SMA). 1.AA Gaseous Fuels:The gaseous fuel allocation is as follows: Natural gas, colliery methane Natural gas emission factors for methane are IPCC defaults. 1.AA Other Fuels:Other fuel allocation is as follows: municipal solid waste, scrap tyres 1.AB Fuel Combustion - Reference Approach:A significant proportion of fuel consumption emissions occur in 1B1b Solid Fuel Transformation, 2C Metal Production, 2B1 Ammonia Productio This discrepancy arises from three sources: (I) The statistical difference between 'apparent consumption' used in the reference inventory and actual consumption used in the sectoral inventory This statistical difference results from losses and errors in the estimates. (2) The sectoral inventory includes emissions from the non-energy use of fuel where they can be specifically identified e.g. catalytic crackers, iron & steel, lubricants combustion, ammonia production. The reference approach implicitly treats the non-energy use of fuel as if it were combustion. A correction is then applied by deducting an estimate of carbon stored from non-energy fuel use. The carbon stored is estimated from an approximate procedure which does not identify specific processes. The result is that the reference approach is based on a higher estimate of non-energy use emissions than the sectoral inventory. (3) The reference approach uses data on primary fuels such as crude oil and natural gas liquids which are then corrected for imports, exports and stock changes of secondary fuels. Thus the estimates obtained will be highly dependent on the default carbon contents used for the primary fuels. Sectoral approach based on consumption of secondary fuels. 1.AC Difference - Reference and Sectoral Approach:The discrepancy in fuel consumption arises from 3 sources:(1) The statistical difference between 'apparent consumption' used in the reference inventory and actual consumption used in the sectoral inventory. This difference results from losses and errors in the estimates. (2) The sectoral inventory includes emissions from the non-energy use of fuel where they can be specifically identified e.g. catalytic crackers, iron&steel, lubricants combustion, ammonia production. The reference approach implicitly treats the non-energy use of fuel as combustion. A correction is then applied by deducting an estimate of carbon stored from non-energy fuel use. The carbon stored is estimated from an approximate procedure which does not identify specific processes.The result is that the reference approach is based on a higher estimate of non-energy use emissions than the sectoral inventory. (3) The reference approach uses data on primary fuels which are then corrected for imports, exports and stock changes of secondary fuels. Thus the estimates obtained are highly dependent on the default carbon contents used for the primary fuels. The sectoral approach is based wholly on the consumption of secondary fuels where carbon contents are known with greater certainty. In particular the carbon contents and calorific values of the primary liquid fuels are likely to vary more than those of secondary fuels 1.AC Difference - Reference and Sectoral Approach/1990:A significant proportion of fuel consumption emissions occur in 1B1b Solid Fuel Transformation, 2C Metal Production, 2B1 Ammonia Production. Including these sources with 1A in the comparison reduces the discrepancy to -0.7%. 1.AC Solid Fuels:So
United Kingdom 2005	550,102	537,776	2.29	1.AA Liquid Fuels:The liquid fuel allocation is as follows: gasoline, diesel oil, residual fuel oil, orimulsion, kerosene, LPG, refinery gas, waste oils, petroleum coke, lubricants, naphtha, other oil products. Liquid fuel emission factors for methane in 1A1, 1A2, 1A4 are mainly from CORINAIR. 1.AA Solid Fuels:The solid fuel allocation is as follows: coal, coke, anthracite, patent fuel, blast furnace gas, coke oven gas. Solid fuel emission factors for methane are mainly based on Brain et al (1994). Emission of VOC from Coal Fired Appliances, DTI, Coal R&D, Report No COAL R033. Solid fuel emission factors for N2O are from Fynes et al (1994) Emissions of Greenhouse gases from coal fired Plant, British coal, CRE. Contract JOUF 0047-C(SMA). 1.AA Gaseous Fuels:The gaseous fuel allocation is as follows: Natural gas, colliery methane Natural gas emission factors for methane are IPCC defaults. 1.AA Other Fuels:Other fuel allocation is as follows: municipal solid waste, scrap tyres 1.AB Fuel Combustion - Reference Approach:A significant proportion of fuel consumption emissions occur in 1B1b Solid Fuel Transformation, 2C Metal Production, 2B1 Ammonia Production This discrepancy arises from three sources: (I) The statistical difference between 'apparent consumption' used in the reference inventory and actual consumption used in the sectoral inventory This statistical difference results from losses and errors in the estimates. (2) The sectoral inventory includes emissions from the non-energy use of fuel where they can be specifically identified e.g. catalytic crackers, iron & steel, lubricants combustion, ammonia production. The reference approach implicitly treats the non-energy use of fuel as if it were combustion. A correction is then applied by deducting an estimate of carbon stored from non-energy fuel use. The carbon stored is estimated from an approximate procedure which does not identify specific processes. The result is that the reference approach is based on a higher estimate of non-energy use emissions than the sectoral inventory. (3) The reference approach uses data on primary fuels such as crude oil and natural gas liquids which are then corrected for imports, exports and stock changes of secondary fuels. Thus the estimates obtained will be highly dependent on the default carbon contents used for the primary fuels. Sectoral approach based on consumption of secondary fuels. 1.AC Difference - Reference and Sectoral Approach:The discrepancy in fuel consumption arises from 3 sources:(1) The statistical difference between 'apparent consumption' used in the reference inventory and actual consumption used in the sectoral inventory. This difference results from losses and errors in the estimates. (2) The sectoral inventory includes emissions from the non-energy use of fuel where they can be specifically identified e.g. catalytic crackers, iron&steel, lubricants combustion, ammonia production. The reference approach implicitly treats the non-energy use of fuel as combustion. A correction is then applied by deducting an estimate of carbon stored from non-energy fuel use. The carbon stored is estimated from an approximate procedure which does not identify specific processes.The result is that the reference approach is based on a higher estimate of non-energy use emissions than the sectoral inventory. (3) The reference approach uses data on primary fuels which are then corrected for imports, exports and stock changes of secondary fuels. Thus the estimates obtained are highly dependent on the default carbon contents used for the primary fuels. The sectoral approach is based wholly on the consumption of secondary fuels where carbon contents are known with greater certainty. In particular the carbon contents and calorific values of the primary liquid fuels are likely to vary more than those of secondary fuels 1.AC Solid Fuels:So
United States Base year	4,811,271	4,852,405	-0.85	1.AA Fuel Combustion - Sectoral Approach:Estimates of biomass consumption for fuel combustion exclude wood wastes, liquors, municipal solid waste, tires, etc. 1.AB Fuel Combustion - Reference Approach:In order to accommodate the differences and limitations between the Reference Approach table of the CRF and that of the U.S. Inventory, the following adaptations were made to section 1.AB: U.S. Territories consumption is included in the Imports column (applies to Natural Gas Liquids, Gasoline, Other Kerosene, Gas/Diesel Oil, Residual Fuel Oil, Lubricants, Other Oil, Other Bit. Coal, and Natural Gas). Adjustments for fuels accounted for in the Industrial Processes sector are included in the stock change column. These adjustments include petroleum coke for aluminum, ferroalloy, titanium dioxide, and ammonia production; coking coal for iron and steel production; natural gas for ammonia production; and other oil and residual fuel for carbon black production.Table 1.A(b) - The United States Reference Approach is also provided in a separate Excel spreadsheet, which is more detailed than this table allows information to be reported. Specifically, the
United States 2005	5,913,853	5,914,480	-0.01	fuel types provided in the CRF tables differ from the fuel types as defined in the U.S., and no "other" options were offered in the CRF table. The U.S. suggests revising the table to allow for additional fuel types. 1.AB Other Fuels:Other (3) includes waste combustion and geothermal emissions. The inclusion of emissions from waste combustion and geothermal in this table gives higher totals for energy consumption and CO2 emissions in the CRF Reference Approach than in the U.S. Inventory Reference Approach which does not includes these sources. 1.AC Difference - Reference and Sectoral Approach:Refer to section 3.11 of the NIR.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.2

CO_2 emissions from stationary combustion - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	192,969	276,554	1.5	3.8	2.4	3.2	5.7	3.1	2.3	2.8	1.1	3.7	1.9	1.2	43.3
Austria	41,504	46,418	5.2	5.9	5.9	0.5	-4.9	-1.8	-2.8	7.4	-1.7	10.1	-3.0	2.7	11.8
Belarus	87,162	48,766	-7.4	-11.1	1.6	3.5	-3.5	-3.8	-3.7	-1.8	-2.2	0.6	6.1	0.2	-44.1
Belgium	89,931	87,910	3.6	0.3	4.7	-6.3	5.6	-6.0	0.6	0.1	-1.9	3.8	-1.8	-2.3	-2.2
Bulgaria	76,912	41,764	-16.2	4.8	-1.7	-0.4	-13.0	-9.4	-1.4	3.7	-6.6	8.6	-2.8	2.2	-45.7
Canada	275,859	338,239	-1.7	2.7	2.6	1.7	1.2	3.9	6.7	-1.3	1.5	4.4	-3.2	-1.0	22.6
Croatia															
Czech Republic	137,865	97,176	-3.5	-0.9	6.2	-7.1	-2.3	-6.4	6.9	-0.1	-5.1	2.1	-1.9	-2.0	-29.5
Denmark	40,736	34,878	23.6	-6.2	28.2	-16.7	-7.9	-7.2	-9.4	4.1	-1.3	12.3	-13.7	-9.2	-14.4
Estonia	33,807	15,633	-5.7	-8.8	5.2	-3.5	-12.5	-7.9	0.5	1.9	-1.5	13.6	-0.3	-3.7	-53.8
European Community	2,408,188	2,377,080	0.9	0.8	3.1	-3.0	1.0	-1.7	0.8	2.8	-0.9	3.0	-0.2	-0.8	-1.3
Finland	40,502	39,480	-2.4	-6.9	13.4	-4.7	-6.9	-1.8	-4.4	12.5	5.2	15.3	-8.3	-22.3	-2.5
France	243,656	248,973	9.1	2.0	5.7	-3.3	7.4	-4.7	-1.3	1.3	-2.9	2.8	0.7	0.5	2.2
Germany	780,207	630,088	-4.4	-0.9	4.1	-5.3	-1.6	-4.4	0.5	4.3	-2.0	3.2	-1.0	-2.2	-19.2
Greece															
Hungary	72,147	46,257	-1.8	-1.6	2.7	-4.0	-3.3	-0.8	-4.1	2.5	-3.6	6.0	-4.7	-0.7	-35.9
Iceland	1,072	1,197	-5.3	2.4	8.5	2.8	-3.1	0.6	-7.8	-3.2	6.1	-6.6	7.2	-1.2	11.6
Ireland	25,193	31,661	2.9	2.4	2.1	3.0	3.0	2.3	4.8	5.0	-4.1	-1.3	-0.8	2.2	25.7
Italy	299,536	334,806	-1.0	7.7	-1.6	0.7	2.5	1.4	1.1	1.0	0.0	3.9	0.4	1.1	11.8
Japan	848,090	953,185	-0.5	0.6	0.7	-0.6	-3.3	3.8	2.2	-1.8	5.0	0.8	0.0	0.9	12.4
Latvia	15,615	4,384	-8.3	-14.8	1.5	-7.8	-5.6	-10.2	-14.7	1.4	-1.7	0.3	-3.4	-0.9	-71.9
Liechtenstein	124	151	-4.7	1.2	0.7	6.7	8.3	-4.6	-7.5	1.6	7.0	6.5	1.2	-0.2	22.0
Lithuania	27,020	8,461	5.6	-12.8	1.7	-8.1	5.2	-20.3	-11.1	5.6	-0.9	0.2	3.8	4.9	-68.7
Luxembourg	7,804	3,925	-3.4	-28.6	0.6	-17.7	-21.0	5.9	-4.6	2.6	18.3	-2.1	13.5	-7.1	-49.7
Monaco	73	66	-5.2	-2.1	6.2	2.8	-1.1	0.3	-0.2	1.1	-2.5	-6.6	-7.9	0.3	-9.1
Netherlands	123,406	132,207	3.9	2.7	5.3	-5.4	1.3	-4.9	1.4	4.5	-0.8	2.4	0.7	-3.8	7.1
New Zealand	13,465	17,446	2.1	-6.2	7.5	14.2	-10.5	7.7	0.0	9.9	-3.3	5.8	-7.5	11.8	29.6
Norway	14,471	19,353	-1.8	-3.6	13.2	-0.5	-2.1	-1.7	0.3	9.8	0.6	7.1	-2.7	-2.7	33.7
Poland	443,132	273,525	-1.8	-0.4	5.6	-4.0	-7.9	-3.9	-4.4	0.5	-4.3	4.1	-2.8	-0.5	-38.3
Portugal	29,136	40,864	3.9	8.1	-9.5	5.5	7.7	18.1	-7.8	1.2	8.6	-10.7	4.5	4.3	40.3
Romania	153,544	82,296	-22.2	4.1	2.9	-12.3	-13.5	-12.9	1.9	4.6	6.2	7.2	-2.4	-5.2	-46.4
Russian Federation	1,845,290	1,346,420	-100.0	-0.6	-0.7	-6.9	-2.5	1.1	3.4	-0.2	-1.5	2.7	-1.1	6.1	-27.0
Slovakia	51,852	29,805	-12.8	2.8	1.4	0.0	-5.5	-2.7	-6.6	7.1	-6.3	1.3	-4.4	-4.0	-42.5
Slovenia	13,193	11,244	-6.0	4.5	1.7	2.2	3.1	-4.2	-0.8	7.3	0.6	-3.6	1.8	0.1	-14.8
Spain	148,903	235,473	3.6	6.3	-10.1	11.8	-0.1	11.9	4.0	-0.3	8.2	-0.3	5.9	5.6	58.1
Sweden	31,833	26,688	2.0	-3.1	12.4	-11.8	1.3	-8.6	-4.2	2.0	2.5	2.5	-4.8	-9.4	-16.2
Switzerland	26,205	27,364	5.8	4.1	3.3	-3.7	3.8	-1.5	-4.9	4.1	-2.7	3.8	0.8	1.7	4.4
Turkey															
Ukraine	505,988	198,197	1.1	-8.9	-10.5	-7.5	-27.2	-1.2	-7.3	0.7	0.1	7.1	-3.2	3.7	-60.8
United Kingdom	445,433	405,733	2.5	-2.5	3.9	-5.1	1.0	-2.3	2.6	3.1	-4.2	2.6	-0.4	-0.5	-8.9
United States	3,388,448	4,021,688	-0.1	0.6	4.3	1.3	0.3	0.5	3.6	-1.4	-0.1	1.7	1.4	0.1	18.7

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary combustion).

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.3

Stationary combustion: liquid fuels, CO_2 (2005)

	Key category	Share of national total	IEF in CRF based on	Energy industries						Manufacturing industries and construction			Other sectors						Other (Not specified elsewhere)		
				Methods and EF used[a]		CO_2 IEF				Method and EF used[b]		CO_2 IEF	Method and EF used[c]		CO_2 IEF				Method and EF used[d]		CO_2 IEF
				Methods	EF	Total	Public electricity and heat production	Petroleum refining	Manufacture of solid fuels and other energy industries	Methods	EF	Total	Methods	EF	Total	Commercial / Institutional	Residential	Agriculture / Forestry / Fisheries	Methods	EF	Stationary
		%				(t/TJ)						(t/TJ)			(t/TJ)						(t/TJ)
Australia[e]	L, T	6.3	GCV	T2	CS, PS	72.19	72.93	71.49	72.86	T2	CS	72.23	T1, T2	CS	71.47	71.37	65.97	72.57	T1, T2	CS, D	22.17
Austria	L, T	16.1	NCV	T2	CS	74.46	78.99	72.37	NO	T2	CS	76.01	T2	CS	74.16	73.39	74.78	72.87	CS, M	CS	NA
Belarus	L, T	12.5	NCV	D	D	76.43	76.43	IE	IE	D, T1	D	73.74	D, T1	D	70.33	70.16	62.87	72.44	D	D	70.34
Belgium	L, T	19.2	NCV			66.57	76.59	64.43	NO			79.65			73.32	73.20	73.19	74.33			NA
Bulgaria	L, T	5.9	NCV	T2	CS	74.93	84.22	NO	70.12	T2	CS	81.96	T2	CS	71.31	74.47	63.05	73.82	NA	NA	NO
Canada[e]	L, T	5.2	GCV	T2	CS	76.16	76.24	75.94	NA	T2	CS	76.18	T2	CS	76.39	76.35	76.45	76.34	NA	NA	NA
Croatia																					
Czech Republic	L, T	4.9	NCV	T1	D	72.97	75.48	71.74	72.60	T1	D	71.32	T1	D	64.52	71.06	62.44	NE	T1	D	NO
Denmark	L, T	13.4	NCV	CR	CR, CS, D	67.02	77.67	57.88	74.00	CR	CS	79.22	CR	CS	74.25	73.88	74.45	74.08	OTH	CS	NA
Estonia	L, T	3.8	NCV	CS, T1	CS, D	75.68	75.68	NO	NE	CS, T1	CS, D	73.40	CS, T1	CS, D	72.64	73.02	70.07	73.29	NA	NA	NO
European Community	L, T	14.6	NCV	CR, CS, D, T1, T2, T3	CR, CS, D, PS	73.20	76.25	71.28	75.92	CR, CS, D, T1, T2, T3	CR, CS, D, PS	75.21	CR, D, T1, T2, T3	CR, CS, D	72.88	73.37	72.57	73.27	CR, D, T1, T2, T3	CR, CS, D	72.41
Finland	L, T	18.2	NCV	T3	CS, D, PS	74.51	78.09	72.66	NO	CS, M, T3	CS, PS	73.87	CS, M, T1, T3	CS, D	74.19	74.98	73.77	74.23	CS, T1	CS	72.08
France	L, T	17.5	NCV	CR	CS	75.69	77.97	73.97	NO	CR	CS	79.02	CR	CS	73.53	74.55	72.98	73.37	NA	NA	NO
Germany	L, T	11.4	NCV	CS	CS	71.16	79.65	68.92	75.16	CS, T2	CS	62.18	CS	CS	73.62	73.70	73.57	73.81	CS	CS	73.99
Greece																					
Hungary	L, T	6.3	NCV	T3	D	76.55	76.55	IE	IE	T1, T2	D	42.73	T1	D	68.35	64.11	62.44	73.00	NA	NA	NO
Iceland	L, T	31.3	NCV			73.47	73.47	NO	NO			75.50			73.59	62.44	70.44	73.67			75.93
Ireland	L, T	18.1	NCV	T1, T3	CS, PS	77.99	79.92	67.80	NO	T1	CR	79.88	T1	CS	72.66	73.18	72.24	73.30	NA	NA	NO
Italy	L, T	17.5	NCV	T3	CS	75.67	76.60	74.85	76.70	T2	CS	83.59	T2	CS	71.30	70.43	70.67	72.91	T2	CS	NA
Japan[e]	L, T	25.6	GCV	T1	CS	69.27	73.76	56.84	62.23	T1	CS	70.82	T1	CS	70.58	71.52	68.46	72.96	T1	CS	72.52
Latvia	L, T	8.4	NCV	T1	CS	76.25	76.47	NO	74.37	T1	CS, PS	73.55	T1	CS	71.53	73.54	67.95	74.09	NA	NA	NA
Liechtenstein	L, T	27.4	NCV	T2	CS	NO	NO	NO	NO	T2	CS	73.70	CS, T1, T2	CS	73.66	73.65	73.70	73.60	T1	CS	NA
Lithuania	L, T	14.2	NCV	T1, T2	CR, CS, D	75.02	78.62	73.85	73.80	T2	CR, CS	75.49	T2	CS	69.01	73.48	65.17	73.98	T2	CS	NE, NO
Luxembourg	L	7.8	NCV	CR	CR, CS	73.00	73.00	NO	NO	CR	CR, CS, PS	75.42	CR	CR	70.38	70.00	70.01	73.82	NA	NA	IE
Monaco	L, T	24.7	NCV	T1	D	NO	NO	NO	NO	NA	NA	NA, NO	T1	D	73.33	IE	73.33	NO	NA	NA	NO
Netherlands	L, T	10.1	NCV	T2	CS	71.40	58.67	75.37	74.10	T2	CS	65.00	T2	CS, D	73.70	70.52	71.93	74.26	T2	D	NA
New Zealand[e]	L	4.1	GCV	D	CS	78.63	72.36	78.80	NO	D	CS	70.48	D	CS	71.21	71.06	62.95	72.44	NA	NA	NA
Norway	L, T	13.0	NCV	T1, T2, T3	CS, PS	57.18	73.28	49.92	86.01	T1, T2, T3	CS	66.99	T2	CS	73.35	73.37	72.83	73.54	T2	CS	73.69
Poland	L, T	7.9	NCV	T2	CS, D	67.29	73.64	64.62	76.09	T2	CS, D	74.45	T2	CS, D	72.25	72.55	68.30	73.82	T2	CS, D	63.51
Portugal	L, T	24.1	NCV	T2	CR, D, PS	73.34	75.52	69.14	NO	T2	CR, D, PS	75.46	T2	CR, D	69.14	72.23	62.98	72.99	NA	NA	NO
Romania	L, T	10.0	NCV	T1	D	72.54	72.54	IE	IE	T1	D	72.02	T1	D	69.24	69.64	67.73	73.08	NA	NA	NE
Russian Federation	L, T	8.7	NCV	T1	D	C, IE	C	IE	IE	T1	D	C, IE	T1	D	C	C	C	C	D, T1	CS, D	C, IE, NO
Slovakia	L, T	2.9	NCV	T1	CS	76.02	75.93	76.10	NO	T1	CS	75.86	T1	CS	73.72	73.26	NO	74.58	T1	CS	75.19
Slovenia	L, T	14.4	NCV	T1	CS, D	73.93	74.05	73.49	72.45	T1	CS, D	77.28	T1	CS, D	72.19	73.30	71.51	72.88	NA	NA	NA
Spain	L, T	18.2	NCV	T2	CR, CS, PS	71.22	75.98	65.43	96.57	T2, T3	CR, CS, PS	82.44	T2, T3	CR, CS	71.32	72.30	69.84	72.56	NA	NA	NO
Sweden	L, T	24.2	NCV	T1, T2, T3	CS	67.19	75.33	63.48	74.26	T1, T2, T3	CS	71.65	T1, T2, T3	CS	73.32	72.53	74.01	72.73	T1	CS	NO
Switzerland	L, T	33.5	NCV	CS, T2	CS	61.40	73.53	60.57	NO	CS, T2, T3	CS	74.01	CS, T2	CS	73.53	73.53	73.53	73.63	T2	CS	NO
Turkey																					
Ukraine	L, T	1.3	NCV	T1	D	65.84	76.26	63.67	71.29	T1	D	74.60	T1	D	66.09	68.67	63.64	72.88	T1	D	72.44
United Kingdom	L, T	8.8	NCV	OTH, T1, T2	CS	73.25	77.05	73.30	62.23	OTH, T1, T2	CS	72.78	OTH, T1, T2	CS	72.07	74.06	71.04	73.47	T2, T3	CS	NA
United States[e]	L, T	10.3	GCV	T1	CS	82.68	82.68	IE	IE	T1	CS	73.13	T1	CS	70.36	72.61	69.21	IE	CS, T1	CS	30.95

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.1 Energy industries.

[b] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.2 Manufacturing industries and construction.

[c] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.4 Other sectors.

[d] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.5 Other (not specified elsewhere).

[e] Australia, Canada, Japan, New Zealand and United States reported energy data on a gross calorific value (GCV) basis. This means that reported IEFs are about 5 per cent lower for liquid and solid fuels and biomass, and about 10 per cent lower for gaseous fuels than would have been the case if the data were given on a net calorific value (NCV) basis. The IEFs included in this table have been converted into NCV-based values and are not reflecting the reported IEFs.

Table 1.4

Stationary combustion: solid fuels, CO_2 (2005)

	Key category	Share in national total	IEF in CRF based on	Energy industries						Manufacturing industries and construction			Other sectors							Other (Not specified elsewhere)		
				Methods and EF used[a]		CO_2 IEF				Method and EF used[b]		CO_2 IEF	Method and EF used[c]		CO_2 IEF					Method and EF used[d]		CO_2 IEF
				Methods	EF	Total	Public electricity and heat production	Petroleum refining	Manufacture of solid fuels and other energy industries	Methods	EF	Total	Methods	EF	Total	Commercial / Institutional	Residential	Agriculture / Forestry / Fisheries	Methods	EF	Stationary
		%				(t/TJ)						(t/TJ)			(t/TJ)						(t/TJ)
Australia[e]	L, T	36.6	GCV	T2	CS, PS	96.01	96.12	NA	86.10	T2	CS	86.26	T1, T2	CS	96.28	96.32	95.42	NA	T1, T2	CS, D	NA
Austria	L, T	12.9	NCV	T2	CS	94.82	94.82	NO	NO	T2	CS	100.22	T2	CS	93.22	93.70	93.17	93.72	CS, M	CS	NA
Belarus	L, T	3.6	NCV	D	D	95.63	95.63	IE	IE	D, T1	D	100.13	D, T1	D	92.74	92.71	92.74	93.36	D	D	103.32
Belgium	L, T	17.6	NCV			146.92	157.50	NO	43.21			67.74			92.71	92.70	92.71	92.71			NA
Bulgaria	L, T	45.2	NCV	T2	CS	108.63	107.34	NO	147.52	T2	CS	133.32	T2	CS	100.65	100.23	100.68	99.94	NA	NA	NO
Canada[e]	L	15.4	GCV	T2	CS	93.19	93.66	86.90	89.91	T2	CS	43.80	T2	CS	100.06	83.84	100.15	NA	NA	NA	NA
Croatia																					
Czech Republic	L, T	49.6	NCV	T1	D	97.01	97.86	NO	69.02	T1	D	94.87	T1	D	98.43	98.78	98.27	99.87	T1	D	NO
Denmark	L, T	22.4	NCV	CR	CR, CS, D	95.00	95.00	NO	NO	CR	CS	96.49	CR	CS	95.00	NO	95.47	95.00	OTH	CS	NO
Estonia	L, T	61.8	NCV	CS, T1	CS, D	96.18	99.25	86.46	102.79	CS, T1	CS, D	99.69	CS, T1	CS, D	97.59	96.85	97.65	96.30	NA	NA	NO
European Community	L, T	20.1	NCV	CR, CS, D, T1, T2, T3	CR, CS, D, PS	101.15	100.96	84.90	105.99	CR, CS, D, T1, T2, T3	CR, CS, D, PS	79.76	CR, D, T1, T2, T3	CR, CS, D	99.18	94.81	100.12	95.14	CR, D, T1, T2, T3	CR, CS, D	98.00
Finland	L, T	16.1	NCV	T3	CS, D, PS	94.67	93.66	93.65	116.63	CS, M, T3	CS, PS	141.43	CS, M, T1, T3	CS, D	93.27	NO	89.87	93.65	CS, T1	CS	NO
France	L, T	8.9	NCV	CR	CS	96.31	95.32	268.00	106.47	CR	CS	138.47	CR	CS	95.00	NO	NO	95.00	NA	NA	NO
Germany	L, T	33.1	NCV	CS	CS	101.33	102.57	40.00	83.85	CS, T2	CS	48.81	CS	CS	99.01	98.18	99.24	98.00	CS	CS	98.00
Greece																					
Hungary	L, T	16.4	NCV	T3	D	104.10	104.10	NO	IE	T1, T2	D	103.53	T1	D	92.85	101.05	92.72	95.10	NA	NA	NO
Iceland	T	0.7	NCV			NO	NO	NO	NO			92.71			NO	NO	NO	NO			NO
Ireland	L, T	15.7	NCV	T1, T3	CS, PS	98.95	98.69	NO	121.54	T1	CR	94.60	T1	CS	99.15	94.97	99.37	NO	NA	NA	NO
Italy	L, T	11.2	NCV	T3	CS	106.13	93.20	NO	191.43	T2	CS	65.31	T2	CS	93.20	93.20	93.20	NO	T2	CS	NA
Japan[e]	L, T	32.2	GCV	T1	CS	94.28	94.74	42.48	85.63	T1	CS	97.59	T1	CS	94.21	95.37	42.86	113.29	T1	CS	111.53
Latvia	L, T	2.7	NCV	T1	CS	95.08	94.57	NO	97.27	T1	CS, PS	92.20	T1	CS	92.31	92.42	92.20	92.20	NA	NA	NA
Liechtenstein		0.0	NCV	T2	CS	NO	NO	NO	NO	T2	CS	NO	CS, T1, T2	CS	94.00	NO	94.00	NO	T1	CS	NA
Lithuania	L, T	3.6	NCV	T1, T2	CR, CS, D	98.73	97.31	NO	102.00	T2	CR, CS	95.03	T2	CS	95.93	95.16	97.02	95.49	T2	CS	NE, NO
Luxembourg	L, T	2.3	NCV	CR	CR, CS	NO	NO	NO	NO	CR	CR, CS, PS	97.88	CR	CR	102.06	102.06	102.06	NE	NA	NA	NO
Monaco	L, T	27.8	NCV	T1	D	55.57	55.57	NO	NO	NA	NA	NA, NO	T1	D	NO	NO	NO	NO	NA	NA	NO
Netherlands	L, T	14.2	NCV	T2	CS	109.96	109.96	NO	NO	T2	CS	130.79	T2	CS, D	89.70	86.66	94.69	NO	T2	D	NA
New Zealand[e]	L, T	8.7	GCV	D	CS	95.93	95.93	NO	NO	D	CS	96.21	D	CS	96.40	96.20	97.90	95.99	NA	NA	NA
Norway	L, T	1.3	NCV	T1, T2, T3	CS, PS	90.70	90.70	NO	NO	T1, T2, T3	CS	114.63	T2	CS	108.55	NO	108.55	NO	T2	CS	NO
Poland	L, T	55.3	NCV	T2	CS, D	99.87	100.47	143.00	79.75	T2	CS, D	106.38	T2	CS, D	95.05	94.18	94.97	95.98	T2	CS, D	98.42
Portugal	L, T	14.9	NCV	T2	CR, D, PS	90.16	90.16	NO	NO	T2	CR, D, PS	98.79	T2	CR, D	NO	NO	NO	NO	NA	NA	NO
Romania	L, T	24.3	NCV	T1	D	99.20	99.20	IE	IE	T1	D	130.67	T1	D	98.93	94.37	99.18	98.59	NA	NA	NE
Russian Federation	L, T	21.4	NCV	T1	D	C, IE	C	IE	IE	T1	D	C, IE	T1	D	C	C	C	C	D, T1	CS, D	C, NE, NA
Slovakia	L, T	20.8	NCV	T1	CS	93.50	93.14	104.64	NO	T1	CS	94.25	T1	CS	94.75	96.84	94.43	94.89	T1	CS	94.88
Slovenia	L, T	31.5	NCV	T1	CS, D	103.51	103.51	NO	NO	T1	CS, D	99.05	T1	CS, D	99.42	NO	99.42	NO	NA	NA	NA
Spain	L, T	18.6	NCV	T2	CR, CS, PS	97.48	97.68	NA	83.82	T2, T3	CR, CS, PS	129.84	T2, T3	CR, CS	87.28	80.91	89.33	NA	NA	NA	NO
Sweden	L, T	11.0	NCV	T1, T2, T3	CS	143.42	151.74	NO	77.10	T1, T2, T3	CS	27.41	T1, T2, T3	CS	NO	NO	NO	NO	T1	CS	NO
Switzerland	L, T	1.5	NCV	CS, T2	CS	94.93	NO	94.93	NO	CS, T2, T3	CS	94.93	CS, T2	CS	94.93	NO	94.93	NO	T2	CS	NO
Turkey																					
Ukraine	L, T	18.6	NCV	T1	D	89.58	95.61	96.30	58.60	T1	D	79.47	T1	D	96.57	96.41	96.68	96.34	T1	D	96.31
United Kingdom	L, T	22.1	NCV	OTH, T1, T2	CS	92.00	92.40	NO	59.77	OTH, T1, T2	CS	133.84	OTH, T1, T2	CS	104.09	92.58	105.67	88.09	T2, T3	CS	NA
United States[e]	L, T	29.1	GCV	T1	CS	94.22	94.22	IE	IE	T1	CS	93.77	T1	CS	95.13	95.13	95.13	IE	CS, T1	CS	54.47

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.1 Energy industries.

[b] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.2 Manufacturing industries and construction.

[c] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.4 Other sectors.

[d] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.5 Other (not specified elsewhere).

[e] Australia, Canada, Japan, New Zealand and United States reported energy data on a gross calorific value (GCV) basis. This means that reported IEFs are about 5 per cent lower for liquid and solid fuels and biomass, and about 10 per cent lower for gaseous fuels than would have been the case if the data were given on a net calorific value (NCV) basis. The IEFs included in this table have been converted into NCV-based values and are not reflecting the reported IEFs.

Table 1.5

Stationary combustion: gaseous fuels, CO_2 (2005)

	Key category	Share in national total	IEF in CRF based on	Energy industries						Manufacturing industries and construction			Other sectors						Other (Not specified elsewhere)		
				Methods and EF used[a]		CO_2 IEF				Method and EF used[b]		CO_2 IEF	Method and EF used[c]		CO_2 IEF				Method and EF used[d]		CO_2 IEF
				Methods	EF	Total	Public electricity and heat production	Petroleum refining	Manufacture of solid fuels and other energy industries	Methods	EF	Total	Methods	EF	Total	Commercial / Institutional	Residential	Agriculture / Forestry / Fisheries	Methods	EF	Stationary
		%				(t/TJ)						(t/TJ)			(t/TJ)						(t/TJ)
Australia[e]	L, T	9.8	GCV	T2	CS, PS	56.91	56.96	56.84	56.84	T2	CS	56.98	T1, T2	CS	56.90	56.90	56.90	56.84	T1, T2	CS, D	NA
Austria	L, T	19.3	NCV	T2	CS	55.40	55.40	55.40	55.40	T2	CS	55.36	T2	CS	55.40	55.40	55.40	55.40	CS, M	CS	NA
Belarus	L, T	48.4	NCV	D	D	55.87	55.87	IE	IE	D, T1	D	59.41	D, T1	D	55.82	55.82	55.82	55.82	D	D	56.42
Belgium	L, T	20.0	NCV			55.99	55.99	55.82	NO			55.84			55.81	55.81	55.81	55.82			NA
Bulgaria	L	8.5	NCV	T2	CS	55.82	55.82	55.82	55.82	T2	CS	55.82	T2	CS	55.82	55.82	55.82	55.82	NA	NA	NO
Canada[e]	L, T	24.8	GCV	T2	CS	58.14	55.23	40.62	65.86	T2	CS	56.72	T2	CS	55.41	55.55	55.20	57.95	NA	NA	NA
Croatia																					
Czech Republic	L, T	12.3	NCV	T1	D	55.82	55.82	55.82	NO	T1	D	55.82	T1	D	55.82	55.82	55.82	55.82	T1	D	NO
Denmark	L, T	16.5	NCV	CR	CR, CS, D	56.96	56.96	NO	56.96	CR	CS	56.96	CR	CS	56.96	56.96	56.96	56.96	OTH	CS	NO
Estonia	L, T	8.4	NCV	CS, T1	CS, D	55.86	55.86	NO	NO	CS, T1	CS, D	55.82	CS, T1	CS, D	55.82	55.82	55.82	55.81	NA	NA	NO
European Community	L, T	20.7	NCV	CR, CS, D, T1, T2, T3	CR, CS, D, PS	56.88	56.57	56.64	60.35	CR, CS, D, T1, T2, T3	CR, CS, D, PS	56.34	CR, D, T1, T2, T3	CR, CS, D	56.56	56.50	56.57	56.65	CR, D, T1, T2, T3	CR, CS, D	55.63
Finland	L, T	11.8	NCV	T3	CS, D, PS	54.76	54.76	54.76	NO	CS, M, T3	CS, PS	54.84	CS, M, T1, T3	CS, D	54.76	54.76	54.76	54.76	CS, T1	CS	54.76
France	L, T	16.1	NCV	CR	CS	55.64	57.00	51.27	NO	CR	CS	57.07	CR	CS	57.00	57.00	57.00	57.00	NA	NA	NO
Germany	L, T	17.0	NCV	CS	CS	55.99	56.00	56.00	55.86	CS, T2	CS	56.00	CS	CS	56.00	56.00	56.00	56.00	CS	CS	56.00
Greece																					
Hungary	L, T	34.9	NCV	T3	D	55.82	55.82	IE	IE	T1, T2	D	53.08	T1	D	55.82	55.82	55.82	55.82	NA	NA	NO
Iceland		0.0	NCV			NO	NO	NO	NO			0			NO	NO	NO	NO			NO
Ireland	L, T	11.5	NCV	T1, T3	CS, PS	56.88	56.88	NO	NO	T1	CR	56.80	T1	CS	56.80	56.80	56.80	NO	NA	NA	NO
Italy	L, T	28.3	NCV	T3	CS	56.44	56.44	56.44	56.44	T2	CS	56.44	T2	CS	56.44	56.44	56.44	56.44	T2	CS	NA
Japan[e]	L, T	12.3	GCV	T1	CS	54.90	54.90	55.55	55.07	T1	CS	55.11	T1	CS	55.31	55.12	55.57	55.07	T1	CS	56.62
Latvia	L, T	29.0	NCV	T1	CS	55.82	55.82	NO	55.82	T1	CS, PS	55.82	T1	CS	55.82	55.82	55.82	55.82	NA	NA	NA
Liechtenstein	L, T	28.4	NCV	T2	CS	55.00	55.00	NO	NO	T2	CS	55.00	CS, T1, T2	CS	55.00	55.00	55.00	NO	T1	CS	NA
Lithuania	L	19.5	NCV	T1, T2	CR, CS, D	56.90	56.90	56.90	56.90	T2	CR, CS	56.90	T2	CS	56.90	56.90	56.90	56.90	T2	CS	NE, NO
Luxembourg	L, T	20.7	NCV	CR	CR, CS	56.00	56.00	NO	NO	CR	CR, CS, PS	55.66	CR	CR	55.00	55.00	55.00	NE	NA	NA	NO
Monaco	L, T	10.9	NCV	T1	D	51.08	51.08	NO	NO	NA	NA	NA, NO	T1	D	51.08	IE	51.08	NO	NA	NA	NO
Netherlands	L, T	37.0	NCV	T2	CS	56.94	56.80	56.80	58.87	T2	CS	56.80	T2	CS, D	56.80	56.80	56.80	56.80	T2	D	NA
New Zealand[e]	L, T	9.8	GCV	D	CS	58.75	57.69	63.66	61.44	D	CS	63.40	D	CS	57.62	57.62	57.62	NE	NA	NA	NA
Norway	L, T	21.1	NCV	T1, T2, T3	CS, PS	69.49	64.95	NO	69.50	T1, T2, T3	CS	76.01	T2	CS	64.95	64.95	64.95	64.95	T2	CS	NO
Poland	L, T	5.4	NCV	T2	CS, D	54.36	54.35	53.87	55.39	T2	CS, D	53.92	T2	CS, D	53.93	54.57	53.65	53.75	T2	CS, D	54.58
Portugal	L, T	8.6	NCV	T2	CR, D, PS	55.82	55.82	55.82	NO	T2	CR, D, PS	55.82	T2	CR, D	55.21	55.82	55.82	23.43	NA	NA	NO
Romania	L, T	19.3	NCV	T1	D	55.82	55.82	IE	IE	T1	D	55.82	T1	D	55.82	55.82	55.82	55.82	NA	NA	NE
Russian Federation	L, T	33.0	NCV	T1	D	C, IE	C	IE	IE	T1	D	C, IE	T1	D	C	C	C	C	D, T1	CS, D	55.82
Slovakia	L, T	23.3	NCV	T1	CS	55.18	55.18	55.18	55.18	T1	CS	55.18	T1	CS	55.14	55.18	55.13	55.18	T1	CS	55.18
Slovenia	L, T	9.0	NCV	T1	CS, D	55.02	55.02	NO	NO	T1	CS, D	55.02	T1	CS, D	55.02	55.02	55.02	NO	NA	NA	NA
Spain	L, T	16.3	NCV	T2	CR, CS, PS	57.35	56.94	63.62	56.00	T2, T3	CR, CS, PS	55.74	T2, T3	CR, CS	56.00	56.00	56.00	56.00	NA	NA	NO
Sweden	L, T	2.6	NCV	T1, T2, T3	CS	56.50	56.50	56.50	NO	T1, T2, T3	CS	56.50	T1, T2, T3	CS	56.50	56.50	56.50	56.50	T1	CS	NO
Switzerland	L, T	11.7	NCV	CS, T2	CS	55.00	55.00	NO	NO	CS, T2, T3	CS	55.00	CS, T2	CS	55.00	55.00	55.00	55.00	T2	CS	NO
Turkey																					
Ukraine	L, T	27.0	NCV	T1	D	55.82	55.82	55.82	55.82	T1	D	55.82	T1	D	55.82	55.82	55.82	55.82	T1	D	55.82
United Kingdom	L, T	30.5	NCV	OTH, T1, T2	CS	58.12	57.18	57.09	61.55	OTH, T1, T2	CS	57.09	OTH, T1, T2	CS	57.09	57.09	57.09	57.09	T2, T3	CS	NA
United States[e]	L	15.8	GCV	T1	CS	55.88	55.88	IE	IE	T1	CS	55.88	T1	CS	55.88	55.88	55.88	IE	CS, T1	CS	20.27

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.1 Energy industries.

[b] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.2 Manufacturing industries and construction.

[c] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.4 Other sectors.

[d] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.5 Other (not specified elsewhere).

[e] Australia, Canada, Japan, New Zealand and United States reported energy data on a gross calorific value (GCV) basis. This means that reported IEFs are about 5 per cent lower for liquid and solid fuels and biomass, and about 10 per cent lower for gaseous fuels than would have been the case if the data were given on a net calorific value (NCV) basis. The IEFs included in this table have been converted into NCV-based values and are not reflecting the reported IEFs.

Table 1.6

Stationary combustion: other fuels, CO_2 (2005)

	Key category	Share in national total	IEF in CRF based on	Energy industries						Manufacturing industries and construction			Other sectors						Other (Not elsewhere specified)		
				Methods and EF used[a]		CO_2 IEF				Method and EF used[b]		CO_2 IEF	Method and EF used[c]		CO_2 IEF				Method and EF used[d]		CO_2 IEF
				Methods	EF	Total	Public electricity and heat production	Petroleum refining	Manufacture of solid fuels and other energy industries	Methods	EF	Total	Methods	EF	Total	Commercial / Institutional	Residential	Agriculture / Forestry / Fisheries	Methods	EF	Stationary
		%				(t/TJ)						(t/TJ)			(t/TJ)						(t/TJ)
Australia[e]		-	GCV	T2	CS, PS	NA	NA	NA	NA	T2	CS	NA	T1, T2	CS	NA	NA	NA	NA	T1, T2	CS, D	NA
Austria	L, T	1.5	NCV	T2	CS	57.60	57.60	NO	NO	T2	CS	76.50	T2	CS	104.17	104.17	NO	NO	CS, M	CS	NA
Belarus		-	NCV	D	D	NO	NO	NO	NO	D, T1	D	IE, NE	D, T1	D	NO	NO	NO	NO	D	D	NO
Belgium	L, T	4.3	NCV			114.80	114.80	NO	NO			56.34			65.58	65.50	66.00	NO			NA
Bulgaria		-	NCV	T2	CS	NO	NO	NO	NO	T2	CS	NO	T2	CS	NO	NO	NO	NO	NA	NA	NO
Canada[e]		-	GCV	T2	CS	NA	NA	NA	NA	T2	CS	NA	T2	CS	NA	NA	NA	NA	NA	NA	NA
Croatia																					
Czech Republic		-	NCV	T1	D	NO	NO	NO	NO	T1	D	NO	T1	D	NO	NO	NO	NO	T1	D	NO
Denmark	L, T	1.0	NCV	CR	CR, CS, D	IE, NO	IE	NO	NO	CR	CS	IE, NO	CR	CS	IE, NO	IE	NO	NO	OTH	CS	NO
Estonia	T	0.6	NCV	CS, T1	CS, D	NO	NO	NO	NO	CS, T1	CS, D	NA, NO	CS, T1	CS, D	73.28	NO	NO	73.28	NA	NA	NO
European Community	L, T	1.3	NCV	CR, CS, D, T1, T2, T3	CR, CS, D, PS	85.02	81.45	60	130.09	CR, CS, D, T1, T2, T3	CR, CS, D, PS	72.69	CR, D, T1, T2, T3	CR, CS, D	111.71	107.44	164.89	100.98	CR, D, T1, T2, T3	CR, CS, D	
Finland	L, T	10.9	NCV	T3	CS, D, PS	99.36	99.36	NO	NO	CS, M, T3	CS, PS	98.53	CS, M, T1, T3	CS, D	100.98	101.01	100.98	100.98	CS, T1	CS	NO
France	L, T	2.1	NCV	CR	CS	106.71	94.93	NO	130.09	CR	CS	68.92	CR	CS	57.00	57.00	57.00	NO	NA	NA	NO
Germany	L, T	1.4	NCV	CS	CS	91.51	91.51	NE	NO	CS, T2	CS	71.33	CS	CS	NE	NE	NE	NE	CS	CS	NE, NO
Greece																					
Hungary		0.1	NCV	T3	D	NO	NO	NO	NO	T1, T2	D	3.81	T1	D	NO	NO	NO	NO	NA	NA	NO
Iceland		0.3	NCV			55.15	55.15	NO	NO			0			NO	NO	NO	NO			NO
Ireland		-	NCV	T1, T3	CS, PS	NO	NO	NO	NO	T1	CR	NO	T1	CS	NO	NO	NO	NO	NA	NA	NO
Italy	L, T	0.8	NCV	T3	CS	94.00	94.00	NO	NO	T2	CS	260.40	T2	CS	113.60	113.60	NO	NO	T2	CS	NA
Japan[e]		-	GCV	T1	CS	NO	NO	NO	NO	T1	CS	NO	T1	CS	NO	NO	NO	NO	T1	CS	NO
Latvia		0.1	NCV	T1	CS	NO	NO	NO	NO	T1	CS, PS	82.76	T1	CS	NO	NO	NO	NO	NA	NA	NA
Liechtenstein		-	NCV	T2	CS	NO	NO	NO	NO	T2	CS	NO	CS, T1, T2	CS	NO	NO	NO	NO	T1	CS	NA
Lithuania		-	NCV	T1, T2	CR, CS, D	NO	NO	NO	NO	T2	CR, CS	NO	T2	CS	NO	NO	NO	NO	T2	CS	NE, NO
Luxembourg		-	NCV	CR	CR, CS	IE, NO	IE	NO	NO	CR	CR, CS, PS	NE	CR	CR	NE	NE	NE	NE	NA	NA	NO
Monaco		-	NCV	T1	D	NO	NO	NO	NO	NA	NA	NA, NO	T1	D	NO	NO	NO	NO	NA	NA	NO
Netherlands	L, T	1.0	NCV	T2	CS	72.81	72.81	NO	NO	T2	CS	NA, NO	T2	CS, D	NO	NO	NO	NO	T2	D	NA
New Zealand[e]		-	GCV	D	CS	IE, NO	NO	IE	NO	D	CS	NO	D	CS	NO	NO	NO	NO	NA	NA	NA
Norway		0.4	NCV	T1, T2, T3	CS, PS	23.90	23.90	NO	NO	T1, T2, T3	CS	20.91	T2	CS	NO	NO	NO	NO	T2	CS	NO
Poland		-	NCV	T2	CS, D	NE	NE	NE	NE	T2	CS, D	NE	T2	CS, D	NE	NE	NE	NE	T2	CS, D	NE
Portugal		0.1	NCV	T2	CR, D, PS	NO	NO	NO	NO	T2	CR, D, PS	69.36	T2	CR, D	NO	NO	NO	NO	NA	NA	NO
Romania		-	NCV	T1	D	IE, NE	NE	NE	IE	T1	D	IE, NE	T1	D	NE	NE	NE	NE	NA	NA	NE
Russian Federation		-	NCV	T1	D	IE, NE	NE	IE	IE	T1	D	IE, NE	T1	D	NA, NE, NO	NE	NO	NA	D, T1	CS, D	NA, NO
Slovakia	L, T	15.3	NCV	T1	CS	103.96	NO	63.40	204.65	T1	CS	160.99	T1	CS	NO	NO	NO	NO	T1	CS	49.51
Slovenia		0.1	NCV	T1	CS, D	NO	NO	NO	NO	T1	CS, D	71.31	T1	CS, D	NA, NO	NA	NA	NO	NA	NA	NA
Spain	T	0.2	NCV	T2	CR, CS, PS	39.86	39.86	NA	NA	T2, T3	CR, CS, PS	80.47	T2, T3	CR, CS	NA	NA	NA	NA	NA	NA	NO
Sweden	L, T	2.1	NCV	T1, T2, T3	CS	29.36	29.36	60	NO	T1, T2, T3	CS	60.00	T1, T2, T3	CS	NO	NO	NO	NO	T1	CS	NO
Switzerland	L, T	4.3	NCV	CS, T2	CS	44.91	44.91	NO	NO	CS, T2, T3	CS	53.28	CS, T2	CS	NO	NO	NO	NO	T2	CS	NO
Turkey																					
Ukraine		0.4	NCV	T1	D	87.76	100.37	71.87	93.88	T1	D	85.56	T1	D	95.59	91.48	96.06	95.82	T1	D	92.61
United Kingdom		0.3	NCV	OTH, T1, T2	CS	61.12	61.12	NO	NO	OTH, T1, T2	CS	103.01	OTH, T1, T2	CS	202.24	30.47	NA	NO	T2, T3	CS	NA
United States[e]	T	0.3	GCV	T1	CS	7.50	7.50	NA	NA	T1	CS	NA	T1	CS	IE, NA	NA	NA	IE	CS, T1	CS	72.69

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.1 Energy industries.

[b] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.2 Manufacturing industries and construction.

[c] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.4 Other sectors.

[d] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.5 Other (not specified elsewhere).

[e] Australia, Canada, Japan, New Zealand and United States reported energy data on a gross calorific value (GCV) basis. This means that reported IEFs are about 5 per cent lower for liquid and solid fuels and biomass, and about 10 per cent lower for gaseous fuels than would have been the case if the data were given on a net calorific value (NCV) basis. The IEFs included in this table have been converted into NCV-based values and are not reflecting the reported IEFs.

Table 1.7

Fuel consumption in stationary combustion: all fuels - trend information

Fuel consumption (TJ)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2,702,346	3,820,115	0.5	4.1	2.7	2.8	5.2	2.7	1.9	2.5	0.7	3.5	1.7	1.4	41.4
Austria	655,235	813,571	5.8	5.7	6.7	-0.2	-3.4	0.5	-3.9	8.1	-1.5	8.3	-2.2	4.8	24.2
Belarus	1,267,202	854,656	-8.6	-10.5	2.4	7.1	-2.7	-2.2	-2.4	-0.7	-1.1	1.4	6.5	1.4	-32.6
Belgium	1,202,714	1,279,314	6.4	2.5	6.2	-6.2	6.7	-3.8	-1.1	1.9	-1.7	4.5	-1.6	-5.5	6.4
Bulgaria	916,095	478,482	-17.0	7.2	-2.3	-3.8	-10.9	-9.9	-0.1	2.0	-5.2	6.8	-1.7	1.2	-47.8
Canada	4,929,021	6,186,115	-1.4	1.9	2.4	0.9	1.5	4.4	5.9	-2.3	2.9	5.0	-3.7	-1.0	25.5
Croatia															
Czech Republic	1,583,886	1,224,639	-1.9	3.3	6.7	-7.0	-4.4	-4.7	4.7	4.0	-5.4	1.0	-0.5	-0.8	-22.7
Denmark	539,769	569,626	20.4	-2.9	24.6	-13.1	-5.6	-4.4	-6.6	4.6	-0.2	9.7	-8.8	-6.2	5.5
Estonia	390,435	202,898	-4.5	-4.6	7.0	-2.9	-12.8	-7.7	2.5	1.0	-0.5	12.2	0.6	-2.8	-48.0
European Community	32,439,027	35,412,792	2.5	2.0	4.0	-2.2	1.6	-0.9	1.0	3.1	-1.0	3.3	0.6	-0.3	9.2
Finland	673,319	779,741	-1.9	-3.8	8.3	0.3	-2.0	1.3	-2.8	6.2	5.4	10.2	-4.0	-15.6	15.8
France	3,647,475	3,934,239	10.9	2.1	6.4	-3.9	6.6	-4.1	-0.6	2.7	-3.8	3.3	1.1	1.0	7.9
Germany	9,870,882	8,942,311	-2.1	-0.2	4.6	-3.4	-1.3	-4.0	0.8	4.2	-2.1	3.2	-0.1	-1.1	-9.4
Greece															
Hungary	1,022,142	797,832	-1.9	1.9	2.0	-2.7	-1.7	-2.7	-2.8	3.2	-3.2	5.9	-2.2	5.3	-21.9
Iceland	14,307	16,092	-5.3	2.5	8.8	2.6	-3.1	0.8	-7.8	-3.5	6.4	-6.3	7.2	-1.6	12.5
Ireland	306,782	429,352	3.8	2.3	3.1	3.2	5.1	3.7	4.6	5.1	-2.7	-0.6	0.0	1.5	40.0
Italy	4,285,668	5,107,088	0.2	7.9	-0.9	0.8	3.0	2.5	1.0	1.1	-0.4	5.0	0.7	1.6	19.2
Japan	12,091,879	13,598,799	0.1	0.7	0.7	-0.7	-2.8	3.8	1.8	-2.1	4.6	0.8	-0.3	1.0	12.5
Latvia	253,373	132,199	-4.6	-3.9	2.2	-2.7	-1.8	-5.7	-9.7	6.1	0.7	1.6	2.1	1.3	-47.8
Liechtenstein	1,869	2,517	-3.5	1.2	2.1	5.7	8.6	-2.9	-4.8	0.8	6.0	7.2	2.1	0.8	34.7
Lithuania	400,063	159,824	4.9	-9.3	2.9	-6.5	3.7	-15.0	-5.2	5.2	0.5	2.1	3.5	3.6	-60.1
Luxembourg	66,783	65,012	1.3	-15.0	4.7	-8.6	-5.1	3.7	-3.8	2.7	23.1	-1.5	13.0	-5.9	-2.7
Monaco	1,156	1,092	-3.4	-1.5	5.9	3.8	-1.6	0.6	0.8	1.6	-3.4	-7.8	-7.7	0.4	-5.6
Netherlands	1,916,668	2,066,295	5.2	2.2	7.1	-5.3	0.8	-4.4	1.4	4.4	-1.9	1.5	1.3	-3.3	7.8
New Zealand	265,725	304,375	-0.8	-11.3	2.2	8.9	-9.2	10.8	-0.9	8.4	-5.0	7.7	-4.1	13.7	14.5
Norway	248,191	323,863	-2.8	-2.4	10.8	0.8	-2.7	-1.1	0.8	7.2	1.4	6.4	-2.8	-2.5	30.5
Poland	4,662,371	3,220,112	-1.4	-0.1	6.2	-3.1	-6.4	-3.4	-4.4	1.6	-3.6	4.3	-2.0	-0.2	-30.9
Portugal	475,700	674,001	3.3	6.7	-7.3	5.4	7.8	17.5	-7.3	1.9	8.0	-9.2	6.5	3.2	41.7
Romania	2,119,111	1,228,301	-20.2	11.2	5.0	-15.5	-12.1	-11.5	0.8	0.5	5.9	8.0	-1.7	-4.3	-42.0
Russian Federation	26,802,160	10,305	-100.0	-4.2	-1.6	-4.6	-3.0	1.8	3.8	0.1	-1.3	3.1	-0.2	-99.9	-100.0
Slovakia	630,236	382,456	0.8	4.3	1.4	-0.2	-4.2	-3.0	-16.9	7.2	-7.2	-0.6	-3.5	-4.2	-39.3
Slovenia	170,411	157,899	-3.1	2.3	3.2	1.2	3.2	-4.2	-1.6	4.0	0.2	-1.2	1.0	1.6	-7.3
Spain	1,935,809	3,365,733	3.9	7.2	-7.7	11.2	0.7	10.0	5.0	1.0	7.9	2.3	6.6	7.1	73.9
Sweden	564,785	604,641	2.9	-0.4	11.0	-9.5	0.9	-5.4	-4.8	7.0	0.3	2.1	-2.9	-3.0	7.1
Switzerland	408,983	451,912	6.5	4.6	4.4	-4.0	3.8	-1.0	-4.5	4.4	-2.4	4.0	1.1	1.8	10.5
Turkey															
Ukraine	7,372,401	3,020,864	0.8	-8.4	-8.2	-7.9	-26.1	-1.5	-6.1	-0.6	-0.6	7.9	-2.0	2.6	-59.0
United Kingdom	5,630,840	5,877,829	3.2	0.0	5.5	-4.2	2.3	-0.5	3.0	2.8	-3.6	2.2	0.3	-1.2	4.4
United States	54,318,771	63,102,299	-0.1	1.0	3.9	1.0	-0.2	0.9	3.2	-2.2	0.2	0.8	1.7	-0.7	16.2

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.8

Fuel consumption in stationary combustion: liquid fuels – trend information

Fuel consumption (TJ)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	420,832	499,935	-0.4	3.3	2.0	-5.9	1.7	-0.7	3.5	1.2	2.5	7.6	-2.8	6.2	18.8
Austria	214,559	201,554	5.2	-1.2	6.9	1.3	0.1	-6.7	-9.7	7.6	-5.9	7.3	-5.4	-0.4	-6.1
Belarus	644,377	129,645	-3.4	-10.3	-5.0	-9.0	-2.3	-11.5	-17.6	-6.2	-10.6	-7.7	2.5	-6.8	-79.9
Belgium	403,815	379,138	15.6	-1.6	10.1	-8.1	2.8	-10.3	-8.2	11.4	-6.1	6.7	-5.0	-1.7	-6.1
Bulgaria	276,792	52,027	-26.3	-1.2	-12.5	-9.3	-6.2	-5.3	-19.6	-4.2	-0.9	1.8	-7.2	-5.4	-81.2
Canada	656,828	530,903	-11.1	-2.9	2.1	1.6	3.8	-6.4	1.4	4.6	-8.2	19.4	-2.3	-7.7	-19.2
Croatia															
Czech Republic	205,165	99,637	-10.9	4.6	14.8	-32.3	15.5	0.4	-2.6	-1.5	-15.5	-2.7	-8.9	-4.7	-51.4
Denmark	161,118	118,666	3.0	7.5	15.9	-9.8	-5.7	-2.4	-7.3	1.6	-4.9	-11.4	-6.8	-4.3	-26.3
Estonia	82,534	10,555	-0.5	-31.0	7.7	-11.6	-4.1	-12.7	-36.4	0.1	6.7	-6.7	-7.6	-6.3	-87.2
European Community	9,875,122	8,348,318	5.1	1.4	2.0	-3.8	0.0	-5.2	-4.0	4.2	-4.7	-0.9	-3.6	-2.4	-15.5
Finland	203,618	170,265	-2.7	-3.6	3.1	-3.9	4.1	-0.6	-6.6	2.3	1.7	-0.5	-4.9	-2.2	-16.4
France	1,498,328	1,298,308	7.6	3.1	3.4	-3.2	4.2	-5.3	-5.9	4.3	-9.0	2.0	0.2	-2.7	-13.3
Germany	1,982,471	1,602,617	15.2	-2.1	6.7	-5.5	-3.7	-11.9	-4.7	9.6	-8.3	0.0	-6.2	-3.1	-19.2
Greece															
Hungary	254,351	103,168	-2.4	-12.3	-12.4	7.9	-7.4	-13.7	0.6	-11.1	-15.4	-13.0	-3.3	13.9	-59.4
Iceland	13,786	15,633	-5.1	3.3	9.2	2.0	-3.7	1.0	-8.1	-4.4	7.4	-6.3	5.8	-0.5	13.4
Ireland	98,437	166,851	12.0	1.3	-4.6	13.0	10.0	13.6	-5.1	7.2	-9.0	-6.1	4.7	0.8	69.5
Italy	2,050,491	1,325,725	-2.7	6.5	-3.3	-2.0	-2.2	-4.5	-3.1	-1.6	-1.1	-4.6	-10.7	-7.5	-35.3
Japan	6,433,479	5,210,535	-1.8	-2.0	-2.1	-4.9	-4.3	1.9	-2.5	-6.3	4.1	-2.8	-3.0	0.7	-19.0
Latvia	97,314	12,512	-12.2	-26.4	14.4	-22.0	-1.3	-11.5	-39.8	-19.4	-5.2	-3.4	-3.6	-15.7	-87.1
Liechtenstein	1,302	1,008	-12.3	-2.9	-6.9	13.4	7.2	-12.0	-12.1	-4.8	12.8	6.0	-2.8	-4.4	-22.6
Lithuania	187,288	43,178	6.2	-20.9	1.1	-8.4	22.0	-31.2	-25.9	12.9	-9.1	-16.3	5.5	4.3	-76.9
Luxembourg	17,205	13,877	9.9	-6.7	9.6	-7.1	16.2	-6.5	-9.8	11.6	-18.5	-8.0	18.2	-12.8	-19.3
Monaco	507	351	-15.4	-6.2	7.7	-7.6	4.7	-2.3	-8.8	-5.5	9.4	7.0	-7.9	-0.8	-30.9
Netherlands	367,079	309,756	-3.6	-3.4	0.3	-2.3	3.4	-3.8	-1.6	4.7	-13.2	4.6	-1.1	-2.5	-15.6
New Zealand	37,010	46,148	-6.2	1.6	-1.3	-2.7	-0.5	1.7	2.2	-1.8	2.3	7.1	2.1	13.1	24.7
Norway	120,304	104,686	-8.1	-8.1	19.1	-6.5	0.8	2.4	-11.6	5.0	-0.1	7.0	-11.2	-8.1	-13.0
Poland	363,998	448,883	-6.0	-2.9	14.5	4.4	10.9	-1.3	8.6	-2.9	-0.5	8.4	1.4	-2.7	23.3
Portugal	260,657	283,822	2.6	7.0	-10.3	7.1	11.7	0.3	-10.5	4.6	6.2	-16.2	1.9	8.9	8.9
Romania	446,052	213,659	-27.9	3.0	13.5	-1.3	-19.0	-21.0	-4.1	10.6	1.9	-12.1	7.0	-7.7	-52.1
Russian Federation	5,480,205	C,IE,NA	*	-7.9	-5.1	-2.5	-7.0	-0.8	7.9	-4.2	-4.6	-0.6	-2.6	*	*
Slovakia	81,347	18,195	681.3	4.3	1.4	-0.2	-4.2	-3.0	-95.9	-12.2	0.0	10.9	-4.6	-5.8	-77.6
Slovenia	37,559	40,091	-0.9	5.3	15.0	-2.0	-0.2	3.6	-8.0	0.7	-6.2	-5.2	-1.3	-1.6	6.7
Spain	855,492	1,073,843	4.3	6.0	-7.4	2.3	2.6	6.2	-1.5	3.2	1.6	-1.1	2.7	-0.5	25.5
Sweden	302,738	227,936	-0.7	-3.0	12.2	-12.9	0.3	-8.5	-4.2	-1.3	1.1	0.9	-8.3	-11.4	-24.7
Switzerland	263,430	246,501	7.7	2.7	3.7	-4.1	4.2	-3.3	-8.5	4.5	-3.5	3.6	-0.5	0.4	-6.4
Turkey															
Ukraine	1,351,836	79,408	59.8	-22.6	-20.5	-14.0	-73.2	-33.2	-38.7	9.9	0.5	-13.0	-4.7	19.9	-94.1
United Kingdom	1,170,646	793,293	2.1	-4.5	0.6	-11.9	-3.6	-7.4	-3.2	4.8	-8.2	-2.8	2.3	3.1	-32.2
United States	12,721,767	13,951,202	-2.8	-5.2	6.8	1.4	0.4	2.0	-0.2	3.1	-5.1	4.8	3.1	-0.8	9.7

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.9

Fuel consumption in stationary combustion: solid fuels – trend information

Fuel consumption (TJ)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	1,453,268	2,124,404	3.3	2.9	4.2	4.8	6.6	3.0	1.1	2.9	0.7	2.7	2.3	0.7	46.2
Austria	139,761	123,558	4.5	14.1	0.7	5.3	-19.7	-0.4	17.4	5.6	-1.2	14.1	-1.9	-1.9	-11.6
Belarus	105,401	28,291	-9.0	-15.4	5.7	-18.9	-8.5	-14.4	8.3	-11.4	-13.6	-5.5	-7.6	5.0	-73.2
Belgium	423,131	246,971	-2.9	-3.5	-4.4	-8.7	5.4	-14.5	6.8	-9.3	0.0	-2.5	-1.9	-7.8	-41.6
Bulgaria	422,902	284,905	-12.2	2.1	0.7	4.8	-12.8	-10.0	0.8	8.8	-6.6	9.7	-2.3	-0.2	-32.6
Canada	1,120,770	1,389,995	3.7	2.6	1.3	5.4	8.0	0.5	7.7	-0.6	-1.9	7.1	-8.4	-1.3	24.0
Croatia															
Czech Republic	1,134,431	746,982	-1.8	-0.5	2.3	-4.9	-8.9	-8.5	10.5	3.0	-4.2	1.5	-1.6	-1.6	-34.2
Denmark	254,835	154,326	35.7	-16.3	37.4	-25.6	-15.1	-16.0	-16.2	5.6	0.3	36.6	-23.5	-16.0	-39.4
Estonia	248,190	134,512	-7.0	-6.4	4.1	-2.3	-14.2	-7.5	4.2	-0.7	-2.6	16.6	-0.5	-3.7	-45.8
European Community	12,063,967	8,678,034	-4.5	-2.6	-2.0	-5.4	-0.5	-5.1	3.7	0.7	0.1	4.5	-0.7	-2.7	-28.1
Finland	145,480	104,338	-7.9	-20.1	29.9	-10.3	-26.3	1.5	-1.8	15.1	12.8	36.5	-11.4	-45.7	-28.3
France	645,603	451,523	11.2	0.0	6.4	-11.0	20.1	-10.2	-2.1	-13.1	-0.4	5.6	-4.2	6.1	-30.1
Germany	5,536,800	3,597,378	-11.6	-2.9	-0.6	-4.3	-1.9	-4.3	3.3	0.5	-0.4	3.8	-0.2	-3.2	-35.0
Greece															
Hungary	348,762	127,609	-3.6	-2.9	2.3	-5.2	-6.8	1.7	-2.5	-5.3	-2.0	5.4	-6.9	-11.7	-63.4
Iceland	521	278	-9.1	-34.0	-24.7	64.0	27.8	-6.2	3.6	31.4	-25.0	-9.3	51.4	-44.7	-46.7
Ireland	144,698	110,984	-1.1	0.1	1.7	-6.9	0.8	-14.4	6.9	5.1	-2.1	-6.5	-5.9	11.5	-23.3
Italy	630,359	690,588	-6.0	6.7	-8.0	-1.2	3.7	0.1	1.6	11.4	3.2	8.4	11.7	-0.8	9.6
Japan	3,353,693	4,807,594	-0.6	3.6	2.7	2.6	-4.0	4.8	6.9	2.5	6.3	2.7	2.5	1.8	43.4
Latvia	30,227	3,226	-12.6	-27.7	-6.2	-12.5	-28.0	-25.2	2.4	-5.9	-19.7	-14.9	-20.9	21.8	-89.3
Liechtenstein	1	0	-5.4	-3.7	-26.9	5.3	5.0	-47.6	118.2	-45.8	-7.7	8.3	-23.1	-10.0	-75.7
Lithuania	33,624	8,583	11.6	-20.3	-8.2	-17.7	-13.1	-15.1	-27.3	-10.1	63.2	28.1	-2.0	10.3	-74.5
Luxembourg	30,305	3,055	-2.6	-43.0	-2.9	-32.4	-59.7	60.8	-14.1	-16.4	-20.4	-7.2	10.8	-12.0	-89.9
Monaco	471	520	1.8	-0.3	7.1	12.8	-6.0	1.0	3.5	6.1	-10.7	-17.2	-10.9	0.4	10.3
Netherlands	300,497	267,409	-8.9	4.4	-4.5	-4.4	3.9	-14.8	7.4	6.7	0.2	2.5	-2.1	-5.7	-11.0
New Zealand	35,483	73,743	-9.0	-2.5	-0.4	17.1	-14.9	2.3	-9.8	32.7	-3.4	60.7	3.4	15.8	107.8
Norway	8,443	6,373	-2.0	0.4	-1.9	7.7	-5.3	-19.1	-1.1	-9.7	-3.6	1.9	-3.0	-9.4	-24.5
Poland	3,979,275	2,207,129	-0.5	-0.6	5.3	-5.0	-9.9	-4.2	-7.1	0.9	-5.2	3.4	-4.2	-0.3	-44.5
Portugal	108,813	140,883	6.3	10.2	-7.1	1.2	-10.3	22.4	0.3	-11.1	7.7	-5.8	2.6	1.5	29.5
Romania	537,493	351,070	-21.1	4.9	0.8	-15.2	-16.2	-11.7	9.6	8.1	9.0	12.3	-3.5	-3.6	-34.7
Russian Federation	6,464,840	C,IE,NA	*	1.6	0.1	-12.2	-4.3	0.9	4.4	-0.7	-2.0	0.0	-4.9	*	*
Slovakia	291,272	105,926	*	*	*	*	*	*	*	14.6	-11.2	-3.0	-7.7	-2.7	-63.6
Slovenia	85,059	62,286	-6.7	2.2	-7.1	6.7	6.7	-11.0	1.8	9.7	6.0	-5.7	2.3	-0.3	-26.8
Spain	737,620	831,438	2.2	2.6	-17.9	13.3	-2.4	13.7	5.7	-8.5	12.8	-6.9	4.4	0.2	12.7
Sweden	99,589	96,055	1.6	-0.2	13.4	-9.3	1.1	-8.2	0.5	8.2	1.3	1.8	6.3	-6.0	-3.5
Switzerland	15,880	8,652	-22.6	2.5	-33.5	-9.6	-13.5	0.1	43.9	1.8	-7.5	1.2	16.9	19.5	-45.5
Turkey															
Ukraine	2,008,966	875,299	-13.3	-5.4	-21.8	-2.5	-15.8	2.6	-6.2	9.0	4.4	2.7	-5.7	3.1	-56.4
United Kingdom	2,532,121	1,486,926	0.5	-5.2	-6.9	-11.9	0.8	-12.1	7.2	6.5	-6.9	8.3	-4.0	1.1	-41.3
United States	19,135,235	23,705,276	-0.5	0.9	4.9	1.9	1.6	0.6	4.1	-2.6	0.3	2.0	1.8	1.2	23.9

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.10

Fuel consumption in stationary combustion: gaseous fuels – trend information

Fuel consumption (TJ)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	649,046	1,000,121	-4.9	7.4	-0.7	3.2	5.3	5.0	2.6	4.0	2.8	2.1	3.5	1.5	54.1
Austria	197,549	324,363	5.5	8.5	8.3	-3.6	1.4	0.5	-4.6	7.1	1.0	8.9	-3.0	12.1	64.2
Belarus	493,858	650,057	-12.9	-10.6	6.8	18.6	-3.2	2.6	2.4	1.1	2.2	4.0	8.3	2.1	31.6
Belgium	323,961	515,068	6.1	11.6	11.7	-6.3	12.6	6.6	0.2	0.1	1.1	6.4	-0.5	-9.0	59.0
Bulgaria	201,521	106,774	-16.3	23.0	-1.8	-17.0	-15.6	-14.4	6.5	-9.5	-10.4	3.9	0.1	12.5	-47.0
Canada	2,648,454	3,613,330	-1.2	3.1	3.5	-0.8	-1.8	7.3	7.1	-3.3	5.9	3.0	-2.5	0.1	36.4
Croatia															
Czech Republic	222,830	320,116	5.1	15.9	15.7	1.6	-0.9	1.5	-2.9	7.1	-3.5	0.9	-0.5	-1.8	43.7
Denmark	76,092	189,179	13.2	15.8	17.8	5.3	8.6	5.1	-0.9	4.1	-0.1	1.5	-0.6	-3.2	148.6
Estonia	45,469	31,640	1.7	14.8	17.4	-4.3	-11.7	-6.7	29.5	8.2	2.0	2.5	5.2	3.6	-30.4
European Community	8,639,744	15,303,270	8.4	7.0	11.3	-0.1	4.6	4.5	3.0	3.4	0.4	4.7	2.5	1.8	77.1
Finland	90,756	149,697	4.5	3.8	4.6	-1.6	14.6	0.1	3.0	9.0	-1.6	10.7	-3.6	-8.6	64.9
France	975,101	1,576,899	12.7	2.2	11.3	-1.3	5.9	-2.1	6.5	7.7	-1.0	2.1	3.0	3.7	61.7
Germany	2,043,698	3,036,563	7.4	6.8	11.7	-4.4	1.5	0.3	0.1	5.0	-0.6	4.0	-0.2	-0.1	48.6
Greece															
Hungary	383,623	506,237	-0.8	8.7	11.6	-5.2	0.7	1.3	-2.5	10.9	0.3	9.8	-2.3	5.0	32.0
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	59,137	141,672	2.1	8.3	18.0	3.1	2.3	10.1	18.9	2.0	5.7	11.3	-1.6	-5.4	139.6
Italy	1,537,487	2,904,369	6.1	10.1	3.6	3.7	7.9	9.2	3.7	0.4	-0.6	10.4	3.9	7.1	88.9
Japan	2,106,359	3,368,410	7.2	3.3	5.1	4.2	2.4	6.0	3.5	0.0	3.2	4.1	0.0	-0.1	59.9
Latvia	98,332	56,547	-0.7	23.1	-13.9	22.4	-2.1	-4.2	10.2	16.2	2.4	4.1	-1.3	2.9	-42.5
Liechtenstein	506	1,395	21.4	9.3	14.4	-3.0	10.2	7.6	-1.6	9.4	1.1	7.1	5.8	4.3	175.8
Lithuania	167,235	77,799	2.6	8.9	4.9	-5.3	-17.9	4.6	16.3	0.4	2.4	12.4	3.6	4.3	-53.5
Luxembourg	18,564	47,341	-0.1	9.8	6.0	3.0	0.6	3.3	2.4	1.1	58.5	1.1	11.6	-3.9	155.0
Monaco	177	221	16.8	4.7	-1.5	-3.9	4.1	5.3	9.5	-2.1	4.3	-1.5	1.5	2.7	24.8
Netherlands	1,207,669	1,381,514	11.6	3.1	11.2	-6.9	-0.6	-2.8	0.9	3.9	-0.1	0.7	2.2	-4.3	14.4
New Zealand	168,205	140,407	0.9	-18.6	4.9	13.5	-12.5	12.7	-0.4	11.6	-9.0	-4.3	-17.2	18.3	-16.5
Norway	83,671	163,796	5.2	2.3	6.3	6.9	-4.7	-5.9	15.6	9.9	2.0	6.9	4.0	0.2	95.8
Poland	283,772	398,952	-9.7	8.4	10.4	3.5	-0.6	-0.2	-2.4	10.0	1.1	6.5	5.1	5.4	40.6
Portugal	NO	131,645	*	*	*	*	755.2	263.0	-18.1	23.4	23.4	1.0	15.7	-3.6	*
Romania	1,109,201	529,931	-16.5	3.8	-1.7	-17.8	-5.9	-7.8	-0.8	-2.8	5.1	12.3	-5.9	-4.9	-52.2
Russian Federation	14,849,648	2,804	-100.0	-5.0	-1.0	-2.2	-1.4	2.3	3.0	1.5	-0.3	4.9	0.1	-100.0	-100.0
Slovakia	206,091	202,206	*	*	*	*	*	*	*	5.9	-8.1	-2.3	-3.7	-2.8	-1.9
Slovenia	26,669	33,394	2.1	0.4	7.1	-4.0	3.6	2.4	2.0	2.4	-2.3	9.7	0.9	1.2	25.2
Spain	188,874	1,280,062	12.1	29.8	12.7	32.8	2.8	15.4	17.5	10.0	13.3	16.0	13.7	21.5	577.7
Sweden	24,368	30,354	9.4	1.6	7.6	1.0	-1.2	1.0	-10.1	17.3	1.7	-5.2	-9.8	-5.6	24.6
Switzerland	66,272	113,718	12.9	10.4	8.3	-3.5	2.9	3.5	-0.6	4.0	-1.9	6.1	3.1	2.6	71.6
Turkey															
Ukraine	3,915,259	2,026,535	-11.1	-3.4	2.8	-8.0	-18.6	-0.3	-4.2	-4.9	-3.0	11.3	0.0	2.0	-48.2
United Kingdom	1,890,083	3,486,056	7.6	5.9	16.4	2.6	4.6	6.7	3.0	0.8	-1.4	0.7	1.6	-3.1	84.4
United States	19,711,776	23,090,807	2.5	4.6	1.6	0.4	-1.2	0.4	4.3	-3.9	3.2	-2.4	0.3	-1.6	17.1

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.11

Fuel consumption in stationary combustion: biomass – trend information

Fuel consumption (TJ)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	179,200	195,655	-0.4	4.1	5.2	4.2	1.0	-1.7	2.6	-4.1	-11.0	8.3	-1.8	-3.6	9.2
Austria	94,376	143,806	9.0	6.4	6.6	0.2	-4.8	16.1	-6.5	11.4	-1.6	3.2	1.2	5.7	52.4
Belarus	21,720	46,664	-52.5	13.9	7.0	45.5	15.9	6.6	4.8	12.0	2.4	2.7	3.6	16.3	114.8
Belgium	19,346	43,008	-19.9	10.8	6.4	-2.6	-10.8	21.6	-34.2	72.7	7.6	19.3	9.1	5.0	122.3
Bulgaria	14,879	34,775	-0.4	21.2	3.2	4.4	42.9	0.4	22.5	-2.7	17.9	0.6	8.3	-7.1	133.7
Canada	502,969	651,887	-1.1	-1.3	-0.7	0.3	3.4	9.0	0.0	-6.0	6.8	0.9	-0.5	-0.3	29.6
Croatia															
Czech Republic	21,460	57,904	2.0	5.9	9.3	-1.5	4.4	5.0	-14.9	32.2	-9.9	3.0	66.3	28.9	169.8
Denmark	47,723	107,455	8.4	6.0	6.9	4.1	-0.7	5.7	6.4	9.8	7.3	10.2	8.1	2.9	125.2
Estonia	8,358	24,412	-1.9	66.6	16.4	4.5	-14.7	-0.9	3.0	3.2	-0.1	9.5	5.4	-2.9	192.1
European Community	1,577,415	2,438,231	6.8	1.9	3.1	5.5	0.5	4.7	-0.8	5.2	1.0	4.4	6.5	4.0	54.6
Finland	178,494	279,667	-1.5	1.6	0.0	13.8	3.5	7.0	-0.6	-4.2	7.9	1.9	4.3	-6.5	56.7
France	475,664	483,123	17.8	0.7	5.1	-5.9	3.0	-1.4	-2.4	-0.2	-2.8	3.7	0.9	0.0	1.6
Germany	223,473	537,500	-1.8	-1.4	-2.7	38.3	-0.8	8.5	4.8	9.1	2.1	7.6	15.7	14.3	140.5
Greece															
Hungary	13,095	43,802	42.8	13.4	-8.8	1.5	-7.7	0.3	9.7	-9.3	7.8	33.9	33.9	67.5	234.5
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	4,510	9,845	0.5	-1.2	17.5	12.9	15.6	1.3	3.6	10.0	-2.7	-3.0	14.2	20.9	118.3
Italy	56,679	152,983	13.8	-0.5	3.1	12.1	-2.0	17.4	4.1	9.9	-3.3	18.0	20.1	-0.4	169.9
Japan	198,347	212,260	0.7	3.9	0.4	3.1	-8.1	4.0	3.3	-8.7	4.2	2.1	-0.6	10.0	7.0
Latvia	27,501	59,729	17.3	18.5	7.1	1.4	3.1	0.3	-6.4	9.0	2.6	1.9	8.8	3.5	117.2
Liechtenstein	60	115	-21.6	-21.7	-2.9	14.8	10.8	9.1	53.7	-32.1	2.2	25.0	8.3	7.8	90.2
Lithuania	11,916	30,264	0	4.9	9.6	2.3	10.2	3.7	4.8	5.5	5.8	3.4	2.1	-1.0	154.0
Luxembourg	709	739	0	-0.1	0.8	0	0	0	0	0	-38.6	0	0	68.7	4.2
Monaco	NA,NO	NA,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	31,790	78,765	1.5	7.0	12.0	6.7	3.1	4.7	7.7	6.2	9.6	-5.5	7.5	25.5	147.8
New Zealand	25,028	44,076	7.4	1.0	-1.8	-5.9	4.4	23.1	2.1	-13.8	4.9	1.5	29.9	-1.0	76.1
Norway	31,598	40,782	-5.0	1.6	3.8	5.5	-8.8	5.9	-2.1	8.5	5.8	1.7	-3.4	2.2	29.1
Poland	35,326	165,148	30.5	0.4	-0.4	6.7	6.5	-3.7	2.3	6.9	1.7	0.9	4.0	-4.5	367.5
Portugal	104,991	115,978	2.0	1.4	0.6	3.5	-0.5	1.7	0.2	-0.9	0.4	-5.3	12.2	0.2	10.5
Romania	26,366	133,641	-6.3	216.5	30.2	-32.7	-10.5	-5.5	-2.0	-22.8	10.1	21.0	9.8	2.4	406.9
Russian Federation	7,467	7,501	4.0	-10.5	-14.2	-13.6	-16.6	30.7	-20.9	-3.0	-4.4	-0.9	-3.8	-95.0	0.5
Slovakia	3,124	1,667	*	*	*	*	*	*	*	23.4	31.3	-24.5	23.7	42.8	-46.6
Slovenia	20,985	21,704	-2.8	-1.3	2.1	1.5	0.9	-12.0	0.8	-2.3	1.9	6.2	0.3	16.7	3.4
Spain	150,720	157,961	-0.1	0.1	-2.0	5.5	-2.5	0.5	1.0	1.0	1.2	2.5	1.9	0.0	4.8
Sweden	119,953	206,660	7.1	5.4	8.9	-6.4	0.7	1.5	-8.3	19.5	-2.6	1.4	-1.3	6.9	72.3
Switzerland	30,585	32,703	9.3	7.1	9.7	-12.0	1.2	-1.2	-6.3	5.0	-2.0	6.5	-0.2	2.8	6.9
Turkey															
Ukraine	36,374	20,305	*	*	*	*	*	-6.0	10.5	11.2	16.7	8.6	-8.7	-20.0	-44.2
United Kingdom	31,604	80,452	4.5	7.1	2.2	4.0	-1.7	7.7	-3.2	6.3	3.1	10.2	8.3	-1.4	154.6
United States	2,338,179	2,000,513	-0.1	2.0	2.8	-2.3	-8.3	1.8	2.1	-11.7	-0.5	0.3	6.0	-10.6	-14.4

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.12

Fuel consumption in stationary combustion: other fuels – trend information

Fuel consumption (TJ)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	8,990	20,290	12.1	3.7	28.4	-6.4	-6.4	6.1	-13.9	28.5	14.2	10.9	20.6	-7.8	125.7
Belarus	1,847	IE,NE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	32,461	95,129	30.2	10.1	4.4	17.9	4.9	6.0	6.5	-0.5	-6.3	0.3	2.9	2.1	193.1
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	IE,NO	IE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	5,884	1,779	-6.5	-15.4	9.7	-4.4	0.6	-60.5	-6.0	-20.3	199.1	57.0	3.7	-14.1	-69.8
European Community	282,779	644,939	4.5	2.7	5.1	11.7	1.3	3.2	5.2	8.1	3.2	11.6	11.0	-2.6	128.1
Finland	54,971	75,774	4.5	7.7	9.8	0.8	-6.5	-10.3	-13.5	37.5	6.5	10.8	-10.8	-20.2	37.8
France	52,779	124,385	7.8	4.0	-0.2	-1.4	2.7	11.2	5.6	1.0	14.9	28.2	8.6	-7.0	135.7
Germany	84,441	168,253	-12.1	-15.3	-7.8	32.5	-12.3	24.6	23.2	6.4	-3.6	3.6	39.6	2.1	99.3
Greece															
Hungary	22,311	17,016	-16.6	97.9	-27.5	-17.9	56.2	-24.4	-43.7	44.9	-22.3	1.5	10.6	20.4	-23.7
Iceland	NO	182	*	24.4	27.5	0	0	2.0	0	0	0	4.1	89.8	30.0	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	10,653	33,423	-9.8	24.7	16.9	19.7	25.7	-28.0	12.8	10.8	-4.7	9.5	27.0	4.8	213.8
Japan	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	NA,NO	184	*	*	*	*	*	*	257.0	87.1	35.4	-12.3	7.9	-41.3	*
Liechtenstein	NA,NO	NA,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NE,NO	NE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	IE,NE,NO	IE,NE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NA,NO	NA,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	9,634	28,851	-0.1	17.0	33.6	19.5	8.1	6.1	0.3	0.9	6.5	8.4	4.0	-1.8	199.5
New Zealand	IE,NA,NO	IE,NA,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	4,174	8,226	3.3	4.0	-1.4	3.6	11.0	12.9	7.4	5.2	-1.2	18.0	0.0	3.7	97.1
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	1,239	1,674	-5.0	45.2	9.2	16.8	26.9	14.8	1.6	-38.8	-34.2	29.0	38.1	-1.3	35.0
Romania	IE,NE	IE,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NA,NE,NO	IE,NA,NE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	48,402	54,462	*	*	*	*	*	*	*	3.3	4.6	8.1	6.2	-11.6	12.5
Slovenia	139	424	-37.4	31.3	4.3	-7.1	29.7	59.8	-5.9	-26.9	1.4	36.3	153.0	-19.4	205.2
Spain	3,103	22,430	0.8	42.7	37.7	46.0	-0.9	11.9	1.0	1.4	12.0	28.1	12.5	6.7	622.8
Sweden	18,138	43,636	34.8	-7.1	5.8	2.3	12.2	-12.8	5.0	-0.6	9.0	30.3	12.7	13.0	140.6
Switzerland	32,815	50,339	-4.2	3.2	3.6	5.0	7.6	3.5	7.5	5.0	3.0	-0.1	3.9	3.5	53.4
Turkey															
Ukraine	59,966	19,316	-23.2	-9.3	-10.5	-7.5	-7.7	-1.5	-11.4	-1.4	-10.0	5.7	-17.2	26.8	-67.8
United Kingdom	6,386	31,103	4.8	10.4	-1.0	17.4	30.2	-3.7	1.9	6.4	9.5	5.6	-5.1	0.8	387.1
United States	411,814	354,501	-14.1	-0.9	1.1	-5.2	-7.1	-3.9	5.0	-0.4	0.3	0.4	0.3	0	-13.9

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.13

Contribution of fuels to total energy consumption in stationary combustion

Percentage (%)	Liquid Fuels		Solid Fuels		Gaseous Fuels		Other Fuels		Biomass	
	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005
Australia	15.6	13.1	53.8	55.6	24.0	26.2	-	-	6.6	5.1
Austria	32.7	24.8	21.3	15.2	30.1	39.9	1.4	2.5	14.4	17.7
Belarus	50.9	15.2	8.3	3.3	39.0	76.1	0.1	-	1.7	5.5
Belgium	33.6	29.6	35.2	19.3	26.9	40.3	2.7	7.4	1.6	3.4
Bulgaria	30.2	10.9	46.2	59.5	22.0	22.3	-	-	1.6	7.3
Canada	13.3	8.6	22.7	22.5	53.7	58.4	-	-	10.2	10.5
Croatia										
Czech Republic	13.0	8.1	71.6	61.0	14.1	26.1	-	-	1.4	4.7
Denmark	29.8	20.8	47.2	27.1	14.1	33.2	-	-	8.8	18.9
Estonia	21.1	5.2	63.6	66.3	11.6	15.6	1.5	0.9	2.1	12.0
European Community	30.4	23.6	37.2	24.5	26.6	43.2	0.9	1.8	4.9	6.9
Finland	30.2	21.8	21.6	13.4	13.5	19.2	8.2	9.7	26.5	35.9
France	41.1	33.0	17.7	11.5	26.7	40.1	1.4	3.2	13.0	12.3
Germany	20.1	17.9	56.1	40.2	20.7	34.0	0.9	1.9	2.3	6.0
Greece										
Hungary	24.9	12.9	34.1	16.0	37.5	63.5	2.2	2.1	1.3	5.5
Iceland	96.4	97.1	3.6	1.7	-	-	-	1.1	-	-
Ireland	32.1	38.9	47.2	25.8	19.3	33.0	-	-	1.5	2.3
Italy	47.8	26.0	14.7	13.5	35.9	56.9	0.2	0.7	1.3	3.0
Japan	53.2	38.3	27.7	35.4	17.4	24.8	-	-	1.6	1.6
Latvia	38.4	9.5	11.9	2.4	38.8	42.8	-	0.1	10.9	45.2
Liechtenstein	69.7	40.0	0.1	0.0	27.1	55.4	-	-	3.2	4.6
Lithuania	46.8	27.0	8.4	5.4	41.8	48.7	-	-	3.0	18.9
Luxembourg	25.8	21.3	45.4	4.7	27.8	72.8	-	-	1.1	1.1
Monaco	43.9	32.1	40.8	47.6	15.4	20.3	-	-	-	-
Netherlands	19.2	15.0	15.7	12.9	63.0	66.9	0.5	1.4	1.7	3.8
New Zealand	13.9	15.2	13.4	24.2	63.3	46.1	-	-	9.4	14.5
Norway	48.5	32.3	3.4	2.0	33.7	50.6	1.7	2.5	12.7	12.6
Poland	7.8	13.9	85.3	68.5	6.1	12.4	-	-	0.8	5.1
Portugal	54.8	42.1	22.9	20.9	-	19.5	0.3	0.2	22.1	17.2
Romania	21.0	17.4	25.4	28.6	52.3	43.1	-	-	1.2	10.9
Russian Federation	20.4	-	24.1	-	55.4	27.2	-	-	0.0	72.8
Slovakia	12.9	4.8	46.2	27.7	32.7	52.9	7.7	14.2	0.5	0.4
Slovenia	22.0	25.4	49.9	39.4	15.6	21.1	0.1	0.3	12.3	13.7
Spain	44.2	31.9	38.1	24.7	9.8	38.0	0.2	0.7	7.8	4.7
Sweden	53.6	37.7	17.6	15.9	4.3	5.0	3.2	7.2	21.2	34.2
Switzerland	64.4	54.5	3.9	1.9	16.2	25.2	8.0	11.1	7.5	7.2
Turkey										
Ukraine	18.3	2.6	27.2	29.0	53.1	67.1	0.8	0.6	0.5	0.7
United Kingdom	20.8	13.5	45.0	25.3	33.6	59.3	0.1	0.5	0.6	1.4
United States	23.4	22.1	35.2	37.6	36.3	36.6	0.8	0.6	4.3	3.2

Note: This table includes data from categories 1.A.1 Energy industries, 1.A.2 Manufacturing industries and construction, 1.A.4 Other sectors and 1.A.5.a Other (stationary).

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.14

CO_2 emissions from energy industries: all fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	142,606	213,462	2.3	3.9	3.0	4.1	7.5	3.4	2.2	3.6	0.5	3.4	2.3	1.0	49.7
Austria	13,659	15,834	5.8	8.8	8.7	0.7	-7.1	-3.1	-1.3	11.1	-1.6	19.0	0.4	-1.3	15.9
Belarus	65,141	32,007	-10.2	-14.7	0.2	5.8	-5.9	-4.0	-4.3	1.5	-1.0	-0.5	6.6	-1.7	-50.9
Belgium	29,863	29,709	-0.6	-1.8	-0.9	-3.9	8.3	-10.7	4.4	-6.1	6.4	5.1	0.8	-0.4	-0.5
Bulgaria	43,217	29,642	-6.3	2.0	-2.9	0.9	-11.1	-6.3	1.8	10.8	-8.9	7.0	-0.1	4.8	-31.4
Canada	144,229	198,066	-0.3	4.2	-0.4	5.2	9.6	4.6	6.5	1.8	-0.3	3.1	-4.7	1.6	37.3
Croatia															
Czech Republic	58,354	57,932	-0.5	4.4	4.5	-0.3	-3.5	-8.0	12.0	0.3	-3.0	2.1	-1.8	0.1	-0.7
Denmark	26,173	22,130	34.2	-9.7	38.8	-20.8	-10.6	-10.0	-11.0	5.1	0.6	18.3	-19.2	-12.8	-15.4
Estonia	30,103	14,580	-5.9	-8.0	4.5	-2.7	-13.2	-6.4	-0.2	1.6	-2.1	14.2	-0.3	-4.1	-51.6
European Community	1,151,957	1,185,231	0.4	0.8	1.4	-3.2	3.0	-1.9	2.8	2.1	2.8	2.8	-0.4	-0.6	2.9
Finland	19,055	21,672	-1.2	-8.7	23.7	-8.1	-12.0	-2.1	-6.6	24.4	10.0	23.0	-11.6	-33.5	13.7
France	66,341	63,878	18.5	5.0	7.8	-5.4	21.2	-8.3	-1.9	-11.3	7.9	2.9	-2.5	2.8	-3.7
Germany	415,082	361,952	-3.1	-2.4	1.8	-5.9	0.9	-3.2	4.0	2.5	0.6	4.2	-1.0	-2.2	-12.8
Greece															
Hungary	25,225	16,913	3.4	-0.8	3.4	-0.5	5.0	-0.7	-7.6	0.3	-8.3	5.6	-10.1	-12.0	-33.0
Iceland	21	23	7.6	10.8	-18.8	-23.6	146.5	-45.2	-30.2	0.9	7.9	-6.7	35.7	13.8	9.2
Ireland	11,159	15,657	4.1	5.4	5.4	4.7	2.6	4.3	2.0	7.6	-5.3	-4.3	-2.3	2.4	40.3
Italy	134,092	159,877	-4.2	9.9	-3.3	1.3	7.7	-2.7	4.3	2.1	4.5	0.5	-0.5	1.4	19.2
Japan	317,760	396,923	0.8	-3.4	0.0	-1.0	-3.0	5.3	2.1	-2.4	9.2	3.7	-0.9	4.0	24.9
Latvia	6,332	2,068	-8.3	-8.2	3.6	-6.7	1.2	-12.6	-15.4	-1.9	-4.4	-2.8	-8.5	-0.4	-67.3
Liechtenstein	0	3	550.0	13.8	25.3	-2.4	15.7	0	-5.7	6.1	-14.3	12.5	4.4	6.4	2,400.0
Lithuania	13,849	5,884	7.7	-11.8	11.9	-7.2	10.2	-20.5	-12.1	9.5	-3.0	-1.2	3.6	3.8	-57.5
Luxembourg	1,268	356	-4.5	-21.2	-13.1	-41.1	-82.9	50.4	147.0	4.4	0	0	44.0	-7.0	-71.9
Monaco	27	29	-1.8	-0.3	7.4	12.1	-5.9	1.1	3.2	5.9	-10.5	-16.9	-11.1	0.2	6.0
Netherlands	52,492	67,355	1.2	6.0	1.6	1.6	3.6	-6.0	2.7	6.6	-0.9	2.2	2.3	-3.9	28.3
New Zealand	6,033	9,256	1.2	-13.6	12.3	30.7	-24.4	23.7	-5.8	20.1	-11.6	19.8	-7.0	29.3	53.4
Norway	6,648	12,487	5.0	-1.8	10.1	3.9	-4.2	-0.3	9.5	12.7	1.7	6.2	1.0	0.6	87.8
Poland	271,844	180,615	-1.6	-7.1	1.4	-2.6	-3.5	-2.8	0.1	1.5	-3.2	5.3	-0.7	-1.7	-33.6
Portugal	15,944	23,762	4.2	14.9	-20.1	4.5	15.5	32.0	-15.9	2.8	15.7	-17.7	6.5	10.6	49.0
Romania	106,012	46,269	-19.7	2.0	4.1	-14.9	-10.8	-12.5	0.4	6.8	1.8	3.4	-6.6	-5.6	-56.4
Russian Federation	1,218,191	783,184	*	-5.5	2.9	-7.1	0.7	-1.2	1.0	0.1	0.2	3.3	-1.5	-12.4	-35.7
Slovakia	15,654	11,275	188.8	2.8	1.4	0.0	-5.5	-2.7	-66.1	6.5	-2.5	4.1	-2.4	-7.8	-28.0
Slovenia	6,701	6,358	-14.7	6.4	-5.0	7.5	4.2	-11.9	5.3	13.6	2.7	-3.8	2.1	1.1	-5.1
Spain	77,357	125,161	1.0	7.8	-14.7	16.4	-1.2	19.3	4.2	-5.5	13.7	-6.3	8.8	8.8	61.8
Sweden	10,050	11,185	11.4	-7.2	34.9	-26.0	9.0	-11.4	-13.3	14.2	11.1	8.9	-6.0	-8.7	11.3
Switzerland	2,493	3,407	11.2	1.0	8.0	-1.5	11.6	-5.2	-3.2	4.2	2.3	-0.8	10.9	4.5	36.7
Turkey															
Ukraine	271,267	101,887	*	*	*	*	*	3.1	-7.0	3.6	-0.2	6.5	-7.0	1.7	-62.4
United Kingdom	236,429	209,235	-0.2	-1.5	0.7	-6.4	1.9	-5.4	5.8	5.2	-0.9	4.1	-0.5	0.9	-11.5
United States	1,810,210	2,381,207	-0.2	0.8	3.7	3.4	4.3	0.5	4.8	-1.7	0.4	1.3	1.4	2.8	31.5

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.15

CO_2 emissions from energy industries: liquid fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	8,979	9,557	4.4	5.8	-1.8	-8.6	3.6	-3.8	-2.4	-1.5	0.6	9.3	-4.0	9.2	6.4
Austria	3,189	3,234	6.9	-11.9	0.2	9.3	7.4	-8.2	-21.5	6.8	-12.5	13.3	9.9	-12.2	1.4
Belarus	39,471	2,665	-7.5	-15.9	-12.4	-17.7	-9.1	-17.9	-27.9	1.6	-12.0	-18.2	-8.5	-24.3	-93.2
Belgium	4,949	5,572	4.0	-12.2	16.5	3.5	14.9	-24.4	-3.4	10.9	-3.5	9.6	7.1	-7.0	12.6
Bulgaria	8,520	873	-39.9	-8.2	-11.3	-26.8	-60.1	-2.6	-27.2	2.6	5.9	-6.1	0.9	17.4	-89.8
Canada	15,452	13,393	-10.3	13.2	-11.0	17.1	31.2	-15.9	-4.3	10.3	-14.0	18.5	0.1	-4.6	-13.3
Croatia															
Czech Republic	1,790	1,537	29.5	1.4	0.4	-7.2	-12.4	-0.8	-8.1	1.4	4.0	23.4	-20.3	-5.8	-14.1
Denmark	1,844	2,004	12.2	28.8	44.4	-11.7	-8.9	-4.1	-6.1	0.0	-7.0	-31.0	-19.6	-8.6	8.7
Estonia	4,825	467	1.9	-24.6	-1.5	-13.3	2.7	-10.7	-45.0	0.1	-10.2	-14.8	-8.5	-4.6	-90.3
European Community	226,485	190,462	4.6	5.0	-1.2	-5.1	2.7	-5.4	-2.9	0.3	0.8	-6.2	-5.5	-1.5	-15.9
Finland	2,845	2,745	1.6	-6.2	13.7	-14.6	2.1	2.2	-14.9	9.8	9.8	-2.2	-13.4	-3.7	-3.5
France	20,968	21,512	22.3	6.3	0.4	2.8	9.4	-6.7	-1.5	-4.9	-1.5	4.1	2.4	-2.2	2.6
Germany	24,931	25,703	15.3	-2.7	-1.0	-7.6	1.9	-4.9	3.2	-1.3	1.5	4.0	-0.3	6.8	3.1
Greece															
Hungary	4,430	391	77.8	-7.2	-16.6	15.1	0.8	-12.5	-20.4	3.0	-49.2	-17.0	-51.6	-44.4	-91.2
Iceland	21	13	7.6	9.2	-24.8	-28.9	192.0	-50.2	-36.8	1.2	5.4	-10.6	17.3	4.7	-39.3
Ireland	1,269	2,974	55.1	-3.5	-0.1	30.9	32.8	26.0	-20.9	13.0	-23.4	-27.9	23.0	2.3	134.4
Italy	80,168	48,567	-0.3	7.1	-3.6	-2.0	-1.9	-10.7	-1.4	-3.2	1.5	-11.2	-17.0	-11.4	-39.4
Japan	151,894	76,016	-5.2	-15.2	-6.4	-14.0	-11.2	-1.4	-10.8	-23.9	21.8	2.7	-9.8	13.9	-50.0
Latvia	3,076	183	-17.9	-33.5	33.3	-36.2	17.9	-15.5	-55.0	-32.7	-3.7	-28.7	-12.5	-24.1	-94.0
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	7,648	2,597	17.2	-22.6	12.1	-7.4	29.9	-33.1	-32.5	21.7	-5.9	-17.0	6.6	3.6	-66.0
Luxembourg	9	12	142.7	-2.2	-27.5	12.1	-62.1	50.7	146.9	4.5	0	0	43.9	0	37.0
Monaco	1	NO	-85.7	4.3	68.3	-72.8	60.0	31.8	-65.5	*	*	*	*	*	*
Netherlands	10,207	11,001	0.5	14.7	-3.8	1.3	4.3	-6.1	2.8	5.3	-15.1	7.1	-3.2	-2.0	7.8
New Zealand	226	173	1.5	60.9	-25.0	-24.4	24.0	14.9	-22.9	7.2	-5.3	22.0	-14.0	-3.5	-23.5
Norway	1,174	1,410	0.2	-12.5	28.2	-5.5	-0.6	5.6	-13.2	3.3	-9.3	7.5	-11.7	7.1	20.1
Poland	10,916	6,964	2.6	-10.8	-0.8	-39.2	7.9	-2.3	54.0	8.3	0.1	0.1	-0.2	-6.1	-36.2
Portugal	8,260	7,994	2.4	15.3	-36.6	6.1	45.9	2.2	-20.9	17.6	18.7	-35.6	-2.0	39.2	-3.2
Romania	17,864	7,653	-25.9	4.4	10.8	0.0	-22.0	-18.0	-20.2	24.7	-9.6	-13.7	-6.0	-3.2	-57.2
Russian Federation	189,467	54,122	*	-12.6	-6.0	-9.7	17.9	-13.3	-9.2	-3.5	-1.9	-1.1	-5.9	-42.8	-71.4
Slovakia	1,540	74	2834.7	2.8	1.4	0.0	-5.5	-2.7	-99.7	-21.2	-25.3	90.6	-4.5	-21.8	-95.2
Slovenia	309	36	-6.9	-13.4	6.3	-0.2	-14.8	-57.3	59.0	74.3	-39.0	-17.5	-40.0	12.0	-88.4
Spain	16,924	25,250	3.8	14.3	-8.2	-4.3	10.3	21.1	-2.1	5.7	5.0	-12.9	5.7	2.5	49.2
Sweden	3,276	3,589	18.5	-9.6	62.2	-38.8	11.5	-17.5	-21.9	17.0	13.2	11.0	-19.5	-10.3	9.5
Switzerland	691	825	52.3	-1.6	13.3	-11.4	28.0	-22.5	-18.2	7.7	3.0	-5.1	20.4	-2.9	19.3
Turkey															
Ukraine	52,890	1,899	*	*	*	*	*	-40.3	-50.2	35.9	10.4	-22.9	-12.4	-6.6	-96.4
United Kingdom	40,013	20,993	-2.8	0.3	-1.5	-18.2	-6.3	-9.8	-4.1	-1.7	4.9	-2.8	-0.3	1.1	-47.5
United States	101,766	102,307	-7.0	-28.0	8.1	13.9	40.5	-7.4	-6.0	11.5	-22.5	24.0	2.0	2.2	0.5

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.16

CO_2 emissions from energy industries: solid fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	120,219	179,230	4.0	3.0	3.8	5.1	7.6	3.2	2.1	3.2	0.3	3.3	2.1	0.1	49.1
Austria	6,247	5,844	9.1	38.1	3.7	6.5	-30.1	8.0	32.4	19.0	-7.5	25.5	-3.5	-12.4	-6.5
Belarus	2,283	659	2.6	-13.3	21.5	-32.0	-2.7	-25.0	13.4	2.8	-15.1	-7.1	-7.3	-11.2	-71.2
Belgium	21,482	15,746	-4.0	-3.8	-7.3	-7.7	-3.1	-20.8	11.7	-12.0	7.0	-3.5	0.1	21.5	-26.7
Bulgaria	31,318	26,084	15.4	0.3	-1.3	5.4	-4.4	-7.4	3.8	12.8	-9.7	8.4	0.1	4.0	-16.7
Canada	85,633	107,499	4.0	2.9	1.5	6.6	6.3	-0.1	7.8	0.2	-1.2	2.2	-5.1	-1.0	25.5
Croatia															
Czech Republic	54,699	54,274	-1.4	3.7	4.0	0.1	-3.1	-8.9	13.5	0.5	-3.3	1.8	-1.0	0.3	-0.8
Denmark	22,462	13,687	37.6	-16.9	40.2	-26.8	-15.7	-16.2	-17.2	7.1	1.4	38.3	-25.0	-16.5	-39.1
Estonia	23,037	12,586	-8.1	-7.3	3.8	-1.4	-14.6	-6.1	2.0	1.0	-1.9	17.6	-1.0	-4.8	-45.4
European Community	827,455	706,520	-1.0	-1.8	-0.6	-5.9	1.4	-4.7	5.1	2.4	2.0	4.8	-1.2	-2.2	-14.6
Finland	9,640	7,252	-8.1	-22.2	41.2	-12.7	-31.5	2.5	-2.9	23.2	17.1	43.9	-12.9	-53.3	-24.8
France	38,372	28,390	18.0	6.1	12.4	-11.9	36.4	-13.6	-3.1	-19.9	12.1	4.6	-9.6	3.3	-26.0
Germany	363,234	295,963	-4.5	-2.5	1.1	-6.1	0.5	-3.8	4.3	2.9	0.2	3.8	-1.4	-3.6	-18.5
Greece															
Hungary	14,582	9,209	-5.9	3.1	3.7	3.0	-0.8	1.7	-2.8	-5.3	-3.6	9.1	-7.1	-18.8	-36.9
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	8,009	8,019	-1.7	5.3	2.5	-3.0	-5.0	-8.4	8.5	7.8	-3.0	-7.6	-8.1	10.5	0.1
Italy	37,209	51,951	-8.6	15.9	-8.7	-0.1	12.0	-0.6	9.9	15.5	10.9	8.0	14.7	1.1	39.6
Japan	89,106	220,293	6.0	7.7	2.9	7.2	-1.3	9.0	9.3	6.7	9.6	4.4	4.1	5.6	147.2
Latvia	519	23	-9.0	16.0	-19.7	-4.1	-30.0	-37.0	57.5	-41.0	-21.3	-32.6	-69.9	-13.0	-95.6
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	220	60	-13.1	-20.8	-13.7	-5.3	-3.4	11.8	-28.6	6.1	-7.9	21.6	-3.7	-10.5	-72.9
Luxembourg	1,234	NO	-5.2	-24.0	-16.4	-47.2	*	*	*	*	*	*	*	*	*
Monaco	26	29	1.8	-0.3	7.1	12.8	-6.0	1.0	3.5	6.1	-10.7	-17.2	-10.9	0.4	10.3
Netherlands	25,776	25,734	-8.1	4.8	-4.7	-3.5	5.0	-13.7	6.8	7.2	0.7	2.7	-2.4	-4.4	-0.2
New Zealand	474	4,693	-53.4	44.3	11.3	94.9	-36.0	45.4	-22.4	54.0	-0.9	125.6	28.2	25.3	889.2
Norway	205	150	12.8	0.5	-6.3	-7.0	0.6	-34.7	-3.9	6.3	-3.4	-8.7	-0.5	18.2	-26.9
Poland	259,267	170,399	-1.7	-7.0	1.4	-1.3	-3.9	-2.9	-1.5	1.0	-3.7	5.3	-1.0	-1.6	-34.3
Portugal	7,685	12,157	6.1	14.6	-7.9	3.1	-8.1	27.5	-3.1	-7.5	10.7	-4.5	2.7	1.6	58.2
Romania	46,030	26,717	-23.8	3.2	1.3	-17.1	-15.7	-7.4	13.9	11.4	3.7	8.0	-5.5	-5.5	-42.0
Russian Federation	479,484	252,887	*	-2.5	11.0	-12.1	-4.5	-0.2	4.9	-1.7	-0.3	2.9	-4.5	-13.6	-47.3
Slovakia	11,269	5,826	*	*	*	*	*	*	*	11.4	-1.2	7.0	-6.1	-3.6	-48.3
Slovenia	6,195	6,059	-13.2	5.9	-5.9	9.5	4.6	-11.5	5.1	13.0	3.7	-5.6	3.3	0.7	-2.2
Spain	59,635	76,956	-0.5	5.5	-18.3	17.6	-1.4	19.0	5.3	-9.3	13.4	-7.6	5.0	0.8	29.0
Sweden	5,737	5,826	5.2	-5.8	20.4	-14.9	6.9	-7.6	-7.7	11.6	10.4	8.5	2.0	-11.1	1.6
Switzerland	47	189	-78.9	-33.4	*	*	*	*	*	*	*	*	*	79.7	303.1
Turkey															
Ukraine	96,018	61,500	*	*	*	*	*	0.9	-5.6	13.0	3.3	3.6	-8.8	6.7	-35.9
United Kingdom	185,476	115,029	0.3	-5.9	-5.7	-14.5	3.1	-16.2	12.3	11.0	-5.9	9.7	-3.8	3.7	-38.0
United States	1,531,251	1,958,415	0.0	1.3	5.5	2.6	1.6	0.3	4.9	-3.0	0.9	2.0	0.6	2.1	27.9

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.17

CO_2 emissions from energy industries: gaseous fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	13,409	24,675	-14.3	10.9	-1.3	2.3	9.4	9.3	5.3	8.5	2.1	2.3	6.1	4.2	84.0
Austria	4,105	6,266	-0.5	6.9	21.1	-11.1	5.0	-6.9	-11.8	2.3	13.9	15.3	-1.7	22.0	52.7
Belarus	23,386	28,684	-16.2	-14.0	7.9	23.1	-4.8	2.4	2.2	1.4	2.0	3.0	9.3	1.3	22.7
Belgium	2,767	6,818	19.9	24.8	6.4	0.6	41.4	22.4	-2.5	-7.3	9.5	17.7	-2.3	-28.3	146.4
Bulgaria	3,379	2,686	-23.6	30.5	-4.0	-1.1	-22.1	1.0	-3.8	-3.8	-4.9	-0.8	-2.8	8.7	-20.5
Canada	43,144	77,174	-5.1	4.7	-1.5	0.0	11.1	19.4	6.6	2.9	3.9	2.2	-5.0	6.7	78.9
Croatia															
Czech Republic	1,866	2,121	-4.0	29.3	22.5	-3.8	-5.2	7.4	-4.2	-4.8	-0.7	-5.8	-4.2	0.0	13.7
Denmark	1,540	5,826	16.2	21.9	25.8	12.2	14.1	7.5	2.8	4.0	3.5	-0.3	-0.3	-6.2	278.4
Estonia	2,241	1,528	0.2	22.6	22.1	-4.3	-16.2	-4.2	32.9	7.8	0.5	-0.9	10.0	1.9	-31.8
European Community	80,619	257,014	2.6	9.4	17.4	12.7	9.5	13.4	2.5	1.5	7.4	5.3	6.2	5.5	218.8
Finland	2,620	5,716	4.8	6.7	9.0	-1.4	25.2	0.1	3.0	10.4	-0.7	14.2	-5.1	-8.1	118.1
France	1,583	5,381	19.4	-6.0	43.4	-4.5	-9.2	-3.4	3.7	5.0	59.9	-22.4	10.0	52.8	239.9
Germany	22,167	32,233	0.4	1.3	14.3	-4.6	4.6	1.1	-0.3	1.9	3.6	8.4	-0.7	4.9	45.4
Greece															
Hungary	6,213	7,313	0.5	-2.6	20.7	-16.5	21.7	3.4	-8.4	9.8	4.0	5.6	-7.1	1.8	17.7
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	1,881	4,664	-5.5	15.5	20.7	8.8	-3.6	11.7	19.7	2.1	8.2	18.9	-4.9	-8.9	148.0
Italy	16,561	59,048	-13.5	16.2	7.2	20.3	41.9	22.1	12.0	1.5	4.7	14.0	7.9	15.2	256.5
Japan	76,761	100,614	6.5	1.5	4.6	3.7	2.9	6.2	2.4	-0.6	1.4	3.2	-4.0	-5.5	31.1
Latvia	2,737	1,862	2.6	43.8	-21.9	51.1	-4.8	-5.0	12.2	16.3	-3.0	4.9	-5.0	2.9	-32.0
Liechtenstein	0	3	550.0	13.8	25.3	-2.4	15.7	0	-5.7	6.1	-14.3	12.5	4.4	6.4	2,400.0
Lithuania	5,982	3,228	-3.7	16.7	12.6	-6.8	-22.9	14.1	22.8	-1.6	0.5	15.2	1.4	4.3	-46.0
Luxembourg	25	344	-20.5	8.5	13.6	-9.4	-28.7	50.4	147.0	4.4	0	0	44.0	-7.2	1,296.9
Monaco	NO	0	*	*	*	*	*	*	*	*	722.8	113.2	-38.0	-39.6	*
Netherlands	15,917	28,519	16.7	2.5	12.1	6.9	1.7	1.7	-1.0	6.9	3.8	-0.6	8.0	-4.4	79.2
New Zealand	5,333	4,390	6.1	-20.6	15.0	24.5	-23.3	20.2	-1.5	14.8	-14.2	-7.9	-29.1	35.7	-17.7
Norway	5,172	10,752	5.8	0.5	7.3	6.5	-5.2	-0.8	15.1	14.7	3.5	6.0	2.9	-0.4	107.9
Poland	1,661	3,252	-9.9	36.5	25.7	-0.5	19.8	29.7	29.7	21.3	31.8	15.0	15.8	1.0	95.8
Portugal	NO	3,611	*	*	*	*	1,270.8	360.5	-45.1	15.3	28.8	-17.4	41.6	-4.6	*
Romania	42,118	11,900	-12.1	-1.5	3.4	-23.6	9.9	-15.2	-3.6	-12.1	7.7	6.4	-9.4	-7.2	-71.7
Russian Federation	549,240	476,175	*	-5.2	0.2	-2.7	-0.2	1.7	1.1	2.2	1.0	4.5	1.2	-6.0	-13.3
Slovakia	2,189	2,757	*	*	*	*	*	*	*	0.6	-9.8	-3.0	-4.1	-5.8	26.0
Slovenia	197	263	-53.5	37.1	12.1	-31.2	3.9	-1.3	-3.2	10.7	-5.0	67.7	-15.7	11.0	33.6
Spain	678	22,233	58.7	69.1	167.9	286.3	-43.4	14.1	29.1	-0.9	78.2	33.5	46.9	65.8	3,181.0
Sweden	485	625	21.2	9.7	-1.1	1.1	-2.8	1.4	-13.1	28.1	1.7	-4.5	-11.6	-14.7	29.0
Switzerland	235	382	10.2	12.5	23.8	5.5	-2.2	-1.3	-13.5	8.5	-4.0	12.4	0.3	2.0	62.6
Turkey															
Ukraine	121,652	37,935	*	*	*	*	*	14.1	-4.4	-9.7	-5.4	13.7	-3.3	-5.2	-68.8
United Kingdom	10,189	71,540	-0.1	14.7	24.6	22.0	3.3	16.0	0.7	-1.2	5.6	-2.0	5.0	-3.2	602.1
United States	176,797	320,116	2.0	8.1	-10.2	6.8	13.3	4.8	7.9	3.1	5.5	-9.0	6.6	7.5	81.1

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.18

Contribution of fuels to CO_2 emissions from energy industries

Percentage (%)	Liquid Fuels		Solid Fuels		Gaseous Fuels		Other Fuels	
	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005
Australia	6.3	4.5	84.3	84.0	9.4	11.6	-	-
Austria	23.3	20.4	45.7	36.9	30.1	39.6	0.9	3.1
Belarus	60.6	8.3	3.5	2.1	35.9	89.6	-	-
Belgium	16.6	18.8	71.9	53.0	9.3	23.0	2.2	5.3
Bulgaria	19.7	2.9	72.5	88.0	7.8	9.1	-	-
Canada	10.7	6.8	59.4	54.3	29.9	39.0	-	-
Croatia								
Czech Republic	3.1	2.7	93.7	93.7	3.2	3.7	-	-
Denmark	7.0	9.1	85.8	61.8	5.9	26.3	1.3	2.8
Estonia	16.0	3.2	76.5	86.3	7.4	10.5	-	-
European Community	19.7	16.1	71.8	59.6	7.0	21.7	1.5	2.6
Finland	14.9	12.7	50.6	33.5	13.8	26.4	20.7	27.5
France	31.6	33.7	57.8	44.4	2.4	8.4	8.2	13.5
Germany	6.0	7.1	87.5	81.8	5.3	8.9	1.1	2.2
Greece								
Hungary	17.6	2.3	57.8	54.4	24.6	43.2	-	-
Iceland	100.0	55.6	-	-	-	-	-	44.4
Ireland	11.4	19.0	71.8	51.2	16.9	29.8	-	-
Italy	59.8	30.4	27.7	32.5	12.4	36.9	0.1	0.2
Japan	47.8	19.2	28.0	55.5	24.2	25.3	-	-
Latvia	48.6	8.9	8.2	1.1	43.2	90.0	-	-
Liechtenstein	-	-	-	-	100.0	100.0	-	-
Lithuania	55.2	44.1	1.6	1.0	43.2	54.9	-	-
Luxembourg	0.7	3.4	97.4	-	1.9	96.6	-	-
Monaco	4.1	-	95.9	99.8	-	0.2	-	-
Netherlands	19.4	16.3	49.1	38.2	30.3	42.3	1.1	3.1
New Zealand	3.7	1.9	7.9	50.7	88.4	47.4	-	-
Norway	17.7	11.3	3.1	1.2	77.8	86.1	1.5	1.4
Poland	4.0	3.9	95.4	94.3	0.6	1.8	-	-
Portugal	51.8	33.6	48.2	51.2	-	15.2	-	-
Romania	16.9	16.5	43.4	57.7	39.7	25.7	-	-
Russian Federation	15.6	6.9	39.4	32.3	45.1	60.8	-	-
Slovakia	9.8	0.7	72.0	51.7	14.0	24.4	4.2	23.2
Slovenia	4.6	0.6	92.5	95.3	2.9	4.1	-	-
Spain	21.9	20.2	77.1	61.5	0.9	17.8	0.2	0.6
Sweden	32.6	32.1	57.1	52.1	4.8	5.6	5.5	10.2
Switzerland	27.7	24.2	1.9	5.6	9.4	11.2	61.0	59.0
Turkey								
Ukraine	19.5	1.9	35.4	60.4	44.8	37.2	0.3	0.5
United Kingdom	16.9	10.0	78.4	55.0	4.3	34.2	0.3	0.8
United States	5.6	4.3	84.6	82.2	9.8	13.4	0.0	0.0

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Romania (1989) and Slovenia (1986).

Table 1.19

CO_2 emissions from manufacturing industries and construction: all fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	36,862	43,436	-1.3	3.3	0.0	-0.1	-0.4	2.2	2.1	-2.0	3.8	1.8	3.1	1.9	17.8
Austria	13,579	15,538	2.0	1.3	0.5	11.0	-7.0	-7.1	4.6	0.2	1.1	2.6	1.7	2.8	14.4
Belarus	7,215	8,217	7.3	-0.1	4.7	1.1	4.1	-1.4	-2.9	-6.7	2.8	8.6	11.4	3.9	13.9
Belgium	32,852	27,682	1.9	0.6	-2.1	-2.2	7.8	-4.4	2.5	-1.4	-4.9	-0.8	-3.6	-5.1	-15.7
Bulgaria	24,755	10,421	-32.4	19.9	-2.9	1.1	-19.6	-13.6	-3.4	-9.1	-5.5	13.1	-6.2	-3.7	-57.9
Canada	62,202	62,127	-6.1	1.4	4.4	0.3	-5.7	0.3	5.0	-6.8	3.2	7.0	1.1	-6.3	-0.1
Croatia															
Czech Republic	46,935	26,387	5.4	-8.5	13.3	-20.7	-4.9	0.6	2.7	3.6	-13.3	5.3	-1.8	-2.4	-43.8
Denmark	5,423	5,571	7.8	2.9	2.7	-0.1	-0.3	0.9	-3.7	1.6	-5.9	-0.2	2.3	-3.9	2.7
Estonia	1,759	527	-2.1	-34.8	25.2	-12.4	4.2	-41.3	30.3	22.4	-28.3	12.6	0.5	11.7	-70.1
European Community	609,684	546,938	-3.6	0.0	-1.5	2.1	-2.0	-0.6	0.9	-0.4	-3.1	2.9	1.1	-0.9	-10.3
Finland	13,278	11,407	-3.8	-4.3	-0.7	1.4	-2.4	-0.1	0.4	-3.8	-2.5	3.4	0.9	-2.5	-14.1
France	83,502	83,402	0.2	-0.3	1.7	1.5	1.9	-5.3	1.8	1.3	-3.0	1.8	1.9	0.0	-0.1
Germany	154,482	102,781	-13.7	0.3	-3.9	-0.1	-4.8	-1.4	-3.4	-3.0	-2.3	3.5	6.2	1.0	-33.5
Greece															
Hungary	22,588	11,796	-14.2	1.1	0.7	-10.2	-5.6	-9.0	1.8	-0.5	-2.5	4.3	-6.8	19.8	-47.8
Iceland	361	442	-20.9	4.0	11.4	17.3	-5.6	5.7	-10.1	7.7	0.3	-6.2	6.1	-1.8	22.5
Ireland	3,970	5,454	3.3	2.5	-4.4	10.0	0.3	3.2	19.7	-0.4	-5.1	0.0	1.4	0.2	37.4
Italy	88,937	81,960	-3.3	2.7	-2.5	3.6	-6.6	4.5	1.6	-3.1	-4.7	6.0	0.1	-4.8	-7.8
Japan	367,681	366,917	-1.4	1.3	2.2	0.5	-6.1	2.0	3.2	-2.7	1.9	0.1	1.5	-2.1	-0.2
Latvia	3,781	1,135	-23.2	-2.1	-2.3	-3.0	-12.3	-8.5	-16.7	-9.9	5.5	-1.6	1.2	1.2	-70.0
Liechtenstein	35	36	-3.1	0.4	-0.1	4.5	6.5	-1.5	-8.7	0.6	3.2	7.4	-2.4	-3.2	2.5
Lithuania	6,197	1,353	0.9	-14.4	-14.9	-3.5	6.5	-27.1	-1.0	-2.5	3.3	3.7	8.0	8.5	-78.2
Luxembourg	5,291	2,295	-10.0	-39.3	-0.4	-20.3	-27.8	13.8	-3.8	-5.1	40.0	-2.5	18.6	-9.2	-56.6
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	33,045	27,182	-1.7	-8.3	2.4	-5.3	0.9	-0.8	-1.9	-2.6	2.8	2.2	-0.9	0.1	-17.7
New Zealand	4,578	4,855	8.6	-2.3	10.0	7.0	1.3	-5.5	3.7	1.8	5.2	-4.5	-13.0	-7.5	6.1
Norway	3,631	3,648	-4.4	-10.0	12.9	-0.5	2.0	-8.0	-5.2	2.3	-6.5	9.8	-5.6	-6.1	0.5
Poland	58,488	37,258	-17.9	30.8	12.4	-8.9	-14.1	-14.9	-4.1	-9.9	-8.5	-2.8	-8.1	-4.3	-36.3
Portugal	9,158	10,515	2.6	1.9	2.9	9.7	-1.3	-0.3	4.3	-3.9	-2.0	-3.0	1.0	-3.1	14.8
Romania	37,339	25,352	-32.7	5.3	2.0	-14.7	-23.7	-11.2	5.0	3.4	17.0	7.5	3.3	-4.7	-32.1
Russian Federation	281,705	385,130	*	33.4	-9.6	-8.9	-6.1	3.8	16.3	-3.5	-1.0	0.0	-4.0	105.0	36.7
Slovakia	23,998	12,254	*	*	*	*	*	*	*	8.7	-5.9	1.2	-7.5	-1.6	-48.9
Slovenia	4,353	2,455	-1.5	-2.0	-6.5	-9.9	2.9	0.9	-1.4	-2.7	1.6	-3.9	6.1	8.7	-43.6
Spain	46,266	71,179	5.0	7.7	-10.1	11.7	0.0	4.4	3.9	7.4	2.3	6.9	2.7	2.1	53.8
Sweden	11,062	10,403	-2.2	2.5	0.5	2.6	-4.3	-8.0	3.0	0.3	0.4	0.1	0.2	-8.8	-6.0
Switzerland	6,029	5,850	-1.7	-1.4	-1.4	1.6	3.1	1.2	1.2	1.8	-2.9	0.7	-0.2	1.0	-3.0
Turkey															
Ukraine	143,311	49,125	*	*	*	*	*	-4.8	-1.2	-3.1	-1.4	11.5	3.2	4.4	-65.7
United Kingdom	99,554	85,093	0.1	-3.3	1.3	0.9	-1.9	1.3	0.2	-0.2	-8.8	1.4	-3.2	0.6	-14.5
United States	857,055	840,111	-2.4	0.6	4.8	-0.7	-4.4	-2.6	2.3	-0.6	-1.4	0.1	2.0	-4.1	-2.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.20

CO_2 emissions from manufacturing industries and construction: liquid fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	11,900	13,451	-3.6	3.0	6.2	-8.7	0.1	-0.8	8.5	-4.0	4.6	0.3	0.9	10.3	13.0
Austria	3,902	3,082	11.0	-5.7	-5.6	21.1	-6.0	-21.6	-0.3	6.7	-14.3	2.9	6.7	-1.9	-21.0
Belarus	3,938	2,978	13.9	-1.0	4.7	-1.2	5.1	-5.9	-10.4	-10.2	-4.1	2.6	15.8	-1.3	-24.4
Belgium	7,533	4,427	17.5	-2.6	-12.1	-0.7	1.6	-26.2	-3.8	23.5	-7.5	-5.2	-2.8	-6.1	-41.2
Bulgaria	7,740	2,944	73.3	41.5	-9.4	13.6	32.6	-9.5	-16.8	-11.9	7.7	7.9	-7.9	-8.5	-62.0
Canada	12,802	7,739	-15.7	-11.6	5.7	-2.4	-6.9	-4.8	0.9	8.1	-17.7	23.8	-2.1	-15.1	-39.5
Croatia															
Czech Republic	9,110	5,213	-9.8	13.4	29.2	-44.0	34.5	2.9	0.9	-5.1	-21.8	5.5	-6.0	1.9	-42.8
Denmark	2,684	2,366	7.8	-0.4	4.0	-6.3	-2.4	0.7	-2.6	4.6	-2.0	-1.1	1.5	-5.5	-11.8
Estonia	775	163	0.4	-64.9	95.1	-2.9	-48.1	-43.9	15.7	9.9	27.6	42.5	-5.8	-9.5	-78.9
European Community	193,843	155,991	1.1	-1.4	-3.4	1.2	-1.8	-4.6	-4.0	2.3	-4.8	2.9	-0.2	-3.7	-19.5
Finland	4,581	4,021	-5.4	1.7	-3.0	1.3	2.9	2.6	-2.6	-2.0	-0.6	-0.3	4.0	-3.2	-12.2
France	30,596	22,125	-0.2	1.1	2.0	-1.7	5.8	-10.1	-8.9	1.4	-9.8	-0.2	-0.7	-1.9	-27.7
Germany	25,897	14,528	8.3	-3.6	-2.5	-7.1	-5.7	-9.5	-8.5	-4.4	-3.0	8.6	-3.0	-10.0	-43.9
Greece															
Hungary	5,084	3,387	-6.2	-10.9	-2.0	-10.3	-17.8	-8.7	3.8	-22.6	11.1	4.9	1.7	34.8	-33.4
Iceland	313	416	-22.8	8.2	13.8	15.2	-7.7	6.8	-11.2	5.5	3.1	-5.9	2.5	3.1	33.2
Ireland	2,225	3,591	3.7	0.0	-12.9	17.9	-1.1	5.8	15.7	-0.8	-6.6	-0.2	0.0	-0.9	61.4
Italy	34,529	26,675	-9.7	0.2	-3.6	4.6	-5.1	6.6	-1.5	-0.7	-4.5	10.8	-0.7	-7.5	-22.7
Japan	145,502	133,332	1.2	1.2	1.2	0.9	-5.6	1.7	0.5	-5.0	-1.3	-1.8	0.5	-3.9	-8.4
Latvia	2,192	279	-32.2	2.0	-2.3	-2.0	-19.0	-10.4	-30.9	-37.3	-4.8	-2.8	-1.1	-18.9	-87.3
Liechtenstein	19	15	-12.3	-2.8	-7.2	13.8	7.4	-12.3	-12.2	-4.8	13.0	6.0	-2.9	-4.3	-22.5
Lithuania	3,897	287	-3.9	-15.7	-20.9	-8.8	5.0	-28.5	-8.2	-10.1	-37.1	-33.5	16.3	15.6	-92.6
Luxembourg	461	261	-12.1	-17.1	25.7	-24.8	36.0	-15.1	-3.9	18.7	-49.7	-0.3	74.4	-29.2	-43.2
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	8,993	7,378	-2.5	-23.7	4.1	-11.5	4.1	7.7	-10.4	-1.5	17.7	12.9	-5.4	1.3	-18.0
New Zealand	728	897	-3.7	2.0	6.4	-5.6	-14.7	-8.7	37.2	-2.4	3.3	-2.6	23.1	-1.1	23.3
Norway	2,898	2,506	-6.0	-15.6	16.2	-8.9	5.9	-7.3	-6.0	5.4	-6.7	10.3	-11.8	-8.1	-13.5
Poland	7,897	7,119	-20.7	18.7	43.9	10.5	11.4	-17.1	-32.2	12.6	7.7	2.8	5.7	-5.9	-9.9
Portugal	6,458	6,829	2.4	6.8	4.7	13.0	-1.1	-4.9	-8.7	-2.5	-1.0	-8.4	2.5	-2.8	5.7
Romania	10,108	4,958	-33.6	-11.0	34.0	-21.4	-19.8	-13.8	28.3	3.4	16.9	-18.6	13.7	-8.0	-50.9
Russian Federation	59,460	71,302	*	2.7	-4.8	27.5	-24.8	15.4	69.5	-14.7	0.3	-7.0	-6.5	79.8	19.9
Slovakia	4,163	1,244	*	*	*	*	*	*	*	-13.2	2.8	8.2	-4.9	-4.9	-70.1
Slovenia	1,656	773	-13.6	-1.5	-15.1	-16.0	-3.2	4.3	-5.8	-10.0	-10.5	-10.0	13.6	20.9	-53.3
Spain	24,520	27,362	3.5	6.8	-15.7	13.4	-0.6	-1.2	-5.1	4.3	-0.2	3.9	0.8	-2.7	11.6
Sweden	8,366	7,765	-6.6	2.8	-0.5	2.3	-4.8	-6.2	1.1	-0.8	1.9	0.8	-2.4	-11.0	-7.2
Switzerland	3,410	2,891	2.7	-6.8	3.7	2.8	4.7	0.1	-8.1	2.4	-3.6	-0.7	-2.3	-1.3	-15.2
Turkey															
Ukraine	39,844	2,581	*	*	*	*	*	-29.3	-33.8	-12.0	-15.1	-0.7	4.9	51.9	-93.5
United Kingdom	28,200	21,604	6.3	-10.5	-2.6	-7.6	-5.7	-5.2	-0.8	10.2	-15.6	-1.7	4.5	8.5	-23.4
United States	289,454	330,877	-7.8	-5.3	10.9	-1.1	-8.2	0.6	2.4	11.8	-3.7	4.9	4.6	1.0	14.3

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.21

CO_2 emissions from manufacturing industries and construction: solid fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	11,579	12,716	-1.9	3.3	-1.6	1.2	-3.7	3.9	-0.7	-5.2	2.9	4.8	5.9	1.1	9.8
Austria	5,014	5,602	-5.1	5.2	-1.3	14.1	-11.0	-2.6	9.6	-7.3	9.9	3.9	1.5	9.4	11.7
Belarus	942	505	-3.6	-20.7	6.5	-4.4	-5.1	-6.1	2.7	10.7	-4.9	-2.4	6.2	30.3	-46.4
Belgium	15,755	9,029	0.4	-5.1	-5.9	-8.4	11.8	-3.2	3.9	-4.7	-6.5	1.4	-8.0	-13.5	-42.7
Bulgaria	9,353	4,395	-57.4	14.4	-1.8	16.1	-41.8	-8.3	-4.0	-3.4	-7.4	19.9	-9.1	-10.4	-53.0
Canada	5,932	7,272	-17.1	-2.4	2.3	0.7	-2.3	2.7	5.5	-1.8	0.3	7.0	5.8	4.3	22.6
Croatia															
Czech Republic	31,840	14,100	8.9	-18.1	5.0	-16.1	-16.2	-0.7	8.8	3.3	-10.4	6.3	-2.7	-4.8	-55.7
Denmark	1,444	816	9.0	-1.5	-1.1	1.6	-3.7	-13.0	-4.7	-14.0	-14.3	2.1	15.7	-16.3	-43.5
Estonia	808	260	-5.4	-8.9	-3.8	-22.5	61.3	-40.5	37.7	24.9	-43.6	-20.4	12.7	30.6	-67.8
European Community	232,697	123,547	-10.6	-6.3	-5.2	0.6	-6.8	-2.9	-4.4	-4.0	-7.4	3.5	1.2	-2.6	-46.9
Finland	4,904	3,904	-4.7	-11.8	-1.3	4.8	-1.3	0.3	3.9	-11.4	-2.1	3.7	-0.8	2.2	-20.4
France	28,970	21,287	-3.4	-9.4	-2.3	3.6	-4.3	-1.5	0.3	-3.2	-8.8	-0.1	1.4	-1.1	-26.5
Germany	80,146	30,231	-28.6	-1.8	-6.7	1.8	-9.6	-4.6	-15.2	-8.2	-1.6	9.8	11.1	4.4	-62.3
Greece															
Hungary	7,815	2,967	-15.6	-7.3	-2.6	-22.6	14.1	0.5	9.0	-15.0	-0.1	-6.1	8.2	7.3	-62.0
Iceland	48	26	-9.1	-34.0	-24.7	64.0	27.8	-6.2	3.6	31.4	-25.0	-9.3	51.4	-44.7	-46.7
Ireland	871	671	0.4	36.2	65.0	-23.9	-12.7	-18.5	73.0	13.9	-5.5	6.1	13.8	12.0	-22.9
Italy	21,265	13,110	-1.5	-5.2	-7.8	2.1	-6.9	0.1	-6.2	-4.2	-15.5	13.2	0.4	-8.8	-38.4
Japan	214,631	215,018	-3.6	1.1	2.7	0.2	-6.2	2.0	5.1	-1.2	3.9	0.8	1.6	-2.3	0.2
Latvia	132	85	-36.7	-55.2	-10.7	-21.6	-11.2	3.3	-42.1	0	0	3.4	-15.5	315.4	-35.8
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	189	376	46.1	-44.9	-8.1	-17.4	7.3	-13.0	-21.0	-14.5	391.9	56.9	0.5	9.0	98.7
Luxembourg	4,242	292	-9.8	-51.9	-3.3	-33.4	-68.7	73.3	-12.6	-17.5	-17.1	-7.4	10.3	-12.9	-93.1
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	5,033	4,297	-12.8	2.9	-1.8	-3.2	0.3	-6.4	-1.5	6.7	-0.9	4.6	7.9	-4.8	-14.6
New Zealand	1,935	1,496	2.2	-17.4	2.9	2.8	0.0	-14.8	-0.5	20.6	-4.4	33.0	-38.7	12.0	-22.7
Norway	734	537	1.8	6.6	1.6	2.8	-16.0	-26.4	3.9	-13.5	-7.2	13.7	9.2	-16.8	-26.8
Poland	42,923	23,089	-16.2	34.5	7.7	-12.0	-19.3	-17.1	3.1	-15.2	-10.4	-5.3	-15.3	-7.2	-46.2
Portugal	2,615	598	3.5	-11.6	-3.2	-6.2	-22.7	-11.2	34.1	-34.6	-38.6	-26.8	0.8	-0.6	-77.1
Romania	10,639	10,610	-30.0	12.1	-1.8	-2.4	-13.5	-28.1	-6.5	-2.9	37.4	30.4	3.6	-0.1	-0.3
Russian Federation	103,481	184,348	*	79.8	-16.4	-29.5	9.4	-2.4	-4.7	-1.6	1.9	-0.9	-9.1	214.7	78.1
Slovakia	8,887	3,580	*	*	*	*	*	*	*	27.7	-14.2	-14.1	-7.6	-1.2	-59.7
Slovenia	1,446	364	-10.0	17.9	-13.9	-14.0	27.4	3.0	-11.8	17.6	33.1	-14.3	1.2	2.2	-74.8
Spain	13,307	4,629	9.8	-13.6	-15.6	-2.3	-23.3	-4.3	-7.6	13.4	-1.2	-10.2	-7.3	-14.9	-65.2
Sweden	1,865	1,519	6.2	7.8	0.8	1.0	-2.9	-15.8	20.8	-0.1	-5.4	-14.4	11.3	5.3	-18.6
Switzerland	1,391	596	-22.2	3.1	-32.5	-9.5	-12.5	0.1	45.3	1.7	-7.6	1.2	-5.4	10.3	-57.1
Turkey															
Ukraine	25,149	8,819	*	*	*	*	*	34.0	-5.5	-0.7	9.9	14.2	2.4	10.7	-64.9
United Kingdom	43,056	26,418	-1.2	-6.0	-3.7	1.8	-6.3	-0.7	-7.1	-1.8	-9.5	3.7	-3.8	-3.0	-38.6
United States	152,336	122,206	-2.8	-3.4	-1.6	-2.3	-3.6	-3.3	4.3	0.0	-7.6	0.5	1.8	-3.2	-19.8

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.22

CO_2 emissions from manufacturing industries and construction: gaseous fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	13,383	17,270	1.3	3.4	-3.3	6.0	1.7	3.1	-0.2	1.8	3.7	1.0	2.6	-3.3	29.0
Austria	4,288	6,006	0.0	3.2	5.3	4.2	-3.5	-2.4	5.7	-1.0	2.1	0.3	-2.6	0.8	40.1
Belarus	2,216	4,734	5.8	4.7	4.5	4.3	4.1	4.0	3.8	-5.5	9.3	13.9	9.1	5.0	113.6
Belgium	7,510	9,716	-10.4	9.8	7.1	-2.6	8.1	3.5	2.2	-5.1	2.1	-4.3	-0.1	1.2	29.4
Bulgaria	7,661	3,082	-7.2	18.1	-0.9	-26.3	-10.7	-25.9	16.6	-14.7	-15.8	7.6	2.0	14.4	-59.8
Canada	43,469	47,116	-1.8	4.9	4.4	0.7	-5.8	1.0	5.7	-10.0	7.9	4.3	1.1	-6.2	8.4
Croatia															
Czech Republic	5,984	7,074	10.0	6.4	21.0	-6.9	-5.4	1.2	-7.6	13.3	-12.0	3.1	3.3	-0.6	18.2
Denmark	1,294	2,320	6.5	11.4	3.8	7.1	4.3	9.3	-4.9	5.0	-7.0	0.0	-2.0	2.3	79.3
Estonia	176	103	1.6	33.9	8.3	-8.0	22.2	-40.6	21.1	28.6	-26.7	67.2	-9.3	12.5	-41.3
European Community	174,928	249,455	0.5	7.2	3.2	3.1	1.7	3.8	7.5	-0.4	0.2	1.8	0.5	1.6	42.6
Finland	2,196	2,031	2.1	-2.5	-5.2	-3.3	-2.8	-0.4	4.3	4.6	-3.6	-2.0	3.4	-8.9	-7.5
France	23,934	37,083	5.0	8.1	5.3	3.1	3.7	-3.5	13.0	4.5	3.5	1.4	2.0	2.2	54.9
Germany	45,540	52,297	0.0	4.8	-1.6	-0.3	0.9	2.9	3.8	-0.7	-1.5	-1.3	1.7	2.2	14.8
Greece															
Hungary	9,637	5,378	-17.9	18.0	5.2	-3.4	-9.8	-14.2	-1.2	22.0	-8.0	9.0	-17.8	19.9	-44.2
Iceland	0	0	-4.3	0	0	4.8	-5.2	-8.5	9.9	-15.2	-3.6	-3.7	19.2	3.1	-30.5
Ireland	873	1,191	5.3	3.0	2.1	4.5	9.7	2.1	19.0	-4.2	-0.4	-1.9	0.0	-2.5	36.4
Italy	32,086	40,727	3.6	8.0	0.8	2.9	-8.0	4.3	7.1	-4.4	-1.6	1.6	0.4	-1.4	26.9
Japan	7,549	18,567	13.0	7.8	8.6	1.8	-11.5	5.8	5.3	-1.7	6.3	8.3	9.7	18.1	146.0
Latvia	1,457	756	-8.4	2.5	-1.1	-3.4	2.5	-6.6	7.8	17.7	10.8	-0.8	2.7	3.5	-48.1
Liechtenstein	16	22	7.4	3.2	6.0	-2.4	5.8	7.9	-6.3	4.3	-2.8	8.4	-2.1	-2.4	30.8
Lithuania	2,111	690	5.7	-1.4	-3.1	8.1	8.6	-26.8	12.5	7.5	9.7	4.3	9.4	5.4	-67.3
Luxembourg	588	1,741	-9.7	11.0	-6.2	12.6	0.0	5.4	2.5	-8.1	121.3	-1.9	12.9	-4.5	195.9
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	19,020	15,506	1.6	-3.8	2.8	-3.5	-0.1	-2.5	1.2	-5.0	-1.6	-2.9	-1.0	0.9	-18.5
New Zealand	1,915	2,462	19.8	7.9	15.1	12.1	5.0	-0.7	0.4	-4.6	10.3	-20.5	-3.5	-18.2	28.5
Norway	NO	586	*	580.8	38.2	374.6	17.5	25.3	-10.6	4.4	-4.8	1.0	19.4	16.0	*
Poland	7,668	7,050	-25.4	7.5	33.4	-1.8	-3.5	4.4	-10.7	4.0	-14.4	4.0	11.2	8.5	-8.1
Portugal	NO	2,973	*	*	*	*	415.2	108.7	63.8	27.3	16.9	18.4	-2.9	-4.2	*
Romania	16,591	9,783	-33.3	7.3	-5.6	-19.9	-34.0	8.5	3.3	7.5	5.1	4.8	-1.5	-7.7	-41.0
Russian Federation	118,763	129,479	*	8.2	-2.4	1.4	-9.8	5.5	13.1	1.9	-3.8	4.4	0.8	44.4	9.0
Slovakia	4,762	2,717	*	*	*	*	*	*	*	5.0	-10.7	-1.3	-11.9	-3.6	-42.9
Slovenia	1,238	1,288	12.7	-6.9	4.2	-4.1	2.2	-2.6	4.7	-2.0	0.5	2.6	2.1	5.0	4.0
Spain	8,439	38,842	1.9	35.5	5.8	17.3	12.8	15.1	18.1	9.2	5.3	12.8	6.1	8.3	360.3
Sweden	687	840	-2.6	-9.2	15.2	3.2	-2.0	0.4	-9.2	13.4	1.1	-3.8	7.0	-8.1	22.2
Switzerland	1,070	2,067	10.5	5.5	2.8	3.6	2.6	4.6	6.7	1.2	-2.5	2.7	4.0	1.5	93.1
Turkey															
Ukraine	74,454	36,818	*	*	*	*	*	-7.1	2.8	-3.2	-2.9	11.3	3.3	0.6	-50.5
United Kingdom	28,296	36,824	-4.2	7.2	10.5	6.4	4.9	6.9	6.5	-4.1	-4.7	1.1	-6.4	-1.2	30.1
United States	415,265	387,028	1.5	5.7	3.3	0.1	-2.4	-4.3	1.7	-8.1	2.2	-3.3	0.1	-8.2	-6.8

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.23

Contribution of fuels to CO_2 emissions from manufacturing industries and construction

Percentage (%)	Liquid Fuels		Solid Fuels		Gaseous Fuels		Other Fuels	
	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005
Australia	32.3	31.0	31.4	29.3	36.3	39.8	-	-
Austria	28.7	19.8	36.9	36.1	31.6	38.7	2.8	5.5
Belarus	54.6	36.2	13.1	6.1	30.7	57.6	1.6	-
Belgium	22.9	16.0	48.0	32.6	22.9	35.1	6.3	16.3
Bulgaria	31.3	28.3	37.8	42.2	30.9	29.6	-	-
Canada	20.6	12.5	9.5	11.7	69.9	75.8	-	-
Croatia								
Czech Republic	19.4	19.8	67.8	53.4	12.7	26.8	-	-
Denmark	49.5	42.5	26.6	14.6	23.9	41.6	0.0	1.2
Estonia	44.1	31.0	45.9	49.4	10.0	19.6	-	-
European Community	31.8	28.5	38.2	22.6	28.7	45.6	1.3	3.3
Finland	34.5	35.3	36.9	34.2	16.5	17.8	12.0	12.7
France	36.6	26.5	34.7	25.5	28.7	44.5	0.0	3.5
Germany	16.8	14.1	51.9	29.4	29.5	50.9	1.9	5.6
Greece								
Hungary	22.5	28.7	34.6	25.2	42.7	45.6	0.2	0.5
Iceland	86.6	94.2	13.4	5.8	0.0	0.0		
Ireland	56.1	65.9	21.9	12.3	22.0	21.8	-	-
Italy	38.8	32.5	23.9	16.0	36.1	49.7	1.2	1.8
Japan	39.6	36.3	58.4	58.6	2.1	5.1	-	-
Latvia	58.0	24.6	3.5	7.5	38.5	66.6	-	1.3
Liechtenstein	53.2	40.3	-	-	46.8	59.7	-	-
Lithuania	62.9	21.2	3.1	27.8	34.1	51.0	-	-
Luxembourg	8.7	11.4	80.2	12.7	11.1	75.9	-	-
Monaco	-	-	-	-	-	-	-	-
Netherlands	27.2	27.1	15.2	15.8	57.6	57.0	-	-
New Zealand	15.9	18.5	42.3	30.8	41.8	50.7	-	-
Norway	79.8	68.7	20.2	14.7	-	16.1	-	0.5
Poland	13.5	19.1	73.4	62.0	13.1	18.9	-	-
Portugal	70.5	64.9	28.6	5.7	-	28.3	0.9	1.1
Romania	27.1	19.6	28.5	41.9	44.4	38.6	-	-
Russian Federation	21.1	18.5	36.7	47.9	42.2	33.6	-	-
Slovakia	17.3	10.1	37.0	29.2	19.8	22.2	25.8	38.5
Slovenia	38.0	31.5	33.2	14.8	28.4	52.4	0.3	1.2
Spain	53.0	38.4	28.8	6.5	18.2	54.6	-	0.5
Sweden	75.6	74.6	16.9	14.6	6.2	8.1	1.3	2.7
Switzerland	56.6	49.4	23.1	10.2	17.8	35.3	2.6	5.1
Turkey								
Ukraine	27.8	5.3	17.5	18.0	52.0	74.9	2.7	1.8
United Kingdom	28.3	25.4	43.2	31.0	28.4	43.3	0.0	0.3
United States	33.8	39.4	17.8	14.5	48.5	46.1	-	-

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Romania (1989) and Slovenia (1986).

Table 1.24

CO_2 emissions from other sectors (commercial/institutional, residential, agriculture/forestry/fisheries): all fuels - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	12,909	19,117	0.7	5.1	2.9	2.0	1.7	1.5	3.4	5.2	2.3	10.5	-4.5	3.8	48.1
Austria	14,266	15,046	7.6	8.1	8.9	-9.0	-0.7	4.8	-10.7	11.7	-4.5	9.5	-10.7	7.2	5.5
Belarus	14,227	7,928	-1.6	-5.1	2.6	-1.0	-0.6	-5.3	-3.9	-9.1	-7.7	-2.0	-0.6	4.7	-44.3
Belgium	27,215	30,519	10.2	2.0	17.2	-11.9	0.9	-3.2	-4.6	7.7	-5.8	7.4	-2.5	-1.5	12.1
Bulgaria	8,940	1,700	-24.1	-21.2	23.5	-17.3	11.6	-16.6	-23.9	-13.6	26.6	6.3	-20.3	-3.3	-81.0
Canada	69,428	78,046	-0.9	0.6	7.5	-3.6	-10.7	5.0	8.7	-4.4	4.9	5.7	-2.7	-3.0	12.4
Croatia															
Czech Republic	32,577	12,857	-21.8	-1.9	-1.8	-1.1	6.3	-12.3	-2.1	-8.1	3.6	-3.9	-2.2	-9.5	-60.5
Denmark	9,139	7,176	2.9	2.0	7.0	-7.8	-2.7	-2.6	-8.0	2.8	-3.9	0.5	-2.9	-1.0	-21.5
Estonia	1,945	526	-5.8	4.8	9.1	-16.8	-7.8	-11.5	-1.5	-12.3	65.5	-0.2	-2.8	-3.7	-73.0
European Community	638,942	642,691	6.2	1.7	10.0	-6.6	0.2	-2.3	-2.6	7.1	-5.3	3.4	-0.8	-1.2	0.6
Finland	7,040	5,022	-2.2	-7.5	2.0	0.2	1.6	-1.5	-6.4	4.0	-0.8	-2.7	-3.6	-5.0	-28.7
France	93,813	101,693	10.5	2.2	7.9	-5.7	3.8	-1.6	-3.4	9.7	-8.8	3.6	1.7	-0.5	8.4
Germany	204,313	164,515	0.6	1.4	13.1	-6.7	-4.2	-8.3	-3.8	12.3	-6.9	1.3	-4.7	-4.1	-19.5
Greece															
Hungary	24,334	17,548	3.0	-4.8	3.3	-4.0	-13.6	5.7	-2.5	8.1	2.3	7.7	3.3	0.3	-27.9
Iceland	691	716	2.5	1.2	8.2	-3.3	-5.0	0.0	-6.0	-11.4	9.8	-6.2	7.3	-1.2	3.7
Ireland	10,065	10,550	1.3	-1.6	0.4	-2.7	5.1	-1.2	1.8	4.0	-1.3	3.0	0.3	2.8	4.8
Italy	76,508	92,969	7.3	9.8	2.4	-3.4	3.9	5.8	-5.0	3.5	-3.4	8.4	2.6	6.6	21.5
Japan	161,641	188,463	-0.8	7.1	-1.1	-2.4	2.3	4.7	0.6	1.2	3.6	-3.5	-0.8	0.8	16.6
Latvia	5,502	1,180	2.1	-36.3	1.4	-16.6	-14.4	-5.1	-9.7	25.5	-2.9	8.8	2.0	-3.8	-78.5
Liechtenstein	88	112	-6.1	1.3	0.5	7.8	8.8	-5.8	-7.1	1.8	9.1	6.0	2.4	0.7	26.5
Lithuania	6,974	1,224	5.7	-14.0	-14.0	-14.6	-15.5	-12.3	-15.1	-4.8	5.8	3.3	0.7	6.6	-82.5
Luxembourg	1,246	1,274	25.7	0.4	10.3	-2.2	6.0	-3.9	-16.2	12.4	-2.6	-1.9	-0.8	-3.0	2.2
Monaco	45	37	-7.3	-3.7	5.0	-6.2	4.4	-0.6	-3.7	-4.4	7.6	4.2	-5.1	0.3	-18.3
Netherlands	37,868	37,671	12.4	6.2	12.7	-14.6	-2.2	-5.7	1.8	6.1	-2.9	3.0	-0.7	-6.2	-0.5
New Zealand	2,854	3,335	-6.6	0.5	-4.3	-2.6	-1.0	6.4	5.2	5.5	-0.3	-2.1	1.9	4.3	16.8
Norway	4,130	3,195	-10.2	-0.2	20.9	-10.5	-0.7	2.3	-15.8	9.4	5.8	6.9	-10.9	-9.9	-22.6
Poland	112,181	50,175	9.4	-5.1	10.2	-1.9	-13.7	4.5	-18.2	6.1	-5.5	3.3	-7.4	7.2	-55.3
Portugal	4,025	6,587	5.5	-2.9	7.7	-0.1	3.6	8.9	2.9	5.5	3.4	3.1	3.9	-3.5	63.6
Romania	10,194	10,675	-14.0	17.7	-3.4	19.3	-0.8	-18.7	3.2	-5.6	5.7	29.4	4.7	-4.8	4.7
Russian Federation	NE	136,982	*	-7.1	-9.1	-2.8	-6.1	9.1	0.4	0.8	-11.4	3.3	-4.4	-10.5	*
Slovakia	10,520	4,845	*	*	*	*	*	*	*	8.6	-12.2	-2.6	-10.0	-0.2	-53.9
Slovenia	2,139	2,431	19.1	8.0	27.5	2.5	1.0	7.2	-10.1	3.0	-4.8	-3.0	-2.2	-9.4	13.7
Spain	25,280	39,133	8.9	-0.1	3.9	0.7	2.6	4.8	3.7	3.0	2.8	5.9	3.4	2.1	54.8
Sweden	10,721	5,100	-2.6	-4.7	0.4	-7.7	-0.4	-5.5	-1.8	-9.7	-6.7	-4.7	-11.4	-12.1	-52.4
Switzerland	17,684	18,107	7.6	6.4	4.1	-5.6	2.9	-1.7	-7.1	4.9	-3.5	5.6	-0.5	1.4	2.4
Turkey															
Ukraine	91,409	45,540	*	*	*	*	*	-7.6	-12.9	-1.8	6.1	4.3	-0.2	7.3	-50.2
United Kingdom	109,451	111,405	10.4	-3.6	11.8	-7.4	1.9	-0.2	-0.5	2.4	-6.1	0.7	1.9	-4.0	1.8
United States	564,642	584,560	1.8	0.0	7.0	-3.5	-8.0	3.7	5.5	-2.8	-0.1	5.5	-2.8	-3.1	3.5

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.25

CO_2 emissions from other sectors (commercial/institutional, residential, agriculture/forestry/fisheries): liquid fuels - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	5,919	9,433	0.8	1.9	0.4	3.0	1.6	2.9	3.6	12.8	2.5	16.7	-7.7	4.7	59.4
Austria	8,822	8,719	2.7	7.1	14.6	-8.4	-0.1	1.5	-9.4	8.6	-0.3	8.8	-13.6	3.3	-1.2
Belarus	5,209	3,786	13.4	1.5	8.4	5.3	5.2	-5.4	-8.8	-11.9	-13.0	-1.8	4.5	4.5	-27.3
Belgium	17,376	17,586	6.8	-0.7	17.0	-11.5	0.3	-4.3	-7.9	6.7	-6.3	7.8	-4.8	-1.0	1.2
Bulgaria	3,778	317	-55.7	-40.8	-26.2	7.4	72.8	42.3	-14.8	40.4	-27.9	-21.0	-20.3	-1.6	-91.6
Canada	19,832	17,335	-8.8	-7.0	9.0	-4.7	-11.9	2.3	6.6	-1.6	2.3	18.0	-4.2	-6.5	-12.6
Croatia															
Czech Republic	2,618	354	-23.0	-30.8	21.0	-18.5	-8.0	-10.6	-19.3	-13.1	-3.4	10.3	-0.9	-50.2	-86.5
Denmark	7,313	4,373	-0.8	0.1	4.0	-8.2	-4.4	-2.1	-10.5	1.7	-4.6	-3.3	-3.9	-1.6	-40.2
Estonia	656	157	-17.8	-17.8	26.4	-12.8	38.7	5.4	22.7	-6.5	86.6	-16.4	-5.4	-8.2	-76.1
European Community	300,680	266,260	7.7	0.4	7.5	-5.1	-1.0	-4.8	-5.0	8.2	-7.3	1.0	-3.9	-2.2	-11.4
Finland	6,768	4,688	-1.8	-7.4	1.8	0.1	1.7	-1.7	-6.5	3.8	-1.2	-2.9	-3.6	-5.1	-30.7
France	59,285	53,978	7.2	3.2	4.6	-5.4	1.4	-1.5	-7.4	9.5	-9.4	2.8	0.5	-1.8	-9.0
Germany	91,461	73,946	17.4	-2.2	11.2	-4.9	-4.6	-13.6	-5.7	15.1	-11.5	-2.6	-8.7	-4.9	-19.2
Greece															
Hungary	7,114	1,285	-18.3	-27.3	-18.0	-7.5	-14.2	-5.0	-3.8	-3.1	-2.9	-22.1	9.8	-16.4	-81.9
Iceland	691	716	2.5	1.2	8.2	-3.3	-5.0	0.0	-6.0	-11.4	9.8	-6.2	7.3	-1.2	3.7
Ireland	3,827	6,086	3.7	4.9	-2.6	4.8	2.5	11.3	-1.0	6.5	-0.3	2.7	-0.8	2.6	59.0
Italy	38,602	26,006	-2.1	9.2	-1.1	-5.1	0.5	6.5	-6.9	2.7	-4.4	-0.6	-4.7	-0.4	-32.6
Japan	137,095	138,393	-1.8	7.4	-2.3	-4.2	1.4	4.7	-0.8	0.9	2.7	-5.8	-3.0	-1.0	0.9
Latvia	2,032	451	17.5	-44.6	-0.5	-14.1	-13.1	0.6	-12.7	31.2	-7.3	17.3	-1.3	-9.8	-77.8
Liechtenstein	77	60	-12.3	-2.9	-6.9	13.4	7.1	-11.9	-12.0	-4.8	12.7	6.0	-2.8	-4.5	-22.6
Lithuania	2,759	329	-9.4	-18.8	-18.8	-13.6	-8.9	-19.5	-5.3	-8.5	-4.8	-5.2	-7.2	2.2	-88.1
Luxembourg	740	721	22.5	-1.5	2.6	1.6	8.4	-2.7	-12.8	10.4	-2.1	-10.0	3.2	-5.4	-2.5
Monaco	36	26	-13.3	-6.3	7.3	-7.0	4.5	-2.5	-8.5	-5.3	9.4	7.0	-7.9	-0.8	-28.9
Netherlands	4,020	3,106	-5.6	1.0	-4.4	-4.4	0.0	-2.9	-2.2	6.6	-8.6	-1.5	-2.0	-3.2	-22.7
New Zealand	1,593	2,059	-8.5	-3.7	-1.3	1.0	3.7	3.6	-6.0	-3.1	2.7	10.7	-6.3	23.5	29.2
Norway	4,090	3,103	-10.3	-0.1	21.1	-10.5	-0.7	2.3	-15.8	9.1	5.7	7.1	-11.5	-11.3	-24.1
Poland	7,846	12,833	-12.4	-9.4	5.5	28.0	10.9	7.6	21.6	-18.7	-8.9	6.9	-4.5	-0.6	63.6
Portugal	4,025	5,830	5.5	-2.9	7.7	-0.2	2.7	6.9	0.5	2.8	1.6	1.1	4.1	-4.5	44.8
Romania	4,769	2,722	-24.4	25.9	-3.5	36.8	-7.6	-39.6	13.1	-22.6	17.9	10.8	37.1	-19.4	-42.9
Russian Federation	NE	34,364	*	1.5	-26.6	4.5	-21.6	26.5	-4.7	0.8	-25.7	4.2	-0.2	30.0	*
Slovakia	387	37	*	*	*	*	*	*	*	1.1	-7.9	-18.9	12.2	24.5	-90.5
Slovenia	814	2,137	14.4	10.8	32.3	3.4	1.0	5.3	-9.7	2.1	-3.9	-4.0	-3.4	-7.6	162.6
Spain	21,679	27,627	5.4	1.6	2.3	-0.9	0.5	3.6	3.5	0.5	0.0	4.3	1.6	-0.7	27.4
Sweden	10,359	4,849	-2.6	-5.1	0.3	-7.8	-0.7	-5.9	-1.6	-10.3	-7.3	-4.4	-9.3	-13.9	-53.2
Switzerland	15,287	14,266	6.5	5.2	3.1	-5.1	2.8	-2.8	-8.0	4.8	-4.0	5.2	-1.5	0.9	-6.7
Turkey															
Ukraine	8,028	834	*	*	*	*	*	-21.3	-18.8	0.5	3.3	-6.7	-4.3	11.2	-89.6
United Kingdom	18,531	15,123	6.5	-4.5	7.6	-8.3	2.6	-8.2	-5.7	5.8	-13.2	-5.2	4.6	-0.6	-18.4
United States	166,552	145,839	-2.1	-4.5	8.9	-7.5	-7.1	6.0	8.1	1.5	-8.6	13.5	-2.4	-5.9	-12.4

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.26

CO_2 emissions from other sectors (commercial/institutional, residential, agriculture/forestry/fisheries): solid fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	566	384	-7.9	-4.4	-7.5	-8.2	-24.5	-12.1	41.5	36.1	-4.7	2.4	2.5	0	-32.2
Austria	2,654	562	10.6	-5.9	-5.1	-21.9	-12.9	-7.7	-12.8	-2.7	-13.6	-9.0	-19.3	0.2	-78.8
Belarus	6,652	1,382	-13.9	-16.0	-3.7	-11.8	-12.0	-10.6	2.9	-21.8	-10.4	-5.7	-12.1	6.1	-79.2
Belgium	1,976	604	14.6	-3.6	13.7	-14.6	-16.5	-9.3	-14.7	4.3	-16.5	-6.3	6.7	-4.1	-69.4
Bulgaria	4,953	1,190	-5.5	-18.7	29.0	-18.0	4.7	-26.8	-27.9	-36.1	74.0	14.1	-23.0	-8.5	-76.0
Canada	192	88	-0.7	34.5	-0.3	-7.0	-12.2	-3.8	-2.0	-2.5	-36.3	-0.5	11.6	-13.6	-54.0
Croatia															
Czech Republic	25,370	3,830	-26.0	-9.0	-10.3	-9.5	9.6	-23.4	-4.1	-24.6	5.3	-13.9	-2.0	-15.4	-84.9
Denmark	320	171	26.5	-25.1	-29.5	-13.0	-24.0	-24.1	34.2	14.0	-30.3	38.3	-13.3	67.8	-46.6
Estonia	722	102	-0.4	68.6	18.7	-27.1	-36.5	8.5	-18.1	-25.2	16.0	-27.1	39.7	-7.4	-85.8
European Community	106,259	14,282	-19.7	-15.1	-1.6	-16.9	-18.8	-9.3	-10.2	-2.4	-14.9	-8.5	-4.7	-8.5	-86.6
Finland	46	12	-25.4	-64.8	-11.5	-18.2	10.3	-10.1	0.9	-22.4	18.6	-3.5	0	-31.8	-74.3
France	4,401	287	0.3	43.1	-0.7	-39.9	-26.5	-24.6	-11.6	-10.9	-40.2	-26.8	0	0	-93.5
Germany	67,047	5,633	-34.6	-13.2	-7.1	-21.1	-35.9	-6.0	0.4	3.2	-8.7	-4.0	-1.5	-6.2	-91.6
Greece															
Hungary	12,281	974	6.0	-16.5	3.1	-17.6	-56.6	7.0	-25.6	41.5	7.6	1.1	-28.7	1.6	-92.1
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	5,745	2,265	-2.7	-10.1	-0.1	-13.1	5.1	-25.7	-0.7	-5.4	-1.8	-1.9	-2.3	4.2	-60.6
Italy	920	32	6.3	3.2	-3.6	-41.2	-44.5	-2.9	-3.1	10.8	-78.0	0.0	-52.1	-9.3	-96.6
Japan	4,744	2,522	-8.3	-11.8	5.7	-2.6	-2.4	-3.5	6.3	-1.2	-0.1	-1.8	-3.0	-3.5	-46.8
Latvia	2,175	191	-11.7	-43.6	8.4	-17.1	-28.0	-20.1	-23.6	36.2	-20.4	-7.4	-2.9	-3.8	-91.2
Liechtenstein	0	0	-5.4	-3.7	-26.9	5.3	5.0	-47.6	118.2	-45.8	-7.7	8.3	-23.1	-10.0	-75.7
Lithuania	2,792	386	11.2	-15.7	-7.6	-18.8	-16.6	-18.9	-28.2	-12.5	22.8	9.5	-4.1	15.7	-86.2
Luxembourg	95	7	97.8	-28.8	16.5	-21.6	-35.6	-17.9	-5.9	6.4	-69.1	-1.5	2.1	-9.6	-92.5
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	189	48	-21.2	-15.3	-1.0	-3.6	5.8	2.4	0.0	12.3	-8.4	2.2	9.9	-64.3	-74.7
New Zealand	818	539	-8.3	11.9	-13.7	-15.3	-15.6	-4.5	-8.8	28.7	-4.5	-9.2	43.0	-25.9	-34.2
Norway	36	4	-6.2	-16.2	-22.1	9.8	-3.7	-16.6	-7.0	-22.2	47.7	-29.3	-13.4	-47.1	-88.8
Poland	98,110	26,773	12.4	-6.7	14.2	-9.1	-23.4	7.0	-37.2	22.7	-7.5	1.3	-10.6	11.7	-72.7
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	2,219	55	-30.7	-6.9	89.5	-12.5	-84.4	149.2	-9.3	-69.2	239.2	-51.5	76.6	-63.9	-97.5
Russian Federation	NE	11,645	*	-4.6	-7.1	-4.4	-6.8	19.0	3.0	5.1	-27.1	-17.1	-4.8	-39.5	*
Slovakia	7,292	523	*	*	*	*	*	*	*	-10.0	-42.6	-11.0	-21.9	-8.5	-92.8
Slovenia	1,291	7	27.3	-20.3	-16.9	-41.6	-18.3	4.7	-40.3	-23.0	-16.3	-1.3	-40.1	-64.1	-99.5
Spain	2,282	552	20.4	-28.3	-4.8	-1.5	-6.8	-28.0	-39.8	-29.7	14.8	21.7	1.6	1.3	-75.8
Sweden	157	NO	-33.3	-50.0	-59.0	214.2	-50.0	-36.3	0	*	*	*	*	*	*
Switzerland	57	35	15.5	-4.2	-43.4	-15.5	-36.4	0.0	-7.2	-0.1	0.0	0.0	207.6	0.9	-38.0
Turkey															
Ukraine	60,906	6,967	*	*	*	*	*	-0.9	-22.3	-7.6	14.8	-7.4	-2.8	-13.1	-88.6
United Kingdom	20,323	4,081	5.9	-25.2	4.4	-8.9	-9.3	-2.9	-16.8	-4.8	-19.6	-16.9	-9.1	-19.8	-79.9
United States	14,784	8,984	-9.2	-3.2	2.6	5.6	-27.8	11.0	-11.4	5.4	-6.2	-7.7	21.4	-17.6	-39.2

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.27

CO_2 emissions from other sectors (commercial/institutional, residential, agriculture/forestry/fisheries): gaseous fuels - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	6,423	9,299	1.4	8.5	5.4	1.5	2.7	0.7	2.4	-2.1	2.4	4.9	-1.3	3.1	44.8
Austria	2,551	5,693	24.3	18.2	-0.6	-5.3	4.8	13.2	-10.7	23.5	-10.4	14.1	-4.9	15.3	123.2
Belarus	2,351	2,760	0.3	0.3	0.3	0.3	0.3	0.3	0.3	7.9	2.2	-0.1	-0.9	4.3	17.4
Belgium	7,812	12,239	17.0	7.4	18.1	-12.3	4.1	-0.9	1.8	9.4	-4.3	7.8	0.4	-2.1	56.7
Bulgaria	209	193	-86.2	350.7	91.6	-63.3	81.8	4.0	16.0	30.0	6.5	36.2	20.9	42.9	-7.6
Canada	49,405	60,623	2.3	3.0	7.0	-3.3	-10.3	5.8	9.3	-5.2	5.7	2.4	-2.3	-1.9	22.7
Croatia															
Czech Republic	4,589	8,673	2.5	23.3	7.8	13.8	5.0	0.1	1.7	5.7	3.2	1.1	-2.5	-3.2	89.0
Denmark	1,486	2,629	15.8	11.8	18.9	-6.5	2.6	-3.2	-3.8	4.9	-1.7	6.4	-0.5	-1.8	77.0
Estonia	141	136	23.6	-30.0	-22.9	-0.1	18.7	-4.6	1.4	0.1	45.6	7.4	-27.3	20.3	-3.3
European Community	230,707	358,720	16.2	5.9	14.3	-6.9	3.5	0.7	0.2	6.8	-3.0	6.0	1.6	-0.2	55.5
Finland	104	213	15.3	0.1	9.1	3.3	-2.3	5.3	-3.9	9.8	4.5	-0.2	-6.0	0.1	104.4
France	30,057	47,333	18.4	-1.3	14.0	-4.1	8.7	-1.0	2.3	10.4	-7.6	5.0	3.1	1.0	57.5
Germany	45,804	84,936	18.4	11.5	20.1	-6.7	1.0	-1.5	-2.0	10.0	-1.4	5.7	-1.0	-3.3	85.4
Greece															
Hungary	4,939	15,290	21.5	11.0	10.2	0.7	-3.6	7.7	0.1	7.4	2.5	12.6	5.7	1.9	209.6
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	493	2,199	29.6	4.1	17.0	-0.2	16.0	12.5	16.1	9.3	-3.9	9.8	6.1	1.9	346.0
Italy	36,417	64,142	17.3	10.4	4.9	-1.7	6.6	5.5	-4.5	3.5	-2.4	12.9	5.0	9.8	76.1
Japan	19,802	47,549	7.6	7.9	5.2	6.8	6.7	5.5	6.2	2.4	7.7	5.3	6.9	6.6	140.1
Latvia	1,295	538	1.0	2.1	-4.9	-19.3	4.4	3.4	5.2	13.5	14.7	8.6	7.4	1.9	-58.4
Liechtenstein	11	52	36.3	14.0	19.8	-3.5	12.8	8.0	1.7	12.5	4.2	6.1	10.0	7.3	365.4
Lithuania	1,423	509	24.3	-5.0	-15.4	-10.3	-21.6	5.4	-12.7	5.3	5.0	6.1	10.5	3.2	-64.3
Luxembourg	411	545	14.9	8.4	22.0	-5.5	6.2	-5.0	-21.8	16.0	-0.1	10.8	-5.9	0.5	32.7
Monaco	9	11	16.8	4.7	-1.5	-3.9	4.1	5.3	9.5	-2.2	3.6	-2.4	2.2	3.1	24.0
Netherlands	33,659	34,517	14.8	6.9	14.5	-15.5	-2.4	-6.0	2.2	6.1	-2.3	3.4	-0.6	-6.3	2.5
New Zealand	443	738	3.3	-2.6	1.6	4.7	1.9	25.7	43.9	8.8	-2.4	-18.2	-5.6	-8.1	66.4
Norway	NO	87	*	406.3	32.1	37.4	323.1	106.4	6.2	439.8	9.2	-3.1	115.7	122.6	*
Poland	6,225	10,569	7.0	9.8	-4.9	8.5	2.3	-8.9	-1.4	10.3	5.6	3.9	-2.7	6.7	69.8
Portugal	NO	757	*	*	*	*	1,784.3	221.3	86.4	56.7	26.4	22.9	2.0	4.6	*
Romania	3,206	7,898	16.8	15.3	-8.3	12.8	11.1	-8.8	-0.1	3.6	-0.3	38.9	-5.8	2.9	146.3
Russian Federation	NE	90,973	*	-10.8	-2.4	-4.6	-0.6	1.9	1.4	-0.4	-1.9	7.7	-5.3	-15.2	*
Slovakia	2,842	4,285	*	*	*	*	*	*	*	15.7	-3.2	-1.1	-8.2	0.8	50.8
Slovenia	34	287	26.6	34.1	25.8	37.5	10.4	29.3	-5.1	15.7	-10.3	4.8	10.7	-18.6	745.3
Spain	1,319	10,954	47.6	5.5	20.5	12.5	17.9	19.9	11.6	15.9	12.4	10.2	8.9	9.9	730.7
Sweden	205	250	20.4	11.6	5.6	-5.9	9.0	5.0	-7.7	5.6	4.5	-10.0	-48.7	46.3	22.1
Switzerland	2,340	3,806	14.3	12.9	9.6	-7.9	3.6	3.5	-3.1	5.3	-1.2	7.4	2.9	3.3	62.6
Turkey															
Ukraine	22,442	37,529	*	*	*	*	*	-9.2	-9.8	0.0	3.6	8.4	0.5	11.6	67.2
United Kingdom	70,372	91,930	12.8	1.2	14.0	-7.0	3.4	1.9	2.4	2.5	-3.6	3.0	2.2	-3.7	30.6
United States	383,306	429,737	4.0	1.6	6.6	-2.4	-7.7	2.8	5.1	-4.4	3.1	3.2	-3.4	-1.7	12.1

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.28

Contribution of fuels to CO_2 emissions from other sectors

Percentage (%)	Liquid Fuels		Solid Fuels		Gaseous Fuels		Other Fuels	
	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005	Base year[a]	2005
Australia	45.9	49.3	4.4	2.0	49.8	48.6	-	-
Austria	61.8	57.9	18.6	3.7	17.9	37.8	1.7	0.5
Belarus	36.6	47.8	46.8	17.4	16.5	34.8	0.1	-
Belgium	63.8	57.6	7.3	2.0	28.7	40.1	0.2	0.3
Bulgaria	42.3	18.6	55.4	70.0	2.3	11.3	-	-
Canada	28.6	22.2	0.3	0.1	71.2	77.7	-	-
Croatia								
Czech Republic	8.0	2.8	77.9	29.8	14.1	67.5	-	-
Denmark	80.0	60.9	3.5	2.4	16.3	36.6	0.2	0.0
Estonia	33.7	29.8	37.1	19.5	7.2	25.9	21.9	24.8
European Community	47.1	41.4	16.6	2.2	36.1	55.8	0.2	0.5
Finland	96.1	93.4	0.7	0.2	1.5	4.2	1.7	2.2
France	63.2	53.1	4.7	0.3	32.0	46.5	0.1	0.1
Germany	44.8	44.9	32.8	3.4	22.4	51.6	-	-
Greece								
Hungary	29.2	7.3	50.5	5.5	20.3	87.1	-	-
Iceland	100.0	100.0	-	-	-	-	-	-
Ireland	38.0	57.7	57.1	21.5	4.9	20.8	-	-
Italy	50.5	28.0	1.2	0.0	47.6	69.0	0.7	3.0
Japan	84.8	73.4	2.9	1.3	12.3	25.2	-	-
Latvia	36.9	38.2	39.5	16.2	23.5	45.6	-	-
Liechtenstein	87.2	53.4	0.1	0.0	12.7	46.6	-	-
Lithuania	39.6	26.9	40.0	31.6	20.4	41.6	-	-
Luxembourg	59.4	56.6	7.6	0.6	33.0	42.8	-	-
Monaco	80.0	69.6	-	-	20.0	30.4	-	-
Netherlands	10.6	8.2	0.5	0.1	88.9	91.6	-	-
New Zealand	55.8	61.7	28.7	16.1	15.5	22.1	-	-
Norway	99.0	97.1	0.9	0.1	-	2.7	0.1	-
Poland	7.0	25.6	87.5	53.4	5.5	21.1	-	-
Portugal	100.0	88.5	-	-	-	11.5	-	-
Romania	46.8	25.5	21.8	0.5	31.5	74.0	-	-
Russian Federation	-	25.1	-	8.5	-	66.4	-	-
Slovakia	3.7	0.8	69.3	10.8	27.0	88.4	-	-
Slovenia	38.0	87.9	60.4	0.3	1.6	11.8	-	-
Spain	85.8	70.6	9.0	1.4	5.2	28.0	-	-
Sweden	96.6	95.1	1.5	-	1.9	4.9	-	-
Switzerland	86.4	78.8	0.3	0.2	13.2	21.0	-	-
Turkey								
Ukraine	8.8	1.8	66.6	15.3	24.6	82.4	0.0	0.5
United Kingdom	16.9	13.6	18.6	3.7	64.3	82.5	0.2	0.2
United States	29.5	24.9	2.6	1.5	67.9	73.5	-	-

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Romania (1989) and Slovenia (1986).

Table 1.29a

CO_2 emissions from transport: all fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	60,737	78,324	-0.5	4.1	3.4	1.9	0.0	1.1	2.7	-1.9	2.2	0.7	5.2	1.3	29.0
Austria	12,400	24,029	12.8	2.7	10.9	-6.6	14.7	-3.3	6.9	6.6	9.8	9.3	2.7	3.2	93.8
Belarus	12,909	4,429	-1.5	-9.9	-0.6	-8.9	-7.0	-17.7	-6.8	-0.1	34.3	-7.6	14.3	1.1	-65.7
Belgium	19,947	25,517	3.2	0.4	2.0	0.9	3.0	1.5	2.0	2.6	1.3	2.1	3.9	-3.4	27.9
Bulgaria	13,814	8,115	-39.9	4.5	-4.2	-19.4	22.6	-4.1	-5.2	2.3	5.1	12.4	4.3	9.4	-41.3
Canada	141,938	189,513	-3.4	2.6	2.4	3.8	2.1	2.6	0.8	-0.9	1.3	2.7	3.1	2.6	33.5
Croatia															
Czech Republic	7,342	16,767	-9.1	24.3	10.3	5.8	-2.2	11.4	-8.0	8.5	3.0	8.1	13.4	10.1	128.4
Denmark	10,344	13,065	4.5	3.4	2.4	1.2	0.1	0.6	-1.1	-0.1	1.5	3.6	2.0	1.6	26.3
Estonia	2,926	2,086	-3.7	-22.0	3.9	6.5	3.3	-6.6	-1.1	18.7	4.4	-2.1	2.6	4.4	-28.7
European Community	687,873	854,919	2.2	1.3	2.3	1.2	3.1	2.4	0.3	1.2	1.3	0.7	1.6	-0.4	24.3
Finland	12,551	13,492	-2.7	-1.7	-0.2	5.0	1.1	1.6	-0.7	0.9	1.6	1.5	2.8	-0.2	7.5
France	119,100	140,897	2.1	1.5	1.1	1.7	1.7	2.3	-0.4	2.3	0.6	-0.2	0.5	-0.9	18.3
Germany	162,487	164,207	2.2	2.1	0.1	0.3	1.9	3.2	-2.1	-2.0	-0.8	-3.6	0.3	-4.2	1.1
Greece															
Hungary	7,569	11,777	-12.5	1.9	0.0	6.1	13.7	4.4	-0.4	3.8	4.8	3.4	5.8	16.1	55.6
Iceland	600	716	1.9	-3.9	-1.6	2.0	0.5	3.6	0.4	1.7	0.6	3.6	1.8	5.6	19.4
Ireland	5,045	12,942	4.0	3.9	17.0	4.8	17.9	10.9	7.4	4.8	1.8	1.6	6.0	6.9	156.5
Italy	101,461	126,891	2.8	1.6	1.1	1.5	3.3	1.1	0.4	1.9	1.7	1.1	1.7	-1.1	25.1
Japan	211,054	249,643	5.4	3.1	2.2	0.8	-0.3	0.8	-0.3	1.0	-2.0	-0.8	0.0	-1.9	18.3
Latvia	2,940	2,888	-6.0	-4.5	-1.6	-0.6	-1.3	-1.5	10.5	17.7	-0.2	4.6	3.3	3.4	-1.8
Liechtenstein	75	84	17.5	2.5	1.6	4.4	-0.3	6.7	4.3	-3.8	-4.9	-0.3	-1.4	-0.7	12.1
Lithuania	5,652	4,124	10.4	22.9	9.2	12.4	5.4	-11.1	-10.9	9.0	3.1	1.7	9.6	6.0	-27.0
Luxembourg	2,724	7,182	21.8	-5.8	2.3	7.6	4.8	9.0	14.6	4.9	3.8	11.1	16.1	2.8	163.6
Monaco	33	32	14.3	-3.5	-0.4	-4.8	-3.5	1.3	-5.0	0.5	-0.5	-1.0	-2.4	-4.3	-0.3
Netherlands	26,009	34,686	1.1	1.8	2.6	1.3	2.4	3.1	1.1	1.6	2.1	2.0	1.6	-0.4	33.4
New Zealand	8,634	14,005	0.1	7.0	0.8	2.9	1.7	2.2	5.0	3.1	4.5	4.5	2.1	-0.8	62.2
Norway	11,110	14,259	-0.8	3.4	5.3	1.9	2.7	4.4	-6.3	2.4	-1.2	2.3	3.4	2.3	28.3
Poland	23,454	35,390	-1.1	8.6	10.5	-5.6	2.4	2.4	0.5	-2.4	-1.1	2.1	4.7	4.6	50.9
Portugal	9,828	19,293	6.8	5.1	5.0	5.6	12.1	5.1	10.0	1.6	2.6	-0.5	-0.3	-0.6	96.3
Romania	7,294	11,975	-11.1	-2.8	34.7	1.0	-0.6	-23.7	8.7	16.2	8.1	0.7	19.7	-18.0	64.2
Russian Federation	330,357	183,839	*	-7.6	-4.9	-8.4	18.4	0.8	-5.7	4.1	1.9	4.4	8.4	-13.9	-44.4
Slovakia	4,885	6,212	-15.8	6.2	1.3	4.0	6.3	-2.2	-10.2	13.7	2.9	2.2	5.6	17.8	27.2
Slovenia	1,971	4,367	-5.5	9.9	15.9	1.6	-13.6	-4.9	4.2	3.6	0.4	3.7	3.8	6.7	121.6
Spain	56,512	102,436	4.0	1.5	6.9	0.9	9.6	6.0	3.2	4.8	2.3	4.9	4.2	3.1	81.3
Sweden	18,174	20,041	-1.4	0.7	-1.2	0.7	1.0	1.6	-1.0	0.8	2.4	1.3	1.2	1.1	10.3
Switzerland	14,404	15,527	3.2	-2.3	0.3	4.0	1.4	4.0	1.6	-1.9	-0.7	1.2	0.7	0.5	7.8
Turkey															
Ukraine	86,625	36,295	*	*	*	*	*	-0.4	-8.8	1.4	4.3	3.2	3.2	-2.6	-58.1
United Kingdom	116,841	129,254	-0.6	-0.9	4.1	1.2	-0.6	0.7	-0.5	-0.3	1.6	1.1	1.1	1.0	10.6
United States	1,416,232	1,867,059	-2.0	1.9	2.2	1.2	1.8	3.9	3.0	-1.5	3.2	-0.2	2.9	1.8	31.8

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.29b

N_2O emissions from transport: all fuels - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2.01	4.77	6.4	7.6	14.0	-2.5	5.1	5.4	10.6	4.2	8.0	5.7	9.8	-4.2	137.1
Austria	0.85	0.88	26.0	-3.4	-4.9	-7.3	7.0	-9.4	-2.4	0.0	5.5	0.8	-5.8	-6.6	3.6
Belarus	0.11	0.01	-3.4	-13.3	-5.0	-14.0	-13.4	-25.0	-21.7	-5.5	24.2	-18.3	30.3	-19.7	-86.7
Belgium	1.14	2.70	6.9	9.6	7.2	4.8	4.9	13.1	4.8	3.1	2.8	1.0	2.7	0.8	137.6
Bulgaria	0.33	0.20	-40.2	3.1	-2.3	-16.4	15.0	-0.7	0.7	5.5	5.7	14.9	2.9	15.7	-37.3
Canada	20.37	24.48	1.0	2.0	3.5	3.1	-3.8	1.9	0.0	-5.3	-3.1	1.0	0.6	0.1	20.2
Croatia															
Czech Republic	0.26	2.30	59.4	46.8	56.5	17.8	-7.6	12.4	-22.7	14.6	17.4	13.3	14.3	8.0	782.5
Denmark	0.45	1.43	16.8	13.2	10.7	11.3	7.6	6.0	3.2	1.6	4.6	4.3	4.2	1.8	221.0
Estonia	0.02	0.02	-4.2	-19.3	4.3	6.5	3.1	-6.7	-2.7	17.8	4.6	-2.2	2.2	4.2	-29.6
European Community	25.57	73.14	8.2	10.9	9.7	8.1	9.7	8.0	4.7	5.3	5.3	3.2	3.8	1.4	186.0
Finland	0.56	1.95	13.3	9.4	9.0	11.4	9.6	9.6	6.8	6.6	7.5	7.0	8.2	5.6	248.7
France	5.36	14.41	7.2	11.5	10.3	8.0	7.1	7.6	4.2	8.2	4.2	3.7	2.2	0.5	169.0
Germany	2.18	4.23	35.0	9.6	4.6	2.3	1.3	0.8	-3.0	-3.0	-3.1	-6.5	-2.2	-4.1	94.4
Greece															
Hungary	0.36	1.37	-11.2	-0.5	-2.9	3.4	9.9	1.4	-2.2	2.7	2.1	4.2	-8.0	11.2	278.9
Iceland	0.02	0.12	2.5	118.5	-0.5	59.5	2.1	48.9	-0.9	0.9	0.9	3.2	0.3	20.5	596.5
Ireland	0.32	1.53	4.1	-2.7	25.2	10.9	23.8	17.8	15.7	7.0	2.1	4.2	7.8	6.8	370.0
Italy	5.54	12.92	1.2	8.9	8.2	6.9	13.0	8.6	3.6	4.3	9.9	3.5	5.4	0.2	133.2
Japan	13.56	10.42	3.9	3.0	1.9	1.0	-2.2	-0.3	-2.1	-4.0	-6.0	-6.5	-7.9	-8.8	-23.1
Latvia	0.26	0.28	-1.0	3.6	2.4	3.5	-0.7	-2.3	8.8	5.6	7.8	14.1	15.9	1.2	7.2
Liechtenstein	0.00	0.00	36.5	18.2	-2.0	5.5	-5.2	3.2	4.8	-8.3	-13.4	-9.1	-8.6	-8.0	35.1
Lithuania	0.22	0.18	9.7	16.1	8.5	18.2	8.7	-8.8	-10.1	11.8	3.6	1.2	11.8	7.3	-19.0
Luxembourg	0.15	0.89	20.0	-3.2	10.0	15.2	10.5	14.3	12.5	7.4	6.9	11.3	21.7	6.0	493.3
Monaco	0.00	0.00	15.0	17.4	18.6	8.6	7.5	12.3	1.4	4.2	4.1	-2.2	-1.7	-3.7	327.2
Netherlands	0.88	1.54	16.3	7.9	1.8	1.4	0.6	0.6	-3.7	-0.3	0.6	-2.3	3.4	-2.5	74.9
New Zealand	0.24	0.48	1.0	10.9	2.8	4.5	2.6	3.5	7.0	3.2	5.5	4.7	1.8	0.1	100.8
Norway	0.48	1.06	2.1	15.3	18.6	4.3	3.2	16.5	-13.6	6.1	-1.4	6.8	6.5	-1.6	122.2
Poland	1.67	3.61	-12.3	21.2	24.8	-5.9	51.5	8.6	9.5	-3.5	-4.6	0.3	1.9	5.1	116.1
Portugal	0.45	1.97	6.1	15.7	12.4	11.7	18.2	9.9	14.2	2.6	4.9	0.6	0.2	-0.1	337.4
Romania	0.06	0.10	-13.7	-6.0	34.7	2.4	-1.9	-22.1	7.0	16.8	8.3	0.0	19.6	-17.6	55.5
Russian Federation	1.97	0.96	*	-8.1	-6.2	-3.8	13.9	0.7	0.0	4.8	0.0	1.9	5.9	-8.0	-51.1
Slovakia	0.39	0.61	-18.8	13.8	8.8	10.1	10.8	2.9	-6.7	18.6	-0.7	5.3	0.9	17.8	55.1
Slovenia	0.08	0.52	-3.1	39.9	37.8	2.1	3.2	22.4	6.6	12.5	8.5	1.5	0.3	4.8	524.3
Spain	2.53	8.75	5.2	9.1	12.1	8.9	15.3	10.6	6.5	8.4	6.3	7.1	6.5	4.3	246.2
Sweden	0.52	0.63	-8.9	10.8	-1.9	6.8	-2.1	5.0	2.0	-6.6	-2.9	-1.6	-2.2	-1.2	22.5
Switzerland	0.33	0.42	23.3	3.7	6.4	4.4	-0.2	1.2	-3.0	-7.0	-7.4	-6.5	-6.6	-7.1	29.1
Turkey															
Ukraine	0.74	0.33	*	*	*	*	*	0.9	-8.9	0.6	4.6	3.4	3.3	-2.7	-56.1
United Kingdom	4.12	17.54	2.7	18.3	15.9	13.8	12.2	10.6	7.5	7.0	6.4	3.9	4.0	1.4	325.5
United States	136.38	116.93	4.9	2.1	1.4	1.2	0.0	-1.6	-2.0	-7.0	-5.5	-7.5	-6.3	-8.1	-14.3

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.30

Road transportation, CO_2, N_2O (2005)

	CO_2 emissions							N_2O emissions						
	Key category	Share of national total	Methods and EF used[a]		CO_2 IEF			Key category	Share of national total	Method and EF used[a]		N_2O IEF		
			Methods	EF	IEF in CRF based on [GCV] or [NCV]	Gasoline	Diesel oil			Methods	EF	IEF in CRF based on [GCV] or [NCV]	Gasoline	Diesel oil
		(%)				(t/TJ)			(%)				(kg/TJ)	
IPCC default EF[b]					NCV	72.1 (US) 73.0 (Europe)	72.1 (US) 74.0 (Europe)					NCV	3-43 (US) 1-20 (Europe)	1-14 (US) 3-4 (Europe)
Australia[c]	L, T	13.1	T1	CS, D	GCV	70.24	72.84		0.27	T1, T2, T3	CS, D	GCV	6.38	1.28
Austria	L, T	24.7	CS, M	CS	NCV	74.21	72.54		0.28	CS, M	CS	NCV	5.56	1.57
Belarus	L, T	4.2	D, T1	D	NCV	68.61	73.26		0.00	D	D	NCV	0.07	0.25
Belgium	L, T	17.3			NCV	68.61	73.33	T	0.55			NCV	9.79	6.70
Bulgaria	L, T	10.3	T1, T2	CS, D	NCV	72.16	76.14		0.08	T1, T2	CS, D	NCV	1.14	1.91
Canada[c]	L, T	17.6	CS, T1, T3	CS	GCV	70.98	75.03		0.46	CS, T1, T2, T3	CS, D	GCV	7.76	2.48
Croatia														
Czech Republic	L, T	11.0	T1	D	NCV	68.61	73.33	L, T	0.48	T2	CS, D	NCV	18.85	4.57
Denmark	L, T	18.6	OTH	CS	NCV	73.00	74.00	T	0.66	OTH	OTH	NCV	11.50	5.66
Estonia	L, T	9.2	T1	D	NCV	68.61	73.33		0.02	T1	D	NCV	0.60	0.60
European Community	L, T	18.9	CR, CS, D, M, T1, T2, T3	CR, CS, D, M	NCV	71.28	73.65	L, T	0.52	CR, CS, D, M, T2, T3	CR, CS, D, M	NCV	8.39	5.08
Finland	L, T	17.0	CS, M, T1, T3	CS, D	NCV	72.90	73.55	L, T	0.85	CS, M, T1, T3	CS, D	NCV	21.69	3.33
France	L, T	23.5	CR, M	CS, M	NCV	72.35	75.05	L, T	0.78	CR, M	CS, M	NCV	10.71	6.84
Germany	L, T	15.2	CS, T1, T3	CS	NCV	72.00	74.00		0.12	T1, T3	CS	NCV	2.08	1.48
Greece														
Hungary	L, T	14.5	T1, T1c	CS, D	NCV	68.61	73.33	L, T	0.52	T1, T1c, T2	CS, D	NCV	14.15	3.92
Iceland	L, T	18.2			NCV	68.61	73.33	L, T	0.96			NCV	15.30	2.74
Ireland	L, T	17.8	T1, T2	CS	NCV	69.96	73.30	T	0.63	T1, T3	CR, M	NCV	11.45	5.74
Italy	L, T	20.2	D, M, T1, T2	CS	NCV	71.15	73.16	L, T	0.67	D, M, T1, T2	CR, CS	NCV	9.25	6.95
Japan[c]	L, T	16.6	T1	CS	GCV	70.59	72.29		0.22	D, T2	CS, D	GCV	3.56	1.97
Latvia	L, T	23.8	CR, T1	D	NCV	72.08	73.84	T	0.47	CR, T1	D, OTH	NCV	6.07	3.83
Liechtenstein	L, T	31.2	T1	CS	NCV	73.90	73.60		0.26	T1	CS, D	NCV	2.25	1.36
Lithuania	L, T	17.1	T2	CS	NCV	73.00	74.00		0.23	T2	CS	NCV	2.00	4.00
Luxembourg	L, T	56.2	CR, T3	CR, D	NCV	71.44	73.70	L, T	2.14	CR, T3	CR, D	NCV	NE	NE
Monaco	L	29.8	T1	D	NCV	73.00	74.00		1.23	T1	D	NCV	12.88	3.90
Netherlands	L, T	16.0	CS, T2	CS	NCV	72.00	74.30		0.22	CS, T2	CS, D	NCV	4.61	2.27
New Zealand[c]	L, T	16.1	D	CS	GCV	69.16	72.43		0.17	D	D	GCV	1.50	3.90
Norway	L, T	17.7	T1, T2	CS, PS	NCV	71.30	73.55	T	0.31	CS, T2, T3	CR, CS, D	NCV	6.04	2.17
Poland	L, T	8.6	T1, T2	CS, D	NCV	70.75	73.16	T	0.25	T1, T2	D	NCV	14.66	3.21
Portugal	L, T	21.7	CR, T1, T2	CR, D, OTH	NCV	71.10	72.45	L, T	0.70	CR, T1, T2, T3	CR, D	NCV	10.12	6.41
Romania	L, T	7.5	T1	D	NCV	68.61	73.33		0.02	T1	D	NCV	0.60	0.60
Russian Federation	L, T	3.9	T1	D	NCV	C	C		0.01	T1	D	NCV	C	C
Slovakia	L, T	12.7	D, M, T1, T2	D	NCV	73.01	73.83		0.36	D, M, T1, T2	D	NCV	10.35	4.71
Slovenia	L, T	21.2	M, T1	D	NCV	73.00	73.67	L, T	0.77	M, T1	CS, D	NCV	10.58	6.76
Spain	L, T	21.0	CR, T2	CR, D	NCV	71.09	72.63	L, T	0.59	CR, T1, T2	CR, D	NCV	7.99	6.00
Sweden	L, T	27.6	CS, T1	CS	NCV	72.60	72.03		0.21	CS, T1, T2	CR, CS, D	NCV	2.16	1.10
Switzerland	L, T	28.1	T1, T2, T3	CS	NCV	73.90	73.60		0.24	T1, T2, T3	CS, D	NCV	2.25	1.36
Turkey														
Ukraine	L	4.8	T1	D	NCV	68.61	73.33		0.01	T1	D	NCV	0.60	0.60
United Kingdom	L, T	18.3	OTH, T2, T3	CS	NCV	70.21	72.89	L, T	0.77	OTH, T2, T3	CS, D	NCV	14.60	5.16
United States[c]	L, T	21.6	T1, T2	CS	GCV	70.71	72.98	L, T	0.47	M, T1, T2	CS, D, M	GCV	6.52	0.19

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.3 Transport.

[b] Source of default emission factors: IPCC Guidelines, volume 3, pages 1.70–1.83. For updates on the default emission factors for N_2O for US gasoline vehicles, see table 2.7, page 2.47 in the IPCC good practice guidance.

[c] Australia, Canada, Japan, New Zealand and United States reported energy data on a gross calorific value (GCV) basis. This means that reported IEFs are about 5 per cent lower for liquid and solid fuels and biomass, and about 10 per cent lower for gaseous fuels than would have been the case if the data were given on a net calorific value (NCV) basis. The IEFs included in this table have been converted into NCV-based values and are not reflecting the reported IEFs.

Table 1.31a

CO_2 emissions from road transportation: all fuels - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	53,153	68,795	-1.9	2.8	3.1	1.9	1.6	2.0	2.5	-2.4	3.4	1.0	5.0	0.5	29.4
Austria	11,924	23,037	13.3	2.8	11.3	-6.9	14.3	-4.2	6.5	7.3	11.2	8.6	2.3	2.9	93.2
Belarus	12,851	3,209	-2.2	-11.6	-2.9	-11.7	-10.3	-21.4	-21.7	-1.0	46.3	-13.5	19.4	3.1	-75.0
Belgium	19,270	24,928	1.0	0.3	2.0	1.2	3.1	1.5	1.7	2.8	1.3	2.2	4.0	-3.4	29.4
Bulgaria	7,747	7,178	-41.8	8.3	-1.6	-24.3	28.3	3.4	-5.8	3.6	5.7	14.3	4.5	9.4	-7.4
Canada	97,674	131,122	-2.4	1.3	-1.1	4.4	3.1	2.6	0.9	2.0	1.6	2.3	3.6	1.4	34.2
Croatia															
Czech Republic	5,995	16,041	-9.8	26.9	11.1	6.6	0.6	10.0	-8.8	9.1	3.5	8.9	14.2	10.3	167.5
Denmark	9,250	12,157	4.5	3.4	2.3	2.0	1.7	1.3	-1.0	0.0	1.0	3.9	2.6	1.1	31.4
Estonia	2,148	1,935	-9.9	-0.1	2.5	8.6	1.9	-8.3	-0.6	22.1	1.9	-0.6	3.8	4.9	-9.9
European Community	636,776	793,884	2.4	1.3	2.1	1.2	3.0	2.3	0.3	1.4	1.4	0.5	1.5	-0.8	24.7
Finland	10,872	11,796	-2.8	-1.4	-0.7	5.0	0.9	1.5	-0.8	1.7	2.1	1.6	3.2	-0.1	8.5
France	111,403	131,474	2.4	1.0	0.9	1.8	1.6	2.2	-0.3	2.7	0.5	-0.1	0.3	-1.1	18.0
Germany	150,358	152,231	2.5	2.5	0.0	0.6	2.1	3.2	-2.1	-2.0	-1.1	-3.7	0.1	-4.9	1.2
Greece															
Hungary	6,807	11,603	-12.2	2.1	0.1	6.4	14.3	4.7	-0.1	4.2	5.1	3.3	6.2	16.7	70.4
Iceland	509	673	3.5	-1.9	-3.7	6.0	1.4	4.5	2.1	1.1	1.4	4.0	1.2	5.9	32.3
Ireland	4,700	12,454	4.3	2.9	17.5	5.4	19.1	10.9	8.0	4.4	2.6	1.6	5.5	7.2	165.0
Italy	93,616	117,042	2.5	1.6	0.4	1.5	3.1	0.8	0.0	2.5	1.9	1.1	1.8	-1.1	25.0
Japan	189,228	225,236	5.4	2.7	2.2	0.2	0.4	1.1	-0.5	1.3	-2.4	-0.8	0.7	-2.2	19.0
Latvia	2,397	2,586	-7.0	-5.8	-1.9	-1.3	-0.2	-0.1	11.5	19.7	-0.5	3.8	3.5	3.8	7.9
Liechtenstein	75	84	17.5	2.5	1.6	4.4	-0.3	6.7	4.3	-3.8	-4.9	-0.3	-1.4	-0.7	12.1
Lithuania	5,281	3,872	10.4	24.7	5.9	13.5	6.2	-10.8	-12.0	10.2	2.9	1.3	10.1	6.4	-26.7
Luxembourg	2,693	7,156	22.0	-5.7	2.3	7.7	4.8	9.1	14.7	4.9	3.8	11.1	16.1	2.8	165.7
Monaco	32	31	14.1	-3.4	-0.2	-5.5	-3.2	0.8	-5.9	-0.5	0.2	-1.6	-2.9	-4.5	-3.4
Netherlands	25,472	33,902	1.1	1.9	2.7	1.2	2.4	2.8	1.1	1.6	2.1	1.8	1.2	0.2	33.1
New Zealand	7,535	12,444	1.2	8.1	1.7	4.2	2.3	2.3	2.6	1.9	5.8	3.9	2.3	0.2	65.1
Norway	7,631	9,603	-1.0	1.8	3.2	0.0	2.9	-0.6	-2.0	6.0	1.0	1.6	3.5	2.0	25.8
Poland	16,068	34,235	-2.3	9.1	11.1	-5.3	3.5	5.7	1.4	-2.5	-0.8	2.6	6.5	5.5	113.1
Portugal	9,249	18,549	6.7	5.3	5.2	5.8	12.4	5.4	10.5	1.7	2.6	-0.4	-0.4	-0.8	100.5
Romania	4,574	11,490	-16.1	-2.5	39.8	-5.3	0.5	-23.3	11.2	28.4	6.7	1.7	20.4	-16.9	151.2
Russian Federation	IE, NE	83,085	*	-8.6	-6.9	-3.2	17.3	0.9	-2.5	6.3	-0.8	2.1	6.3	-26.5	*
Slovakia	4,501	6,095	-15.0	6.1	1.4	4.5	7.0	-2.0	-10.5	14.3	3.2	2.8	5.8	18.2	35.4
Slovenia	1,902	4,328	-5.9	10.0	16.1	1.7	-13.7	-4.9	4.2	3.7	0.3	3.8	3.9	6.8	127.5
Spain	50,442	92,666	5.7	1.4	6.5	1.0	9.6	5.2	2.9	4.9	2.7	4.9	3.9	2.4	83.7
Sweden	16,629	18,502	-0.2	0.5	-1.1	0.0	0.3	1.2	-0.8	1.1	2.8	1.0	1.2	1.4	11.3
Switzerland	13,744	15,063	3.6	-2.3	0.4	4.2	1.5	4.3	1.7	-1.8	-0.7	1.3	0.8	0.6	9.6
Turkey															
Ukraine	46,346	20,154	*	*	*	*	*	5.8	-9.7	9.8	11.8	5.4	5.6	-2.8	-56.5
United Kingdom	109,688	120,135	-0.7	-0.9	3.9	1.2	-0.6	0.8	-0.7	0.0	2.1	-0.2	1.0	0.4	9.5
United States	1,159,498	1,565,862	-1.0	2.2	2.1	2.5	2.9	3.3	1.5	0.5	3.0	0.8	2.7	1.2	35.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.31b

N_2O emissions from road transportation: all fuels - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	1.81	4.51	5.9	7.0	14.7	-2.7	6.6	6.1	11.0	4.3	9.0	6.1	10.0	-4.8	149.4
Austria	0.81	0.84	27.1	-3.3	-4.9	-7.7	7.2	-10.0	-2.5	-0.1	5.7	0.3	-6.0	-6.6	3.1
Belarus	0.11	0.01	-4.1	-15.7	-8.6	-18.2	-19.6	-32.9	-39.0	-10.6	44.8	-34.8	64.4	-33.8	-93.5
Belgium	0.97	2.55	8.6	8.0	7.9	5.5	5.0	14.2	4.4	3.5	3.0	1.1	2.8	1.0	163.2
Bulgaria	0.16	0.18	-40.2	6.3	3.4	-22.5	24.3	7.6	1.0	7.9	6.5	17.4	3.7	16.5	17.9
Canada	10.33	11.20	9.3	0.9	-1.5	0.5	-2.8	-1.6	-5.1	-1.3	-3.7	-4.3	-3.5	-5.0	8.4
Croatia															
Czech Republic	0.23	2.28	69.3	48.4	58.5	18.0	-7.7	12.5	-23.4	14.9	17.8	13.5	14.4	7.8	899.0
Denmark	0.39	1.38	17.9	13.9	11.0	12.7	9.1	6.6	3.4	1.7	4.3	4.5	4.5	1.6	251.4
Estonia	0.02	0.02	-9.8	0.7	2.5	9.1	1.5	-8.2	-0.8	22.1	2.0	-0.7	3.2	4.6	-10.9
European Community	22.80	69.76	9.4	11.5	10.0	8.5	10.0	8.3	4.7	5.6	5.7	3.3	3.8	1.2	206.0
Finland	0.51	1.91	14.8	10.1	9.2	11.6	9.9	9.9	7.1	6.9	7.8	7.2	8.4	5.8	270.8
France	5.14	14.13	7.6	11.5	10.4	8.2	7.2	7.8	4.4	8.5	4.2	3.8	2.1	0.5	175.2
Germany	1.96	3.79	38.9	10.2	4.7	2.7	1.4	0.7	-5.3	-3.0	-3.5	-6.9	-2.6	-7.2	93.1
Greece															
Hungary	0.29	1.36	-11.0	-0.4	-2.9	3.5	10.2	1.5	-2.1	2.9	2.2	4.2	-8.0	11.6	360.8
Iceland	0.01	0.11	4.2	138.1	-1.3	64.4	2.3	50.2	-0.6	0.8	1.1	3.3	0.1	20.8	710.7
Ireland	0.23	1.43	7.0	-2.7	28.8	13.1	27.4	19.7	17.7	7.5	5.2	4.1	6.9	7.9	521.7
Italy	5.18	12.55	0.9	9.2	8.4	7.4	13.4	8.8	3.6	4.7	10.2	3.6	5.5	0.4	142.4
Japan	12.59	9.46	4.0	3.1	1.9	0.7	-2.1	-0.1	-2.3	-4.1	-6.5	-6.9	-8.3	-9.7	-24.8
Latvia	0.05	0.16	1.2	2.5	6.3	3.5	11.9	10.7	15.4	9.1	12.8	16.5	29.2	1.6	221.3
Liechtenstein	0.00	0.00	36.5	18.2	-2.0	5.5	-5.2	3.2	4.8	-8.3	-13.4	-9.1	-8.6	-8.0	35.2
Lithuania	0.20	0.17	9.6	17.4	4.7	20.2	9.8	-8.3	-11.1	13.4	3.4	0.7	12.5	7.8	-18.0
Luxembourg	0.14	0.88	21.4	0.0	10.0	15.2	10.5	14.3	12.5	7.4	5.2	11.5	22.1	6.0	528.6
Monaco	0.00	0.00	14.8	17.5	18.8	8.4	7.7	12.2	1.2	4.0	4.3	-2.3	-1.8	-3.7	328.9
Netherlands	0.87	1.53	16.4	8.0	1.8	1.4	0.6	0.5	-3.7	-0.3	0.6	-2.4	3.3	-2.4	75.1
New Zealand	0.21	0.44	2.0	12.5	3.9	5.7	3.3	3.6	4.9	2.6	6.9	4.2	2.0	1.1	109.5
Norway	0.15	0.55	12.0	17.4	18.4	10.2	9.0	6.4	4.3	9.1	3.5	2.6	2.9	0.0	260.1
Poland	0.49	3.28	-8.3	27.8	39.0	-6.2	77.2	13.4	11.7	-3.4	-4.4	-0.1	2.0	6.2	563.7
Portugal	0.40	1.94	6.1	16.5	13.4	12.3	19.0	10.2	14.7	2.9	5.0	0.8	0.2	-0.1	380.0
Romania	0.04	0.09	-17.0	-7.0	44.0	-4.5	-0.1	-22.4	9.4	30.1	7.2	1.2	20.2	-16.9	148.5
Russian Federation	IE, NE	0.71	*	-7.5	-6.5	-2.6	16.6	0.1	-1.6	6.0	-0.5	2.5	5.9	-26.3	*
Slovakia	0.23	0.56	-14.7	16.2	12.7	15.4	15.9	5.3	-7.7	22.5	0.3	8.9	1.3	19.8	143.9
Slovenia	0.06	0.51	-7.9	44.5	41.8	2.5	3.5	23.7	6.8	13.1	8.6	1.8	0.3	4.9	810.0
Spain	2.19	8.34	7.0	9.6	12.6	9.5	15.9	10.8	6.7	8.7	6.7	7.3	6.6	4.2	280.5
Sweden	0.32	0.45	-7.5	16.3	-1.9	7.6	-5.2	6.3	4.1	-7.9	-3.0	-3.1	-3.0	-1.6	40.3
Switzerland	0.31	0.41	25.3	3.9	6.7	4.5	-0.1	1.3	-3.0	-7.1	-7.5	-6.5	-6.7	-7.3	33.2
Turkey															
Ukraine	0.39	0.17	*	*	*	*	*	8.2	-10.2	10.1	11.9	5.3	5.6	-3.0	-56.4
United Kingdom	3.31	16.41	3.6	20.1	16.9	14.8	13.0	11.2	7.9	7.4	7.0	3.8	3.9	1.1	396.2
United States	129.99	109.14	5.5	2.2	1.4	1.5	0.1	-1.9	-2.6	-6.8	-5.8	-7.6	-7.0	-8.9	-16.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.31c

N_2O implied emissions factor for road transportation: gasoline - trend information

N_2O IEF (kg/TJ)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia[b]	2.77	6.38	9.4	5.3	15.1	-3.7	6.6	5.1	10.2	7.9	6.2	4.7	5.3	-4.3	130.7
Austria	6.77	5.56	17.3	-1.7	-3.0	-3.0	-0.5	-6.0	-3.7	-4.4	-4.4	-6.5	-9.0	-9.9	-17.8
Belarus	0.60	0.07	-2.9	-6.8	-8.7	-11.2	-14.9	-20.7	-30.4	-14.0	-5.0	-42.5	35.6	-42.5	-89.0
Belgium	1.62	9.79	24.2	13.3	13.4	10.4	5.9	3.5	11.7	4.9	6.2	-1.5	8.8	6.6	502.6
Bulgaria	1.20	1.14	-2.6	-0.3	1.0	1.3	-12.2	6.5	2.7	-3.0	1.4	2.8	-4.7	6.2	-4.8
Canada[b]	9.36	7.76	12.7	1.0	-0.8	-3.3	-6.5	-4.9	-6.3	-3.2	-6.4	-6.7	-6.7	-6.3	-17.1
Croatia															
Czech Republic	2.44	18.85	186.8	34.2	51.3	16.8	-2.8	1.0	-24.7	7.1	12.1	9.0	8.8	5.1	673.6
Denmark	1.95	11.50	41.0	16.1	13.5	15.6	9.9	7.5	5.0	2.8	3.7	2.3	3.0	1.4	490.1
Estonia	0.60	0.60	-0.1	1.0	-0.6	0.3	0.2	0.3	-0.8	0.1	0.1	0.3	-0.3	-0.7	-0.6
European Community	1.73	8.39	14.6	17.4	12.7	11.9	11.2	8.4	7.9	6.6	6.1	4.3	4.3	3.1	384.4
Finland	3.63	21.69	28.7	14.8	15.6	11.0	13.7	12.6	12.6	6.5	6.7	7.3	7.4	7.7	497.0
France	1.77	10.71	1.9	25.1	25.2	17.9	13.4	12.3	12.0	10.0	9.0	8.1	5.8	4.5	505.9
Germany	1.02	2.08	53.4	8.5	4.3	1.3	-1.8	-3.5	-4.9	-3.7	-4.9	-6.2	-6.1	-8.2	103.7
Greece															
Hungary	2.44	14.15	0	0	0	0	0	0	0	0	0	0	-0.1	-5.5	480.4
Iceland	1.71	15.30	1.2	204.0	0	67.3	0.0	50.1	0	0	0	0	0	15.6	793.3
Ireland	1.90	11.45	4.2	3.7	16.9	19.5	13.2	18.2	16.9	5.6	5.1	4.0	3.0	1.6	502.4
Italy	1.82	9.25	2.6	20.0	15.4	13.5	19.8	11.7	7.8	6.8	9.2	3.8	5.2	2.2	406.7
Japan[b]	6.82	3.56	-0.1	0.4	-0.7	-0.9	-4.4	-2.8	-5.1	-6.6	-7.8	-9.3	-10.2	-8.7	-47.7
Latvia	0.77	6.07	7.6	6.8	16.2	16.4	21.6	18.0	24.4	8.1	16.7	21.0	45.2	0.3	689.5
Liechtenstein	1.86	2.25	21.7	15.8	-3.1	0.3	-1.2	-2.9	-4.4	-5.7	-7.5	-8.3	-8.1	-8.4	21.2
Lithuania	2.00	2.00	0	0	0	0.0	0.0	0	0	0	0	-0.1	0.1	0	0
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	1.71	12.88	0.4	28.2	24.3	18.1	13.8	12.3	9.1	6.9	4.5	2.7	2.7	2.4	651.4
Netherlands	3.33	4.61	19.0	7.9	-1.6	0.4	-2.5	-2.8	-6.0	-4.4	-0.9	-4.9	5.3	-4.2	38.2
New Zealand[b]	1.50	1.50	0	0	0	0	0	0	0	0	0	0	0	0.0	0
Norway	1.03	6.04	24.2	23.1	22.6	16.8	10.9	10.2	9.6	5.1	4.1	2.4	1.3	1.1	484.3
Poland	1.55	14.66	-4.5	40.0	41.4	0.0	112.4	3.0	28.0	2.1	0.7	3.0	1.8	12.0	843.9
Portugal	1.72	10.12	-0.5	19.1	14.1	10.2	9.7	8.2	6.5	4.5	2.4	2.3	1.5	1.0	488.0
Romania	0.60	0.60	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
Russian Federation	NE	C	*	0	0	0	0	0	0	0	0	0	0	*	*
Slovakia	1.78	10.35	5.4	31.5	27.8	25.9	16.8	11.1	7.0	10.5	4.9	8.0	-0.3	9.5	480.8
Slovenia	1.90	10.58	-2.1	42.5	28.1	-3.1	19.3	32.5	0.0	9.5	8.7	0	0	0.0	457.8
Spain	1.76	7.99	2.0	16.2	12.6	12.6	11.0	10.5	8.7	8.5	6.9	5.0	5.3	5.4	354.4
Sweden	1.50	2.16	-10.6	16.1	-1.5	10.7	-4.7	5.0	5.0	-10.5	-6.3	-3.8	-2.5	-2.2	44.0
Switzerland	1.85	2.25	22.4	7.5	4.6	0.3	-1.5	-2.8	-4.4	-5.6	-7.4	-8.3	-7.9	-8.6	21.9
Turkey															
Ukraine	0.60	0.60	*	*	*	*	*	0	0	0	0	0	0	0.0	0.0
United Kingdom	1.72	14.60	3.0	29.6	18.1	18.7	18.0	12.6	11.4	10.3	7.4	7.3	5.0	3.8	748.3
United States[b]	9.72	6.52	6.1	0.0	-0.5	0.5	-2.9	-4.4	-3.2	-7.4	-8.2	-8.1	-8.8	-9.2	-32.9

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Australia, Canada, Japan, New Zealand and United States reported energy data on a gross calorific value (GCV) basis. This means that reported IEFs are about 5 per cent lower for liquid and solid fuels and biomass, and about 10 per cent lower for gaseous fuels than would have been the case if the data were given on a net calorific value (NCV) basis. The IEFs included in this table have been converted into NCV-based values and are not reflecting the reported IEFs.

Table 1.31d

N_2O implied emissions factor for road transportation: diesel oil - trend information

N_2O IEF (kg/TJ)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia[b]	1.46	1.28	0.1	0.1	0.1	0.1	0.2	-2.8	-0.1	-4.8	-0.3	0.0	-3.7	-2.1	-12.3
Austria	1.98	1.57	-2.5	-2.4	-4.6	2.2	-1.8	1.1	-1.3	-1.7	-0.8	-1.4	-0.5	-3.9	-20.6
Belarus	0.59	0.25	-1.1	-2.5	-3.0	-4.3	-6.1	-9.3	-15.7	-10.3	3.4	-14.3	27.7	-32.7	-58.4
Belgium	5.15	6.70	3.0	4.5	1.2	1.1	0.2	18.3	-1.5	-0.4	0.0	-0.8	-4.0	4.7	29.9
Bulgaria	1.91	1.91	0	0	0	3.5	0	0	0	0	0	0	0	0.0	0.0
Canada[b]	2.33	2.48	0.8	0.6	0.1	0.2	1.4	0.0	0.4	-0.1	0.5	0.1	0.0	0.3	6.6
Croatia															
Czech Republic	3.00	4.57	-0.2	0.0	2.6	3.1	-5.4	0.0	30.6	2.8	5.2	2.6	3.0	2.1	52.7
Denmark	4.43	5.66	0.0	0.9	0.4	0.2	1.1	2.0	3.8	1.6	3.8	1.6	4.4	2.9	27.9
Estonia	0.60	0.60	0.1	0.3	0.2	0.5	-0.7	-0.6	0.4	0.1	0.9	-0.2	-0.4	0.3	0.7
European Community	3.73	5.08	1.1	2.4	2.4	2.1	2.5	3.7	1.6	2.7	3.4	2.7	2.2	2.5	36.1
Finland	3.26	3.33	2.6	2.8	-0.9	-3.4	-0.8	-0.2	0.2	0.8	1.4	1.1	-1.5	2.6	2.0
France	5.25	6.84	2.8	2.6	1.5	0.0	1.3	1.5	0.5	3.6	1.2	2.5	0.4	0.9	30.3
Germany	0.82	1.48	-0.6	5.2	6.4	8.1	9.2	8.1	6.1	6.9	4.1	2.4	4.1	3.8	80.0
Greece															
Hungary	3.90	3.92	0	0	0	0	0	0	0	0	0	0	-34.6	-0.1	0.6
Iceland	2.74	2.74	0	0	0	0	0	0	0	0	0	0	0	0	0
Ireland	5.84	5.74	0.7	-12.1	0.6	-4.0	1.2	-2.6	-0.3	-0.6	-1.2	1.4	0.8	0.8	-1.6
Italy	5.71	6.95	-0.3	0.0	3.1	-1.0	1.8	4.2	-0.5	-1.7	9.3	2.7	4.5	2.4	21.6
Japan[b]	1.94	1.97	-1.2	1.4	0.6	0.8	-0.5	1.8	6.0	-1.9	4.6	2.2	-5.6	-4.7	1.5
Latvia	3.92	3.83	5.4	4.0	3.4	-12.5	-0.5	4.0	-12.9	-24.1	10.5	5.3	6.5	-2.4	-2.4
Liechtenstein	0.75	1.36	-0.3	-0.9	1.7	11.9	7.9	8.5	10.7	7.6	5.3	5.8	3.9	4.7	81.9
Lithuania	4.00	4.00	0	0	0	0	0	0	0	0	0	0	0	0	0
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	3.71	3.90	1.2	0.7	1.0	0.1	-0.1	0.0	0.1	0.5	-0.2	0.0	-0.2	0.0	5.2
Netherlands	1.45	2.27	0.8	0.3	4.9	7.5	6.8	5.9	6.7	5.5	1.6	0.7	0.3	1.7	56.9
New Zealand[b]	3.90	3.90	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	2.41	2.17	-0.6	2.6	0.3	-3.2	-4.7	-1.9	-1.5	-0.5	0.5	2.0	1.8	0.1	-9.8
Poland	3.10	3.21	-1.0	-0.5	-0.7	0.0	0.0	-1.4	-17.6	0.3	0.6	0.2	0.8	0.0	3.6
Portugal	4.39	6.41	1.1	3.1	1.8	3.4	4.6	2.6	4.0	0.8	1.8	1.3	1.0	1.9	45.9
Romania	0.60	0.60	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Russian Federation	NE	C	*	0	0	0	0	0	0	0	0	0	0	*	*
Slovakia	4.68	4.71	3.7	-0.1	2.2	0.0	0.3	2.3	-1.1	1.2	-6.4	2.7	-2.6	-4.7	0.7
Slovenia	2.64	6.76	-1.6	-1.2	4.6	25.7	20.5	17.0	14.5	12.7	12.9	-1.5	0.0	0.0	156.5
Spain	4.61	6.00	0.3	1.1	1.7	5.3	1.7	2.0	0.9	1.1	2.8	1.5	2.1	1.1	30.1
Sweden	1.11	1.10	4.6	6.6	4.0	-2.6	0.6	8.2	7.6	1.2	0.2	-1.5	-4.5	-0.7	-1.0
Switzerland	0.75	1.36	-1.7	-1.6	2.8	7.3	8.1	9.8	9.3	6.4	7.2	5.2	4.3	4.6	79.8
Turkey															
Ukraine	0.60	0.60	*	*	*	*	*	0	0	0	0	0	0	0.0	0
United Kingdom	3.16	5.16	5.6	7.1	2.1	3.1	4.0	4.8	3.2	2.5	2.4	2.7	3.2	0.4	63.2
United States[b]	0.22	0.19	5.9	1.0	-0.6	-2.8	-0.3	-2.3	-2.6	4.0	-2.1	-0.7	-3.2	-3.8	-12.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Australia, Canada, Japan, New Zealand and United States reported energy data on a gross calorific value (GCV) basis. This means that reported IEFs are about 5 per cent lower for liquid and solid fuels and biomass, and about 10 per cent lower for gaseous fuels than would have been the case if the data were given on a net calorific value (NCV) basis. The IEFs included in this table have been converted into NCV-based values and are not reflecting the reported IEFs.

Table 1.32

Civil aviation, navigation and international bunkers, CO_2 (2005)

	Methods and EF used[a]		IEF in CRF based on [GCV] or [NCV]	Civil aviation				Aviation bunkers		Navigation				Marine bunkers	
						CO_2 IEF		CO_2 IEF				CO_2 IEF		CO_2 IEF	
	Methods	EF		Key category	Share of national total	Jet kerosene	Aviation gasoline	Jet kerosene	Aviation gasoline	Key category	Share of national total	Residual oil	Gas/diesel oil	Residual oil	Gas/diesel oil
					(%)	(t/TJ)		(t/TJ)			(%)	(t/TJ)		(t/TJ)	
IPCC default EF[b]			NCV			72.80	72.10	72.80	72.10			77.60	73.00	77.60	75.0 - 77.6
Australia[c]	T1	CS, D	GCV	L, T	0.97	72.53	69.82	72.53	NA	T	0.43	76.70	72.84	76.70	72.84
Austria	CS, M	CS	NCV	T	0.23	72.75	72.75	72.75	NO		0.09	NO	72.54	NO	NO
Belarus	D, T1	D	NCV		0.01	71.15	68.55	71.15	NE		-	NE	NE	NE	NE
Belgium			NCV		0.01	IE	70.23	NE	70.79		0.23	73.30	73.32	76.59	73.33
Bulgaria	T1, T2	CS, D	NCV	T	0.17	70.60	70.80	70.60	NO	T	-	NO	NO	NO	76.14
Canada[c]	CS, T1, T3	CS	GCV	L, T	1.13	71.77	73.17	71.77	73.17	L	0.81	76.28	75.03	76.28	75.03
Croatia															
Czech Republic	T1	D	NCV		0.06	70.78	68.60	70.79	NE		0.01	NO	73.33	NO	NO
Denmark	OTH	CS	NCV		0.20	72.00	73.00	72.00	73.00	L	0.83	78.00	74.00	78.00	74.00
Estonia	T1	D	NCV		0.01	70.17	NO	70.78	NO	T	0.12	NO	73.33	76.59	73.33
European Community	CR, CS, D, M, T1, T2, T3	CR, CS, D, M	NCV	L, T	0.60	72.37	63.90	71.94	70.79	L	0.51	77.18	73.73	77.19	73.73
Finland	CS, M, T1, T3	CS, D	NCV		0.48	73.20	71.30	73.20	NO	L, T	0.77	78.80	74.10	78.80	74.10
France	CR, M	CS, M	NCV	L	0.89	71.59	IE	71.59	IE	L, T	0.50	78.00	75.00	78.00	75.00
Germany	CS, T1, T3	CS	NCV	T	0.51	73.27	IE	73.27	NE		0.10	NO	74.00	78.00	74.00
Greece															
Hungary	T1, T1c	CS, D	NCV		-	NO	IE	70.79	NO		0.00	NO	68.61	NA	NA
Iceland			NCV		0.65	70.79	68.61	70.79	NO	T	0.51	76.59	73.33	0	0
Ireland	T1, T2	CS	NCV		0.15	71.36	IE	71.37	NO		0.08	76.00	73.30	76.00	73.30
Italy	D, M, T1, T2	CS	NCV	L, T	0.46	70.74	70.74	70.74	NO	L	1.06	76.54	73.27	76.54	73.27
Japan[c]	T1	CS	GCV	L, T	0.79	70.67	70.59	74.39	NO	L, T	0.95	IE	72.29	IE	72.29
Latvia	CR, T1	D	NCV		0.02	72.10	70.20	72.10	NO		0.41	NA	74.00	76.59	74.00
Liechtenstein	T1	CS	NCV		0.03	73.20	NO	73.20	NO		-	NO	NO	NO	NO
Lithuania	T2	CS	NCV		0.01	74.00	72.00	74.00	NO		0.08	78.00	74.00	78.00	74.00
Luxembourg	CR, T3	CR, D	NCV		-	NO	NE	71.98	NE		0.04	NO	70.00	NE	NE
Monaco	T1	D	NCV		-	NO	NO	NO	NO	T	1.46	NO	74.00	NO	74.00
Netherlands	CS, T2	CS	NCV		0.02	71.50	72.00	71.50	NO	T	0.30	NO	74.30	77.40	74.30
New Zealand[c]	D	CS	GCV	L	1.32	70.97	67.74	70.97	NO		0.51	75.88	NE	76.51	72.43
Norway	T1, T2	CS, PS	NCV	L, T	1.71	73.09	71.30	NO	NO	L, T	4.52	78.82	73.69	NO	NO
Poland	T1, T2	CS, D	NCV		0.00	70.66	NE	70.66	NE	T	0.01	77.60	73.00	77.60	74.10
Portugal	CR, T1, T2	CR, D, OTH	NCV		0.47	69.15	69.19	69.21	69.23		0.31	77.37	74.07	77.37	74.07
Romania	T1	D	NCV		0.06	70.78	68.61	NE	NE	T	0.08	76.59	72.60	IE	IE
Russian Federation	T1	D	NCV	T	0.48	C	C	70.79	NE		0.15	C	C	77.40	NE
Slovakia	D, M, T1, T2	D	NCV		0.02	73.05	73.60	73.05	73.59		-	NO	NO	NO	75.01
Slovenia	M, T1	D	NCV		0.01	NO	71.49	71.53	NO		-	NO	IE	NO	NO
Spain	CR, T2	CR, D	NCV	L, T	1.57	73.52	IE	72.77	NO	L	0.58	76.78	72.64	76.78	72.64
Sweden	CS, T1	CS	NCV	L	0.99	73.10	72.30	73.10	NO	L	0.80	77.61	74.45	77.61	74.45
Switzerland	T1, T2, T3	CS	NCV	T	0.23	73.20	IE	73.20	IE		0.23	NO	73.70	NO	NO
Turkey															
Ukraine	T1	D	NCV		0.02	70.79	68.61	70.79	NO	T	0.06	76.59	73.33	76.59	73.33
United Kingdom	OTH, T2, T3	CS	NCV	T	0.37	71.76	69.46	71.75	NO	L	0.64	77.99	73.48	77.99	73.48
United States[c]	T1, T2	CS	GCV	L	2.31	70.80	69.03	70.72	NA	L, T	0.80	78.62	71.44	78.62	72.98

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.A.3 Transport.

[b] Source of default emission factors: IPCC Guidelines, volume 3, pages 1.89, 1.91 (for gas/diesel oil: single value for internal waterways and range for sea-going ships, boats).

[c] Australia, Canada, Japan, New Zealand and United States reported energy data on a gross calorific value (GCV) basis. This means that reported IEFs are about 5 per cent lower for liquid and solid fuels and biomass, and about 10 per cent lower for gaseous fuels than would have been the case if the data were given on a net calorific value (NCV) basis. The IEFs included in this table have been converted into NCV-based values and are not reflecting the reported IEFs.

Table 1.33

Domestic and international aviation - activity data (2005)

	Activity data in CRF based on	Civil aviation						Aviation bunkers			Total jet kerosene and aviation gasoline		
		Jet kerosene			Aviation gasoline			Jet kerosene					
		CRF	IEA[a]	Difference	CRF	IEA[a]	Difference	CRF	IEA[a]	Difference	CRF	IEA[a]	Difference
		(TJ)		(%)	(TJ)		(%)	(TJ)		(%)	(TJ)		(%)
Australia	GCV	70,996	73,573	3.6	2,924	3,181	8.8	98,230	114,684	16.8	172,150	191,437	11.2
Austria	NCV	2,868	4,637	61.7	121	0	-100.0	23,791	24,480	2.9	26,780	29,117	8.7
Belarus	NCV	63	0	-100.0	30	0	-100.0	2,930	0	-100.0	3,024	0	-100.0
Belgium	NCV	IE	0		128	90	-30.2	NE	55,603		50,497	55,693	10.3
Bulgaria	NCV	1,674	535	-68.0	21	45	108.4	6,696	8,160	21.9	8,392	8,740	4.1
Canada	GCV	120,443	208,277	72.9	2,953	2,822	-4.4	135,941	36,073	-73.5	259,338	247,172	-4.7
Croatia			2,408			45			1,739			4,192	
Czech Republic	NCV	1,198	1,293	7.9	88	90	1.8	13,182	13,734	4.2	14,468	15,116	4.5
Denmark[b]	NCV	1,756	1,159	-34.0	96	90	-6.7	35,760	37,321	4.4	37,621	38,570	2.5
Estonia	NCV	24	0	-100.0	NO	269		2,017	1,828	-9.4	2,041	2,097	2.7
European Community	NCV	342,087	317,254	-7.3	4,800	5,958	24.1	1,613,178	1,781,972	10.5	2,010,458	2,105,228	4.7
Finland	NCV	4,456	6,376	43.1	39	134	249.1	17,626	18,148	3.0	22,120	24,659	11.5
France	NCV	69,070	57,699	-16.5	IE	1,030		223,265	237,260	6.3	292,335	295,989	1.2
Germany	NCV	69,225	72,101	4.2	IE	717		276,889	288,404	4.2	346,114	361,222	4.4
Greece			16,899			0			33,754			50,654	
Hungary	NCV	NO	624.25188		IE	0		9,368	9,364	0.0	9,368	9,988	6.6
Iceland	NCV	303	268	-11.8	40	45	11.2	5,752	5,797	0.8	6,096	6,109	0.2
Ireland	NCV	1,510	1,828	21.1	IE	90		34,387	34,468	0.2	35,897	36,385	1.4
Italy	NCV	36,872	7,045	-80.9	615	627	2.0	120,777	160,656	33.0	158,264	168,328	6.4
Japan	GCV	160,584	152,853	-4.8	265	269	1.4	301,914	304,323	0.8	462,763	457,444	-1.1
Latvia	NCV	28	0	-100.0	6	0	-100.0	2,462	2,542	3.2	2,496	2,542	1.8
Liechtenstein[c]	NCV	1			NO			7			8		
Lithuania	NCV	12	0	-100.0	25	45	79.2	1,923	2,007	4.3	1,960	2,051	4.7
Luxembourg	NCV	NO	0		NE	0		18212.11	18,728	2.8	18212.11	18,728	2.8
Monaco[d]	NCV	NO			NO			NO			NO		
Netherlands	NCV	230	3,032	1217.1	342	134	-60.7	152,106	156,286	2.7	152,678	159,452	4.4
New Zealand	GCV	14,510	14,759	1.7	587	627	6.8	37,280	34,869	-6.5	52,377	50,255	-4.1
Norway	NCV	12,593	15,785	25.3	103	90	-12.8	12,961	11,772	-9.2	25,657	27,646	7.8
Poland	NCV	229	0	-100.0	NE	0		9,660	13,867	43.5	9,890	14,002	41.6
Portugal	NCV	5,779	7,090	22.7	14	134	865.4	36,224	31,168	-14.0	42,031	38,392	-8.7
Romania	NCV	797	0	-100.0	473	448	-5.2	NE	4,816		1,270	5,264	314.6
Russian Federation	NCV	C	0		C	1,658		253,156	447,499	76.8	253,156	449,157	77.4
Slovakia	NCV	137	0	-100.0	7	538	7426.9	1,233	1,694	37.4	1,378	2,232	62.0
Slovenia	NCV	NO	0		24	45	90.5	903	981	8.6	927	1,026	10.7
Spain	NCV	93,918	96,581	2.8	434	448	3.3	130,817	134,526	2.8	225,168	231,555	2.8
Sweden	NCV	9,028	9,364	3.7	37	179	381.4	26,481	27,378	3.4	35,546	36,921	3.9
Switzerland[c]	NCV	1,699	1,694	-0.2	IE	179		47,679	51,010	7.0	49,377	52,884	7.1
Turkey			40,175			0			47,086			87,261	
Ukraine	NCV	900	0	-100.0	45	134	198.4	14,895	16,231	9.0	15,840	16,365	3.3
United Kingdom	NCV	32,074	33,442	4.3	2,351	2,285	-2.8	487,939	523,792	7.3	522,364	559,564	7.1
United States	GCV	2,451,571	2,766,907	12.9	37,300	43,320	16.1	931,764	735,502	-21.1	3,420,636	3,545,730	3.7

[a] Source: IEA [unpublished]. Data downloaded on 12 August 2007 from http://data.iea.org/ieastore/statslisting.asp.

[b] IEA data for Denmark does not include Faroe Islands nor Greenland.

[c] No IEA data for Liechtenstein (and it is not included in Switzerland).

[d] IEA data for Monaco are included in the data of France.

Table 1.34

Domestic and international navigation - activity data (2005)

	Activity data in CRF based on	Navigation						Marine bunkers						Total					
		Residual oil			Gas / diesel oil			Residual oil			Gas / diesel oil			Residual oil			Gas / diesel oil		
		CRF	IEA[a]	Difference	CRF	IEA[a]	Difference	CRF	IEA[a]	Difference	CRF	IEA[a]	Difference	CRF	IEA[a]	Difference	CRF	IEA[a]	Difference
		(TJ)		(%)	(TJ)		(%)	(TJ)		(%)	(TJ)		(%)	(TJ)		(%)	(TJ)		(%)
Australia	GCV	7,796	7,315	-6.2	2,004	3,163	57.9	34,810	32,637	-6.2	6,620	2,210	-66.6	42,606	39,952	-6.2	8,624	5,373	-37.7
Austria	NCV	NO	0		999	390	-61.0	NO	0		NO	0		NO	0		999	390	-61.0
Belarus	NCV	NE	0		NE	0		NE	0		NE	0		NE	0		NE	0	
Belgium	NCV	1716.26	2,854	66.3	2,842	6,413	125.7	288,713	298,837	3.5	22,129	22,447	1.4	290,430	301,691	3.9	24,971	28,860	15.6
Bulgaria	NCV	NO	0		NO	0		NO	0		4,589	4,767	3.9	NO	0		4,589	4,767	3.9
Canada	GCV	44,230	40,595	-8.2	40,211	38,740	-3.7	23,252	21,343	-8.2	3,460	3,337	-3.6	67,482	61,938	-8.2	43,670	42,077	-3.6
Croatia			0			1,387			643			390			643			1,777	
Czech Republic	NCV	NO	0		209	217	3.7	NO	0		NO	0		NO	0		209	217	3.7
Denmark[b]	NCV	1,506	1,367	-9.2	5,361	4,420	-17.6	20,591	20,378	-1.0	13,917	14,127	1.5	22,096	21,745	-1.6	19,278	18,547	-3.8
Estonia	NCV	NO	0		341	477	39.8	3,087	3,095	0.3	1,917	1,950	1.7	3,087	3,095	0.3	2,258	2,427	7.5
European Community	NCV	100,360	40,515	-59.6	166,280	172,034	3.5	1,764,868	1,783,858	1.1	244,414	300,084	22.8	1,865,228	1,824,373	-2.2	410,694	472,117	15.0
Finland	NCV	1,913	1,809	-5.5	2,990	4,637	55.1	18,998	18,851	-0.8	2,077	2,123	2.2	20,911	20,659	-1.2	5,067	6,760	33.4
France	NCV	1,442	0	-100.0	29,188	2,600	-91.1	102,246	102,131	-0.1	13,238	17,767	34.2	103,688	102,131	-1.5	42,426	20,367	-52.0
Germany	NCV	NO	0		13,489	13,650	1.2	92,008	84,808	-7.8	18,988	18,807	-1.0	92,008	84,808	-7.8	32,477	32,457	-0.1
Greece			13,103			14,213			102,171			16,640			115,274			30,853	
Hungary	NCV	NO	0		36	43	20.4	NA	0		NA	0		NA,NO	0		36	43	20.4
Iceland	NCV	40	0	-100.0	217	260	20.0	0	80	100.0	0	2,687	100.0	40	80	100.0	217	2,947	1,260.1
Ireland	NCV	701	723	3.2	50	43	-13.3	990	965	-2.5	3,465	3,467	0.1	1,691	1,688	-0.2	3,515	3,510	-0.1
Italy	NCV	37,385	0	-100.0	35,876	10,617	-70.4	77,357	112,139	45.0	1,723	27,560	1,499.8	114,743	112,139	-2.3	37,598	38,177	1.5
Japan	GCV	IE	108,200		7,365	55,510	653.7	IE	236,698		1,884	7,973	323.3	IE	344,899		9,249	63,483	586.4
Latvia	NCV	NA	0		572	0	-100.0	7,064	6,994	-1.0	3,824	3,900	2.0	7,064	6,994	-1.0	4,396	3,900	-11.3
Liechtenstein[c]	NCV	NO			NO			NO			NO			NO			NO		
Lithuania	NCV	4	0	-100.0	226	217	-4.1	5,163	5,185	0.4	770	780	1.3	5,167	5,185	0.3	996	997	0.1
Luxembourg	NCV	NO	0		80	0	-100.0	NE	0		NE	0		NE,NO	0		80	0	-100.0
Monaco[d]	NCV	NO			17			NO			195			NO			212		
Netherlands	NCV	NO	0		8,579	8,753	2.0	628,166	616,967	-1.8	68,492	83,807	22.4	628,166	616,967	-1.8	77,071	92,560	20.1
New Zealand	GCV	5,462	0	-100.0	NE	0		8,913	8,601	-3.5	905	997	10.2	14,374	8,601	-40.2	905	997	10.2
Norway	NCV	1,913	1,889	-1.3	30,907	31,330	1.4	12,310	11,817	-4.0	17,700	17,507	-1.1	14,224	13,706	-3.6	48,607	48,837	0.5
Poland	NCV	260	0	-100.0	38	87	127.0	8,519	8,521	0.0	5,027	5,027	0.0	8,778	8,521	-2.9	5,065	5,113	1.0
Portugal	NCV	2,443	0	-100.0	995	1,083	8.9	19,821	18,288	-7.7	8,072	5,893	-27.0	22,264	18,288	-17.9	9,067	6,977	-23.1
Romania	NCV	63	40	-36.0	1,718	1,733	0.9	IE	0		IE	0		63	40	-36.0	1,718	1,733	0.9
Russian Federation	NCV	C	19,454		C	32,717		7,895	0	-100.0	NE	0		7,895	19,454	146.4	C,NE	32,717	
Slovakia	NCV	NO	0		NO	0		NO	0		9	0	-100.0	NO	0		9	0	-100.0
Slovenia	NCV	NO	0		IE	0		NO	0		IE	0		NO	0		IE	0	
Spain	NCV	23,457	3,416	-85.4	10,444	62,313	496.6	287,367	287,462	0.0	42,336	42,467	0.3	310,824	290,879	-6.4	52,780	104,780	98.5
Sweden	NCV	2,973	2,974	0.1	3,105	3,033	-2.3	79,217	74,036	-6.5	6,601	6,500	-1.5	82,190	77,010	-6.3	9,706	9,533	-1.8
Switzerland[c]	NCV	NO	0		1,701	347	-79.6	NO	0		NO	520		NO	0		1,701	867	-49.1
Turkey			4,461			12,783			21,343			23,313			25,804			36,097	
Ukraine	NCV	310	0	-100.0	3,007	5,633	87.4	721	0	-100.0	2,106	0	-100.0	1,031	0	-100.0	5,113	5,633	10.2
United Kingdom	NCV	14,664	14,269	-2.7	39,925	39,867	-0.1	48,172	46,825	-2.8	28,592	38,480	34.6	62,836	61,094	-2.8	68,517	78,347	14.3
United States	GCV	486,103	6,150	-98.7	313,652	0	-100.0	366,467	792,611	116.3	104,192	291,850	180.1	852,570	798,761	-6.3	417,843	291,850	-30.2

[a] Source: IEA [unpublished]. Data downloaded on 12 August 2007 from http://data.iea.org/ieastore/statslisting.asp.

[b] IEA data for Denmark does not include Faroe Islands nor Greenland.

[c] No IEA data for Liechtenstein (and it is not included in Switzerland).

[d] IEA data for Monaco are included in the data of France.

Table 1.35

CO_2 emissions from civil aviation - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2,894	5,086	23.6	15.5	8.7	4.1	-10.8	-4.9	5.4	9.2	-11.5	-2.5	2.9	5.7	75.7
Austria	32	217	17.2	6.5	10.2	11.0	9.6	5.0	1.2	-4.7	-0.5	108.3	18.5	13.1	579.3
Belarus	C	7	*	*	*	*	*	*	*	3.6	-13.5	27.4	27.2	3.5	*
Belgium	12	9	-0.7	10.8	-15.0	-10.6	11.1	30.5	0.9	1.4	22.0	-7.8	-41.6	12.6	-25.6
Bulgaria	612	120	-14.7	-13.0	-22.5	-14.3	-34.5	-70.4	-10.1	45.4	3.1	17.6	84.9	15.1	-80.4
Canada	6,216	8,417	-11.4	8.6	4.7	2.5	2.2	1.6	-0.2	-6.1	9.7	7.4	8.4	9.9	35.4
Croatia															
Czech Republic	149	91	-8.8	7.6	10.3	16.2	-48.3	-1.2	23.7	26.0	-11.9	-19.2	-12.1	10.7	-39.1
Denmark	243	133	-17.9	1.2	3.1	3.5	-8.6	-10.2	-11.5	4.8	-13.4	-2.3	-7.3	5.4	-45.0
Estonia	12	2	0	0	0	1.2	34.1	76.3	-56.3	-91.0	315.9	-58.6	112.9	-20.7	-86.3
European Community	17,450	25,063	-5.0	8.1	8.6	3.9	6.7	5.7	6.1	-3.8	-2.9	-0.1	4.4	7.2	43.6
Finland	385	329	-11.8	1.5	16.4	11.0	14.2	-0.9	-1.0	-2.0	-13.2	1.1	1.6	-0.9	-14.6
France	4,541	4,945	-0.5	16.1	7.9	0.9	5.2	-0.4	2.0	-8.1	-3.0	-8.5	0.2	-1.9	8.9
Germany	2,897	5,072	-1.9	3.6	4.7	3.9	2.8	7.3	5.0	-2.6	-0.9	1.5	2.8	15.1	75.0
Greece															
Hungary	1	IE, NO	*	*	*	*	*	*	*	-13.3	*	*	*	*	*
Iceland	32	24	-3.7	29.2	13.1	-6.3	5.0	-3.8	-12.1	-12.1	-12.3	0	13.1	0	-23.6
Ireland	59	108	5.3	6.6	2.8	7.0	14.4	6.0	13.3	13.1	-3.7	-2.2	2.4	-0.4	82.4
Italy	1,597	2,652	-1.3	6.4	12.0	8.1	8.8	15.3	5.7	-5.0	3.8	3.5	-3.7	-0.6	66.1
Japan	7,162	10,799	8.4	12.3	-1.9	6.5	-0.3	-1.7	1.4	0.4	2.0	1.2	-3.6	1.3	50.8
Latvia	0	2	3.1	100.0	50.1	33.3	25.0	20.0	16.7	14.3	11.0	7.0	5.3	6.0	3655.2
Liechtenstein	0	0.1	0	0	1.0	1.0	1.0	1.0	0.9	0.9	4.4	4.4	-28.4	35.1	11.7
Lithuania	1	3	0	0	0	44.4	23.1	-12.5	0	1042.7	-18.8	-71.2	111.0	-52.7	273.3
Luxembourg	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	41	41	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
New Zealand	773	1,016	-15.2	2.6	-3.7	-2.3	3.7	-10.0	11.0	32.7	-6.3	12.2	2.9	-14.8	31.5
Norway	679	928	2.6	7.5	11.1	2.8	2.4	14.9	-8.6	0.6	-14.1	4.5	-0.9	-1.9	36.5
Poland	35	16	-17.3	4.9	27.0	-17.3	-12.4	-17.9	24.0	0.5	-2.2	6.0	-7.4	-22.4	-53.5
Portugal	165	401	23.3	10.6	0.9	3.7	17.9	6.2	5.4	5.5	5.9	-4.7	3.5	-0.1	143.1
Romania	193	89	-28.4	10.3	-53.5	71.8	-8.7	16.1	-3.3	-21.2	-13.3	-13.1	8.3	31.3	-54.1
Russian Federation	NE	10,218	*	-7.0	-7.2	-1.3	-6.3	3.4	-14.4	20.3	13.3	-3.8	24.9	-4.5	*
Slovakia	8	11	-7.0	-0.2	17.2	-11.4	-8.1	1.4	3.6	-4.9	4.3	28.1	29.8	16.2	36.2
Slovenia	1	2	-77.8	-2.6	11.8	6.8	23.8	-3.1	0.1	-18.2	-0.5	2.7	-21.3	-11.1	170.2
Spain	4,135	6,905	-15.1	14.7	15.8	7.7	14.4	9.9	6.0	-0.5	-6.9	4.9	10.9	16.5	67.0
Sweden	673	663	-8.9	1.4	-3.0	8.3	2.0	4.7	-7.9	-2.9	-4.0	-3.0	14.6	-0.7	-1.6
Switzerland	253	124	-7.4	-0.1	-3.3	-4.1	-3.8	-2.1	-5.4	-9.6	-11.7	-3.8	0.6	-13.5	-50.8
Turkey															
Ukraine	268	67	*	*	*	*	*	30.5	-10.2	-3.8	20.3	22.6	2.6	4.3	-75.1
United Kingdom	1,272	2,465	-2.2	6.3	8.7	3.7	8.7	10.7	9.2	4.9	0.6	2.0	8.9	7.1	93.8
United States	145,740	167,336	-5.3	-2.2	6.3	0.5	1.1	3.9	3.7	-6.8	-4.4	-1.8	2.7	6.2	14.8

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.36

CO_2 emissions from aviation bunkers - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	4,339	6,768	4.0	9.5	7.8	3.6	10.6	0.5	0.9	6.3	-14.1	-11.5	1.1	13.2	56.0
Austria	886	1,731	12.2	12.0	10.5	4.0	3.5	-2.3	8.6	-2.8	-6.3	-14.5	17.4	13.0	95.3
Belarus	5,558	208	*	-35.5	-10.1	-6.5	-43.1	15.2	63.2	8.1	22.4	8.5	-3.4	-20.9	-96.2
Belgium	3,096	3,565	-99.9	14.1	16.1	7.8	12.9	11.4	2.8	-9.5	95.2	-53.6	-2.5	-4.1	15.2
Bulgaria	749	473	-64.1	-13.1	-14.1	-9.4	14.7	-34.9	-15.5	45.8	1.5	21.5	-16.4	16.6	-36.9
Canada	6,921	9,269	-10.0	6.3	17.3	2.5	3.1	6.9	1.5	-10.4	0.7	-7.2	12.1	-0.7	33.9
Croatia															
Czech Republic	617	933	-10.1	30.9	11.8	-7.1	-41.7	139.7	-36.3	41.2	2.6	20.2	35.2	15.6	51.3
Denmark	1,736	2,575	-6.0	2.7	5.6	2.0	7.4	6.1	2.6	1.5	-13.6	4.0	14.3	5.2	48.3
Estonia	95	143	3.2	23.1	-12.5	42.5	-35.1	31.6	11.7	-17.9	12.1	1.3	54.8	68.8	49.5
European Community	61,111	119,626	-4.1	5.5	5.8	5.3	7.8	8.0	5.6	-2.2	2.8	-1.3	7.3	5.1	95.8
Finland	1,008	1,290	-5.9	8.2	7.0	4.0	2.5	7.0	-2.8	2.5	-1.1	3.3	15.1	0.6	28.0
France	8,618	15,984	-2.0	-0.9	6.9	3.5	5.3	12.3	4.4	1.6	0.3	0.9	6.9	1.3	85.5
Germany	11,589	20,286	-1.9	3.6	4.7	3.9	2.8	7.3	5.0	-2.6	-0.9	1.5	2.8	15.1	75.0
Greece															
Hungary	431	663	-20.9	-1.6	6.8	-5.1	4.6	7.3	6.3	-15.1	7.2	2.6	3.0	8.8	53.7
Iceland	220	407	1.1	10.5	15.0	7.6	15.8	7.5	12.2	-14.4	-11.3	6.5	12.2	10.0	85.4
Ireland	1,058	2,454	-3.6	-2.8	-8.2	21.0	2.7	18.9	16.0	20.5	6.7	-2.2	-5.6	16.1	132.0
Italy	4,116	8,543	20.0	6.0	7.2	2.0	8.7	9.7	7.1	-10.0	-1.4	15.8	0.2	5.9	107.5
Japan	13,189	21,336	5.5	12.3	9.0	3.8	4.5	-2.1	-0.2	-4.2	13.0	-3.6	3.9	0.7	61.8
Latvia	221	178	35.2	0	28.0	0	-9.4	0	-10.3	0	3.8	44.4	20.5	21.2	-19.7
Liechtenstein	0	0	0	0	2.8	2.7	2.7	2.6	2.5	2.5	-10.3	10.1	-28.4	35.1	11.7
Lithuania	418	142	19.9	2.6	-16.7	0.3	-16.3	-9.5	-1.2	17.9	-10.5	12.8	10.4	35.7	-65.9
Luxembourg	399	1,311	3.3	13.6	8.6	19.6	21.2	12.8	-4.7	8.1	8.3	4.2	8.7	1.6	228.5
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	4,540	10,876	6.7	16.1	6.5	8.2	9.4	2.8	-0.8	-2.2	4.6	-1.6	7.0	3.5	139.5
New Zealand	1,341	2,513	-4.4	9.6	4.2	4.5	-0.5	14.2	-9.5	7.0	2.1	18.9	12.4	-2.0	87.4
Norway	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	1,106	683	-17.7	5.0	27.2	-14.7	-6.6	-13.5	22.1	-1.6	-2.6	8.2	-2.3	-17.4	-38.3
Portugal	1,391	2,508	4.2	9.4	9.8	1.9	8.8	1.1	15.4	-6.7	0.7	4.6	13.4	5.6	80.4
Romania	IE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	2,243	17,920	-10.6	-6.8	-6.2	-0.9	-6.1	3.4	13.5	-2.8	-0.1	4.1	-8.4	-3.9	698.9
Slovakia	63	90	-7.0	0.6	18.0	-11.4	-7.8	0.9	1.6	-5.9	3.8	32.2	35.2	16.0	42.8
Slovenia	97	65	-65.3	6.8	-7.4	5.5	-8.0	19.4	15.0	12.9	2.9	-4.4	-23.8	7.3	-33.7
Spain	3,432	9,519	19.2	5.8	5.5	7.9	5.7	3.5	7.5	1.9	-3.8	4.9	10.9	0.4	177.4
Sweden	1,335	1,936	-18.5	6.4	2.7	5.7	7.2	12.3	2.5	-2.9	-13.9	-2.8	13.1	9.3	45.0
Switzerland	3,066	3,490	-2.4	6.6	4.1	3.9	4.8	7.4	4.7	-5.6	-7.7	-10.3	-5.8	1.7	13.8
Turkey															
Ukraine	2,709	1,054	*	*	*	*	*	34.9	-9.5	-4.2	20.3	23.3	1.6	1.3	-61.1
United Kingdom	15,674	35,008	-1.5	6.3	6.0	6.3	11.3	8.7	10.2	-2.5	-1.9	2.4	11.8	5.7	123.3
United States	45,731	62,598	0.6	5.7	2.8	7.1	1.4	3.8	2.9	-1.9	4.1	-3.8	5.8	0.6	36.9

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.37

CO_2 emissions from navigation - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2,919	2,282	2.3	19.8	3.5	-0.3	-12.6	-11.6	4.8	-10.5	-0.3	-0.3	9.3	5.1	-21.8
Austria	52	81	-9.2	-3.0	0.1	14.4	1.0	1.0	0.9	14.3	9.4	9.4	-11.9	5.9	55.7
Belarus	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	267	334	125.0	7.2	-0.3	3.1	2.8	8.1	16.9	2.1	3.8	-2.3	3.7	-2.6	25.3
Bulgaria	1,088	NA, NO	-93.8	2.1	143.0	-83.1	85.6	-13.8	*	*	*	*	*	*	*
Canada	4,726	6,072	4.3	-6.6	2.3	1.4	14.5	-3.7	2.8	8.4	-0.4	13.2	7.3	-2.9	28.5
Croatia															
Czech Republic	56	15	-0.8	3.2	-16.8	-16.1	-16.1	0.8	-9.1	5.7	-14.7	-26.9	-56.1	80.2	-72.6
Denmark	554	543	15.9	5.7	6.3	-10.8	-19.1	-8.7	1.5	-1.0	19.5	-0.9	-7.2	10.1	-2.0
Estonia	578	25	17.6	-97.0	77.4	-13.8	-1.9	-7.8	39.7	-8.1	52.4	-22.1	0.5	-4.2	-95.7
European Community	19,175	21,563	3.6	-5.0	2.8	-1.1	5.0	0.2	-6.8	2.6	-1.4	11.5	2.6	2.9	12.5
Finland	441	533	0.6	-6.4	6.5	6.4	-2.1	4.5	0.4	-8.5	5.4	2.0	-2.2	1.8	20.7
France	1,873	2,815	-10.6	2.6	-7.4	-0.8	1.6	9.4	-9.8	16.7	13.8	6.6	5.2	3.7	50.3
Germany	2,050	998	1.0	-21.0	-8.1	-20.9	-8.4	-18.5	-7.2	-3.6	-12.8	4.3	12.8	15.0	-51.3
Greece															
Hungary	107	2	-6.2	-58.1	17.9	71.7	-26.6	-48.3	6.7	-6.3	180.0	361.9	-85.8	-34.5	-97.7
Iceland	59	19	-8.6	-35.7	17.6	-38.9	-23.4	-11.2	-30.6	62.2	-9.5	-5.6	7.3	1.6	-68.1
Ireland	84	57	-0.1	-6.0	3.0	6.0	5.6	13.4	2.5	-7.1	-51.4	-5.2	4.2	-4.4	-32.3
Italy	5,401	6,143	7.3	-1.6	12.4	3.7	4.8	-2.4	2.1	-0.1	-2.1	1.6	1.1	-1.4	13.7
Japan	13,731	12,961	4.2	3.4	5.9	6.3	-11.1	-0.4	1.6	-3.1	1.2	-3.0	-8.7	0.4	-5.6
Latvia	17	45	16.6	4.5	3.0	-5.2	-0.3	4.5	4.4	0.2	-3.3	-1.2	-4.6	2.1	158.2
Liechtenstein	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	16	17	75.0	-2.0	46.9	62.3	-16.7	-54.8	-6.1	17.2	13.9	11.2	28.7	-1.3	8.6
Luxembourg	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0
Monaco	1	2	28.7	-5.1	-14.9	61.8	-19.7	36.3	40.1	32.3	-15.3	14.0	10.0	-1.1	198.8
Netherlands	405	637	0.1	-4.7	-3.6	9.0	5.4	26.5	-2.6	1.7	3.3	17.2	22.0	-23.4	57.4
New Zealand	248	394	4.6	-9.4	-14.4	-26.2	-31.3	50.5	73.6	-13.0	10.9	2.8	-10.5	18.6	58.9
Norway	1,929	2,450	-0.2	4.2	5.5	10.4	4.8	9.2	-8.8	-10.1	-1.5	-0.6	1.5	8.6	27.0
Poland	2,334	23	14.4	10.1	-7.7	1.4	-7.9	-20.1	-21.9	0.4	-5.9	-26.2	-66.4	-88.2	-99.0
Portugal	240	263	-0.4	-6.1	5.6	4.4	3.0	-9.5	-10.3	-3.4	4.7	0.7	2.3	24.3	9.3
Romania	1,607	130	25.9	-20.9	43.6	132.9	-4.0	-33.8	-48.9	-88.5	169.5	-61.3	63.0	92.8	-91.9
Russian Federation	IE, NA, NE	3,293	*	-23.1	-3.2	-9.4	-10.9	8.5	15.8	5.5	-4.1	-2.1	-3.4	-1.0	*
Slovakia	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	IE, NA, NO	IE, NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	1,500	2,560	-0.9	-14.6	3.1	-20.2	0.4	34.0	4.5	13.3	11.5	3.8	1.9	5.8	70.7
Sweden	538	536	-24.5	19.3	-2.7	21.9	22.6	14.4	3.0	-1.2	-2.3	15.6	-12.2	-5.6	-0.3
Switzerland	124	125	-1.0	-1.1	0.6	0.5	0.6	0.5	0.5	0.8	0.7	0.7	0.7	0.7	1.1
Turkey															
Ukraine	2,564	244	*	*	*	*	*	0.4	1.0	4.0	0.1	0.8	8.3	-3.7	-90.5
United Kingdom	4,122	4,179	4.3	-3.2	8.1	-3.6	-6.6	-9.2	-3.3	-17.5	-16.0	71.8	-1.8	13.7	1.4
United States	39,812	57,592	-12.0	5.0	-5.8	-35.7	-23.2	46.7	70.1	-34.5	44.6	-15.9	14.5	6.8	44.7

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.38

CO_2 emissions from marine bunkers - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2,057	2,995	-9.6	33.0	1.6	-7.3	-12.0	10.5	13.0	-6.1	9.1	-2.5	0.8	7.3	45.6
Austria	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	13,303	23,736	1.2	-8.8	22.7	10.8	4.5	-19.3	8.1	0.9	37.9	2.8	5.6	-2.1	78.4
Bulgaria	969	349	0.5	3.8	-17.1	49.3	-6.4	-97.5	704.1	49.0	9.9	29.6	-15.9	-4.6	-63.9
Canada	2,987	1,932	3.4	3.9	-6.9	-1.3	24.0	-10.1	1.5	7.7	-24.2	-42.4	21.8	-2.0	-35.3
Croatia															
Czech Republic	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	3,087	2,636	-10.5	4.8	-5.1	-8.3	0.2	-5.9	3.0	-15.8	-17.7	5.5	-18.7	3.6	-14.6
Estonia	574	377	3.8	-30.8	4.6	10.8	6.2	6.7	-9.3	-4.8	18.5	-4.9	33.0	-20.1	-34.4
European Community	103,213	154,828	-0.7	1.4	6.6	8.8	4.5	-4.9	5.3	4.0	2.8	1.2	5.7	5.1	50.0
Finland	1,842	1,651	-4.7	-20.9	13.3	8.7	28.2	7.1	15.3	-10.5	12.8	-0.6	-19.4	-1.7	-10.4
France	8,137	8,968	3.7	3.1	4.9	10.0	10.1	1.6	3.4	-14.8	-3.0	8.4	13.6	-8.5	10.2
Germany	7,980	8,582	-15.6	0.9	-0.9	6.9	-5.1	1.8	5.0	1.1	7.0	10.3	2.5	0	7.5
Greece															
Hungary	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	99	NA, NE, NO	-62.0	54.0	-13.9	20.0	18.7	-7.2	33.4	-31.8	39.1	-13.4	26.4	*	*
Ireland	57	329	88.5	200.3	35.1	-4.4	4.6	8.9	-12.2	6.7	-10.7	18.7	-12.2	-30.6	479.8
Italy	4,389	6,210	-18.2	10.1	-29.2	7.1	0.6	-0.1	24.8	13.6	14.6	12.2	7.1	3.5	41.5
Japan	17,640	20,229	5.5	1.1	-41.1	30.2	6.5	-5.3	4.5	-13.6	4.9	9.9	4.7	12.9	14.7
Latvia	1,500	824	-70.1	-46.2	-35.3	-27.2	-79.0	-33.2	-20.0	2348.5	5.5	-8.7	7.9	28.7	-45.1
Liechtenstein	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	304	460	64.9	-7.1	-6.9	-54.1	-17.2	45.1	27.3	7.6	10.8	-0.3	0.3	30.8	51.3
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	4	15	29.3	-4.0	-8.5	39.1	-5.9	41.2	39.9	38.2	-15.8	17.5	13.3	-0.3	257.1
Netherlands	34,357	54,080	2.8	1.2	2.1	6.2	1.1	3.5	6.3	10.1	-1.2	-6.5	7.8	15.4	57.4
New Zealand	1,033	710	-11.6	-15.1	-5.6	4.6	-3.5	-14.7	-18.5	6.0	33.6	-22.4	-9.0	-4.7	-31.3
Norway	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	1,648	1,034	-60.9	5.1	17.6	28.7	24.4	14.0	-4.9	-8.7	3.3	5.4	-10.9	27.3	-37.3
Portugal	1,780	2,131	3.1	0.2	2.0	-3.0	-3.0	0.7	0.6	-4.2	2.3	-2.1	2.1	15.9	19.7
Romania	IE, NA, NE	IE, NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	1,289	611	47.2	-49.6	239.4	-12.8	-27.4	-9.2	21.0	4.0	1.6	-2.5	-13.6	3.0	-52.6
Slovakia	65	1	-12.2	35.0	-14.8	-40.4	39.8	-78.9	*	*	7.9	-24.3	-61.1	-92.0	-99.0
Slovenia	NA	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	11,528	25,139	6.0	2.8	46.0	23.3	5.3	-2.4	2.2	11.9	2.4	1.9	3.1	9.8	118.1
Sweden	2,228	6,640	18.5	-1.7	5.9	17.3	15.4	-2.2	-2.8	-2.4	-11.8	34.5	17.8	2.1	198.0
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	3,528	210	*	*	*	*	*	-19.2	-9.2	7.2	-40.5	-29.3	20.8	13.5	-94.1
United Kingdom	6,680	5,860	-3.3	7.3	9.3	12.1	9.1	-27.5	-12.0	12.2	-16.7	-4.0	14.4	-0.3	-12.3
United States	67,952	34,593	9.0	0.5	0.4	7.7	7.3	-19.8	-12.0	-5.8	-28.0	-11.1	40.4	-1.0	-49.1

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.39

Fugitive emissions from fuels: coal mining and handling, CH_4 (2005)

	Key category	Share of national total	Methods and EF used[a]		Activity data					CH_4 IEF			
					CRF			IEA[b]		Underground mines		Surface mines	
			Methods	EF	Underground mines	Surface mines	Total	Total	Difference	Mining activities	Post-mining activities	Mining activities	Post-mining activities
		(%)			(Mt)				(%)	(kg/t)			
IPCC default EF[c]										4.50-16.75	0.60-2.68	0.20-1.34	0-0.13
Australia	L	3.81	T2, T3	CS, D, PS	86.6	296.4	383.0	375.6	-1.9	6.50	0.28	1.23	NE
Austria		-	NA	NA	NO	NO	NO	0.0		NO	NO	NO	IE
Belarus		-	NA	NA	NE	NE	NE	2.3		NE	NE	NE	NE
Belgium		-			NO	NO	NO	0		NE	NE	NE	NE
Bulgaria	L	1.58	T1	D	2.5	22.2	24.7	24.7	0.0	11.73	1.68	0.80	0.07
Canada	T	0.10	CS	CS	0.8	83.2	84.0	65.3	-22.2	4.10	IE	0.38	IE
Croatia								0					
Czech Republic	L, T	3.19	T1, T2	CS, D	13.3	44.6	57.9	62.0	7.2	12.25	1.64	0.77	0.07
Denmark[d]		-	NA	NA	NO	NO	NO	0		NO	NO	NO	NO
Estonia	L, T	1.23	CS, T1	CS	7.0	7.5	14.5	15.0	3.2	1.34	0.13	0.20	0.07
European Community	T	0.28	CR, CS, D, T1, T2	CR, CS, D	0	0	0	328.7	100.0	0	0	0	0
Finland		-	NA	NA	NO	NO	NO	8.7		NO	NO	NO	NO
France	T	0.01	CR	CS, PS	0.0	0.0	0.0	0	-100.0	169.58	IE	7.36	IE
Germany	L, T	0.57	CS, T2	CS	24.9	177.9	202.8	206.1	1.6	10.22	0.58	0.01	IE
Greece								69.4					
Hungary	T	0.03	D, T2	CS	1.4	8.2	9.6	9.6	0	0.67	0.07	0.00	0.00
Iceland		-	NA	NA	NO	NO	NO	0		NO	NO	NO	NO
Ireland		-	NA	NA	NE	NE	NE	4.0		NO	NO	NO	NO
Italy		0.00	T1	CR, CS, D	0.1	NO	0.1	0.1	0	10.05	0.30	NO	NA
Japan	T	0.01	T1, T3	D, OTH	0.7	0.5	1.2	0	-100.0	2.52	1.64	0.77	0.07
Latvia		-	NA	NA	NO	NO	NO	0.0		NO	NO	NO	NO
Liechtenstein		-	NA	NA	NO	NO	NO			NO	NO	NO	NO
Lithuania		-	NA	NA	NO	NO	NO	0.1		NO	NO	NO	NO
Luxembourg		-	NA	NA	NO	NO	NO	0		NO	NO	NO	NO
Monaco[e]		-	NA	NA	NO	NO	NO			NO	NO	NO	NO
Netherlands		-	T1b	D	NA	NA	NA	0		NA	NA	NA	NA
New Zealand		0.40	T1	D	0.7	4.3	5.1	5.3	4.1	13.73	1.60	0.77	0.07
Norway		0.08	T2	CS	0.2	1.5	1.7	1.5	-12.9	7.16	IE	0.54	IE
Poland	L, T	2.40	CS, T1	CS	93.0	61.6	154.6	158.7	2.7	4.55	0.34	0.01	NE
Portugal		-	NA	NA	NO	NO	NO	0		NO	IE	NO	IE
Romania	L, T	1.62	T1	D	7.4	24.3	31.6	31.1	-1.7	11.72	1.64	0.77	0.07
Russian Federation	L, T	2.00	T1, T2, T3	CS, D	103.0	195.0	298.0	278.2	-6.6	12.30	0.00	4.18	NE
Slovakia		0.71	T2	CS	2.5	NO	2.5	2.5	0.0	5.84	0.60	NO	NO
Slovenia	L, T	1.25	T1	CS	0.0	NO	0.0	4.5	99,909.8	1,834.98	845.90	NO	NO
Spain	T	0.21	CR, CS, T2	CR, CS	10.0	12.8	22.8	19.5	-14.6	2.97	1.11	0.18	0.04
Sweden		-	T2, T3	CS	NO	NO	NO	1.0		NO	NO	NO	NO
Switzerland		-	NA	NA	NO	NO	NO	0		NO	NO	NO	NO
Turkey								58.3					
Ukraine	L, T	6.79	T1, T3	CS, D	78.4	0.3	78.7	61.1	-22.4	17.20	1.34	0.94	0.13
United Kingdom	L, T	0.58	T3	CS, OTH	19.1	10.4	29.6	20.0	-32.3	11.44	0.58	0.34	NO
United States	L, T	0.72	T2, T3	CS	334.4	691.5	1,025.9	1,025.8	0.0	7.20	0.91	0.61	0.10

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.B.1 Solid fuels.

[b] Source: IEA [unpublished]. Data downloaded on 12 August 2007 from http://data.iea.org/ieastore/statslisting.asp.

[c] Source of default emission factors: IPCC Guidelines, volume 3, pages 1.105–1.110 (Tier 1).

[d] IEA data for Denmark does not include Faroe Islands nor Greenland.

[e] IEA data for Monaco are included in the data of France.

Table 1.40

Fugitive emissions from fuels: CH_4 emissions from coal mining and handling - trend information

CH_4 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	750	952	0.2	1.9	-4.3	16.4	0.4	-5.7	-1.9	4.7	-0.9	0.2	-0.6	8.7	27.0
Austria	1	IE, NO	-15.0	-5.2	-14.6	2.0	0.9	-0.2	10.3	-4.8	18.2	-18.4	-79.6	*	*
Belarus	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	95	53	-14.1	3.7	-2.7	-9.9	5.0	-12.1	1.9	1.1	1.4	-1.6	2.0	-10.2	-44.4
Canada	91	35	9.0	-3.0	3.1	-7.2	-16.8	-20.7	-12.2	4.3	-33.3	9.8	-8.9	9.8	-62.1
Croatia															
Czech Republic	362	221	-11.3	-1.9	-2.9	-1.9	-4.0	-9.5	4.4	2.4	-3.0	-3.9	-2.7	-0.3	-38.8
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	19	12	-9.6	-7.9	11.0	-3.3	-17.4	-9.5	15.5	-2.0	-3.5	2.7	3.1	9.2	-36.7
European Community	2,095	567	-2.1	2.6	-8.2	-3.9	-14.0	-2.2	-8.7	-12.8	-0.6	-10.6	-14.6	-17.4	-72.9
Finland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	204	1	-7.2	-0.9	-24.0	-14.9	-3.0	-5.0	-3.5	-35.6	-11.4	-28.9	-43.3	-95.0	-99.3
Germany	877	271	-5.2	-1.7	-5.9	-1.2	-18.3	12.8	-10.0	-11.7	0.1	-7.7	-18.2	-12.0	-69.1
Greece															
Hungary	44	1	-1.9	-13.1	5.9	-0.4	-5.3	-9.0	0.0	-18.0	14.7	-9.6	-55.7	-81.3	-97.6
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NE, NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	3	1	-11.9	-35.6	-17.6	-39.5	-86.6	-20.8	4730.7	17.0	17.3	53.4	-60.8	-3.1	-62.3
Japan	134	4	-9.6	-21.5	-3.5	-22.4	-13.3	-0.8	-11.2	-25.9	-79.2	-20.7	-29.1	10.6	-97.4
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	13	15	-32.6	32.3	3.5	-0.5	17.2	3.6	-3.9	4.8	-0.7	-6.2	-6.1	-1.9	12.4
Norway	3	2	6.4	-1.6	2.2	-12.5	3.9	28.4	9.2	-9.3	-7.7	53.6	-36.0	-27.6	-25.2
Poland	879	456	-5.8	0.3	-0.3	-1.4	-7.6	-0.2	-4.7	-9.5	-5.7	3.0	-1.1	-3.3	-48.1
Portugal	3	IE, NO	-3.2	*	*	*	*	*	*	*	*	*	*	*	*
Romania	304	119	-12.1	1.4	4.6	-19.0	-22.8	-13.0	19.3	8.2	-6.0	-0.4	-4.6	-3.4	-60.9
Russian Federation	1,936	2,026	-11.6	2.6	-2.8	0.6	-0.1	-1.5	18.0	4.8	-7.8	18.1	12.7	-6.5	4.7
Slovakia	27	16	6.0	-0.7	1.3	1.8	1.8	-5.4	-2.3	-8.6	-2.4	-17.8	-6.4	-18.2	-40.5
Slovenia	17	12	-6.7	1.5	-4.5	7.2	-1.2	-6.7	-1.8	-7.7	13.4	3.1	-0.4	-5.6	-28.8
Spain	86	44	-11.4	0.4	1.4	-1.0	-10.3	-7.1	0.9	-12.1	-3.3	-2.0	-5.1	-5.4	-48.8
Sweden	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	2,638	1,355	-8.7	-18.8	-4.1	-1.7	0.7	-1.2	11.1	-15.8	12.1	-2.5	1.4	-2.8	-48.6
United Kingdom	870	181	2.8	9.5	-7.2	-4.2	-14.7	-16.2	-12.5	-9.5	0.0	-14.0	-9.6	-22.8	-79.2
United States	3,899	2,494	-3.5	2.0	-4.6	-1.0	0.0	-6.5	-4.8	-0.7	-6.4	0.1	4.7	-3.9	-36.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.41a

Fugitive emissions from fuels: oil and natural gas, CH_4, CO_2 (2005)

	CH_4				CO_2			
	Key category	Share of national total (%)	Methods and EF used[a]		Key category	Share of national total (%)	Methods and EF used[a]	
			Methods	EF			Methods	EF
Australia	L, T	0.77	T1,T2,T3	CS,PS	L, T	1.06	T1, T2, T3	CS, PS
Austria	L, T	0.72	T1	CS,D		0.22	CS, T1	CS, PS
Belarus	L, T	2.10	CS	CS		-	NA	NA
Belgium		0.28				0.10		
Bulgaria	L	0.90	T1	D		-	NA	NA
Canada	L, T	6.49	CS	CS	L, T	2.21	CS	CS
Croatia								
Czech Republic		0.46	T1, T2	CS, D		-	NA	NA
Denmark		0.15	CR	CR	L, T	0.66	CR	CR
Estonia	L, T	2.52	T1	CS, D		-	NA	NA
European Community	L, T	0.58	CR, CS, D, T1, T2, T3	CR, CS, D, M	L	0.40	CR, CS, D, M, T1, T2, T3	CR, CS, D, PS
Finland		0.09	CS, M, T1	CS, D, M	T	0.19	CS	CS, D
France		0.34	CR	CS	L	0.71	CR	CS
Germany	L	0.70	CS	CS		0.00	CS, T1	CS
Greece								
Hungary	L, T	2.55	CS, D	CS, OTH		0.11	D	D
Iceland		-	NA	NA		-	NA	NA
Ireland		0.08	CS	CS		0.09	CS	CS
Italy	L, T	0.97	T1, T2	CS, D	T	0.36	T1, T2	CS, D
Japan		0.02	CS, T1	CS, D, OTH		0.00	T1	D
Latvia	L	1.34	CS	PS		-	NA	NA
Liechtenstein		0.39	T3	CS		-	NA	NA
Lithuania	L	0.92	T1	D		0.08	T1	D
Luxembourg		0.47	CR	PS		-	NA	NA
Monaco		-	NA	NA		-	NA	NA
Netherlands	L, T	0.36	T1b, T2, T3	CS, D, PS	L, T	0.51	CS, T2, T3	CS, PS
New Zealand		0.48	D	D	L, T	1.23	D	CS
Norway	L, T	1.14	T2	CS	L, T	4.81	T2	CS, PS
Poland	L, T	1.31	T1	CS, D		0.06	T1	CS, D
Portugal	L, T	1.00	CR, OTH	CR, OTH	L, T	0.82	D	D
Romania	L, T	5.18	T1	D		-	NA	NA
Russian Federation	L, T	4.49	T1	D, OTH	L, T	3.00	T1	D, OTH
Slovakia	L, T	1.40	T1	CS		0.00	T1	CS
Slovenia		0.16	T1	CS, D		-	NA	NA
Spain		0.21	CR, CS, T1	CR, CS	L, T	0.49	CS, T1, T2	CS, PS
Sweden		0.01	CS, T1, T2	CS, PS		0.14	T1, T2	CS, D
Switzerland	T	0.33	CS	CS		0.20	CS	CS
Turkey								
Ukraine	L, T	5.72	T1	CS,D		0.01	T1	D
United Kingdom	L, T	0.85	T3	CS	L	0.87	T3	CS
United States	L, T	1.93	M	M	T	0.39	M	M

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 1.B.2 Oil and natural gas.

Table 1.41b

Fugitive emissions from fuels: oil and natural gas - oil, CH_4, CO_2 (2005)

	Oil																	
	Exploration				Production				Transport				Refining (R) / Storage (S)			
	CH_4 IEF[a]	CO_2 IEF	Activity data		CH_4 IEF[a]	CO_2 IEF	Activity data		CH_4 IEF[a]	CO_2 IEF	Activity data		CH_4 IEF[a]	CO_2 IEF	Activity data	
	Value		Unit	Description	Value		Unit	Description	Value		Unit	Description	Value		Unit	Description
IPCC default EF[b]					300 - 5,000		PJ	Oil produced	745.00		PJ	Oil tankered	20 - 250 (S) 90 - 1,400 (R)		PJ	Oil refined
Australia	NA	NA		NA	729	NA	PJ	Crude oil and ORF produced	745	NA	PJ	Quantity shipped	1,603	282,427	PJ	Oil refined
Austria	IE	IE	number	number of wells drilled	6,097,076	142,690,058	Mt	Oil throughput	IE	IE	number	oil loaded in tankers	32	NA	Mt	Oil refined (SNAP 0401)
Belarus	NO	NO		number of wells drilled	2,673	NA	PJ	PJ of oil produced	NO	NO		PJ oil loaded in tankers	750	NA	PJ	(e.g. PJ oil refined)
Belgium	NO	NO		(SPEC)	NO	NO		(spec)	NO	NO		(spec)	185	NA	PJ	(e.g. PJ oil refined)
Bulgaria	NE	NE		(e.g. number of wells drilled)	2,650	NE	PJ	(e.g. PJ of oil produced)	745	NE	PJ	(e.g. PJ oil loaded in tankers)	745	NE	PJ	(e.g. PJ oil refined)
Canada	IE	IE		NA	2,225	1,454	10^3 m^3	Conventional Oil, Heavy Oil and Crude Oil Production	11	0	m^3	Convention, Heavy, and Crude Oil Production	12	3	TJ	Energy Consumption of Refineries
Croatia																
Czech Republic	NE	NE		(e.g. number of wells drilled)	5,287	NE	PJ	(e.g. PJ of oil produced)	NO	NO		(e.g. PJ oil loaded in tankers)	1,150	IE	PJ	(e.g. PJ oil refined)
Denmark	IE	NA		(e.g. number of wells drilled)	175	NA	10^3 m^3	Oil produced	IE	NA	10^3 m^3	Oil transported by pipelines	IE	NA		(e.g. PJ oil refined)
Estonia	NO	NO	PJ	Shale Oil	40,000	NO	PJ	(e.g. PJ of oil produced)	745	NO	PJ	(e.g. PJ oil loaded in tankers)	200	NO	PJ	(e.g. PJ oil refined)
European Community	0	0			0	0			0	0			0	0		
Finland	NO	NO		(e.g. number of wells drilled)	NO	NO		(e.g. PJ of oil produced)	NO	NO		kt oil loaded in tankers	37	102	kt	kt oil refined
France	NO	NO			35,000	1,675,000	PJ	PJ Produced	NA	NA	PJ	PJ Loaded	40	844,452	PJ	PJ Refined
Germany	NE	NE	t	(crude oil)	NE	NE	t	(e.g. PJ of oil produced)	1	NE	t	(e.g. PJ oil loaded in tankers)	0	NE	t	(crude oil & products)
Greece																
Hungary	IE	IE		(e.g. number of wells drilled)	49,496	NO	PJ	oil produced	6	IE	10^3 m^3	pipeline and tankers	1,400	NO	PJ	oil refined
Iceland	NO	NO			NO	NO			NO	NO			NO	NO		
Ireland	NO	NO		(e.g. number of wells drilled)	NO	NO		(e.g. PJ of oil produced)	NO	NO		(e.g. PJ oil loaded in tankers)	NO	NE		(e.g. PJ oil refined)
Italy	IE	IE		number of wells drilled	1,684	56,082	Gg	(Gg of oil produced)	NA	NA		oil loaded in tankers	24	14,394	Gg	(Gg oil refined)
Japan	203	4,275	number	number of wells drilled	1	0	10^3 l	oil produced	0	0	10^3 l	Oil & Condensate produced	91	NE	PJ	oil refined
Latvia	NO	NO	1000 number	(e.g. number of wells drilled)	NO	NO	PJ	(e.g. PJ of oil produced)	NO	NO	PJ	(e.g. PJ oil loaded in tankers)	NO	NO	PJ	(e.g. PJ oil refined)
Liechtenstein	NO	NO		number of wells drilled	NO	NO		oil produced	NO	NO		oil loaded in tankers	NO	NO		oil refined
Lithuania	270	5,700	number	(wells drilled)	1,450	270	10^3 m^3	(conventional oil production)	5	0	10^3 m^3	oil transported by pipelines	745	NO	PJ	(e.g. PJ oil refined)
Luxembourg	NO	NO		number of wells drilled	NO	NO		oil produced	NO	NO		oil loaded in tankers	NO	NO		oil refined
Monaco	NO	NO			NO	NO			NO	NO			NO	NO		
Netherlands	IE	IE		number of wells drilled/tested	IE	IE	10^6 m^3	oil produced	NE	NE		(e.g. PJ oil loaded in tankers)	122	408,875	PJ	Refery input: crude oil, NGL
New Zealand	NE	NE		(e.g. number of wells drilled)	NE	NE		(e.g. PJ of oil produced)	1	NE	TJ	(e.g. PJ oil loaded in tankers)	1	NE	TJ	(e.g. PJ oil refined)
Norway	IE	IE		number of wells drilled	IE	IE		oil produced	NA	NA	PJ	Oil loaded	4,309	1,695,578	PJ	Oil refined
Poland	NE	NE		NE	61,800	6,315,000	PJ	Production	1	6	Gg	NE	NE	NE		NE
Portugal	NO	NO			NO	NO			60,000	1,100,000	Mt	Consumption of crude	77,159	27,223,358	Mt	Production (crude and other materials)
Romania	NE	NE		number of wells drilled	300	NE	PJ	(e.g. PJ of oil produced)	745	NE	PJ	(e.g. PJ oil loaded in tankers)	110	NE	PJ	(e.g. PJ oil refined)
Russian Federation	64	0		number of wells drilled	1,690,378	314,759	Mt	oil produced	6,303	581	Mt	(oil transported in pipelines)	37,030	NE	Mt	oil refined
Slovakia	NO	NO		(e.g. number of wells drilled)	36,408	193	PJ	production	131	1	PJ	transport of crude oil (transfer)	131	1	PJ	refinin/storage
Slovenia	NO	NO		(e.g. number of wells drilled)	NO	NO	TJ	(e.g. PJ of oil produced)	NO	NO		(e.g. PJ oil loaded in tankers)	NO	NO	TJ	(e.g. PJ oil refined)
Spain	NE	NE			0	NE	Mg	Crude oil produced	27	NE	Gg	Transport of crude oil	1	31,201	Gg	Oil refined
Sweden	NO	NO			NO	NO			NE	NE		(e.g. PJ oil loaded in tankers)	11,393	NA	Mt	(e.g. PJ oil refined)
Switzerland	NO	NO			NO	NO			NO	NO			1,042	31,387	PJ	Crude oil used
Turkey																
Ukraine	NE	NE		number of wells drilled	4,500	NE	PJ	Oil and natural gas liquids produced	5	0	10^3 m^3	Crude oil transported by pipeline	1,200	NE	PJ	Oil refined
United Kingdom	34,170	2,949,000	number	Wells drilled	618	146,536	PJ	Oil and gas produced.	97	NO	Gg	Offshore loading of oil only	371	NO	PJ	Oil refinery throughput
United States	IE	NA		IE	708,299	NA	10^6 Bbl(oil US)	(e.g. Domestic Oil Production)	934	NA	10^6 Bbl(oil US)	Refinery Feed	4,959	NA	Bbl(oil US)	Refinery Feed

[a] The units of the implied emission factors (IEF) vary from Party to Party depending on the unit of the activity data used. The unit of the IEF is kg/unit of activity data.

[b] Source of emissions factors: IPCC Guidelines, vol. 3, pages 1.119–1.121. For updated detailed emission factors on CH_4 and implied emissions factors on CO_2 and N_2O also look at the IPCC good practice guidance, table 2.16, pages 2.86–2.87.

Table 1.41c

Fugitive emissions from fuels: oil and natural gas - natural gas, CH_4, CO_2 (2005)

	Natural Gas																	
	Production (P) / Processing (Pr)				Transmission				Distribution				Other leakage			
	CH_4 IEF[a]	CO_2 IEF	Activity data		CH_4 IEF[a]	CO_2 IEF	Activity data		CH_4 IEF[a]	CO_2 IEF	Activity data		CH_4 IEF[a]	CO_2 IEF	Activity data	
	Value		Unit	Description	Value		Unit	Description	Value		Unit	Description	Value		Unit	Description
IPCC default EF[b]	**15000-314000 (P) 288000-628000 (Pr)**		**PJ**	**Gas produced**	**57,000 - 628,000**		**PJ**	**Gas consumed/produced**	**57,000 - 628,000**		**PJ**	**Gas consumed/produced**	**0 - 384,000**		**PJ**	**Gas consumed**
Australia	268	IE	PJ	Gas produced	10,042	575	PJ	Gas transmitted	154,757	8,947	PJ	Utility sales	NE	NE		NE
Austria	IE	50,703	10^6 m^3	Gas throughput (a)	2,900	25	km	Pipelines length (km)	643	NA	km	Distribution network length	NO	NO	PJ	(e.g. PJ gas consumed)
Belarus	287,386	NA	PJ	PJ gas produced	8,665	NA	PJ	PJ gas consumed	IE	NA		PJ gas consumed	84,431	NA	PJ	PJ gas consumed
Belgium	NE	NE		(speci	4,270	2,093	PJ	(e.g. PJ gas consumed)	25,925	747	PJ	PJ gas consumed	NO	NO		(speci)
Bulgaria	83,682	NE	PJ	(e.g. PJ gas produced)	10,642	NE	PJ	(e.g. PJ gas consumed)	9,510	NE	PJ	(e.g. PJ gas consumed)	272,801	NE	PJ	(e.g. PJ gas consumed)
Canada	1,369	44	10^6 m^3	Gross New Production of Natural Gas (also includes oil and Gas Well Drilling and Servicing)	3,260	24	km	Pipeline Distance	737	NE	km	Pipeline Distance - leakage	1,021	200		
Croatia																
Czech Republic	39,351	NO	PJ	(e.g. PJ gas produced)	8,604	NO	PJ	(e.g. PJ gas consumed)	128,416	NO	PJ	(e.g. PJ gas consumed)	NE	NO	PJ	(e.g. PJ gas consumed)
Denmark	IE	NA	10^6 m^3	Gas produced	26	NA	10^6 m^3	Gas transmission	21	NA	10^6 m^3	Gas distributed	NO	NO		Incl. in transmission
Estonia	NO	NO	PJ	(e.g. PJ gas produced)	458,000	NO	PJ	(e.g. PJ gas consumed)	NO	NO	PJ	Natural Gas	271,676	NO	PJ	
European Community	0	0			0	0			0	0			0	NA, NE, NO		
Finland	NO	NO		(e.g. PJ gas produced)	6,661	18,317	PJ	PJ gas consumed	224,404	617,111	PJ	PJ gas distributed via local networks	NO	NO		t of natural gas released from pipelines
France	51,593	NA	PJ	PJ Production	NA	NA	PJ	PJ Consumed	NO	NO			NO	NO		
Germany	89	0	TJ	(natural gas from crude oil extraction)	12	NE	TJ	(total amount of gas consumed)	NE	NE	km	(distribution net)	NE, NO	NE, NO	TJ	(gas consumed)
Greece																
Hungary	111,738	NO	PJ	gas produced	29,973	NO	PJ	gas consumed	521	NO	km	Pipeline, lenth	NO	NO		(e.g. PJ gas consumed)
Iceland	NO	NO			NO	NO			NO	NO			NO	NO		
Ireland	14,898	3,113,998	PJ	PJ of Gas produced	IE	IE		(e.g. PJ gas consumed)	43,129	NO	PJ	PJ of gas consumed	NO	NO	PJ	(e.g. PJ gas consumed)
Italy	2,711	1,895	10^6 m^3	(Mm3 gas produced)	329	NA	10^6 m^3	(Mm3 gas transported)	5,912	NA	10^6 m^3	(Mm3 gas transported)	IE	NA		
Japan	4	0	10^3 m^3	gas produced	363	NA	km	Pipelines length	1,135	NA	PJ	LNG & NG Consumption with Town Gas Production	NE	NE		not estimated
Latvia	NO	NO	TJ	(e.g. PJ gas produced)	C	NO	TJ	(e.g. PJ gas consumed)	C	NO	TJ	(e.g. PJ gas consumed)	C	NO		
Liechtenstein	NO	NO		gas produced	NO	NO		gas consumed	450	NO	TJ	gas consumed	IE	NO		
Lithuania	NO	NO	PJ	(e.g. PJ gas produced)	IE	IE	km	pipeline	IE	IE	kha	distribution mains	NE	NE	PJ	(e.g. PJ gas consumed)
Luxembourg	NO	NO		gas produced	54,111	NO	PJ	gas consumed	IE	IE	TJ	gas consumed	IE	IE		
Monaco	NO	NO			NO	NO			NO	NO			NO	NO		
Netherlands	IE	NO	PJ	gas produced	2,560	NO	PJ	gas transported	107,506	3,307	10^3 km	natural gas distribution network	IE	NE		
New Zealand	NE	NE		(e.g. PJ gas produced)	IE	IE	TJ	(e.g. PJ gas consumed)	237	48	TJ	(e.g. PJ gas consumed)	NE	NE		(e.g. PJ gas consumed)
Norway	IE	IE		gas produced	IE	IE		gas consumed	IE	IE		gas consumed	NE, NO	NE, NO		
Poland	96,328	56,942	PJ	Production	137,131	522	PJ	Transmission	313,183	1,177	PJ	Distribution	NE	NE		NE
Portugal	NO	NO			7,794	21,721	Gg	gas consumed	IE	IE	Gg	gas consumed	IE	IE		
Romania	288,000	NE	PJ	(e.g. PJ gas produced)	364,300	NE	PJ	(e.g. PJ gas consumed)	IE	IE		gas consumed	149,270	NE	PJ	(e.g. PJ gas consumed)
Russian Federation	C	C	10^6 m^3	gas processed	2,500	16	km	length of pipelines	NA	NA		distribution means	2,315	NE		gas storage
Slovakia	110,345	586	PJ	production	2,900	15	km	transfer	710	4	km	distribution	IE	IE	PJ	consumed
Slovenia	39	NA	TJ	PJ gas produced	283	NA	km	lenght of transport pipelines	251	NA	km	lenght of pipelines	65	NA, NE		(e.g. PJ gas consumed)
Spain	70,889	NE	PJ	PJ gas produced (NCV)	876	12	PJ	PJ gas (NCV)	16,051	153	PJ	PJ gas consumed (NCV)	NE	NE		(e.g. PJ gas consumed)
Sweden	NO	NO			NO	NO	TJ	Pressure levelling losses	NO	NO		(e.g. PJ gas consumed)	NO	NO		
Switzerland	NO	NO			392	2,429	km	See documentation box	IE	IE			IE	IE		
Turkey																
Ukraine	2,900	95	10^6 m^3	Natural Gas Produced	5,857,105	NO	10^3 km	Length of natural gas transmission pipeline	820,000	NO	10^3 km	Length of natural gas distribution network	245,968	NO	PJ	Residential and Non-residential Gas Consumed
United Kingdom	IE	NE		(e.g. PJ gas produced)	IE	NE		(e.g. PJ gas consumed)	67,427	NE	PJ	Gas consumed	NE	NE		(e.g. PJ gas consumed)
United States	123,488	1,212,537	10^9 ft^3	(e.g. Total Natural Gas Produced)	80,045	2,722	10^9 ft^3	(e.g. Total Natural Gas Consumed)	59,565	1,771	10^9 ft^3	(e.g. Total Natural Gas Consumed)	IE	IE		(e.g. PJ gas consumed)

[a] The units of the implied emission factors (IEF) vary from Party to Party depending on the unit of the activity data used. The unit of the IEF is kg/unit of activity data.

[b] Source of emissions factors: IPCC Guidelines, vol. 3, pages 1.119–1.121. For updated detailed emission factors on CH_4 and implied emissions factors on CO_2 and N_2O also look at the IPCC good practice guidance, table 2.16, pages 2.86–2.87.

Table 1.41d

Fugitive emissions from fuels: oil and natural gas - venting and flaring, CH_4, CO_2 (2005)

	Venting and flaring																							
	Oil							Gas							Combined									
	Venting[a]			Flaring[a]				Venting[a]			Flaring[a]				Venting[a]				Flaring[a]					
	CH_4 IEF[b]	Activity data		CH_4 IEF[b]	CO_2 IEF	Activity data		CH_4 IEF[b]	Activity data		CH_4 IEF[b]	CO_2 IEF	Activity data		CH_4 IEF[b]	Activity data		CH_4 IEF[b]	CO_2 IEF		Activity data			
	value	unit	Description	value		unit	Description	value	unit	Description	value		unit	Description	value	unit	Description	value			unit	Description	
IPCC default EF[c]	1,000 -3,000	PJ	Oil produced	1,000 -3,000		PJ	Oil produced	6,000 -209,000	PJ	Gas produced	6,000 - 209,000		PJ	Gas produced	3,000 -14,000	PJ	Oil produced	3,000 -14,000			PJ	Oil and gas produced		
Australia	NA		NA	IE	IE		IE	32,189	PJ	PJ gas produced	IE	IE		IE	NA		NA	9,418	744,110		PJ	PJ gas and oil produced		
Austria	IE			IE	IE			IE			IE	IE			IE			IE	IE					
Belarus	NE		PJ oil produced	NE	NE		PJ gas consumption	6,000		PJ gas produced	IE	NA		PJ gas consumption	NE			NE	NE					
Belgium	NA		(spec)	NE	IE		(spec)	NA		(spec)	NE	IE		(spec)	NA		(spec)	NE	NE			(spec)		
Bulgaria	2,000	PJ	(e.g. PJ oil produced)	9	NE	PJ	(e.g. PJ gas consumption)	18,000	PJ	(e.g. PJ gas produced)	329	NE	PJ	(e.g. PJ gas consumption)	NE			NE	NE					
Canada	7,173	m^3	Conventional oil, Heavy Oil, and Crude Oil Production	836	1,183,513	10^6 m^3	Flared Gas and Flare	1,038	10^6 m^3	gross new production of natural Gas	108	164,649	10^6 m^3	Flared Gas and Flare	274,589,876	10^6 m^3	Number of Wells Drilled (Number)	32,811,396	50,650,932,669		10^6 m^3	Number of Wells Drilled (Number)		
Croatia																								
Czech Republic	NE		(e.g. PJ oil produced)	NE	NE		(e.g. PJ gas consumption)	NE		(e.g. PJ gas produced)	NE	NE		(e.g. PJ gas consumption)	NE			NE	NE					
Denmark	NO		(e.g. PJ oil produced)	0	57	GJ	Refinergy gas consumption	IE		Incl. in transmission	0	57	GJ	Gas consumption	NO			NO	NO					
Estonia	4,000	PJ	(e.g. PJ oil produced)	NA	NO	PJ	Shale Oil	NO	PJ	(e.g. PJ gas produced)	NA	NA	PJ	Natural Gas	NO	PJ	Natural Gas	NO	NO		PJ	Oil and Gas		
European Community	0			0	0			0			0	0			0			0	0					
Finland	NO	kt	kt oil refined	0	6,317	kt	kt oil refined	NO		(e.g. PJ gas produced)	NO	NA		(e.g. PJ gas consumption)	NO			NO	NO					
France	NO			0	24,710	PJ	PJ Consumed	NO			IE	IE			NO			307,246	28,985,507		PJ	PJ Consumed		
Germany	NE		(e.g. PJ oil produced)	NE	NE		(e.g. PJ gas consumption)	NE		(e.g. PJ gas produced)	NE	NE	10^3 m^3	(natural gas)	NE			NE	NE					
Greece																								
Hungary	2,000	PJ	(e.g. PJ oil produced)	NE	1,842,392	PJ	Oil production	24,000	PJ	(e.g. PJ gas produced)	NE	3,945	10^6 m^3	gas production	NA			NA	NA			Oil and gas produced, oil refining		
Iceland	NO			NO	NO			NO			NO	NO			NO			NO	NO					
Ireland	NO		(e.g. PJ oil produced)	NO	NO		(e.g. PJ gas consumption)	IE		(e.g. PJ gas consumed)	NO	NO	PJ	quantity of gas flared	NO			NO	NO					
Italy	IE			6,175	2,541,500	10^6 m^3	(Mm3 gas consumption)	IE			IE	IE	10^3 m^3	gas produced	NO			NO	NO					
Japan	1	10^3 t	oil produced	16	7,904	10^3 t	oil produced	IE	km	pipeline length	0	4	10^3 m^3	gas produced	IE		included elsewhere	IE	IE			included elsewhere		
Latvia	NO	PJ	(e.g. PJ oil produced)	NO	NO	PJ	(e.g. PJ gas consumption)	NO	PJ	(e.g. PJ gas produced)	NO	NO	PJ	(e.g. PJ gas consumption)	NO	PJ		NO	NO		PJ			
Liechtenstein	NO		oil produced	NO	NO		gas consumed	NO		gas produced	NO	NO		gas consumed	NO		gas produced	NO	NO			Gas/Oil Produced		
Lithuania	1,381	10^3 m^3	(conventional oil production and oil transported by tanker truck)	138	67,000	10^3 m^3	(conventional oil production	IE	km	(transmission pipeline)	NO	NO	PJ	(e.g. PJ gas consumption)	NO	PJ		NO	NO		PJ			
Luxembourg	NO		oil produced	NO	NO		gas consumed	NO		gas produced	NO	NO		gas consumed	NO		combined oil and gas production	NO	NO			combined oil and gas consumption		
Monaco	NO			NO	NO			NO			NO	NO			NO			NO	NO					
Netherlands	IE	10^6 m^3	oil produced	IE	IE	10^6 m^3	oil produced	IE	PJ	gas produced	IE	IE	PJ	gas produced	4,137			IE	IE			(specify)		
New Zealand	IE		(e.g. PJ oil produced)	IE	IE		(e.g. PJ gas consumption)	IE		(e.g. PJ gas produced)	394	1,078,577	TJ	(e.g. PJ gas consumption)	IE			IE	IE		TJ	venting & flaring from oil & gas		
Norway	IE		(e.g. PJ oil produced)	NE	75,650,118	PJ	Oil flared	IE		(e.g. PJ gas produced)	27,675	58,412,348	PJ	Gas flared	1,478	PJ	Oil and gas produced	IE	IE					
Poland	NE		NE	NE	NE		NE	NE		NE	NE	NE		NE	NE		NE	NE	NE			NE		
Portugal	8	Mt	Oil refined	IE	IE			NO			IE	IE			NO			IE	IE					
Romania	NE	PJ	(e.g. PJ oil produced)	NE	NE		(e.g. PJ gas consumption)	18,000	PJ	(e.g. PJ gas produced)	IE	NE		(e.g. PJ gas consumption)	NE		(PJ gas and oil produced)	NE	NE			(PJ gas and oil combined comsumption)		
Russian Federation	1,610	kt	oil produced	160	78,107	kt	oil produced	1,000	km	length of pipelines	NA	NA		gas exploration and processing	NE		(oil produced)	12,000	1,999,993		10^6 m^3	(Assotiated gas flaring)		
Slovakia	6,553	PJ	production	6,553	35	PJ	production	1,200	km	transfer	667	4	PJ	production	NO			NO	NO					
Slovenia	NO		(e.g. PJ oil produced)	NO	NO		(e.g. PJ gas consumption)	NO		(e.g. PJ gas produced)	NO	NO		(e.g. PJ gas consumption)	NO			NO	NO					
Spain	NE		(e.g. PJ oil produced)	1	3,109	Gg	(e.g. PJ gas consumption)	17,029,235	PJ	(e.g. PJ gas produced)	5,439	55,992,112	PJ	(e.g. PJ gas consumption)	NE			NE	NE					
Sweden	NE		(e.g. PJ oil produced)	1	59,650	TJ	Refinery gas other liquid fuels	NE		(e.g. PJ gas produced)	NE	NE		(e.g. PJ gas consumption)	NE			NA	NA					
Switzerland	IE			81	192,130	PJ	Crude oil used	IE			NO	NO			NO		(specify)	NO	NO					
Turkey																								
Ukraine	NE		(e.g. PJ oil produced)	IE	IE		(e.g. PJ gas consumption)	NE		(e.g. PJ gas produced)	11	1,800	10^6 m^3	Natural Gas Produced	NE		—	NE	NE			—		
United Kingdom	IE		(e.g. PJ oil produced)	IE	IE		(e.g. PJ gas consumption)	IE		(e.g. PJ gas produced)	IE	IE		(e.g. PJ gas consumption)	NA			254,143	70,590,660		PJ	Gas consumption		
United States	IE		oil produced	IE	IE		(e.g. Total Natural Gas Consumption)	IE		(e.g. Total Natural Gas Produced)	IE			(e.g. Total Natural Gas Consumption)	IE			IE	54,706,667		10^12 Btu	Gas Flared		

[a] The units of the implied emission factors (IEF) vary from Party to Party depending on the unit of the activity data used. The unit of the IEF is kg/unit of activity data.

[b] Source of emissions factors: IPCC Guidelines, vol. 3, pages 1.119–1.121. For updated detailed emission factors on CH_4 and implied emissions factors on CO_2 and N_2O also look at the IPCC good practice guidance, table 2.16, pages 2.86–2.87.

Table 1.42a

Fugitive emissions from fuels: CO_2 emissions from oil and natural gas - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	5,982	5,554	-3.9	3.2	-6.9	-3.3	4.3	8.3	12.6	6.6	-6.5	-10.5	-4.4	-3.1	-7.2
Austria	102	205	8.8	-0.4	-44.1	69.7	17.7	20.2	-3.5	11.1	-8.6	39.5	-9.9	-2.4	101.0
Belarus	NA, NE, NO	NA, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	85	147	-2.4	0.0	10.7	1.1	6.4	10.0	48.9	-11.5	0.7	0.0	0.0	0.0	72.0
Bulgaria	NA, NE, NO	NA, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	10,559	16,470	4.3	5.8	6.3	1.9	10.5	-10.0	2.1	0.6	3.3	0.6	-1.6	0.0	56.0
Croatia															
Czech Republic	IE, NE, NO	IE, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	263	435	96.6	-21.9	9.6	41.1	-25.3	112.6	-33.8	6.6	-15.5	2.7	10.7	-28.6	64.9
Estonia	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	17,222	16,815	1.6	3.0	1.0	-7.2	-3.4	-4.8	-1.9	-0.9	2.6	0.3	-0.8	0.4	-2.4
Finland	226	130	-4.9	3.0	-9.4	28.1	-27.8	-10.1	-0.5	-7.3	4.1	-3.7	-5.0	11.2	-42.6
France	4,508	3,948	6.3	-12.9	1.4	5.1	-2.2	-3.7	1.7	3.1	-7.0	-1.5	12.3	-10.8	-12.4
Germany	0	0	14.7	3.2	8.3	-1.7	-2.3	6.8	-5.4	1.0	-0.3	4.1	-7.5	0	27.7
Greece															
Hungary	196	85	-1.6	2.3	-9.6	-9.2	-7.8	-3.9	-7.7	-10.0	-1.5	6.6	-4.8	-10.5	-56.6
Iceland	NA, NE, NO	NA, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	139	60	2.5	2.5	-3.6	-12.3	-23.5	8.5	-39.5	89.2	-51.2	-10.0	21.1	-15.6	-56.7
Italy	3,341	2,112	-2.3	-1.6	-4.4	6.9	-3.9	-22.9	7.5	-5.6	-7.4	25.4	-24.1	-1.9	-36.8
Japan	37	38	46.5	-0.4	-3.1	-2.8	-10.9	-10.9	-5.3	-10.0	-4.6	11.4	1.6	7.4	2.6
Latvia	IE, NE, NO	IE, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	2	18	105.4	36.6	23.4	35.7	27.5	-14.3	36.0	48.5	-7.9	-11.7	-20.8	-27.9	1025.1
Luxembourg	IE, NE, NO	IE, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	775	1,074	-8.6	-13.2	-13.0	28.8	-37.3	-29.3	22.0	-36.3	559.1	-6.7	-4.5	7.6	38.6
New Zealand	621	951	14.0	-6.3	2.3	8.7	-4.1	-7.1	-6.5	7.2	-4.4	6.4	37.0	7.7	53.2
Norway	2,650	2,606	-20.7	-1.1	12.9	-5.8	3.3	21.3	5.7	-8.4	-14.2	-2.5	-5.7	-2.2	-1.7
Poland	50	234	-1.0	3.8	10.1	-8.2	22.3	18.5	47.9	17.4	-5.2	3.8	15.8	-4.7	367.7
Portugal	115	705	1.6	36.8	-9.7	23.3	-2.4	-4.9	-11.1	29.4	-0.2	10.1	-5.9	7.7	511.9
Romania	IE, NE, NO	E, NA, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	60,981	63,873	-7.0	-1.7	0.0	-2.4	6.3	1.6	5.0	5.9	20.6	7.6	13.5	1.9	4.7
Slovakia	0	0	-9.0	9.6	2.1	0.8	6.8	-0.1	6.5	2.4	-3.2	6.5	-4.5	-7.0	16.5
Slovenia	NE, NO	NA, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	1,744	2,151	-2.2	-11.2	-1.8	2.8	4.8	-2.7	12.4	-6.1	4.0	-10.9	13.7	-1.3	23.3
Sweden	93	92	-30.0	18.0	-45.1	37.9	37.6	-16.1	99.7	-27.4	9.1	-12.7	-11.0	15.8	-0.9
Switzerland	139	106	-2.4	-1.7	7.5	-2.6	-2.4	-4.5	-3.0	3.5	-3.6	-10.7	5.2	-0.7	-24.0
Turkey															
Ukraine	53	39	-13.3	-0.9	1.4	-1.5	-0.9	0.7	-1.1	2.7	1.7	2.7	6.6	1.6	-26.0
United Kingdom	5,760	5,748	-1.1	21.2	5.7	-26.6	-1.5	-4.3	-9.4	-1.7	0.7	-4.9	-2.9	12.7	-0.2
United States	33,729	28,185	-2.7	1.0	-6.9	-0.5	-6.4	3.4	-3.0	-2.0	2.9	-4.0	-0.9	0.0	-16.4

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1.42b

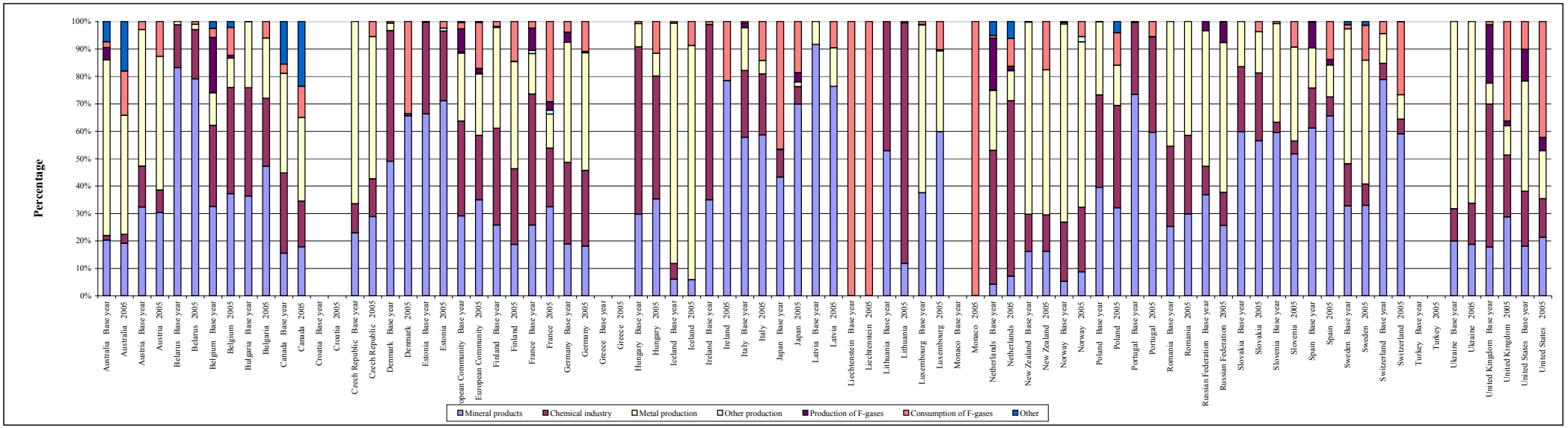
Fugitive emissions from fuels: CH_4 emissions from oil and natural gas - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	331	192	-10.1	19.8	-8.5	4.1	-2.9	-16.9	8.2	2.2	-5.9	-23.4	-2.2	-4.1	-41.9
Austria	18	32	4.2	5.3	5.9	3.7	2.2	4.1	2.8	1.5	3.9	2.2	8.0	2.3	78.5
Belarus	59	76	-10.1	-4.1	8.4	8.8	-3.9	-2.2	6.9	0.5	0.9	3.9	6.1	-2.7	28.9
Belgium	25	19	-0.9	1.0	-2.8	-5.4	-3.5	0.3	-2.8	-1.8	-4.7	-4.4	-1.8	0.7	-24.5
Bulgaria	61	30	-6.2	14.8	1.3	-11.9	-9.3	-16.0	34.1	-8.1	-9.1	2.5	10.5	11.8	-50.8
Canada	1,436	2,307	4.0	6.6	7.2	3.5	2.0	-1.5	5.2	1.6	-1.6	1.3	1.3	-1.1	60.7
Croatia															
Czech Republic	43	32	-14.8	0.0	8.3	-1.8	5.2	-2.3	-5.0	-6.2	2.8	-9.0	-7.1	19.6	-24.6
Denmark	2	5	21.0	15.4	-3.9	10.3	0.1	14.2	6.9	0.2	3.3	1.9	20.4	-0.9	154.2
Estonia	38	25	-0.3	15.0	10.7	-2.6	-5.6	-2.7	14.7	7.5	-16.2	10.3	18.1	5.0	-33.6
European Community	1,460	1,149	0.5	-4.0	-0.9	-3.9	-0.1	-3.5	-2.3	0.9	-1.5	-6.5	-3.3	0.1	-21.3
Finland	1	3	272.6	-0.5	3.4	-13.2	1.8	-19.0	-6.8	23.1	-15.8	7.9	-10.6	16.4	473.8
France	122	90	-3.6	-4.5	-4.9	-0.5	-0.2	-0.7	-0.1	-0.7	-0.6	-0.7	-0.6	-0.7	-26.0
Germany	334	332	5.4	-12.2	4.1	-3.0	-0.8	-1.2	-1.4	1.6	-1.7	0.2	-3.0	-2.3	-0.4
Greece															
Hungary	76	98	3.0	5.6	2.2	1.2	1.0	-1.2	-0.9	0.3	-1.0	1.9	0.9	0.1	27.9
Iceland	NA, NE, NO	NA, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	6	3	-2.8	-3.2	-3.6	-4.2	-12.7	-3.0	-4.1	7.4	-24.9	806.0	-89.5	-13.9	-56.6
Italy	346	269	-0.6	-3.4	-1.6	-0.6	1.3	-3.0	-2.4	-5.1	-2.9	-1.7	-2.3	0.2	-22.4
Japan	11	16	11.1	-0.5	-0.7	2.7	-1.8	-0.6	4.8	-1.7	8.2	3.2	4.4	5.9	45.6
Latvia	13	7	-3.7	-2.6	-3.6	-6.7	-4.1	-4.7	-7.5	-3.0	4.3	-21.8	-1.1	11.8	-46.8
Liechtenstein	0	0	18.1	8.7	9.9	3.9	9.0	7.0	4.2	7.2	5.3	5.9	5.3	12.6	224.7
Lithuania	17	10	3.0	17.1	8.3	-3.5	-6.7	-0.1	16.0	11.8	-1.0	5.2	-3.1	1.9	-41.7
Luxembourg	1	3	6.9	17.4	6.9	2.1	1.0	6.7	2.4	3.3	27.1	0.7	4.3	-2.7	116.0
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	78	36	0.1	-0.2	-7.4	-33.9	1.0	-14.2	-7.1	-1.5	-4.6	-0.5	-6.2	7.1	-54.0
New Zealand	15	18	-4.6	-3.8	0.2	16.8	7.0	11.6	-2.7	5.7	-1.3	2.0	-7.6	-1.1	19.6
Norway	15	29	11.4	-1.7	4.1	11.9	-6.1	-6.0	18.1	14.9	-9.8	-6.8	8.8	-14.5	92.5
Poland	196	248	-9.0	10.7	4.6	-0.8	1.6	-4.5	10.3	4.9	-3.5	10.1	6.0	3.0	26.4
Portugal	2	41	-8.5	-4.6	-8.6	113.3	82.4	29.8	-5.8	165.9	18.2	16.5	-39.6	105.0	2320.1
Romania	1,091	379	-16.2	1.2	0.1	-18.9	-2.1	-6.6	-1.3	-3.5	-0.5	4.5	-0.8	-4.1	-65.3
Russian Federation	4,451	4,562	-4.0	0.0	1.1	-0.5	2.7	1.6	2.1	3.1	5.3	7.1	1.0	2.0	2.5
Slovakia	24	32	2.1	9.6	2.1	0.8	6.8	-0.1	6.5	2.3	-3.2	6.5	-4.5	-6.9	30.7
Slovenia	3	2	2.4	-5.2	-3.3	-4.5	-7.5	-3.2	-4.1	-5.4	-7.0	-3.5	-8.4	-1.7	-41.7
Spain	30	43	13.9	2.8	-4.6	16.3	5.0	-26.1	11.4	10.4	9.0	-26.9	20.3	9.6	44.0
Sweden	0	0	-0.6	4.9	0.5	-0.1	0.1	-10.1	0.2	-2.6	8.9	-13.3	13.7	-11.1	1.8
Switzerland	18	8	-5.1	-7.6	-8.1	-5.9	-2.0	3.1	-7.4	2.0	-10.9	-9.7	-1.3	-1.2	-53.8
Turkey															
Ukraine	1,492	1,141	-7.3	-4.4	1.8	-3.2	-7.4	2.0	-0.3	-1.9	0.2	7.0	1.6	2.2	-23.6
United Kingdom	491	268	-2.1	0.9	-2.8	-5.7	-2.1	-4.0	-4.8	0.7	-2.6	-26.0	4.0	-6.5	-45.5
United States	7,567	6,649	0.8	-0.8	1.1	-1.3	-2.1	-3.4	2.8	-1.1	-0.7	-1.5	-3.4	-3.3	-12.1

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Figure 2.1

Contribution of subsectors to total GHG emissions in Industrial processes sector[a]



[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.1

Mineral products, CO_2 (2005)

	Methods and EF used[a]		Cement production					Lime production		
					Activity data (production)					
	Methods	EF	Key category	Share of national total (%)	Description[b]	Value (kt)	CO_2 IEF (t/t)	Key category	Share of national total (%)	CO_2 IEF (t/t)
IPCC default EF[c]							0.499 (cement)			
IPCC default EF[d]							0.51 (clinker)			0.59-0.86
Australia	T2	CS	L	0.7	Clinker production	6,657	0.55		0.2	0.7
Austria	CS, T1	CS, D	L, T	1.9	Clinker Production [kt]	3,221	0.56	L	0.6	0.8
Belarus	T1	D	L, T	1.9	Used clincer production data	2,802	0.51		0.8	0.8
Belgium			L	2.0	(e.g. cement or clinker production)	5,555	0.53	L	1.4	0.8
Bulgaria	D, T1, T2	D	L, T	2.2	Klinker - kt	2,982	0.52	L, T	1.4	0.8
Canada	D, T1, T2	D, OTH	L	1.0	Clinker Production Data	13,889	0.52		0.2	0.8
Croatia										
Czech Republic	CS, D, T1, T2	CR, CS	L	1.1	(clinker production)	3,045	0.53		0.3	0.5
Denmark	CS	CS	L, T	2.2	Production of Cement	2,706	0.54		0.2	0.1
Estonia	CS, T1	CS	L, T	1.8	(e.g. cement or clinker production)	697	0.53		0.1	0.8
European Community	CR, CS, D, T1, T2	CR, CS, D, PS	L, T	2.0	(e.g. cement or clinker production)	NE	NE	L	0.4	NE
Finland	T1, T2	CS, D	L, T	0.8	clinker production	1,110	0.49	L, T	0.7	0.7
France	CR	D, PS	L, T	1.7	kt of Clinker	17,332	0.53	L	0.4	0.8
Germany	CS, D	CS, D	L	1.3	(clinker production)	24,378	0.53	L	0.5	0.8
Greece										
Hungary	CS, D, T2, T3	CS, D, PS	L	1.5	clinker production	2,353	0.51		0.4	0.8
Iceland			L	1.5	clinker production	99	0.54		-	NO
Ireland	T1, T2	CS, PS	L, T	3.4	Clinker production	4,400	0.54		0.3	0.8
Italy	D, T2	CS, D, PS	L	3.1	(clinker production)	33,122	0.54	L	0.5	0.8
Japan	CS, D, T2	CS, D	L, T	2.3	Clinker produced	63,003	0.50	L	0.5	0.8
Latvia	CR, T2	CR, CS, PS	L	1.3	(e.g. cement or clinker production)	C	C	T	0.0	C
Liechtenstein	NA	NA		-	Production	NO	NO		-	NO
Lithuania	CS, T1, T2	CS, D, PS	L, T	1.6	(clinker production)	729	0.50		0.1	0.8
Luxembourg	CR	PS	L	3.4	clinker production	834	0.53		-	NO
Monaco	NA	NA		-		NO	NO		-	NO
Netherlands	CS	CS, D, PS		0.2	Clinker production	814	0.52		-	NE
New Zealand	T1, T2	D, PS	L	0.7	Cement production	C	C		0.2	0.7
Norway	D	CS	L	1.4	Production quantity	1,454	0.54		0.2	0
Poland	T1	CS, D	L	1.3	Cement production	9,468	0.53	T	0.3	0.8
Portugal	CR, D, OTH, T2	CR, CS, D, OTH	L, T	4.3	Total clinker production	7,212	0.51	T	0.5	0.7
Romania	CR, CS, D, OTH, T2	CR, D, PS	L	2.1	(e.g. cement production)	6,007	0.53	L	1.4	0.8
Russian Federation	D, T2	D	L	1.0	(clinker production)	42,247	0.52		0.3	0.7
Slovakia	T1	CS	L, T	2.6	Clinker Production	2,353	0.52	L	1.4	0.7
Slovenia	CS, D, T2	CS, D	L	2.4	Clinker produced	922	0.54	L, T	0.6	0.7
Spain	CS, D, T2	CS, D, PS	L, T	3.9	Clinker production	31,742	0.54		0.4	0.8
Sweden	CS, D, T2	CS, D, PS	L, T	2.0	Produced amount of clinker	2,457	0.55	L, T	0.9	0.8
Switzerland	CS, D, T2	CS, D, OTH	L, T	3.4	clinker production	3,442	0.53		0.1	0.6
Turkey										
Ukraine	T1, T2	CS, D	L	1.2	(e.g. cement or clinker production)	9,181	0.52	L, T	0.8	0.7
United Kingdom	T2	CS	L	0.8	clinker production kt	10,749	0.50		0.1	0.4
United States	CS, D, T1	CS, D	L, T	0.6	Clinker Production	88,783	0.52		0.2	0.7

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 2.A Mineral products.

[b] The CRF requests Parties to specify the activity data used (e.g. cement or clinker) for estimating the emissions from cement production. The descriptions included in this column are as reported in the CRF by Parties.

[c] Source of default emission factors: IPCC Guidelines, volume 3, page 2.6.

[d] Source of default emission factors: IPCC good practice guidance, pages 3.13 and 3.22.

Table 2.2a

CO_2 emissions from cement production - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	3,463	3,644	-8.1	-3.6	-3.4	-1.8	9.1	1.3	2.9	-2.2	-1.5	2.8	-0.8	2.5	5.2
Austria	2,033	1,797	-1.4	-22.4	0.2	7.8	-9.2	0.5	6.5	0.5	0.9	1.1	2.0	0.4	-11.6
Belarus	966	1,421	-3.9	-10.6	14.1	47.5	-3.3	-3.3	-2.7	-5.1	19.4	18.6	11.0	12.6	47.1
Belgium	2,824	2,934	2.0	2.4	-7.6	5.1	0.4	-1.9	5.0	-11.1	1.1	-2.1	-1.4	3.4	3.9
Bulgaria	2,006	1,552	-40.8	38.1	-1.5	-13.1	-51.1	30.3	7.0	3.7	-0.8	4.7	13.6	12.8	-22.7
Canada	5,436	7,184	-18.2	13.2	-5.3	7.6	2.6	4.2	1.5	-2.8	3.0	1.1	4.2	1.2	32.1
Croatia															
Czech Republic	2,489	1,625	-7.2	-9.2	5.6	-1.6	-0.8	-5.1	-1.3	-15.9	-13.8	6.9	10.7	-2.2	-34.7
Denmark	882	1,456	23.3	1.0	6.5	12.4	0.8	-6.0	3.0	1.8	1.4	-5.6	12.4	-5.4	65.0
Estonia	483	373	-2.5	5.4	3.9	9.6	1.9	-10.5	4.9	2.2	-6.0	-6.6	8.8	0.9	-22.8
European Community	79,905	84,168	-5.1	3.7	-3.5	2.9	2.8	1.8	1.9	-1.9	-0.1	1.8	2.9	0.2	5.3
Finland	786	542	-21.9	2.3	2.0	17.9	1.1	7.5	5.2	-0.4	-4.3	-3.4	4.1	4.2	-31.0
France	10,948	9,239	-5.0	-1.6	-2.3	-3.8	7.1	-3.5	2.1	1.1	-0.1	-1.0	4.2	3.5	-15.6
Germany	15,146	12,921	-10.2	1.4	-4.8	3.1	1.8	1.5	-3.3	-11.5	-5.0	5.3	4.2	-7.2	-14.7
Greece															
Hungary	1,765	1,199	-38.6	3.6	-4.6	5.7	0.2	2.6	12.5	0.4	6.0	-0.5	-9.1	-10.6	-32.1
Iceland	52	54	-6.9	0.8	10.8	11.4	17.0	13.6	6.7	-10.5	-31.7	-18.5	55.1	8.4	4.6
Ireland	884	2,357	-11.5	2.3	11.8	16.5	-7.5	10.1	45.9	8.8	0.5	14.4	7.9	2.7	166.6
Italy	16,084	17,886	-1.0	11.0	-8.6	1.8	2.1	5.1	3.8	3.6	-0.4	4.2	3.0	0.2	11.2
Japan	37,966	31,654	4.3	-0.4	1.0	-6.2	-11.4	-1.0	0.3	-2.1	-5.7	-1.5	-2.1	3.2	-16.6
Latvia	346	140	-27.5	-22.5	16.8	2.7	-4.4	36.8	-36.4	21.9	6.2	7.5	8.6	-2.9	-59.5
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	1,571	363	-7.1	-19.4	3.1	15.4	12.5	-16.0	-14.8	-3.6	1.9	0.7	20.4	10.0	-76.9
Luxembourg	551	438	0	-10.8	-1.3	3.4	0.5	5.0	5.7	-12.6	3.7	-12.0	10.0	-1.5	-20.4
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	416	421	19.7	-7.6	-26.2	19.0	14.9	19.7	-9.3	1.9	2.3	-11.2	2.8	-5.6	1.2
New Zealand	442	569	-2.5	6.3	-4.8	4.3	-8.2	10.5	-0.2	0.8	3.0	-3.0	-8.8	18.5	28.8
Norway	649	780	-27.9	3.6	-1.4	6.9	-5.8	-0.4	0.8	-4.2	-3.4	7.0	-16.0	7.5	20.2
Poland	7,028	5,006	-0.7	0.4	-6.7	8.4	-6.0	-2.5	-1.0	-18.3	-5.8	-2.2	11.0	-1.3	-28.8
Portugal	3,107	3,656	3.0	5.1	-2.1	5.1	-0.7	8.2	-0.5	-4.8	7.9	-7.5	3.3	0	17.7
Romania	5,572	3,154	-28.0	13.5	1.7	-6.1	-3.0	-9.3	0.4	4.2	-4.6	0.3	12.9	6.1	-43.4
Russian Federation	34,262	21,988	-5.1	1.0	-23.6	-3.5	-2.9	10.5	14.7	5.0	7.9	9.1	12.0	6.2	-35.8
Slovakia	1,438	1,234	-29.1	3.5	-4.7	10.4	50.0	0.3	-34.9	1.6	-3.6	-20.9	32.0	3.2	-14.2
Slovenia	515	498	-11.4	6.1	7.4	1.2	4.2	0.9	5.6	3.1	-12.1	1.5	5.1	2.5	-3.3
Spain	12,534	17,141	-4.7	7.5	-2.0	5.3	8.3	4.5	2.1	1.9	3.4	3.3	1.6	3.1	36.8
Sweden	1,272	1,341	-10.6	16.8	-5.5	-9.8	2.5	0.5	13.0	3.4	-3.8	-5.8	6.5	4.4	5.4
Switzerland	2,525	1,807	-12.9	-5.7	-10.0	-10.3	0.0	-0.1	7.4	1.9	-3.8	-2.2	6.0	5.4	-28.4
Turkey															
Ukraine	9,287	4,820	-5.1	-31.7	-36.6	11.8	15.5	-9.2	-10.7	9.5	13.9	28.2	19.7	13.1	-48.1
United Kingdom	6,659	5,423	-17.8	-1.3	2.1	4.6	1.9	-4.5	-3.0	-7.7	2.5	-2.0	1.9	-0.6	-18.6
United States	33,278	45,910	-2.2	2.1	0.6	3.4	2.3	2.0	3.0	0.4	3.7	0.4	5.9	0.7	38.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.2b

CO_2 implied emission factors for cement production - trend information

CO_2 IEF (t/t)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	0.56	0.55	-0.1	0.4	0.0	0.1	-0.5	-0.9	-0.1	-0.2	-0.4	-0.6	0.3	0.0	-1.9
Austria	0.55	0.56	0.2	0.4	0.7	1.2	-1.8	-0.2	0.9	0.2	-0.9	1.0	-1.2	0.5	1.4
Belarus	0.51	0.51	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
Belgium	0.53	0.53	0.2	0.0	-0.2	0.1	0.0	-0.1	0.1	-2.3	0.3	3.8	0.5	-3.8	-1.0
Bulgaria	0.52	0.52	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	0.52	0.52	0	0	0	0	0	0	0	0	0	0	0	0	0
Croatia															
Czech Republic	0.53	0.53	0.4	0.4	0.4	1.1	1.1	0.6	-1.0	0.7	-0.1	0	0	-3.1	1.3
Denmark	0.54	0.54	-0.1	-0.4	0.1	0	-0.5	1.1	0.9	0	0	0	0	0	-1.2
Estonia	0.53	0.53	-0.2	-0.4	-0.4	-0.5	0.5	0.0	-0.2	0.5	0.2	-0.5	0.4	1.0	0.8
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	0.53	0.49	0.2	-1.6	1.1	-0.2	1.5	0.6	-0.2	-0.2	-0.5	0.4	-8.0	-0.1	-8.7
France	0.53	0.53	0	0	0	0	0	0	0	0	0	0	-0.9	2.5	1.5
Germany	0.53	0.53	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	0.56	0.51	-0.8	-0.1	2.5	0.1	-2.8	2.2	0.9	0.8	-0.6	-0.7	-1.8	-5.2	-8.4
Iceland	0.53	0.54	0	0	0	0	0	0	0	0	0	0	0	2.3	2.3
Ireland	0.55	0.54	0.0	0.0	-0.1	0.0	0.0	0.0	-0.3	-0.1	-0.3	-1.6	-0.1	0.0	-2.4
Italy	0.54	0.54	0	0	0	0	0	0	0	0	0	0	0	0	0
Japan	0.50	0.50	0.0	0.0	0	0.0	0.0	0.0	-0.5	0.5	0.2	0.2	0.2	0.3	0.9
Latvia	0.53	C	0	-4.4	4.6	1.0	-1.7	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	0.51	0.50	-0.5	-1.9	-0.1	1.1	-0.2	0.0	-0.3	0.8	0.5	0.2	0.2	-4.5	-3.0
Luxembourg	0.53	0.53	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	0.54	0.52	0	0.1	-0.2	0.2	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-4.3	-4.3
New Zealand	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	0.52	0.54	-21.8	-0.2	0.3	-0.4	-0.1	0.3	1.6	-0.7	-5.8	4.0	6.7	-2.1	2.9
Poland	0.53	0.53	0	0	0	0	0	0	0	1.1	-0.2	-0.4	-0.2	0.3	0.7
Portugal	0.51	0.51	0.0	0	0	0	0	0	0.0	0.0	0	0	0	0	0
Romania	0.53	0.53	-0.1	0.0	0.0	0.0	0.1	0.3	-0.3	0.0	-0.1	0.1	-0.4	0	-0.4
Russian Federation	0.52	0.52	0	0	0	0	0	0	0	0	0	0	0	0	0
Slovakia	0.51	0.52	0	0	0	0	0	0	-0.4	-0.7	0.9	1.9	2.0	-0.3	3.4
Slovenia	0.54	0.54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	-0.2	-0.2
Spain	0.54	0.54	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweden	0.54	0.55	0.0	-0.8	0.8	-0.6	-0.3	0.0	0.1	-0.1	0.2	0.0	-0.2	1.3	0.7
Switzerland	0.53	0.53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turkey															
Ukraine	0.53	0.52	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-1.3
United Kingdom	0.50	0.50	0.0	0	0.0	0.0	0	0.0	0	0.0	0	0	0	0.0	0
United States	0.52	0.52	0.0	0.0	0	0	0	0	0.0	0.0	0	0.0	0	0	0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.3

Chemical industry, CO_2 and N_2O (2005)

	CO_2						N_2O								
	Methods and EF used[a]		Ammonia production				Methods and EF used[a]		Nitric acid production				Adipic acid production		
	Methods	EF	Key category	Share of national total	Activity data (production)	CO_2 IEF	Methods	EF	Key category	Share of national total	Activity data (production)	N_2O IEF	Key category	Share of national total	N_2O IEF
				(%)	(kt)	(t/t)				(%)	(kt)	(t/t)		(%)	(t/t)
IPCC default EF[b]						1.5-1.6						0.002-0.019			0.59-0.86
Australia	T2	CS		-	C	IE	NA	NA		-	C	IE		-	NO
Austria	CS	CS, PS	L	0.5	478	1.1	CS	PS	T	0.3	558	0.002		-	NO
Belarus	NA	NA		-	941	NA	T1	D		0.6	306	0.005		-	NO
Belgium			L, T	0.9	C	C			L, T	2.1	733	0.013		-	NO
Bulgaria	D, T1	CS, D	L, T	0.9	C	C	D	D	L, T	1.4	C	C		-	NO
Canada	D	CS	L	0.7	4,025	1.6	CS, T3	CS, OTH		0.2	1,147	0.004	T	0.4	C
Croatia															
Czech Republic	T1	CS		0.4	254	2.4	CS, T1	CS, PS	L	0.7	532	0.006		-	NO
Denmark				-	NO	NO	NA	NA	T	-	NO	NO		-	NO
Estonia	CS	CS		0.7	213	0.7	NA	NA		-	NO	NO		-	NO
European Community	CR, CS, D, T1b, T2, T3	CR, CS, D, PS		0.4	NE	NE	CR, CS, D, T2, T3	CR, CS, D, PS	L	0.8	NE	NE	T	0.3	NE
Finland	T2	CS, D		-	NO	NO	T1	PS	L	2.3	582	0.009		-	NO
France	CR	D, PS	T	0.4	1,444	1.6	CR	PS	L, T	0.8	2,816	0.005	T	0.3	C
Germany	CS, D	CS, D	L, T	0.5	2,894	1.8	CS	CS	L, T	1.1	6,488	0.006	T	0.3	C
Greece															
Hungary	D, T3	D, PS	L, T	1.0	336	2.4	T3	D, PS	L, T	2.4	486	0.013		-	NO
Iceland				-	NO	NO	NA	NA		-	NO	NO		-	NO
Ireland	NA	NA	T	-	NO	NO	NA	NA	T	-	NO	NO		-	NO
Italy	D	CR, PS	T	0.1	607	1.2	D	D, PS		0.3	572	0.010	L, T	1.0	0.26
Japan	T1	CS		0.2	1,309	1.7	D, T1	CS, PS		0.1	602	0.004	T	0.0	C
Latvia	NA	NA		-	NO	NO	NA	NA		-	NO	NO		-	NO
Liechtenstein	NA	NA		-	NO	NO	NA	NA		-	NO	NO		-	NO
Lithuania	T2	PS	L, T	5.1	C	C	T1	D	L, T	9.6	C	C		-	NO
Luxembourg	NA	NA		-	NO	NO	NA	NA		-	NO	NO		-	NO
Monaco	NA	NA		-	NO	NO	NA	NA		-	NO	NO		-	NO
Netherlands	CS, T1b	CS, PS	L	1.5	C	C	T2	PS	L, T	2.7	C	C		-	NO
New Zealand	T2	CS, PS		0.4	235	1.5	NA	NA		-	NO	NO		-	NO
Norway	D	CS, D	L, T	0.6	366	1.4	CS, T2	PS	L, T	3.6	1,588	0.004		-	NO
Poland	T1	CR, D	L, T	0.9	2,519	1.5	T1	CS	L, T	1.1	2,219	0.006		-	NO
Portugal	D, T2	CS, PS	L, T	2.1	C	C	D	CR, OTH	L, T	0.7	C	C		-	NO
Romania	D, T1b	D	L, T	1.6	1,611	1.5	D	D	L, T	2.1	1,119	0.009	T	-	NA
Russian Federation	D, T1b	D	L	0.9	12,422	1.5	D	D		0.1	5,007	0.002		-	NO
Slovakia	NA	NA		-	426	IE	T2	PS	L, T	2.6	498	0.008		-	NO
Slovenia	D	D		-	NO	NO	D	D		0.0	0	0.005		-	NO
Spain	D	CS, D, PS		0.1	542	1.1	D	CS	T	0.4	720	0.007		-	NA
Sweden	D	PS		-	NO	NO	CS, T2	PS	L, T	0.7	264	0.005		-	NO
Switzerland	CS	CS		0.0	40	0.0	CS, D	CS, D		0.3	94	0.005		-	NO
Turkey															
Ukraine	T1, T2	CS, D	L, T	2.6	5,214	2.1	T1	D		0.2	1,054	0.002	T	0.4	0.08
United Kingdom	CS	CS, OTH		0.2	31	35.7				0.3	1,713	0.004	T	0.1	C
United States	CS, D	CS, D	T	0.2	10,143	1.6	D	D		0.2	6,328	0.008	T	0.1	0.02

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 2.B Chemical industry.

[b] Source of default emission factors: ammonia; IPCC Guidelines, volume 3, page 2.16 nitric acid and adipic acid; IPCC good practice guidance, pages 3.34 and 3.44.

Table 2.4a

CO_2 emissions from ammonia production - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	517	503	5.6	5.9	0.3	-1.2	-1.3	1.0	-2.3	-8.8	2.9	8.3	-11.1	7.6	-2.6
Belarus	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	694	1,330	-8.9	11.7	-3.7	0.3	-4.6	19.7	-4.5	-3.2	-17.1	1.7	-0.7	5.1	91.8
Bulgaria	1,662	597	-16.5	20.9	-0.7	-17.7	-46.4	-28.2	71.1	-10.4	-36.4	6.0	21.0	1.9	-64.1
Canada	3,924	5,002	-1.4	18.8	1.7	-4.1	1.4	0.6	0.8	-5.6	-5.8	6.7	8.7	-8.7	27.5
Croatia															
Czech Republic	807	609	-3.1	-11.7	7.6	-8.4	3.1	-14.8	14.4	-15.8	-12.8	30.2	-0.7	-12.8	-24.5
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	317	144	-8.0	2.6	1.8	5.3	8.6	-10.2	-13.4	7.9	-86.0	226.8	84.7	-16.3	-54.7
European Community	17,603	16,801	-2.6	7.0	-3.3	2.0	2.7	-6.4	3.4	-1.6	-4.7	-2.1	2.5	1.9	-4.6
Finland	44	NO	1.1	*	*	*	*	*	*	*	*	*	*	*	*
France	3,357	2,362	-2.0	-3.2	6.4	-1.3	-0.3	-3.0	2.9	-10.9	-12.2	-7.0	6.4	8.6	-29.6
Germany	4,596	5,253	-16.2	19.5	-1.1	-0.7	0.4	-3.4	6.6	-1.2	1.9	9.1	-1.6	1.6	14.3
Greece															
Hungary	1,996	822	-40.8	-1.1	11.6	-4.1	-11.4	-10.8	29.3	-9.8	-28.7	-0.5	28.7	12.9	-58.8
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	989	NO	4.2	-7.8	-5.2	16.5	-1.5	-10.9	-6.3	17.4	-22.0	*	*	*	*
Italy	1,710	705	-4.3	-3.3	-32.9	12.2	-8.3	-10.3	12.7	4.0	10.3	21.9	10.0	-5.7	-58.8
Japan	3,385	2,165	-1.5	1.1	0.7	-2.5	-11.2	10.0	-3.2	-7.0	-8.1	-10.2	0.5	-11.9	-36.0
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	1,190	1,154	9.0	59.5	26.8	-16.6	6.1	-1.7	4.6	5.9	5.3	-3.4	-6.7	7.6	-3.0
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	3,096	3,105	12.7	-0.9	-5.3	5.2	1.6	-0.7	0.6	-16.0	-4.2	-1.1	7.4	0.6	0.3
New Zealand	275	346	-0.4	3.3	-12.9	13.4	9.8	15.2	-5.5	11.7	-7.6	13.0	-1.6	-8.5	26.1
Norway	500	335	-11.7	7.9	-6.5	8.2	-48.6	-35.4	124.1	-7.2	-5.7	35.5	6.8	-32.6	-33.0
Poland	3,517	3,779	2.4	15.6	-2.8	3.0	-9.0	-12.8	25.7	-6.2	-24.2	40.9	7.2	4.6	7.4
Portugal	569	1,809	-21.5	54.8	-18.7	46.9	24.9	-52.9	10.9	53.4	6.5	6.1	5.8	5.5	217.8
Romania	5,006	2,417	-36.9	25.4	1.8	-48.3	-50.8	78.2	50.5	-8.0	-1.6	27.1	-1.6	13.3	-51.7
Russian Federation	18,888	18,633	-5.2	9.3	-0.1	-9.5	-8.8	16.5	14.6	-0.6	-0.8	5.7	8.0	3.7	-1.3
Slovakia	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	709	612	20.8	1.6	4.3	5.7	-5.9	-7.3	-1.7	0.5	-2.5	2.8	-7.3	3.4	-13.6
Sweden	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	0.32	0.32	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey															
Ukraine	11,756	10,859	-7.0	2.3	5.0	1.9	-4.9	12.0	-4.7	2.7	-0.9	5.9	-0.1	9.1	-7.6
United Kingdom	1,322	1,120	0.2	0.2	0.2	-34.4	25.0	0.2	16.9	5.6	-9.4	-6.4	8.5	-11.3	-15.3
United States	19,306	16,321	-0.7	-3.1	-0.8	1.8	6.2	-6.0	-4.8	-14.8	6.3	-9.0	4.5	-3.4	-15.5

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economie in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.4b

CO_2 implied emission factors for ammonia production - trend information

CO_2 IEF (t/t)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	1.12	1.05	2.5	-0.5	-2.1	-0.2	-2.3	-0.3	-0.7	-1.8	-0.6	-1.6	-11.0	14.7	-6.2
Belarus	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	1.24	C	0	0	0	0	0	0	0	0	0	0	*	*	*
Canada	1.56	1.56	0	0	0	0	0	0	0	0.8	-0.8	0.4	-0.4	0	0
Croatia															
Czech Republic	2.40	2.40	0.0	0.0	0	0	0	0	0	0	0	0	0.0	0.0	0.0
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	1.08	0.68	0.1	-8.3	1.0	3.8	6.1	-5.0	-2.4	4.1	-45.5	56.6	-10.0	-20.5	-37.4
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	1.55	NO	0.1	*	*	*	*	*	*	*	*	*	*	*	*
France	1.74	1.64	-2.9	-3.3	1.3	1.3	1.3	1.3	-3.6	-1.3	3.2	-5.4	9.3	3.0	-6.1
Germany	1.82	1.82	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	2.55	2.44	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.2
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	2.30	NO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*
Italy	1.18	1.16	0	0	0	0	0	0	0	0	0.0	0.0	-1.8	0.6	-1.2
Japan	1.81	1.65	0.6	-1.6	-0.1	-0.6	-4.6	7.5	-2.3	1.7	0.7	-1.7	-4.0	-9.0	-8.7
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	1.60	1.47	-0.3	4.2	2.2	-1.7	-8.4	0.4	-4.1	1.3	-1.2	-1.7	1.1	2.0	-8.4
Norway	1.44	1.41	2.1	0.9	-0.8	21.9	-16.2	9.7	-8.5	-4.3	-4.1	13.9	-10.9	-0.1	-2.5
Poland	1.50	1.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	1.50	1.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Russian Federation	1.50	1.50	0	0	0	0	0	0	0	0	0	0	0	0	0
Slovakia	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	1.24	1.13	1.4	1.5	1.6	0.3	0.4	-2.6	-2.2	1.5	0.4	0.7	-0.9	-6.3	-8.6
Sweden	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	0.01	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey															
Ukraine	2.38	2.08	-1.1	-1.1	-1.1	-1.1	-1.2	-1.2	-1.2	-0.7	-0.7	-0.7	0.0	0.0	-12.5
United Kingdom	29.59	35.71	-1.3	0.3	0.2	-19.7	14.5	-6.9	9.4	33.5	-4.8	1.2	9.3	-8.9	20.7
United States	1.25	1.61	-1.7	-0.5	-3.7	2.0	2.9	0.2	4.4	10.2	-6.3	11.4	-1.8	4.2	28.6

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.5a

N_2O emissions from nitric acid production - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	3	1	1.7	3.9	2.0	-1.3	4.0	3.0	3.0	-17.4	2.6	9.4	-68.2	-2.4	-69.9
Belarus	1	2	-18.2	-11.1	-12.5	28.6	11.1	0	-10.0	11.1	20.0	-8.3	18.2	14.8	35.6
Belgium	11	10	-2.9	9.2	10.6	-4.7	2.1	-2.7	-5.6	-4.3	-8.6	-18.9	4.4	-1.7	-13.9
Bulgaria	8	3	-27.9	43.6	2.1	-17.7	-40.0	-24.4	79.5	-1.5	-15.9	6.5	-26.0	15.6	-59.0
Canada	3	4	4.4	5.0	10.2	-4.4	-2.2	12.7	5.4	4.4	-2.2	0.7	-2.9	2.8	24.8
Croatia															
Czech Republic	4	3	-34.8	14.9	-9.4	9.0	7.7	-17.8	13.8	-1.1	-13.5	-0.3	20.7	-5.8	-10.4
Denmark	3	NO	-8.4	12.1	-7.7	1.7	-4.9	17.8	5.6	-11.8	-12.6	15.6	-40.7	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	119	106	-5.1	0.8	1.0	-1.1	-0.5	5.6	-0.9	-12.2	-9.6	8.4	5.2	6.9	-10.4
Finland	5	5	-13.1	1.9	0.0	-1.4	-4.7	-2.1	1.3	-5.8	4.1	6.2	2.8	7.5	-5.3
France	21	14	1.4	-9.2	0	2.7	-0.5	1.9	1.0	-15.7	-11.4	1.0	0.7	-6.8	-34.0
Germany	15	36	-20.7	14.0	-4.8	0.3	-0.6	4.1	6.9	-12.2	9.9	64.4	14.1	47.1	136.7
Greece															
Hungary	15	6	-49.5	-33.7	42.9	-3.7	-16.0	-12.4	31.7	8.6	-35.7	5.6	33.5	9.8	-57.3
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	3	NO	-21.5	0	0	0	0.0	0	0.0	-28.1	-50.0	*	*	*	*
Italy	7	5	-4.2	10.5	-4.2	1.5	-14.8	-14.1	36.0	-3.6	-17.1	12.5	58.5	-6.5	-19.1
Japan	2	3	-0.4	-1.6	-2.4	-3.3	9.9	-3.1	4.1	-8.2	2.9	6.8	1.9	-4.7	1.9
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	2	7	4.9	11.4	37.3	10.4	29.3	5.3	17.4	10.3	8.1	3.1	7.1	26.9	183.5
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	20	18	1.4	-5.8	-0.3	0	-0.5	-4.3	-1.1	-9.4	-5.8	0.6	11.0	0.7	-10.6
New Zealand	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	7	6	0.3	-1.5	-1.1	-8.6	14.0	11.2	-7.7	-2.3	12.9	-10.5	7.8	5.9	-5.2
Poland	14	14	-8.8	13.5	-0.1	-6.3	-7.6	-2.1	22.7	2.6	-18.0	20.2	2.7	6.5	1.5
Portugal	2	2	-5.7	22.6	5.4	1.4	-30.0	66.6	-41.8	33.8	1.3	1.3	1.2	1.2	8.0
Romania	22	10	-49.2	14.6	6.6	-31.6	-28.2	13.8	43.8	-12.3	1.3	19.6	16.6	0.2	-53.1
Russian Federation	13	10	-2.6	17.9	9.1	-8.5	-12.0	20.2	14.2	5.9	0.7	-0.1	6.9	-9.1	-21.9
Slovakia	4	4	-30.0	12.6	16.8	-5.4	-15.0	-24.9	29.9	13.1	-10.6	10.7	14.3	-5.1	7.5
Slovenia	NO	0	*	*	*	*	26.4	-11.8	69.6	-10.5	-9.4	12.0	-19.7	-84.8	*
Spain	9	5	-10.4	10.0	2.4	-3.3	-7.8	9.4	-2.1	-10.5	-7.1	1.5	-9.0	-12.6	-45.8
Sweden	3	1	5.3	-8.5	-4.0	-1.2	12.7	-12.3	-3.7	-25.0	-8.0	-2.2	-0.9	3.0	-46.0
Switzerland	1	0	-0.8	-1.7	-3.3	-11.7	6.6	1.6	9.6	5.2	3.5	-10.4	4.8	-15.2	-16.5
Turkey															
Ukraine	4	2	-11.6	-21.6	18.5	9.4	-18.6	8.1	12.1	-3.1	21.9	0.6	-14.1	18.6	-34.9
United Kingdom	13	7	1.1	-5.2	1.8	-5.1	17.2	47.3	-8.1	-22.3	-37.3	9.4	13.5	-23.6	-48.3
United States	58	51	-0.1	1.4	4.1	2.5	-1.6	-3.7	-2.7	-18.8	8.2	-2.8	-4.2	-2.1	-12.1

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies i transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.5b

N_2O implied emission factors for nitric acid production – trend information

N_2O IEF (t/t)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	0.006	0.002	0.7	7.7	-0.4	0.0	0.7	1.4	-1.0	-13.6	0.4	2.4	-69.0	0.2	-71.4
Belarus	0.005	0.005	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
Belgium	0.008	0.013	376.2	-5.5	4.9	-2.1	*	*	8.1	-81.2	-5.9	82.0	11.7	-6.7	68.6
Bulgaria	C	C	0	0	0	0	0	0	*	*	0	*	*	*	*
Canada	0.003	0.004	10.5	-3.6	5.1	-0.7	4.7	4.8	-2.7	0.8	-2.7	1.2	-11.8	11.4	5.0
Croatia															
Czech Republic	0.007	0.006	-1.2	1.4	-6.8	9.4	-2.3	-3.8	2.5	-1.2	0.0	-12.9	13.2	-5.6	-10.8
Denmark	0.007	NO	0	0	0	0	0	0	0	0	0.0	0.0	0.0	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	0.010	0.009	-0.8	-1.4	0.0	-2.0	1.2	-2.4	1.6	-1.1	0.0	-0.3	-2.5	-7.1	-10.6
France	0.007	0.005	4.3	-9.8	-9.3	8.8	2.0	2.8	-4.3	-3.2	-2.9	-9.0	-2.3	-7.8	-25.0
Germany	0.006	0.006	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	0.014	0.013	-2.2	-1.9	-2.1	0.8	2.6	0.2	-1.8	-0.5	-1.2	1.7	-1.4	-5.8	-10.8
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	0.010	NO	2.2	0	0	0	0.0	0	0.0	-28.1	0	*	*	*	*
Italy	0.006	0.010	0.6	-0.1	3.4	-1.1	-0.6	-4.5	5.5	1.8	-19.4	13.1	38.7	0.6	46.6
Japan	0.004	0.004	-0.7	-1.1	1.9	-4.2	18.1	-4.9	1.9	-0.3	-2.6	10.2	3.3	-3.7	19.4
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	0.005	0.004	-0.1	-6.2	-0.1	-6.7	9.9	12.2	-8.6	-3.4	11.3	-13.1	7.4	6.6	-20.8
Poland	0.006	0.006	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	0.009	0.009	-1.0	-0.5	-0.5	0.4	0.3	1.3	0.3	0.9	-2.4	-0.5	3.1	-1.9	-2.3
Russian Federation	0.002	0.002	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0	0
Slovakia	0.009	0.008	-7.1	1.8	4.3	0.3	-5.1	-7.5	-2.2	-0.8	2.8	-1.7	-1.0	0.1	-13.5
Slovenia	NO	0.005	*	*	*	*	0	0	2.8	-2.7	0	0	0	-6.5	*
Spain	0.007	0.007	0	0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0
Sweden	0.007	0.005	-0.3	-17.2	0.0	1.4	9.9	-8.5	-14.1	14.3	-1.3	-0.4	-0.3	0.0	-23.5
Switzerland	0.005	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey															
Ukraine	0.002	0.002	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	0.005	0.004	0.2	-1.6	0.1	-1.4	5.6	57.8	10.3	-4.5	-36.6	4.5	14.0	-23.9	-27.3
United States	0.008	0.008	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.6a

N_2O emissions from adipic acid production - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	34.6	8.5	-6.7	-2.2	6.9	-13.8	-48.8	-65.5	-48.5	-10.6	55.6	-13.3	185.2	-14.4	-75.3
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	190.1	37.6	2.3	-3.7	2.7	-4.2	-38.0	-60.7	-7.6	36.6	-10.0	-2.8	-8.8	-13.9	-80.2
Finland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	47.8	4.9	-2.1	4.6	2.8	-0.9	-44.2	-53.2	-29.6	51.0	-17.8	4.0	-71.6	29.3	-89.7
Germany	60.7	10.6	5.6	-9.9	6.3	-11.8	-67.7	-70.0	-27.5	165.6	4.3	-1.8	26.5	-31.5	-82.6
Greece															
Hungary	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	14.8	19.6	10.5	15.7	-2.7	0.3	4.8	5.1	4.4	5.4	-1.7	-6.8	3.4	-8.5	32.6
Japan	24.2	1.7	-9.7	-1.0	13.8	6.5	-13.7	-84.1	215.2	-82.4	-28.9	-6.2	84.0	-38.1	-93.1
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	1.5	NO	-35.2	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	2.2	NA	-14.9	10.3	0.8	39.7	3.7	-19.7	24.1	-42.6	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	5.0	5.8	-2.3	-7.3	57.3	14.6	1.4	-23.1	132.3	-3.8	-12.0	15.2	19.8	16.5	17.4
United Kingdom	66.9	2.5	0.5	-10.5	-1.2	2.8	-1.6	-95.0	94.4	20.8	-62.1	-9.4	89.8	-16.1	-96.3
United States	49.0	19.3	-2.3	14.5	-1.0	-39.5	-41.9	-8.5	10.2	-18.5	19.9	4.4	-6.9	4.2	-60.7

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.6b

N_2O implied emission factors for adipic acid production – trend information

N_2O IEF (t/t)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Germany	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	0.30	0.26	0	0	0	0	0	0	0	0	0	0	-8.3	-5.2	-13.1
Japan	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	0.30	NO	0	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	0.30	NA	0	0	0	0	-0.1	0.2	0.0	-0.1	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	0.08	0.08	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
United Kingdom	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	0.07	0.02	1.4	13.2	-2.0	-41.7	-41.3	-13.0	8.1	-9.7	8.7	0	-10.6	0.0	-72.3

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.7

Metal production, CO_2 (2005)

	Methods and EF used[a]		Iron and steel[b]							Aluminium production			
						Steel		Pig iron					
	Methods	EF	Key category	Share of national total	CO_2 IEF	Activity Data (production)	CO_2 IEF	Activity Data (production)	CO_2 IEF	Key category	Share of national total	Activity Data (production)	CO_2 IEF
				(%)	t/t	(kt)	t/t	(kt)	t/t		(%)	(kt)	t/t
IPCC default EF[c]					1.5-1.6								1.5-1.8
Australia	T1b	CS	L, T	1.5	1.3	5,977	NA	NO	NO	L	0.6	1,890	1.6
Austria	CS, T2	D, PS	L, T	5.4	0.3	7,032	0.1	5,458	0.8	T	-	NO	NO
Belarus	D	D		0.0	IE, NO	IE	IE	IE	IE		-	NO	NO
Belgium			L, T	1.1	0.1	6,032	0.1	7,186	0.1		-	NO	NO
Bulgaria	D	CS	L	2.0	C	C	C	C	NO		-	5	NO
Canada	CS, T2	OTH	L, T	0.9	0.3	15,327	0.0	8,274	0.8	L, T	0.6	2,901	1.7
Croatia													
Czech Republic	T1	D	L, T	4.4	0.3	6,189	1.0	4,627	IE		-	NO	NO
Denmark				0.0	0.1	250	0.1	NO	NO		-	NO	NO
Estonia	NA	NA		-	NA	NO	NA	NO	NA		-	NO	NO
European Community	CR, CS, D, T1, T2, T3	CR, CS, D,PS	L, T	1.5	NE	NE	NE	NE	NE		0.1	NE	NE
Finland	CS, T2, T3	CS, D	L, T	3.5	0.4	4,738	0.5	IE	IE		-	NO	NO
France	CR	CS, PS	L, T	0.6	0.1	19,657	0.1	12,705	0.1		0.1	443	1.5
Germany	CS, T2, T3	CS	L, T	4.3	0.4	44,524	1.0	28,854	IE		0.1	646	1.4
Greece													
Hungary	CS, D, T3	D		0.3	0.1	1,963	0.1	1,329	IE		0.1	32	1.8
Iceland				-	NA, NO	NO	NO	NO	NO	L, T	11.0	272	1.5
Ireland	NA	NA		-	NO	NO	NO	NO	NO		-	NO	NO
Italy	D	CR, CS, PS	T	0.2	0.0	29,319	0.0	11,392	0.1		0.1	196	1.6
Japan	CS	OTH		0.0	NE	NE	IE	NE	IE		-	6	IE
Latvia	T2	PS		0.4	C, NE	C	NE	NE	NE		-	NO	NO
Liechtenstein	NA	NA		-	NO	NO	NO	NO	NO		-	NO	NO
Lithuania	NA	NA		-	NO	NO	NO	NO	NO		-	NO	NO
Luxembourg	CR	PS	L, T	1.9	0.1	2194	0.1	NO	NA		-	NE	NE
Monaco	NA	NA		-	NA, NO	NO	NO	NO	NO		-	NO	NO
Netherlands	T1a, T2	CS	L, T	0.6	0.2	6,930	0.0	NO	NO		0.2	334	1.5
New Zealand	T2	D, PS	L	2.2	C, IE, NO	C	C	IE	IE		0.7	351	1.6
Norway	T2	CS, PS	L	0.5	3.2	0	NO	84	3.2	L, T	4.1	1,389	1.6
Poland	CS, T1	CS, D	T	0.7	0.1	IE	IE	4,481	0.3		0.0	54	1.8
Portugal	D, T2	D, PS		0.0	11.9	1	11.9	IE	IE		-	NO	NO
Romania	T1b, T2	CS, D	L, T	4.4	0.5	6,259	0.1	4,114	1.6		0.2	239	1.5
Russian Federation	T1b, T2	CS, D	L, T	3.5	0.5	66,262	0.1	48,400	1.4		0.3	C	C
Slovakia	T1, T2	CS, PS	L, T	1.1	0.1	4,238	0.1	3,681	IE		0.5	159	1.4
Slovenia	D, T2	PS		0.1	0.1	606	0.1	NO	NO	L, T	1.0	121	1.7
Spain	D, T2	CS, PS	L, T	0.5	0.1	17,842	0.1	4,187	0.1		0.1	397	1.7
Sweden	CS, D, T1	CS, PS	L, T	2.9	0.3	1,802	0.1	3,849	0.5		0.2	103	1.9
Switzerland	CS, T3	CS		0.3	0.1	1,118	0.1	IE	IE	T	0.1	45	1.6
Turkey													
Ukraine	T2	CS	L, T	13.3	1.0	27,899	0.1	30,746	1.7		-	IE	IE
United Kingdom	T3	CS		0.3	0.1	2,685	0.0	10,189	IE		0.1	368	1.5
United States	CS, D, T1, T2	CS, D	L, T	0.6	0.4	42,705	1.0	37,222	IE		0.1	2,478	1.7

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category 2.C Metal production.

[b] CO_2 emission estimates from sinter (2.C.1.3) were reported by Belgium, European Community, Poland and Spain; CO2 emission estimates from coke (2.C.1.4) were reported by only Australia, European Community, Finland, Latvia Poland, Portugal and the United States.

[c] Source of default emission factors: IPCC Guidelines, volume 3, pages 2.28 and 2.33.

Table 2.8a

CO_2 emissions from iron and steel production - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	10,174	8,075	-2.6	2.9	-0.5	-0.3	-3.8	4.9	-5.9	-8.4	-3.2	-2.6	5.9	-19.8	-20.6
Austria	3,546	4,995	-1.0	14.9	-5.6	10.7	-4.9	-3.6	11.8	-1.0	10.8	-1.8	-1.7	12.3	40.9
Belarus	6	10	1.0	-15.5	19.1	37.7	15.7	2.7	12.0	-0.7	-0.3	5.4	13.3	8.0	86.5
Belgium	1,946	1,535	-13.5	8.2	-17.2	2.9	8.0	5.6	-10.7	-8.0	27.2	-15.9	-2.6	-7.2	-21.1
Bulgaria	2,360	1,376	-26.1	9.4	-9.8	7.0	-14.8	-9.2	-12.6	-4.6	-6.2	25.7	-8.3	-8.5	-41.7
Canada	7,060	7,010	17.8	4.6	-1.7	-2.5	1.8	2.7	0.0	-7.8	-2.3	-1.0	15.9	-14.1	-0.7
Croatia															
Czech Republic	12,533	6,403	-29.9	5.2	-7.5	6.7	-11.7	-20.6	18.2	-6.7	4.1	10.1	-11.2	-4.8	-48.9
Denmark	28	16	0.0	15.1	-8.8	-0.5	20.5	2.0	-5.4	14.6	*	*	*	*	-45.2
Estonia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	72,122	64,015	-6.0	1.1	-8.4	10.0	-3.9	-5.9	6.5	-3.9	2.2	0.4	2.7	-1.7	-11.2
Finland	1,861	2,394	0.4	-1.1	4.5	13.0	-0.7	-0.2	1.1	-1.9	-4.1	12.0	3.3	-5.8	28.6
France	4,104	3,227	-23.2	21.5	-29.1	18.2	-3.7	-12.8	-11.4	-4.6	25.2	6.9	13.5	-13.4	-21.4
Germany	48,326	42,621	-4.1	0.4	-7.6	11.9	-3.2	-6.7	10.6	-4.2	0.2	-1.3	2.6	-3.8	-11.8
Greece															
Hungary	470	254	-34.9	-4.0	0.6	-9.1	7.4	-0.3	3.5	4.2	5.3	-3.1	-2.0	0.6	-46.0
Iceland	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	3,124	1,221	-5.1	-2.5	-19.8	-7.6	-9.2	-24.1	-17.2	1.1	-4.2	-5.2	4.7	3.6	-60.9
Japan	356	253	-9.3	3.3	6.4	1.2	-23.8	-13.2	-2.4	-15.2	4.9	9.3	6.7	-2.0	-29.0
Latvia	44	39	-68.4	-17.0	-5.4	73.0	2.4	0.8	-0.6	-2.2	-1.2	0.6	-11.9	-0.2	-12.1
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	962	246	-5.0	-39.5	-9.0	-21.6	-57.6	6.7	-10.6	6.0	94.3	-2.7	-8.5	2.2	-74.5
Monaco	NA, NE	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	2,514	1,208	-13.9	0.0	-3.5	16.8	-18.1	-8.5	-15.9	-1.2	7.4	10.6	-15.8	-8.0	-52.0
New Zealand	1,329	1,662	9.3	5.4	-2.3	-10.0	7.3	4.1	-0.8	4.5	-3.5	13.6	0.9	-4.0	25.0
Norway	200	268	-12.7	2.5	8.5	-23.9	13.8	5.4	7.1	14.0	-2.7	10.8	4.4	-21.8	33.6
Poland	6,556	2,807	-12.2	-8.4	-14.3	42.2	-17.7	-13.0	22.3	-31.2	18.1	13.7	1.6	-32.2	-57.2
Portugal	13	12	4.6	-13.8	-4.6	33.6	-3.4	8.7	9.7	-12.4	-54.3	9.5	37.0	-19.3	-5.9
Romania	15,803	6,794	-36.1	10.9	-6.2	7.0	-0.2	-39.1	0.9	-7.5	34.1	-11.0	4.3	8.2	-57.0
Russian Federation	92,669	74,083	-17.7	8.9	-6.4	0.4	-7.2	17.9	13.1	-1.4	0.7	4.4	6.3	-6.8	-20.1
Slovakia	420	506	-11.2	-3.7	-9.0	5.2	0.9	10.3	2.9	6.6	9.4	10.5	0.9	-6.3	20.4
Slovenia	40	30	-42.0	-3.9	-19.1	15.9	2.0	1.9	15.0	-0.5	5.6	9.4	18.6	2.2	-24.2
Spain	1,825	2,176	2.2	-33.7	-8.4	14.6	6.3	10.2	19.9	-4.6	7.0	-10.7	13.5	15.8	19.2
Sweden	1,813	1,974	2.5	-6.6	-0.2	-0.4	-3.1	-9.4	-2.6	16.0	-7.1	12.8	-5.6	7.8	8.9
Switzerland	111	151	4.3	-41.8	3.1	6.9	11.6	46.0	11.3	2.5	7.4	-1.4	-1.4	-1.4	36.2
Turkey															
Ukraine	80,459	55,911	-15.3	-7.5	2.8	19.6	4.4	5.6	7.9	1.6	0.5	1.4	-0.6	-3.0	-30.5
United Kingdom	1,859	1,879	-34.0	22.6	18.1	-14.9	-12.1	20.7	-9.6	-34.4	-35.3	105.8	13.5	25.4	1.1
United States	84,904	45,235	-10.7	0.1	-8.2	6.4	-6.0	-5.8	2.6	-11.0	-5.8	-2.2	-3.9	-11.8	-46.7

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.8b

CO_2 implied emission factors for iron and steel production (steel) - trend information

CO_2 IEF (t/t)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	0.11	0.11	2.5	3.3	-0.5	-1.2	-0.8	-1.3	0.5	-1.6	1.6	-1.3	0.1	3.9	-3.7
Belarus	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	0.13	0.10	-0.9	1.7	462.3	-84.2	3.5	-1.4	-4.3	-0.1	1179.5	-92.4	-3.7	-0.5	-22.5
Bulgaria	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	0.05	0.04	7.0	3.8	3.4	-5.6	-6.1	-2.5	-2.3	-8.7	3.0	-3.2	6.8	-6.2	-16.0
Croatia															
Czech Republic	1.24	1.03	-11.2	18.3	-16.9	14.3	-17.3	2.7	3.7	-8.1	0.6	6.0	-14.4	8.2	-16.6
Denmark	0.05	0.06	0.0	16.1	-1.4	-19.1	31.4	-4.3	19.6	0.2	*	*	*	*	34.5
Estonia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	0.65	0.50	-0.6	6.5	0.5	-0.1	-6.2	-0.3	-2.4	2.1	-5.6	-5.9	2.0	-4.0	-22.3
France	0.09	0.07	7.2	0.9	-10.3	-1.6	0.1	-2.4	-21.4	17.5	-0.4	43.1	-18.9	1.2	-14.7
Germany	0.55	0.96	-0.1	95.1	-2.4	-1.1	-1.1	-2.3	0.3	-0.8	-0.2	-0.8	-0.9	0.2	74.1
Greece															
Hungary	0.13	0.13	0	0	0	0.7	-0.1	-0.2	0.3	-0.3	0.3	-0.1	-0.2	0.1	0.6
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	0.05	0.02	0.8	-8.1	-8.4	-9.2	-10.3	-22.7	-26.5	5.6	2.0	-3.2	-0.7	-3.4	-60.2
Japan	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	0.16	0.11	0.0	-22.8	-5.2	-11.9	-41.3	1.6	-9.6	0.0	93.5	-0.5	-8.8	25.0	-30.9
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	0.01	0.01	0.0	0.0	0	0	0	0.0	-27.7	33.5	36.1	-23.8	0	0.0	0.0
New Zealand	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	0.04	11.87	28.5	-19.2	-9.0	34.2	4.2	-0.4	1.0	303.4	8256.6	-6.8	-16.2	11.7	33026.9
Romania	0.06	0.06	-2.8	9.3	4.0	1.8	5.7	-3.9	-3.0	0.3	11.9	-2.0	-6.6	-6.0	5.7
Russian Federation	0.06	0.06	-5.0	5.1	0.5	0.6	1.3	0.5	-5.9	1.0	1.1	-1.1	-1.8	-5.1	6.1
Slovakia	0.12	0.12	0	0	0	0	0	0	0	0	0	3.5	0	-2.2	1.2
Slovenia	0.02	0.05	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	1.5	-2.8	12.5	-3.7	210.2
Spain	0.08	0.08	0.0	-12.1	1.0	1.9	-1.6	13.4	7.8	-1.2	0.9	-16.6	2.0	10.0	-1.6
Sweden	0.08	0.10	-0.3	6.1	6.4	-9.7	3.6	0.7	-1.1	-1.1	3.4	-0.7	3.9	4.6	17.3
Switzerland	0.09	0.13	1.8	-3.6	1.3	0.3	0.2	40.4	0.7	0.7	1.3	0.2	-0.6	-0.1	46.0
Turkey															
Ukraine	0.07	0.09	4.7	2.5	-0.2	-3.9	0.4	2.8	1.1	2.0	-1.1	3.5	0.9	-0.3	20.7
United Kingdom	0.01	0.01	-0.9	-0.9	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	0.0	0	0.0	0.0	-9.1
United States	1.38	1.01	3.3	-1.5	-3.9	6.2	-8.0	-2.5	-0.4	1.7	-3.5	-3.9	-6.4	2.7	-27.2

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.9a

CO_2 emissions from aluminium production - trend information

CO_2 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2,017	3,076	0.1	-2.3	11.8	-1.2	14.1	3.6	1.8	3.5	4.0	1.1	0.5	1.8	52.5
Austria	158	NO	0	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	2,715	4,842	15.9	-3.4	6.1	1.7	1.2	-0.7	-1.3	7.8	5.2	3.7	-7.8	14.6	78.4
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	3,884	3,952	-4.0	4.1	1.7	1.8	4.9	4.7	2.8	2.3	1.4	-0.7	2.2	-1.6	1.8
Finland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	534	644	-11.2	-2.9	3.0	6.4	4.6	9.1	-0.5	4.6	4.5	-4.9	-4.5	-9.9	20.6
Germany	1,012	883	-6.7	14.2	0.3	-0.8	7.0	3.3	1.9	1.4	0.3	1.0	1.2	-3.4	-12.8
Greece															
Hungary	133	57	-16.3	7.6	4.9	0.6	0.1	-0.2	0.6	2.2	2.0	-0.7	-2.0	-7.5	-56.9
Iceland	136	409	2.0	1.9	4.1	20.4	40.5	30.8	-0.5	8.2	5.0	2.3	1.4	0.4	199.4
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	359	303	-6.0	1.3	3.7	1.8	-0.4	0.1	1.4	-1.2	1.5	0.5	2.1	0.2	-15.5
Japan	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	395	484	-3.1	-1.7	5.2	2.0	14.3	8.5	5.0	-2.8	-3.0	-0.5	16.7	1.1	22.7
New Zealand	458	555	-0.6	0.5	4.9	2.2	7.4	-1.2	-2.8	-3.0	7.1	0.3	1.9	0.5	21.2
Norway	1,419	2,197	-1.2	1.1	0.7	8.4	7.2	1.4	1.6	0.8	3.1	9.2	10.3	5.4	54.8
Poland	86	96	-0.4	12.6	-6.8	3.3	1.0	-5.9	2.7	4.3	7.7	-2.7	3.0	-9.1	12.3
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	398	359	-8.2	19.0	-0.3	16.7	6.7	-0.4	-0.5	3.8	3.8	6.1	8.7	11.0	-10.0
Russian Federation	5,129	6,380	-6.2	9.0	-1.4	0.4	3.3	5.2	2.9	1.6	1.3	3.7	3.3	2.0	24.4
Slovakia	121	231	-1.6	-0.6	184.8	-1.1	-2.0	1.1	0.6	0.2	-0.2	1.6	40.6	-2.0	90.2
Slovenia	89	211	-16.6	4.2	-7.1	-0.3	-0.3	-0.3	1.1	-0.2	47.5	9.3	2.9	0.0	135.5
Spain	610	661	-0.4	7.0	-0.2	0.6	-1.1	0.9	0.8	1.7	1.9	0.4	1.2	1.9	8.3
Sweden	133	148	0.2	7.9	6.1	-0.5	2.1	0.6	3.5	-4.2	5.1	0.0	-0.5	1.8	11.1
Switzerland	139	72	-5.9	-14.2	28.3	2.7	18.3	6.6	3.2	2.1	10.7	9.2	2.3	-0.2	-48.5
Turkey															
Ukraine	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	450	567	1.3	2.8	0.9	3.2	4.3	4.2	12.5	11.7	1.0	-0.5	4.9	2.5	26.0
United States	6,831	4,208	1.7	2.2	5.8	0.5	2.9	1.5	-3.2	-28.0	2.5	0.3	-6.0	-0.6	-38.4

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.9b

CO_2 implied emission factors for aluminium production - trend information

CO_2 IEF (t/t)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	1.63	1.63	0.0	5.0	8.0	-5.7	0.2	-2.3	-1.5	0.8	2.8	-1.5	-0.7	1.1	-0.4
Austria	1.80	NO	0	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	1.74	1.67	-0.7	0.2	1.1	-0.3	-0.8	-1.8	-0.1	-1.1	0.3	0.5	-0.6	2.4	-4.0
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	1.64	1.45	1.1	2.4	-1.2	1.3	-0.7	1.6	2.8	0.1	3.3	-1.0	-4.9	-9.0	-11.2
Germany	1.37	1.37	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	1.80	1.80	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0
Iceland	1.55	1.50	0.5	0.2	0.9	0.7	-0.1	2.4	-2.4	0.3	-2.9	1.3	-0.4	-0.1	-3.5
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	1.55	1.55	0	0	0	0	0	0	0	0	0	0	0	0	0
Japan	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	1.45	1.45	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	1.73	1.58	0	0.0	0.1	-6.3	5.1	-4.3	-3.1	-1.5	4.1	0.3	-3.0	0.1	-9.0
Norway	1.63	1.58	-2.6	2.6	-0.1	0.7	-1.1	-0.2	-0.6	0.0	2.3	-3.6	-0.9	0.2	-3.0
Poland	1.80	1.80	0	0	0	0	0	0	0	0	0	0	0	0	0
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	1.50	1.50	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Russian Federation	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	1.80	1.45	0	0	-16.7	0	0	0	0	0	0	0	0	-3.4	-19.5
Slovenia	2.01	1.74	-4.2	4.4	-3.9	-3.9	0.5	-1.8	0.0	-0.1	4.6	-1.5	0.9	0.0	-13.3
Spain	1.72	1.66	-0.2	0.0	-0.2	1.1	-1.3	-0.1	0.4	-1.3	0.9	-1.9	-0.1	1.3	-3.1
Sweden	1.86	1.89	-0.4	-4.8	2.3	-0.6	4.8	-2.5	1.5	-4.6	5.1	1.3	-0.5	-2.7	1.7
Switzerland	1.60	1.60	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey															
Ukraine	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	1.55	1.54	0.0	-0.1	0.0	-0.1	0.0	-0.1	-0.5	0	0	0	0	0	-0.9
United States	1.69	1.70	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	0.2	-0.1	0.3	1.0	1.0	0.6

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.10

Metal production, PFCs and SF_6 (2005)

	PFCs								SF_6							
	Methods and EF used[a]		Aluminium production - PFCs						Methods and EF used[b]		SF_6 used in magnesium foundries					
						IEF		Ratio					Activity data (production)		SF_6 IEF	Actual SF_6 emissions[e]
	Methods	EF	Key category	Share of national total	Activity data (aluminium production)	CF_4	C_2F_6	IEF CF_4 / IEF C_2F_6	Methods	EF	Key category	Share of national total	Description	Value		
				(%)	(kt)	(kg/t)						(%)		(t)	(kg/t)	(t)
IPCC default EF[c]						0.31-1.7	0.04-0.17								1[d]	
Australia	T1c	CS	T	0.3	1,890	0.11	0.01	7.7	NA	NA		-	(SF6 consumption)	NO	NO	NO
Austria	NA	NA	T	-	NO	NO	NO	-	NA	NA	T	-	cast Magnesium [t]	3,600	NO	NO
Belarus	NA	NA		-	NO	NO	NO	-	NA	NA		-	NO	NO	NO	NO
Belgium	NA	NA		-	NO	NO	NO	-	NA	NA		-	(spec)	NO	NO	NO
Bulgaria	NA	NA		-	5	NO	NO	-	NA	NA		-		NO	NO	NO
Canada	CS	OTH	T	0.4	2,901	0.14	0.01	11.9	D, T3	D		0.0	SF6 use	9	1,000	8.8
Croatia								-								
Czech Republic	NA	NA		-	NO	NO	NO	-	NA	NA		-	NO	NO	NO	NO
Denmark	NA	NA		-	NO	NO	NO	-	NA	NA		-	(SF6 consumption)	NO	NO	NO
Estonia	NA	NA		-	NO	NO	NO	-	NA	NA		-	(Magnesium Foundries)	NO	NO	NO
European Community	CR, T1, T2, T3	CS, PS	T	0.0	NE	NE	NE	-				0.0	(specify)	NE	NE	53.7
Finland	NA	NA		-	NO	NO	NO	-	NA	NA		-	(SF6 consumption)	NO	NO	NO
France	CR	PS	T	0.1	443	0.18	0.05	4.0	CR	PS		0.1	SF6 consumption	NA	NA	18.4
Germany	T3	CS	T	0.0	646	0.07	0.01	9.7	D	D		0.1	Consumption Mg-Production	28	1,000	27.6
Greece																
Hungary	D, T2	D, PS		0.3	32	0.88	0.09	10.0	NA	NA		-		NO	NO	NO
Iceland			T	0.7	272	0.01	0.00	7.8				-		0	NO	NO
Ireland	NA	NA		-	NO	NO	NO	-	NA	NA		-	NO	NO	NO	NO
Italy	T2	D, PS	T	0.0	196	0.12	0.02	7.8	D	PS		0.0	consumption of SF6	4	1,000	3.5
Japan	T1b	CS		0.0	6	0.31	0.03	10.0	CS	CS		0.1	SF6 consumption	38	1,000	38.2
Latvia	NA	NA		-	NO	NO	NO	-	NA	NA		-		NO	NO	NO
Liechtenstein	NA	NA		-	NO	NO	NO	-	NA	NA		-	NO	NO	NO	NO
Lithuania	NA	NA		-	NO	NO	NO	-	NA	NA		-		NO	NO	NO
Luxembourg	NA	NA		-	NE	NO	NO	-	NA	NA		-	magnesium production	NO	NO	NO
Monaco	NA	NA		-	NO	NO	NO	-	NA	NA		-		NO	NO	NO
Netherlands	T2	PS	T	0.0	334	0.03	0.00	7.0	NA	NA		-		NO	NO	NO
New Zealand	T2	D	T	0.1	351	0.03	0.00	11.0	NA	NA		-	SF6 consumption	NO	NA	NA
Norway	T2	CS	L, T	1.5	1,389	0.08	0.01	15.3	T1	D	T	0.4		10	1,000	10.0
Poland	T1c	D		0.1	54	0.61	0.06	10.0	NA	NA		-		0	NE	NE
Portugal	NA	NA		-	NO	NO	NO	-	NA	NA		-	(SF6 consumption)	NO	NO	NO
Romania			T	0.4	239	0.31	0.04	7.8	NA	NA		-	(specify)	NA	NA	NA
Russian Federation	T1b	D	L, T	0.9	C	C	C	-	D	D		0.0	(SF6 consumption)	5	1,000	4.9
Slovakia	T1	D		0.0	159	0.02	0.00	10.0	NA	NA		-		NO	NO	NO
Slovenia	T3	PS	L, T	0.6	121	0.14	0.02	8.9	NA	NA		-		NO	NO	NO
Spain	T2	PS	T	0.0	397	0.05	0.00	15.3	NA	NA		-	NO	NO	NE	NE
Sweden	T2	CS	T	0.4	103	0.38	0.04	9.0	D	D	T	0.1	SF6 consumption	4	1,000	4.2
Switzerland	T3	PS	T	0.0	45	0.03	0.00	9.0	T1	D		0.1	(specify)	C	C	2.0
Turkey								-								
Ukraine	T1	D		-	IE	IE	IE	-	NA	NA		-	Magnesium Foundries	NO	NE	NE
United Kingdom	CS	CS, PS		0.0	368	IE	IE	-	T2	PS		-	SF6 consumption	IE	IE	IE
United States	T2	CS	T	0.0	2,478	0.16	0.02	8.7	D	CS		0.0	Magnesium Production and Processing	C	C	111.3

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for PFCs for all subcategories within the category 2.C Metal production.

[b] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for SF_6 for all subcategories within the category 2.C Metal production.

[c] Source of default emission factors: IPCC good practice guidance, page 3.44.

[d] The default SF_6 emission factor is 1 kg/t magnesium produced or smelted.

[e] IPCC good practice guidance state that SF_6 emissions equal consumption (IPCC good practice, page 3.48).

Table 2.11

CF_4 emissions from aluminium production - trend information

CF_4 emissions (t)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	511.8	203.6	0.1	-29.2	-7.8	-12.1	44.8	-35.7	12.3	40.0	-3.0	-2.6	1.2	5.4	-60.2
Austria	137.3	NO	0	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	905.4	419.1	6.3	-8.4	1.0	-1.4	2.5	-17.2	-7.4	-19.1	-14.5	1.4	0.7	0.0	-53.7
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	1,532.5	228.2	-10.1	-4.1	-5.1	-2.3	-2.2	-4.6	-28.9	-14.6	51.5	-31.2	-34.6	-25.8	-85.1
Finland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	368.6	79.4	-13.9	-16.5	-14.2	2.9	27.2	32.8	-37.9	-23.3	99.1	-14.7	-42.6	-43.4	-78.5
Germany	335.5	45.3	-14.5	5.4	-5.3	-26.8	8.4	-26.2	-58.6	4.3	16.0	9.7	-5.7	-24.5	-86.5
Greece															
Hungary	36.2	28.0	-13.7	5.0	-4.5	-0.3	7.6	2.4	20.3	-5.8	1.6	-6.7	6.2	3.9	-22.6
Iceland	54.6	3.4	-17.0	32.0	-57.3	227.5	118.7	-3.8	-26.6	-27.9	-20.9	-17.6	-35.5	-32.4	-93.8
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	198.3	23.5	-21.9	-12.6	-49.2	1.8	0.6	-0.7	37.8	17.8	-15.2	34.7	-41.2	15.0	-88.1
Japan	NE	2.0	*	*	-5.4	-9.8	-16.9	-41.1	-39.0	-11.7	-5.6	2.0	-2.1	0.0	*
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	277.3	11.2	-0.8	-3.0	11.5	6.8	-26.4	-25.8	4.7	-4.5	53.6	-77.7	-74.4	-17.4	-96.0
New Zealand	68.0	11.0	24.1	-20.8	57.9	-30.0	-52.4	0	-23.0	0	42.9	0	0	0	-83.8
Norway	467.4	116.7	-10.9	-1.2	-8.8	-11.1	-8.8	-6.5	-5.0	0.6	7.4	-37.6	-2.8	-4.4	-75.0
Poland	33.7	32.7	*	*	-6.1	3.3	1.0	-5.9	-7.9	16.3	7.6	-2.6	3.0	-9.1	-3.1
Portugal	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	451.4	74.1	-8.2	19.0	-0.3	-78.7	6.7	-0.4	-0.5	3.8	3.8	6.1	8.7	11.1	-83.6
Russian Federation	1,930.0	2,530.2	-6.2	9.0	-0.8	1.0	3.9	5.8	3.5	2.2	1.9	4.3	3.9	2.0	31.1
Slovakia	36.6	2.7	-1.6	-13.4	-69.7	-3.4	-33.1	-49.4	0.6	0.2	-0.2	83.0	-7.4	3.8	-92.6
Slovenia	37.2	16.4	17.5	1.4	-16.2	-18.8	-23.2	-30.2	0	0	10.3	2.7	0.6	2.5	-56.0
Spain	122.2	20.2	-6.4	1.6	-4.9	2.2	-7.5	-9.9	-44.8	-48.6	5.0	-4.4	-3.6	-20.6	-83.5
Sweden	58.5	39.0	-1.9	10.3	-13.2	-8.6	-3.1	10.0	-17.9	-1.8	9.1	0.1	1.1	2.4	-33.4
Switzerland	13.3	1.4	-15.6	-20.7	17.9	-6.3	6.8	-8.7	-31.2	2.1	10.7	9.2	-4.1	-6.9	-89.4
Turkey															
Ukraine	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	2,440.1	391.0	-16.1	-1.7	5.4	-11.6	-18.1	-1.6	1.8	-60.8	50.3	-28.2	-26.3	4.9	-84.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.12

Production of halocarbons and SF_6 (2005)

	HFCs							PFCs		SF_6	
	Methods and EF used[a]		Production of HCFC-22					Methods and EF used[a]		Methods and EF used[a]	
					Activity data (HCFC-22 production)		IEF				
	Methods	EF	Key category	Share of national total	CRF	International[b]	HFC-23	Methods	EF	Methods	EF
				(%)	(t)		(kg/t)				
IPCC default EF[c]							40.0				
Australia	NA	NA	T	-	NO	0	NO	NA	NA	NA	NA
Austria	NA	NA		-	NO	0	NA	NA	NA	NA	NA
Belarus	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Belgium				-	NO	0	NO				
Bulgaria	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Canada	NA	NA		-	NA	93	NO	NA	NA	NA	NA
Croatia						0					
Czech Republic	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Denmark	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Estonia	NA	NA		-	NO	0	NO	NA	NA	NA	NA
European Community			T	0.1	NE	4,498	NE				
Finland				-	NO	0	NO			NA	NA
France	CR	PS	T	0.1	1,000,000	1,537	0.0	CR	PS	CR	PS
Germany				-	NE	380	C	NA	NA	NA	NA
Greece						254					
Hungary	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Iceland	NA	NA		-	0	0	NO	NA	NA	NA	NA
Ireland	NA	NA		-	NA	0	NA	NA	NA	NA	NA
Italy				-	C	0	NA	NA	NA	NA	NA
Japan	CS	CS		0.0	65,715	1,042	0.6	CS	CS	CS	CS
Latvia	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Liechtenstein	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Lithuania	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Luxembourg	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Monaco	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Netherlands	T2	PS	T	0.1	C	867	C	NA	NA	NA	NA
New Zealand	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Norway	NA	NA		0	0	0	0	NA	NA	NA	NA
Poland	NA	NA		-	NE	0	NE	NA	NA	NA	NA
Portugal	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Romania	NA	NA		-	NA	0	NA	NA	NA	NA	NA
Russian Federation	D	D	T	0.7	30,279	222	40.0	NA	NA	NA	NA
Slovakia	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Slovenia	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Spain	T2	PS	T	0.1	C	579	C	NA	NA	NA	NA
Sweden	NA	NA		-	NO	-2	NO	NA	NA	NA	NA
Switzerland	NA	NA		-	NO	0	NO	NA	NA	NA	NA
Turkey						0					
Ukraine	NA	NA		-	NE	0	NE	NA	NA	NA	NA
United Kingdom[d]				-	IE	882	IE			NA	NA
United States	M, T2	CS, M	T	0.2	156,425	6,009	9.0	NA	NA	NA	NA

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for HFCs, PFCs and SF6 for all subcategories within the category 2.E Production of halocarbons and SF_6.

[b] Source of data for HCFC production: Ozone secretariat, downloaded from web site 2 September 2007 http://ozone.unep.org/Data_Reporting/Data_Access/. Data are for total HCFC production in units of ODP (ozone depleting potential).

[c] Source of default emission factors: IPCC Guidelines, volume 3, page 2.35.

[d] The United Kingdom reported aggregated HFC emissions from 2.E.1 Production and 2.E.2 Fugitive.

Table 2.13

HFC-23 emissions from production of halocarbons and SF_6 - trend information

HFC-23 emissions (t)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	96	NO	0	-11.4	*	*	*	*	*	*	*	*	*	*	*
Austria	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	834	293	-5.5	8.3	13.0	4.6	3.8	-15.3	-13.3	-46.2	-23.4	-7.3	-25.1	-6.5	-64.9
Finland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	140	29	30.3	-76.2	73.8	-6.7	-37.9	98.7	-19.5	4.4	3.3	-34.4	25.2	12.7	-79.0
Germany	C	C	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	30	NA	0	0	*	*	*	*	*	*	*	*	*	*	*
Japan	NE	42	*	*	-8.0	-5.9	-6.1	2.3	-11.9	-24.7	-34.9	-17.4	-79.2	-53.6	*
Latvia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NE	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	379	17	-22.1	-8.3	19.6	-2.6	16.1	-55.8	-29.6	-81.4	52.2	-39.4	-14.6	-44.7	-95.6
New Zealand	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	NO	0	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	680	1,211	76.5	8.9	-22.1	59.6	0.0	14.1	12.3	11.0	-26.0	-1.0	-1.0	46.9	78.1
Slovakia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	205	29	-9.3	34.1	9.0	14.4	-12.2	16.0	7.3	-54.1	-64.6	52.9	-71.1	-26.5	-86.1
Sweden	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	2,990	1,413	-12.0	-14.4	15.2	-3.8	34.0	-24.2	-2.1	-33.5	-0.1	-37.7	26.5	6.0	-52.7

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 2.14a

Consumption of halocarbons and SF_6 - HFCs (2005)

	Methods and EF used[a]		HFC-23			HFC-32			HFC-41			HFC-43-10mee			HFC-125		
	Methods	EF	P[b] 2.F(p) (Gg CO_2 equivalent)	A[c] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A	P[b] 2.F(p) (Gg CO_2 equivalent)	A[c] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A	P[b] 2.F(p) (Gg CO_2 equivalent)	A[c] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A	P[b] 2.F(p) (Gg CO_2 equivalent)	A[c] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A	P[b] 2.F(p) (Gg CO_2 equivalent)	A[c] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A
Australia	M	D	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	IE, NE, NO	645.53	IE, NE, NO
Austria	CS	CS	37.37	26.29	1.42	9.91	3.60	2.76	NE, NO	NO	NE, NO	1.91	1.89	1.01	340.39	149.86	2.27
Belarus	D	D	NE, NO	1.19	NE, NO	NE, NO	0.02	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	6.97	NE, NO
Belgium			-1.40	0	0	-0.15	7.28	-0.02	NE, NO	0	NE, NO	NE, NO	0	NE, NO	-6.55	293.73	-0.02
Bulgaria	NA	NA	NA, NE, NO	NE, NO	NA, NE, NO	5.49	NE, NO	NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	107.61	NE, NO	NE, NO
Canada	T2	D	6.88	7.10	0.97	22.53	6.06	3.72	IE, NO	IE, NA, NE, NO	IE, NA, NE, NO	1.48	2.03	0.73	1,373.28	837.46	1.64
Croatia																	
Czech Republic	D, T1, T2	D	15.09	15.09	1.00	12.58	10.03	1.25	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	194.04	133.39	1.45
Denmark			NO	NA, NO	NA, NO	13.92	8.89	1.57	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	271.07	189.65	1.43
Estonia	T1a	D	NA, NO	NA, NO	NA, NO	0.55	NA, NO	NA, NO	NO	NA, NO	NA, NO	0.01	NA, NO	NA, NO	40.68	NA, NO	NA, NO
European Community			IE	1,514.69	IE	IE	398.89	IE	IE	NA, NE, NO	IE, NA, NE, NO	IE	266.76	IE	IE	6,272.19	IE
Finland	OTH, T1, T2	D	C, NO	C, NA, NE, NO	C, NA, NE, NO	18.28	10.53	1.74	NO	NO	NO	NO	NO	NO	337.30	230.18	1.47
France	CR, M, T2	CS, PS	NE	28.41	NE	NE	66.21	NE	NE	NO	NE, NO	NE	264.88	NE	NE	1,373.97	NE
Germany	CS, T2	CS, D	2,190.09	149.48	14.65	511.42	25.34	20.18	NO	NA, NO	NA, NO	C, NO	C, IE, NE, NO	C, IE, NE, NO	14,558.52	1,481.02	9.83
Greece																	
Hungary	CS, D, T1	CS	2.28	0.77	2.95	9.08	5.80	1.57	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	197.74	128.63	1.54
Iceland	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO	0.21	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	30.12	NA, NE, NO	NA, NE, NO
Ireland	T1, T2, T3	CS	19.82	3.02	6.57	6.99	1.75	4.00	NO	NO	NO	NO	NO	NO	120.73	55.24	2.19
Italy	CS, T2	CS, D, PS	NA, NO	24.15	NA, NO	31.85	235.27	0.14	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	1,131.20	1,643.17	0.69
Japan	CS, T1	CS, D	14,575.86	121.93	119.55	IE, NE	72.93	IE, NE	NO	IE, NA, NE, NO	IE, NA, NE, NO	NO	E, NA, NE, NO	IE, NA, NE, NO	IE, NE	314.19	IE, NE
Latvia	OTH, T2	D, OTH	NO	NE, NO	NE, NO	0.88	0.00	848.13	NO	NO	NO	NO	NO	NO	32.68	0.03	1,228.74
Liechtenstein	CS	CS	NO	NO	NO	NO	0.04	NO	NO	NO	NO	NO	NO	NO	NO	0.96	NO
Lithuania			NE, NO	NE, NO	NE, NO	NE, NO	0.03	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	3.31	NE, NO
Luxembourg	CS	CS	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO
Monaco	T1a	D	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	0.10	NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	0.55	NE, NO
Netherlands	T2	CS	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	840.00	241.10	3.48
New Zealand	D, T2	CS, D	NA, NO	NA, NO	NA, NO	4.54	3.12	1.46	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	254.42	174.72	1.46
Norway	OTH, T2	CS, OTH	2.73	1.36	2.01	8.64	2.95	2.93	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	199.05	133.83	1.49
Poland	T1a, T1b, T2	D	2.81	2.46	1.14	9.45	4.28	2.21	NE, NO	NA, NE	NA, NE, NO	NE, NO	NA, NE	NA, NE, NO	324.83	236.01	1.38
Portugal			0.51	16.20	0.03	483.06	2.02	239.35	NO	NO	NO	NO	NO	NO	2,950.38	41.66	70.82
Romania	T2	D	NA, NE	0.26	NA, NE	1.89	0.00	584.66	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	38.12	0.29	132.60
Russian Federation	D	D	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE
Slovakia	D	CS	0.09	0.91	0.10	9.23	4.61	2.00	NO	NO	NO	NO	NO	NO	98.45	34.93	2.82
Slovenia	T2	D	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
Spain	D, T1, T2	D	NE	1,266.33	NE	C, NE	NA, NO	C, NA, NE, NO	NE	NA, NO	NA, NE, NO	NE	NA, NO	NA, NE, NO	NE	321.06	NE
Sweden	CS, T1, T2	CS, D, PS	NA, NE, NO	0.81	NA, NE, NO	14.06	2.65	5.30	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	215.87	67.57	3.19
Switzerland	T2	CS, D, M	9.03	3.52	2.57	27.02	5.57	4.85	NO	NO	NO	NO	NO	NO	430.15	126.36	3.40
Turkey																	
Ukraine	NA	NA	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
United Kingdom	T2, T3	CS	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO
United States	M, OTH, T2	CS, M	879.78	239.82	3.67	1,791.50	625.64	2.86	NE, NO	NA, NO	NA, NE, NO	C, IE, NE	C, NA, NO	C, IE, NA, NE, NO	39,884.63	19,783.17	2.02

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all HFCs for all subcategories within the category 2.F Consumption of halocarbons and SF_6.

[b] P = Potential emissions

[c] A = Actual emissions

Table 2.14b

Consumption of halocarbons and SF_6 - HFCs (2005)

	Methods and EF used[a]		HFC-134			HFC-134a			HFC-152a			HFC-143			HFC-143a		
	Methods	EF	P[b] 2.F(p) (Gg CO2 equivalent)	A[c] 2.F(a) (Gg CO2 equivalent)	Ratio P / A	P[b] 2.F(p) (Gg CO2 equivalent)	A[c] 2.F(a) (Gg CO2 equivalent)	Ratio P / A	P[b] 2.F(p) (Gg CO2 equivalent)	A[c] 2.F(a) (Gg CO2 equivalent)	Ratio P / A	P[b] 2.F(p) (Gg CO2 equivalent)	A[c] 2.F(a) (Gg CO2 equivalent)	Ratio P / A	P[b] 2.F(p) (Gg CO2 equivalent)	A[c] 2.F(a) (Gg CO2 equivalent)	Ratio P / A
Australia	M	D	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	IE, NE, NO	2,480.28	IE, NE, NO	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	IE, NE, NO	898.23	IE, NE, NO
Austria	CS	CS	NE, NO	NO	NE, NO	560.54	427.23	1.31	41.69	80.31	0.52	NE, NO	NO	NE, NO	404.15	169.00	2.39
Belarus	D	D	NE, NO	2.12	NE, NO	NE, NO	5.20	NE, NO	NE, NO	0.00	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	10.68	NE, NO
Belgium			NE, NO	0	NE, NO	-2.91	715.20	0.00	-0.01	28.57	0.00	NE, NO	0	NE, NO	-0.38	398.03	0.00
Bulgaria	NA	NA	NA, NE, NO	NE, NO	NA, NE, NO	117.69	NE, NO	NE, NO	26.88	NE, NO	NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	129.17	NE, NO	NE, NO
Canada	T2	D	IE, NO	IE, NA, NE, NO	IE, NA, NE, NO	3,818.04	2,816.79	1.36	130.30	128.58	1.01	IE, NO	IE, NA, NE, NO	IE, NA, NE, NO	1,732.48	1,034.94	1.67
Croatia																	
Czech Republic	D, T1, T2	D	NA, NE, NO	NO	NA, NE, NO	770.73	273.40	2.82	0.07	0.02	3.37	NA, NE, NO	NO	NA, NE, NO	214.21	135.44	1.58
Denmark			NO	NA, NO	NA, NO	365.48	377.39	0.97	0.77	0.25	3.14	NO	NA, NO	NA, NO	331.18	228.96	1.45
Estonia	T1a	D	NO	NA, NO	NA, NO	377.73	7.88	47.93	21.39	NA, NO	NA, NO	NO	NA, NO	NA, NO	55.84	NA, NO	NA, NO
European Community			IE	NA, NE, NO	IE, NA, NE, NO	IE	22,711.69	IE	IE	360.13	IE	IE	NA, NE, NO	IE, NA, NE, NO	IE	6,501.89	IE
Finland	OTH, T1, T2	D	NO	NO	NO	565.50	279.28	2.02	13.02	0.30	42.84	NO	NO	NO	375.15	266.34	1.41
France	CR, M, T2	CS, PS	NE	NO	NE, NO	NE	6,652.42	NE	NE	43.91	NE	NE	NO	NE, NO	NE	1,827.21	NE
Germany	CS, T2	CS, D	NO	NA, NO	NA, NO	42,475.90	5,195.10	8.18	18.25	109.35	0.17	NO	NA, NO	NA, NO	18,156.50	1,785.30	10.17
Greece																	
Hungary	CS, D, T1	CS	NO	NA, NO	NA, NO	379.02	218.68	1.73	0.08	0.08	1.00	NO	NA, NO	NA, NO	243.00	161.05	1.51
Iceland	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO	10.90	NA, NE, NO	NA, NE, NO	0.05	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	35.46	NA, NE, NO	NA, NE, NO
Ireland	T1, T2, T3	CS	NO	NO	NO	1,033.70	286.34	3.61	0.97	0.95	1.03	NO	NO	NO	120.86	70.41	1.72
Italy	CS, T2	CS, D, PS	NA, NO	NO	NA, NO	5,575.70	2,363.05	2.36	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	801.80	901.48	0.89
Japan	CS, T1	CS, D	NO	IE, NA, NE, NO	IE, NA, NE, NO	20,320.04	4,620.84	4.40	IE, NE	170.37	IE, NE	NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NE	E, NA, NE, NO	IE, NA, NE, NO
Latvia	OTH, T2	D, OTH	NO	NO	NO	49.61	18.88	2.63	0.02	NO	NO	NO	NO	NO	44.60	0.03	1,289.89
Liechtenstein	CS	CS	NO	NO	NO	NO	2.13	NO	NO	NO	NO	NO	NO	NO	NO	0.94	NO
Lithuania			NE, NO	NE, NO	NE, NO	NE, NO	10.51	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	5.08	NE, NO
Luxembourg	CS	CS	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO
Monaco	T1a	D	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	1.17	NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	0.10	NE, NO
Netherlands	T2	CS	NE, NO	NO	NE, NO	689.00	415.60	1.66	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	828.40	291.31	2.84
New Zealand	D, T2	CS, D	NO	NA, NO	NA, NO	328.25	323.57	1.01	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	348.06	239.02	1.46
Norway	OTH, T2	CS, OTH	NO	0.91	NO	653.90	193.40	3.38	18.68	4.83	3.87	NO	0.12	NO	185.55	141.89	1.31
Poland	T1a, T1b, T2	D	NE, NO	NA, NE	NA, NE, NO	603.01	2,170.79	0.28	0.34	3.36	0.10	NE, NO	NA, NE	NA, NE, NO	418.82	313.92	1.33
Portugal			NO	NO	NO	1,013.90	232.45	4.36	NO	43.68	NO	NO	NO	NO	1,133.56	52.13	21.75
Romania	T2	D	NA, NE	0.19	NA, NE	165.38	3.02	54.82	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	46.18	0.19	238.09
Russian Federation	D	D	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE
Slovakia	D	CS	NO	NO	NO	145.60	91.90	1.58	0.14	0.17	0.82	NO	NO	NO	89.68	38.79	2.31
Slovenia	T2	D	NO	NA, NO	NA, NO	NE, NO	94.95	NE, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
Spain	D, T1, T2	D	NE	NA, NO	NA, NE, NO	NE	2,105.73	NE	NE	23.83	NE	NE	NA, NO	NA, NE, NO	C, NE	457.99	C, NE
Sweden	CS, T1, T2	CS, D, PS	NO	NA, NE, NO	NA, NE, NO	686.86	603.44	1.14	27.88	29.01	0.96	NO	NA, NE, NO	NA, NE, NO	198.75	73.46	2.71
Switzerland	T2	CS, D, M	NO	NO	NO	1,028.18	372.42	2.76	1.97	2.76	0.71	NO	NO	NO	445.53	124.63	3.57
Turkey																	
Ukraine	NA	NA	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
United Kingdom	T2, T3	CS	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO
United States	M, OTH, T2	CS, M	NE, NO	C, NA, NO	C, NA, NE, NO	97,822.29	74,026.21	1.32	C, IE, NE	C, NA, NO	C, IE, NA, NE, NO	NE, NO	C, NA, NO	C, NA, NE, NO	46,986.03	22,125.46	2.12

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all HFCs for all subcategories within the category 2.F Consumption of halocarbons and SF_6.

[b] P = Potential emissions

[c] A = Actual emissions

Table 2.14c

Consumption of halocarbons and SF_6 - HFCs (2005)

	Methods and EF used[a]		HFC-227ea			HFC-236fa			HFC-245ca			Unspecified HFCs			Total		
	Methods	EF	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A
			(Gg CO_2 equivalent)			(Gg CO_2 equivalent)			(Gg CO_2 equivalent)			(Gg CO_2 equivalent)			(Gg CO_2 equivalent)		
Australia	M	D	IE, NE, NO	E, NA, NE, NO	E, NA, NE, NO	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	IE, NE, NO	IE, NA, NO	E, NA, NE, NO	7,520.57	227.69	33.03	7,520.57	4,251.74	1.77
Austria	CS	CS	23.20	6.00	3.87	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	43.23	47.37	0.91	1,462.39	911.55	1.60
Belarus	D	D	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	26.19	NE, NO
Belgium			NE, NO	11.23	NE, NO	NE, NO	0	NE, NO	NE, NO	0	NE, NO	NE, NO	0	NE, NO	-11.40	1,454.05	-0.01
Bulgaria	NA	NA	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	386.84	A, NE, NO	NA, NE, NO
Canada	T2	D	65.30	11.41	5.73	2.26	E, NA, NE, NO	IE, NA, NE, NO	IE, NE, NO	IE, NA, NE, NO	E, NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	7,152.54	4,844.37	1.48
Croatia																	
Czech Republic	D, T1, T2	D	2.55	1.04	2.46	71.00	25.75	2.76	0.28	0.06	5.00	NA, NE, NO	NO	NA, NE, NO	1,280.55	594.22	2.16
Denmark			NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	982.42	805.14	1.22
Estonia	T1a	D	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	496.19	7.88	62.96
European Community			IE	449.17	IE	IE	12.45	IE	IE	NA, NE, NO	E, NA, NE, NO	154,067.10	9,326.67	16.52	154,067.10	47,814.54	3.22
Finland	OTH, T1, T2	D	C, NO	NO	C, NO	NO	NO	NO	C, NO	NO	C, NO	-7.42	77.16	-0.10	1,301.82	863.80	1.51
France	CR, M, T2	CS, PS	NE	95.02	NE	NE	NO	NE, NO	NE	NO	NE, NO	NE	NO	NE, NO	NE	10,420.91	NE
Germany	CS, T2	CS, D	1,031.72	96.54	10.69	C, NO	1.99	C, NO	NO	NA, NO	NA, NO	NO	1.82	NO	78,942.41	8,845.94	8.92
Greece																	
Hungary	CS, D, T1	CS	2.96	2.57	1.15	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	834.16	517.58	1.61
Iceland	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	0	NA, NO	NA, NO	76.74	A, NE, NO	NA, NE, NO
Ireland	T1, T2, T3	CS	143.04	13.32	10.74	NO	NO	NO	NO	NO	NO	NO	NO	NO	1,446.12	431.03	3.36
Italy	CS, T2	CS, D, PS	NA, NO	79.95	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	7,540.55	5,247.06	1.44
Japan	CS, T1	CS, D	NO	141.09	NO	NO	E, NA, NE, NO	IE, NA, NE, NO	NO	IE, NA, NE, NO	E, NA, NE, NO	30,264.05	886.84	34.13	65,159.94	6,328.19	10.30
Latvia	OTH, T2	D, OTH	NO	0.18	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	127.81	19.12	6.68
Liechtenstein	CS	CS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	4.07	15.18
Lithuania			NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	18.94	NE, NO
Luxembourg	CS	CS	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO	NE	NA, NE, NO	NA, NE, NO	NE	82.64	NE	NE	82.64	NE
Monaco	T1a	D	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	1.92	NE, NO
Netherlands	T2	CS	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	33.00	170.04	0.19	2,390.40	1,118.05	2.14
New Zealand	D, T2	CS, D	75.40	1.13	66.67	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	1,010.67	741.56	1.36
Norway	OTH, T2	CS, OTH	14.16	3.20	4.42	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	1,082.71	482.50	2.24
Poland	T1a, T1b, T2	D	NE, NO	7.69	NE, NO	NE, NO	NA, NE	NA, NE, NO	NE, NO	NA, NE	NA, NE, NO	NE, NO	NA, NE	NA, NE, NO	1,359.26	2,749.73	0.49
Portugal			NO	2.51	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	5,581.41	390.64	14.29
Romania	T2	D	NA, NE	0.05	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	251.56	4.00	62.94
Russian Federation	D	D	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	132.11	NE	NE	132.11	NE
Slovakia	D	CS	0.88	0.01	142.86	16.61	3.32	5.00	NO	NO	NO	NO	NO	NO	360.67	174.65	2.07
Slovenia	T2	D	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NE, NO	94.95	NE, NO
Spain	D, T1, T2	D	C, NE	144.57	C, NE	NE	10.46	NE	NE	NA, NO	NA, NE, NO	NE	NA, NO	NA, NE, NO	C, NE	4,329.98	C, NE
Sweden	CS, T1, T2	CS, D, PS	11.05	0.03	376.01	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	NA, NO	NA, NE, NO	NA, NE, NO	1,154.48	776.96	1.49
Switzerland	T2	CS, D, M	5.25	3.63	1.45	NO	NO	NO	NO	NO	NO	NO	NO	NO	1,947.12	638.89	3.05
Turkey																	
Ukraine	NA	NA	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	A, NE, NO	NA, NE, NO
United Kingdom	T2, T3	CS	NA, NE, NO	IE, NA, NO	E, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	E, NA, NE, NO	53,276.51	8,878.75	6.00	53,276.51	8,878.75	6.00
United States	M, OTH, T2	CS, M	C, IE, NE	C, NA, NO	E, NA, NE, NO	2,049.81	1,028.35	1.99	C, NE, NO	C, NA, NO	C, NA, NE, NO	23,821.67	5,702.36	4.18	213,235.70	123,531.01	1.73

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all HFCs for all subcategories within the category 2.F Consumption of halocarbons and SF_6.

[b] P = Potential emissions

[c] A = Actual emissions

Table 2.15a

Consumption of halocarbons and SF_6 - PFCs (2005)

	Methods and EF used[b]		CF_4			C_2F_6			C_3F_8			C_4F_{10}			c-C_4F_8		
	Methods	EF	P[c] 2.F(p) (Gg CO_2 equivalent)	A[d] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A	P[c] 2.F(p) (Gg CO_2 equivalent)	A[d] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A	P[c] 2.F(p) (Gg CO_2 equivalent)	A[d] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A	P[c] 2.F(p) (Gg CO_2 equivalent)	A[d] 2.F(a) (Gg CO_2 equivalent)	A[d] Ratio P / A	P[c] 2.F(p) (Gg CO_2 equivalent)	A[d] 2.F(a) (Gg CO_2 equivalent)	Ratio P / A
Australia	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO
Austria	CS	CS	94.33	36.98	2.55	227.19	70.55	3.22	11.20	10.08	1.11	0.07	0.36	0.20	NO	NO	NO
Belarus	NA	NA	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Belgium			NO	0	NO	NO	0	NO	NO	0	NO	NO	0	NO	NO	0	NO
Bulgaria	NA	NA	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO
Canada	T2	D	16.19	12.50	1.30	25.14	14.86	1.69	0.10	0.72	0.14	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO
Croatia																	
Czech Republic	D	D	NA, NE, NO	NO	NA, NE, NO	6.07	4.04	1.50	7.70	5.95	1.29	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO
Denmark			NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	3.15	13.90	0.23	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
Estonia	NA	NA	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
European Community			IE	370.68	IE	IE	677.85	IE	IE	285.83	IE	IE	4.05	IE	IE	18.22	IE
Finland	T1, T2	D	C, NO	C, NA, NO	C, NA, NO	C, NO	C, NA, NO	C, NA, NO	11.17	8.93	1.25	NO	NO	NO	NO	C, NO	C, NO
France	CR, T2	CS, PS	NE	116.35	NE	NE	251.43	NE	NE	6.57	NE	NE	NO	NE, NO	NE	2.77	NE
Germany	CS, T2	CS, D	IE, NO	98.31	IE, NO	329.73	138.77	2.38	515.30	142.14	3.63	IE, NO	NA, NO	IE, NA, NO	IE, NO	1.51	IE, NO
Greece																	
Hungary	CS	CS	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	2.98	1.55	1.91	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
Iceland	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO
Ireland	T2	CS	50.49	34.16	1.48	247.71	135.88	1.82	NO	NO	NO	NO	NO	NO	6.00	3.92	1.53
Italy	CS	PS	148.86	84.89	1.75	111.45	81.22	1.37	17.92	4.29	4.18	NO	NO	NO	28.96	10.02	2.89
Japan	CS, T1	CS, D	3,584.75	IE, NA, NE, NO	IE, NA, NE, NO	IE, NE	IE, NA, NE, NO	IE, NA, NE, NO	IE, NE	IE, NA, NE, NO	IE, NA, NE, NO	NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NE	IE, NA, NE, NO	IE, NA, NE, NO
Latvia	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Liechtenstein	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Lithuania	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Luxembourg	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Monaco	T1a	D	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	0.06	NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO
Netherlands	CS, T2	PS	C, NE	NO	C, NE, NO	C, NE	NO	C, NE, NO	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO
New Zealand	NA	NA	IE, NA, NO	NA, NO	IE, NA, NO	IE, NA, NO	NA, NO	IE, NA, NO	NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Norway			NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	0.25	0.39	0.65	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
Poland	T1a, T2	D	NE, NO	NA, NE	NA, NE, NO	NE, NO	NA, NE	NA, NE, NO	NE, NO	NA, NE	NA, NE, NO	NE, NO	18.35	NE, NO	NE, NO	NA, NE	NA, NE, NO
Portugal	NA	NA	NO	NO	NO	0.07	NO	NO	1.68	NO	NO	NO	NO	NO	NO	NO	NO
Romania			NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE
Russian Federation	NA	NA	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE
Slovakia	D	CS	0.20	0.20	1.00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Slovenia	NA	NA	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
Spain	T1, T2	D	NE	NA, NO	NA, NE, NO	NE	NA, NO	NA, NE, NO	NE	97.53	NE	NE	3.69	NE	NE	NA, NO	NA, NE, NO
Sweden	CS, T1	CS, D	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	21.84	2.39	9.14	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO
Switzerland	T1, T2	D, M	17.21	13.42	1.28	22.45	12.05	1.86	25.99	4.08	6.37	NO	NO	NO	0.90	0.50	1.82
Turkey																	
Ukraine	NA	NA	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
United Kingdom	T1, T2, T3	CS	IE, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO
United States	M, OTH, T2	CS, M	1,063.17	1,071.14	0.99	2,769.56	1,938.69	1.43	74.61	29.84	2.50	C, IE, NE, NO	C, NA, NO	IE, NA, NE, NO	370.93	111.28	3.33

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all PFCs and SF$_6$ for all subcategories within the category 2.F Consumption of halocarbons and SF$_6$

[b] P = Potential emissions

[c] A = Actual emissions

Table 2.15b

Consumption of halocarbons and SF_6 - PFCs (2005)

	Methods and EF used[a]		C_5F_{12}			C_6F_{14}			Unspecified PFCs			Total		
	Methods	EF	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A	P[b] 2.F(p)	A[c] 2.F(a)	Ratio P / A
			($Gg CO_2$ equivalent)			($Gg CO_2$ equivalent)			($Gg CO_2$ equivalent)			($Gg CO_2$ equivalent)		
Australia	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO
Austria	CS	CS	NO	NO	NO	NO	NO	NO	NO	NO	NO	332.79	117.97	2.82
Belarus	NA	NA	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NA, NE, NO	NA, NE, NO
Belgium			NO	0	NO	NO	0	NO	NO	0	NO	NO	0	NO
Bulgaria	NA	NA	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
Canada	T2	D	NO	0.01	NO	1.66	1.67	1.00	NO	NA, NE, NO	NA, NE, NO	43.10	29.75	1.45
Croatia														
Czech Republic	D	D	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	13.77	9.99	1.38
Denmark			NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	3.15	13.90	0.23
Estonia	NA	NA	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
European Community			IE	NA, NO	IE, NA, NO	IE	217.14	IE	1,974.73	265.19	7.45	1,974.73	1,838.95	1.07
Finland	T1, T2	D	NO	NO	NO	NO	NO	NO	0.65	0.94	0.69	11.82	9.88	1.20
France	CR, T2	CS, PS	NE	NO	NE, NO	NE	217.14	NE	NE	NO	NE, NO	NE	594.26	NE
Germany	CS, T2	CS, D	IE, NO	NA, NO	IE, NA, NO	IE, NO	NA, NO	IE, NA, NO	IE, NO	NA, NO	IE, NA, NO	845.03	380.72	2.22
Greece														
Hungary	CS	CS	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	2.98	1.55	1.91
Iceland	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	0	NA, NO	NA, NO	NE, NO	NA, NE, NO	NA, NE, NO
Ireland	T2	CS	NO	NO	NO	NO	NO	NO	NO	NO	NO	304.21	173.95	1.75
Italy	CS	PS	NO	NO	NO	NO	NO	NO	NO	NO	NO	307.19	180.42	1.70
Japan	CS, T1	CS, D	IE, NE	IE, NA, NE, NO	IE, NA, NE, NO	IE, NE	IE, NA, NE, NO	IE, NA, NE, NO	14,048.47	4,951.00	2.84	17,633.22	4,951.00	3.56
Latvia	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA, NO	NA, NO
Liechtenstein	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA, NO	NA, NO
Lithuania	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA, NO	NA, NO
Luxembourg	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NA, NO	NA, NO
Monaco	T1a	D	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	0.06	NE, NO
Netherlands	CS, T2	PS	NE, NO	NO	NE, NO	NE, NO	NO	NE, NO	C, NE	178.19	C, NE	C, NE, NO	178.19	C, NE, NO
New Zealand	NA	NA	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	IE, NA, NO	NA, NO	IE, NA, NO
Norway			NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	0.25	0.39	0.65
Poland	T1a, T2	D	NE, NO	NA, NE	NA, NE, NO	NE, NO	NA, NE	NA, NE, NO	NE, NO	NA	NA, NE, NO	NE, NO	18.35	NE, NO
Portugal	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	1.75	NA, NO	NA, NO
Romania			NA, NE	0.08	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	0.08	NA, NE
Russian Federation	NA	NA	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE	NE	NA, NE	NA, NE
Slovakia	D	CS	NO	NO	NO	NO	NO	NO	NO	NO	NO	0.20	0.20	1.00
Slovenia	NA	NA	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
Spain	T1, T2	D	NE	NA, NO	NA, NE, NO	NE	NA, NO	NA, NE, NO	NE	NA, NO	NA, NE, NO	NE	101.22	NE
Sweden	CS, T1	CS, D	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	NO	NA, NE, NO	NA, NE, NO	21.84	2.39	9.14
Switzerland	T1, T2	D, M	NO	NO	NO	18.77	15.68	1.20	NO	NO	NO	85.33	45.72	1.87
Turkey														
Ukraine	NA	NA	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NA, NE, NO	NA, NE, NO
United Kingdom	T1, T2, T3	CS	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	NA, NE, NO	IE, NA, NO	IE, NA, NE, NO	146.95	86.06	1.71	146.95	86.06	1.71
United States	M, OTH, T2	CS, M	C, IE, NE, NO	C, NA, NO	IE, NA, NE, NO	C, IE, NE, NO	C, NA, NO	IE, NA, NE, NO	IE, NE, NO	NA, NO	IE, NA, NE, NO	4,278.27	3,150.96	1.36

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all PFCs and SF_6 for all subcategories within the category 2.F Consumption of halocarbons and SF_6.

[b] P = Potential emissions

[c] A = Actual emissions

Table 2.16

Consumption of halocarbons and SF_6 - SF_6 (2005)

	Methods and EF used		SF_6		
	Methods	EF	P[a] 2.F(p)	A[b] 2.F(a)	Ratio P / A
			(Gg CO_2 equivalent)		
Australia	T2	CS	NE, NO	521.02	NE, NO
Austria	CS	CS	473.65	286.77	1.65
Belarus	D	D	NE, NO	1.48	NE, NO
Belgium			NE, NO	43.04	2.64
Bulgaria	D	D	0.96	4.42	0.22
Canada	T1, T2	D, OTH	2,754.57	1,198.98	2.30
Croatia					
Czech Republic	D, T1, T3	D	156.88	85.88	1.83
Denmark			85.56	21.75	3.93
Estonia	T1a	D	NA, NO	5.87	NA, NO
European Community			6,116.23	5,643.75	1.08
Finland	T2, T3	OTH	103.68	19.56	5.30
France	CR, T2	CS, PS	NE	803.70	NE
Germany	CS, T3	CS	2,303.98	2,478.30	0.93
Greece					
Hungary	CS, D, T1	CS	237.28	201.02	1.18
Iceland	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO
Ireland	T1, T2	CS	198.51	95.96	2.07
Italy	CS, T3	CS, PS	1,541.84	375.47	4.11
Japan	CS, T1	CS, D	40,085.08	2,225.07	18.02
Latvia	T2	D	NE, NO	7.53	NE, NO
Liechtenstein	CS	CS	1.79	0.06	31.64
Lithuania	T1	CS	NE, NO	1.38	NE, NO
Luxembourg	CS	CS	NE	3.78	NE
Monaco	NA	NA	NE, NO	NA, NE, NO	NA, NE, NO
Netherlands	CS, T2	D, PS	C, NE	337.25	C, NE
New Zealand	T2, T3	CS	15.06	21.84	0.69
Norway	T2	CS	NE, NO	71.88	3.90
Poland			NE, NO	23.83	NE, NO
Portugal	T3	CS	19.68	10.21	1.93
Romania	T2	D	NA, NE	0.11	NA, NE
Russian Federation	OTH	OTH	NE	22.88	NE
Slovakia	D	CS	92.25	16.61	5.55
Slovenia	T2	D	NE, NO	18.84	NE, NO
Spain	T2	D	NE	271.63	NE
Sweden	CS, D	CS, D, PS	37.69	42.52	0.89
Switzerland			846.42	149.81	5.65
Turkey					
Ukraine	NA	NA	NE, NO	NE, NO	NE, NO
United Kingdom	OTH, T3	CS, OTH	1,237.81	855.17	1.45
United States	M, T2	CS, M	24,041.49	14,174.88	1.70

[a] P = Potential emissions

[b] A = Actual emissions

Table 3.1

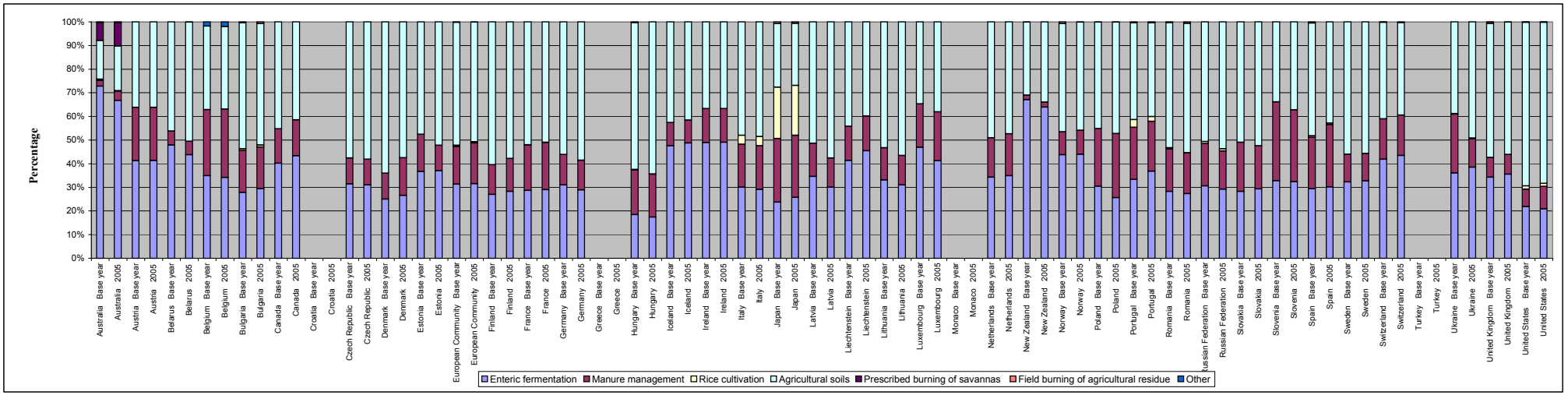
Solvent and other product use, CO_2 and N_2O (2005)

	Methods and EF used[a]		Key category (CO_2)	Methods and EF used[a]		Key category (N_2O)	Paint application		Degreasing and dry cleaning			
	CO_2			N_2O			CO_2		CO_2		N_2O	
	Methods	EF		Methods	EF		Share of national total (%)	CO_2 IEF (t/t)	Share of national total (%)	CO_2 IEF (t/t)	Share of national total (%)	N_2O IEF (t/t)
Australia	NA	NA		NA	NA		-	NA	-	NA	-	NA
Austria	CR, CS	CS	T	CS	D		0.1	1.16	0.0	1.50	-	NA
Belarus	NA	NA		T1	D		-	NA	-	NA	-	NA
Belgium	NA	NA					-	NE	-	NE	-	NE
Bulgaria	NA	NA		NA	NA		-	NE	-	NE	-	NA
Canada	NA	NA		D	OTH		-	NA	-	NA	-	NA
Croatia												
Czech Republic	CR	CS		D	D		0.1	3.14	0.0	3.14	-	NA
Denmark	OTH	OTH		NA	NA		0.1	0.07	0.0	0.26	-	NA
Estonia	NA	NA		NA	NA		-	NA	-	NA	-	NA
European Community							0.1	NE	0.0	NE	0	NE
Finland	T2	D		CS	CS		0.0	2.20	0.0	2.20	-	NO
France	CR	CS, PS		CR	CS		0.1	2.60	0.0	1.03	-	NA
Germany	NA	NA		CS	CS		-	NE	-	NE	-	NE
Greece												
Hungary	CS	CS		CS, T2	PS		0.1	0.62	0.0	0.22	-	NO
Iceland	NA	NA					-	NE	-	NE	-	NA
Ireland	CR, CS	CR		NA	NA		0.0	3.12	0.0	3.12	-	NA
Italy	CR, CS	CR, CS		CS	CS		0.1	0.74	0.0	2.11	-	NA
Japan	NA	NA		CS	OTH		-	NA	-	NE	-	NA
Latvia	CR	CR		CS	CS		0.2	1.13	0.1	0.00	-	NO
Liechtenstein	CS	CS	T	CS	CS		0.1	0.39	0.0	NA	-	NO
Lithuania	CR	D		NA	NA		0.2	3.12	0.1	3.12	-	NE
Luxembourg	CR	CR		NA	NA		0.0	0.92	0.0	2.90	-	NE
Monaco	NA	NA		NA	NA		-	NE	-	NE	-	NE
Netherlands	CS	CS		CS	CS		0.0	2.96	0.0	0.51	-	NO
New Zealand	NA	NA		D	D		-	NA	-	NA	-	NA
Norway	T2	CS		CS	CS		0.0	0	0.0	0	-	NA
Poland	CS	CS		CS	CS		0.1	3.12	0.0	3.12	-	NE
Portugal	D	CR, CS, OTH		NA	NA		0.1	0.46	0.0	3.12	-	NO
Romania	CR	CR		NA	NA		0.1	NE	0.0	NE	-	NE
Russian Federation	NA	NA		CS	CS		-	NE	-	NE	-	NE
Slovakia	NA	NA		D	CS		-	NE	-	NE	-	NE
Slovenia	NA	NA		D	D		-	NO	-	NE	-	NE
Spain	D	CR		CS	CS		0.1	0.62	0.0	2.83	-	NA
Sweden	CS	CS	T	CS	CS	T	0.1	1.60	0.0	0.57	-	NA
Switzerland	CS	CS	T	CS	CS	T	0.1	0.39	0.0	NA	-	NO
Turkey												
Ukraine	NA	NA		OTH	OTH		-	NE	-	NE	-	NE
United Kingdom	NA	NA		NA	NA		-	NE	-	NE	-	NE
United States	NA	NA		D	D		-	NE	-	NE	-	NE

[a] Information on methods and emission factors in this table is as reported by Parties in the table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the Solvent and other product use sector.

Figure 4.1

Contribution of subsectors to total GHG emissions in the Agriculture sector [a]



[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.1

Enteric fermentation, CH_4 (2005)

	Key category	Share of national total	Methods and EF used[a]		Cattle					Sheep				Swine			
					Activity data (population size)			Dairy cattle	Non-dairy cattle	Activity data (population size)			CH_4 IEF	Activity data (population size)			CH_4 IEF
			Methods	EF	CRF	FAO[b]	Difference	CH_4 IEF		CRF	FAO[b]	Difference		CRF	FAO[b]	Difference	
		(%)			(thousands of head)		(%)	(kg/head/yr)		(thousands of head)		(%)	(kg/head/yr)	(thousands of head)		(%)	(kg/head/yr)
IPCC default EF[c]								56-118[d]	44-56[d]				8.0				1.5
Australia	L, T	11.2	CS, T1, T2	CS, D	26,173	27,782	6.1	113	72	101,287	101,125	-0.2	6.8	2,543	2,538	-0.2	1.4
Austria	L, T	3.5	T1, T2	CS, D	2,011	2,051	2.0	115	56	326	327	0.4	8.0	3,170	3,209	1.3	1.5
Belarus	L	7.5	T1	D	3,980	3,963	-0.4	81	56	53	59	11.3	8.0	3,545	3,407	-3.9	1.5
Belgium	L, T	2.7			2,698	2,699	0.0	103	48	153	152	-0.6	8.2	6,318	6,318	0.0	1.5
Bulgaria	L, T	2.0	T1	D	647	672	3.8	81	56	1,647	1,693	2.7	8.0	937	931	-0.61833318	1.5
Canada	L, T	3.3	T1, T2	CS, D	16,062	15,063	-6.2	135	65	641	980	52.8	8.0	14,803	14,619	-1.2	1.5
Croatia						471					796				1,205		
Czech Republic	L, T	1.7	T1, T2	CS, D	1,397	1,397	0.0	114	53	140	140	0.1	8.0	2,877	2,877	0.0	1.5
Denmark	L, T	4.0	T1	CS	1,544	1,546	0.1	128	35	88	256	191.4	17.2	13,466	13,466	0	1.1
Estonia	L, T	2.1	T1, T2	CS, D	250	250	0.1	121	49	50	38	-23.2	8.0	347	340	-1.8	0.8
European Community	L, T	2.9	CR, CS, D, M, T1, T2	CR, CS, D	76,672	77,361	0.9	110	47	99,274			6.8	115,989	123,120	6.1	1.4
Finland	L, T	2.3	CS, D, T1, T2	CS, D	959	959	0.0	119	IE	90	90	0.0	8.2	1,401	1,401	0.0	1.5
France	L, T	5.0	CR	CS, D	19,586	19,310	-1.4	104	52	9,136	9,097	-0.4	8.0	9,875	14,951	51.4	1.5
Germany	L, T	1.8	CS, D, T1, T2	CS, D	13,036	13,035	0.0	113	37	2,643	2,714	2.7	8.0	24,481	26,858	9.7	1.3
Greece						603					8,827				949		
Hungary	L, T	1.8	D, T1a	CS, D	720	723	0.5	100	48	1,447	1,397	-3.4	8.0	4,022	4,059	0.9	1.5
Iceland	L, T	6.2			67	63	-5.4	100	48	636	455	-28.4	8.0	33	41	23.7	1.5
Ireland	L, T	12.9	T1, T2	CS, D	6,212	6,983	12.4	107	53	6,600	6,392	-3.1	5.8	1,680	1,688	0.5	0.4
Italy	L, T	1.9	T1, T2	CS, D	6,252	6,304	0.8	113	46	7,954	8,106	1.9	8.0	9,201	8,972	-2.5	1.5
Japan	L	0.5	CS, T1	CS, D	4,211	4,402	4.5	107	60	11	11	0	4.1	9,655	9,600	-0.6	1.1
Latvia	L, T	5.3	T1	D	385	371	-3.7	81	56	42	39	-7.2	8.0	428	436	1.8	1.5
Liechtenstein	L, T	3.6	T2, T3	CS	5	6	29.7	122	81	4	3	-19.5	10.4	2	3	76.2	1.4
Lithuania	L, T	5.5	T1, T2	CS, D	800	792	-1.0	96	43	29	22	-24.1	8.0	1,115	1,073	-3.7	1.5
Luxembourg	L	1.2	T1, T2	CS	185.965	185	-0.4	122	60	10.277	10	0	7.9	90.147	90	0	1.5
Monaco		-	NA	NA	NO			NO	NO	NO			NO	NO			NO
Netherlands	L, T	3.0	T1, T2	CS, D	3,799	3,799	0.0	128	72	1,363	1,363	0.0	8.0	11,312	11,312	0.0	1.5
New Zealand	L, T	31.0	T1, T2	CS, D	9,584	9,501	-0.9	79	57	39,769	39,928	0.4	11.0	357	341	-4.4	1.5
Norway	L, T	3.5	T1, T2	CS, D	927	934	0.7	114	94	1,526	2,423	58.8	14.2	674	824	22.2	1.5
Poland	L, T	2.2	T1, T2	CS, D	5,483	5,483	0.0	94	47	316	316	0.0	8.1	18,112	18,112	0.0	1.5
Portugal	L, T	3.6	T2	CS	1,423	1,443	1.4	118	58	3,390	3,541	4.5	9.6	2,313	2,348	1.5	1.4
Romania	L, T	3.6	T1	D	2,817	2,808	-0.3	81	56	7,611	7,425	-2.4	5.0	6,622	6,495	-1.9	1.0
Russian Federation	L, T	1.9	CS, T1, T2	CS, D	22,988	22,988	0	101	51	15,494	15,494	0.0	8.0	13,413	13,413	0.0	1.5
Slovakia	L, T	2.0	T1, T2	CS, D	528	540	2.3	103	56	320	321	0.2	8.0	1,108	1,149	3.7	1.5
Slovenia	L, T	3.2	T1, T2	CS, D	453	451	-0.3	96	52	129	119	-7.8	8.0	547	534	-2.5	1.6
Spain	L, T	3.1	CS, T1, T2	CS, D	6,426	6,463	0.6	94	54	22,749	22,749	0.0	8.6	25,244	24,884	-1.4	1.5
Sweden	L	4.2	CS, T1, T2	CS, D	1,605	1,605	0.0	129	57	471	456	-3.2	8.0	1,811	1,811	0.0	1.5
Switzerland	L, T	4.2	T2	CS	1,547	1,545	-0.2	110	81	447	446	0.0	10.4	1,573	1,609	2.3	1.4
Turkey						10,069					25,201				4		
Ukraine	L, T	2.8	T1, T3	CS, D	6,514	6,903	6.0	104	47	872	875	0.3	8.0	7,053	6,466	-8.3	1.5
United Kingdom	L	2.4	T1	CS, D	10,353	10,378	0.2	104	43	35,241	35,253	0.0	4.7	4,696	4,862	3.5	1.5
United States	L, T	1.5	M, T1, T2	CS, D, M	99,969	95,438	-4.5	102	43	6,135	6,135	0	8.0	60,946	60,975	0.0	1.5

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.A Enteric fermentation. Cattle population and the CH4 IEF are included in this table for these Parties.

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for the various livestock types within the category CH_4 from 4.A Enteric fermentation.

[b] Source of international statistics: FAOSTAT data, downloaded on 2 September 2007 from http://faostat.fao.org/site/405/default.aspx. Data for Luxembourg are included in the data of Belgium for 1990-1999. Time-series data for Belarus, Croatia, Czech Republic, Estonia, Lativi

[c] Source of default emission factors: IPCC Guidelines, volume 3, tables 4-3 and 4-4 (pages 4.10–4.11).

[d] For dairy and non-dairy cattle, IPCC default emission factors (in kg CH4/head/year) are provided by regions as shown below (see footnote c for source reference).

	North America	Western Europe	Eastern Europe	Oceania	Asia
Dairy cattle	**118**	**100**	**81**	**68**	**56**
Non-dairy cattle	**47**	**48**	**56**	**53**	**44**

Table 4.2

CH_4 emissions from enteric fermentation - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	3,042	2,794	0.2	-0.8	-0.5	0.7	-0.1	1.1	0.5	0.6	-2.3	-1.1	-0.8	0.7	-8.1
Austria	179	154	-1.4	0.8	-1.4	-1.8	-0.8	-1.0	-0.6	-1.5	-1.8	-0.7	0.2	-1.3	-14.1
Belarus	465	271	-5.2	-5.6	-4.1	-1.3	-2.4	-6.9	-2.4	-3.2	-2.3	-2.3	0.4	-0.1	-41.6
Belgium	217	183	-0.3	0.9	-1.8	-2.0	-0.7	0.0	-1.5	0.3	-4.3	-3.4	-1.4	-1.5	-15.5
Bulgaria	193	67	-7.9	-5.4	-3.4	-3.5	2.9	1.5	-4.4	-21.5	10.9	3.7	-0.8	-5.1	-65.1
Canada	876	1,168	1.2	5.4	3.0	-0.1	-0.6	-0.5	1.2	2.8	0.7	0.4	6.1	2.2	33.4
Croatia															
Czech Republic	232	115	-5.8	-2.6	-0.9	-6.7	-6.2	2.1	-4.0	0.7	-2.3	-2.6	-3.2	1.0	-50.4
Denmark	155	125	0.1	-1.0	0.2	-3.5	-0.1	-4.2	-0.8	1.9	-2.7	-1.5	-3.3	-2.8	-19.3
Estonia	53	21	-5.7	-10.7	-6.1	-1.0	-3.5	-15.0	-1.4	4.4	-4.9	1.5	0.9	0.5	-60.1
European Community	6,485	5,801	-2.3	0.1	0.7	-1.2	-0.3	-0.1	-1.3	-0.6	-2.1	-0.6	-1.1	-0.8	-10.5
Finland	91	75	-3.8	-5.4	0.5	1.2	-2.2	-1.5	-0.2	-1.3	0.5	-1.7	-1.3	-0.6	-17.8
France	1,470	1,326	-1.8	0.4	-0.2	-1.2	-0.7	-0.3	1.0	0.3	-1.4	-2.2	-1.4	0.0	-9.8
Germany	1,147	873	-11.7	-0.3	-0.3	-3.3	-0.9	0.4	-1.9	1.6	-3.8	-0.8	-2.7	-0.3	-23.8
Greece															
Hungary	154	70	-5.7	-1.8	-0.6	-3.5	-0.5	0.5	-0.2	-4.5	-3.2	-0.9	-3.2	-1.7	-54.5
Iceland	13	11	-2.2	-3.3	1.0	1.3	1.2	-0.9	-4.4	-0.3	-2.3	-1.7	-1.5	1.0	-14.2
Ireland	445	431	1.4	0.2	2.8	2.3	1.3	-3.2	-4.6	-0.3	-1.2	-0.6	0.3	-2.0	-3.1
Italy	580	517	2.2	1.8	0.5	0.4	-0.7	1.1	-2.1	-4.1	-5.5	0.2	-2.0	0.2	-10.9
Japan	364	335	1.4	-1.1	-0.8	-0.6	-0.5	-0.8	-0.5	-0.5	-0.5	-1.3	-1.1	-0.8	-7.9
Latvia	98	28	-3.4	-3.2	-5.8	-6.2	-8.8	-13.1	-2.4	4.5	0.4	-3.5	-1.6	2.8	-71.9
Liechtenstein	0.47	0.47	-1.2	1.7	0.3	-1.5	0.3	-2.0	-3.9	8.9	-0.1	1.5	1.7	1.8	0.6
Lithuania	149	60	-6.4	-5.5	0.7	-1.6	-6.4	-5.7	-10.9	2.9	3.1	3.7	-1.8	-0.7	-60.0
Luxembourg	9	8	-2.0	1.4	0.1	-2.7	-0.8	-0.4	-2.4	0.0	-2.2	-3.4	-1.6	-0.2	-19.9
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	358	302	1.6	0.3	-4.2	-1.5	-2.8	-0.3	-4.1	2.5	-5.9	2.7	0.0	-0.1	-15.7
New Zealand	1,038	1,139	-0.8	1.4	1.2	0.3	0.6	0.9	1.7	0.9	0.2	0.1	0.7	0.7	9.7
Norway	93	91	1.4	1.0	0.3	-0.8	0.9	-0.3	-1.4	-1.8	-2.3	2.5	-2.5	0.6	-1.8
Poland	760	426	-11.0	-5.0	-3.3	3.3	2.6	-5.5	-7.1	-3.7	-3.0	-0.5	-2.9	2.2	-43.9
Portugal	125	145	1.4	4.7	2.1	-3.4	3.6	3.2	1.6	-0.6	-0.2	-2.1	3.4	0.8	15.9
Romania	563	264	-12.8	-3.6	-0.4	-2.4	-6.0	-6.0	-5.8	-2.8	2.8	1.0	-2.4	2.2	-53.1
Russian Federation	4,512	1,882	-2.9	-9.9	-10.3	-9.6	-10.5	-12.2	0.5	2.1	-0.8	-2.9	-3.2	-4.9	-58.3
Slovakia	95	45	-8.3	7.2	-6.3	-10.5	-5.7	-4.0	-1.7	3.0	-3.2	-4.3	-7.2	1.6	-52.6
Slovenia	36	31	-7.1	3.9	-3.7	-5.8	2.0	3.6	5.5	-2.4	1.0	-4.6	-0.9	0.3	-14.3
Spain	561	643	1.4	0.8	7.6	-1.0	2.4	1.2	0.5	2.6	0.6	1.5	-2.1	-1.5	14.6
Sweden	144	134	-1.8	-2.9	-0.9	0.3	-2.8	-1.0	-2.4	-1.1	-0.5	-1.8	1.5	-1.1	-7.2
Switzerland	118	108	0.3	0.7	-0.8	-1.8	-0.9	-0.7	-0.1	1.1	-0.8	-1.4	-1.0	0.1	-8.1
Turkey															
Ukraine	1,794	558	-3.2	-11.4	-11.6	-14.9	-3.6	-13.2	-10.2	2.2	0.3	-14.4	-7.2	-4.7	-68.9
United Kingdom	877	759	-1.5	-1.1	0.9	-1.3	-0.3	-0.1	-3.3	-6.1	-1.0	0.4	0.2	-2.3	-13.5
United States	5,510	5,340	-0.7	2.1	-2.0	-1.8	-1.3	0.1	-1.0	-0.9	0.1	0.3	-2.2	1.5	-3.1

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.A Enteric fermentation.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.3a

CH_4 emissions from enteric fermentation: dairy cattle - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year [a] to 2005
Australia	275	346	-0.8	4.0	3.5	4.3	4.8	2.9	1.9	-0.2	-1.4	-1.8	-1.1	0.2	25.6
Austria	88	61	-2.9	-11.2	-0.4	4.2	2.1	-3.4	-9.7	-2.3	-0.1	-3.3	-1.6	-0.7	-30.4
Belarus	191	127	-2.0	-1.9	-4.4	-2.1	-2.7	-3.1	-2.1	-3.3	-3.8	-3.4	-2.7	-3.0	-33.7
Belgium	95	77	-2.5	0.2	-4.6	-1.3	2.5	-0.5	-1.3	2.2	-3.6	-2.3	-1.8	-2.1	-19.0
Bulgaria	51	29	-2.7	-6.4	1.0	2.4	8.7	5.4	-0.6	-19.7	6.6	-0.8	1.5	-1.9	-43.0
Canada	160	144	-2.9	1.5	1.3	-0.6	-2.3	-0.8	-2.6	-0.7	1.4	-1.6	-0.2	0.3	-10.4
Croatia															
Czech Republic	119	66	-7.2	-3.8	-0.7	-8.7	-3.9	2.9	-2.7	0.0	-0.8	-1.9	-2.9	3.8	-44.7
Denmark	88	72	-0.7	0.0	-1.1	-4.6	0.1	-5.0	-1.1	-0.1	-0.5	-0.1	-3.5	0.4	-18.4
Estonia	28	14	-5.8	-10.3	-4.3	2.2	-2.3	-15.7	0.3	3.3	-10.0	1.8	3.1	-1.1	-50.5
European Community	2,532	2,072	-5.1	-0.6	-0.7	-1.6	-0.7	-0.3	-2.6	0.7	-1.6	-0.7	-1.5	-0.8	-18.2
Finland	48	38	-8.2	-3.1	-1.2	1.7	-1.5	-1.2	1.0	-0.9	-0.2	-3.0	-1.3	-1.2	-20.5
France	530	419	-4.7	-1.3	-1.8	-2.0	-1.1	-0.7	-0.1	-0.1	0.0	-2.3	-1.7	-0.4	-21.0
Germany	603	480	-10.6	0.2	0.3	-3.3	-2.3	0.2	-2.8	1.4	-2.9	0.2	-1.7	0.3	-20.3
Greece															
Hungary	59	30	-7.4	-2.7	0.9	-2.1	-1.5	0.9	1.3	-3.3	-8.6	-4.3	-6.3	-3.1	-48.8
Iceland	3	2	-1.9	-0.3	-1.9	-1.2	-1.0	-3.2	-4.3	-3.1	-2.8	-2.4	-2.0	0.6	-23.9
Ireland	138	120	-1.6	0.2	1.4	-0.6	-0.9	-2.2	-1.4	1.0	-1.0	-0.2	-0.2	-4.5	-13.1
Italy	245	208	-6.7	4.3	1.5	0.8	1.5	0.3	-3.7	1.8	-5.8	0.1	-1.8	1.5	-15.2
Japan	193	163	0.5	-1.1	-0.6	-1.2	-1.5	-1.9	-1.4	-0.9	-0.6	-1.4	-1.6	-1.2	-15.4
Latvia	43	15	-0.7	-6.4	-5.8	-4.4	-8.0	-14.9	-0.7	2.2	-1.9	-9.3	0.1	-0.5	-65.4
Liechtenstein	0.32	0.30	-0.1	-0.6	0.5	0.2	0.6	-0.5	-4.3	10.8	-2.4	-0.4	-1.7	0.4	-4.4
Lithuania	76	40	-4.0	-3.7	1.7	0.1	-5.8	-9.7	-6.7	3.4	1.4	1.2	-1.5	-2.6	-47.4
Luxembourg	7	5	-5.5	-0.8	-1.3	-3.4	-0.8	-1.8	-3.9	-1.1	-1.8	-3.5	-1.8	-1.4	-33.1
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	203	183	-1.4	1.5	-4.3	-1.9	2.1	0.3	-4.5	4.9	-5.1	4.5	0.3	-1.0	-9.5
New Zealand	238	405	2.9	5.6	4.8	2.7	2.0	3.8	6.1	6.5	4.6	2.0	0.5	0.2	70.5
Norway	46	37	-1.5	-0.1	1.0	-2.4	-1.8	0.7	-6.5	-2.3	-1.0	-1.2	-2.1	-2.8	-20.9
Poland	457	263	-8.4	-7.5	-2.5	1.6	1.7	-4.2	-8.6	-1.3	-4.3	1.4	-3.1	0.8	-42.5
Portugal	37	39	-1.9	3.4	1.5	0.6	0.9	7.2	-1.0	-1.2	0.4	-4.9	0.1	2.5	4.0
Romania	293	132	-14.5	-3.2	0.4	-1.7	-5.8	-5.7	-5.9	-2.4	2.8	0.7	-4.0	3.8	-55.0
Russian Federation	2,094	1,038	-2.9	-6.8	-7.2	-6.2	-8.6	-9.7	0.8	1.6	-3.5	-4.5	-3.9	-4.7	-50.4
Slovakia	40	24	-6.3	1.3	-3.3	-6.6	-4.1	-2.4	0.3	-0.9	2.9	-4.2	-5.4	1.8	-41.4
Slovenia	20	12	-6.9	0.5	-19.3	-4.0	-0.3	2.4	-4.5	-2.5	4.7	-7.1	1.7	-8.0	-43.6
Spain	116	97	4.0	-2.1	1.2	-2.0	0.8	-1.5	-3.2	1.7	1.7	-2.3	-2.0	-1.8	-16.6
Sweden	69	51	-8.0	-3.8	-5.1	1.7	-4.5	0.5	-4.8	-0.7	-0.1	-3.1	1.0	-2.3	-26.5
Switzerland	81	68	0.8	0.4	-0.1	-1.3	0.1	-6.9	-1.3	0.6	-1.5	-2.6	-1.9	-0.9	-16.6
Turkey															
Ukraine	1,052	402	-2.2	-8.2	-9.2	-12.0	-3.1	-12.1	-8.5	1.4	-0.5	-12.3	-6.0	-6.4	-61.8
United Kingdom	251	214	-2.9	-3.0	0.3	-1.5	-2.2	1.1	-3.3	-2.5	2.6	-0.6	-2.7	-1.4	-14.7
United States	1,375	1,319	0.2	0.4	-5.0	0.1	-0.3	1.1	1.5	-0.3	0.6	0.8	-1.1	2.6	-4.1

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.A Enteric fermentation. For these Parties, emissions from mature dairy cattle are included in this table.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.3b

CH_4 implied emission factors for enteric fermentation: dairy cattle - trend information

CH_4 IEF (kg/head/yr)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	107	113	0.7	0.5	0.1	0.3	0.2	0.9	0.4	0.7	-0.5	-0.1	-0.3	0.1	5.5
Austria	98	115	0.2	1.9	0.9	0.9	0.9	0.9	1.5	1.5	1.4	2.1	2.0	0	17.8
Belarus	81	81	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0
Belgium	100	103	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.0	0.4	0.2	0.1	3.4
Bulgaria	81	81	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	117	135	0.7	0.7	1.5	0.4	1.5	1.6	1.5	0.6	1.7	0.1	-0.4	0.1	15.4
Croatia															
Czech Republic	96	114	-4.0	4.0	1.5	-2.3	4.3	3.7	1.6	0.7	1.7	-0.9	0.0	3.6	19.2
Denmark	117	128	0.9	-0.5	-0.8	-0.2	0.3	-0.7	-0.4	1.8	1.8	2.2	2.0	1.4	10.1
Estonia	99	121	0.0	2.3	3.4	4.6	3.3	-3.4	6.0	5.2	0.1	0.8	3.4	2.1	23.1
European Community	96	110	1.2	1.2	0.3	0.8	0.6	0.9	0.7	0.9	1.0	1.2	0.7	1.1	14.9
Finland	97	119	0.9	1.3	0.4	2.0	0.5	1.6	3.3	1.6	1.8	1.1	1.6	0.5	22.2
France	99	104	0.5	0.6	0.2	0.4	0.2	0.3	0.2	-0.1	0.5	0.0	0.3	0.7	5.6
Germany	95	113	0.9	1.1	1.0	0.0	1.6	1.6	1.4	1.9	-0.2	1.4	0.2	1.4	19.5
Greece															
Hungary	100	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Iceland	100	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Ireland	103	107	-0.1	1.4	2.4	-0.2	0.3	-2.0	0.7	2.8	-0.6	1.5	-0.8	-3.3	3.9
Italy	93	113	5.3	0.9	1.5	0.9	-0.3	-0.1	-0.9	-2.4	6.2	0.0	2.2	1.3	21.7
Japan	101	107	0.3	0.9	1.0	0.8	0.9	0.6	0.3	0.0	0.2	-0.2	0.1	-0.1	6.7
Latvia	81	81	0	0	0	0	0	0	0	0	0	0	0	0	0
Liechtenstein	111	122	0.3	0.9	0.1	1.3	1.0	0.3	1.5	2.4	0.7	0.3	1.7	-0.8	9.5
Lithuania	91	96	-2.8	1.0	1.0	1.3	2.1	-1.8	5.2	2.6	1.1	0.1	1.7	1.4	6.4
Luxembourg	121.82	121.82	0	0	0	0	0	0	0	0	0	0	0	0	0
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	108	128	0.0	0.9	-1.8	2.7	0.9	1.7	0.9	2.1	-1.2	5.0	0.8	1.6	18.5
New Zealand	70	79	1.3	0.2	1.3	0.7	0.8	1.1	1.9	0.4	1.2	0.2	1.2	-0.6	12.3
Norway	135	114	-2.2	-0.7	-0.4	-2.4	-2.8	1.3	-5.0	1.7	2.8	-2.4	-1.0	-4.3	-15.7
Poland	95	94	-1.6	-0.1	0.8	0.7	0.2	-0.8	0.9	1.8	0.1	0.5	0.5	0.8	-1.1
Portugal	95	118	-0.3	3.1	2.4	0.8	2.0	9.0	1.0	2.0	2.0	-2.4	0.1	4.3	24.4
Romania	81	81	0	0	0	0	0	0	0	0	0	0	0	0	0
Russian Federation	101	101	-1.8	0.4	-2.1	3.1	-0.2	-2.6	3.3	5.5	0.0	-0.8	1.9	3.1	0.5
Slovakia	74	103	2.7	2.4	2.4	1.1	4.5	1.2	1.3	3.7	2.7	1.3	0.3	2.8	40.0
Slovenia	86	96	2.0	0.7	2.8	0.6	0.5	0.7	1.5	0.7	1.5	-0.5	-0.8	2.5	11.4
Spain	72	94	6.8	4.1	-2.4	0.4	0.6	4.4	3.0	1.8	-0.3	2.8	2.2	2.1	30.6
Sweden	120	129	0.3	1.6	-1.9	1.2	-0.5	0.5	-0.2	1.7	0.1	0.3	0.7	0.4	7.7
Switzerland	102	110	0.8	0.4	-0.3	1.4	0.9	0.4	0.8	0.6	0.2	0.4	0.9	0.1	7.8
Turkey															
Ukraine	107	104	-0.9	-2.8	-0.4	-0.5	4.2	-4.5	0.9	2.6	3.9	-2.5	2.4	2.2	-2.1
United Kingdom	88	104	-0.1	1.2	0.9	2.9	0.0	0.4	1.0	1.1	3.7	0.9	0.1	1.8	17.6
United States	97	102	1.4	0.9	-3.6	1.3	0.8	0.9	1.1	0.5	0.3	1.0	0.2	1.6	4.8

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.A Enteric fermentation. For these Parties, CH4 IEF from mature dairy cattle are included in this table.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.4a

CH_4 emissions from enteric fermentation: non-dairy cattle - trend information

CH_4 Emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	1,565	1,658	2.0	0.6	0.8	0.8	-0.5	0.7	0.8	2.2	-1.1	-0.1	-0.8	0.7	6.0
Austria	81	83	-0.2	12.9	-2.5	-7.2	-3.5	2.0	8.2	-1.0	-3.0	1.1	1.9	-1.9	1.9
Belarus	258	135	-7.6	-9.5	-3.6	-0.3	-2.2	-10.9	-2.7	-3.1	-0.5	-1.0	3.7	2.8	-47.7
Belgium	110	95	2.0	1.5	0.1	-2.9	-3.7	0.2	-1.4	-0.3	-5.1	-4.5	-1.0	-1.2	-13.7
Bulgaria	56	16	-12.7	-11.2	-11.5	-7.7	5.5	5.5	-5.3	-1.1	28.1	16.5	-4.3	-13.8	-71.2
Canada	687	976	2.1	6.2	3.4	-0.1	-0.6	-0.7	1.6	3.2	0.5	0.8	7.4	2.6	42.2
Croatia															
Czech Republic	102	43	-4.4	-0.5	-1.3	-5.0	-9.4	1.5	-5.3	1.9	-4.1	-3.8	-3.5	-2.5	-57.4
Denmark	53	34	-0.3	-2.9	1.6	-3.5	-2.2	-4.0	-0.9	4.7	-7.3	-5.2	-5.7	-9.4	-34.6
Estonia	23	7	-5.2	-11.7	-7.1	-7.3	-6.4	-12.5	-5.7	6.7	6.4	0.8	-4.1	2.8	-70.8
European Community	2,860	2,716	-0.2	1.6	0.9	-1.3	-0.6	0.0	-0.5	0.2	-2.8	-0.7	-1.0	-0.5	-5.0
Finland	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	821	805	0.2	1.5	0.6	-0.9	-0.5	0.3	1.8	0.7	-2.2	-2.4	-1.4	0.3	-2.0
Germany	476	327	-12.8	-1.0	-1.4	-3.9	0.3	0.4	-1.0	1.7	-5.6	-2.6	-4.5	-1.2	-31.2
Greece															
Hungary	59	20	-4.4	0.8	-3.3	-4.3	-3.4	-1.9	-8.5	-6.2	3.8	-0.8	-0.9	-1.0	-65.8
Iceland	2	2	7.9	3.3	3.0	2.8	2.2	-0.1	-2.6	-2.5	-3.9	-2.6	-2.2	3.0	-2.8
Ireland	256	270	2.3	0.6	4.3	4.2	1.8	-3.8	-5.9	-0.3	-0.5	-0.4	0.6	-0.2	5.7
Italy	233	205	13.8	-2.0	-1.8	0.8	-3.4	1.3	-1.6	-1.9	-7.0	0.1	-3.5	-0.9	-12.2
Japan	158	161	3.0	-1.0	-0.9	0.0	0.7	0.4	0.5	-0.2	-0.3	-1.3	-0.7	-0.4	1.9
Latvia	51	11	-5.8	2.5	-4.5	-8.5	-10.3	-10.4	-5.7	8.5	4.0	5.5	-4.2	8.2	-77.9
Liechtenstein	0.00	0.03	27.3	12.8	11.6	10.2	9.4	8.6	7.8	50.8	33.6	33.6	40.2	29.8	1714.7
Lithuania	67	16	-9.2	-10.4	-0.8	-6.6	-8.4	6.9	-21.9	0.9	8.6	10.7	-3.2	3.9	-75.7
Luxembourg	2	2	12.6	7.6	3.9	-1.8	-1.2	2.7	1.0	2.7	-3.3	-4.5	-1.7	1.2	28.2
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	8	11	16.6	0.7	-2.4	0.5	0	8.0	6.8	-1.2	-6.0	2.3	1.5	2.2	38.1
New Zealand	235	255	1.9	1.2	-1.2	-3.9	-1.7	-0.7	2.0	0.2	-0.1	-0.8	0.2	-0.2	8.3
Norway	21	27	5.4	2.5	1.8	5.2	6.2	-5.4	2.3	-4.8	-7.1	5.4	1.8	7.9	26.9
Poland	219	127	-18.6	-1.2	-1.9	8.4	4.4	-8.4	-4.3	-9.6	0.2	-4.6	-1.1	4.7	-42.0
Portugal	49	63	3.9	8.7	3.6	-4.1	3.1	2.2	2.7	2.4	-1.8	-0.2	4.0	1.3	29.4
Romania	152	67	-14.5	-3.2	0.4	-1.7	-5.8	-5.7	-5.9	-2.4	2.8	0.7	-1.5	-1.4	-56.1
Russian Federation	1,831	651	-3.7	-11.3	-13.0	-12.5	-12.4	-15.9	1.3	4.2	3.0	-1.9	-3.6	-6.7	-64.5
Slovakia	45	17	-10.2	14.4	-10.0	-16.1	-5.0	-7.3	-4.3	10.5	-11.4	-5.1	-9.1	2.0	-63.3
Slovenia	14	17	-8.1	8.0	14.9	-8.6	2.7	5.3	12.7	-2.4	-2.7	-2.9	-2.8	6.1	20.5
Spain	192	293	3.7	13.1	5.7	-1.5	4.3	3.8	-0.1	6.0	1.8	3.9	-1.1	-2.3	53.0
Sweden	61	69	4.8	-2.1	2.5	-0.4	-1.5	-2.1	-0.4	-1.7	-0.7	-1.5	2.0	-0.6	13.8
Switzerland	NO	6	*	*	*	*	*	*	8.8	12.8	14.8	12.1	7.4	8.9	*
Turkey															
Ukraine	634	124	-4.1	-16.7	-15.9	-21.5	-4.9	-17.9	-15.1	4.5	2.3	-21.4	-11.1	0.0	-80.4
United Kingdom	391	356	-1.3	0.2	2.4	-2.9	-0.9	-0.8	-2.3	-4.9	-2.6	2.2	1.9	-1.9	-8.9
United States	3,859	3,772	-1.1	3.0	-1.0	-2.5	-1.8	0.0	-1.8	-1.1	-0.1	0.3	-2.7	1.1	-2.2

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.A Enteric fermentation. For these Parties, emissions from mature non-dairy cattle are included in this table.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.4b

CH_4 implied emission factors for enteric fermentation: non-dairy cattle - trend information

CH_4 IEF (kg/head/yr)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	71	72	0.1	-0.4	-0.3	0.0	0.0	0.4	0.1	0.3	0.1	0.5	0.1	0.1	0.7
Austria	48	56	1.1	5.9	0.3	-1.1	-1.2	1.2	2.6	-0.1	-0.2	0.0	0.6	0.5	15.9
Belarus	56	56	0	0	0	0	0	0	0	0	0	0	0	0	0
Belgium	48	48	0.2	0.0	0.1	0.2	-0.1	0.1	0.0	0.6	0.2	-0.1	0.1	0.0	1.5
Bulgaria	56	56	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	65	65	0.0	-0.1	-0.7	-0.3	-0.3	0.4	0.4	-0.2	-0.1	0.5	-0.6	0.2	-0.3
Croatia															
Czech Republic	44	53	1.4	4.9	0.6	1.0	0.0	5.4	0.3	0.7	0.8	0.5	-0.2	1.3	18.7
Denmark	35	35	0.1	-1.7	1.3	0.7	-0.3	0.8	0.3	0.5	0.3	-0.4	-1.7	-0.6	-1.5
Estonia	48	49	1.9	-0.7	0.3	0.6	-0.7	1.1	-0.3	-1.5	1.5	-0.7	1.0	0.2	1.9
European Community	45	47	1.1	0.4	0.3	0.2	-0.2	-0.2	0.4	0.7	-0.4	0.4	0.2	0.1	4.7
Finland	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	50	52	0.4	0.2	0.3	0.3	0.0	0.1	0.0	-0.3	-0.2	0.2	0.0	0.1	2.7
Germany	36	37	-0.4	-0.8	-0.5	-0.5	1.2	0.1	0.7	0.8	-0.8	0.5	-0.6	0.0	2.6
Greece															
Hungary	48	48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Iceland	48	48	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0	0	0.0	0.0	0.0
Ireland	55	53	-1.0	-1.2	1.9	0.1	-2.4	-5.1	0.6	3.7	-2.1	0.6	2.9	-0.3	-3.9
Italy	46	46	4.2	-2.6	0.0	0.8	-1.9	0.8	-0.7	0.9	-1.9	0.3	-0.8	0.3	1.8
Japan	58	60	-0.1	0.3	0.5	0.7	1.0	0.8	0.6	0.0	-0.1	-0.2	0.1	0.1	3.9
Latvia	56	56	0	0	0	0	0	0	0	0	0	0	0	0	0
Liechtenstein	81	81	-15.1	-9.8	11.6	-8.2	9.4	-6.9	7.8	-4.1	-1.4	0.0	0	0.0	0.3
Lithuania	45	43	-1.6	0.5	2.4	0	3.1	2.0	1.7	0.9	0.2	2.2	-1.6	-3.1	-6.5
Luxembourg	60	60	0.1	0.0	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	67	72	0.0	0.9	-2.6	1.8	-0.6	2.9	-0.3	0.4	0.1	7.3	0.6	-2.0	8.9
New Zealand	51	57	0.8	0.6	0.4	1.2	-0.2	0.9	1.1	1.4	-0.3	-0.1	0.7	1.3	12.2
Norway	75	94	1.9	-0.3	-0.3	3.3	4.4	-4.1	6.9	-2.3	-3.0	4.7	2.1	6.9	24.0
Poland	40	47	-2.1	1.6	-0.5	4.3	16.7	-0.4	0.5	-1.1	2.8	-2.1	0.2	-0.4	19.1
Portugal	50	58	1.9	7.0	1.8	-4.9	1.9	0.5	1.1	1.5	-1.4	-0.3	2.8	-0.6	15.8
Romania	56	56	0	0	0	0	0	0	0	0	0	0	0	0	0
Russian Federation	48	51	0.3	3.6	-2.6	1.3	-0.8	-4.9	2.1	6.0	1.2	-1.1	2.8	1.4	6.0
Slovakia	45	56	1.6	1.5	1.5	-5.4	11.5	-0.3	-0.2	13.2	-6.9	-4.9	2.4	5.4	24.9
Slovenia	45	52	1.6	1.3	3.5	1.6	-0.1	0.2	2.8	1.0	-0.3	1.2	-2.0	1.3	15.6
Spain	55	54	-0.9	0.7	-0.7	-1.4	0.1	-0.1	1.0	0.4	-0.6	0.4	-1.0	0.1	-1.7
Sweden	53	57	1.6	-0.3	0.2	0.4	0.3	-0.1	0.2	0.1	0.3	-0.1	0.3	0.5	7.3
Switzerland	NO	81	*	*	*	*	*	*	0	0	0	0	0	0.0	*
Turkey															
Ukraine	43	47	1.2	-2.1	0.8	0.7	5.0	-7.7	-1.6	2.9	4.5	0.9	1.3	3.3	8.9
United Kingdom	42	43	0.0	0.0	0.3	0.3	0.1	0.1	-0.2	0.2	0.2	-0.4	0.2	0.2	1.4
United States	45	43	-2.4	1.0	-0.9	-0.4	-0.1	0.7	-0.9	-0.5	0.7	1.3	-1.9	0.3	-3.3

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.A Enteric fermentation. For these Parties, CH4 IEF for mature non-dairy cattle are included in this table.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.5

Manure management, CH_4 (2005)

	Key category	Share of national total	Methods and EF used[a]		Cattle		Sheep	Swine
					Dairy cattle[b]	Non-dairy cattle[b]		
			Methods	EF	CH_4 IEF (kg/head/yr)			
		(%)						
IPCC default EF[c]					6 to 81	1 to 38	0.19 to 0.37	3 to 20
Australia		0.4	CS, M, T2	CS, D	8.77	0.04	0.00	23.19
Austria	L, T	0.9	T1, T2	CS, D	20.36	7.43	0.19	5.96
Belarus		1.0	T1	D	6.00	4.00	0.19	4.00
Belgium	L, T	1.7			22.53	13.66	1.41	10.15
Bulgaria	T	0.7	T1, T2	CS, D	18.30	12.21	0.28	9.95
Canada		0.4	T2	CS	29.70	2.71	0.30	5.02
Croatia								
Czech Republic		0.3	T1	D	14.00	6.00	0.19	3.00
Denmark	L, T	1.6	T2	CS	18.91	1.71	0.32	2.54
Estonia		0.4	T1	CS, D	16.33	5.45	0.19	2.28
European Community	L	1.0	CR, CS, D, M, T1, T2	CR, CS, D	20.16	10.00	0.19	8.55
Finland		0.4	T2	CS	13.29	IE	0.19	3.52
France	L	2.3	CR, T1	CS, D	18.42	19.76	0.28	20.92
Germany		0.5	D, T1, T2	CS, D	18.92	7.99	0.19	3.01
Greece								
Hungary	L	0.5	D	CS, D	6.00	4.00	0.19	3.00
Iceland		0.6			14.00	6.00	0.19	3.00
Ireland	L, T	3.2	T1, T2	CS, D	20.35	10.89	0.17	12.45
Italy	L, T	0.5	T1, T2	CS, D	14.36	7.43	0.22	7.52
Japan		0.2	CS, T1	CS, D	64.98	1.63	0.28	1.40
Latvia	L	0.8	T1	D	6.00	4.00	0.19	4.00
Liechtenstein		0.6	T2, T3	CS	24.24	8.05	0.36	3.08
Lithuania		0.8	T1, T2	CS, D	5.22	1.91	0.19	4.51
Luxembourg		0.6	T2	CS	21.15	8.41	0.16	26.92
Monaco		-	NA	NA	NO	NO	NO	NO
Netherlands	L, T	1.2	T2	CS	37.51	3.43	0.18	3.92
New Zealand	L	1.0	T1, T2	CS, D	3.35	0.70	0.11	20.00
Norway	L	0.6			14.41	11.91	0.76	1.99
Poland	L, T	0.9	T1, T2	CS, D	9.33	5.88	0.17	6.54
Portugal	L, T	1.4	T2	CS	4.65	1.64	0.31	21.32
Romania	L, T	1.3	T1	D	19.00	13.00	0.16	7.00
Russian Federation		0.1	CS, T1, T2	CS, D	4.71	2.67	0.19	3.92
Slovakia		0.3	T1, T2	D	4.00	3.80	0.19	4.00
Slovenia	L, T	2.2	T1, T2	CS, D	46.71	20.80	0.19	14.87
Spain	L, T	2.0	CS, T1, T2	CS, D	14.62	1.15	0.22	14.99
Sweden	L, T	0.7	T1, T2	CS, D	18.62	6.22	0.19	3.36
Switzerland	L, T	0.9	T2	CS, D	24.01	8.05	0.35	3.08
Turkey								
Ukraine	T	0.1	T1, T2	CS, D	3.11	1.02	0.19	0.89
United Kingdom		0.4	T1, T2	CS, D	25.43	4.24	0.11	3.00
United States	L, T	0.6	M, T1, T2	CS, D, M	65.78	1.27	0.61	13.98

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for the various livestock types within the category CH_4 from 4.B Manure management.

[b] Information on implied emission factors reported by Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland refers to mature dairy cattle and mature n dairy cattle respectively, as these Parties are using Option B to report livestock types within the category 4.B Manure management.

[c] Source of default emission factors: IPCC Guidelines,volume 3, tables 4-5 and 4-6 (pages 4.12–4.13). Default emission factors are provided according to climate regions (cool, temperate, warm), as shown below.

Default IPCC emission factors according to climate regions

	Dairy cattle			Non-dairy cattle			Swine		
	cool	temperate	warm	cool	temperate	warm	cool	temperate	warm
North America	36	54	76	1	2	3	10	14	18
Western Europe	14	44	81	6	20	38	3	10	19
Eastern Europe	6	19	33	4	13	23	4	7	11
Oceania	31	32	33	5	6	7	20	20	20
Asia	7	16	27	1	1	2	1	4	7

	Sheep		
	cool	temperate	warm
Developed countries	0.19	0.28	0.37

Table 4.6

Manure management, N_2O (2005)

	Key category	Share of national total	Methods and EF used[a]		Animal waste management systems (AWMS)				N excretion rates				
					Anaerobic lagoons	Liquid systems	Solid storage and dry lot	Other	Dairy cattle	Non-dairy cattle	Sheep	Swine	Poultry
		(%)	Methods	EF	N_2O IEF (kg N2O-N/kg N)				(kg N / head / year)				
IPCC default EF					0.001[b]	0.001[b]	0.02[b]	0.005[c]	60 to 100[d]	40 to 70[d]	16 to 20[d]	12 to 20[d]	0.6[d]
Australia	T	0.3	CS, M, T1, T2	D	0.001	0.001	0.020	0.018	140	40	7	12	0.7
Austria	L, T	0.9	T1	CS	NO	0.001	0.020	0.005	95	46	13	14	0.5
Belarus		0.0	T1	D	NO	0.002	0.019	NO	70	50	16	20	0.6
Belgium	L	0.6			NO	0.001	0.019	0.005	95	38	6	12	0.6
Bulgaria		0.5	D	D	0.001	0.001	0.020	0.005	70	50	16	20	0.6
Canada	L	0.7	T1	D	NE	0.001	0.020	0.005	108	58	4	12	0.5
Croatia													
Czech Republic		0.2	T1	D	NO	0.001	0.020	0.005	100	70	20	20	1.0
Denmark	L	0.9	CS	D	NO	0.001	0.020	NO	132	39	17	9	0.7
Estonia	T	0.3	T1	D	NO	0.001	0.020	0.005	100	70	20	20	0.6
European Community	L	0.5	CR, CS, D, T1, T2	CR, CS, D	0.001	0.001	0.019	0.010	93	45	8	11	0.6
Finland	L, T	0.7	D	D	NO	0.001	0.020	NE	110	46	9	18	0.8
France	L, T	1.1	CR, T1	CS, D	NA	0.001	0.020	NA	100	57	18	18	0.6
Germany		0.3	CS, T1	D	NO	0.001	0.015	NO	118	43	8	14	0.6
Greece													
Hungary	L, T	1.4	CS, D	CS, D	NO	0.001	0.020	0.005	100	70	20	20	0.6
Iceland		0.7			NO	0.001	0.020	NO	60	34	6	13	0.4
Ireland		0.6	T1	D	NO	0.001	0.020	NO	85	65	6	8	0.3
Italy	L	0.6	T1, T2	CS, D	NO	0.001	0.020	0.020	116	50	16	12	0.5
Japan		0.3	CS, D	CS, D	NO	0.001	0.020	0.017	80	47	12	16	0.9
Latvia	L, T	1.4	T1, T2	CS, D	NA	0.001	0.020	0.005	71	50	6	7	0.6
Liechtenstein		0.6	CS	D	NO	0.001	0.019	NO	114	80	6	11	0.7
Lithuania	L, T	1.4	T1	D	NA	0.001	0.020	0.002	70	50	16	20	0.6
Luxembourg		-	NA	NA	NE	NE	NE	NO	NE	NE	NE	NE	NE
Monaco		-	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands		0.4	T2	D	NO	0.001	0.017	NO	NA	NA	NA	NA	NA
New Zealand		0.1	T1	D	0.001	NO	0.020	0.005	116	74	15	16	0.6
Norway		0.2			NA	0.001	0.018	NA	82	35	10	6	0.2
Poland	L	1.5	T3	CS	NO	0.001	0.020	NE	70	50	16	20	0.6
Portugal	L, T	0.7	D	D	0.001	0.001	0.020	NO	88	48	6	8	0.7
Romania		0.9	T1	D	0.001	0.001	0.020	0.005	70	50	16	20	0.6
Russian Federation	L, T	0.9	T1	CS, D	NO	0.001	0.020	NO	95	55	16	23	0.8
Slovakia	L, T	0.9	T2	D	NO	0.001	0.020	NO	100	60	16	NE	NE
Slovenia	L, T	0.8	D	CS, D	0.001	0.001	0.020	0.003	108	42	20	12	0.6
Spain	L, T	0.7	CS, D	D	NO	0.001	0.020	NO	68	52	5	9	0.7
Sweden	L, T	0.8			NO	1.000	19.299	20.000	123	185	13	47	1.2
Switzerland	L, T	0.7	CS	D	NO	0.001	0.020	NO	38,905	IE	2,243	3,837	178.5
Turkey													
Ukraine		0.7	T2	D	0.001	NO	0.020	0.009	74	39	16	13	0.3
United Kingdom		0.2	T1	D	NO	0.001	0.020	0.005	105	49	7	10	0.7
United States		0.1	M, T1, T2	D	NE	0.004	0.016	0.002	84	50	11	8	0.4

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.B Manure management.

[a] Information on methods and emission factors in this table is a reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method or type of emission factor used for all subcategories within the category N2O from 4.B Manure management.

[b] Source of default emission factors: IPCC good practice guidance, tables 4.12 (page 4.43

[c] Source of default emission factors: IPCC Guidelines, volume 3, table 4-22 (pages 4.104

[d] Source of default N excretion rates: IPCC Guidelines, volume 3, table 4-20 (pages 4.99). Default values are provided by regions as shown belov

IPCC defaults:

	North America	Western Europe	Eastern Europe	Oceania	Asia
Dairy cattle	100		70	80	60
Non-dairy cattle	70		50	60	40
Sheep	16	20	16	20	12
Swine	20		16		
Poultry	0.6				

Table 4.7a

CH_4 emissions from manure management - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	73	92	0.1	2.0	1.0	4.3	4.2	2.7	1.6	2.6	0.9	-1.8	-2.8	-0.7	25.9
Austria	50	42	-1.4	-0.8	-1.9	-0.1	1.0	-5.2	-2.7	0.5	-3.2	0.3	-3.0	0.2	-16.9
Belarus	57	36	-5.3	-5.4	-3.8	-1.0	-1.2	-5.4	-2.8	-2.7	-2.0	-1.9	1.7	2.2	-37.6
Belgium	128	114	-3.2	2.0	0.1	-0.1	0.2	0.7	-3.3	-2.6	-2.5	-3.7	-1.4	-1.3	-11.0
Bulgaria	73	23	-12.1	-0.6	-8.5	-11.6	6.1	2.2	-10.6	-28.7	16.2	8.7	-1.3	-5.4	-68.6
Canada	123	153	-0.3	5.2	1.2	0.2	1.4	0.3	2.5	3.5	2.8	-0.1	1.3	1.2	23.8
Croatia															
Czech Republic	48	24	-4.0	-5.2	0.5	-3.0	-4.9	-0.8	-5.5	-0.6	-4.0	-3.0	-4.7	-3.8	-50.8
Denmark	36	48	5.2	-0.2	1.6	1.5	4.2	-1.4	3.8	3.8	1.6	0.4	2.5	-1.9	35.3
Estonia	9	4	-11.9	-6.2	-20.2	1.1	1.3	-26.5	0.7	6.3	-3.2	27.3	0.4	-0.6	-60.8
European Community	2,110	2,092	-2.0	1.0	0.2	0.7	0.9	-1.6	0.1	0.5	-1.1	-1.1	-0.1	-0.3	-0.8
Finland	11	13	-4.3	6.4	1.0	5.4	-1.1	-1.3	1.4	-2.9	5.3	2.5	-0.1	2.1	20.8
France	657	622	-0.9	0.5	0.8	-0.4	0.3	-4.2	1.0	0.7	-0.4	-1.5	-0.2	-0.3	-5.3
Germany	280	236	-11.6	-0.7	0.7	-1.5	0.8	0.4	-1.9	1.2	-2.7	-3.6	-2.6	0.5	-15.8
Greece															
Hungary	42	20	-12.6	1.5	3.5	-5.5	4.8	1.1	-4.7	-3.1	2.6	0.0	-10.0	-7.0	-53.9
Iceland	1	1	-0.8	-0.2	0.1	0.1	1.8	-1.7	-2.7	-0.3	-4.1	-2.1	-2.1	2.4	-12.6
Ireland	110	106	1.1	-0.3	3.9	2.4	1.1	-4.3	-4.8	0.3	-0.7	-1.4	-0.3	-1.3	-3.9
Italy	165	150	0.0	2.0	0.3	-0.4	1.1	1.0	-2.1	1.8	-2.2	-0.4	-3.0	-0.2	-9.0
Japan	149	120	-0.1	-2.1	-1.5	-1.7	-2.1	-2.1	-1.5	-0.8	-0.7	-1.1	-1.5	-1.0	-19.4
Latvia	13	4	-6.3	2.4	-10.0	-6.2	-6.3	-8.7	-2.7	7.1	3.0	-2.5	-1.5	0.6	-70.2
Liechtenstein	0	0	0.2	-1.7	0.3	-2.3	-0.6	-1.1	-5.1	8.1	-1.7	0.0	-4.9	4.3	-12.8
Lithuania	20	9	-8.1	-1.8	-6.5	2.6	-4.9	-13.5	-8.9	11.1	4.1	2.2	0.5	2.7	-55.2
Luxembourg	4	4	-7.8	3.2	0.2	2.6	3.0	2.8	-4.5	-0.7	-0.2	2.2	-0.5	4.4	2.2
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	141	117	0.7	8.5	-1.4	-0.3	-7.3	-1.8	-1.7	-1.4	-4.0	-4.2	1.9	-0.3	-17.2
New Zealand	28	35	0.4	3.2	2.2	0.9	0.2	1.0	1.8	2.3	2.2	2.1	1.3	0.4	25.2
Norway	14	15	2.7	1.7	1.8	0.2	1.3	-0.8	-0.9	-2.5	-2.0	1.1	0.7	1.4	5.6
Poland	164	171	9.1	4.5	-6.3	-0.1	4.1	2.9	-6.5	-0.6	14.2	-2.7	-7.4	4.8	4.2
Portugal	56	55	4.2	-1.2	-3.6	-0.5	0.1	0.6	0.0	0.3	0.0	-1.3	0.2	0.2	-1.4
Romania	211	97	-6.6	-9.8	1.5	0.7	-9.8	-11.1	-10.9	-4.3	7.1	1.1	9.2	2.0	-53.9
Russian Federation	353	149	-2.6	-9.9	-10.3	-10.2	-7.6	-7.5	-0.3	-0.8	-0.3	1.8	-5.5	-9.5	-57.7
Slovakia	18	8	-7.0	2.7	-4.9	-8.2	-11.7	-3.3	-3.5	1.2	1.1	-4.9	-15.3	-2.3	-56.4
Slovenia	24	21	-7.8	-8.1	-5.0	1.4	3.9	-9.0	10.4	-1.6	6.6	-4.9	-6.8	1.7	-13.3
Spain	297	422	-0.4	2.1	-1.4	5.9	6.0	0.6	6.0	1.5	0.1	1.7	2.7	-0.3	42.4
Sweden	17	23	-2.2	2.5	1.3	-2.4	-1.1	-0.6	-4.1	12.3	-0.6	3.9	0.2	4.9	35.2
Switzerland	27	24	-0.5	-1.2	-0.7	-1.0	0.9	-3.4	0.0	1.3	-0.6	-1.8	-0.8	0.2	-11.2
Turkey															
Ukraine	868	27	-14.7	-21.5	-44.4	-58.7	-40.4	-5.3	-23.4	1.7	2.8	-19.4	-7.8	0.1	-96.9
United Kingdom	139	119	-1.3	-2.0	0.6	-0.3	0.1	-1.5	-3.7	-3.7	-1.0	-0.5	-0.4	-2.5	-14.2
United States	1,471	1,966	4.4	3.0	-4.0	5.1	9.2	-1.1	1.2	3.6	2.5	-1.6	-1.9	3.9	33.7

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.B Manure management.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.7b

N_2O emissions from manure management - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	1.7	4.8	10.8	11.1	-3.0	11.1	8.5	14.2	5.9	0.3	-0.2	1.3	7.0	4.4	184.8
Austria	3.2	2.8	-1.2	2.2	-1.8	-1.2	-0.2	-1.3	-1.3	-0.9	-2.1	-0.8	-0.4	-1.1	-12.8
Belarus	0.0	0.0	-5.1	-5.9	-3.8	-1.1	-1.8	-6.3	-2.4	-3.1	-2.2	-2.1	1.2	1.5	-40.7
Belgium	3.1	2.8	-0.3	1.7	-0.2	-0.3	-0.7	0.5	-2.3	-1.1	-3.7	-6.7	1.6	-1.8	-11.1
Bulgaria	3.4	1.2	-10.6	-2.7	-6.9	-8.5	7.0	3.3	-8.0	-25.3	14.9	7.1	-1.1	-5.4	-65.0
Canada	13.1	17.3	0.9	4.9	3.0	0.5	0.0	0.1	1.2	2.7	0.4	0.3	5.5	1.9	31.5
Croatia															
Czech Republic	2.2	1.1	-3.7	-5.2	0.8	-2.5	-4.2	-0.5	-5.5	-0.8	-4.0	-2.8	-5.0	-3.9	-48.4
Denmark	2.2	1.8	-0.2	-3.0	0.0	-0.4	1.2	-2.9	-4.8	0.3	-2.7	-4.6	1.4	-3.0	-18.6
Estonia	0.9	0.2	-6.6	-4.0	-16.4	-3.6	-4.7	-12.8	-4.7	2.5	-4.4	-46.4	-0.5	-1.2	-81.4
European Community	80.2	71.9	-2.4	0.8	0.6	0.3	0.5	-0.2	-1.8	1.0	-2.2	-1.5	-0.7	-0.9	-10.4
Finland	2.1	1.6	-8.2	-0.3	2.0	3.9	-2.1	-3.9	-1.4	-4.5	-1.0	-1.7	-2.3	-1.3	-24.8
France	22.2	19.5	-1.7	0.3	0.2	-1.0	-0.6	-1.2	0.6	0.7	-1.8	-2.6	-2.5	-1.0	-12.2
Germany	13.2	9.8	-11.4	0.3	0.7	-1.2	-0.4	1.8	-1.6	1.8	-2.8	6.9	-1.0	-0.7	-25.8
Greece															
Hungary	7.8	3.6	-8.4	-1.1	-1.2	-1.9	1.3	-0.9	0.7	-3.1	-1.1	0.7	-4.7	-3.5	-53.1
Iceland	0.1	0.1	-3.9	-7.8	1.2	1.0	2.1	-0.8	-7.3	-0.2	-2.6	-1.0	-1.2	0.7	-21.4
Ireland	1.3	1.3	3.5	1.7	1.2	2.1	2.8	1.2	-5.2	-3.6	-2.7	-0.8	-0.6	-0.4	0.8
Italy	12.6	11.9	-0.2	2.2	1.1	0.9	2.1	1.5	-3.3	5.2	-5.3	-0.8	-2.2	-1.1	-5.9
Japan	17.9	15.2	-0.8	-2.1	-1.3	-1.1	-1.0	-1.1	-0.9	-0.8	-0.6	-0.6	-0.6	-0.5	-15.2
Latvia	1.8	0.5	-4.0	-3.4	-4.8	-6.3	-8.1	-11.2	-2.4	5.8	1.5	-3.1	-6.8	1.9	-72.2
Liechtenstein	0.0	0.0	0	1.1	1.7	-0.2	0.4	-1.3	-5.2	5.2	-1.6	2.2	2.5	2.4	-0.1
Lithuania	2.8	1.0	-5.8	-6.3	-2.6	-2.3	-8.3	-5.4	-15.2	3.1	3.8	3.8	-1.7	1.7	-63.3
Luxembourg	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	2.2	2.4	5.8	4.2	-1.6	-0.8	7.8	1.5	-5.6	-2.0	2.0	-17.9	10.7	6.6	8.5
New Zealand	0.1	0.2	0.7	5.9	4.0	2.8	2.9	3.4	3.5	4.4	3.8	3.4	1.9	1.8	68.9
Norway	0.4	0.4	6.5	0.9	0.7	-2.9	-0.2	-0.2	2.0	-0.6	-2.7	-10.9	-2.3	0.8	-7.7
Poland	30.1	18.9	-3.2	-1.3	-5.5	1.8	0.4	-5.0	-6.5	-1.5	-1.2	-3.8	-6.0	3.0	-37.2
Portugal	1.8	1.9	1.2	1.5	0.7	0.3	2.1	1.2	1.0	-2.0	-2.2	-3.7	-0.7	0.0	2.5
Romania	10.0	4.6	-11.5	-5.2	1.0	-1.5	-7.4	-6.8	-6.7	-2.8	3.9	0.7	0.6	2.2	-53.8
Russian Federation	154.9	60.1	-2.7	-11.8	-12.3	-10.7	-9.4	-10.3	-0.7	1.5	0.8	-1.1	-3.1	-7.8	-61.2
Slovakia	3.5	1.4	-9.3	5.1	-7.5	-8.4	-11.7	-4.7	-2.2	-3.1	-1.2	-3.0	-6.7	-3.5	-61.0
Slovenia	0.9	0.6	-5.4	1.9	-2.6	-1.1	-2.2	-1.3	-0.9	-1.3	1.5	-5.6	-6.0	4.8	-36.4
Spain	8.0	9.4	1.4	2.4	2.5	4.3	0.7	-0.3	-1.7	3.8	0.4	-0.8	1.4	-1.2	18.8
Sweden	2.4	1.7	-2.8	-5.0	-0.2	2.3	0.1	-6.7	-2.1	-6.1	-0.1	-5.3	1.2	-5.6	-30.9
Switzerland	1.4	1.3	-0.3	-1.6	0.8	-2.1	-0.8	-2.1	0.2	-2.1	0.3	-0.7	-0.2	0.7	-10.7
Turkey															
Ukraine	25.5	10.0	-3.0	-7.5	-10.8	-12.8	-3.6	-5.8	-13.8	5.8	0.5	-12.9	-9.4	-0.5	-60.9
United Kingdom	4.9	4.1	-0.5	-1.4	1.1	-0.1	0.7	-0.3	-5.8	-4.0	-2.9	-1.4	0.2	-2.6	-16.0
United States	27.8	30.7	5.0	0.1	-2.9	3.3	1.5	0.6	4.2	2.3	-1.5	-3.7	1.2	0.9	10.3

Note: Liechtenstein, Luxembourg, Netherlands, Norway and Switzerland are using Option B to report livestock types and emissions within the category 4.B Manure management.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.8

Agricultural soils, N_2O (2005)

	Methods and EF used[a]		Direct soil emissions								Pasture, range and paddock manure			Indirect soil emissions					
					Synthetic fertilizers		Animal manure	N-fixing crops	Crop residue	Cultivation of histosols						Atmospheric deposition		Nitrogen leaching and run-off	
			Key category	Share of national total	Activity data	N_2O IEF	N_2O IEF				Key category	Share of national total	N_2O IEF	Key category	Share of national total	Activity data	N_2O IEF	Activity data	N_2O IEF
	Methods	EF			Use of synthetic fertilizers														
				(%)	(kg N / year)	(kg N_2O-N / kg N)				(kg N_2O-N / ha)		(%)	(kg N_2O-N / kg N)		(%)	(kg N / year)	(kg N_2O-N / kg N)	(kg N / year)	(kg N_2O-N / kg N)
IPCC default EF						0.0125 (0.0025-0.0225)[b]		0.0125[b]		8, 16 (2-15)[c]			0.02 (0.005-0.03)[d]				0.01 (0.002-0.2)[c]		0.025 (0.002-0.12)[e]
Australia	CS, T1, T2	CS, D	L, T	1.0	1,032,776,193	0.0065	0.0100	0.0125	0.0125	8.00	L, T	0.8	0.004	L, T	1.3	730,854,065	0.010	492,290,900	0.013
Austria	T1	D	L, T	1.6	96,971,454	0.0125	0.0125	0.0125	0.0125	NO		0.2	0.020	L, T	1.2	35,327,498	0.010	75,062,884	0.025
Belarus	T1a, T1b	D	L, T	6.5	365,400,000	0.0125	0.0125	0.0125	0.0125	5.00		0.0	0.020	L	2.2	40,665,010	0.010	121,897,514	0.025
Belgium			L, T	1.5	150,523,954	0.0125	0.0125	0.0125	0.0125	8.00		0.6	0.020	L	0.6	47,744,524	0.010	57,477,887	0.025
Bulgaria	D	D	L, T	1.5	143,555,400	0.0100	0.0100	0.0003	0.0001	8.00	T	0.7	0.020	L, T	1.3	39,928,864	0.010	55,879,464	0.025
Canada	CS, T1, T2	CS, D	L, T	1.7	1,539,450,000	0.0078	0.0100	NO	0.0075	8.00		0.6	0.020	L	0.8	524,994,344	0.010	621,792,586	0.012
Croatia																			
Czech Republic	T1	D	L, T	1.7	185,918,400	0.0125	0.0125	0.0125	0.0125	8.00	T	0.2	0.020	L, T	1.2	58,827,020	0.010	119,226,930	0.025
Denmark	CS	CS	L, T	4.5	201,683,160	0.0125	0.0125	0.0125	0.0125	2.87		0.4	0.020	L, T	3.6	73,628,965	0.010	163,575,436	0.025
Estonia	T1	D	L	1.7	20,083,000	0.0112	0.0125	0.0125	0.0125	NE		0.2	0.020	T	1.1	8,006,806	0.010	15,022,659	0.025
European Community	CR, CS, D, T1, T1a, T1b, T2, T3	CR, CS, D	L, T	2.4	8,361,490,073	0.0121	0.0128	0.0125	0.0120	7.48	L	0.6	0.019	L, T	1.6	2,513,220,923	0.010	6,390,611,916	0.018
Finland	D	CS, D	L, T	3.6	148,664,628	0.0125	0.0125	0.0125	0.0125	7.85		0.2	0.020	L, T	0.9	37,414,592	0.010	33,437,468	0.025
France	CR, T1	CS, D	L, T	4.1	2,091,443,400	0.0125	0.0125	0.0125	0.0125	NO	L, T	1.3	0.020	L, T	3.2	593,746,289	0.010	1,247,923,984	0.025
Germany	CR, D, T1, T2	CR, D	L	2.4	1,778,438,000	0.0119	0.0127	0.0125	0.0100	8.02		0.1	0.020	L	1.2	494,539,300	0.010	306,000,000	0.067
Greece																			
Hungary	D	D	L, T	4.0	234,000,000	0.0125	0.0125	0.0125	0.0125	NO		0.3	0.020	L, T	2.5	66,412,593	0.010	138,618,890	0.025
Iceland			L, T	2.0	8,051,156	0.0125	0.0125	NO	0.0125	NE	L	1.1	0.020	L, T	2.2	2,791,491	0.010	5,529,095	0.025
Ireland	T1a, T1b	CS, D	L, T	3.8	346,394,849	0.0125	0.0125	0.0125	0.0125	NO	L, T	4.0	0.020	L, T	1.9	90,681,742	0.010	71,311,365	0.025
Italy	D	CS, D	L, T	1.6	710,888,241	0.0125	0.0125	0.0125	0.0125	8.00		0.3	0.020	L, T	1.3	324,300,191	0.010	487,204,663	0.025
Japan	CS, T1b	CS, D		0.3	472,397,000	0.0066	0.0063	NE	0.0125	8.00		-	IE		0.2	259,935,778	0.010	279,161,769	0.012
Latvia	T1, T1a	CS, D	L, T	6.6	31,680,000	0.0125	0.0125	0.0125	0.0125	8.00	L, T	0.9	0.020	L, T	2.6	9,461,330	0.010	19,471,995	0.025
Liechtenstein	CS, T1b	CS	L, T	2.1	162,331	0.0125	0.0125	0.0125	0.0125	8.00		0.2	0.020	T	0.9	169,940	0.010	129,132	0.025
Lithuania	T1, T1a	D	L, T	6.0	95,602,353	0.0113	0.0100	0.0125	0.0125	8.00		0.8	0.020	L, T	3.4	25,292,527	0.010	52,279,144	0.025
Luxembourg	CR	CR		1.1	NE	NE	NE	NE	NE	NE		-	NE		-	NE	NE	NE	NE
Monaco	NA	NA		-	NO	NO	NO	NO	NO	NO		-	NO		-	NO	NO	NO	NO
Netherlands	T1, T1b, T2, T3	CS, D	L, T	2.3	300,500,000	0.0093	0.0180	0.0093	0.0099	4.71	T	0.3	0.015	L, T	1.5	100,300,000	0.010	787,000,000	0.007
New Zealand	D, T1a	CS, D	L, T	2.3	308,406,000	0.0100	0.0100	0.0100	0.0100	8.00	L, T	9.8	0.010	L	4.4	354,566,200	0.010	136,091,737	0.025
Norway	T1a	CS, D	L, T	2.5	105,807,380	0.0125	0.0125	0.0125	0.0125	8.00		0.4	0.020	L	0.8	15,968,163	0.010	27,778,042	0.025
Poland	T1, T2	CS, D	L, T	3.1	805,500,000	0.0089	0.0100	0.0100	0.0100	8.00		0.1	0.020	L	1.0	96,955,900	0.010	279,683,850	0.025
Portugal	T1a	D	L, T	1.6	133,996,959	0.0125	0.0125	0.0125	0.0125	NO	L	0.8	0.020	L, T	1.5	44,211,280	0.010	84,903,453	0.025
Romania	T1	D	L, T	3.7	269,100,000	0.0125	0.0125	0.0125	0.0125	NE	L	1.1	0.020	L, T	2.4	134,035,854	0.010	245,903,781	0.025
Russian Federation	CS, T1, T1a, T1b	CS, D	L, T	2.4	776,916,000	0.0142	0.0125	IE	0.0125	8.00		0.3	0.020	T	0.7	606,629,385	0.010	1,039,430,077	0.025
Slovakia	T2	CS, D	L, T	2.5	73,185,300	0.0125	0.0125	0.0125	0.0125	NO		0.2	0.020	T	0.8	23,118,728	0.010	21,875,300	0.025
Slovenia	D, T1, T1a, T1b	CS, D	L, T	1.9	26,252,100	0.0125	0.0125	0.0125	0.0125	8.00		0.3	0.020	L	1.5	10,870,411	0.010	20,680,966	0.025
Spain	CS, T1a, T1b	D	L, T	2.2	906,951,000	0.0118	0.0102	0.0125	0.0125	NO		0.4	0.010	L, T	1.7	206,164,388	0.010	1,808,590,680	0.007
Sweden	CS, T1, T1a, T1b, T2	CS, D	L	4.4	161,500,000	0.0079	0.0250	0.0125	0.0125	8.00	L	0.5	0.016	L, T	1.4	36,388,000	0.010	62,170,000	0.025
Switzerland	CS, T1b	D	L, T	2.3	49,256,000	0.0125	0.0125	0.0125	0.0125	8.00		0.3	0.020	L, T	1.3	47,529,446	0.010	36,658,558	0.025
Turkey																			
Ukraine	CS, T1, T1a, T1b, T2	D	L	2.2	339,192,000	0.0125	0.0125	0.0125	0.0125	8.00		0.6	0.020	L, T	0.8	93,112,072	0.010	250,092,606	0.025
United Kingdom	T1, T1a, T2	CS, D	L	1.8	1,119,334,429	0.0125	0.0125	0.0125	0.0125	8.00	L	0.7	0.020	L	1.3	329,368,369	0.010	571,246,303	0.025
United States	CS, M	CS, M	L, T	2.1	10,051,602,041	0.0181	0.0186	IE	0.0181	9.22		0.2	0.008	L, T	0.8	5,040,273,217	0.010	8,215,455,988	0.008

[a] Information on methods and emission factors is included in this table as reported by Parties in table Summary 3 of the CRF. It may therefore not reflect the actual method or type of emission factor used for all subcategories within the category 4D from 4.D Agricultural soils.

[b] Source of default emission factors: IPCC good practice guidance, table 4-17, page 4.60 (see also IPCC Guidelines, volume 3; table 4-18, page 4.89). IEFs for N-fixing crops and crop residues are shown in the unit kg N2O-N/kg N. The unit of the IPCC default emission factor is also kg N2O-N/kg N.

[c] For cultivation of histosols the two default values refer to temperate and tropical, respectively. It should be noted that default emission factors for histosols have been updated from 5 to 8 and from 10 to 16 for temperate and tropical, respectively (table 4.17, page 4.60 of IPCC good practice guidance). The values in parenthesis indicate the range as prese in the IPCC Guidelines, volume 3; table 4-18, page 4.89.

[d] Source of default emission factor: IPCC Guidelines, volume 3, table 4-22, page 4.104 (Pasture range and paddock). See also IPCC good practice guidance, table 4.12, page 4.43.

[e] Source of default emission factor: IPCC Guidelines, volume 3, table 4-23, page 4.105 (default emission factors for indirect emissions). See also IPCC good practice guidance, table 4.12, page 4.43.

Table 4.9

N_2O emissions from agricultural soils - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	46	53	-1.5	3.5	2.1	3.2	4.1	2.9	5.3	1.5	-0.9	-3.9	-1.6	-0.1	15.2
Austria	11	9	7.7	1.2	-9.3	1.4	0.7	-2.7	-3.5	-0.3	-0.1	-4.2	-4.2	0.7	-14.1
Belarus	30	21	-3.3	-14.3	19.0	11.5	1.9	-6.8	3.7	-9.8	-5.1	11.8	8.0	11.7	-30.1
Belgium	15	13	-2.5	0.9	-1.8	0.1	0.6	0.5	-4.4	-1.6	-1.5	-4.5	-0.4	-1.2	-14.4
Bulgaria	25	8	-28.1	-15.9	-2.6	1.7	-13.8	13.1	-3.7	-8.6	1.9	-5.5	10.7	-5.2	-68.1
Canada	67	76	-3.2	2.1	4.1	-0.6	1.0	1.5	-0.8	-4.5	-2.5	6.8	3.3	-1.4	13.4
Croatia															
Czech Republic	29	15	-15.8	1.6	-7.1	1.3	-3.6	-0.8	-1.0	3.9	-2.7	-10.0	8.9	-5.1	-49.2
Denmark	27	18	-1.8	-2.5	-4.7	-1.2	-0.6	-6.1	-3.6	-2.4	-4.0	-1.5	0.1	-0.8	-32.0
Estonia	5	2	-4.7	-11.8	-14.4	5.7	3.6	-16.2	9.1	-5.3	-8.8	30.0	2.2	0.6	-56.6
European Community	728	631	-2.6	0.6	1.4	0.6	-0.1	-0.3	-0.4	-3.9	-1.1	-1.3	-0.4	-2.0	-13.3
Finland	14	10	-7.0	5.1	-3.3	-2.0	-2.5	-2.4	1.4	-1.7	-1.3	-1.5	-2.7	-0.7	-25.0
France	181	157	-3.7	0.9	1.4	2.9	-0.1	-1.5	0.9	-4.9	1.0	-4.3	1.2	-1.2	-13.0
Germany	143	122	-8.2	4.7	0.0	-0.8	1.0	2.9	1.8	-2.4	-2.6	-0.5	0.9	-0.9	-14.6
Greece															
Hungary	35	18	-27.5	-5.1	4.0	-1.1	9.0	2.9	-5.3	6.1	2.8	-4.2	6.0	-8.3	-49.9
Iceland	1	1	-2.5	-4.4	4.7	-2.0	0.7	3.8	-1.8	-1.2	-7.0	-5.1	-3.1	-0.1	-18.3
Ireland	23	22	0.1	2.6	0.3	-2.3	6.7	0.0	-5.9	-5.0	-1.4	2.7	-2.4	-2.3	-3.3
Italy	63	58	3.1	-3.2	-1.7	5.2	-3.4	1.0	-1.4	-1.4	-1.5	-0.9	0.8	-3.2	-7.2
Japan	28	23	-1.9	-3.0	-2.8	-1.7	-1.1	-0.5	-0.5	-0.7	-0.2	-0.5	-0.6	-1.1	-17.0
Latvia	10	4	-7.9	-28.5	3.4	2.1	-3.8	-8.1	2.3	10.9	-1.1	6.9	-2.5	4.1	-63.7
Liechtenstein	0.03	0.03	-0.1	-0.5	-2.7	-1.1	-3.1	-1.3	-3.1	1.5	-1.8	-0.2	-0.5	1.0	-17.5
Lithuania	16	7	-10.5	-2.7	19.1	0.9	-2.3	0.2	-2.8	3.0	6.5	3.7	0.0	-10.0	-54.6
Luxembourg	0.47	0.47	0	0	0	0	0	0	0	0	0	0	0	0	0
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	35	28	2.3	4.5	-1.6	-1.3	-2.4	-3.9	-8.3	-4.2	-5.8	-1.9	-0.9	-1.1	-20.2
New Zealand	32	41	-0.2	2.3	1.6	0.5	0.9	1.7	3.1	3.2	2.7	1.8	1.3	0.2	26.6
Norway	7	6	0.3	1.7	0.9	0.3	0.1	-2.7	0.8	-3.8	-1.0	1.6	0.3	0.4	-2.4
Poland	76	53	-20.6	2.7	-1.3	1.9	-0.1	-2.4	-2.0	0.9	-2.9	-2.1	1.7	0.6	-30.3
Portugal	10	11	1.1	-0.9	7.1	-0.7	-3.5	0.4	6.3	-4.1	1.1	-15.6	5.4	6.2	1.7
Romania	72	36	-22.0	-3.6	-5.8	2.3	-9.4	-4.8	-12.1	9.8	-2.5	2.2	11.3	-0.7	-49.9
Russian Federation	506	234	-6.3	-9.5	-6.0	-3.7	-12.2	-4.7	4.8	0.1	0.3	-3.7	-1.2	-1.2	-53.7
Slovakia	12	5	-19.7	1.8	-0.7	1.2	-7.5	-8.8	3.0	1.7	3.2	-3.7	-2.9	-0.1	-52.9
Slovenia	3	2	-7.0	-0.6	-1.8	3.6	2.5	0.0	2.2	-1.0	1.9	-3.0	-5.7	0.8	-4.8
Spain	61	62	-1.4	-4.9	17.1	-5.1	6.9	3.2	5.0	-5.8	-4.8	9.0	-5.8	-7.0	0.5
Sweden	17	15	-2.8	-1.6	-0.3	1.2	-1.4	-4.6	-0.1	0.8	-0.9	-1.5	0.0	-0.9	-9.2
Switzerland	8	7	0.0	-4.8	1.7	-4.5	-0.5	-0.7	0.2	-0.9	-0.3	-2.4	0.4	-0.3	-14.9
Turkey															
Ukraine	131	48	-8.0	-10.3	-20.0	-2.4	-6.3	-9.4	-10.9	12.5	-1.4	-13.5	11.5	-0.9	-63.2
United Kingdom	98	81	-0.6	0.5	0.5	3.1	-3.2	-2.2	-3.7	-6.3	2.2	-2.5	-0.4	-1.4	-17.4
United States	1,184	1,178	0.1	-1.6	16.9	-8.6	7.3	-13.6	7.7	3.2	-5.9	-4.3	-3.3	7.8	-0.5

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 4.10

Agricultural soils: parameters (fractions) used to estimate N_2O emissions in the agricultural soils category (2005)

	$Frac_{BURN}$	$Frac_{FUEL}$	$Frac_{GRAZ}$	$Frac_{NCRBF}$	$Frac_{NCRO}$	$Frac_{R}$	$Frac_{GASF}$	$Frac_{GASM}$	$Frac_{LEACH}$
	(kg N / kg crop-N)	(kg N / kg N excreted)		(kg N / kg of dry biomass)	(kg N / kg of dry biomass)	(kg N / kg crop-N)	(NH_3 -N + NO_X -N / kg of synth. fert. N applied)	(NH_3 -N + NO_X -N / kg N excreted)	(kg N / kg of fertilizer or manure N)
IPCC default EF	0.1[a]	no default[b]	no default[b]	0.03[a]	0.015[a]	0.45[a]	0.1[a]	0..2[a]	0.3 (0.1-0.8)[a]
Australia	NA	NA	NA	NA	NA	NA	0.10	NA	0.30
Austria	0.00	NO	0.14	0.01	0.015	0.34	0.03	0.20	0.30
Belarus	0.01	NO	0.02	0.03	0.015	0.45	0.10	0.20	0.30
Belgium	NO	0.03	0.13	NE	NE	0	0.16	0.34	NE
Bulgaria	0.10	0	0.46	0.03	0.020	0.45	0.10	0.20	0.20
Canada	0	0	0.37	0.01	0.006	0.45	0.10	0.30	0.16
Croatia									
Czech Republic	NO	NO	0.139	0.015	0.03	0.15	0.10	0.20	0.30
Denmark	NO	NO	0.11	NE	NE	0.23	0.02	0.21	0.34
Estonia	0.10	0	0.20	0.03	0.015	0.45	0.10	0.20	0.30
European Community	NA	NA	0.35	0.02	0.014	0.42	0.06	0.26	0.28
Finland	NA	NA	0.20	0.04	0.010	0.43	0.01	0.33	0
France	NA	NO	0.42	0.03	NA	NA	0.10	0.20	0.30
Germany	NO	NE	0.11	NE	NE	NE	0.04	0.30	0.30
Greece									
Hungary	0	0	0.10	0	0	0	0.10	0.20	0.30
Iceland	NO	NO	0	0	NO	0	0	0	0
Ireland	NO	NO	0.65	NO	NO	NO	0.02	0.20	0.10
Italy	0.10	0	0.19	0.03	0.015	0.45	0.09	0.29	0.30
Japan	0.10	NA	NA	NA	NA	NA	0.10	0.20	0.30
Latvia	0.10	NO	0.35	0.02	0.030	0.45	0.10	0.20	0.30
Liechtenstein	0	0	0	0	0	0	0	0	0
Lithuania	0.10	NO	0.23	0.03	0.015	0.45	0.10	0.20	0.30
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	NO	NO	NE	NE	NE	NE	NE	NE	NE
New Zealand	0.30	NA	IE	0.03	0.02	0.45	0.10	0.20	0.07
Norway	0	NO	0	0	0	0	0	0	0
Poland	0	NO	0	NE	0	0	0	0	0
Portugal	0.05	NO	0.45	0.02	0.013	0.71	0.06	0.22	0.30
Romania	0.10	0	0.34	0.03	0.015	0.45	0.10	0.20	0.30
Russian Federation	NO	NO	0.22	NE	NE	NE	0.10	0.20	0.30
Slovakia	NO	NO	0.15	0.07	0.145	NE	0.10	0.24	0.14
Slovenia	NO	NO	0.13	0.02	0.008	0.47	0.10	0.20	0.30
Spain	0.01	NO	0.38	0.02	0.006	NA	0.06	0.34	0.30
Sweden	NO	NO	0.31	0.02	0.020	0.20	0.01	0.32	0.23
Switzerland	NO	NO	0.13	0.02	0.011	0.38	0.07	0.33	0.20
Turkey									
Ukraine	NO	NO	NE	0.01	0.010	NE	0.10	0.32	0.30
United Kingdom	0	0	0.52	0.03	0.020	0.45	0.10	0.20	0.30
United States	NA	NA	NA	NA	NA	NA	NA	NA	NA

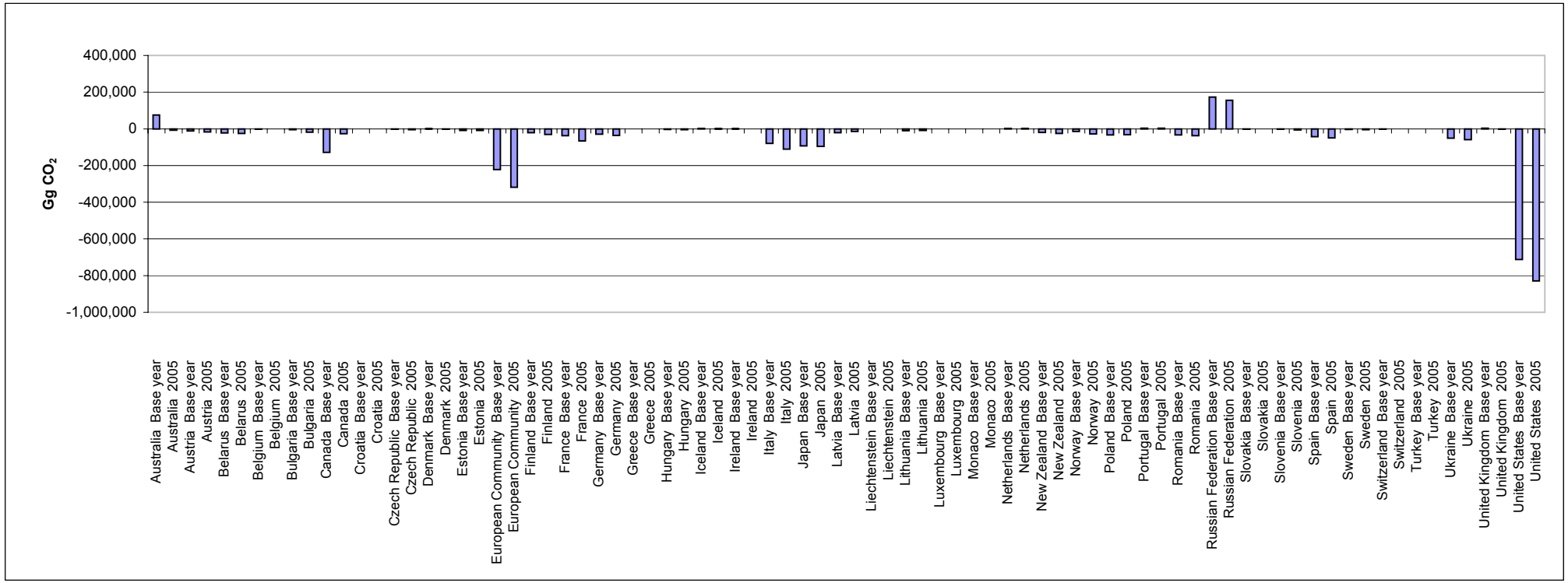
Abbreviations of fractions:

$Frac_{FUEL}$	Fraction of livestock N excretion in excrements burned for fuel	$Frac_{BURN}$	Fraction of crop residue burned
$Frac_{GRAZ}$	Fraction of livestock N excreted and deposited onto soil during grazing	$Frac_{GASF}$	Fraction of synthetic fertilizer N applied to soils that volatises as NH_3 and NO_X
$Frac_{NCRBF}$	Fraction of N in N-fixing crop	$Frac_{GASM}$	Fraction of livestock N excretion that volatilises as NH_3 and NO_X
$Frac_{NCRO}$	Fraction of N in non-N-fixing crop	$Frac_{LEACH}$	Fraction of N input to soils that is lost through leaching and run-off
$Frac_{R}$	Fraction of total above-ground crop biomass that is removed from the field as a crop product		

[a] Source of IPCC default fractions: IPCC Guidelines, volume 3, tables 4.19 and 4.24 (pages 4.94 and 4.106). (See also IPCC good practice guidance, table 4.19, page 4.74).

[b] Countries are recommended to obtain country-specific data.

Figure 5.1
Net CO_2 emissions/removals from the LULUCF sector [a]



Note: The presentations of national totals without emissions and removals from the LULUCF sector exclude emissions and removals associated with carbon stock changes and other emission sources covered in the LULUCF sector.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.1

Net CO_2 emissions/removals from LULUCF - trend information

CO_2 emissions/removals (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	75,371	-6,792	-30.7	-52.3	-17.7	-43.5	181.8	-44.7	18.1	-46.4	34.1	-344.5	-56.1	-2.9	-109.0
Austria	-11,913	-17,037	48.2	-2.9	-33.9	93.3	-8.8	26.4	-24.6	16.9	-19.1	9.5	0.2	0.4	43.0
Belarus	-22,035	-24,944	9.6	1.5	-0.7	-5.7	3.1	4.4	1.4	-0.2	-5.2	-6.4	-1.7	5.1	13.2
Belgium	-1,431	-370	-16.7	-11.5	-9.3	12.0	-8.8	-4.8	26.7	80.5	-16.5	-26.5	-31.7	-68.5	-74.1
Bulgaria	-5,026	-18,037	27.1	5.0	-15.5	4.9	0.4	6.0	25.1	3.7	-10.7	-14.3	15.7	120.7	258.9
Canada	-127,808	-25,908	-17.6	-234.5	-166.8	46.2	-157.8	-160.2	162.0	-9.6	-136.9	-81.5	812.0	-142.4	-79.7
Croatia															
Czech Republic	-1,762	-4,712	467.6	-5.8	36.8	-53.3	-29.6	38.3	41.4	3.3	-13.0	-8.8	-13.8	-2.4	167.5
Denmark	552	-1,453	-405.8	3.2	-27.2	-3.2	66.0	-37.3	-234.4	-146.1	159.6	23.2	26.7	-52.6	-363.4
Estonia	-9,371	-8,097	4.6	2.1	8.9	-12.8	-3.1	3.2	0.6	-4.2	-11.1	3.2	3.3	1.3	-13.6
European Community	-222,085	-318,570	25.4	1.1	5.8	-1.2	-3.9	3.5	-2.8	8.6	4.0	-3.7	-3.9	4.4	43.4
Finland	-21,440	-30,964	68.7	-10.2	48.8	-26.3	-4.1	5.1	-4.1	17.0	-1.0	-5.4	3.5	67.3	44.4
France	-37,635	-65,255	-8.3	-2.5	11.6	2.0	1.1	2.5	-23.3	18.2	21.5	7.7	1.4	3.4	73.4
Germany	-28,616	-36,497	3.0	0.8	1.4	1.3	0.8	1.4	3.8	2.3	0.6	1.5	1.1	0.7	27.5
Greece															
Hungary	-3,150	-4,505	10.5	7.5	-52.7	-0.5	40.9	-65.4	4.3	85.0	-10.9	53.6	-7.0	0.8	43.0
Iceland	1,623	1,286	-1.0	-1.4	-1.2	-1.4	-1.7	-2.0	-1.7	-1.2	-1.5	-1.8	-2.6	-2.3	-20.7
Ireland	121	-657	125.7	-1146.8	69.5	-25.6	-159.6	11.2	-171.4	-82.5	-763.2	137.1	-34.9	237.8	-644.0
Italy	-79,992	-110,176	26.6	5.2	2.8	-6.7	-3.2	7.9	-5.8	12.8	3.8	-1.5	-6.6	5.1	37.7
Japan	-92,311	-96,099	-1.2	3.7	-0.2	0.0	-0.5	-0.1	0.0	-0.3	10.9	-0.1	-0.3	-6.2	4.1
Latvia	-20,691	-14,470	2.8	-10.8	6.9	-11.9	-6.9	-5.3	-3.5	0.4	-7.4	3.9	1.9	3.8	-30.1
Liechtenstein	-7	-6	21.6	25.0	-15.6	-51.5	26.8	-8.9	26.8	-29.4	38.3	6.2	9.1	0.1	-13.0
Lithuania	-10,757	-9,119	-2.2	-19.2	6.5	5.7	4.6	0.4	-6.4	-2.6	-6.5	5.2	3.6	5.4	-15.2
Luxembourg	-295	-295	0	0	0	0	0	0	0	0	0	0	0	0	0
Monaco	0	0	1.4	1.4	0.3	0.3	0	8.6	-7.4	0.2	0.3	-1.2	-0.8	35.2	48.1
Netherlands	2,392	2,341	-3.7	1.8	1.4	8.2	-4.0	0.2	4.1	-1.2	-0.3	-0.4	-0.8	-0.6	-2.1
New Zealand	-19,084	-24,594	-7.5	5.9	2.2	10.8	12.9	3.1	1.3	1.5	3.5	7.0	2.6	4.8	28.9
Norway	-14,734	-27,232	-3.7	-5.4	3.1	-2.7	42.1	1.1	26.1	8.1	1.9	-9.6	1.2	6.7	84.8
Poland	-32,935	-32,108	-0.6	-5.2	3.4	-7.0	-5.6	0.4	-6.0	10.8	-8.3	-10.0	4.2	20.1	-2.5
Portugal	3,650	3,664	-31.9	39.7	75.8	6.5	19.2	-13.5	13.5	-20.5	-0.1	-397.5	-76.5	67.3	0.4
Romania	-32,641	-37,422	4.1	-1.9	-2.5	1.0	5.5	-3.2	-3.1	2.6	-6.3	-1.0	-1.9	4.6	14.6
Russian Federation	172,587	154,920	-93.6	-13.3	-4.4	-63.7	-238.6	-350.9	-279.6	-19.5	-170.5	96.8	-43.1	-170.7	-10.2
Slovakia	-2,407	-877	45.7	-18.7	-10.2	-42.1	38.4	-15.7	46.9	117.4	0.3	-7.8	-12.0	-79.4	-63.5
Slovenia	-1,589	-5,430	23.2	11.6	-2.2	-9.8	9.8	6.9	1.9	1.9	4.2	-3.2	6.1	-3.8	241.7
Spain	-42,763	-49,677	1.6	-0.3	1.5	0.4	-1.2	3.4	5.6	-0.7	0.4	2.3	4.3	-3.7	16.2
Sweden	-3,688	-4,057	346.4	1.1	16.8	-5.0	-26.7	-24.6	89.4	-18.2	0.1	-16.8	-75.0	-27.6	10.0
Switzerland	-1,711	-259	-167.8	-16.9	-24.3	13.6	-59.2	341.6	-125.2	-153.0	-20.9	-453.4	-144.7	-68.8	-84.8
Turkey															
Ukraine	-51,486	-58,575	4.7	2.0	0.8	-1.2	0.3	11.1	-0.5	-0.5	-4.0	1.1	-2.9	-4.3	13.8
United Kingdom	2,882	-2,056	-4.4	14.9	-14.3	-41.0	-110.6	403.8	67.9	34.2	86.6	5.0	63.8	6.3	-171.4
United States	-712,778	-828,453	11.2	-0.6	0.5	3.5	-6.2	-3.3	-3.3	1.4	5.8	0.0	1.6	0.4	16.2

Note: The presentations of national totals without emissions and removals from the LULUCF sector exclude emissions and removals associated with carbon stock changes and other emission sources covered in the LULUCF sector.

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.2a

Methods and emission factors used (2005)

	Forest Land						Cropland						Grassland					
	CO_2		CH_4		N_2O		CO_2		CH_4		N_2O		CO_2		CH_4		N_2O	
	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF
Australia	CS, T1, T2, T3	CS, M	CS	CS	CS	CS	T3	M	CS	CS	CS	CS	T3	M	CS	CS	CS	CS
Austria	T1, T3	CS	T1	CS, D	T1	CS, D	T1, T3	CS, D	NA	NA	T1	CS, D	T1, T3	CS, D	NA	NA	NA	NA
Belarus	T1	CS, D	T1	D	T1	D			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Belgium			NA	NA	NA	NA			NA	NA	NA	NA			NA	NA	NA	NA
Bulgaria			NA	NA					NA	NA	NA	NA			NA	NA	NA	NA
Canada	CS, T2, T3	CS	T2	CS	T2	CS	CS, T1, T2, T3	CS, D	T2	CS	T2	CS	NA	NA	NA	NA	NA	NA
Croatia																		
Czech Republic	T1, T2	CS, D, PS	T1, T2	CS, D	T1, T2	CS, D			NA	NA	NA	NA	T1	D	NA	NA	NA	NA
Denmark			NA	NA	CS	CS	CS, T1	CS, D	NA	NA	NA	NA	CS	CS	NA	NA	NA	NA
Estonia	T1	CS, D	T1	D	T1	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
European Community																		
Finland	T2, T3	CS, D	T2	D	T1, T2	D	D	CS	NA	NA	NA	NA	D	D	NA	NA	NA	NA
France	CR, CS, T2	CS	CS, T2	CS	CR, T2	CS	CR, CS, T2	CS	CS, T2	CS	CR, T2	CS	CR, CS, T2	CS	CS, T2	CS	CR, T2	CS
Germany	D, T2	CS, D	NA	NA			CS, D, T2	CS, D	NA	NA			T2	CS	NA	NA	NA	NA
Greece																		
Hungary	D, T2	CS, D	T1	CS, D	T1	CS, D	D	D	NA	NA	NA	NA	D	D	NA	NA	NA	NA
Iceland			NA	NA	T1	D	CS, T1	CS, D	NA	NA	NA	NA			NA	NA	NA	NA
Ireland	T1, T3	CS, D	NA	NA	NA	NA	T1	D	NA	NA	NA	NA	T1	D	NA	NA	NA	NA
Italy	T1, T2	CS, D	T1	D	T1	D	T1	D	NA	NA	T1	D	NA	NA	NA	NA	NA	NA
Japan	T1, T2, T3	CS, D	T1	D	T1	D	T1, T2	CS, D	T1	D	T1	D	T2	CS, D	T1	D	T1	D
Latvia	T2	CS	T2	CS	T2	CS	T1, T2	CS, D	NA	NA	NA	NA	T1, T2	CS, D	T1	D	T1	D
Liechtenstein	T2	CS	NA	NA	NA	NA			NA	NA	NA	NA	T2	CS	NA	NA	NA	NA
Lithuania	T1	CS, D	T1	D	T1	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Luxembourg	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Monaco	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Netherlands	CS, T2	CS	NA	NA	NA	NA			NA	NA	NA	NA			NA	NA	NA	NA
New Zealand	T2	CS	T1	D	T1	D	T1	D	NA	NA	NA	NA	T1	D	T1	D	T1	D
Norway	CS, D, T1, T3	D	T1	D	T1	D	D, T1, T2, T3	CS, D	NA	NA	T1	D	T1, T2	CS, D	NA	NA	NA	NA
Poland									NA	NA	NA	NA			NA	NA	NA	NA
Portugal	CS, D, T2	CS, D	D	D	D	D	D, T2	CS, D	NA	NA			D, T2	CS, D	NA	NA	NA	NA
Romania	T1, T2	CS, D	T1	D	T1	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Russian Federation	T2	CS	T1, T2	CS, D	T1, T2	CS, D	CS, T1	CS, D	NA	NA	NA	NA	CS, T1	CS, D	NA	NA	NA	NA
Slovakia	CS, T2	CS, PS	T2	D, PS	T2	D			NA	NA	NA	NA	CS	CS	NA	NA	NA	NA
Slovenia	D, T2	CS, D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Spain	T1	CS, D					NA	NA	NA	NA	NA	NA						
Sweden	T1, T3	CS	T1	CS	T1	CS, D	T3	CS	NA	NA	CS	CS	T1, T3	CS, D	T1	D	T1	D
Switzerland	T2	CS	T1	CS	T1	D	T2	CS	NA	NA	T1	D	T2	CS	NA	NA	NA	NA
Turkey																		
Ukraine	T1, T2	CS, D	T1	D	T1	D	T1	D	NA	NA	NA	NA	T1	D	NA	NA	NA	NA
United Kingdom	CS, T3	CS	NA	NA	NA	NA	CS, T3	CS	NA	NA	NA	NA	CS, D, T3	CS	D	CS	D	CS
United States	T3	CS	T2	D	D, T2	D	T2	CS	NA	NA	NA	NA	T3	CS	NA	NA	NA	NA

Table 5.2b

Methods and emission factors used (2005)

	Wetlands						Settlements						Other Land					
	CO_2		CH_4		N_2O		CO_2		CH_4		N_2O		CO_2		CH_4		N_2O	
	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF	Method	EF
Australia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Austria	T1, T3	CS	NA	NA	NA	NA	T1, T3	CS	NA	NA	NA	NA	T1, T3	CS	NA	NA	NA	NA
Belarus	T2	CS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Belgium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bulgaria			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Canada	CS, T2, T3	CS	T2	CS	T2	CS	T2, T3	CS	T2	CS	T2	CS	NA	NA	NA	NA	NA	NA
Croatia																		
Czech Republic	T1	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	T1	CS, D	NA	NA	NA	NA
Denmark	CS	D	CS	D	CS	CS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
European Community																		
Finland	D	CS	D	CS	D	CS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
France	CR, CS, T2	CS	CS, T2	CS	CR, T2	CS	CR, CS, T2	CS	CS, T2	CS	CR, T2	CS	CR, CS, T2	CS	CS, T2	CS	CR, T2	CS
Germany	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	D, T2	CS	NA	NA	NA	NA
Greece																		
Hungary	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	D	D	NA	NA	NA	NA
Iceland							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ireland	T1	CS, D	NA	NA	NA	NA	T1, T2	CS, D	NA	NA	NA	NA	T1	D	NA	NA	NA	NA
Italy	NA	NA	NA	NA	NA	NA	T1	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Japan	T2	CS, D	T1	D	T1	D	T2	CS, D	T1	D	T1	D	T2	CS, D	T1	D	T1	D
Latvia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Liechtenstein			NA	NA	NA	NA	T2	CS	NA	NA	NA	NA	T2	CS	NA	NA	NA	NA
Lithuania	T1	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Luxembourg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Monaco	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Netherlands	NA	NA	NA	NA	NA	NA	CS	CS	NA	NA	NA	NA	CS	CS	NA	NA	NA	NA
New Zealand	T1	D	NA	NA	NA	NA	T1	D	NA	NA	NA	NA	T1	D	NA	NA	NA	NA
Norway	T1	CS, D	NA	NA	T1	D	T3	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Poland	NA	NA	NA	NA	NA	NA			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Portugal	D, T2	CS, D	NA	NA	NA	NA	D, T2	CS, D	NA	NA	NA	NA	D, T2	CS, D	NA	NA	NA	NA
Romania	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Russian Federation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Slovakia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	T2	CS	NA	NA	NA	NA
Slovenia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Spain																		
Sweden	NA	NA	NA	NA	NA	NA	T3	CS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Switzerland	T2	CS	NA	NA	NA	NA	T2	CS	NA	NA	NA	NA	T2	CS	NA	NA	NA	NA
Turkey																		
Ukraine	T1	D	NA	NA	T1	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
United Kingdom	NA	NA	NA	NA	NA	NA	CS, D, T3	CS	D	CS	D	CS	NA	NA	NA	NA	NA	NA
United States	NA	NA	NA	NA	NA	NA	T2, T3	CS	NA	NA	D	D	NA	NA	NA	NA	NA	NA

Table 5.3a

Forest land remaining forest land - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005)[a, b]

	Activity data		IEF (Mg C/ha)					
	Total area (kha)	Area of organic soil[b] (kha)	CSC[c] in living biomass/area			Net CSC[c] in DOM[d]/area	Net CSC[c] in soils/area	
			Increase	Decrease	Net Change		Mineral soils[b]	Organic soils[b]
Australia	15,702.90	NO	0.73	-0.06	0.67	-0.13	NA, NO	NO
Austria	3,365.06	NA	3.19	-1.82	1.37	0.05	NO	NO
Belarus	7,792.20	NE	1.40	-0.48	0.92	NE	NE	NE
Belgium	620.98		3.54	-2.67	0.88	NA		
Bulgaria	4,076.46	NE	0.94	-0.48	0.46	NE	NE	NE
Canada	235,674.39	IE, NO	3.50	-3.63	-0.13	0.41	-0.16	IE, NA
Croatia								
Czech Republic	2,576.09		2.66	-1.97	0.69	0		
Denmark	440.80	17.63	3.76	-2.73	1.03	NE	NE	NE
Estonia	2,122.80	NE	2.28	-1.24	1.04	NE	NE	NE
European Community	NE	NE	NE	NE	NE	NE	NE	IE
Finland	22,127.00	5,970.00	1.54	-1.08	0.46	0.04	0.06	-0.30
France	13,701.37		2.98	-1.33	1.65	-0.32		
Germany	10,411.25	NE	1.94	NA	1.94	NE	NE	NE
Greece								
Hungary	1,745.23		0.83	NA	0.83	NE		
Iceland	52.40	3.53	0.63	NE	0.63	NE	NE	-0.16
Ireland	247.01	NE	0.92	NO	0.92	0.01	NE	NE
Italy	11,026.26	NO	2.49	-1.44	1.05	0.19	0.67	NO
Japan	24,453.99	IE	0.94	0.00	0.94	-0.01	0.02	IE
Latvia	2,758.00	NE	2.40	-1.13	1.27	0.01	NE	NE
Liechtenstein	5.86	NE	3.22	-2.35	0.86	0.00	0.01	IE
Lithuania	1,793.71		2.17	-0.99	1.17	NE		
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	437.92	0	2.60	-1.38	1.22	0.21	NE	NE
New Zealand	1,846.90	IE, NE	5.44	-2.33	3.11	0.84	IE, NE	IE, NE
Norway	9,355.37	NO	0.69	IE	0.69	0.07	0.11	NO
Poland	8,836.00	NE	1.91	-1.20	0.71	NE	0.43	NE
Portugal	2,824.48	NO	2.00	-2.17	-0.17	0.00	0.00	NO
Romania	6,731.85	NE	2.37	-0.86	1.52	NE	NE	NE
Russian Federation	620,398.20	NE	0.13	-0.05	0.08	NE	NE	NE
Slovakia	1,880.00	4.89	2.21	-2.19	0.03	NE	NE	NE
Slovenia	1,169.20	NE	2.43	-1.16	1.27	NE	NE	NE
Spain	15,956.59		0.46	NO	0.46	NE		
Sweden	27,402.02	3,818.50	0.11	NA	0.11	0.06	-0.19	NA
Switzerland	1,222.55		2.61	-2.23	0.38	NO		
Turkey								
Ukraine	9,030.50	NE	1.97	-0.55	1.43	NE	NE	NE
United Kingdom	822.00		NO	NO	NO	NO		
United States	254,684.49	NA	0.49	IE	0.49	0.11	NE	NA

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.
[d] DOM = dead organic matter.

Table 5.3b

Forest land remaining forest land - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005)[a, b]

	Emissions/Removals (Gg C)						Net CO_2 (Gg)
	CSC [c] in living biomass			Net CSC [c] in DOM[d]	Net CSC [c] in soils		
	Gains	Losses	Net Change		Mineral soils[b]	Organic soils[b]	
Australia	11,420.34	-897.47	10,522.86	-2,116.15	NA, NO	NO	-30,824.62
Austria	10,729.15	-6,110.53	4,618.62	163.95	NO	NO	-17,536.08
Belarus	10,927.41	-3,757.19	7,170.22	NE	NE	NE	-26,290.81
Belgium	2,200.81	-1,656.50	544.31	NA			-2,094.61
Bulgaria	3,812.45	-1,938.07	1,874.38	NE	NE	NE	-6,872.74
Canada	824,737.94	-855,389.79	-30,651.85	96,569.10	-38,672.06	IE, NA	-99,899.02
Croatia							
Czech Republic	6,850.02	-5,084.11	1,765.92				-6,475.03
Denmark	1,659.00	-1,203.00	456.00	NE	NE	NE	-1,672.00
Estonia	4,843.27	-2,633.20	2,210.07	NE	NE	NE	-8,103.58
European Community	154,772.11	-72,651.36	82,120.75	482.43	2,283.00	IE	-311,249.34
Finland	34,076.53	-23,935.50	10,141.02	929.58	974.08	-1,775.85	-37,652.38
France	40,841.51	-18,181.34	22,660.17	-4,403.59			-66,940.79
Germany	20,199.14	NA	20,199.14	NE	NE	NE	-74,063.51
Greece							
Hungary	1,451.73	NA	1,451.73	NE			-5,323.00
Iceland	32.88	NE	32.88	NE	NE	-0.57	-118.48
Ireland	227.76	NO	227.76	2.75	NE	NE	-845.19
Italy	27,506.43	-15,924.17	11,582.26	2,125.55	7,427.89	NO	-77,497.55
Japan	23,092.30	-2.53	23,089.77	-139.66	431.15	IE	-85,731.28
Latvia	6,625.80	-3,118.86	3,506.94	25.00	NE	NE	-12,950.45
Liechtenstein	18.83	-13.78	5.05	0.02	0.05	IE	-18.78
Lithuania	3,885.85	-1,783.59	2,102.27	NE			-7,396.44
Luxembourg	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO
Netherlands	1,136.60	-603.80	532.80	91.50	NE	NE	-2,289.10
New Zealand	10,043.49	-4,302.78	5,740.71	1,559.62	IE, NE	IE, NE	-26,767.89
Norway	6,454.61	IE	6,454.61	676.75	1,066.47	-39.20	-29,914.96
Poland	16,912.35	-10,612.08	6,300.27	NE	3,763.99	NE	-36,902.29
Portugal	5,646.92	-6,130.20	-483.28	-2.15	1.25	NO	1,775.31
Romania	15,980.06	-5,772.73	10,207.33	NE	NE	NE	-37,426.89
Russian Federation	79,107.16	-32,334.28	46,772.88	NE	NE	NE	-171,500.56
Slovakia	4,158.93	-4,107.96	50.97	NE	NE	NE	-186.89
Slovenia	2,843.10	-1,362.09	1,481.01	NE	NE	NE	-5,430.37
Spain	7,300.26	NO	7,300.26	NE			-26,767.60
Sweden	3,124.71	NA	3,124.71	1,713.12	-4,371.32	NA	-1,710.55
Switzerland	3,194.54	-2,727.42	467.12	NO			-1,712.78
Turkey							
Ukraine	17,803.35	-4,923.24	12,880.12	NE	NE	NE	-47,227.10
United Kingdom	NO	NO	NO	NO			NO
United States	124,341.61	IE	124,341.61	28,527.17	NE	9,497.59	-595,343.38

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.4

Net CO_2 emissions/removals from forest land remaining forest land - trend information

CO_2 emissions/removals [b] (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	-42,762	-30,825	-0.7	-0.6	0.9	0.1	0.0	-11.3	-2.9	-2.7	5.0	-2.8	-6.3	-1.2	-27.9
Austria	-12,226	-17,536	48.5	-3.0	-31.0	86.5	-9.4	25.3	-24.0	16.4	-18.9	9.7	0	0	43.4
Belarus	-25,132	-26,291	7.0	1.7	-0.7	-5.0	2.4	3.0	1.0	0.0	-4.7	-5.9	-1.5	5.5	4.6
Belgium	-3,205	-2,095	-8.9	-5.4	1.7	0.7	-3.8	-1.9	10.8	39.4	-9.6	-15.2	-16.1	-27.8	-34.7
Bulgaria	-5,133	-6,873	24.0	3.1	-13.4	5.4	-0.2	4.9	24.7	5.5	-12.1	-15.2	12.9	-13.7	33.9
Canada	-189,803	-99,899	-0.5	-15.7	-3.4	0.8	-2.2	-6.8	-4.2	8.5	-15.2	3.4	-18.3	-1.8	-47.4
Croatia															
Czech Republic	-4,470	-6,475	71.8	-8.5	0.1	-18.3	-5.7	7.3	19.4	7.8	1.5	-8.7	-6.8	5.2	44.9
Denmark	-2,831	-1,672	6.2	-3.7	2.3	2.8	4.7	-0.4	-81.8	483.3	7.5	-8.1	-2.9	-49.7	-40.9
Estonia	-9,448	-8,104	3.7	1.8	8.9	-12.6	-3.2	3.2	0.8	-4.6	-10.1	2.0	3.4	1.1	-14.2
European Community	-250,107	-311,249	20.9	2.3	5.2	-2.1	-3.9	3.2	-4.6	6.7	3.2	-6.8	-0.7	1.7	24.4
Finland	-27,807	-37,652	50.2	-1.0	30.2	-19.2	-2.3	4.7	-2.5	11.2	-4.1	-4.5	1.8	43.8	35.4
France	-46,014	-66,941	-12.7	-2.3	8.8	0.7	0.0	1.6	-21.8	14.9	18.9	7.1	-1.1	3.0	45.5
Germany	-74,064	-74,064	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	-3,393	-5,323	11.8	0.0	-58.3	1.4	55.2	-61.6	-39.3	151.8	-14.2	81.9	-14.9	31.1	56.9
Iceland	-29	-118	16.7	11.6	9.6	8.1	6.9	7.6	8.2	7.0	6.1	7.1	6.2	6.6	315.1
Ireland	-1,079	-845	7.8	-25.5	-18.0	-33.5	118.5	11.1	-79.9	-67.6	851.6	251.4	-42.4	16.7	-21.7
Italy	-45,782	-77,498	46.7	8.0	4.0	-10.1	-3.2	11.9	-8.5	12.9	8.6	-12.4	11.0	-0.4	69.3
Japan	-75,122	-85,731	0.3	5.2	0.3	0.3	0.2	0.2	0.3	0.3	11.8	0.1	0.1	-5.6	14.1
Latvia	-18,736	-12,950	3.3	-14.0	8.3	-11.6	-5.5	-4.8	-3.0	-1.3	-8.4	6.5	-0.1	3.5	-30.9
Liechtenstein	-18	-19	2.0	5.9	-2.7	7.7	-1.8	4.3	-1.8	-0.4	-0.4	-6.4	0.9	0.1	4.0
Lithuania	-8,994	-7,396	-2.1	-22.2	8.8	7.2	5.2	0.6	-7.5	-3.1	-7.7	5.2	3.4	4.7	-17.8
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	-2,505	-2,289	1.6	-1.8	-1.1	-7.7	3.5	-1.4	-3.9	0	0	0	0	0	-8.6
New Zealand	-20,625	-26,768	-4.6	0.6	3.1	7.6	5.6	4.3	1.4	2.2	1.3	6.0	2.2	5.1	29.8
Norway	-17,268	-29,915	-3.1	-4.2	2.8	-3.4	36.4	1.7	20.7	7.3	3.3	-8.7	0.8	6.2	73.2
Poland	-42,705	-36,902	-1.8	-4.6	2.3	-4.8	-3.9	0.9	-6.1	10.2	-3.8	-1.5	1.3	1.4	-13.6
Portugal	2,072	1,775	-69.1	49.8	26.8	1.1	23.6	-14.0	17.0	-18.7	3.8	-234.3	-85.5	102.4	-14.3
Romania	-32,644	-37,427	4.1	-1.9	-2.5	1.0	5.5	-3.1	-2.9	2.5	-6.1	-1.2	-2.0	4.6	14.7
Russian Federation	-143,304	-171,501	0	0	0	0	-87.7	776.1	-126.2	-121.1	2292.3	33.2	-19.5	-67.6	19.7
Slovakia	-4,614	-187	21.0	-15.0	-9.3	-30.4	14.4	-9.6	52.0	27.6	1.6	-8.1	-33.7	-94.7	-95.9
Slovenia	-1,589	-5,430	23.2	11.6	-2.2	-9.8	9.8	6.9	1.9	1.9	4.2	-3.2	6.1	-3.8	241.7
Spain	-26,768	-26,768	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweden	-7,855	-1,711	192.2	8.3	17.6	-7.3	-26.4	-16.6	64.9	-16.7	-5.6	-25.5	-68.2	-73.1	-78.2
Switzerland	-3,545	-1,713	-80.9	-12.1	-16.9	8.6	-38.8	150.4	-97.0	1,003.8	-6.4	-120.6	-661.7	-24.9	-51.7
Turkey															
Ukraine	-54,097	-47,227	4.4	-5.9	-4.2	0.6	4.3	0.8	-2.3	-1.0	-2.4	-2.6	-2.9	0.4	-12.7
United Kingdom	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	-466,546	-595,343	19.0	1.0	1.7	3.6	-7.9	-5.6	-4.0	4.9	7.2	0.0	0.0	0.0	27.6

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Only net CO_2 emissions from carbon stock change are included in this table. For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to CO_2.

Table 5.5

Area of forest land remaining forest land - trend information

Area (kha)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	15,702.90	15,702.90	0	0	0	0	0	0	0	0	0	0	0	0	0
Austria	3,326.11	3,365.06	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.1	0	0	1.2
Belarus	7,028.00	7,792.20	0.5	1.7	0.4	1.0	1.0	-0.3	1.6	1.6	0.4	0.5	0.7	-0.1	10.9
Belgium	641.11	620.98	-0.3	-2.9	-0.3	-0.3	-0.3	-0.3	-0.1	-0.5	0	0	0	0	-3.1
Bulgaria	3,259.00	4,076.46	0.1	0.1	-0.1	-0.1	16.3	-13.6	0.8	2.0	0.7	1.7	14.5	0.3	25.1
Canada	236,364.03	235,674.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3
Croatia															
Czech Republic	2,562.40	2,576.09	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.5
Denmark	411.39	440.80	0	0	0	0	0	0	7.1	0	0	0	0	0	7.1
Estonia	1,857.00	2,122.80	1.1	-0.3	3.7	0.0	1.3	6.0	2.7	6.4	-2.0	2.8	-6.8	0.5	14.3
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	21,961.00	22,127.00	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	-0.5	-0.5	-0.7	0.8
France	13,156.36	13,701.37	0	0.2	0.2	-0.1	0.2	-0.1	0.2	0.2	0.3	0.3	0.3	0.5	4.1
Germany	10,478.60	10,411.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	-0.8	-0.6
Greece															
Hungary	1,515.12	1,745.23	0.7	0.7	0.5	0.7	0.8	0.9	-0.5	1.6	0.3	1.4	1.8	1.1	15.2
Iceland	31.60	52.40	3.5	3.8	3.4	3.0	2.7	3.1	3.5	3.1	2.8	3.4	3.0	3.4	65.8
Ireland	194.73	247.01	-2.8	-3.2	-0.4	5.5	5.9	4.3	1.2	3.2	5.2	6.9	2.1	2.4	26.8
Italy	9,262.89	11,026.26	1.3	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	19.0
Japan	23,583.42	24,453.99	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	3.7
Latvia	2,535.70	2,758.00	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	-0.2	-0.2	8.8
Liechtenstein	5.77	5.86	0.3	0.2	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	1.5
Lithuania	1,612.21	1,793.71	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	11.3
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	432.40	437.92	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.1	1.3
New Zealand	1,184.88	1,846.90	2.2	6.0	5.2	4.5	3.6	2.8	2.2	1.9	1.6	1.3	-0.6	0.6	55.9
Norway	8,887.72	9,355.37	-0.3	-0.3	-0.3	0.8	1.6	0.9	1.4	0.7	1.7	0.0	0.0	0.0	5.3
Poland	8,864.00	8,836.00	0.1	0.1	0.3	0.3	0.2	0.4	0.1	0.3	0.3	0.3	0.4	-3.7	-0.3
Portugal	2,987.31	2,824.48	0.4	0.4	0.2	0.2	0.2	0.2	0.2	-1.7	-1.7	-1.7	-1.8	-1.8	-5.5
Romania	6,542.00	6,731.85	1.9	0.0	-0.1	0.2	-0.2	0.0	-3.2	0.0	2.9	0.1	1.4	-0.2	2.9
Russian Federation	609,460.58	620,398.20	0.3	-0.1	-0.1	-0.1	-0.1	0.3	0.2	0	0.1	0.3	0.4	0.2	1.8
Slovakia	1,921.71	1,880.00	0.3	-0.1	0.0	-0.2	0.0	0.1	0.3	0.0	0.1	0.0	-2.4	-0.1	-2.2
Slovenia	1,053.45	1,169.20	0.9	0.3	0.1	1.0	0.1	0.4	1.7	0.8	0.6	0.7	0.5	0.5	11.0
Spain	15,956.59	15,956.59	0	0	0	0	0	0	0	0	0	0	0	0	0
Sweden	27,352.20	27,402.02	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.7	-1.4	0.2
Switzerland	1,197.30	1,222.55	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.1
Turkey															
Ukraine	9,514.45	9,030.50	0.2	-5.0	0.1	0.4	0.3	0.5	0.0	0.3	0.3	0.1	0.1	-0.2	-5.1
United Kingdom	822.00	822.00	0	0	0	0	0	0	0	0	0	0	0	0	0
United States	242,299.70	254,684.49	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	5.1

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.6a

Land converted to forest land - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Activity data		IEF (Mg C/ha)					
	Total area (kha)	Area of organic soil[b] (kha)	CSC [c] in living biomass/area			Net CSC[c] in DOM[d]/area	Net CSC [c] in soils/area	
			Increase	Decrease	Net Change		Mineral soils[b]	Organic soils[b]
Australia	1,140.81	NO	4.63	NA, NO	4.63	0.61	NO	NO
Austria	11.38	NO	1.18	-0.09	1.09	NO	1.40	NO
Belarus	170.51	NE, NO	IE, NE, NO	IE, NE, NO	IE, NE, NO	NE, NO	NE, NO	NE, NO
Belgium	NE		NE	NE	NE	NE		
Bulgaria	NE	NE	NE	NE	NE	NE	NE	NE
Canada	185.31	IE, NO	1.93	-0.65	1.28	0.27	0.05	IE, NA
Croatia								
Czech Republic	14.81		1.92	NO	1.92	0		
Denmark	30.96	NO	1.33	NA, NO	1.33	NE, NO	NE	NE
Estonia	NE	NE	NE	NE	NE	NE	NE	NE
European Community	NE	NE	NE	NE	NE	NE	NE	IE
Finland	IE	IE	IE	IE	IE	IE	IE	IE
France	2,030.78		0.75	NO	0.75	0.43		
Germany	366.19	NE	3.47	NA	3.47	NE	NE	NE
Greece								
Hungary	44.41		2.90	IE, NA	2.90	NE		
Iceland	1.80	0.23	1.20	NE, NO	1.20	NE, NO	NE, NO	-0.16
Ireland	289.30	13.69	0.44	NO	0.44	0.01	-0.31	-3.96
Italy	117.56	NO	2.52	-1.46	1.06	0.19	33.15	NO
Japan	538.19	IE	0.95	IE, NE	0.95	-0.05	0.01	IE
Latvia	178.00	IE, NE	2.40	IE, NE, NO	2.40	NE	IE, NE	IE, NE
Liechtenstein	0.01	NE, NO	3.01	NO	3.01	NO	NO	NO
Lithuania	220.30		0.69	NA	0.69	1.52		
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	4.97	0	9.30	NE	9.30	NE	IE	IE
New Zealand	6.53	NE	IE, NE	-52.38	-52.38	IE	IE	IE
Norway	3.60	NA, NO	NA	NA	NA	NA	NA, NO	NA, NO
Poland	364.00	NE	0.38	NE	0.38	0	1.98	NE
Portugal	9.81	NO	25.73	-13.17	12.56	-0.91	4.40	NO
Romania	3.87	NE	NA, NE	NA, NE	NA, NE	NA, NE	NE	NE
Russian Federation	IE, NE	NE	IE, NE	IE, NE	IE, NE	NE	IE, NE	IE, NE
Slovakia	51.64	IE, NO	IE	IE	IE	2.72	IE, NO	IE, NO
Slovenia	IE, NE	NE	IE, NE	IE, NE	IE, NE	NE	IE, NE	NE
Spain	3,501.30		1.78	IE, NO	1.78	NE, NO		
Sweden	1,536.93	NA	0.84	0.00	0.84	NA	NA	NA
Switzerland	2.47		1.54	-1.11	0.42	NO		
Turkey								
Ukraine	813.20	NE, NO	1.63	NA, NO	1.63	0.43	0.44	NE, NO
United Kingdom	1,652.90		2.00	IE, NO	2.00	0.16		
United States	NA	NA	NE	NE	NE	NE	NE	NE

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.
[d] DOM = dead organic matter.

Table 5.6b

Land converted to forest land - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Emissions/Removals (Gg C)						Net CO_2 (Gg)
	CSC [c] in living biomass			Net CSC [c] in DOM[d]	Net CSC [c] in soils		
	Gains	Losses	Net Change		Mineral soils[b]	Organic soils[b]	
Australia	5,280.55	NA, NO	5,280.55	701.26	NO	NO	-21,933.28
Austria	13.38	-1.02	12.37	NO	15.94	NO	-103.80
Belarus	IE, NE, NO	IE, NE, NO	IE, NE, NO	NE, NO	NE, NO	NE, NO	NE,NO,IE
Belgium	NE	NE	NE	NE			NE
Bulgaria	NE	NE	NE	NE	NE	NE	NE
Canada	357.17	-119.71	237.46	50.72	9.61	IE, NA	-1,091.87
Croatia							
Czech Republic	28.44	NO	28.44				-110.75
Denmark	41.28	NA, NO	41.28	NE, NO	NE	NE	-151.36
Estonia	NE	NE	NE	NE	NE	NE	NE
European Community (15)	14,560.69	-301.77	14,258.92	1,150.93	5,127.24	IE	-75,302.66
Finland	IE	IE	IE	IE	IE	IE	IE
France	1,531.99	NO	1,531.99	873.43			-10,976.41
Germany	1,271.71	NA	1,271.71	NE	NE	NE	-4,662.94
Greece							
Hungary	129.00	IE, NA	129.00	NE			-473.00
Iceland	2.16	NE, NO	2.16	NE, NO	NE, NO	-0.04	-7.78
Ireland	128.18	NO	128.18	3.07	-86.30	-54.18	33.81
Italy	296.39	-171.59	124.80	22.90	3,897.41	NO	-14,832.09
Japan	508.74	IE, NE	508.74	-28.19	2.84	IE	-1,772.46
Latvia	427.20	IE, NE, NO	427.20	NE	IE, NE	IE, NE	-1,566.40
Liechtenstein	0.03	NO	0.03	NO	NO	NO	-0.12
Lithuania	151.06	NA	151.06	334.71			-1,781.14
Luxembourg	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO
Netherlands	46.24	NE	46.24	NE	IE	IE	-169.55
New Zealand	IE, NE	-342.20	-342.20	IE	IE	IE	1,254.72
Norway	NA	NA	NA	NA	NA, NO	NA, NO	NO,NA
Poland	139.25	NE	139.25		718.93		-3,146.66
Portugal	252.41	-129.16	123.25	-8.96	43.17	NO	-577.39
Romania	NA, NE	NA, NE	NA, NE	NA, NE	NE	NE	NE,NA
Russian Federation	IE, NE	IE, NE	IE, NE	NE	IE, NE	IE, NE	NE,IE
Slovakia	IE	IE	IE	140.28	IE, NO	IE, NO	-514.36
Slovenia	IE, NE	IE, NE	IE, NE	NE			NE,IE
Spain	6,248.04	IE, NO	6,248.04	NE, NO			-22,909.48
Sweden	1,292.75	0.00	1,292.75	NA	NA	NA	-4,740.08
Switzerland	3.80	-2.75	1.04	NO			-3.83
Turkey							
Ukraine	1,322.06	NA, NO	1,322.06	352.58	360.28	NE, NO	-7,461.38
United Kingdom	3,308.66	IE, NO	3,308.66	260.48			-15,738.00
United States	NE	NE	NE	NE	NE	NE	NE

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.7

Net CO_2 emissions/removals from land converted to forest land - trend information

CO_2 emissions/removals [b] (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	-1,990	-21,933	97.9	12.3	10.9	9.9	18.1	0.8	12.6	13.5	20.2	4.0	-1.8	2.2	1,002.2
Austria	-133	-104	0	0	-12.3	0	0	0	0	0	0	0	0	0	-21.8
Belarus	NE, NO,IE	NE, NO,IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	-5	NE	-68.4	*	*	*	*	*	*	*	*	*	*	*	*
Canada	-1,227	-1,092	0.7	0.3	0.0	-0.3	-2.0	-0.9	-0.9	-1.1	-1.7	-1.7	-1.9	-2.3	-11.0
Croatia															
Czech Republic	-152	-111	-3.7	-3.5	-3.4	-8.1	-8.8	-6.9	-2.0	14.3	4.1	0.3	4.0	-4.6	-27.3
Denmark	NO,NA,NE	-151	*	36.1	58.3	44.9	43.6	25.8	37.0	25.0	19.5	22.3	15.1	22.3	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	-53,157	-75,303	2.1	1.5	1.7	1.9	-0.1	3.9	6.2	3.5	2.3	2.0	1.5	0.5	41.7
Finland	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	-9,754	-10,976	0	2.1	2.2	2.3	1.5	0.7	0.4	-0.2	-0.2	-0.7	-1.2	-1.3	12.5
Germany	-336	-4,663	33.4	26.7	21.1	17.4	14.8	12.9	11.4	10.3	9.3	8.5	7.8	5.5	1,288.0
Greece															
Hungary	142	-473	104.8	-117.5	962.5	-29.0	-107.7	257.1	-607.0	-28.4	50.4	-95.8	-1,130.4	-299.6	-433.9
Iceland	-5	-8	27.3	-7.1	-7.7	-8.3	18.2	15.4	-6.7	-7.1	23.1	-6.3	13.3	5.9	63.7
Ireland	601	34	28.4	-49.3	-26.2	-178.0	-114.7	-177.4	2,737.8	64.1	-35.2	-152.1	-70.5	-42.2	-94.4
Italy	-13,443	-14,832	2.1	0.9	0.9	0.0	0.3	1.0	0.1	1.0	1.1	-0.1	1.0	0.6	10.3
Japan	-5,654	-1,772	-4.1	-2.8	-6.2	-6.8	-6.6	-6.9	-8.0	-8.4	-2.3	-3.0	-4.5	-32.6	-68.7
Latvia	-2,136	-1,566	-0.9	11.5	-3.7	-7.6	-14.5	-7.7	-7.3	-3.7	4.9	-17.0	17.6	7.7	-26.7
Liechtenstein	-0.121	-0.1215254	-3.0	-5.6	2.9	-57.1	33.3	-10.0	5.6	57.9	-13.3	26.9	0	0.4	0.4
Lithuania	-1,936	-1,781	-3.1	-3.6	-3.7	-2.6	0.6	0.6	-0.3	-0.8	0.9	3.4	4.0	7.4	-8.0
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	-11	-170	100.0	20.0	16.7	14.3	12.5	11.1	10.0	9.1	8.3	7.7	7.1	6.7	1,500.0
New Zealand	870	1,255	51.6	-24.8	10.1	-10.3	-49.8	25.3	0.9	11.9	-26.9	-5.2	-1.3	14.7	44.2
Norway	NO,NA	NO,NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	NE	-3,147	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	-577	-577	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NE,NA	NE,NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NE,IE	NE,IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE, NO,IE	-514	*	*	*	*	*	*	*	*	*	*	*	10.8	*
Slovenia	NE,IE	NE,IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	-15,995	-22,909	4.4	-0.8	3.8	0.9	-3.0	8.7	13.4	-1.6	0.9	5.1	9.4	-7.6	43.2
Sweden	-1,306	-4,740	-23.3	23.6	-10.9	19.6	7.2	8.6	16.6	49.7	10.7	1.0	-50.0	112.3	262.8
Switzerland	-7	-4	-78.0	-4.7	-24.1	24.7	-30.1	90.9	-65.3	109.8	-22.4	-72.3	191.1	-2.4	-47.9
Turkey															
Ukraine	-1,397	-7,461	-10.1	117.8	-0.8	-0.6	9.3	-3.4	-2.7	-0.5	0.6	0.8	0.6	-12.8	434.2
United Kingdom	-12,203	-15,738	4.2	-1.7	-1.6	-1.5	-0.8	0.7	2.2	3.9	4.9	4.0	4.2	-3.5	29.0
United States	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Only net CO_2 emissions from carbon stock change are included in this table. For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to C.

Table 5.8

Area of land converted to forest land - trend information

Area (kha)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	81.44	1,140.81	101.0	12.9	11.4	10.3	12.1	10.8	12.1	10.8	14.9	9.0	7.1	5.6	1,300.9
Austria	14.59	11.38	0	0	-12.4	0	0	0	0	0	0	0	0	0	-22.0
Belarus	50.60	170.51	10.3	7.3	30.0	23.1	18.7	15.8	1.1	0	0	0	0	0	237.0
Belgium	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	2.46	NE	-43.1	*	*	*	*	*	*	*	*	*	*	*	*
Canada	219.52	185.31	-0.1	-0.5	-1.6	-1.2	-1.4	-1.7	-1.5	-1.8	-2.1	-1.9	-0.9	-0.8	-15.6
Croatia															
Czech Republic	20.38	14.81	-3.7	-3.5	-3.4	-8.1	-8.8	-6.9	-2.0	14.3	4.1	0.3	4.0	-4.6	-27.3
Denmark	0.73	30.96	137.0	23.1	19.4	26.9	13.1	36.5	16.7	11.0	10.9	10.7	4.9	12.2	4,141.1
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	1,763.05	2,030.78	0	2.4	2.5	2.6	1.6	0.7	0.3	-0.2	-0.2	-0.7	-1.1	-1.1	15.2
Germany	24.28	366.19	33.4	27.9	21.8	17.9	15.2	13.2	11.6	10.4	9.5	8.6	7.9	5.5	1,408.2
Greece															
Hungary	32.66	44.41	-1.4	12.4	20.4	12.0	-0.6	1.7	1.7	15.9	16.2	4.8	-0.2	1.0	36.0
Iceland	1.10	1.80	27.3	-7.1	-7.7	-8.3	18.2	15.4	-6.7	-7.1	23.1	-6.3	13.3	5.9	63.6
Ireland	175.43	289.30	5.2	7.0	5.6	1.3	2.0	2.0	3.8	3.5	3.2	1.1	1.2	3.1	64.9
Italy	117.56	117.56	0	0	0	0	0	0	0	0	0	0	0	0	0
Japan	1,366.84	538.19	-4.4	-6.4	-6.1	-6.8	-6.5	-6.8	-7.9	-8.3	-10.2	-3.0	-4.4	-4.1	-60.6
Latvia	228.65	178.00	-0.5	13.4	-3.3	-7.6	-14.9	-7.5	-5.8	-3.2	6.0	-17.2	18.4	6.6	-22.2
Liechtenstein	0.02	0.01	6.3	-16.7	6.7	-50.0	0	12.5	-11.1	25.0	10.0	27.3	-21.4	0	-31.3
Lithuania	242.00	220.30	-3.1	-3.6	-3.7	-2.6	0.6	0.6	0.6	-0.8	0.4	2.4	4.0	6.9	-9.0
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	4.97	4.97	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	17.89	6.53	51.6	9.4	-13.5	-10.3	-22.0	-19.4	-16.9	-17.3	-16.0	-27.0	-30.6	-46.3	-63.5
Norway	9.77	3.60	164.9	21.7	17.8	20.3	-21.8	4.5	-30.2	-6.2	-94.7	0	0	0.0	-63.1
Poland	NE	364.00	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	9.81	9.81	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	16.20	3.87	-98.7	-48.3	953.3	-86.7	-90.5	60,250.0	-99.2	19,460.0	-91.7	519.1	-68.2	-87.9	-76.1
Russian Federation	IE, NE	IE, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	IE, NO	51.64	*	*	*	*	*	*	*	*	*	*	*	6.0	*
Slovenia	IE, NE	IE, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	218.83	3,501.30	100.0	20.0	16.7	14.3	12.5	11.1	10.0	9.1	8.3	7.7	7.1	6.7	1,500.0
Sweden	613.79	1,536.93	6.3	3.7	2.5	4.9	5.0	6.2	4.4	7.1	7.6	9.3	0.7	27.2	150.4
Switzerland	3.98	2.47	-0.4	0	0	0	0	0	0	0	0	0	0	0.1	-38.0
Turkey															
Ukraine	577.30	813.20	-3.0	66.7	-3.3	-5.0	3.8	-11.8	-4.9	-0.5	0.6	0.8	0.6	-12.5	40.9
United Kingdom	1,394.49	1,652.90	1.5	1.3	1.3	1.1	1.1	1.1	1.1	1.1	1.1	0.9	0.8	0.7	18.5
United States	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.9a

Cropland remaining cropland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Activity data		IEF (Mg C/ha)					
			CSC [c] in living biomass/area			Net CSC[c] in DOM[d]/area	Net CSC [c] in soils/area	
	Total area (kha)	Area of organic soil[b] (kha)	Increase	Decrease	Net Change		Mineral soils[b]	Organic soils[b]
Australia	NA	NA	NA	NA	NA	NA	NA	NA
Austria	1,425.31	NO	IE	-0.04	-0.04	NO	0.07	NO
Belarus	4,648.90	NE	NE	NE	NE	NE	NE	NE
Belgium	859.30		NE	NE	NE	NA		
Bulgaria	3,776.12	NE	0.94	-0.09	0.85	NE	NE	NE
Canada	49,753.40	IE, NO	0.00	0.00	0.00	-0.01	0.07	IE, NA
Croatia								
Czech Republic	3,285.69		NE	NE	NE	NE		
Denmark	2,423.21	61.75	0.02	0.00	0.02	NA	0.09	-4.43
Estonia	NE	NE	NE	NE	NE	NE	NE	NE
European Community	NE	NE	NE	NE	NE	NE	NE	IE
Finland	2,234.40		IE, NE	IE, NE	IE, NE	NA	0.19	
France	15,661.04		0.16	-0.16		NO		
Germany	12,548.27	NE	0.00	0.00	0.00	NE	-0.44	NE
Greece								
Hungary	4,570.00		NE	NE	NE	NA		
Iceland	129.00	NE	NA	NA	NA	NA	NE	IE
Ireland	310.32	5.21	NO	NO	NO	NO	0.02	-1.00
Italy	10,980.46	9.00	0.51	NO	0.51	NA		-10.00
Japan	3,969.24	IE	NA	NA	NA	NE	NA	IE
Latvia	1,822.63	IE	0.03	NE	0.03	NE	NE	IE
Liechtenstein	1.89	NE	NO	NO	NO	NO	-0.66	IE
Lithuania	2,915.00		NE	NE	NE	NA		
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	953.08		NE	NE	NE	NE	NE	NE
New Zealand	420.13	NE	0.44	NE	0.44	NE	NE	NE
Norway	1,011.60	NO	0.00	NA, NE	0.00		0.03	NO
Poland	12,926.24	NE	0.00	NE	0.00	NE	-0.18	NE
Portugal	9.23	NO	14.57	-9.23	5.35	-0.08	-0.42	NO
Romania	9,861.70	NE	NE	NE	NE	NE	NE	NE
Russian Federation	93,327.08	1,399.91	0.02	-0.01	0.02	NE	-0.99	-1.00
Slovakia	1,423.12	4.89	NE	NE	NE	NE	NE	NE
Slovenia	NE		NE	NE	NE	NE	NE	
Spain								
Sweden	2,711.32	252.00	0.00	0.00	0.00	NA	-0.43	NA
Switzerland	460.19		NO	NO	NO	NO		
Turkey								
Ukraine	29,416.90	83.58	0.05	0.00	0.05	NE	0.01	-10.00
United Kingdom	5,971.74		0.03	NA, NO	0.03	IE, NO		
United States	152,447.48	720.00	NE	NE	NE	NE	0.13	-10.48

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.
[d] DOM = dead organic matter.

Table 5.9b

Cropland remaining cropland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Emissions/Removals (Gg C)						Net CO_2 (Gg)
	CSC [c] in living biomass			Net CSC [c] in DOM[d]	Net CSC [c] in soils		
	Gains	Losses	Net Change		Mineral soils[b]	Organic soils[b]	
Australia	NA	NA	NA	NA	NA	NA	NA
Austria	IE	-58.04	-58.04	NO	100.43	NO	-155.41
Belarus	NE	NE	NE	NE	NE	NE	NE
Belgium	NE	NE	NE	NA			576.05
Bulgaria	3,558.08	-355.60	3,202.48	NE	NE	NE	-11,742.42
Canada	42.02	-48.92	-6.90	-445.64	3,240.86	IE, NA	-10,223.84
Croatia							
Czech Republic	NE	NE	NE	NE			NE
Denmark	45.32	-7.73	37.59	NA	211.86	-273.55	88.37
Estonia	NE	NE	NE	NE	NE	NE	NE
European Community	8,640.47	-2,654.55	5,985.92	-0.77	-7,842.45	IE	6,810.09
Finland	IE, NE	IE, NE	IE, NE	NA	427.81	-1,340.70	3,347.26
France	2,435.02	-2,435.02		NO			NO
Germany	1.08	-40.95	-39.87	NE	-5,526.27	NE	20,409.20
Greece							
Hungary	NE	NE	NE	NA			6.71
Iceland	NA	NA	NA	NA	NE	IE	NE,IE,NA
Ireland	NO	NO	NO	NO	7.24	-5.21	-7.41
Italy	5,546.44	NO	5,546.44	NA		-90.00	-20,006.96
Japan	NA	NA	NA	NE	NA	IE	NA,IE,NE
Latvia	60.96	NE	60.96	NE	NE	-76.42	56.70
Liechtenstein	NO	NO	NO	NO	-1.26	IE	4.61
Lithuania	NE	NE	NE	NA			NA,NE
Luxembourg	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO
Netherlands	NE	NE	NE	NE	NE	NE	NE
New Zealand	183.03	NE	183.03	NE	NE	NE	-671.12
Norway	4.79	NA, NE	4.79		34.80	-56.73	62.85
Poland	48.68	NE	48.68	NE	-2,262.20	NE	8,116.23
Portugal	134.57	-85.21	49.36	-0.77	-3.90	NO	-163.89
Romania	NE	NE	NE	NE	NE	NE	NE
Russian Federation	2,002.98	-504.00	1,498.98	NE	-90,699.44	-1,399.91	332,201.34
Slovakia	NE	NE	NE	NE	NE	NE	NE
Slovenia	NE	NE	NE	NE			NE
Spain							
Sweden	0.30	0.00	0.30	NA	-1,047.41	NA	3,839.42
Switzerland	NO	NO	NO	NO			552.12
Turkey							
Ukraine	1,529.64	-119.70	1,409.94	NE	199.15	-835.81	-2,835.37
United Kingdom	174.65	NA, NO	174.65	IE, NO			532.94
United States	NE	NE	NE	NE	19,391.09	-7,545.77	-43,432.86

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.10

Net CO_2 emissions/removals from cropland remaining cropland - trend information

CO_2 emissions/removals [b] (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	-485	-155	0.8	-42.2	-10.1	-6.0	-15.4	-10.4	-5.8	-16.3	33.4	-27.4	-30.9	89.3	-67.9
Belarus	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	471	576	-0.6	-11.3	2.0	2.2	1.6	-0.3	2.0	-0.1	-1.0	0.3	0.2	4.8	22.3
Bulgaria	-358	-11,742	16.2	27.0	-26.6	-11.0	11.1	14.0	5.0	-29.5	47.1	16.2	33.3	1,391.3	3,183.1
Canada	-2,819	-10,224	2.1	10.9	9.5	10.4	10.4	9.2	8.1	7.5	6.3	5.7	5.4	5.0	262.7
Croatia															
Czech Republic	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	2,722	88	-71.9	-28.8	86.6	4.7	-27.4	67.5	12.3	27.7	-38.5	-47.0	-80.0	-46.0	-96.8
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	11,654	6,810	-35.9	28.0	17.8	-5.2	-7.8	-9.6	1.6	-2.3	-13.6	1.0	-14.0	-2.6	-41.6
Finland	6,798	3,347	-23.8	36.0	2.5	-6.5	-8.6	-5.8	-7.7	-5.3	-10.5	-7.3	-7.3	-7.3	-50.8
France	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Germany	21,137	20,409	0.0	0.0	0.0	0.0	0.0	0.0	-2.6	-0.2	0.1	-0.1	-0.1	0	-3.4
Greece															
Hungary	-136	7	-66.7	-155.6	-144.0	-200.0	-327.3	-172.0	-222.2	-4.5	661.9	-113.1	-1,004.8	-101.9	-104.9
Iceland	NE,IE,NA	NE,IE,NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	9	-7	59.4	-2.0	-42.7	-21.5	16.4	69.9	-54.6	25.9	-9.5	34.7	-45.5	-74.8	-186.7
Italy	-22,162	-20,007	-1.1	-1.6	-4.5	3.5	-0.3	1.5	0.0	-0.7	-0.7	-3.9	-0.2	1.8	-9.7
Japan	NA,IE,NE	NA,IE,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	164	57	0.3	-91.1	79.7	37.5	-11.2	-26.0	-11.3	-17.9	15.7	-6.0	55.5	52.8	-65.3
Liechtenstein	5	5	-0.8	0	0	0.8	-1.5	0.8	0.8	0	0.8	0	0	0.8	0.0
Lithuania	NA,NE	NA,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	-539	-671	1.6	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.3	24.6
Norway	189	63	-8.2	6.3	-3.6	-3.7	-4.9	-5.6	-61.2	-26.7	152.5	-18.2	-11.1	24.0	-66.7
Poland	8,165	8,116	-2.8	-0.7	4.8	15.4	12.6	6.7	7.5	10.3	15.7	47.9	-7.8	-37.8	-0.6
Portugal	-164	-164	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	319,156	332,201	-50.2	20.0	5.6	44.9	-52.6	38.8	26.2	19.1	0.2	-7.8	13.9	1.1	4.1
Slovakia	3,286	NE	-2.3	-24.3	0	56.4	-44.3	-4.8	156.9	-77.2	17.1	20.7	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain															
Sweden	4,183	3,839	-18.2	14.1	-9.4	16.5	1.8	-20.6	30.5	-16.6	0.2	9.6	-7.4	11.9	-8.2
Switzerland	564	552	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-2.1
Turkey															
Ukraine	2,144	-2,835	-43.0	38.8	40.6	-83.2	-1,943.9	-115.2	15.7	29.3	-36.4	213.4	-2.8	32.3	-232.3
United Kingdom	1,010	533	-3.6	-4.2	-4.4	-4.6	-4.9	-5.1	-5.4	-3.4	-3.5	-3.7	-3.8	-4.0	-47.2
United States	-32,812	-43,433	0	23.1	0	0	-4.6	-0.6	3.0	3.9	0.7	0.3	0.9	0.3	32.4

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Only net CO_2 emissions from carbon stock change are included in this table. For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to CO_2

Table 5.11

Area of cropland remaining cropland - trend information

Area (kha)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	1,473.63	1,425.31	1.3	-0.6	0.0	0.6	0.5	-2.5	-0.6	-0.6	0.4	0.3	-0.9	0.4	-3.3
Belarus	5,023.70	4,648.90	-0.2	0.2	0.1	-0.9	0.4	0.0	-0.9	-6.6	-2.3	-0.2	0.3	0.0	-7.5
Belgium	767.28	859.30	1.8	-1.3	-1.2	1.1	0.6	-0.4	1.1	-2.2	-1.4	0.4	0.4	1.8	12.0
Bulgaria	4,654.60	3,776.12	0.0	0.0	-10.8	0.0	20.3	0.6	-1.7	-1.5	-3.2	14.1	-25.2	-17.0	-18.9
Canada	48,026.35	49,753.40	-0.3	0.1	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	3.6
Croatia															
Czech Republic	3,454.99	3,285.69	-1.0	-0.5	-1.3	-0.2	0.0	0.1	-0.4	-0.2	-0.2	-0.2	-0.2	-0.2	-4.9
Denmark	2,575.44	2,423.21	-0.5	3.5	0.2	0.1	-0.3	-1.2	-0.1	0.9	-0.5	-0.3	-0.3	-2.4	-5.9
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	2,271.00	2,234.40	1.4	-7.0	-0.9	0.1	1.9	0.5	0.5	0.0	0.8	0.4	0.3	0.7	-1.6
France	17,491.78	15,661.04	0	-1.4	1.0	0.9	1.2	0.3	0.3	0.1	0.7	0.3	0.4	0.5	-10.5
Germany	12,773.02	12,548.27	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	-1.8
Greece															
Hungary	4,240.00	4,570.00	0	0	0	0	-0.7	0	0.7	1.2	0.5	2.1	0	2.0	7.8
Iceland	148.00	129.00	0	0	0	0	0	*	*	0	0	0	0	0	-12.8
Ireland	404.56	310.32	-0.7	-0.3	-0.2	-0.6	-1.6	-1.8	-0.2	-0.2	-0.2	-0.1	-3.4	-14.9	-23.3
Italy	11,027.75	10,980.46	-0.4	0.3	-0.7	0.1	0.6	0.9	0.8	-1.4	-0.6	-3.9	3.5	0.5	-0.4
Japan	4,120.47	3,969.24	-0.1	-0.2	-0.3	-0.3	-0.3	-0.5	-0.3	-0.4	-0.4	-0.3	-0.2	-0.2	-3.7
Latvia	1,723.00	1,822.63	0	0.3	0.2	-0.1	5.0	2.2	0.5	-0.3	1.4	-2.0	-0.6	-1.5	5.8
Liechtenstein	1.95	1.89	-0.3	-0.3	-0.2	-0.1	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-3.2
Lithuania	2,314.00	2,915.00	30.6	10.6	0.0	0.4	0.4	-0.3	-0.2	-0.1	0.0	-0.1	0.0	0.0	26.0
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	957.11	953.08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4
New Zealand	406.65	420.13	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.3
Norway	1,078.71	1,011.60	-0.4	-0.4	-0.4	-1.2	-0.4	-0.3	-0.3	-1.1	-0.5	-0.1	-0.1	-0.1	-6.2
Poland	14,231.34	12,926.24	-0.2	-0.1	-1.6	-1.0	-0.4	-0.7	-1.3	-0.9	0.4	-3.3	0.5	-0.3	-9.2
Portugal	9.23	9.23	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	10,045.60	9,861.70	-0.3	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.2	0.0	-0.4	0.0	0.1	-1.8
Russian Federation	132,532.50	93,327.08	-1.0	-1.9	-2.1	-2.6	-3.6	-3.9	-2.3	-1.2	-1.3	-4.9	-1.2	-2.5	-29.6
Slovakia	1,509.00	1,423.12	0	0.1	-0.5	0.5	-0.2	-1.3	-0.7	-0.1	-0.6	-0.7	-0.9	0.4	-5.7
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	2,895.42	2,711.32	-0.5	-0.2	-0.3	0.1	0.1	-0.3	-0.1	-0.1	0.0	-0.6	2.5	-5.3	-6.4
Switzerland	491.05	460.19	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-6.3
Turkey															
Ukraine	33,565.00	29,416.90	-0.4	-1.6	-2.3	0.5	-4.8	-2.3	-1.3	3.5	-0.7	-6.5	6.3	-0.8	-12.4
United Kingdom	5,971.74	5,971.74	0	0	0	0	0	0	0	0	0	0	0	0	0
United States	157,396.43	152,447.48	0	0	0	0	0	0	0	0	0	0	0	0	-3.1

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies i transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.12a

Land converted to cropland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a,b]

	Activity data		IEF (Mg C/ha)					
	Total area (kha)	Area of organic soil[b] (kha)	CSC[c] in living biomass/area			Net CSC[c] in DOM[d]/area	Net CSC[c] in soils/area	
			Increase	Decrease	Net Change		Mineral soils[b]	Organic soils[b]
Australia	2,704.99	NO	0.28	NA, NO	0.28	-0.35	0.59	NO
Austria	30.68	NO	1.94	-0.19	1.75	NO	-0.68	NO
Belarus	931.93	NE	NE, NO	NE, NO	NE, NO	NE, NO	NE	NE
Belgium	NE		NE	NE	NE	NE		
Bulgaria	NE	NE	NE	NE	NE	NE	NE	NE
Canada	942.56	IE, NE, NO	NA, NE, NO	-1.76	-1.76	-1.22	0.70	IE, NA, NE
Croatia								
Czech Republic	NO		NO	NO	NO	NO		
Denmark	NO	NO	NO	NO	NO	NO	NO	NO
Estonia	NE	NE	NE	NE	NE	NE	NE	NE
European Community	NE	NE	NE	NE	NE	NE	NE	IE
Finland	IE, NE		IE, NE	IE, NE	IE, NE	NE	IE, NE	
France	2,191.39		NO	-0.29	-0.29	-0.03		
Germany	28.57	NE	2.76	-1.03	1.74	NE	-30.78	NE
Greece								
Hungary	IE, NO		IE, NO	IE, NO	IE, NO	IE, NO		
Iceland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Ireland	57.98	0.97	NO	NO	NO	NO	-0.60	-1.00
Italy	53.52	NO	1.30	NO	1.30	NO	-5.78	NO
Japan	92.16	IE, NE	0.04	-0.16	-0.13	-0.40	-0.10	IE, NE
Latvia	NE	NE	NE	NE	NE	NE	NE	NE
Liechtenstein	0.00	NE, NO	8.49	-11.29	-2.79	NO	-8.61	IE, NO
Lithuania	NA, NE		NA, NE	NA, NE	NA, NE	NA, NE		
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	19.40		NE	NE	NE	NE	0.50	IE, NE
New Zealand	0.91	NE	2.18	-11.80	-9.61	NA, NE	NE	NE
Norway	2.70	NO	IE, NA, NE, NO	-11.16	-11.16	0	IE, NA, NE, NO	IE, NA, NE, NO
Poland	NE		NE	NE	NE	NE	NE	
Portugal	3.69	NO	10.84	-19.32	-8.48	-1.71	-16.01	NO
Romania	NA	NE	NA	NA	NA	NA	NE	NE
Russian Federation	NO	NO	NO	NO	NO	NO	NO	NO
Slovakia	IE, NE, NO	NE	NE	NE	NE	NE	NE	NE
Slovenia	NE		NE	NE	NE	NE	NE	
Spain								
Sweden	123.42	NA, NO	1.10	NA, NO	1.10	NA, NO	NA, NO	NA, NO
Switzerland	2.65		1.15	-1.10	0.04	0.00		
Turkey								
Ukraine	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
United Kingdom	5,352.83		IE, NO	-0.01	-0.01	IE, NO		
United States	12,682.85	30.00	IE	IE	IE	IE	-0.10	-24.00

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.12b

Land converted to cropland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a,b]

	Emissions/Removals (Gg C)						Net CO_2 (Gg)
	CSC [c] in living biomass			Net CSC [c] in DOM [d]	Net CSC [c] in soils		
	Gains	Losses	Net Change		Mineral soils [b]	Organic soils [b]	
Australia	745.61	NA, NO	745.61	-938.91	1,609.04	NO	-5,191.05
Austria	59.40	-5.72	53.68	NO	-20.75	NO	-120.77
Belarus	NE, NO	NE, NO	NE, NO	NE, NO	NE	NE	NO,NE
Belgium	NE	NE	NE	NE			NE
Bulgaria	NE	NE	NE	NE	NE	NE	NE
Canada	NA, NE, NO	-1,654.50	-1,654.50	-1,148.47	661.54	IE, NA, NE	7,851.91
Croatia							
Czech Republic	NO	NO	NO	NO			NO
Denmark	NO	NO	NO	NO	NO	NO	NO
Estonia	NE	NE	NE	NE	NE	NE	NE
European Community	383.41	-814.80	-431.38	-63.16	-7,960.36	IE	31,001.31
Finland	IE, NE	IE, NE	IE, NE	NE			NE,IE
France	NO	-642.06	-642.06	-56.85			12,954.14
Germany	78.97	-29.33	49.64	NE	-879.50	NE	3,042.79
Greece							
Hungary	IE, NO	IE, NO	IE, NO	IE, NO			NO,IE
Iceland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NO,NE
Ireland	NO	NO	NO	NO	-34.15	-0.97	128.80
Italy	69.57	NO	69.57	NO	-309.59	NO	880.07
Japan	3.43	-15.15	-11.72	-36.81	-8.79	IE, NE	210.16
Latvia	NE	NE	NE	NE	NE	NE	NE
Liechtenstein	0.03	-0.05	-0.01	NO	-0.03	IE, NO	0.17
Lithuania	NA, NE	NA, NE	NA, NE	NA, NE			NE,NA
Luxembourg	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO
Netherlands	NE	NE	NE	NE	9.70	IE, NE	-35.57
New Zealand	1.98	-10.70	-8.72	NA, NE	NE	NE	31.98
Norway	IE, NA, NE, NO	-30.16	-30.16		IE, NA, NE, NO	IE, NA, NE, NO	110.57
Poland	NE	NE	NE				NE
Portugal	39.97	-71.27	-31.30	-6.31	-59.07	NO	354.49
Romania	NA	NA	NA	NA	NE	NE	NA,NE
Russian Federation	NO	NO	NO	NO	NO	NO	NO
Slovakia	NE	NE	NE	NE	NE	NE	NE
Slovenia	NE	NE	NE	NE			NE
Spain							
Sweden	135.50	NA, NO	135.50	NA, NO	NA, NO	NA, NO	-496.83
Switzerland	3.04	-2.93	0.11	-0.01			29.05
Turkey							
Ukraine	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NO,NE
United Kingdom	IE, NO	-66.43	-66.43	IE, NO			14,294.20
United States	IE	IE	IE	IE	-1,245.00	-720.00	7,205.00

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.13

Net CO_2 emissions/removals from land converted to cropland - trend information

CO_2 emissions/removals [b] (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	13,164	-5,191	-26.1	-32.9	38.6	-33.7	161.1	-40.9	-35.1	-40.9	364.2	-101.7	4209.3	0.0	-139.4
Austria	-130	-121	0.9	-1.2	1.9	0.0	-0.5	0.0	-0.8	21.9	-21.5	-14.3	30.0	-13.7	-7.3
Belarus	NO,NE	NO,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	12,366	7,852	-7.6	-5.9	-1.4	-2.4	-2.0	-1.0	-2.9	-4.1	-1.1	-3.2	3.6	-2.4	-36.5
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	39,388	31,001	-4.2	-1.7	-1.8	-1.9	2.0	1.4	-2.6	-4.5	-3.6	-0.8	15.7	-16.5	-21.3
Finland	NE,IE	NE,IE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	21,916	12,954	-7.2	-2.6	-2.4	-2.5	-2.1	-2.1	-2.3	-4.3	-4.5	-3.3	-5.7	-4.3	-40.9
Germany	3,145	3,043	0	0	0	0	0	0	-3.3	0	0	0	0	0	-3.3
Greece															
Hungary	227	NO,IE	*	*	*	*	*	*	-481.0	-60.0	-656.3	*	*	*	*
Iceland	NO,NE	NO,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	129	*	0	163.5	-38.6	0	0	0	191.7	-2.4	35.1	-27.5	0	*
Italy	115	880	*	-19.8	*	*	691.7	41.9	-2.8	*	*	*	*	-85.5	665.3
Japan	1,865	210	-22.3	-4.5	-12.7	-18.3	-2.5	-10.3	-18.6	-9.1	-14.0	-5.6	-22.2	-15.3	-88.7
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	0.11	0.17	-31.5	-34.4	52.5	103.2	31.6	-38.1	24.7	-6.3	23.8	-30.1	-12.0	0.4	47.2
Lithuania	NE,NA	NE,NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	-36	-36	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	24	111	-16.7	-50.0	*	*	*	*	*	*	*	0	0	0	362.2
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	354	354	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NA,NE	NA,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain															
Sweden	-11	-497	-108.5	-388.2	-1692.9	-126.1	-66.8	-1,421.5	-131.8	-570.4	-116.4	-193.6	-209.2909535	506.3	4,493.2
Switzerland	-68	29	-0.6	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2	-142.5
Turkey															
Ukraine	-5	NO,NE	*	-19.9	-93.8	-77.5	11,134.2	-57.3	-38.3	329.8	-0.1	9.7	24.2	*	*
United Kingdom	14,034	14,294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.9
United States	8,666	7,205	0	-18.7	0	0	0	0	0	0	0	0	0	0	-16.9

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Only net CO_2 emissions from carbon stock change are included in this table. For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to C.

Table 5.14

Area of land converted to cropland - trend information

Area (kha)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2,022.40	2,704.99	3.3	2.1	2.4	2.3	2.1	2.1	2.2	1.7	1.6	1.5	0.1	0	33.8
Austria	33.90	30.68	0.7	-1.0	-0.2	0.0	-0.4	0.0	-0.6	18.6	-18.8	-12.1	24.3	-11.5	-9.5
Belarus	1,081.20	931.93	-0.1	-0.1	-0.6	-0.6	-0.6	-0.6	0	-3.5	-3.7	-3.8	-3.9	3.5	-13.8
Belgium	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	112.50	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	1,713.36	942.56	-4.2	-4.3	-4.5	-3.8	-3.9	-4.1	-4.2	-4.4	-3.6	-3.8	-3.6	-3.4	-45.0
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	IE, NE	IE, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	3,656.51	2,191.39	0	-2.9	-2.9	-3.0	-3.2	-3.5	-3.4	-3.8	-4.2	-4.7	-5.1	-5.4	-40.1
Germany	31.46	28.57	0	0	0	0	0	0	-9.2	0	0	0	0	0	-9.2
Greece															
Hungary	160.00	IE, NO	*	*	*	*	*	*	66.7	-60.0	500.0	*	*	*	*
Iceland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	57.98	*	0	61.7	0	0	0	0	72.3	24.6	29.8	0	0	*
Italy	6.99	53.52	*	-19.8	*	*	691.7	41.9	-2.8	*	*	*	*	-85.5	665.3
Japan	475.93	92.16	-8.1	-11.0	-11.2	-11.2	-11.9	-9.4	-11.3	-10.7	-9.1	-9.8	-8.8	-11.4	-80.6
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	0.00	0.00	-33.3	33.3	-25.0	166.7	-12.5	0	0	0	0	-14.3	-33.3	0	33.3
Lithuania	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	19.40	19.40	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	0.91	0.91	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	1.05	2.70	-16.7	-50.0	*	*	0	0	0	200.0	-0.1	-0.1	0	0	157.1
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	3.69	3.69	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NA	NA	-76.9	33.3	550.0	3.8	251.9	-16.8	200.0	-10.5	-88.2	656.0	-43.9	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE	IE, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	99.96	123.42	11.0	-2.6	-6.5	6.0	10.8	2.6	3.8	1.1	8.7	1.4	-5.6	-20.2	23.5
Switzerland	1.79	2.65	-0.7	0	0	0	0	0	0	0	0	0	0	0.1	48.3
Turkey															
Ukraine	2.40	NE, NO	*	0.3	35.0	-44.0	139.9	41.8	20.5	-44.3	-53.2	*	*	*	*
United Kingdom	3,899.47	5,352.83	2.5	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.8	37.3
United States	9,484.71	12,682.85	0	0	0	0	0	0	0	0	0	0	0	0	33.7

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.15a

Forest land converted to cropland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Activity data		IEF (Mg C/ha)					
	Total area (kha)	Area of organic soil[b] (kha)	CSC [c] in living biomass/area			Net CSC[c] in DOM[d]/area	Net CSC [c] in soils/area	
			Increase	Decrease	Net Change		Mineral soils[b]	Organic soils[b]
Australia	2,704.99	NO	0.28	NA	0.28	-0.35	0.59	NO
Austria	0.27	NO	IE	-21.17	-21.17	NO	-1.96	NO
Belarus	NO	NE	NO	NO	NO	NO	NE	NE
Belgium	NE		NE	NE	NE	NE		
Bulgaria	NE	NE	NE	NE	NE	NE	NE	NE
Canada	752.82	IE, NO	NA, NO	-2.20	-2.20	-1.53	1.02	IE, NA
Croatia								
Czech Republic	NO		NO	NO	NO	NO		
Denmark	NO	NO	NO	NO	NO	NO	NO	NO
Estonia	NE	NE	NE	NE	NE	NE	NE	NE
European Community	NE	NE	NE	NE	NE	NE	NE	IE
Finland	IE, NE		IE, NE	IE, NE	IE, NE	NE	IE, NE	
France	220.59		NO	-2.91	-2.91	-0.26		
Germany	0.49	NE	0.09	-59.91	-59.83	NE	-27.26	NE
Greece								
Hungary	IE		IE	IE	IE	IE		
Iceland	NE	NE	NE	NE	NE	NE	NE	NE
Ireland	NO	NO	NO	NO	NO	NO	NO	NO
Italy	NO	NO	NO	NO	NO	NO	NO	NO
Japan	32.85	IE, NE	0.01	-0.46	-0.45	-1.12	-0.48	IE, NE
Latvia	NE	NE	NE	NE	NE	NE	NE	NE
Liechtenstein	NO	NO	NO	NO	NO	NO	NO	NO
Lithuania	NA		NA	NA	NA	NA		
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	IE	0	NE	NE	NE	NE	NE	NE
New Zealand	0.04	NE	2.14	-221.29	-219.14	NA, NE	NE	NE
Norway	1.80	NO	IE	-16.73	-16.73		IE	IE
Poland	NE		NE	NE	NE	NE	NE	
Portugal	1.52	NO	14.53	-36.23	-21.70	-3.56	-13.78	NO
Romania	NA	NE	NA	NA	NA	NA	NE	NE
Russian Federation	NO	NO	NO	NO	NO	NO	NO	NO
Slovakia	NE	NE	NE	NE	NE	NE	NE	NE
Slovenia	NE		NE	NE	NE	NE	NE	
Spain								
Sweden	19.94	NA	1.44	NA	1.44	NA	NA	NA
Switzerland	0.01		NO	-75.12	-75.12	-1.56		
Turkey								
Ukraine	NO	NO	NO	NO	NO	NO	NO	NO
United Kingdom	71.71		IE, NO	IE, NO	IE, NO	IE		
United States	IE	IE	IE	IE	IE	IE	IE	NE

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.
[d] DOM = dead organic matter.

Table 5.15b

Forest land converted to cropland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Emissions/Removals (Gg C)						Net CO_2 (Gg)
	CSC [c] in living biomass			Net CSC [c] in DOM [d]	Net CSC [c] in soils		
	Gains	Losses	Net Change		Mineral soils [b]	Organic soils [b]	
Australia	745.61	NA	745.61	-938.91	1,609.04	NO	-5,191.05
Austria	IE	-5.72	-5.72	NO	-0.53	NO	22.90
Belarus	NO	NO	NO	NO	NE	NE	NE,NO
Belgium	NE	NE	NE	NE			NE
Bulgaria	NE	NE	NE	NE	NE	NE	NE
Canada	NA, NO	-1,654.50	-1,654.50	-1,148.47	766.98	IE, NA	7,465.30
Croatia							
Czech Republic	NO	NO	NO	NO			NO
Denmark	NO	NO	NO	NO	NO	NO	NO
Estonia	NE	NE	NE	NE	NE	NE	NE
European Community	50.86	-732.13	-681.26	-62.26	-410.91	IE	4,232.89
Finland	IE	IE	IE	NE			IE,NE
France	NO	-642.06	-642.06	-56.85			3,936.32
Germany	0.04	-29.33	-29.28	NE	-13.34	NE	156.29
Greece							
Hungary	IE	IE	IE	IE			IE
Iceland	NE	NE	NE	NE	NE	NE	NE
Ireland	NO	NO	NO	NO	NO	NO	NO
Italy	NO	NO	NO	NO	NO	NO	NO
Japan	0.30	-15.11	-14.81	-36.81	-15.66	IE, NE	246.71
Latvia	NE	NE	NE	NE	NE	NE	NE
Liechtenstein	NO	NO	NO	NO	NO	NO	NO
Lithuania	NA	NA	NA	NA			NA
Luxembourg	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO
Netherlands	NE	NE	NE	NE	NE	NE	NE
New Zealand	0.09	-9.54	-9.45	NA, NE	NE	NE	34.63
Norway	IE	-30.16	-30.16		IE	IE	110.57
Poland	NE	NE	NE	NE			NE
Portugal	22.07	-55.03	-32.96	-5.41	-20.93	NO	217.41
Romania	NA	NA	NA	NA	NE	NE	NA,NE
Russian Federation	NO	NO	NO	NO	NO	NO	NO
Slovakia	NE	NE	NE	NE	NE	NE	NE
Slovenia	NE	NE	NE	NE			NE
Spain							
Sweden	28.75	NA	28.75	NA	NA	NA	-105.42
Switzerland	NO	-0.49	-0.49	-0.01			2.41
Turkey							
Ukraine	NO	NO	NO	NO	NO	NO	NO
United Kingdom	IE, NO	IE, NO	IE, NO	IE			5.39
United States	IE	IE	IE	IE	IE	NE	NE,IE

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.16

Net CO_2 emissions/removals from forest land converted to cropland - trend information

CO_2 emissions/removals [b] (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	-13,164	5,191	-26.1	-32.9	38.6	-33.7	161.1	-40.9	-35.1	-40.9	364.2	-101.7	4,209.3	0	-139.4
Austria	-28	-23	0	0	-10.0	0	0	0	0	0	0	0	0	0	-18.2
Belarus	NE,NO	NE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	-11,683	-7,465	-7.9	-6.0	-1.3	-2.2	-1.9	-0.8	-2.9	-4.1	-1.1	-3.2	3.9	-2.4	-36.1
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	-7,039	-4,233	-22.3	-1.7	7.0	-9.2	2.4	2.0	0.7	6.8	-14.6	9.1	-14.1	-2.2	-39.9
Finland	IE,NE	IE,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	-6,611	-3,936	-23.8	-1.5	-0.7	-0.8	1.5	2.2	0.9	-5.0	-4.8	0.7	-6.7	-1.1	-40.5
Germany	-156	-156	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	-1,880	-247	-22.0	-4.5	-11.0	-14.1	-3.7	-6.7	-18.8	-13.3	-13.0	-6.6	-17.5	-15.3	-86.9
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	-35	-35	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	-24	-111	-16.7	-50.0	*	*	*	*	*	*	*	0	0	0	362.2
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	-217	-217	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NA,NE	NA,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain															
Sweden	-15	105	26.3	-75.4	6,496.9	-117.1	-75.6	-1.1	32.2	-2,745.2	-103.6	-1,926.4	-114.8	93.0	-818.8
Switzerland	-6	-2	-0.1	0.7	0.5	0.6	0.5	1.0	0.3	0.6	1.1	0.2	0.6	0.8	-58.9
Turkey															
Ukraine	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	-12	-5	-5.4	-5.2	-5.2	-5.2	-5.2	-5.1	-5.1	-5.1	-5.1	-5.0	-5.0	-5.0	-54.8
United States	IE,NE	IE,NE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Only net CO_2 emissions from carbon stock change are included in this table. For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to CO_2.

Table 5.17

Area of forest land converted to cropland - trend information

Area (kha)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2,022.40	2,704.99	3.3	2.1	2.4	2.3	2.1	2.1	2.2	1.7	1.6	1.5	0.1	0	33.8
Austria	0.33	0.27	0	0	-10.0	0	0	0	0	0	0	0	0	0	-18.2
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	1,342.87	752.82	-2.1	-3.5	-3.6	-3.8	-3.9	-4.1	-4.2	-4.4	-4.6	-4.9	-4.7	-4.5	-43.9
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	310.79	220.59	0	-2.2	-2.3	-2.3	-2.2	-2.1	-2.0	-2.4	-2.7	-2.7	-3.3	-3.4	-29.0
Germany	0.49	0.49	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	174.21	32.85	-3.9	-6.8	-8.5	-11.2	-9.7	-7.2	-10.3	-10.8	-13.8	-10.9	-19.6	-17.7	-81.1
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	0.04	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	0.60	1.80	-16.6	-50.0	*	*	*	*	*	*	*	0	0	0	199.8
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	1.52	1.52	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	24.40	19.94	14.2	0	-11.8	5.0	7.3	9.9	0	-5.6	4.0	4.3	11.5	-47.1	-18.3
Switzerland	0.02	0.01	0	0	0	0	0	0	0	0	0	0	0	0.1	-60.1
Turkey															
Ukraine	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	71.71	71.71	0	0	0	0	0	0	0	0	0	0	0	0	0
United States	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.18a

Grassland remaining grassland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Activity data		IEF (Mg C/ha)					
	Total area (kha)	Area of organic soil[b] (kha)	CSC [c] in living biomass/area			Net CSC[c] in DOM[d]/area	Net CSC [c] in soils/area	
			Increase	Decrease	Net Change		Mineral soils[b]	Organic soils[b]
Australia	NA	NA	NA	NA	NA	NA	NA	NA
Austria	1,818.54	12.95	NO	NO	NO	NO	0.02	-2.50
Belarus	3,299.80	NE	NE	NE	NE	NE	NE	NE
Belgium	518.96					NA		
Bulgaria	2,165.60	NE	0.01	-0.01	0.00	NE	NE	NE
Canada	NE	NE	NE	NE	NE	NE	NE	NE
Croatia								
Czech Republic	971.77		NE	NE	NE	NA		
Denmark	176.65	16.48	NA	NA	NA	NA	IE	-1.25
Estonia	NE	NE	NE	NE	NE	NE	NE	NE
European Community	NE	NE	NE	NE	NE	NE	NE	IE
Finland	520.43		NA	NA	NA	NA	-1.19	
France	8,969.13		0.36	-0.36	0	0.00		
Germany	6,223.41	NE	NE	NE	NE	NE	-0.73	NE
Greece								
Hungary	2,730.00		NE	NE	NE	NE		
Iceland	3,843.90	446.47	NE	NE	NE	NA	NE	-1.10
Ireland	3,822.29	287.68	NO	NO	NO	NO	NO	-0.25
Italy	5,710.37	NO				NO		NO
Japan	514.23	IE	NA	NA	NA	NE	NA	IE
Latvia	636.80	IE	0.17	NO	0.17	NE	NE	IE
Liechtenstein	5.26	NE	0.03	-0.03	0.00	NO	-0.10	IE
Lithuania	453.00		NE	NE	NE	NE		
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	1,305.98		NE	NE	NE	NE	-0.89	IE
New Zealand	14,256.47	NE	NE	NE	NE	NE	NE	NE
Norway	166.62	NO	NO	NO	NO		NO	NO
Poland	3,365.00	NE	NE	NE	NE	NE	NE	NE
Portugal	NO	NO	NO	NO	NO	NO	NO	NO
Romania	4,845.30	NE	NE	NE	NE	NE	NE	NE
Russian Federation	70,481.60	2,114.45	NO	NO	NO	NA	0.03	-0.25
Slovakia	793.00	NE	NE	NE	NE	NE	NE	NE
Slovenia	NE		NE	NE	NE	NE	NE	
Spain								
Sweden	378.61	36.13	0.44	NA	0.44	-0.05	1.26	NA
Switzerland	1,511.37		0.01	-0.01	0.00	NO		
Turkey								
Ukraine	6,973.30	569.17	NE	NE	NE	NE	0.04	-2.50
United Kingdom	8.47		NE	NE	NE	IE, NO		
United States	191,090.49	480.00	NE	NE	NE	NE	-0.02	-2.10

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[a] DOM = dead organic matter.

Table 5.18b

Grassland remaining grassland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Emissions/Removals (Gg C)						Net CO_2 (Gg)
	CSC [c] in living biomass			Net CSC [c] in DOM[d]	Net CSC [c] in soils		
	Gains	Losses	Net Change		Mineral soils[b]	Organic soils[b]	
Australia	NA	NA	NA	NA	NA	NA	NA
Austria	NO	NO	NO	NO	28.44	-32.39	14.47
Belarus	NE	NE	NE	NE	NE	NE	NE
Belgium				NA			1,148.46
Bulgaria	24.74	-18.06	6.68	NE	NE	NE	-24.49
Canada	NE	NE	NE	NE	NE	NE	NE
Croatia							
Czech Republic	NE	NE	NE	NA			NA,NE
Denmark	NA	NA	NA	NA	IE	-20.60	75.54
Estonia	NE	NE	NE	NE	NE	NE	NE
European Community	3,412.19	-3,246.69	165.50	-50.40	-6,428.56	IE	23,149.34
Finland	NA	NA	NA	NA	-620.28	-15.89	2,332.61
France	3,246.69	-3,246.69	0	-31.86			116.82
Germany	NE	NE	NE	NE	-4,546.45	NE	16,670.32
Greece							
Hungary	NE	NE	NE	NE			NE,NO
Iceland	NE	NE	NE	NA	NE	-491.11	1,800.74
Ireland	NO	NO	NO	NO	NO	-71.92	263.70
Italy				NO		NO	NO
Japan	NA	NA	NA	NE	NA	IE	NA,IE,NE
Latvia	109.43	NO	109.43	NE	NE	-2.12	-393.48
Liechtenstein	0.14	-0.14	0.00	NO	-0.51	IE	1.87
Lithuania	NE	NE	NE	NE			NE
Luxembourg	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO
Netherlands	NE	NE	NE	NE	-1,158.00	IE	4,246.00
New Zealand	NE	NE	NE	NE	NE	NE	NE
Norway	NO	NO	NO		NO	-510.00	1,870.00
Poland	NE	NE	NE	NE	NE	NE	NE
Portugal	NO	NO	NO	NO	NO	NO	NO
Romania	NE	NE	NE	NE	NE	NE	NE
Russian Federation	NO	NO	NO	NA	2,295.15	-528.61	-6,477.29
Slovakia	NE	NE	NE	NE	NE	NE	NE
Slovenia	NE	NE	NE	NE			NE
Spain							
Sweden	165.50	NA	165.50	-18.54	432.04	NA	-2,123.02
Switzerland	10.51	-11.66	-1.15	NO			69.82
Turkey							
Ukraine	NE	NE	NE	NE	228.45	-1,422.92	4,379.74
United Kingdom	NE	NE	NE	IE, NO			404.43
United States	NE	NE	NE	NE	-3,385.91	-1,006.68	16,106.19

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.19

Net CO_2 emissions/removals from grassland remaining grassland - trend information

CO_2 emissions/removals [b] (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	6	14	0.3	1.9	-1.6	-1.7	6.7	6.3	5.8	24.6	12.2	15.0	9.0	4.0	136.0
Belarus	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	1,303	1,148	-3.4	6.9	15.3	-10.9	-0.1	0.5	-1.9	2.4	3.0	-0.2	-1.3	-2.5	-11.9
Bulgaria	-174	-24	24.0	56.3	-22.1	13.7	-3.4	20.5	-28.5	-61.1	24.4	16.6	24.6	0.0	-85.9
Canada	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NA,NE	NA,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	93	76	-2.4	8.4	-6.9	-13.1	-6.8	2.1	4.2	4.5	2.2	0.0	-2.9	2.4	-18.7
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	21,016	23,149	8.4	3.1	-0.8	-0.7	-3.6	6.7	-7.0	9.8	-6.2	2.3	2.6	-5.7	10.2
Finland	-1,648	2,333	-63.0	-12.8	-45.1	67.1	73.5	37.6	24.1	8.7	-16.3	11.5	6.0	-26.9	-241.5
France	132	117	0	-7.3	-8.5	9.4	2.1	2.9	1.4	5.9	3.7	2.2	3.0	2.1	-11.5
Germany	18,282	16,670	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.1	-0.1	-0.1	0	-8.8
Greece															
Hungary	NE,NO	NE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	1,812	1,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6
Ireland	303	264	-1.0	-2.5	0.0	-1.6	0	0	0	0	-0.2	-0.2	-0.8	-0.8	-13.1
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	NA,IE,NE	NA,IE,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	-193	-393	0.0	25.7	9.8	4.1	7.2	7.6	4.1	10.5	6.9	0.2	-0.4	-0.4	103.9
Liechtenstein	2	2	-0.7	2.4	-1.4	10.0	0.8	-5.9	-2.3	4.0	-6.3	-7.2	3.7	-1.9	-8.5
Lithuania	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	4,246	4,246	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	1,870	1,870	0	0	0	0	0	0	0	0	0	0	0	0	0
Poland	4,531	NE	-2.8	-0.7	4.8	15.4	12.6	6.7	7.5	10.3	15.7	47.9	-7.8	*	*
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	-12,936	-6,477	5.1	81.8	20.5	2.5	28.8	-13.2	-39.2	-8.8	4.9	8.0	12.6	-66.5	-49.9
Slovakia	536	NE	-26.1	57.1	-63.6	-153.3	-240.7	-281.0	530.5	10.4	-0.8	56.0	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain															
Sweden	-2,091	-2,123	-43.3	-48.2	-37.6	39.7	163.1	-41.5	167.1	-59.9	63.9	-1.8	-29.0	36.5	1.5
Switzerland	55	70	-0.1	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	26.9
Turkey															
Ukraine	997	4,380	110.0	11.8	-6.2	-0.2	-6.5	-9.1	-8.7	15.0	11.6	10.7	8.9	6.9	339.1
United Kingdom	390	404	1.7	15.3	-14.8	-11.6	-25.1	37.2	-1.0	9.1	-36.0	68.8	-29.5	14.0	3.8
United States	130	16,106	-58.5	-9815.5	-0.1	-0.1	-0.1	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	12248.8

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Only net CO_2 emissions from carbon stock change are included in this table. For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to CO_2.

Table 5.20

Area of grassland remaining grassland - trend information

Area (kha)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	1,962.94	1,818.54	0.0	-0.1	0.1	0.1	-0.4	-0.4	-0.4	-1.7	-1.1	-1.5	-1.1	-0.5	-7.4
Belarus	3,156.80	3,299.80	-0.3	-0.5	-0.1	1.0	0.3	-0.7	0.7	8.3	1.3	0.3	-0.2	0.3	4.5
Belgium	578.44	518.96	-3.8	3.2	3.7	-0.5	0.1	0.7	-1.6	2.8	2.9	-0.1	-1.1	-2.1	-10.3
Bulgaria	2,798.30	2,165.60	-2.3	0	-4.2	-4.4	-3.7	-1.0	4.8	0.0	0	0	0	0	-22.6
Canada	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	828.35	971.77	0.5	1.6	1.7	4.8	0.2	0.0	0.3	1.1	0.5	0.2	0.2	0.1	17.3
Denmark	217.24	176.65	-2.4	8.4	-6.9	-13.1	-6.8	2.1	4.2	4.5	2.2	0.1	-2.9	2.4	-18.7
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	645.49	520.43	-4.8	24.0	3.4	-5.4	-11.0	-3.5	-2.2	0.0	-3.6	-1.9	-1.5	14.5	-19.4
France	6,132.80	8,969.13	0	3.3	-0.9	0.1	-1.0	0.9	0.8	1.5	0.9	1.3	1.3	1.1	46.2
Germany	6,616.39	6,223.41	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	0	-5.9
Greece															
Hungary	2,970.00	2,730.00	-0.7	2.0	-0.7	0	0.7	0	-1.6	-0.7	-4	0	-5.2	0	-8.1
Iceland	3,846.40	3,843.90	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
Ireland	4,121.30	3,822.29	-0.4	-1.0	0.0	-0.7	0	0	0	0	-0.3	-0.3	-1.0	-1.0	-7.3
Italy	7,550.34	5,710.37	-1.0	-2.3	-0.8	-2.0	-2.9	-3.4	-3.5	0.5	-0.9	5.0	-7.8	-3.0	-24.4
Japan	232.10	514.23	24.4	6.3	4.5	4.9	4.6	2.2	2.1	1.4	0.9	1.3	1.6	1.0	121.6
Latvia	844.20	636.80	-0.1	-0.4	-0.3	-15.1	0	-8.9	-1.9	0.9	-0.2	0.5	1.3	2.6	-24.6
Liechtenstein	5.58	5.26	-0.4	-0.4	-0.5	-0.3	-0.3	-0.4	-0.4	-0.2	-0.4	-0.5	-0.4	-0.4	-5.6
Lithuania	1,111.00	453.00	-63.9	21.3	1.3	-1.4	1.1	1.4	0.8	0.6	-0.1	0.2	-0.3	0.4	-59.2
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	1,460.21	1,305.98	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-10.6
New Zealand	14,663.19	14,256.47	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-2.8
Norway	154.98	166.62	-0.7	-0.7	-0.7	1.8	11.3	0	-4.3	3.4	3.2	-1.0	-1.1	-1.1	7.5
Poland	3,910.66	3,365.00	-0.5	-0.2	1.9	-0.6	-2.6	-1.6	0.4	-1.0	-5.9	-8.2	2.9	0	-14.0
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	4,401.10	4,845.30	0.5	0.4	0.4	-0.1	0.2	-1.4	0.1	2.0	0.1	-1.8	-0.2	0.2	10.1
Russian Federation	81,577.80	70,481.60	-0.6	0.9	0.4	0.4	-3.5	-3.7	-5.0	-0.6	-0.8	-0.1	-0.8	-0.6	-13.6
Slovakia	813.00	793.00	-0.6	0	0.8	-0.9	0.0	2.6	1.0	-0.1	-0.1	2.3	-10.3	0.0	-2.5
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	405.00	378.61	-2.2	-0.5	0.8	-1.2	-0.3	-0.2	-0.9	-1.8	-3.0	-0.2	-5.8	11.1	-6.5
Switzerland	1,533.05	1,511.37	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-1.4
Turkey															
Ukraine	7,125.00	6,973.30	0.2	-0.4	-0.4	-0.4	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-2.1
United Kingdom	8.11	8.47	2.0	17.0	-16.3	-13.0	-28.4	44.1	-1.2	10.3	-40.2	82.5	-32.7	16.2	4.4
United States	195,773.62	191,090.49	0	0	0	0	0	0	0	0	0	0	0	0	-2.4

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.21a

Land converted to grassland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Activity data		IEF (Mg C/ha)					
	Total area (kha)	Area of organic soil[b] (kha)	CSC[c] in living biomass/area			Net CSC[c] in DOM[d]/area	Net CSC[c] in soils/area	
			Increase	Decrease	Net Change		Mineral soils[b]	Organic soils[b]
Australia	13,177.39	NA, NO	NA, NO	-0.89	-0.89	-0.04	-0.23	NA, NO
Austria	29.56	NO	IE, NO	-3.90	-3.90	NO	0.55	NO
Belarus	IE, NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Belgium								
Bulgaria	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Canada	NE, NO	NE, NO	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
Croatia								
Czech Republic	2.02		1.80	NO	1.80			
Denmark	NO	NO	NO	NO	NO	NO	NA	NA
Estonia	NE	NE	NE	NE	NE	NE	NE	NE
European Community	NE	NE	NE	NE	NE	NE	NE	IE
Finland	NE		NE	NE	NE	NE	NE	
France	3,164.72		NO	-0.10	-0.10	-0.03		
Germany	24.55	IE, NE	0.00	-10.29	-10.29	NE	11.09	IE, NE
Greece								
Hungary	10.00		IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO		
Iceland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Ireland	112.98	3.77	0.48	NO	0.48	NO	0.56	-0.25
Italy	NO	NO	NO	NO	NO	NO	NO	NO
Japan	124.11	IE	0.06	-0.07	-0.01	-0.11	2.84	IE
Latvia	NE	NE	NE	NE	NE	NE	NE	NE
Liechtenstein	0.01	NE	8.40	-29.67	-21.27	-0.84	10.49	IE
Lithuania	NA, NE		NA, NE	NA, NE	NA, NE	NA, NE		
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	19.17	0	NE	-4.07	-4.07	NE	4.80	IE, NE
New Zealand	1.08	NE	3.97	-183.03	-179.06	NA, NE	NE	NE
Norway	0.98	NO	NA	-5.05	-5.05		NA	NA
Poland	22,500.00	NE	NE	NE	NE		0.00	NE
Portugal	0.57	NO	3.12	-7.18	-4.06	-0.31	16.15	NO
Romania	33.40	NE	NA, NE	NA, NE	NA, NE	NA, NE	NE	NE
Russian Federation	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NA, NO	NE, NO	NE, NO
Slovakia	100.60	NO	NE	NE	NE	1.20	NO	NO
Slovenia	NE, NO		NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	
Spain								
Sweden	145.85	NA	1.17	-0.48	0.69	NA	NA	NA
Switzerland	4.62		2.42	-23.65	-21.23	-1.13		
Turkey								
Ukraine	936.59	0.26	0.73	-0.45	0.28	NE, NO	1.37	-2.50
United Kingdom	4,555.43		0.01	0.00	0.01	IE, NO		
United States	22,034.09	70.00	IE, NE	IE, NE	IE, NE	IE, NE	0.21	-3.45

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.21b

Land converted to grassland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Emissions/Removals (Gg C)						Net CO_2 (Gg)
	CSC [c] in living biomass			Net CSC [c] in DOM[d]	Net CSC [c] in soils		
	Gains	Losses	Net Change		Mineral soils[b]	Organic soils[b]	
Australia	NA, NO	-11,728.18	-11,728.18	-555.12	-3,032.07	NA, NO	56,156.35
Austria	IE, NO	-115.14	-115.14	NO	16.19	NO	362.81
Belarus	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NO,NE
Belgium							
Bulgaria	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NO,NE
Canada	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NE,NA
Croatia							
Czech Republic	3.64	NO	3.64				-216.50
Denmark	NO	NO	NO	NO	NA	NA	NA,NO
Estonia	NE	NE	NE	NE	NE	NE	NE
European Community	285.17	-845.76	-560.59	-93.40	4,903.60	IE	-15,581.88
Finland	NE	NE	NE	NE			NE
France	NO	-321.69	-321.69	-93.22			-6,248.77
Germany	0.01	-252.60	-252.60	NE	272.29	IE, NE	-72.20
Greece							
Hungary	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO			-19.80
Iceland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NO,NE
Ireland	54.46	NO	54.46	NO	61.36	-0.94	-421.22
Italy	NO	NO	NO	NO	NO	NO	NO
Japan	7.11	-8.66	-1.55	-13.05	352.59	IE	-1,239.30
Latvia	NE	NE	NE	NE	NE	NE	NE
Liechtenstein	0.08	-0.30	-0.21	-0.01	0.10	IE	0.43
Lithuania	NA, NE	NA, NE	NA, NE	NA, NE			NE,NA
Luxembourg	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO
Netherlands	NE	-78.10	-78.10	NE	92.05	IE, NE	-51.15
New Zealand	4.27	-197.07	-192.79	NA, NE	NE	NE	706.91
Norway	NA	-4.95	-4.95		NA	NA	18.14
Poland	NE	NE	NE		37.42		-137.22
Portugal	1.79	-4.12	-2.33	-0.18	9.27	NO	-24.77
Romania	NA, NE	NA, NE	NA, NE	NA, NE	NE	NE	NE,NA
Russian Federation	NE, NO	NE, NO	NE, NO	NA, NO	NE, NO	NE, NO	NO,NA,NE
Slovakia	NE	NE	NE	120.45	NO	NO	-441.65
Slovenia	NE, NO	NE, NO	NE, NO	NE, NO			NO,NE
Spain							
Sweden	171.10	-70.40	100.70	NA	NA	NA	-369.23
Switzerland	11.19	-109.17	-97.98	-5.20			338.14
Turkey							
Ukraine	686.21	-425.14	261.07	NE, NO	1,284.90	-0.65	-5,666.18
United Kingdom	57.82	-3.70	54.11	IE, NO			-8,757.36
United States	IE, NE	IE, NE	IE, NE	IE, NE	4,693.00	-241.30	-16,322.90

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.22

Net CO_2 emissions/removals from land converted to grassland - trend information

CO_2 emissions/removals [b] (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	111,378	56,156	-16.9	-13.5	-3.6	-2.4	12.8	-12.3	6.9	-3.5	3.8	-25.5	26.1	0	-49.6
Austria	439	363	0.3	-0.4	-7.2	0.0	-0.2	0.0	-0.3	9.3	-15.4	5.9	-11.6	11.1	-17.4
Belarus	NO,NE	NO,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium															
Bulgaria	NO,NE	NO,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	NE,NA	NE,NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	-442	-217	654.4	3.4	206.1	-81.9	*	*	278.7	-55.9	-50.2	-2.5	-51.9	82.9	-51.0
Denmark	NA,NO	NA,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	-15,584	-15,582	14.8	-1.1	8.6	-13.7	2.6	-2.9	-0.1	20.7	-10.1	52.7	-41.8	4.9	0.0
Finland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	-9,344	-6,249	8.1	-3.4	-2.3	-3.8	-3.8	-4.3	-3.7	-4.2	-3.9	-3.4	0.6	-4.5	-33.1
Germany	273	-72	0	0	0	0	0	0	-126.4	0	0	0	0	0	-126.4
Greece															
Hungary	NE, NO,IE	-20	*	*	*	*	-4.5	*	*	*	*	*	*	*	*
Iceland	NO,NE	NO,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	-128	-421	-81.7	-3.4	-13.3	-49.1	54.9	-8.1	-40.8	25.5	-68.0	6.7	160.0	203.4	228.7
Italy	NO	NO	*	*	*	*	*	*	*	*	-58.7	579.7	*	*	*
Japan	-4,001	-1,239	-12.1	-8.7	-7.6	-9.5	-11.2	-6.6	-6.5	-5.8	-3.1	-5.8	-6.4	-6.3	-69.0
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	0	0	50.0	340.4	-93.3	-6,273.1	-41.1	37.2	-6.7	40.5	-42.1	-76.8	0.5	2.8	-206.7
Lithuania	NE,NA	NE,NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	-51	-51	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	707	707	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	NO,NA	18	*	0	0	0	*	*	22.7	46.8	-83.2	1,053.9	-87.0	192.0	*
Poland	NE	-137	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	-25	-25	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NE,NA	NE,NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NO,NA,NE	NO,NA,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE,NO	-442	*	*	*	*	*	*	*	*	*	*	*	18.3	*
Slovenia	NO,NE	NO,NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain															
Sweden	512	-369	-100.6	16.8	-42.1	-526.9	-129.9	-138.9	164.6	247.8	-122.7	36.2	-340.9	-212.8	-172.1
Switzerland	615	338	0.4	4.0	-1.9	1.1	0.7	1.5	0.3	0.9	0.7	0.1	0.6	0.7	-45.1
Turkey															
Ukraine	-2,393	-5,666	-47.8	-6.9	62.6	-5.6	31.0	21.0	13.1	-5.3	-11.5	9.7	-5.9	-7.9	136.8
United Kingdom	-7,261	-8,757	1.7	1.4	1.4	1.4	1.3	0.9	1.0	1.0	1.1	1.1	1.1	1.0	20.6
United States	-14,553	-16,323	0	11.9	0	0	0	0	0	0	0	0	0	0	12.2

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Only net CO_2 emissions from carbon stock change are included in this table. For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to CO_2.

Table 5.23

Area of land converted to grassland - trend information

Area (kha)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	8,813.48	13,177.39	4.4	3.0	2.8	2.5	2.3	2.3	2.8	2.8	2.3	2.0	2.5	0	49.5
Austria	29.82	29.56	0.6	-0.9	-1.3	0.0	-0.4	0.0	-0.6	13.0	-20.2	6.5	-26.8	48.0	-0.9
Belarus	IE, NE, NO	IE, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium			*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	4.15	2.02	654.5	3.4	206.1	-82.0	*	*	279.2	-55.7	-50.3	-1.5	-52.4	82.1	-51.2
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	4,275.11	3,164.72	0	-1.6	-1.8	-1.8	-1.9	-2.0	-2.4	-2.3	-2.6	-2.7	-3.0	-3.0	-26.0
Germany	33.56	24.55	0	0	0	0	0	0	-26.8	0	0	0	0	0	-26.8
Greece															
Hungary	IE, NO	10.00	*	*	*	*	50.0	*	*	*	*	*	*	*	*
Iceland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	26.30	112.98	150.9	9.8	-21.0	-6.5	-6.8	14.3	23.9	-29.2	-30.7	-4.5	-2.9	53.7	329.6
Italy	NO	NO	*	*	*	*	*	*	*	*	-58.7	579.7	*	*	*
Japan	428.23	124.11	-12.7	-8.6	-7.9	-10.2	-11.0	-6.7	-7.2	-6.2	-3.8	-6.4	-7.7	-7.0	-71.0
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	0.01	0.01	40.0	-33.3	16.7	128.6	0	-12.5	-14.3	41.7	-23.5	-23.1	0	0	100.0
Lithuania	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	19.17	19.17	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	1.08	1.08	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	NO	0.98	*	25.0	20.0	42.9	-90.0	-0.1	500.1	-33.3	-74.5	20.6	-16.3	5.6	*
Poland	NE	22,500.00	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	0.57	0.57	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	312.20	33.40	138.6	-16.2	-94.2	1,554.5	-30.2	-30.7	1,254.5	-97.3	112.5	-82.4	666.7	263.0	-89.3
Russian Federation	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NO	100.60	*	*	*	*	*	*	*	*	*	*	*	9.1	*
Slovenia	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	86.57	145.85	5.8	1.4	15.1	7.8	-0.3	4.6	2.7	1.8	-0.6	7.9	-1.3	3.2	68.5
Switzerland	5.68	4.62	-0.6	0	0	0	0	0	0	0	0	0	0	0.1	-18.8
Turkey															
Ukraine	329.27	936.59	2.5	-0.4	37.5	11.0	35.7	21.4	15.2	-9.1	-6.3	-0.1	0.5	0.9	184.4
United Kingdom	3,233.17	4,555.43	2.7	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.0	40.9
United States	21,226.40	22,034.09	0	0	0	0	0	0	0	0	0	0	0	0	3.8

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.24a

Forest land converted to grassland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Activity data		IEF (Mg C/ha)					
	Total area (kha)	Area of organic soil[b] (kha)	CSC[c] in living biomass/area			Net CSC[c] in DOM[d]/area	Net CSC[c] in soils/area	
			Increase	Decrease	Net Change		Mineral soils[b]	Organic soils[b]
Australia	13,177.39	NO	NA	-0.89	-0.89	-0.04	-0.23	NO
Austria	2.81	NO	IE	-21.17	-21.17	NO	-0.57	NO
Belarus	NO	NE	NO	NO	NO	NO	NE	NE
Belgium								
Bulgaria	NE	NE	NE	NE	NE	NE	NE	NE
Canada	NO	NO	NA	NA	NA	NA	NA	NA
Croatia								
Czech Republic	NO		NO	NO	NO	NA		
Denmark	NO	NO	NO	NO	NO	NO	NA	NA
Estonia	NE	NE	NE	NE	NE	NE	NE	NE
European Community	NE	NE	NE	NE	NE	NE	NE	IE
Finland	NE		NE	NE	NE	NE	NE	
France	173.35		NO	-1.86	-1.86	-0.34		
Germany	1.58	NE	0.00	-59.91	-59.91	NE	NE	NE
Greece								
Hungary	IE		IE	IE	IE	IE		
Iceland	NE	NE	NE	NE	NE	NE	NE	NE
Ireland	NO	NO	NO	NO	NO	NO	NO	NO
Italy	NO	NO	NO	NO	NO	NO	NO	NO
Japan	11.65	IE	0.01	-0.20	-0.19	-1.12	2.45	IE
Latvia	NE	NE	NE	NE	NE	NE	NE	NE
Liechtenstein	0.00	NE	7.83	-134.19	-126.36	-4.22	-21.00	IE
Lithuania	NA		NA	NA	NA	NA		
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	1.40		NE	-55.79	-55.79	NE	IE	IE
New Zealand	1.02	NE	3.82	-192.82	-189.01	NE	NE	NE
Norway	0.90	NO	NA	NA	NA	NA	NA	NA
Poland	NE	NE	NE	NE	NE	NE	NE	NE
Portugal	0.01	NO	3.04	-40.07	-37.03	-3.94	10.45	NO
Romania	33.40	NE	NE	NE	NE	NE	NE	NE
Russian Federation	NO	NO	NO	NO	NO	NO	NO	NO
Slovakia	NO	NO	NE	NE	NE	NE	NO	NO
Slovenia	NE		NE	NE	NE	NE	NE	
Spain								
Sweden	48.33	NA	NA	-1.46	-1.46	NA	NA	NA
Switzerland	1.60		0.04	-68.25	-68.21	-3.26		
Turkey								
Ukraine	NO	NO	NO	NO	NO	NO	NO	NO
United Kingdom	342.13		IE, NO	IE, NO	IE, NO	IE		
United States	NA	NA	IE	IE	IE	IE	IE	IE

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.
[d] DOM = dead organic matter.

Table 5.24b

Forest land converted to grassland - AD, IEFs, carbon stock changes in pools and net CO_2 emissions/removals (2005) [a, b]

	Emissions/Removals (Gg C)						Net CO_2 (Gg)
	CSC [c] in living biomass			Net CSC [c] in DOM [d]	Net CSC [c] in soils		
	Gains	Losses	Net Change		Mineral soils [b]	Organic soils [b]	
Australia	NA	-11,728.18	-11,728.18	-555.12	-3,032.07	NO	56,156.35
Austria	IE	-59.48	-59.48	NO	-1.60	NO	223.96
Belarus	NO	NO	NO	NO	NE	NE	NE,NO
Belgium							
Bulgaria	NE	NE	NE	NE	NE	NE	NE
Canada	NA	NA	NA	NA	NA	NA	NA
Croatia							
Czech Republic	NO	NO	NO	NA			NA,NO
Denmark	NO	NO	NO	NO	NA	NA	NA,NO
Estonia	NE	NE	NE	NE	NE	NE	NE
European Community	0.05	-625.11	-625.07	-58.37	-87.28	IE	2,825.93
Finland	NE	NE	NE	NE			NE
France	NO	-321.69	-321.69	-58.31			1,552.27
Germany	0.01	-94.91	-94.91	NE	NE	NE	348.00
Greece							
Hungary	IE	IE	IE	IE			IE
Iceland	NE	NE	NE	NE	NE	NE	NE
Ireland	NO	NO	NO	NO	NO	NO	NO
Italy	NO	NO	NO	NO	NO	NO	NO
Japan	0.11	-2.35	-2.23	-13.05	28.53	IE	-48.58
Latvia	NE	NE	NE	NE	NE	NE	NE
Liechtenstein	0.02	-0.27	-0.25	-0.01	-0.04	IE	1.11
Lithuania	NA	NA	NA	NA			NA
Luxembourg	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO
Netherlands	NE	-78.10	-78.10	NE	IE	IE	286.37
New Zealand	3.90	-197.07	-193.16	NE	NE	NE	708.27
Norway	NA	NA	NA	NA	NA	NA	NA
Poland	NE	NE	NE	NE	NE	NE	NE
Portugal	0.04	-0.52	-0.48	-0.05	0.14	NO	1.46
Romania	NE	NE	NE	NE	NE	NE	NE
Russian Federation	NO	NO	NO	NO	NO	NO	NO
Slovakia	NE	NE	NE	NE	NO	NO	NE,NO
Slovenia	NE	NE	NE	NE			NE
Spain							
Sweden	NA	-70.40	-70.40	NA	NA	NA	258.13
Switzerland	0.06	-108.90	-108.84	-5.20			608.09
Turkey							
Ukraine	NO	NO	NO	NO	NO	NO	NO
United Kingdom	IE, NO	IE, NO	IE, NO	IE			155.75
United States	IE	IE	IE	IE	IE	IE	IE

[a] Changes introdcued by the new LULUCF tables included in decision 14/CP.11 have been used for the first time in this S&A report, part I. The main changes introduced include splitting of soils into mineral and organic components, and the inclusion of a 'Net CO2' column.

[b] Version 3.0 or earlier of the CRF Reporter do not include the new LULUCF tables included in decision 14/CP.11. For those Parties who reported their annual GHG inventory submission using any one of these earlier versions of the CRF Reporter, the area of organic soil and the net CSC in both mineral and organic soils are empty, however, the 'Net CO_2' has been calculated by the secretariat that includes CO_2 from net CSC in soils.

[c] CSC = carbon stock change.

[d] DOM = dead organic matter.

Table 5.25

Net CO_2 emissions/removals from forest land converted to grassland - trend information

CO_2 emissions/removals [b] (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	-111,378	-56,156	-16.9	-13.5	-3.6	-2.4	12.8	-12.3	6.9	-3.5	3.8	-25.5	26.1	0	-49.6
Austria	-282	-224	0	0	-11.5	0	0	0	0	0	0	0	0	0	-20.6
Belarus	NE,NO	NE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium															
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NA,NO	NA,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NA,NO	NA,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	-4,387	-2,826	-35.8	0.1	1.1	19.3	-15.1	9.0	3.0	9.0	-16.6	-1.8	0.3	-4.0	-35.6
Finland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	-2,651	-1,552	-28.7	1.3	-4.3	1.7	1.1	3.0	-2.2	-0.4	-2.6	-4.1	-18.4	-0.3	-41.4
Germany	-348	-348	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	160	49	14.0	-9.5	-6.8	-12.0	-15.1	-5.8	1.1	-5.8	-10.3	-13.1	-22.5	-17.9	-69.6
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	IE,NO	-1	*	*	*	640.7	-27.4	12.1	-11.6	42.5	-30.3	-50.0	-13.9	0.4	*
Lithuania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	-286	-286	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	-708	-708	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NA,NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE,NO	NE,NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain															
Sweden	-721	-258	-112.5	16.7	-72.8	-956.4	-114.2	-258.3	118.7	124.8	-103.4	-153.5	3,764.2	-31.2	-64.2
Switzerland	-932	-608	0.0	2.2	-1.0	0.6	0.4	0.8	0.2	0.5	0.4	0.0	0.3	0.4	-34.7
Turkey															
Ukraine	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	-97	-156	0.1	5.2	1.0	-7.6	1.3	30.3	12.7	8.3	3.0	0.1	-3.5	2.6	60.5
United States	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] Only net CO_2 emissions from carbon stock change are included in this table. For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to CO_2.

Table 5.26

Area of forest land converted to grassland (trend information)

Area (kha)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	8,813.48	13,177.39	4.4	3.0	2.8	2.5	2.3	2.3	2.8	2.8	2.3	2.0	2.5	0	49.5
Austria	3.54	2.81	0	0	-11.5	0	0	0	0	0	0	0	0	0	-20.6
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium			*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	220.57	173.35	0	-1.5	-1.7	-1.6	-1.6	-1.4	-1.5	-1.5	-1.6	-1.9	-2.8	-2.8	-21.4
Germany	1.58	1.58	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece															
Hungary	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	56.51	11.65	-9.8	-7.4	-8.8	-13.8	-10.3	-5.6	-7.1	-7.9	-10.1	-10.3	-20.8	-16.3	-79.4
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	0.00	*	*	*	600.0	-28.6	20.0	-16.7	60.0	-37.5	-60.0	0	0	*
Lithuania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	1.40	1.40	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	1.02	1.02	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	NO	0.90	*	*	*	*	*	*	*	-50.0	0	0	0	0	*
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	0.01	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NA	33.40	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	38.02	48.33	15.6	-1.5	12.5	4.2	1.0	7.2	-0.7	5.8	2.7	11.7	-9.3	-26.9	27.1
Switzerland	2.61	1.60	-0.4	0	0	0	0	0	0	0	0	0	0	0.1	-38.9
Turkey															
Ukraine	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	341.52	342.13	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2
United States	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.27

Direct N_2O emissions from N-fertilization (base year and 2005) - AD, IEFs and N2O emissions

	Forest Land remaining Forest Land						Land converted to Forest Land					
	Base year[a]			2005			Base year[a]			2005		
	Total amount of fertilizer applied	N_2O-N emissions per unit of fertilizer	N_2O emissions	Total amount of fertilizer applied	N_2O-N emissions per unit of fertilizer	N_2O emissions	Total amount of fertilizer applied	N_2O-N emissions per unit of fertilizer	N_2O emissions	Total amount of fertilizer applied	N_2O-N emissions per unit of fertilizer	N_2O emissions
	(Gg N/yr)	(kg N_2O-N/kg N)	(Gg)	(Gg N/yr)	(kg N_2O-N/kg N)	(Gg)	(Gg N/yr)	(kg N_2O-N/kg N)	(Gg)	(Gg N/yr)	(kg N_2O-N/kg N)	(Gg)
Australia	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belarus	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Bulgaria	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Canada	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Croatia												
Czech Republic	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Denmark	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Estonia	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
European Community	14.88	0.01	0.27	6.42	0.01	0.12	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
Finland	4.40	0.01	0.09	1.80	0.01	0.04	IE	IE	IE	IE	IE	IE
France	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Germany	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Greece												
Hungary	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Iceland	IE	IE	IE	0.00	0.01	0.00	IE	IE	IE	0.02	0.01	0.00
Ireland	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Italy	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Japan	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Latvia	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Liechtenstein	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Lithuania	NA	NA	NA	NA	NA	NA	NA	NA	NA	NE	NE	NE
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
New Zealand	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Norway	1.12	0.00	0.00	0.48	0.00	0.00	IE	IE	IE	IE	IE	IE
Poland	IE, NE	IE, NE	IE, NE	IE, NE	IE, NE	IE, NE	0	0	0	0	0	0
Portugal	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Romania	NA	NA	NA	NA	NA	NA	IE	IE	IE	IE	IE	IE
Russian Federation	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Slovakia	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Slovenia	NO	NO	NO	NO	NO	NO	NE	NE	NE	NE	NE	NE
Spain												
Sweden	10.48	0.01	0.19	4.62	0.01	0.08	IE	IE	IE	IE	IE	IE
Switzerland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Turkey												
Ukraine	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
United Kingdom	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
United States	10.90	0.01	0.17	71.51	0.01	1.12	NA	NE	NE	NA	NE	NE

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.28

Direct N_2O emissions from N-fertilization - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	0.272	0.117	-36.2	-6.6	-3.5	3.2	-12.9	39.3	-1.3	-16.7	-9.0	-1.2	15.1	27.0	-56.8
Finland	0.087	0.035	-24.5	-43.8	18.4	63.5	-31.0	56.0	-0.9	-18.2	5.6	-2.6	5.8	-8.0	-59.1
France	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Germany	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	0.007	0.016	20.0	60.2	-11.4	32.1	27.7	-9.5	-11.5	7.2	9.1	55.9	12.5	11.8	148.7
Ireland	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NA	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	0.004	0.002	52.8	4.7	-1.5	-1.5	11.7	-7.7	-35.7	-18.1	36.7	-55.7	1.3	26.6	-59.1
Poland	IE, NE	IE, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	IE, NO	IE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	IE, NA	IE, NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	0.185	0.082	-41.6	16.9	-10.1	-21.0	2.0	30.0	-1.5	-15.6	-18.5	0	22.7	51.9	-55.7
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	0.171	1.124	-3.1	42.9	28.0	25.0	18.7	31.6	-24.0	10.5	0	0	0	0	556.3

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.29

N_2O emissions from disturbance associated with land-use conversion to cropland - AD, IEFs and N2O emissions (base year and 2005)

	Base year[a]			2005		
	Land area converted	N_2O-N emissions per area converted	N_2O emissions	Land area converted	N_2O-N emissions per area converted	N_2O emissions
	(kha)	(kg N_2O-N/ha)	(Gg)	(kha)	(kg N_2O-N/ha)	(Gg)
Australia	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO
Austria	33.57	0.69	0.04	30.41	0.69	0.03
Belarus	1,081.20	IE, NE, NO	IE, NE, NO	931.93	IE, NE, NO	IE, NE, NO
Belgium	NO	NO	NO	NO	NO	NO
Bulgaria	NE	NE	NE	NE	NE	NE
Canada	497.89	0.20	0.15	349.92	0.26	0.14
Croatia						
Czech Republic	NO	NA, NO	NA, NO	NO	NA, NO	NA, NO
Denmark	NO	NO	NO	NO	NO	NO
Estonia	NE	NE	NE	NE	NE	NE
European Community	NE	NE	10.36	NE	NE	7.35
Finland	NE	NE	NE	NE	NE	NE
France	3,656.51	1.52	8.73	2,191.39	1.49	5.13
Germany	31.06	24.77	1.21	35.21	24.58	1.36
Greece						
Hungary	NA	NA	NA	NA	NA	NA
Iceland	NE	NE	NE	NE	NE	NE
Ireland	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO
Italy	6.99	4.82	0.05	53.52	4.82	0.41
Japan	475.93	0.40	0.30	92.16	0.36	0.05
Latvia	IE, NE	NE	NE	IE, NE	NE	NE
Liechtenstein	0.00	NO	NO	0.00	NO	NO
Lithuania	NE	NE	NE	NE	NE	NE
Luxembourg	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO
Netherlands	NE	NE	NE	NE	NE	NE
New Zealand	NE	NE	NE	NE	NE	NE
Norway	0.90	1.56	0.00	2.70	0.14	0.00
Poland	NE	NE	NE	NE	NE	NE
Portugal	3.69	13.49	0.08	3.69	13.49	0.08
Romania	NE	NE	NE	NE	NE	NE
Russian Federation	NO	NO	NO	NO	NO	NO
Slovakia	NE	NE	NE	NE	NE	NE
Slovenia	NE	NE	NE	NE	NE	NE
Spain						
Sweden	65.12	2.50	0.26	85.95	2.50	0.34
Switzerland	0.55	5.97	0.01	1.84	10.11	0.03
Turkey						
Ukraine	2.40	0.00	0.00	NO	NA, NE, NO	NA, NE, NO
United Kingdom	NE, NO	NA, NE, NO	NA, NE, NO	NE, NO	NA, NE, NO	NA, NE, NO
United States	IE	IE	IE	IE	IE	IE

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.30

N_2O emissions from disturbance associated with land-use conversion to cropland - trend information

N_2O emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	IE, NO	IE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	0.04	0.03	0.7	-1.0	-0.1	0.0	-0.4	0.0	-0.6	18.9	-19.3	-11.6	24.3	-11.5	-9.2
Belarus	IE, NE, NO	IE, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	0.15	0.14	-2.8	-1.3	-0.7	-0.3	-0.3	0.5	0.0	0.4	1.1	1.2	1.3	0.4	-6.2
Croatia															
Czech Republic	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	10.36	7.35	-0.1	-1.8	-4.2	0.0	3.2	0.2	-0.5	-10.3	-2.9	-3.4	33.7	-27.3	-29.1
Finland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	8.73	5.13	0	-1.3	-1.3	-1.3	-3.0	-3.1	-2.9	-3.6	-4.0	-4.3	-4.6	-4.8	-41.2
Germany	1.21	1.36	0	0	0	0	0	0	12.5	0	0	0	0	0	12.5
Greece															
Hungary	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NA, NE, NO	NA, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	0.05	0.41	*	-19.8	*	*	691.7	41.9	-2.8	*	*	*	*	-85.5	665.3
Japan	0.30	0.05	-7.3	-11.8	-13.8	-14.7	-11.3	-8.8	-11.4	-10.7	-10.3	-9.3	-11.8	-13.8	-82.6
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	-63.6	*	*	2,100.0	*	*	*	-47.1	*	*	*
Lithuania	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	0.00	0.00	-9.8	-11.3	-5.0	-5.5	-6.5	-7.6	-7.6	-21.9	-12.3	3.6	1.7	-8.8	-73.2
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	0.08	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0
Romania	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	0.26	0.34	16.9	-1.6	-9.1	7.9	10.8	3.6	3.5	2.4	4.9	-2.2	0.8	-22.8	32.0
Switzerland	0.01	0.03	-1.8	0	0	0	0	0	0	0	0	0	0	0.1	468.7
Turkey															
Ukraine	0.00	NA, NE, NO	*	-81.6	301.8	-53.5	39.3	*	*	-5.3	*	*	*	*	*
United Kingdom	NA, NE, NO	NA, NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.31

CO_2 emissions from agricultural lime application in cropland and grassland (base year [a] and 2005) [b]

	Cropland						Grassland					
	Base year[a]			2005			Base year[a]			2005		
	Total amount of lime applied	CO_2 emissions per unit of lime	CO_2 emissions	Total amount of lime applied	CO_2 emissions per unit of lime	CO_2 emissions	Total amount of lime applied	CO_2 emissions per unit of lime	CO_2 emissions	Total amount of lime applied	CO_2 emissions per unit of lime	CO_2 emissions
	(Mg/yr)	($MgCO_2$-C/Mg)	(Gg)	(Mg/yr)	($MgCO_2$-C/Mg)	(Gg)	(Mg/yr)	($MgCO_2$-C/Mg)	(Gg)	(Mg/yr)	($MgCO_2$-C/Mg)	(Gg)
Australia	NE	NE	NE	NE	NE	NE	NE	NE	NE		NE	NE
Austria	205,230	0.12	90.30	205,174	0.12	90.28	IE	IE	IE	IE	IE	IE
Belarus	5,221,200	0.12	2,297.33	2,499,000	0.12	1,099.56	NO	NO	NO	NO	NO	NO
Belgium	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Bulgaria	112,286	0.12	49.41	NE, NO	NE, NO	NE, NO	NO	NO	NO	NO	NO	NO
Canada	442,755	0.13	203.62	626,114	0.13	287.76	IE	IE	IE	IE	IE	IE
Croatia												
Czech Republic	2,517,500	0.12	1,107.70	135,697	0.12	59.71	132,500	0.12	58.30	7,127	0.12	3.14
Denmark	1,285,300	0.12	565.55	499,300	0.12	219.69	IE	IE	IE	IE	IE	IE
Estonia	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
European Community	11,414,854	0.12	5,077.80	7,307,493	0.12	3,234.61	2,122,163	0.12	954.75	1,122,124	0.12	502.12
Finland	1,344,769	0.13	617.87	587,794	0.12	264.76	IE	IE	IE	IE	IE	IE
France	1,248,835	0.12	551.57	1,202,308	0.12	530.24	NO	NO	NO	NO	NO	NO
Germany	5,118,222	0.12	2,252.02	3,536,908	0.12	1,555.15	IE	IE	IE	IE	IE	IE
Greece												
Hungary	21,000	0.12	9.24	73,000	0.08	20.59	NO	NO	NO	NO	NO	NO
Iceland	NE	NE	NE	8,484	0.11	3.46	NO	NO	NO	NO	NO	NO
Ireland	86,998	0.12	38.28	60,699	0.12	26.71	719,902	0.12	316.76	486,564	0.12	214.09
Italy	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Japan	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Latvia	10,500	0.12	4.62	3,300	0.12	1.45	NE	NE	NE	NE	NE	NE
Liechtenstein	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Lithuania	200,000	0.13	93.43	NA	NA	NA	NA	NA	NA	NA	NA	NA
Luxembourg	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Monaco	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Netherlands	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
New Zealand	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Norway	492,407	0.12	216.66	207,325	0.12	91.22	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO	IE, NO
Poland	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Portugal	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Romania	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Russian Federation	21,980,000	0.12	9,671.20	1,582,280	0.12	696.20	IE	IE	IE	IE	IE	IE
Slovakia	1,000	0.12	0.44	2,440	0.12	1.08	NE	NE	NE	NE	NE	NE
Slovenia	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Spain	0	0	0	0	0	0	0	0	0	0	0	0
Sweden	383,760	0.12	169.77	263,870	0.12	116.60	NO	NO	NO	NO	NO	NO
Switzerland	45,000	0.12	19.80	45,000	0.12	19.80	NO	NO	NO	NO	NO	NO
Turkey												
Ukraine	6,930,700	0.12	3,049.51	243,100	0.12	106.96	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
United Kingdom	1,741,739	0.12	792.45	951,440	0.12	431.19	1,402,261	0.12	638.00	635,560	0.12	288.03
United States	21,371,258	0.06	4,667.07	18,508,630	0.06	4,049.03	IE	IE	IE	IE	IE	IE

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

[b] For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to CO_2.

Table 5.32

CO_2 emissions from agricultural lime application (all land-use categories) - trend information [a]

CO_2 emissions (Gg)			Relative change (%)												
	Base year [b]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year [b] to 2005
Australia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Austria	90.30	90.28	0.8	1.4	0.0	0.1	-0.5	0.0	-1.4	-0.1	0.0	0.0	-0.1	0.1	0.0
Belarus	2,297.33	1,099.56	-11.5	13.1	2.3	20.3	-10.6	-29.2	-10.3	10.2	16.2	10.8	7.1	12.9	-52.1
Belgium	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	49.41	NE, NO	-81.5	*	*	*	*	*	*	*	*	*	*	*	*
Canada	203.62	287.76	25.4	-0.8	10.5	-8.6	11.9	-1.7	-11.3	7.6	9.2	-7.9	0	0	41.3
Croatia															
Czech Republic	1,166.00	62.84	-73.6	7.9	2.8	-17.7	-3.3	-3.3	6.2	0.6	-6.8	-12.1	-8.3	-9.4	-94.6
Denmark	565.55	219.69	-18.2	35.1	-20.8	19.5	-46.3	5.1	-1.7	-23.0	16.3	-3.0	-30.3	39.3	-61.2
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	6,379.27	3,904.60	-11.0	19.8	-0.7	0.4	-10.5	-1.8	-2.6	-8.4	2.6	0.5	-8.2	-1.5	-38.8
Finland	617.87	264.76	-30.2	-14.0	17.5	3.1	-8.5	0.3	-24.0	21.2	6.9	-34.2	-9.3	5.2	-57.2
France	551.57	530.24	-8.7	19.2	-8.5	17.9	-8.7	-3.7	-17.0	-8.1	7.6	6.3	3.0	-5.4	-3.9
Germany	2,415.59	1,648.28	-24.6	17.4	2.9	4.9	13.8	0.7	10.6	-13.3	6.5	-8.4	-0.9	0	-31.8
Greece															
Hungary	9.24	20.59	-41.8	-17.6	58.3	-35.1	27.9	39.4	13.9	-44.5	43.8	23.9	22.4	71.4	122.9
Iceland	NA, NE, NO	3.46	*	*	*	*	*	*	*	*	*	*	6.6	37.2	*
Ireland	355.04	240.80	-11.2	83.4	-2.1	-12.5	-27.8	25.4	-4.4	5.2	-28.9	41.2	-37.7	0.0	-32.2
Italy	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Latvia	4.62	1.45	0	0	-25.5	-61.5	56.2	4.3	108.2	-93.1	4589.9	63.5	-95.9	50.0	-68.6
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	93.43	NA	-14.3	-33.3	-50.0	*	*	*	*	*	*	*	*	*	*
Luxembourg	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	183.15	74.74	-19.9	2.5	12.6	-0.5	-5.5	-18.9	15.7	-18.0	5.8	2.1	-8.6	-5.4	-59.2
New Zealand	346.42	714.21	12.0	2.2	2.5	2.7	9.2	8.5	7.8	7.2	0.3	-2.8	-2.0	2.3	106.2
Norway	226.78	108.24	-13.0	11.3	-7.2	0.2	-11.0	-1.0	-13.4	1.9	-2.0	-8.5	-11.1	-1.0	-52.3
Poland	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	9,671.20	696.20	-7.6	-36.7	-29.0	-25.0	-30.3	8.7	12.0	-3.6	-8.0	3.7	-8.4	-4.1	-92.8
Slovakia	0.44	1.08	0	0	0	0	0	0	143.8	0	0	0	0	0	143.8
Slovenia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	169.77	116.60	-21.0	8.2	14.1	-9.7	-24.8	19.3	0	-12.2	-4.5	-2.2	-4.3	-4.8	-31.3
Switzerland	19.80	19.80	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey															
Ukraine	3,049.51	106.96	-47.9	0	-77.9	-76.3	9.5	*	*	12.6	-24.8	-8.2	68.8	9.1	-96.5
United Kingdom	1,430.45	719.22	23.9	20.4	-0.9	-11.1	-21.4	-16.2	-10.5	-8.8	2.0	24.2	-11.2	-11.7	-49.7
United States	4,667.07	4,049.03	7.3	6.1	-0.6	-2.0	10.3	-5.6	-2.9	1.9	12.8	-8.1	-14.7	3.8	-13.2

[a] For those Parties who reported its annual GHG inventory using version 3.0 or earlier of the CRF Reporter, carbon emissions have been converted to CO.

[b] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.33

Biomass burning - CO_2 emissions from forest land (base year and 2005)

	Base year[a]					2005				
	Activity Data			CO_2 IEF	CO_2 Emission	Activity Data			CO_2 IEF	CO_2 Emission
	Description	Unit	Value	(Mg/activity data unit)	(Gg)	Description	Unit	Value	(Mg/activity data unit)	(Gg)
Australia	Area burned		NA	NA	NA	Area burned		NA	NA	NA
Austria	Area burned	ha	200	IE, NO	IE, NO	Area burned	ha	67	IE, NO	IE, NO
Belarus	Biomass burned	kg dm	27	1,349.01	36.61	Biomass burned	kg dm	24	1,383.27	33.19
Belgium	Area burned	ha	NO	NO	NO	Area burned	ha	NO	NO	NO
Bulgaria	Biomass burned	kg dm	NE	NE	NE	Biomass burned	kg dm	NE	NE	NE
Canada	Area burned	ha	268,155	132.21	35,453.44	Area burned	ha	598,033	109.57	65,528.14
Croatia										
Czech Republic	Biomass burned	kg dm	273,086,092	0.00	500.66	Biomass burned	kg dm	364,535,222	0.00	668.31
Denmark	Area burned	ha	NO	NO	NO	Area burned	ha	NO	NO	NO
Estonia	Area burned	ha	1,010	76.54	77.30	Area burned	ha	57	116.24	6.65
European Community					872.35					1,201.51
Finland	Area burned	ha	4,188	3.13	13.10	Area burned	ha	1,554	10.11	15.72
France	Area burned	kha	13,173	NO	NO	Area burned	kha	13,668	NO	NO
Germany	Area burned	ha	NE, NO	IE	IE	Area burned	ha	274	IE, NO	IE, NO
Greece										
Hungary			NA	IE, NO	IE, NO			NA	IE, NO	IE, NO
Iceland			NE, NO	NE, NO	NE, NO			NE, NO	NE, NO	NE, NO
Ireland			NO	NE, NO	NE, NO			NO	NE, NO	NE, NO
Italy	Area burned	ha	96,157	IE, NO	IE, NO	Area burned	ha	19,040	IE, NO	IE, NO
Japan	Biomass burned	kg dm	49,465,963	IE	IE	Biomass burned	kg dm	58,638,589	IE	IE
Latvia	Biomass burned	kg dm	112,110	1.83	205.54	Biomass burned	kg dm	205,092	1.83	376.00
Liechtenstein	Biomass burned	kg dm	NO	NO	NO	Biomass burned	kg dm	NO	NO	NO
Lithuania	Area burned	ha	134	51.97	6.96	Area burned	ha	51	60.66	3.08
Luxembourg	Biomass burned	kg dm	NE	NE	NE	Biomass burned	kg dm	NE	NE	NE
Monaco			NO	NO	NO			NO	NO	NO
Netherlands			NA	NO	NO			NA	NO	NO
New Zealand	Biomass burned	kg dm	239,342,200	IE, NE, NO	IE, NE, NO	Biomass burned	kg dm	311,451,467	IE, NE, NO	IE, NE, NO
Norway	Area burned	ha	936	IE, NO	IE, NO	Area burned	ha	345	IE, NO	IE, NO
Poland				NE	NE				NE	NE
Portugal	Biomass burned	kg dm	915,714,955	0.00	737.80	Biomass burned	kg dm	1,435,144,666	0.00	1,047.93
Romania	Area burned	ha	93	24.77	2.30	Area burned	ha	212	24.77	5.25
Russian Federation	Area burned	ha	1,377,364	IE, NO	IE, NO	Area burned	ha	736,300	IE, NO	IE, NO
Slovakia	Biomass burned	kg dm	87,388	1.83	160.21	Biomass burned	kg dm	133,572	IE, NO	IE, NO
Slovenia			NE, NO	NE, NO	NE, NO			NE, NO	NE, NO	NE, NO
Spain										
Sweden			6,673	18.20	121.44			9,140	15.08	137.87
Switzerland	Area burned	ha	1,100	IE, NO	IE, NO	Area burned	ha	343	IE, NO	IE, NO
Turkey										
Ukraine	Biomass burned	kg dm	32,163	2.64	84.96	Biomass burned	kg dm	13,790	3.96	54.58
United Kingdom	Biomass burned	kg dm	NE, NO	NE, NO	NE, NO	Biomass burned	kg dm	NE, NO	NE, NO	NE, NO
United States	Area burned		NA	IE, NE	IE, NE	Area burned		NA	IE, NE	IE, NE

[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Romania (1989) and Slovenia (1986).

Table 5.34

CH_4 emissions from biomass burning in forest land - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	72.88	47.25	53.7	28.9	-3.1	28.4	-20.9	-16.2	-5.2	87.9	190.9	-4.7	-10.0	-71.6	-35.2
Austria	0.01	0.00	-72.5	-44.8	-9.4	-31.0	365.0	-91.4	425.0	-42.9	700.0	-64.9	0	0	-64.9
Belarus	0.20	0.17	-40.6	14.3	120.0	-80.0	12.8	-7.0	70.4	-48.7	534.0	-45.6	-60.7	6.1	-11.6
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	130.22	240.69	65.3	250.3	-80.4	-70.2	1226.9	-59.5	-87.7	227.2	348.6	-16.9	26.1	-57.3	84.8
Croatia															
Czech Republic	2.18	2.92	-18.9	-5.2	59.5	21.0	-20.8	-12.0	-8.4	3.7	3.9	22.9	-7.0	-4.2	33.5
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	0.34	0.03	-98.8	-50.2	8.6	58.7	-24.7	6.8	54.0	-66.4	480.2	-85.5	82.7	-74.6	-91.4
European Community	23.45	14.55	-24.6	52.7	-52.8	54.4	74.0	-55.0	232.0	-51.4	2.1	140.1	-73.2	68.9	-38.0
Finland	0.42	0.17	-56.9	-19.5	-26.5	65.9	-71.3	185.2	-51.7	137.6	14.9	-21.0	-68.4	135.9	-58.3
France	6.87	1.83	-44.4	87.2	-54.3	88.2	4.8	-24.4	285.2	-44.4	11.1	-17.5	-74.0	53.9	-73.4
Germany	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	1.43	1.28	-2.4	5.0	8.6	1.8	-2.6	5.3	6.7	-3.9	0	0.8	0.8	3.2	-10.5
Iceland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	6.80	1.63	-74.4	-55.0	-19.0	234.1	16.4	-50.8	104.9	-36.6	-44.0	110.1	-46.7	-1.3	-76.1
Japan	0.40	0.47	-25.2	-51.2	227.7	21.0	-68.9	-51.3	49.0	59.2	66.4	-81.0	211.0	-18.7	18.5
Latvia	0.90	1.64	18.6	20.2	-1.8	31.9	12.4	7.2	2.3	-38.8	8.4	-4.0	-7.9	4.9	82.9
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	0.03	0.01	-51.7	1.2	1.1	0.1	-82.5	542.1	-3.0	-65.7	548.7	-38.8	-41.6	-79.8	-55.7
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	1.72	2.24	8.6	-8.8	25.4	-3.8	-30.8	-15.9	-6.7	1.5	-18.4	-3.0	10.2	9.5	30.1
Norway	0.08	0.03	68.2	-51.2	354.0	68.7	-68.3	213.1	-80.0	420.7	-75.4	328.3	-87.1	181.8	-63.2
Poland	NE	0.13	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	6.53	10.23	57.7	544.0	-65.0	-62.2	396.1	-45.8	120.6	-33.9	43.7	338.3	-80.3	122.0	56.7
Romania	0.01	0.02	-37.6	-33.3	9.1	-70.0	101.5	176.6	851.7	-71.7	252.0	-78.8	-83.7	71.0	128.0
Russian Federation	172.98	74.85	-50.5	-34.5	430.1	-57.7	223.5	-66.1	57.1	-42.3	69.7	66.0	-73.8	11.4	-56.7
Slovakia	0.70	1.07	-37.2	12.0	11.1	5.9	-1.3	14.4	9.8	1.5	-2.5	10.1	12.6	30.0	52.9
Slovenia	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	0.53	0.60	-1.1	0.1	1.0	62.2	-44.4	21.0	-3.7	-3.0	11.0	5.8	-5.6	0	13.2
Switzerland	0.07	0.02	-86.6	50.0	-47.0	550.3	-83.5	-96.3	283.3	4.3	1,012.5	37.5	-96.5	1,615.4	-68.9
Turkey															
Ukraine	0.40	0.26	-41.9	-69.8	163.9	-93.0	422.0	32.6	-81.3	311.7	-20.9	-49.8	-84.4	514.2	-35.8
United Kingdom	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	336.92	551.37	-63.6	-50.2	180.6	-56.4	-18.9	129.7	54.8	-57.3	73.5	-22.4	-14.0	67.1	63.7

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.35

N_2O emissions from biomass burning in forest land - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	1.35	0.87	53.7	28.9	-3.1	28.4	-20.9	-16.2	-5.2	87.9	190.9	-4.7	-10.0	-71.6	-35.2
Austria	0.00	0.00	-73.5	-44.8	-9.4	-31.0	365.0	-91.4	425.0	-42.9	700.0	-64.9	0	0	-66.3
Belarus	0.00	0.00	-38.3	16.7	114.3	-80.0	7.8	-1.0	66.7	-46.3	516.3	-47.2	-60.7	9.1	-11.1
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	5.48	10.13	65.3	250.3	-80.4	-70.2	1226.9	-59.5	-87.7	227.2	348.6	-16.9	26.1	-57.3	84.8
Croatia															
Czech Republic	0.02	0.02	-18.9	-5.2	59.5	21.0	-20.8	-12.0	-8.4	3.7	3.9	22.9	-7.0	-4.2	33.5
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	0.00	0.00	-98.8	-50.2	8.6	58.7	-24.7	6.8	54.0	-66.4	480.2	-85.5	82.7	-74.6	-91.4
European Community	0.47	0.36	-28.2	10.3	-17.9	14.2	15.8	-21.5	50.1	-23.8	10.9	47.6	-45.9	23.7	-24.4
Finland	0.00	0.00	-56.9	-19.5	-26.5	65.9	-71.3	185.5	-51.7	137.6	15.0	-21.0	-68.4	135.9	-58.3
France	0.36	0.25	-32.0	3.3	-7.9	9.7	-1.0	-5.6	23.8	-11.1	13.8	11.6	-30.7	7.8	-28.6
Germany	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	0.01	0.01	-2.3	4.3	8.3	2.6	-2.5	5.1	7.3	-4.5	0	1.2	1.2	2.3	-10.8
Iceland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	0.05	0.02	-74.4	-55.0	-19.0	234.1	16.4	-50.8	104.9	-36.6	-44.0	110.1	-46.7	87.7	-54.5
Japan	0.00	0.00	-25.2	-51.2	227.7	21.0	-68.9	-51.3	49.0	59.2	66.4	-81.0	211.0	-18.7	18.5
Latvia	0.01	0.01	18.6	20.2	-1.8	31.9	12.4	7.2	2.3	-38.8	8.4	-4.0	-7.9	-7.0	62.2
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	0.00	0.00	-51.7	1.2	1.1	0.1	-82.5	542.1	-3.0	-65.7	548.7	-38.8	-41.6	-79.8	-55.7
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	0.01	0.02	8.6	-8.8	25.4	-3.8	-30.8	-15.9	-6.7	1.5	-18.4	-3.0	10.2	9.5	30.1
Norway	0.00	0.00	67.2	-51.2	354.0	68.7	-68.3	-68.7	99.7	-47.9	146.4	327.4	-87.6	176.5	-65.5
Poland	NE	0.00	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	0.04	0.07	57.7	544.0	-65.0	-62.2	396.1	-45.8	120.6	-33.9	43.7	338.3	-80.3	122.0	56.7
Romania	0.00	0.00	-37.6	-33.3	9.1	-70.0	101.5	176.6	851.7	-71.7	252.0	-78.8	-83.7	71.0	128.0
Russian Federation	1.19	0.51	-50.4	-34.9	428.6	-57.4	222.2	-66.0	56.5	-42.6	71.0	66.0	-73.9	10.9	-57.1
Slovakia	0.01	0.02	-32.7	15.9	0	0	0	37.0	0	0	0	0	12.0	53.8	56.6
Slovenia	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	0.00	0.00	-1.1	0	1.1	62.2	-44.4	21.0	-3.8	-2.9	11.3	5.6	-5.5	0	13.2
Switzerland	0.01	0.00	-86.2	48.3	-46.5	552.2	-83.3	-96.0	300.0	0	925.0	36.6	-96.4	1600.0	-68.8
Turkey															
Ukraine	0.01	0.00	-41.9	-69.8	163.9	-93.0	422.0	32.6	-81.3	311.7	-20.9	-49.8	-84.4	514.2	-35.8
United Kingdom	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	2.32	3.79	-63.6	-50.2	180.6	-56.4	-18.9	129.7	54.8	-57.3	73.5	-22.4	-14.0	67.1	63.7

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.36

CH_4 emissions from biomass burning in land converted to cropland - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	34.85	23.20	-8.2	-12.3	12.9	-3.0	6.9	-7.3	6.7	-9.3	1.3	-8.4	-6.1	0	-33.4
Austria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	15.58	8.73	-12.8	-13.4	2.1	-1.5	4.3	-2.7	0.2	-0.5	2.3	-4.7	1.7	-0.6	-44.0
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	7.37	5.87	-14.7	-0.4	0.0	0.0	1.1	1.5	0.8	-2.2	-2.0	0.8	-2.8	0	-20.3
Finland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	7.37	5.87	-14.7	-0.4	0.0	0.0	1.1	1.5	0.8	-2.2	-2.0	0.8	-2.8	0	-20.3
Germany	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	1.03	0.07	-43.4	4.1	-19.6	-25.5	23.9	-5.1	-47.0	-27.4	-7.5	21.5	-7.1	-5.1	-93.7
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland			*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	IE, NE	IE, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.37

N_2O emissions from biomass burning in land converted to cropland - trend information

N_2O emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	0.65	0.43	-8.2	-12.3	12.9	-3.0	6.9	-7.3	6.7	-9.3	1.3	-8.4	-6.1	0	-33.4
Austria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	0.64	0.35	-13.2	-14.6	3.8	-3.0	4.8	-1.9	-0.6	0.1	2.0	-6.1	3.5	-1.4	-45.5
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	0.05	0.04	-14.7	-0.4	0.0	0.0	1.1	1.5	0.8	-2.2	-2.0	0.8	-2.8	0	-20.3
Finland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	0.05	0.04	-14.7	-0.4	0.0	0.0	1.1	1.5	0.8	-2.2	-2.0	0.8	-2.8	0	-20.3
Germany	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	0.01	0.00	-43.4	4.1	-19.6	-25.5	23.9	-5.1	-47.0	-27.4	-7.5	21.5	-7.1	-5.1	-93.7
Latvia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland			*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	IE, NE	IE, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.38

CH_4 emissions from biomass burning in grasslands - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	126.32	63.20	-12.1	-16.3	-6.3	0.1	-0.6	2.1	3.7	2.8	-5.3	-23.2	25.4	0	-50.0
Austria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	8.07	7.12	10.6	-1.8	6.3	-4.7	3.3	-2.7	2.9	1.5	-9.8	2.1	-4.8	0.5	-11.8
Finland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	7.82	6.44	10.7	0.9	5.0	-7.8	4.1	-1.9	-3.7	2.5	-8.5	2.6	-4.2	-0.5	-17.7
Germany	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	0.15	0.01	-42.7	5.1	-19.1	-25.2	24.4	-4.6	-46.8	-27.2	-7.0	21.6	-7.0	-5.3	-93.0
Latvia	NE, NO	0.01	*	436.2	132.8	-52.9	117.8	114.0	-15.8	112.3	140.6	24.1	-53.1	-68.9	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	2.73	1.80	-17.9	4.2	-4.0	28.6	-1.5	-6.2	-28.4	-7.0	9.9	-5.8	-12.8	-6.5	-34.1
Norway	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain			*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	0.01	0.01	0	0	0	54.5	-88.2	50.0	66.7	20.0	150.0	26.7	-73.7	0	-54.5
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	0.15	0.57	6.8	11.3	17.8	-17.0	4.4	147.5	50.1	31.7	-13.1	-5.8	-10.8	0.7	288.9
United States	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 5.39

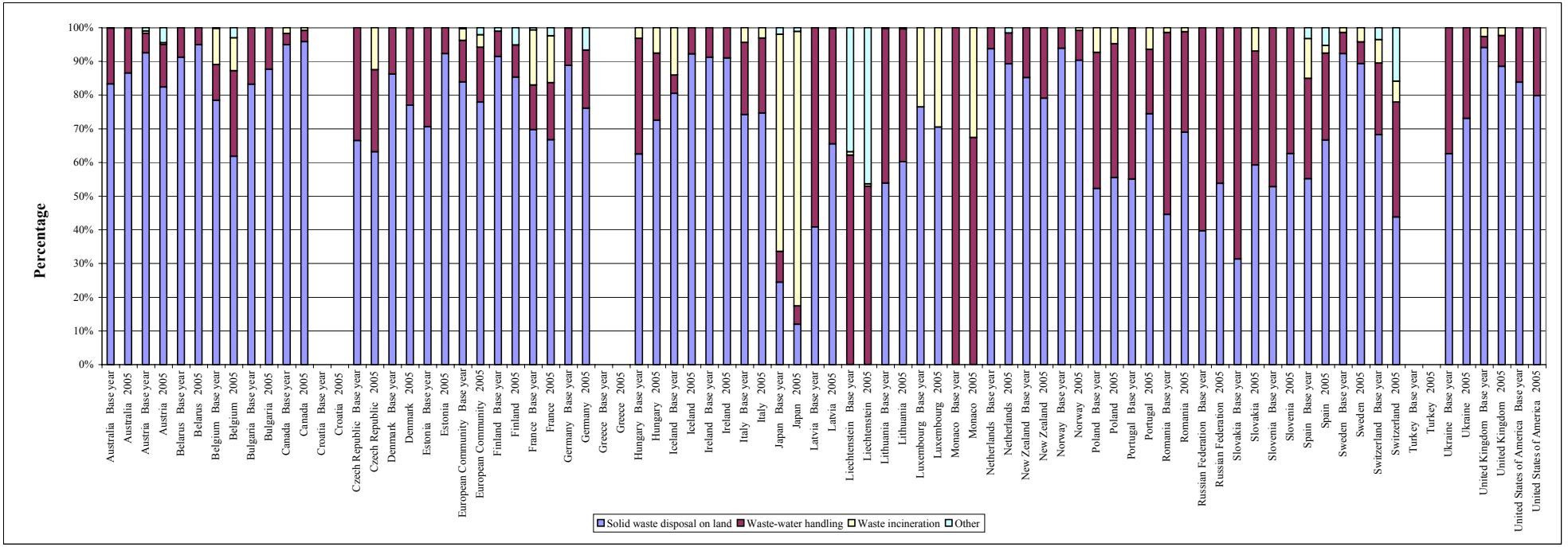
N_2O emissions from biomass burning in grasslands - trend information

N_2O emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2.34	1.17	-12.1	-16.3	-6.3	0.1	-0.6	2.1	3.7	2.8	-5.3	-23.2	25.4	0	-50.0
Austria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Croatia															
Czech Republic	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Denmark	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	0.06	0.05	10.6	-1.8	6.3	-4.7	3.3	-2.7	2.8	1.5	-9.8	2.1	-4.8	0.5	-11.7
Finland	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
France	0.05	0.04	10.7	0.9	5.0	-7.8	4.1	-1.9	-3.7	2.5	-8.5	2.6	-4.2	-0.5	-17.7
Germany	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Iceland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Japan	0.00	0.00	-42.7	5.1	-19.1	-25.2	24.4	-4.6	-46.8	-27.2	-7.0	21.6	-7.0	-5.3	-93.0
Latvia	NE, NO	0.00	*	436.2	132.8	-52.9	117.8	114.0	-15.8	112.3	140.6	24.1	-53.1	-68.9	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	0.02	0.01	-17.9	4.2	-4.0	28.6	-1.5	-6.2	-28.4	-7.0	9.9	-5.8	-12.8	-6.5	-34.1
Norway	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Romania	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*
Sweden	0.00	0.00	0	0	0	71.4	-83.3	0	50.0	33.3	150.0	30.0	-73.1	0	-50.0
Switzerland	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Turkey															
Ukraine	NA, NE	NA, NE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	0.00	0.00	6.9	11.3	17.8	-17.0	4.5	147.4	50.0	31.7	-13.1	-5.8	-10.8	0.7	289.1
United States	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Figure 6.1

Contribution of subsectors to total GHG emissions in the Waste sector[a]



[a] In accordance with the UNFCCC reporting guidelines on annual inventories of Annex I Parties the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 6.1

Solid waste disposal on land, waste-water handling and waste incineration (2005)

	Activity data		Solid waste disposal on land							Waste-water handling										Waste incineration			
			CH_4							CH_4								N_2O from human sewage		CO_2 from non-biogenic waste			
	Population (million)		Methods and EF used[a]		Key category	Share of national total	Emissions per capita	CH_4 IEF		Methods and EF used[b]		Key category	Share of national total	Emissions per capita	CH_4 IEF				Emissions per capita	N_2O IEF	Methods and EF used[c]		Key category	Share of national total
															Domestic / commercial		Industrial							
	CRF	World Bank[d]	Methods	EF				Managed	Unmanaged	Methods	EF				Waste-water	Sludge	Waste-water	Sludge			Methods	EF		
						(%)	(kg)	(t/t)	(t/t)				(%)	(kg)	(kg / kg DC)				(kg)	(kg N_2O -N/kg sewage N)				(%)
IPCC default EF[e]																				0.01				
Australia	20	20	T2	M	L, T	2.81	35	0.04	NA	T2	CS, D	T	0.32	3.97	0.08	0.03	0.06	0.03	0.09	0.01	T1, T2	CS, D		0.01
Austria	8	8	T2	CS, D	L, T	2.02	11	0.17	NO	D	CS, D		0.04	0.24	0.01	IE	NA	IE	0.08	0.01	D	CS, D		0.01
Belarus	10	10	T1	D	L, T	5.80	21	NO	0.06	NA	NA		-	NE	NE	NE	NE	NE	0.08	0.01	NA	NA		-
Belgium	10	10			T	0.57	4	0.03	NO				0.05	0.30	NA	IE	NE	NE	0.08	0.01				0.08
Bulgaria	8	8	T2	CS, D	L	8.11	35	0.09	NE	D	CS, D	L, T	0.93	4.02	0.06	0.06	0.04	0.04	0.06	0.01	NA	NA		-
Canada	32	32	CS	CS	L, T	3.58	39	0.08	NA	CS	CS		0.03	0.37	NA	NE	NO	NE	0.07	0.01	CS	CS		0.02
Croatia		4																						
Czech Republic	10	10	T1	CS, D	L, T	1.26	9	0.03	NO	CS, T1, T2	CS, D		0.35	2.38	0.09	0.26	0.06	0.06	0.06	0.01	T1	CS, D	T	0.25
Denmark	5	6	CS	CS	L	1.62	9	0.06	NO	CS, D	CS		0.39	2.18	0.15	NE	IE	NE	0.03	NE	NA	NA		-
Estonia	1	1	T1	D	L, T	2.34	17	0.07	NO	T1	D	T	0.02	0.18	0.00	IE	0.00	IE	0.09	0.01	NA	NA		-
European Community	NE	387	S, D, M, T1, T	CR, CS, D	L, T	2.03	10	0.06	0	CS, D, M, T1,	CR, CS, D		0.20	1.04	NE	NE	NE	NE	NA	NA				0.07
Finland	5	5	T2	CS, D	L, T	3.00	19	0.07	NO	D	CS, D		0.19	1.18	0.12	IE	0.00	IE	0.05	0.01	NA	NA		-
France	63	61	CR, T2	CS	L, T	1.70	7	0.05	14.27	CR, T2	CS		0.21	0.91	0.10	NE	NO	NE	0.05	NA	CR	CS, PS		0.30
Germany	82	82	T2	CS, D	L, T	1.04	6	0.26	NO	CS, T1	CS, D	T	0.01	0.05	0.00	NE	NE	NE	0.09	0.01	NA	NA		-
Greece		11																						
Hungary	10	10	T2	D	L, T	3.56	13	0.03	NA, NO	CS, D	CS, D	L	0.72	2.71	0.14	IE	0.03	IE	0.07	0.01	CS	OTH		0.37
Iceland	0	0			L, T	4.16	25	0.03	0				0.15	0.90	NE	NE	NE	NE	0.08	0.01			T	0.00
Ireland	4	4	T2	D	L	2.31	19	0.11	NE	T1	D		0.04	0.29	NO	0.01	NO	0.02	0.10	0.01	NA	NA		-
Italy	59	59	T2	CS	L	2.49	12	0.05	NO	D	D		0.40	1.89	0.60	0.60	0.25	IE	0.11	0.01	D	CS		0.03
Japan	128	128	CS, T3	CS	T	0.42	2	0.19	NO	CS, D	CS, D		0.11	0.54	NE	IE	NE	IE	0.00	NE	CS	CS	L, T	2.66
Latvia	2	2	T2	D	L, T	4.57	10	0.05	NO	D	D	L, T	1.94	4.37	0.24	NE	0.07	NE	0.07	0.01	D	D		0.00
Liechtenstein	0	0	NA	NA		-	NO	NO	NO	CS	CS		0.01	0.03	IE	NE	NO	NO	0.09	0.01	T2	CS		0.00
Lithuania	3	3	T2	D	L, T	4.10	13	0.06	0.03	T1	D	L, T	2.35	7.43	0.30	IE	0.13	IE	0.07	0.00	T1	D		0.03
Luxembourg	0	0	T2	D		0.19	2	0.02	NO	NA	NA		-	NE, NO	NE	NE	NE	NE	NE	NE	CS	CS		0.08
Monaco	0	0	NA	NA		-	NA, NO	NO	NO	NA	NA		-	NA, NO	NO	NO	NO	NO	0.07	0.01	NA	NA		-
Netherlands	16,306	16	T2	CS	L, T	2.80	17	0.16	NO	T2	CS		0.10	0.60	0.05	IE	NE	NE	0.03	NA	NA	NA		-
New Zealand	4	4	T2	D	L, T	1.89	17	0.04	NE	D, OTH	OTH		0.29	2.59	0.00	IE	NE	IE	0.08	NE	NA	NA		-
Norway	5	5	T2	CS, D	L, T	2.53	14	0.12	IE	T1	D		0.04	0.22	0.01	IE	IE	IE	IE	IE	D	CS		0.02
Poland	38	38	OTH	OTH	L, T	1.70	8	IE	NE	D	CS, D	L, T	0.89	4.41	0.03	0.49	0.09	NE	0.11	0.01	D	D		0.14
Portugal	11	11	T2	CS, D	L, T	5.63	22	0.05	NO	D	CS, D	L, T	0.76	2.95	0.14	0.20	0.00	IE	0.11	0.01	D	CS, D	T	0.45
Romania	22	22	T1	D	L, T	3.33	11	0.05	0.03	D	D	L	1.02	3.44	0.11	NE	0.12	NE	0.10	0.01	D	D		0.06
Russian Federation	143	143	T2	CS, D	L, T	1.79	13	0.04	0.02	D	CS, D	L	1.35	9.59	0.21	IE	0.06	IE	0.09	0.01	NA	NA		-
Slovakia	5	5	T1, T2	CS, D	L, T	2.61	11	IE	IE	D, T1	CS	L	1.43	6.07	0.22	0.37	0.01	0.18	NA	NA	D	CS		0.30
Slovenia	2,001	2	T2	D	L, T	2.00	10	0.03	NO	T1	D	L	0.88	4.30	0.01	0.49	0.00	0.09	0.10	0.00	NA	NA		-
Spain	43	43	CS, T2	CR, CS, D	L, T	1.96	9	0.03	0.08	D	CS, D	L	0.49	2.35	0.00	0.09	0.03	0.04	0.09	0.19	CR	CR, CS	T	0.03
Sweden	9	9	T3	CS, D	L, T	2.87	10	0.06	NO	NA	NA		-	IE, NO	IE	IE	IE	IE	0.01	0.00	M	PS		0.14
Switzerland	8	7	CS, D	CS, D	L, T	0.58	2	0.91	NO	D	CS, D, OTH		0.06	0.21	0.01	NO	IE	IE	0.09	0.01	CS	CS		0.03
Turkey		72																						
Ukraine	47	47	T2	CS, D	L, T	1.67	7	0.02	0.03	T2	CS, D		0.36	1.54	0.05	0.30	0.02	0.13	0.07	0.01	NA	NA		-
United Kingdom	60	60	T2	CS	L, T	2.97	15	0.06	NA	CS, OTH	CS		0.12	0.64	IE	0.09	NE	NE	0.06	0.01	T1, T2	CS		0.07
United States	300	296	M	M	L, T	1.82	21	0.04	NE	D	D		0.35	4.08	0.16	NE	0.03	NE	0.09	0.01	NA	NA		-

[a] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method used or type of emission factor for all subcategories within the category 6.A Solid waste disposal on land.

[b] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method used or type of emission factor for all subcategories within the category 6.B Waste-water handling.

[c] Information on methods and emission factors in this table is as reported by Parties in table Summary 3 of the CRF. It may not reflect the actual method used or type of emission factor for all subcategories within the category 6.C Waste incineration.

[d] Source of population data: HNPStats - The World Bank Group: World Development Indicators database, http://devdata.worldbank.org/dataonline/

[e] Source of default emission factors: IPCC Guidelines, volume 3, page 6.28.

Table 6.2

CH_4 emissions from solid waste disposal on land - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	726	702	1.0	1.7	-5.6	0.4	-2.3	2.3	0.5	1.3	2.0	-2.4	-0.8	-0.2	-3.3
Austria	161	90	-0.2	-5.5	-5.4	-4.7	-3.7	-4.2	-4.3	-4.1	-1.8	1.2	-7.5	-7.4	-44.3
Belarus	112	209	0.2	2.9	22.6	1.0	4.1	7.2	1.3	1.6	3.3	34.5	10.2	3.6	86.8
Belgium	125	39	-0.7	-3.2	-7.8	-1.1	-6.3	-12.3	-7.3	-27.6	-16.0	-11.7	-2.2	-5.9	-68.7
Bulgaria	508	270	-2.5	-4.2	-5.1	-5.7	-6.6	-5.7	-4.6	-4.3	-3.7	-3.1	-3.1	-3.4	-46.8
Canada	1,046	1,275	2.5	0.5	0.4	1.8	1.3	1.4	0.3	0.2	1.6	1.7	1.6	1.6	21.9
Croatia															
Czech Republic	93	88	0.7	2.4	0.1	-14.9	1.3	-8.7	1.6	-3.3	9.7	3.4	2.5	2.5	-5.9
Denmark	64	50	1.8	-3.3	-0.7	-4.7	-3.4	2.1	0.1	-0.5	-4.5	2.0	-8.0	-2.3	-20.7
Estonia	19	23	33.0	5.3	7.7	6.0	-5.0	0.3	-2.9	-32.6	-0.8	-4.4	9.3	-5.9	20.4
European Community	7,004	4,047	1.3	-1.9	-2.5	-5.6	-4.2	-5.3	-4.7	-7.1	-5.6	-6.5	-5.5	-2.9	-42.2
Finland	173	99	1.4	-1.9	-2.6	-2.8	-4.6	-2.5	-6.5	-3.9	-7.8	-6.9	-5.6	-9.1	-42.9
France	534	452	5.4	2.7	2.7	-13.3	0.1	-2.0	-3.3	-4.9	-5.8	-2.9	-2.8	-3.6	-15.4
Germany	1,710	496	1.1	-6.8	-7.9	-9.0	-9.7	-10.0	-10.4	-11.0	-11.1	-12.3	-12.4	-8.5	-71.0
Greece															
Hungary	91	136	3.0	1.9	1.7	1.3	1.4	1.7	1.8	1.7	1.7	-0.1	0.2	1.0	49.1
Iceland	5	7	3.5	2.5	4.1	2.4	2.1	2.8	3.1	4.7	-4.9	2.4	-0.9	1.4	35.6
Ireland	63	77	2.5	3.7	-4.0	-13.6	5.8	2.6	6.1	-10.9	12.6	9.5	-0.2	-1.1	21.5
Italy	633	687	6.4	5.0	1.4	1.5	-1.2	0.3	4.8	-1.0	-3.6	-4.1	-5.9	-0.4	8.6
Japan	432	274	-0.8	-2.7	-2.6	-3.0	-3.8	-3.8	-4.4	-4.3	-4.6	-4.0	-3.8	-3.5	-36.5
Latvia	13	24	7.2	6.5	6.3	5.5	4.5	3.9	4.5	5.1	0.9	-5.8	-2.6	3.1	78.2
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	51	44	3.1	2.3	-1.1	-1.5	-1.3	-0.7	-3.6	-2.9	-2.9	-2.9	-3.3	-2.1	-13.6
Luxembourg	2	1	-14.8	0.8	4.6	1.5	1.4	0	-0.7	-12.1	-13.8	5.7	1.8	0	-26.5
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	572	282	0.1	-5.1	-3.4	-3.2	-4.3	-8.5	-5.8	-6.0	-4.8	-6.6	-3.7	-9.1	-50.6
New Zealand	101	70	1.2	-9.6	0.5	-0.8	-3.2	-7.0	1.2	-2.9	-2.9	-1.5	-4.5	-4.1	-31.2
Norway	81	65	0.0	-1.0	-0.7	-1.1	-5.3	-6.2	4.0	-3.1	-3.6	-0.6	-0.2	-3.4	-19.7
Poland	204	322	4.0	2.8	2.5	2.8	3.0	2.8	2.6	2.3	1.4	1.0	0.6	0.4	58.1
Portugal	185	229	4.6	4.4	4.8	5.0	5.7	5.5	-18.0	-6.2	5.1	0.0	-0.1	0.4	23.7
Romania	123	243	-0.3	31.2	6.9	3.3	-19.1	28.0	13.9	3.4	10.1	-4.4	-10.0	18.7	97.7
Russian Federation	1,221	1,814	3.4	2.7	2.6	2.4	2.3	2.2	2.4	2.0	2.4	2.7	3.1	3.0	48.6
Slovakia	22	60	4.8	11.2	22.7	8.8	6.6	6.5	1.6	6.6	15.6	11.9	-2.5	-7.0	166.1
Slovenia	14	19	0.7	-1.5	-1.0	1.6	1.6	1.7	1.7	2.2	2.2	1.9	3.9	2.0	36.5
Spain	193	411	9.6	7.5	6.9	6.7	5.6	3.9	5.0	5.2	3.5	1.0	-1.0	2.9	113.3
Sweden	137	92	1.5	-0.3	-0.9	-1.0	-1.6	-4.3	-3.1	-1.8	-6.6	-5.7	-1.0	-7.0	-33.1
Switzerland	33	15	-2.4	-1.6	-3.7	-1.3	-6.8	-4.6	-8.1	-6.8	-5.0	-13.5	4.0	-3.2	-54.8
Turkey															
Ukraine	251	334	3.4	0.4	0.6	0.8	1.2	1.6	1.5	1.6	2.3	2.2	1.8	6.4	32.9
United Kingdom	2,370	931	-1.5	-3.2	-3.4	-7.9	-7.0	-9.1	-6.6	-13.2	-9.0	-12.5	-7.2	-1.7	-60.7
United States	7,668	6,286	0.4	-3.9	-2.4	-4.5	-5.1	-2.5	-2.6	-3.2	2.2	3.5	-2.1	-0.1	-18.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 6.3

Solid waste disposal on land: CH_4 emissions per capita - trend information

CH_4 emissions per capita (kg/capita)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	42.6	34.5	-0.3	0.5	-6.9	-0.7	-3.3	1.1	-0.7	-0.1	0.9	-3.6	-1.9	-1.4	-18.8
Austria	20.9	10.9	-1.3	-5.8	-5.5	-4.8	-3.8	-4.4	-4.4	-4.5	-2.3	0.8	-8.2	-8.0	-47.9
Belarus	11.0	21.4	0.1	3.3	23.0	1.4	4.6	7.5	1.6	1.9	3.8	35.2	10.8	4.1	94.7
Belgium	12.6	3.7	-1.0	-3.4	-8.0	-1.3	-6.5	-12.5	-7.5	-27.8	-16.3	-12.1	-2.6	-6.5	-70.2
Bulgaria	56.5	34.9	-1.5	-3.8	-4.6	-5.2	-6.0	-5.1	-2.9	-2.5	-3.2	-2.5	-2.6	-2.8	-38.2
Canada	37.6	39.5	1.1	-0.3	-0.7	0.8	0.4	0.6	-0.6	-0.8	0.7	0.8	0.5	0.6	4.9
Croatia															
Czech Republic	9.0	8.6	1.3	2.5	0.3	-14.8	1.4	-8.6	1.7	-2.8	10.0	3.4	2.5	2.3	-4.7
Denmark	12.2	9.1	1.5	-3.7	-1.4	-5.1	-3.7	1.8	-0.3	-0.8	-4.8	0.8	-8.2	-2.6	-25.4
Estonia	12.3	17.3	33.6	7.2	9.3	7.3	-4.0	1.1	-2.5	-32.3	-0.4	-4.0	9.6	-5.7	40.3
European Community	19.2	10.5	0.8	-2.2	-2.7	-5.8	-4.4	-5.6	-5.2	-7.4	-5.9	-7.1	-6.1	-3.5	-45.5
Finland	34.8	18.9	0.8	-2.2	-2.9	-3.0	-4.9	-2.8	-6.7	-4.1	-8.0	-7.1	-5.9	-9.5	-45.7
France	9.4	7.4	5.0	2.4	2.4	-13.6	-0.2	-2.4	-3.8	-5.4	-6.4	-3.8	-3.4	-4.1	-21.1
Germany	21.5	6.0	0.4	-7.0	-8.2	-9.2	-9.7	-10.1	-10.5	-11.1	-11.3	-12.4	-12.4	-8.4	-72.1
Greece															
Hungary	8.7	13.5	3.0	2.0	1.9	1.5	1.6	2.0	2.1	1.9	2.0	0.1	0.4	1.2	55.7
Iceland	21.2	24.7	2.2	1.7	3.3	1.7	1.4	1.5	1.8	3.2	-5.9	1.8	-1.8	-0.2	16.4
Ireland	18.1	18.5	1.9	2.6	-4.8	-14.5	4.7	1.4	4.7	-12.3	10.8	7.8	-2.0	-3.2	2.4
Italy	11.2	11.7	6.4	5.0	1.3	1.4	-1.2	0.3	4.7	-1.0	-3.9	-4.9	-6.8	-1.1	5.1
Japan	3.5	2.1	-1.1	-3.1	-2.8	-3.2	-4.0	-4.0	-4.6	-4.5	-4.8	-4.3	-3.9	-3.5	-38.6
Latvia	5.0	10.3	7.6	7.9	7.3	7.2	6.3	4.8	5.2	5.7	1.8	-5.3	-2.1	3.6	106.9
Liechtenstein		NO										*	*	*	*
Lithuania	13.9	13.0	2.9	3.0	-0.3	-0.8	-0.6	0.0	-2.8	-2.4	-2.5	-2.5	-2.8	-1.5	-6.4
Luxembourg	4.1	2.5	-16.0	-0.6	3.1	0.0	0.2	-1.3	-2.1	-12.4	-14.6	4.1	1.0	-0.7	-38.5
Monaco		NA, NO										*	*	*	*
Netherlands	38.3	17.3	-0.7	-5.6	-3.7	-3.8	-4.8	-9.1	-6.6	-6.7	-5.4	-7.0	-4.1	-9.3	-54.8
New Zealand	29.3	17.0	-0.2	-10.9	-1.1	-2.1	-4.1	-7.5	0.6	-3.4	-4.4	-3.3	-5.8	-5.0	-42.1
Norway	19.1	14.1	-0.5	-1.6	-1.2	-1.6	-5.9	-6.8	3.3	-3.6	-4.2	-1.2	-0.7	-4.0	-26.3
Poland	5.4	8.4	3.7	2.7	2.4	2.7	2.9	2.8	3.1	2.8	1.4	1.1	0.7	0.4	56.8
Portugal	18.7	21.7	4.2	4.1	4.5	4.6	5.3	5.0	-18.4	-6.8	4.3	-0.7	-0.7	-0.1	16.1
Romania	5.3	11.2	-0.2	31.5	7.2	3.6	-18.9	28.2	13.9	4.8	11.8	-4.1	-9.7	19.0	111.6
Russian Federation	8.2	12.7	3.2	2.8	2.9	2.7	2.6	2.6	2.4	2.3	2.9	3.2	3.6	3.5	54.0
Slovakia	4.2	11.0	4.8	10.8	22.5	8.6	6.5	6.5	1.8	6.8	15.6	11.9	-2.5	-7.1	160.9
Slovenia	7.2	9.7	0.5	-1.6	-1.1	1.9	1.8	1.5	1.6	2.1	2.1	1.8	3.8	1.8	35.1
Spain	5.0	9.5	9.3	7.3	6.6	6.5	5.2	3.4	4.2	4.0	2.0	-0.7	-2.6	1.2	90.9
Sweden	16.0	10.1	0.8	-0.8	-1.0	-1.1	-1.7	-4.3	-3.3	-2.1	-6.9	-6.0	-1.4	-7.3	-36.6
Switzerland	4.9	2.0	-3.6	-2.3	-4.1	-1.5	-7.1	-5.0	-8.7	-7.4	-5.8	-14.1	3.3	-3.9	-59.2
Turkey															
Ukraine	4.8	7.1	3.1	1.2	1.5	1.7	2.1	2.5	2.6	2.7	3.3	3.0	2.5	7.2	46.5
United Kingdom	41.2	15.5	-1.8	-3.3	-3.6	-8.1	-7.2	-9.3	-8.2	-12.8	-8.7	-13.0	-7.6	-2.3	-62.5
United States	30.7	21.2	-0.9	-5.0	-3.5	-5.6	-6.2	-3.6	-3.7	-4.3	1.1	2.6	-3.0	-1.0	-31.0

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 6.4

CH_4 recovered from managed solid waste disposal sites - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year [a] to 2005
Australia	2	142	0	-21.3	220.4	6.9	32.1	-7.2	6.0	0.4	-5.6	28.0	10.9	6.8	7126.5
Austria	4	22	19.3	23.4	19.3	7.8	0.9	4.5	4.0	4.6	0.0	0	0	0	442.8
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NO	27	*	46.7	58.9	-7.2	13.8	15.7	8.3	51.6	5.4	-3.9	-17.2	-4.4	*
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	193	314	1.5	9.0	8.7	1.2	1.5	1.5	6.7	6.3	-0.1	-0.1	0.2	0.2	62.7
Croatia															
Czech Republic	3	17	0	0.0	74.8	95.5	10.9	4.6	-2.3	5.3	9.8	3.4	2.5	2.5	416.6
Denmark	1	11	39.3	60.6	9.7	36.5	18.2	-12.9	-3.9	-9.1	11.8	-29.1	38.6	-3.0	2023.8
Estonia	NO	3	*	*	29.4	-11.8	-27.8	52.9	-29.0	7.9	36.6	0.9	-25.7	74.4	*
European Community	796	4,460	22.3	14.0	11.1	18.7	10.7	11.6	7.7	12.7	7.7	7.0	4.9	1.0	460.4
Finland	NO	37	*	45.4	52.0	48.1	61.2	-5.3	70.3	16.2	43.4	18.6	9.5	22.7	*
France	46	665	12.6	26.4	23.0	99.7	15.2	17.2	17.0	16.3	12.8	7.4	7.1	4.9	1339.6
Germany	268	647	14.6	11.0	8.6	6.5	5.1	4.4	3.7	2.9	2.9	1.7	2.0	-5.1	141.1
Greece															
Hungary	NO	2	*	*	*	*	*	*	*	-33.3	0	1437.5	72.4	-2.8	*
Iceland	NO	2	*	*	*	*	128.6	45.4	23.2	-5.3	172.2	3.2	22.5	71.4	*
Ireland	NO	45	*	*	*	212.3	-3.9	9.6	2.6	68.3	-1.8	3.4	18.9	11.1	*
Italy	107	356	4.3	3.1	5.1	5.8	19.5	9.2	-2.7	20.6	14.8	10.8	14.0	1.3	231.2
Japan	1	0	-38.0	102.7	6.7	13.1	-5.5	18.3	-29.9	-11.9	-7.1	-20.4	1.1	-91.0	-94.7
Latvia	NO	5	*	*	*	*	*	*	*	*	*	251.5	45.2	2.2	*
Liechtenstein	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Luxembourg	NO	0.33	*	*	*	*	0	0	0	##############	95.0	-15.4	0	0	*
Monaco	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	26	46	37.0	14.9	-6.3	-14.2	-9.4	23.4	-0.8	1.4	-6.1	-0.2	-21.0	-6.7	77.7
New Zealand	NO	50	*	180.3	3.8	9.9	19.9	30.0	-0.9	10.1	8.9	5.4	11.7	9.3	*
Norway	1	22	182.5	28.1	16.7	14.7	44.0	33.2	-15.1	9.4	7.7	-3.0	-4.8	7.4	2224.2
Poland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Portugal	NO	57	*	*	*	*	*	*	*	273.7	13.0	7.4	7.7	5.3	*
Romania	NA	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Russian Federation	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	NO	5	167.0	38.0	24.9	7.3	6.8	6.4	6.0	5.7	6.6	8.1	-0.9	5.0	*
Spain	3	78	25.8	14.4	28.3	7.8	22.8	17.5	15.1	3.6	18.5	44.2	47.0	6.1	2605.2
Sweden	12	29	12.5	0	0	0	0	10.0	3.0	-4.7	10.9	1.4	-17.3	-2.4	145.1
Switzerland	9	6	8.8	-3.6	-0.6	-4.3	-2.6	0	-2.0	-11.6	-16.2	-6.4	-25.5	-19.7	-33.0
Turkey															
Ukraine	NO	NO	*	*	*	*	*	*	*	*	*	*	0	*	*
United Kingdom	322	2,402	35.7	15.6	12.0	18.7	12.1	13.0	8.0	13.0	7.0	8.2	3.9	1.1	647.0
United States	1,079	5,668	15.2	30.2	15.0	19.5	17.8	10.3	9.3	10.5	3.1	2.9	10.6	6.7	425.1

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 6.5

Waste generation rate

Waste generation (kg/person/day)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	2.65	2.68	2.7	0.5	0.3	1.9	5.1	-3.6	2.6	-5.2	1.0	0.6	-3.8	3.1	1.2
Austria	0.95	0.22	-7.8	-4.3	4.9	-1.5	0.6	3.4	-1.8	-2.2	16.9	23.7	-76.2	-0.7	-77.2
Belarus	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Bulgaria	2.36	1.15	6.2	-23.4	-9.8	-9.4	-11.3	1.0	3.8	-0.5	0.7	0.9	-3.1	5.3	-51.3
Canada	1.68	2.95	8.8	4.1	3.8	3.7	8.9	-1.6	4.0	1.9	0.7	4.7	1.2	3.8	75.7
Croatia															
Czech Republic	1.00	1.19	2.3	2.4	2.5	2.5	2.4	-7.6	0.2	2.9	10.4	-1.9	0.0	-4.7	18.7
Denmark	5.43	7.20	2.1	2.9	11.9	-0.9	-5.2	-0.4	6.2	-2.4	2.3	-4.0	5.6	6.1	32.6
Estonia	0.61	0.93	6.8	12.2	9.7	6.5	1.2	-3.2	0.9	-30.7	5.9	12.6	3.8	-31.0	52.3
European Community	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Finland	1.70	1.29	-7.0	-4.4	-4.5	-5.9	5.9	2.1	10.8	-8.1	-3.1	0.7	0.4	2.9	-24.5
France	0.82	0.97	2.5	2.4	1.8	-1.2	2.7	0.3	1.4	0.8	0.6	-0.8	-0.8	0	18.4
Germany	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	1.10	1.26	-3.1	1.0	3.0	6.7	2.7	1.8	5.2	1.6	0.8	1.6	-2.4	1.6	14.5
Iceland	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*
Ireland	1.15	1.85	3.5	3.0	2.9	2.1	1.5	10.8	9.3	5.6	-0.7	5.5	2.5	-8.1	60.5
Italy	1.07	1.48	5.0	-4.3	0.5	2.3	0.8	5.5	1.8	1.3	1.2	0.2	3.4	1.4	38.5
Japan	1.12	1.09	-0.2	-0.1	0.8	-0.2	0.5	-0.6	1.9	-0.7	-1.2	-0.5	-1.8	0.0	-3.0
Latvia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Liechtenstein	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Lithuania	1.47	0.83	1.6	-22.0	-5.4	0.3	4.9	-28.6	4.6	-3.2	-4.0	-8.7	14.2	0.5	-43.5
Luxembourg	NE	NE	*	*	0	-2.9	3.6	2.9	1.7	-1.7	1.7	3.9	*	*	*
Monaco	NO	0.35	*	-2.0	2.4	7.0	-0.6	-8.7	6.4	-5.2	-5.0	10.3	5.7	-14.9	*
Netherlands	1.52	1.70	0	-2.2	2.6	4.7	0.5	1.0	2.9	-0.1	1.2	-1.9	2.0	0	12.1
New Zealand	2.35	2.14	0	0.0	-2.2	-1.8	-1.4	-1.3	-1.3	-1.7	-2.3	1.1	1.5	0.0	-9.1
Norway	0	0	*	*	*	*	*	*	*	*	*	*	*	*	*
Poland	318.97	245.15	*	*	*	*	*	*	*	*	0.0	-99.8	*	*	-23.1
Portugal	0.76	1.07	3.0	3.5	3.4	3.3	3.3	3.2	1.9	4.6	1.7	1.8	-1.1	-1.8	42.0
Romania	0.57	1.16	0	30.4	7.4	3.6	8.7	8.0	2.6	2.8	5.9	5.9	1.6	-0.1	104.7
Russian Federation	0.66	1.02	1.1	1.7	1.7	1.8	1.7	2.0	6.2	-1.7	6.7	7.1	7.9	2.7	54.7
Slovakia	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovenia	1.29	1.16	0	0	0	0	-0.4	0.4	-2.7	-0.1	-2.9	1.6	-4.0	-2.1	-9.9
Spain	0.88	1.34	0.7	0.6	5.3	8.7	3.0	3.7	-0.2	1.2	0.2	0.8	3.8	2.2	53.4
Sweden	1.02	1.32	0	0	-0.3	12.1	5.0	-1.9	-0.5	3.5	5.9	-0.1	-1.1	4.1	29.2
Switzerland	1.93	2.06	-3.2	0.3	0.7	1.8	3.3	4.2	3.1	-0.9	0.3	-1.1	1.4	2.0	6.8
Turkey															
Ukraine	0.79	1.06	-12.7	9.6	7.0	6.6	7.7	7.1	5.3	11.4	1.1	1.1	1.1	16.5	34.2
United Kingdom	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
United States	2.05	2.06	-1.1	-2.6	-2.0	3.7	0	3.5	-1.3	-2.6	0.9	-0.4	1.8	-1.5	0.9

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 6.6a

CH_4 emissions from waste-water handling - trend information

CH_4 emissions (Gg)			Relative change (%)												
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	122	81	-1.3	-4.4	-7.0	-4.1	-5.4	-2.0	-1.2	4.3	-2.4	-3.2	-1.4	-4.8	-33.8
Austria	5	2	-0.3	-4.1	-8.0	-8.8	-9.7	-8.0	-8.7	-9.4	-10.0	-11.3	0.7	0.7	-59.6
Belarus	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	4	3	0.4	-0.5	-0.5	-1.0	-1.1	-4.7	-1.4	-12.5	-1.4	-0.8	-0.7	-0.2	-22.0
Bulgaria	88	31	-22.3	32.3	-5.0	-15.1	-13.7	-12.3	-6.1	-18.9	-5.0	168.4	0.4	-47.0	-64.6
Canada	11	12	-8.0	-2.5	12.6	-7.4	-0.2	20.8	-12.7	0.8	0.3	1.4	1.8	1.6	12.1
Croatia															
Czech Republic	39	24	-3.6	-4.1	-6.9	3.9	-2.2	-7.0	-6.1	-3.6	7.3	-7.8	-0.6	-0.5	-38.1
Denmark	6	12	-2.4	16.3	14.2	22.8	1.8	-6.2	-8.3	6.6	34.1	-3.5	-11.6	-4.3	101.6
Estonia	6	0	-11.4	31.7	15.6	21.5	-0.1	1.7	0.4	-23.6	2.9	-26.2	-49.3	10.1	-96.0
European Community	604	401	-2.7	-0.3	-2.4	-0.4	-0.7	-1.9	-3.5	-6.3	0.3	-1.0	-2.0	-15.3	-33.7
Finland	7	6	-5.8	1.8	-2.6	-1.3	-2.5	-2.9	-1.7	-1.3	3.3	-0.9	0.7	-2.7	-15.1
France	37	55	5.8	4.7	4.5	4.4	4.2	4.2	0.7	-9.0	2.0	1.9	1.9	1.9	51.4
Germany	106	4	-23.3	-5.3	-25.2	-33.7	-50.8	-9.7	-10.7	-12.0	-13.6	-15.7	-18.7	0	-95.9
Greece															
Hungary	40	27	-0.8	-0.1	-0.1	-1.0	-1.8	0.3	-2.5	-8.8	-5.6	-6.7	-2.0	-2.5	-32.2
Iceland	0	0	1.5	0.4	0.7	0.9	15.4	24.1	39.9	1.2	72.5	0.8	1.0	2.1	343.3
Ireland	1	1	0.6	-1.0	-1.0	23.1	13.2	3.8	4.3	2.8	2.7	1.6	3.5	2.1	71.6
Italy	94	111	4.0	-0.1	1.0	1.4	0.5	0.2	0.9	1.0	0.4	-0.6	0.4	0.5	18.0
Japan	101	69	-2.0	-3.2	-1.9	-2.5	-2.6	-2.8	-2.9	-3.2	-3.1	-2.8	-2.4	-0.7	-31.8
Latvia	17	10	-1.5	-2.6	-1.2	-0.5	0.2	-1.5	0.1	9.9	-1.5	0.0	-0.1	-0.4	-39.1
Liechtenstein	0	0	0	-9.1	10.0	0	9.1	8.3	0	-7.7	0	0	8.3	-6.8	34.6
Lithuania	40	25	-7.6	7.0	-3.0	20.9	3.1	-34.5	37.5	-13.0	-9.1	31.3	16.2	4.8	-36.5
Luxembourg	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	NA, NO	NA, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	14	10	33.4	-14.4	-1.4	-2.5	-0.5	2.4	-6.5	-0.3	2.3	-6.1	6.3	-8.7	-29.2
New Zealand	11	11	0.4	0.4	0.3	0.3	-1.0	-0.9	-1.0	-1.0	0.4	0.5	0.4	0.4	0.0
Norway	1	1	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.6	0.5	0.6	0.6	0.6	8.8
Poland	103	168	-5.2	-6.2	1.0	2.1	3.8	-4.6	-27.1	-1.7	-2.4	-5.2	1.1	-0.2	62.8
Portugal	128	31	0.6	1.2	-5.6	1.9	2.0	-5.2	-3.0	-3.7	-1.2	-0.7	-6.1	-71.0	-75.7
Romania	117	75	-11.3	-0.2	-6.4	-0.4	-14.0	6.2	16.0	-8.8	2.0	2.6	11.4	-31.4	-36.1
Russian Federation	1,597	1,372	-6.7	3.7	-6.7	0.5	1.9	7.4	5.5	2.4	2.4	2.8	2.7	2.0	-14.1
Slovakia	48	33	-5.5	0.0	-0.8	0.7	-3.0	1.4	-11.5	0.9	0.2	-9.6	-0.2	2.0	-32.2
Slovenia	10	9	-7.1	-0.5	-1.3	13.2	3.2	2.5	2.5	-2.2	1.5	-1.1	5.1	-0.3	-13.5
Spain	59	102	3.6	3.3	2.7	6.1	4.7	3.7	2.9	3.3	4.4	3.8	2.9	3.2	72.7
Sweden	IE, NO	IE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Switzerland	1	2	1.7	1.1	0.9	0.5	0.7	1.0	1.0	1.1	0.8	0.8	0.7	0.6	15.6
Turkey															
Ukraine	76	72	1.6	0.0	-0.2	-1.3	-1.6	-1.4	-1.5	-0.8	-1.0	-0.4	-0.5	0.0	-4.9
United Kingdom	34	38	-6.3	-4.5	2.7	2.6	2.6	-3.0	2.4	0.7	0.6	0.6	0.6	0.6	13.8
United States	1,180	1,210	1.6	-1.6	2.3	3.4	-0.2	0.3	-0.7	-2.0	-0.3	-0.7	0.1	-1.0	2.5

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 6.6b

N_2O emissions from waste-water handling - trend information

N_2O emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year [a] to 2005
Australia	1.54	1.85	1.4	1.1	1.4	1.2	1.0	1.1	1.2	1.2	1.3	1.2	1.3	1.1	19.4
Austria	0.35	0.80	-0.5	2.6	14.7	8.2	6.0	9.8	14.1	12.5	0.5	0.0	7.1	0.7	128.8
Belarus	0.73	0.75	-2.7	-4.6	6.5	4.5	4.3	4.2	0	1.3	0	-4.2	1.6	1.4	2.7
Belgium	0.87	0.88	1.4	-0.5	-0.2	0.2	1.0	1.5	-7.6	2.7	-0.4	1.7	0.6	0.2	0.6
Bulgaria	1.00	0.47	-9.8	-7.5	-4.8	-11.0	11.6	2.9	-5.4	-4.7	1.5	0.4	-0.8	-1.9	-52.6
Canada	1.79	2.21	-1.4	1.5	0.4	2.7	1.4	1.4	1.5	4.3	0.5	-0.4	1.9	0.1	23.5
Croatia															
Czech Republic	0.52	0.64	-0.5	0.0	-0.2	-0.1	-0.1	-0.1	25.0	-0.8	0.0	0.0	0.1	0.2	23.4
Denmark	0.28	0.20	-4.7	-7.6	-18.5	-6.1	1.2	-6.1	5.6	-12.4	1.7	-14.5	6.9	14.6	-30.4
Estonia	0.13	0.12	12.0	-9.2	-1.6	-1.3	-0.9	-1.5	-0.5	-0.4	-0.4	-0.4	-3.6	3.8	-10.7
European Community	28.88	30.06	-0.5	-1.7	0.7	0.3	1.3	-0.3	2.0	0.3	0.2	-0.5	0.7	0.2	4.1
Finland	0.46	0.33	-4.5	0.5	-3.0	-1.3	-5.0	-3.9	-0.3	-0.1	-4.6	0.9	-1.8	-3.3	-28.9
France	4.36	4.04	0.2	0.1	-0.8	-2.6	-2.7	-0.8	10.2	-8.5	-0.1	-0.2	-0.2	-0.2	-7.4
Germany	7.17	7.34	-0.4	-0.7	2.4	-5.2	5.5	0.2	0.1	2.3	0.1	-1.0	0.0	-0.1	2.3
Greece															
Hungary	0.67	0.68	-2.9	0	-6.5	0	-1.7	3.5	5.1	-3.2	0	10.0	1.5	1.5	1.5
Iceland	0.02	0.02	1.5	0.4	0.7	0.9	1.2	1.4	1.4	1.2	0.7	0.8	1.0	2.1	17.1
Ireland	0.37	0.43	1.4	-3.1	1.1	3.0	2.1	2.8	4.2	-0.8	1.3	1.6	1.6	2.1	17.7
Italy	6.01	6.38	1.2	-0.6	2.7	-0.2	2.1	2.6	1.0	-1.4	0.1	0.6	0.7	0.7	6.1
Japan	4.16	3.78	1.7	-1.4	1.7	0.8	-1.3	-2.9	-1.0	-1.4	-1.1	0.4	0.7	-2.0	-9.1
Latvia	0.18	0.16	-0.3	-1.3	-0.6	-0.8	-0.9	-0.8	-2.6	-0.5	-0.7	-0.7	-0.5	-0.6	-13.7
Liechtenstein	0.00	0.00	3.8	0	0	0	3.6	0	3.4	0	3.3	0	0	1.9	21.5
Lithuania	0.26	0.24	0.1	-0.8	-0.5	0.3	-0.7	-0.7	-0.4	-0.6	0.9	-0.5	-0.3	-0.9	-5.6
Luxembourg	NE, NO	NE, NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Monaco	0.00	0.00	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	10.3
Netherlands	1.66	1.29	1.9	-7.3	-2.0	-1.3	2.4	-4.1	-2.7	1.2	-1.9	-6.4	0.4	0.4	-22.0
New Zealand	0.47	0.53	0	2.1	0	0	2.0	0	0	2.0	0	2.2	0.6	-0.2	11.3
Norway	0.29	0.37	0	3.5	6.4	7.8	0.2	1.1	-10.3	2.4	-7.2	6.9	0.1	3.2	24.3
Poland	3.68	4.24	1.9	1.1	1.3	-1.2	1.9	-0.2	-1.1	-1.0	0.8	0.4	21.2	0.0	15.1
Portugal	1.52	1.88	1.9	0.4	-0.6	2.1	6.0	1.6	0.7	1.7	0.2	1.4	0.5	0.3	23.9
Romania	2.21	2.06	-0.1	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-2.7	-0.3	-0.3	-0.2	-6.6
Russian Federation	17.49	12.68	-14.1	-1.2	-1.5	1.3	-0.6	-2.1	-1.7	2.5	2.8	1.0	0.4	2.4	-27.5
Slovakia	0.06	0.09	1.0	-5.9	10.1	-6.6	4.3	-13.8	-15.0	108.7	77.0	-27.7	7.2	1.9	37.5
Slovenia	0.19	0.20	-5.8	3.3	5.5	-1.9	-1.8	8.5	-2.3	-2.0	1.0	-2.5	9.2	0.2	6.6
Spain	3.46	3.86	-3.8	-3.6	0.1	4.5	1.0	0.6	2.6	2.0	3.5	-0.9	3.5	0.2	11.6
Sweden	0.63	0.44	0	3.6	0	-7.4	-7.2	-0.8	-7.8	-0.8	-3.7	0.0	-1.4	0.0	-29.6
Switzerland	0.62	0.68	1.2	0.6	0.3	0.1	0.3	0.5	0.6	1.1	0.8	0.8	0.7	0.6	10.4
Turkey															
Ukraine	5.02	3.43	-6.6	-6.2	-3.8	-2.3	0	-4.4	0.9	1.5	3.6	-2.6	2.1	-0.9	-31.7
United Kingdom	3.33	3.92	-0.9	-6.4	3.4	11.1	-1.1	-3.3	3.0	3.1	-0.6	0.4	0.0	0.1	17.6
United States	20.57	25.84	2.4	-1.0	1.7	2.0	1.8	3.1	1.1	0.1	0.7	2.0	1.3	1.2	25.6

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 6.7

CO_2 emissions from waste incineration - trend information

CO_2 emissions (Gg)			Relative change (%)											
	Base year [a]	2005	1990 to 1991	1994 to 1995	1995 to 1996	1996 to 1997	1997 to 1998	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002	2002 to 2003	2003 to 2004	2004 to 2005	Base year[a] to 2005
Australia	21	28	0.7	26.0	-12.1	15.5	1.2	1.8	-3.9	0.5	0.6	0.6	0.6	0.5	33.7
Austria	27	12	-13.0	3.0	2.9	2.9	2.8	2.7	0	0	0	0	0	0	-54.4
Belarus	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Belgium	337	115	-63.6	-25.9	-1.1	19.3	-24.5	31.4	11.5	2.4	3.8	36.6	-39.8	-10.3	-66.0
Bulgaria	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Canada	267	186	-4.7	-2.4	-2.8	-3.2	-3.5	-9.2	1.9	0.0	-11.8	1.9	1.9	1.8	-30.3
Croatia															
Czech Republic	IE, NE	358	*	0	0	0	0	0	0	0	0	3.2	-11.3	9.8	*
Denmark	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Estonia	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
European Community	5,217	3,009	-7.1	-15.9	1.7	-11.4	-4.3	-5.2	0.6	2.3	2.0	-1.8	-9.1	0.3	-42.3
Finland	NE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
France	2,295	1,648	-0.9	-2.1	-3.8	-9.1	-7.2	-5.5	3.6	-3.7	1.4	-0.4	-4.9	-0.7	-28.2
Germany	NO	NO	*	*	*	*	*	*	*	*	*	*	*	*	*
Greece															
Hungary	98	297	67.1	-2.3	0.2	2.7	5.0	-1.2	-1.2	1.4	-27.0	-7.0	26.4	136.5	204.5
Iceland	19	0	-0.8	-11.8	-10.4	-3.6	-15.3	-18.2	-6.0	-7.3	-7.1	-14.7	-53.0	-98.9	-99.9
Ireland	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Italy	537	165	4.7	-7.8	-2.3	7.5	-0.7	-22.0	-48.8	10.3	10.2	-11.9	-7.7	-17.0	-69.2
Japan	21,996	36,168	1.8	4.0	5.4	3.7	0.5	1.4	4.2	0.2	0.2	8.3	2.0	1.1	64.4
Latvia	NE, NO	0	*	*	*	*	*	*	59.9	98.6	-87.2	22.2	20.1	-0.1	*
Liechtenstein	0	0	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-2.9	0.5
Lithuania	4	6	8.4	261.1	-66.2	-0.9	5.1	-56.6	195.4	32.1	-8.2	169.0	-48.5	87.1	45.0
Luxembourg	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0
Monaco	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Netherlands	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
New Zealand	NE	NE	*	*	*	*	*	*	*	*	*	*	*	*	*
Norway	0	13	0	-18.3	-8.3	13079.7	203.4	-14.8	91.9	-62.0	-2.8	-3.4	-36.0	-35.7	6654.1
Poland	579	543	-9.9	1.1	1.3	-0.3	6.1	-16.0	25.7	-3.7	3.8	1.6	-35.8	85.8	-6.3
Portugal	10	383	0	0	11.7	16.4	-24.7	1356.5	151.2	-3.0	5.7	6.2	-4.3	1.9	3701.0
Romania	85	89	0.0	2.4	-0.1	0.5	0.5	0.5	3.8	5.3	-6.7	13.4	-23.0	13.2	4.7
Russian Federation	NA	NA	*	*	*	*	*	*	*	*	*	*	*	*	*
Slovakia	IE	146	*	*	*	*	*	*	*	-13.5	5.9	-2.0	5.5	-1.6	*
Slovenia	NO	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
Spain	750	126	-21.1	-82.0	115.0	26.9	7.7	-24.9	-31.9	53.0	-2.3	-35.3	-57.5	66.3	-83.3
Sweden	44	91	19.0	-12.9	14.9	3.0	-2.8	-2.0	-7.8	6.8	27.9	26.0	16.2	2.6	107.9
Switzerland	53	15	-8.1	-11.9	-7.3	-7.9	-8.6	-9.4	-10.4	-11.6	-13.1	-0.4	-0.4	0	-71.1
Turkey															
Ukraine	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*
United Kingdom	1,207	459	-0.5	-5.4	1.7	-43.5	0.9	-8.1	1.4	5.5	-3.0	-4.4	-1.9	1.6	-62.0
United States	IE	IE	*	*	*	*	*	*	*	*	*	*	*	*	*

[a] In accordance with the UNFCCC reporting guidelines on annual GHG inventories of Annex I Parties, the year 1990 should be the base year for the estimation and reporting of inventories. However, in accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990: Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986).