



**SYNTHESIS AND ASSESSMENT REPORT ON THE GREENHOUSE GAS INVENTORIES
SUBMITTED IN 2002¹**

Note by the secretariat

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¹ The full text of the guidelines is contained in document FCCC/CP/1999/7.

I. INTRODUCTION

A. Mandate

1. The Conference of the Parties (COP), by its decision 6/CP.5, adopted the guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention² (hereinafter referred to as the review guidelines) for a trial period covering inventory submissions due in 2000 and 2001 (FCCC/CP/1999/6/Add.1). The COP, by its decision 34/CP.7, extended the trial period to include inventory submissions due in 2002.
2. In accordance with decision 6/CP.5 a revision of the review guidelines was undertaken, and the COP, by its decisions 19/CP.8, adopted revised guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention.³
3. By its decision 6/CP.5, the COP requested the secretariat to conduct an annual synthesis and assessment of greenhouse gas (GHG) inventories for all Annex I Parties, in accordance with the provisions of the review guidelines. 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 (desk reviews, centralized reviews and in-country reviews). The review guidelines state that the synthesis and assessment should contain two parts: Part I should provide information allowing comparisons across Annex I Parties and descriptions of common methodological issues; and Part II should contain 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.
4. In accordance with decision 19/CP.8, Part I will be published on the UNFCCC web site as a synthesis and assessment report. Part II will be sent to the respective Party for comments and, together with the comments provided by 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Party, will be provided to the corresponding expert review team as input for the individual review; Part II will not be published on the UNFCCC web site.

B. Scope of the note

5. This document contains Part I of the synthesis and assessment report, covering the national GHG inventories submitted in 2002 by those Annex I Parties that used the common reporting format (CRF) in accordance with the reporting guidelines (FCCC/CP/1999/7).

C. Approach

6. For inventory submissions due in 2002, which is the last year of the trial period, this synthesis and assessment report was prepared using elements of decisions 6/CP.5 and 19/CP.8. In accordance with the decision 6/CP.5 the synthesis and assessment was conducted by the secretariat, with the assistance of experts. In accordance with decision 19/CP.8 only Part I of the synthesis and assessment will be published.
7. This synthesis and assessment report covers only the inventory information submitted in the CRF and not information contained in the national inventory reports. The comments and questions are not intended as a judgement of whether inventory problems exist, but are provided as an indication of potential issues that need to be considered further during the third stage of the review process (individual review of inventories) by the expert review teams.
8. The completeness and the scope of this report are limited by the fact that only 27 out of 40 Annex I Parties submitted their inventory within six weeks from the due date for submissions. Accordingly, this report covers inventories submitted by: Austria, Belgium, Canada, Czech Republic,

² The full text of the guidelines is contained in document FCCC/CP/1999/7.

³ The full text of the guidelines is contained in document FCCC/CP/2002/8.

Denmark, Estonia, European Community, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom and United States.⁴

9. The inventory data were analyzed according to the sectors, subsectors and source categories specified in the CRF and which correspond to those of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the IPCC Guidelines).

10. The secretariat compiled the information provided by Parties using the CRF and prepared the preliminary synthesis and assessment report. This included a draft of Part I of the report, that consisted of a set of data tables to allow comparison of inventory information across Parties, and a draft Part II, containing a preliminary analysis of inventories of individual Annex I Parties.

11. To facilitate the analysis of the inventory data, the secretariat considers, for each individual Party, those source categories that are *key sources* 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 7 “Methodological choice and recalculations” of the *IPCC Good Practice Guidance and Uncertainty Management* (hereinafter referred to as the IPCC good practice guidance).⁵ This identification has been performed at the level of detail recommended in that guidance.⁶ The land-use change and forestry sector has not been included in the calculation of the key source calculations.

12. The secretariat also conducted a number of data analyses and comparisons:

- *Key sources*, implied emission factors and other methodological information were compared across Parties. Where possible, implied emission factors were compared against default emission factors from the IPCC.
- A preliminary statistical analysis of the data was performed, in order to detect potential issues in the inventory data comparisons.
- Activity data reported by Parties were compared with data from international data sources, such as United Nations, International Energy Agency (IEA), and Food and Agriculture Organization (FAO) statistics, for source categories for which international data sources are available.
- An assessment of trends in emissions and implied emission factors from 1990 to 2000 was performed, where possible.
- The inventory data submitted in 2002 were compared with data in previous inventory submissions.
- The national inventory report, or any other accompanying textual information, was used to assess the consistency of the information provided, where possible.
- Specific data checks were carried out to verify the consistency of the reported data, and to detect omissions and other problems relating to inappropriate use of the CRF.

⁴ Australia, Belarus, Germany, Japan and Romania also submitted inventories in the CRF format but after the established timeframe of six weeks from the due date for submissions. Monaco and the Russian Federation submitted inventories in 2002 but not using the CRF format. Bulgaria, Croatia, Liechtenstein, Lithuania, Slovenia and Ukraine did not submit an inventory in 2002.

⁵ For some Parties, identification of key sources at that level of detail was not possible due to insufficient reporting of disaggregated data. For these Parties, key sources have been identified at the level of category disaggregation provided in Summary table 1.A of the CRF (corresponding to summary Table 7A of the IPCC Guidelines).

⁶ Emissions and removals associated with land-use change and forestry are not covered in the current edition of the IPCC good practice guidance. A separate IPCC report on good practice for land use, land-use change and forestry is in preparation.

13. Five national inventory experts from the roster of experts were invited to assist the secretariat in finalizing the synthesis and assessment. The experts were: Ms. Maria Paz Cigaran (Peru), Mr. Wojciech Galinski (Poland), Ms. Anke Herold (Germany), Mr. Alexander Nakhutin (Russian Federation), and Mr. Minxing Wang (China).

14. The main task of the experts was to assist the secretariat in considering inventory data and other information across Parties, and in identifying potential issues for further consideration during the review of individual inventories. Mainly, they were asked to provide advice on:

- (a) The content of the preliminary draft of Part I of the synthesis and assessment report;
- (b) The potential problems identified in the preliminary country-by-country analysis of Part II of the report.

15. Part I of the draft synthesis and assessment report was sent to Parties for comment, together with the corresponding preliminary findings on the individual Party's GHG inventory (Part II). However, the tables in Part I do not reflect corrections by the Parties to the data.

16. For those Parties whose GHG inventory was subject to an individual review,⁷ responses by the Party to the preliminary findings were provided to the expert review teams for their consideration.

17. A separate document with a compilation of the emissions and trends for the period 1990–2000, in tabular and graphical format, was prepared by the secretariat mainly on the basis of the submissions of Parties for the year 2002 (FCCC/WEB/2002/10). A summary of this document can be found in document FCCC/SB/2002/INF.2.⁸ This synthesis and assessment report may be read in conjunction with these documents.

II. COMPARISON OF GREENHOUSE GAS INVENTORY INFORMATION ACROSS PARTIES

A. Overview

1. General notes

18. This synthesis and assessment report contains greenhouse gas inventory information, compiled in tabular format, from the 27 Annex I Parties that provided information in the common reporting format as part of their annual inventory submission in 2002, within six weeks from the due date for submissions. 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 27 Parties and for all years from 1990 to 2000. For some sectors and categories, however, trend comparisons across all Parties were not possible due to the lack of data for some or all of these years.

19. Default emission factors and other parameters from the IPCC Guidelines have been included in the tables, as appropriate, to facilitate comparison with implied emission factors reported by Parties. In addition, where updated default emission factors were available from the IPCC good practice guidance, these have been provided in the relevant footnotes.

⁷ The following Parties' GHG inventories submitted in 2002 were subjected to an individual review: Canada (centralized review), Czech Republic (desk review), Denmark (centralized review), Finland (centralized review), Hungary (in-country review), Latvia (in-country review), Netherlands (centralized review), New Zealand (desk review), Norway (in-country review), Spain (desk review), Sweden (centralized review) and United Kingdom (desk review).

⁸ This document contains information from all Annex I Parties that submitted inventories in the year 2002 irrespective of whether they reported the inventory data using the CRF or not.

20. Some of the tables indicate whether a source category is a key source, in terms of its absolute level of emissions or trend assessment, as calculated by the secretariat in accordance with the definitions given in chapter 7 of the IPCC good practice guidance for the tier 1 level assessment.⁹ Table 1 includes a summary of key sources in 2000 calculated in accordance with the IPCC good practice guidance.

Table 1. Summary of key sources (2000) – tier 1 level assessment (disaggregation level of sources as recommended in IPCC good practice guidance)^{a)}

Source	GHG	Parties	Number of Parties
Enteric fermentation in domestic livestock	CH ₄	Austria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States	24 (all)
Solid waste disposal sites	CH ₄	Austria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States	24 (all)
Stationary combustion – oil	CO ₂	Austria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States	24 (all)
Mobile combustion – Road vehicles	CO ₂	Austria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States	24 (all)
Stationary combustion – coal	CO ₂	Austria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, United Kingdom, United States	23 (all except Switzerland)
Stationary combustion – gas	CO ₂	Austria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States	23 (all except Iceland)
Direct emissions from agricultural soils	N ₂ O	Canada, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States	23 (all except Austria)
Cement production	CO ₂	Austria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, United Kingdom, United States	21
Indirect emissions from agricultural soils	N ₂ O	Canada, Czech Republic, Denmark, Finland, France, Hungary, Ireland, Italy, Latvia, New Zealand, Norway, Portugal, Spain, Switzerland, United Kingdom, United States	16

^{a)} Belgium, European Community and Luxembourg are not included in this table as data from these Parties were not reported at the level of detail necessary to identify key sources according to the level of disaggregation recommended by the IPCC good practice guidance. Key sources identified for these Parties based on summary table 1.A of the CRF are included in table 2.

⁹ Emissions and removals from land-use change and forestry have not been included in the calculations for the identification of key sources.

Table 1. Summary of key sources – tier 1 level assessment (disaggregation level of sources as recommended in IPCC good practice guidance) (continued)

Source	GHG	Parties	Number of Parties
Mobile combustion – road vehicles	N ₂ O	Austria, Canada, Finland, France, Italy, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States	12
Fugitive emissions – oil and gas operations	CH ₄	Canada, Estonia, Hungary, Italy, Latvia, Netherlands, Norway, Poland, Slovakia, United Kingdom, United States	11
Manure management	CH ₄	Austria, Belgium, Canada, Denmark, European Community, France, Hungary, Ireland, Italy, Netherlands, Portugal, Spain	12
Nitric acid production	N ₂ O	Czech Republic, Finland, France, Ireland, Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom	10
Animal production	N ₂ O	France, Greece, Ireland, New Zealand, Portugal, Spain, Sweden, United Kingdom, United States	9
Mobile combustion – aircraft	CO ₂	Canada, France, Greece, New Zealand, Norway, Portugal, Spain, Sweden, United States	9
Ozone-depleting substances substitutes	HFCs and PFCs	Austria, Denmark, Finland, France, Spain, Sweden, Switzerland, United Kingdom, United States	9
Stationary combustion – other fuels	CO ₂	Finland, France, Hungary, Italy, Netherlands, Slovakia, Sweden, Switzerland	8
Fugitive emissions – coal mining and handling	CH ₄	Czech Republic, Estonia, Hungary, New Zealand, Poland, Slovakia, United Kingdom, United States	8
Manure management	N ₂ O	France, Hungary, Ireland, Italy, Latvia, Poland, Portugal, Sweden	8
Fugitive emissions – oil and gas operations	CO ₂	Canada, Denmark, France, Netherlands, New Zealand, Norway, United Kingdom	7
Other transportation	CO ₂	Canada, Finland, Greece, Hungary, Netherlands, Norway, United States	7
Iron and steel industry	CO ₂	Austria, Canada, France, New Zealand, Sweden, United States	6
Mobile combustion – waterborne navigation	CO ₂	Finland, Greece, Italy, Norway, Sweden, United States	6
Ammonia production	CO ₂	Austria, Canada, France, Ireland, Norway	5
Waste-water handling	CH ₄	Hungary, Latvia, Portugal, Slovakia, Spain	5
HFC production	HFC-23	Greece, Netherlands, Spain	3
Stationary combustion – coal	N ₂ O	Czech Republic, Greece, Sweden	3
Stationary combustion – oil	N ₂ O	Italy, Spain, Sweden	3
Aluminium production	CF ₄ and C ₂ F ₆	Canada, Iceland, Norway	3
Aluminium production	CO ₂	Iceland, Norway	2
Lime production	CO ₂	Italy, Slovakia	2
Ferroalloys production	CO ₂	Iceland, Norway	2
Adipic acid production	N ₂ O	France, Italy	2
Stationary combustion – biomass	CH ₄	France, Latvia	2
Other (agricultural soils)	N ₂ O	Netherlands, Sweden	2
Railways	CO ₂	Canada, Latvia	2

Table 1. Summary of key sources – tier 1 level assessment (disaggregation level of sources as recommended in IPCC good practice guidance) (continued)

Source	GHG	Parties	Number of Parties
Agricultural soils	CH ₄	Austria	1
Agricultural soils	CO ₂	Finland	1
Limestone and dolomite use	CO ₂	Slovakia	1
Other	CO ₂	Finland	1
Other (by-product emissions; production of halocarbons and SF ₆)	HFCs, PFCs and SF ₆	United Kingdom	1
Other (fugitive from solid fuels)	CO ₂	Finland	1
Other (industrial processes)	CO ₂	Canada	1
Other (mineral products)	CO ₂	Austria	1
Other (waste)	CH ₄	Austria	1
Magnesium production	SF ₆	Norway	1
Solid fuel transformation	CO ₂	Spain	1
Solvent and other product use	CO ₂	Austria	1
Waste incineration	CO ₂	Switzerland	1
Waste water handling	N ₂ O	Portugal	1

Table 2. Summary of key sources for Belgium, European Community and Luxembourg – level assessment, based on summary table 1.A of the CRF^{b)}

Source	GHG	Parties	Number of Parties
Enteric fermentation in domestic livestock	CH ₄	Belgium, European Community, Luxembourg	3
Energy industries	CO ₂	Belgium, European Community, Luxembourg	3
Manufacturing industries and construction	CO ₂	Belgium, European Community, Luxembourg	3
Mineral products	CO ₂	Belgium, European Community, Luxembourg	3
Other sectors	CO ₂	Belgium, European Community, Luxembourg	3
Transport	CO ₂	Belgium, European Community, Luxembourg	3
Agricultural soils	N ₂ O	Belgium, European Community	2
Manure management	CH ₄	Belgium, European Community	2
Solid waste disposal sites	CH ₄	Belgium, European Community	2
Chemical industry	N ₂ O	Belgium, European Community	2
Metal production	CO ₂	European Community, Luxembourg	2
Manure management	N ₂ O	Belgium, European Community	2
Consumption of halocarbons and SF ₆	HFCs	European Community	1
Fugitive emissions: oil and gas operations	CH ₄	European Community	1
Other	CO ₂	Belgium	1

^{b)} Because these Parties have not submitted sectoral background data tables, key sources have been assessed at the level of summary table 1.A of the CRF, rather than at the level of disaggregation recommended by the IPCC good practice guidance.

2. Explanatory notes

21. Blank cells in the tables indicate that a Party did not report information for a given source and gas in the appropriate table of the CRF.
22. The differences in activity data between the CRF and international data sources were calculated as percentage deviations from the activity data 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.
23. References to the base year refer to 1990, except for the following Parties with economies in transition which, in accordance with decision 9/CP.2, use base years other than 1990: Hungary (average 1985-1987) and Poland (1988).
24. Identified key sources are indicated by an "L" for level and "T" for trend assessments in the "key source" columns. The column "Per cent of national total" indicates the contribution of that key source to the Party's national total of GHG emissions in terms of CO₂ equivalent, excluding emissions and removals from land-use change and forestry.
25. Tables on energy indicate whether implied emission factors 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.
26. Where Parties used notation keys (NO, NE, NA, IE, C, 0) these have been reproduced verbatim from the CRF tables provided by Parties. The notation keys, as described in the UNFCCC reporting guidelines (FCCC/CP/1999/7), are as follows:

NO	Not occurring
NE	Not estimated
NA	Not applicable
IE	Included elsewhere
C	Confidential
"0"	Estimates that are less than one half of the unit being used to record the inventory table

27. 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):

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

Greenhouse gases have the following chemical formulae and abbreviations:

CF ₄	perfluoromethane
C ₂ F ₆	perfluoroethane
C ₃ F ₈	perfluoropropane
C ₄ F ₁₀	perfluorobutane
c-C ₄ F ₈	perfluorocyclobutane
C ₅ F ₁₂	perfluoropentane
C ₆ F ₁₄	perfluorohexane
CH ₄	methane
CO ₂	carbon dioxide
HFCs	hydrofluorocarbons
N ₂ O	nitrous oxide
PFCs	perfluorocarbons
SF ₆	sulphur hexafluoride

The following units have been used:

kg	kilogram (10 ³ grams)
t	tonne (10 ⁶ grams)
kt	kilotonne (10 ⁹ grams)
Gg	gigagram (10 ⁹ grams)
Mt	megatonne (10 ¹² grams)
TJ	terajoule (10 ¹² joules)
PJ	petajoule (10 ¹⁵ joules)
Gg CO ₂ equ	Gg of CO ₂ equivalent
Mha	million hectares
NGL	natural gas liquids
FAO	Food and Agriculture Organization of the United Nations

The following other abbreviations have been used:

CRF	common reporting format
NIR	national inventory report
A	actual emissions
P	potential emissions
AD	activity data
EF	emission factor
IEF	implied emission factor
GHG	greenhouse gas
GWP	global warming potential
N	nitrogen
NCV	net calorific value
GCV	gross calorific value
yr	year
L	level (key source applying the IPCC good practice guidance tier 1 level assessment)
T	trend (key source applying the IPCC good practice guidance tier 1 trend assessment)

1. Energy

Energy - Total CO₂ emissions from the reference approach and the sectoral approach (2000)

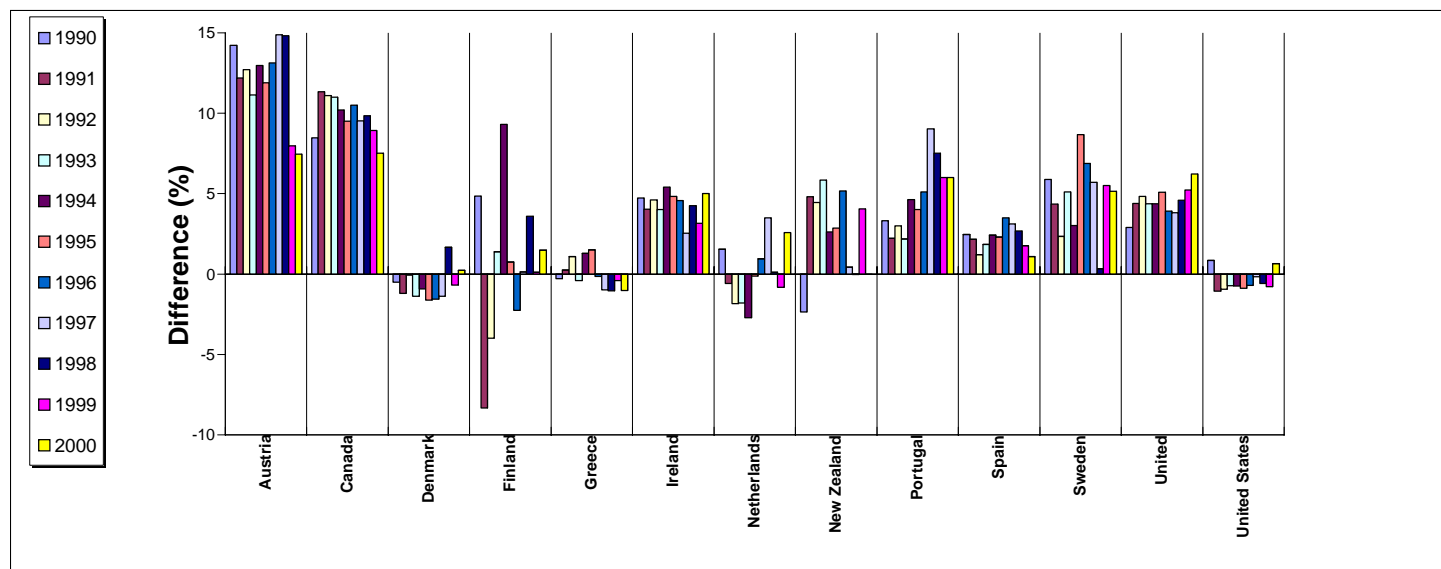
CO₂ emissions from total fuel combustion

	Reference approach	Sectoral approach	Difference	Explanation for difference as reported in table 1.A(c) of the CRF
	Gg CO ₂		(%)	
Austria	57,289.42	53,318.85	7.45	CORINAIR is used as national method, considering the following items of the official Austrian energy balance (in German): "Energetischer Endverbrauch", "Umwandlungseinsatz", "Verbrauch des Sektors Energie". Differences between national estimates and reference approach include: Solid fuels: <u>Energy consumption:</u> National approach doesn't include transformation losses of coking coal to coke oven gas and coke. <u>CO₂ emissions:</u> The national approach doesn't separate between fuel related and non-fuel related CO ₂ -emissions for metal production. All CO ₂ -emissions are included in sector 2C: Metal production. Gaseous fuels: <u>Energy consumption:</u> national approach doesn't include losses and non-energy-use. <u>CO₂ emissions:</u> National approach uses sector specific carbon contents (different from IPCC reference factor). Liquid fuels: <u>Energy consumption:</u> National approach doesn't include non-energy use and energy losses. <u>CO₂ emissions:</u> Heat values and carbon contents are sector and fuel specific. The energy statistic is mass balanced only. Other fuels: The national approach considers waste as an additional fuel type (= municipal and industrial waste, sludge). 90 % of CQ emissions from waste-burning are considered as biogenic.
Belgium	NE	114,125.81	NE	
Canada	555,295.92	516,512.49	7.51	The comparison as programmed in the CRF is not appropriate for the Canadian inventory since our national approach does not include fossil fuel based CQ from various industrial processes such as ammonia production and aluminium production. When these sources are included in the national approach totals for energy the two match quite closely, 516512+30992=522134 which is a 1.4% difference.
Czech Republic	122,116.35	124,420.10	-1.85	
Denmark	50,814.58	50,693.82	0.24	Non-energy use of fuels is not included in the Danish national approach. Fuel consumption for non-energy is subtracted in the reference approach to make results comparable. Inclusion of these fuels in future inventories will be considered. CO ₂ emission from the plastic part of municipal wastes is included in the Danish national approach. Thus the energy content of combusted municipal wastes is included in liquid fuels in table 1A(c). Correction of this will be considered in future inventories. For now the energy content of municipal waste is added in the reference approach to make results comparable. CO ₂ emission from the plastic part of municipal wastes is added in the reference approach according to decision to include this emission.
Estonia	16,494.54	16,494.54	0.00	
European Community	NE	3,136,284.09	NE	
Finland	55,750.52	54,932.08	1.49	Secondary liquid fuels with notification 'IE*' are included in other oil in Table 1.A(b). Anthracite is included in other bituminous coal. All biomass fuels are included in solid biomass.
France	NE	5,132.60	NE	Detailed data for the reference approach are not available at this time. The same method that previous years has been used for the sectoral approach.
Greece	94,696.46	95,681.67	-0.03	
Hungary	55,573.14	55,734.26	-0.29	
Iceland	1,943.72	1,905.93	1.98	
Ireland	43,302.53	41,239.14	5.00	
Italy	421,922.45	433,984.28	-2.78	
Latvia	6,778.76	6,746.31	0.48	Reference approach and national approach data diverge due to statistical differences in energy balance for 2000, source is Central Statistical Bureau of Latvia.
Luxembourg	NE	4,707.21	NE	
Netherlands	174,522.08	170,142.30	2.57	The energy consumption in the national approach (NA) is based on the data from the national inventory. These fuel data are not complete due to: 1) Not all CO ₂ emissions (from combustion) submitted by industry are accompanied by fuel data in the inventory; 2) In industry reports some of the CO ₂ emissions from combustion are allocated as process emissions and thus the corresponding fuel data are not incorporated in the totals for the fuel data. 3) Industries may calculate and report actual CO ₂ emissions from energy used as chemical feedstock using different overall CO ₂ emission factors for the amount of energy carriers converted into products than used in the RA for estimating non-reported feedstock emissions. 4) Industry firms report more heavy fuels used as chemical feedstock than the energy statistics used in the RA. The extent of these causes may differ from year to year, which then also causes the fluctuations in the difference between RA and NA. In addition, the RA figures are calculated using preliminary values for the carbon content of crude oil and NGL. For more information see the national inventory report.
New Zealand	27,394.87	27,394.58	0.00	IE for "other" refers to LPG and fuel oil data. Figures for these are included in the "liquid fuels" total. See the national inventory report for information about the reference and national approaches.
Norway	33,696.47	30,956.75	8.85	
Poland	NE	302,281.50	NE	

CO₂ emissions from total fuel combustion

	Reference approach	Sectoral approach	Difference	Explanation for difference as reported in table 1.A(c) of the CRF
	Gg CO ₂		(%)	
Portugal	60,535.47	57,105.69	6.01	Differences between sectoral and reference approach (CO ₂ from fuel combustion): the sectoral approach CO ₂ estimates depends partially on combustion information from point sources, and the reference approach results from national energy balances. Furthermore, feedstock emissions were estimated differently in the two approaches: in the sectoral approach, emissions were estimated from production activity data; in the reference approach, a global percentage of carbon stored (e.g. lubricants, naphtha) 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.
Slovakia	36,965.33	37,502.26	-1.43	
Spain	284,381.84	281,298.49	1.10	
Sweden	53,471.60	50,850.87	5.15	If energy consumption in 1B and 2 is taken into account, the difference in energy consumption is 0,62% and the difference in CO ₂ emissions is 2,22%. See comparison 1990 - 2000, in appendix 12 of the Swedish national inventory report, for further information. Note that cell D12 and E12 includes gasoline consumption. Gasoline is a liquid fuel, hence not included in B12 and C12. (Also the case 1990-99)
Switzerland	40,051.13	40,014.04	0.09	"Other" in the national approach: including liquid fuels, gaseous fuels, solid fuels from the cement, lime, glass sector (1A 2f) and gasoline and diesel from the off road sector 1A 5 (Other). Fuel tourism is also listed in this category due to national circumstances (see documentation box 1.A.(a)s4 and table 1.A.(a)s3). <u>Differences in energy consumption</u> : different conversion factors in the reference approach (IPCC factors) and national approach (national factors) and allocation problems (see comments to "other" above). Documentation box: to table 1.A(b) <u>Liquid fossil primary fuels (Table 1.A(b))</u> not calculated. Instead, the CO ₂ -emissions of the processing from primary fuels to secondary fuels in the refineries is calculated by taking into account the residual fuel and the liquid gas burnt in the refineries. <u>Bitumen</u> consumption has to be set to zero, because this consumption appears in the CORINAIR (national) approach in the sector 2 (industrial processes, asphalt concrete) and not in sector 1 (energy).
United Kingdom	554,084.49	521,612.39	6.23	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 4.9%. This discrepancy arises from three sources: (1) 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 and 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. The sectoral approach is based wholly on the consumption of secondary fuels where the 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.
United States	5,682,376.69	5,645,956.72	0.65	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 table 1.A(b): 1) Orimulsion values refer to the U.S. inventory's "other liquids" which has production. The carbon stored subtracted in column P refers to "pentanes plus." 2) Naphtha values refer to "naphtha for petrofeed" and "special naphtha." 3) Refinery feedstocks values refer to the U.S. inventory's "other oil for petrofeed" and "still gas." 4) Other oil values refer to the U.S. inventory's "waxes", "asphalt/road oil," "misc. products," and "U.S. terr. misc. products." 5) Other bit. coal includes the U.S. inventory's "bituminous coal" and "unspecified coal." 6) 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). 7) Other includes waste combustion and geothermal emissions. Additional notes: 8) 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 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. 9) "Other" reported above includes waste combustion, geothermal consumption, and adjustments to exclude petroleum coke for aluminum, ferroalloy, and titanium dioxide production; coking coal for iron and steel production; and natural gas for ammonia production. These fuels consumed as feedstocks are accounted for in the Industrial Processes section. The inclusion of waste combustion in this table gives higher totals for energy consumption and CO ₂ emissions in the CRF reference approach than in the U.S. Inventory reference approach which does not include waste combustion.

Differences in CO2 emissions from reference and sectoral approach for the period 1990 – 2000a [%]



a Only Parties that provided the full time series for the sectoral and reference approaches are included in the graph.

Energy - Stationary combustion: liquid fuels (2000)

Stationary combustion - liquid fuels (CO ₂)																		
Key source	Percentage of national total	IEF in CRF based on	1.A.1 Energy industries							1.A.2 Manufacturing industries and construction				1.A.4 Other sectors				
			Methods and EF used ^b		CO ₂ IEF				Methods and EF used ^c		CO ₂ IEF	Methods 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	Agricultural/forestry/fisheries	
					(t/TJ)						(t/TJ)			(t/TJ)				
Austria	L, T	18.5	NCV	C	CS	76.56	78.47	75.65		C	CS	72.36	CS	CS	74.54	75.07	74.71	73.68
Belgium ^a				CS,T1	CS,D					C,T1	C,CS,D		C,T1	C,D				
Canada	L, T	9.2	GCV	T2	CS	66.68	71.53	64.94		T2	CS	71.96	T2	CS	69.30	66.81	71.46	68.54
Czech Republic	L, T	7.6	NCV	T1	D	74.66	75.36	74.32	73.33	T1	D	64.35	T1	D	68.11	70.35	62.44	73.33
Denmark	L, T	17.9	NCV	C	CS	54.91	54.01	58.77		C	CS	77.49	C	CS	73.91	73.58	73.70	74.22
Estonia	L	10.1	NCV			75.24	75.24					72.40			69.76	72.65	69.59	71.21
European Community				C, CS, T1, T2	C, CS, D, PS	NE	NE	NE	NE	C, CS, T1, T2	C, CS, D, PS	NE	C, CS, T1, T2	C, CS, D	NE	NE	NE	NE
Finland	L, T	18.3	NCV	CS (T2)	CS/PS/D	72.35	76.16	70.60	NO	CS (T2)	CS/PS/D	72.53	CS (T2, T1)	CS/D	73.68	74.32	73.41	73.62
France	L, T	18.6	NCV	C	CS	68.38	76.94	64.61	82.74	C	CS	75.90	C	CS	73.33	74.25	72.87	73.26
Greece	L, T	18.8	NCV	C	C and CS	75.02	75.96	73.25		C	C	61.49	C	C	72.97	72.31	73.01	74.56
Hungary	L	8.4	NCV	D	D	76.54	76.54			D	D	40.82	D	D	64.77	67.86	62.44	72.72
Iceland	L	35.5	NCV	T1	D	73.33	73.33	NO	NO	T1	D	69.97	T1	D	73.47	62.50	72.37	73.54
Ireland	L	19.6	NCV	T1	PS, CS	78.18	79.18	68.03	NO	T1	PS, CS	77.92	T1	CS	73.11	73.70	72.56	73.30
Italy	L	23.1	NCV	D, T2	CS	75.38	76.46	72.88	77.56	D, T2	CS	82.03	D, T2	CS	73.35	73.77	73.32	73.21
Latvia	L	14.4	NCV	T1	D	75.31	75.31			T1	D	74.97	T1	D	71.33	74.17	62.44	73.69
Luxembourg ^a																		
Netherlands	L, T	1.6	NCV	CS	PS, CS	74.18	74.28	73.22	73.66	CS	PS, CS	56.46	CS	CS	71.07	71.27	71.24	70.33
New Zealand	L	3.2	GCV	T1	CS/D	74.91	67.81	74.93	NE	T1	CS/D	68.11	T1	CS/D	67.59	67.28	59.94	68.46
Norway	L, T	15.5	NCV	T2	CS	60.92	73.69	58.16	73.55	T2	CS	66.93	T2	CS	73.42	73.56	73.07	73.50
Poland	L	7.4	NCV	T2	CS	69.08	75.21	66.62	73.71	T2	CS	74.39	T2	CS	72.25	75.40	69.01	71.70
Portugal	L, T	23.1	NCV	C+T2	C	70.33	70.42	70.15		C+T2	C	69.87	C+T2	C	69.07	70.62	64.88	73.45
Slovakia	L	4.4	NCV			75.01	75.98	74.31				74.92			73.46	73.10		74.19
Spain	L, T	19.6	NCV	CS,C	PS,C	72.24	79.03	66.59	76.56	CS,C	PS,C	91.89	C	C	71.52	72.55	69.44	73.44
Sweden	L, T	30.4	NCV	CS	CS	69.99	75.31	68.78	75.30	CS	CS	72.37	CS	CS	74.60	74.50	75.09	73.23
Switzerland	L	29.8	NCV	RA, C	RA, CS	76.43	73.70	77.00	NO	C	CS	73.89	C	CS	73.70	73.70	73.70	73.70
United Kingdom	L, T	9.3	NCV	T2	CS	69.03	75.62	68.26	61.85	T2	CS	71.84	T2	CS	72.03	73.55	71.09	72.57
United States	L, T	9.2	GCV	T1	CS	75.51	75.51	IE	IE	T1	CS	38.88	T1	CS	65.90	68.02	64.88	IE

^a The Party provided insufficient data.

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

^c Information on methods and emission factors is included in this table as reported by Parties. 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.

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

Energy - Stationary combustion: solid fuels (2000)

Stationary combustion - Solid fuels (CO ₂)																	
Key source	Percentage of national total	IEF in CRF based on	1.A.1 Energy industries						1.A.2 Manufacturing industries and construction				1.A.4 Other sectors				
			Methods and EF used ^b		CO ₂ IEF			Methods and EF used ^c		CO ₂ IEF	Methods and EF used ^d		CO ₂ IEF				
			Methods	EF	Total	Public electricity and heat production	Manufacture of solid fuels and other energy industries	Methods	EF	Total	Methods	EF	Total	Commercial/institutional	Residential	Agricultural/forestry/fisheries	
					(t/TJ)					(t/TJ)			(t/TJ)				
Austria	L, T	8.54	NCV	C	CS	98.12	98.12		C	CS	10.33	CS	CS	93.58	93.10	93.65	106.00
Belgium ^a				CS, T1	CS, D				C, T1	C, CS, D		C, T1	C, D				
Canada	L, T	15.16	GCV	T2	CS	87.85	87.88	79.36	T2	CS	83.23	T2	CS	86.16	79.51	89.20	
Czech Republic	L, T	57.31	NCV	T1	D	98.90	98.94	97.89	T1	D	107.93	T1	D	98.89	100.68	98.20	99.98
Denmark	L, T	23.01	NCV	C	CS	95.00	95.00		C	CS	95.00	C	CS	95.00		95.00	95.00
Estonia	L	58.93	NCV			99.28	99.28				102.06			98.73	98.85	98.71	100.29
European Community				C, CS, T1, T2	C, CS, D, PS	NE	NE	NE	C, CS, T1, T2	C, CS, D, PS	NE	C, CS, T1, T2	C, CS, D	NE	NE	NE	NE
Finland	L, T	18.96	NCV	CS (T2)	CS/PS/D	91.36	92.71	39.68	CS (T2)	CS/PS/D	97.81	CS (T2, T1)	CS/D	92.02	150.00	89.89	92.90
France	L, T	10.28	NCV	C	CS	106.16	105.21	106.39	C	CS	135.73	C	CS	95.00	95.00	95.00	95.00
Greece	L, T	35.28	NCV	C	C and CS	122.13	122.13		C	C	93.47	C	C	96.42		95.07	99.18
Hungary	L	17.45	NCV	D	D	92.38	92.38		D	D	101.29	D	D	98.01	95.05	98.36	98.38
Iceland	L	1.18	NCV	T1	D	NO	NO	NO	T1	D	92.71	T1	D	NO	NO	NO	NO
Ireland	L	16.17	NCV	T1	PS, CS	99.43	99.43	NO	T1	PS, CS	97.64	T1	CS	98.34	98.86	98.34	NO
Italy	L	8.91	NCV	D, T2	CS	115.57	104.58	241.53	D, T2	CS	68.24	D, T2	CS	101.88	101.88	101.88	NO
Latvia	L	5.28	NCV	T1	D	101.97	101.97		T1	D	103.76	T1	D	92.91	92.92	92.94	92.74
Luxembourg ^a																	
Netherlands	L, T	11.47	NCV	CS	PS, CS	102.63	102.63		CS	PS, CS	92.63	CS	CS	100.71	94.00	103.00	94.00
New Zealand	L	3.55	GCV	T1	CS/D	89.47	89.47	NE	T1	CS/D	89.47	T1	CS/D	89.47	89.47	89.47	89.47
Norway	L, T	1.64	NCV	T2	CS	87.72	87.72		T2	CS	115.16	T2	CS	94.02		94.46	86.12
Poland	L	59.47	NCV	T2	CS	97.31	98.50	72.34	T2	CS	107.82	T2	CS	94.08	97.39	94.15	92.40
Portugal	L, T	16.66	NCV	C+T2	C	92.05	92.02	96.30	C+T2	C	107.05	C+T2	C				
Slovakia	L	22.83	NCV			93.31	93.31				94.44			95.03	96.72	94.75	95.00
Spain	L, T	21.55	NCV	CS, C	PS, C	98.99	99.39	74.38	CS, C	PS, C	100.91	C	C	84.02	59.07	94.68	
Sweden	L, T	10.03	NCV	CS	CS	96.30	100.77	79.00	CS	CS	90.99	CS	CS				
Switzerland		0.19	NCV	RA, C	RA, CS	NO	NO	NO	C	CS	94.00	C	CS	94.00	94.00	94.00	NO
United Kingdom	L, T	19.95	NCV	T2	CS	87.37	87.32	89.53	T2	CS	131.66	T2	CS	90.92	87.19	91.32	87.19
United States	L, T	29.00	GCV	T1	CS	88.61	88.61	IE	T1	CS	87.07	T1	CS	89.47	89.47	89.47	IE

^a The Party provided insufficient data.

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

^c Information on methods and emission factors is included in this table as reported by Parties. 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.

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

Energy - Stationary combustion: gaseous fuels (2000)

Stationary combustion - gaseous fuels (CO ₂)																		
Key source	Percentage of national total	IEF in CRF based on	1.A.1 Energy industries							1.A.2 Manufacturing industries and construction				1.A.4 Other sectors				
			Methods and EF used ^b		CO ₂ IEF				Methods and EF used ^c		CO ₂ IEF	Methods 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	Agricultural/forestry/fisheries	
					(t/TJ)						(t/TJ)			(t/TJ)				
Austria	L, T	18.5	NCV	C	CS	55.00	55.00		55.00	C	CS	54.80	CS	CS	55.00	55.00	55.00	
Belgium ^a				CS,T1	CS,D					C,T1	C,CS,D		C,T1	C,D				
Canada	L, T	22.1	GCV	T2	CS	51.48	49.78	49.77	52.38	T2	CS	49.78	T2	CS	49.78	49.78	49.78	49.78
Czech Republic	L, T	11.9	NCV	T1	D	55.82	55.82	55.82		T1	D	55.82	T1	D	55.82	55.82	55.82	55.82
Denmark	L, T	15.5	NCV	C	CS	57.10	57.10		57.10	C	CS	57.10	C	CS	57.10	57.10	57.10	57.10
Estonia	L	9.2	NCV			55.82	55.82					55.82			55.82	55.82	55.82	55.82
European Community				C, CS, T1, T2	C, CS, D, PS	NE	NE	NE	NE	C, CS, T1, T2	C, CS, D, PS	NE	C, CS, T1, T2	C, CS, D	NE	NE	NE	NE
Finland	L, T	11.0	NCV	CS (T2)	CS/PS/D	56.34	56.31	56.49	NO	CS (T2)	CS/PS/D	54.99	CS (T2, T1)	CS/D	55.81	55.81	55.84	55.78
France	L, T	14.0	NCV	C	CS	57.00	57.00	57.02		C	CS	56.48	C	CS	57.00	57.00	57.00	57.00
Greece	L, T	3.0	NCV	C	C and CS	55.82	55.82		55.82	C	C	49.37	C	C	55.83	55.83	55.84	
Hungary	L	28.4	NCV	D	D	66.27	66.27			D	D	58.34	D	D	55.82	55.82	55.82	55.82
Iceland				T1	D	NO	NO	NO	NO	T1	D	NO	T1	D		NO	NO	NO
Ireland	L	10.6	NCV	T1	PS, CS	56.36	56.36	NO	NO	T1	PS, CS	54.94	T1	CS	54.94	54.94	54.94	NO
Italy	L	23.9	NCV	D, T2	CS	55.46	55.46	55.46	55.46	D, T2	CS	55.46	D, T2	CS	55.46	55.46	55.46	55.45
Latvia	L	24.1	NCV	T1	D	55.82	55.82			T1	D	55.82	T1	D	55.82	55.82	55.82	55.81
Luxembourg ^a																		
Netherlands	L, T	34.8	NCV	CS	PS, CS	55.68	55.65		56.03	CS	PS, CS	55.23	CS	CS	55.95	56.00	55.92	56.00
New Zealand	L	12.8	GCV	T1	CS/D	52.90	51.92	58.87	54.98	T1	CS/D	30.40	T1	CS/D	51.81	51.81	51.81	NE
Norway	L, T	14.8	NCV	T2	CS	62.23	57.86		62.24	T2	CS	57.90	T2	CS	57.86	57.86	57.86	57.86
Poland	L	4.2	NCV	T2	CS	54.86	54.48	56.85	56.07	T2	CS	53.82	T2	CS	53.58	54.29	53.42	53.64
Portugal	L	4.5	NCV	C+T2	C	56.05	56.05			C+T2	C	56.04	C+T2	C	56.05	56.07	56.04	56.07
Slovakia	L	26.7	NCV			58.63	58.63	58.63	58.11			58.63			58.63	58.63	58.63	58.63
Spain	L, T	9.5	NCV	CS,C	PS,C	65.12	69.11	56.00	56.00	CS,C	PS,C	56.22	C	C	56.00	56.00	56.00	56.00
Sweden	L, T	2.3	NCV	CS	CS	56.50	56.50	56.50	NO	CS	CS	56.50	CS	CS	56.50	56.50	56.50	56.50
Switzerland	L	10.2	NCV	RA, C	RA, CS	55.01	55.01	NO	NO	C	CS	55.00	C	CS	55.00	55.00	55.00	55.00
United Kingdom	L, T	32.0	NCV	T2	CS	60.86	58.34	57.96	70.66	T2	CS	57.96	T2	CS	57.96	57.96	57.96	57.96
United States	L, T	16.6	GCV	T1	CS	50.04	50.04	IE	IE	T1	CS	48.54	T1	CS	50.04	50.04	50.04	IE

^a The Party provided insufficient data.

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

^c Information on methods and emission factors is included in this table as reported by Parties. 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.

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

Energy - Stationary combustion: other fuels (2000)

Stationary combustion - Other fuels (CO ₂)															
Key source	Percentage of national total	IEF in CRF based on	1.A.1 Energy industries				1.A.2 Manufacturing industries and construction				1.A.4 Other sectors				
			Methods and EF used ^b		CO ₂ IEF		Methods and EF used ^c		CO ₂ IEF	Methods and EF used ^d		CO ₂ IEF			
			Methods	EF	Total	Public electricity and heat production	Methods	EF	Total	Methods	EF	Total	Commercial/institutional	Residential	Agricultural/forestry/fisheries
						(t/TJ)				(t/TJ)				(t/TJ)	
Austria	T	0.06	NCV	C	CS			C	CS	7.86	CS	CS			
Belgium ^a				CS,T1	CS,D			C,T1	C,CS,D		C,T1	C,D			
Canada		0.00	GCV	T2	CS			T2	CS		T2	CS			
Czech Republic		0.00	NCV	T1	D			T1	D		T1	D			
Denmark		0.00	NCV	C	CS			C	CS		C	CS			
Estonia		0.09	NCV										62.44	62.44	62.44
European Community				C, CS, T1, T2	C, CS, D, PS	NE	NE	C, CS, T1, T2	C, CS, D, PS	NE	C, CS, T1, T2	C, CS, D	NE	NE	NE
Finland	L, T	9.20	NCV	CS (T2)	CS/PS/D	103.29	103.29	CS (T2)	CS/PS/D	99.31	CS (T2, T1)	CS/D	104.85	104.44	104.93
France	L	1.11	NCV	C	CS	101.97	57.02	C	CS	74.78	C	CS	56.99	56.94	57.00
Greece				C	C and CS			C	C		C	C			
Hungary	L	0.79	NCV	D	D	72.60	72.60	D	D	32.63	D	D			
Iceland		0.16	NCV	T1	D	NO	NO	T1	D	99.72	T1	D	NO	NO	NO
Ireland		0.08	NCV	T1	PS, CS	54.94	54.94	T1	PS, CS	NO	T1	CS	NO	NO	NO
Italy	L	1.25	NCV	D, T2	CS	94.43	94.43	D, T2	CS	94.19	D, T2	CS	66.55	72.08	64.94
Latvia		0.00	NCV	T1	D			T1	D		T1	D			
Luxembourg ^a															
Netherlands	L, T	14.47	NCV	CS	PS, CS	1069.70	207.63	CS	PS, CS	1031.40	CS	CS	54.00	54.00	
New Zealand		0.00	GCV	T1	CS/D	NE/NO	NE/NO	T1	CS/D	NE	T1	CS/D	NO	NO	NO
Norway		0.27	NCV	T2	CS	23.93	23.93	T2	CS		T2	CS	149.67	149.67	
Poland		0.00	NCV	T2	CS			T2	CS		T2	CS			
Portugal		0.00	NCV	C+T2	C			C+T2	C	76.04	C+T2	C			
Slovakia	L	13.60	NCV			87.26				148.44			49.57	49.57	
Spain		0.14	NCV	CS,C	PS,C	39.98	39.98	CS,C	PS,C	80.47	C	C			
Sweden	L, T	2.31	NCV	CS	CS	34.88	34.88	CS	CS	59.53	CS	CS			
Switzerland	L	6.15	NCV	RA, C	RA, CS	59.30	NO	C	CS	79.04	C	CS	73.67	NO	NO
United Kingdom		0.13	NCV	T2	CS	30.47	30.47	T2	CS	94.25	T2	CS	30.47	30.47	
United States	T	0.32	GCV	T1	CS	7.12	7.12	T1	CS		T1	CS		NE	NE

^a The Party provided insufficient data.

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

^c Information on methods and emission factors is included in this table as reported by Parties. 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.

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

Note

This table is provided for the purpose of completeness. Parties reported emissions and activity data from different fuels under other fuels in the CRF and, consequently, the CQ IEFs may not be comparable.

Energy - Energy industries: all fuel types**Trends in CO₂ emissions 1990 to 2000****Gigagrams**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	14,395	15,537	12,045	11,320	11,657	13,125	13,996	14,357	13,488	12,918	12,137
Belgium	28,572	30,034	30,019	29,293	28,385	29,822	29,292	27,960	30,011	26,950	27,357
Canada	144,277	143,735	152,371	143,826	146,708	152,961	152,221	159,790	177,041	183,251	191,442
Czech Republic	59,171						57,818	59,180	58,706	53,848	60,160
Denmark	26,202	35,155	30,127	31,689	35,388	32,024	44,412	35,433	31,506	28,237	25,250
Estonia	29,753	28,656	22,066	17,007	17,765	16,363	17,127	16,850	14,791	13,478	13,945
European Community	1,147,013	1,151,715	1,116,445	1,059,905	1,065,962	1,072,576	1,082,515	1,045,861	1,087,327	1,066,494	1,092,146
Finland	18,517	19,107	17,510	19,945	24,645	22,456	27,509	24,673	21,395	21,029	19,815
France	65,492	77,232	69,530	56,165	52,444	55,173	59,468	55,984	68,443	61,397	60,173
Greece	43,302	42,149	44,091	44,366	46,323	45,056	44,205	47,668	50,254	50,220	55,058
Hungary	29,746	28,520	27,476	27,575	26,290	26,431	26,610	26,537	24,161	23,614	22,403
Iceland	4	4	4	3	3	3	4	2	4	3	3
Ireland	11,057	11,543	12,224	12,233	12,574	13,239	13,959	14,643	15,047	15,728	16,016
Italy	142,927	137,489	137,592	127,476	129,069	140,299	134,549	133,463	151,975	146,563	155,052
Latvia	8,288	8,659	7,026	5,482	4,726	4,543	3,902	3,819	3,543	3,116	2,705
Luxembourg ^a										103	255
Netherlands	51,513	52,190	54,130	53,800	55,980	56,589	59,306	58,200	60,379	57,911	59,085
New Zealand	6,032	6,151	7,628	6,598	5,458	4,728	5,314	6,945	5,197	6,520	6,116
Norway	7,247	7,453	8,226	8,589	9,148	8,919	9,777	10,244	9,861	9,489	10,370
Poland	236,582	233,002	223,009	202,569	200,331	187,346	195,987	192,784	184,916	180,001	176,324
Portugal	15,884	16,509	19,410	17,870	16,745	20,441	16,569	17,106	19,682	24,837	22,377
Slovakia	50,654	45,257	41,784	39,016	35,684	36,685	37,194	37,212	35,139	34,066	12,095
Spain	76,717	77,181	84,836	78,310	79,155	84,946	72,309	84,112	83,019	98,783	103,542
Sweden	10,170	11,280	11,319	10,829	13,119	11,576	15,724	11,491	12,671	11,129	10,704
Switzerland	905	1,224	1,302	987	1,068	1,120	1,296	1,204	1,453	1,155	984
United Kingdom	228,089	226,050	215,977	199,254	196,560	197,766	197,680	183,447	189,067	180,843	190,833
United States	1,858,940	1,855,274	1,877,454	1,952,255	1,982,593	1,989,266	2,061,198	2,137,933	2,226,426	2,246,193	2,352,492

^a 1999 value is taken from the previous submission.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	7.9	-22.5	-6.0	3.0	12.6	6.6	2.6	-6.1	-4.2	-6.0	-15.7
Belgium	5.1	0.0	-2.4	-3.1	5.1	-1.8	-4.5	7.3	-10.2	1.5	-4.3
Canada	-0.4	6.0	-5.6	2.0	4.3	-0.5	5.0	10.8	3.5	4.5	32.7
Czech Republic							2.4	-0.8	-8.3	11.7	1.7
Denmark	34.2	-14.3	5.2	11.7	-9.5	38.7	-20.2	-11.1	-10.4	-10.6	-3.6
Estonia	-3.7	-23.0	-22.9	4.5	-7.9	4.7	-1.6	-12.2	-8.9	3.5	-53.1
European Community	0.4	-3.1	-5.1	0.6	0.6	0.9	-3.4	4.0	-1.9	2.4	-4.8
Finland	3.2	-8.4	13.9	23.6	-8.9	22.5	-10.3	-13.3	-1.7	-5.8	7.0
France	17.9	-10.0	-19.2	-6.6	5.2	7.8	-5.9	22.3	-10.3	-2.0	-8.1
Greece	-2.7	4.6	0.6	4.4	-2.7	-1.9	7.8	5.4	-0.1	9.6	27.1
Hungary	-4.1	-3.7	0.4	-4.7	0.5	0.7	-0.3	-9.0	-2.3	-5.1	-24.7
Iceland	7.7	-7.1	-23.1	0.0	9.1	16.4	-45.9	97.1	-23.0	2.1	-18.1
Ireland	4.4	5.9	0.1	2.8	5.3	5.4	4.9	2.8	4.5	1.8	44.8
Italy	-3.8	0.1	-7.4	1.2	8.7	-4.1	-0.8	13.9	-3.6	5.8	8.5
Latvia	4.5	-18.9	-22.0	-13.8	-3.9	-14.1	-2.1	-7.2	-12.1	-13.2	-67.4
Luxembourg										147.0	
Netherlands	1.3	3.7	-0.6	4.1	1.1	4.8	-1.9	3.7	-4.1	2.0	14.7
New Zealand	2.0	24.0	-13.5	-17.3	-13.4	12.4	30.7	-25.2	25.5	-6.2	1.4
Norway	2.8	10.4	4.4	6.5	-2.5	9.6	4.8	-3.7	-3.8	9.3	43.1
Poland	-1.5	-4.3	-9.2	-1.1	-6.5	4.6	-1.6	-4.1	-2.7	-2.0	-25.5
Portugal	3.9	17.6	-7.9	-6.3	22.1	-18.9	3.2	15.1	26.2	-9.9	40.9
Slovakia	-10.7	-7.7	-6.6	-8.5	2.8	1.4	0.0	-5.6	-3.1	-64.5	-76.1
Spain	0.6	9.9	-7.7	1.1	7.3	-14.9	16.3	-1.3	19.0	4.8	35.0
Sweden	10.9	0.3	-4.3	21.1	-11.8	35.8	-26.9	10.3	-12.2	-3.8	5.2
Switzerland	35.2	6.4	-24.2	8.2	4.9	15.7	-7.1	20.7	-20.5	-14.8	8.7
United Kingdom	-0.9	-4.5	-7.7	-1.4	0.6	0.0	-7.2	3.1	-4.3	5.5	-16.3
United States	-0.2	1.2	4.0	1.6	0.3	3.6	3.7	4.1	0.9	4.7	26.6

Energy - Energy industries by fuel type: liquid

Trends in CO₂ emissions 1990 to 2000

Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	3,869	4,458	4,103	4,242	4,146	3,851	4,101	4,535	4,842	4,512	3,574
Belgium											
Canada	35,451	33,459	35,705	33,891	31,876	33,869	32,273	33,766	37,679	36,015	35,428
Czech Republic ^{a, b}	1,790								1,726	1,712	1,574
Denmark	2,225	2,484	2,544	2,578	3,502	4,491	6,305	5,748	5,225	5,039	4,783
Estonia ^b											1,115
European Community											
Finland	2,607	2,638	2,486	2,482	3,009	2,972	3,145	2,608	2,844	2,871	2,502
France	20,926	25,557	22,436	19,662	19,994	21,244	21,144	21,922	24,136	22,653	22,544
Greece	7,948	8,462	8,330	8,483	8,512	9,009	9,165	8,979	8,863	8,428	9,731
Hungary ^a									5,388	4,199	3,382
Iceland										3	3
Ireland	1,148	1,855	1,890	1,855	2,273	2,174	2,181	2,857	3,584	4,602	3,781
Italy ^a									90,311	79,232	79,464
Latvia										1,404	668
Luxembourg ^a										3	
Netherlands	5,635					5,508	6,635	6,451	6,278	150	100
New Zealand ^{a, b}		227	408	275	168	271	214	153			168
Norway	1,791								2,378	2,519	2,438
Poland											7,694
Portugal	7,981	8,151	10,797	8,415	6,868	9,112	6,145	6,285	9,460	11,359	8,109
Slovakia ^b											97
Spain	16,422	16,887	20,030	15,784	17,647	19,818	18,060	17,188	19,164	22,992	23,012
Sweden	4,269	5,093	4,871	4,749	7,027	5,903	8,881	5,831	6,361	5,778	5,553
Switzerland ^b											181
United Kingdom	38,940	37,801	35,434	33,959	30,846	30,876	30,067	24,357	23,060	21,661	19,827
United States	103,388	98,167	83,727	93,804	88,530	64,452	69,454	78,399	106,469	107,701	95,181

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	15.2	-8.0	3.4	-2.3	-7.1	6.5	10.6	6.8	-6.8	-20.8	-7.6
Belgium											
Canada	-5.6	6.7	-5.1	-5.9	6.3	-4.7	4.6	11.6	-4.4	-1.6	-0.1
Czech Republic									-0.8	-8.1	-12.1
Denmark	11.6	2.4	1.4	35.8	28.3	40.4	-8.8	-9.1	-3.5	-5.1	115.0
Estonia											
European Community											
Finland	1.2	-5.8	-0.2	21.3	-1.2	5.8	-17.1	9.0	1.0	-12.9	-4.0
France	22.1	-12.2	-12.4	1.7	6.3	-0.5	3.7	10.1	-6.1	-0.5	7.7
Greece	6.5	-1.6	1.8	0.3	5.8	1.7	-2.0	-1.3	-4.9	15.5	22.4
Hungary									-22.1	-19.5	
Iceland											12.8
Ireland	61.6	1.9	-1.9	22.5	-4.4	0.3	31.0	25.5	28.4	-17.8	229.4
Italy									-12.3	0.3	
Latvia										-52.4	
Luxembourg											
Netherlands						20.4	-2.8	-2.7	-97.6	-33.1	-98.2
New Zealand		79.5	-32.5	-39.0	61.5	-21.1	-28.5				
Norway									5.9	-3.2	36.1
Poland											
Portugal	2.1	32.5	-22.1	-18.4	32.7	-32.6	2.3	50.5	20.1	-28.6	1.6
Slovakia											
Spain	2.8	18.6	-21.2	11.8	12.3	-8.9	-4.8	11.5	20.0	0.1	40.1
Sweden	19.3	-4.4	-2.5	48.0	-16.0	50.4	-34.3	9.1	-9.2	-3.9	30.1
Switzerland											
United Kingdom	-2.9	-6.3	-4.2	-9.2	0.1	-2.6	-19.0	-5.3	-6.1	-8.5	-49.1
United States	-5.0	-14.7	12.0	-5.6	-27.2	7.8	12.9	35.8	1.2	-11.6	-7.9

Energy - Energy industries by fuel type: solid

Trends in CO₂ emissions 1990 to 2000

Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	6,379	6,932	4,088	3,129	3,233	4,517	4,664	5,007	3,510	3,787	4,878
Belgium											
Canada	78,674	82,365	85,180	77,859	81,052	83,079	84,800	91,329	97,337	96,699	102,208
Czech Republic ^{a, b}	55,516								54,562	49,539	56,098
Denmark	22,457	30,902	25,683	26,935	29,147	24,207	33,931	24,983	20,858	17,567	14,552
Estonia ^b											11,186
European Community											
Finland	9,279	9,204	7,536	9,328	12,565	9,724	13,895	12,044	8,171	8,309	8,034
France	38,372	45,284	40,588	30,247	26,622	28,203	31,994	27,830	37,851	32,457	31,481
Greece	35,257	33,594	35,672	35,798	37,714	35,953	34,941	38,466	40,501	39,764	42,259
Hungary ^a									11895	11892	11373
Iceland											
Ireland	7,909	7,796	8,477	7,955	8,205	8,645	8,856	8,606	8,145	7,454	8,084
Italy ^a									31,584	30,268	33,877
Latvia										184	292
Luxembourg ^a											0
Netherlands	25,616					27,817	26,414	23,963	26,637	17,525	23,419
New Zealand ^{a, b}		229	913	446	389	561	614	1199			844
Norway	52								63	63	58
Poland											167,122
Portugal	7,903	8,358	8,613	9,455	9,878	11,329	10,424	10,765	9,891	12,607	12,215
Slovakia ^b											5,342
Spain	59,443	59,106	63,648	62,034	61,057	64,494	52,820	61,984	61,022	72,610	76,356
Sweden	4,873	4,938	5,016	4,583	4,618	4,317	5,388	4,209	4,748	3,905	3,721
Switzerland ^b											NO
United Kingdom	180,801	179,415	168,239	140,228	132,575	126,668	117,122	99,703	102,650	87,366	98,617
United States	1,541,536	1,535,737	1,559,400	1,620,315	1,636,513	1,647,932	1,739,117	1,788,988	1,816,972	1,828,049	1,915,375

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	8.7	-41.0	-23.5	3.3	39.7	3.2	7.4	-29.9	7.9	28.8	-23.5
Belgium											
Canada	4.7	3.4	-8.6	4.1	2.5	2.1	7.7	6.6	-0.7	5.7	29.9
Czech Republic									-9.2	13.2	1.0
Denmark	37.6	-16.9	4.9	8.2	-16.9	40.2	-26.4	-16.5	-15.8	-17.2	-35.2
Estonia											
European Community											
Finland	-0.8	-18.1	23.8	34.7	-22.6	42.9	-13.3	-32.2	1.7	-3.3	-13.4
France	18.0	-10.4	-25.5	-12.0	5.9	13.4	-13.0	36.0	-14.3	-3.0	-18.0
Greece	-4.7	6.2	0.4	5.4	-4.7	-2.8	10.1	5.3	-1.8	6.3	19.9
Hungary									0.0	-4.4	
Iceland											
Ireland	-1.4	8.7	-6.2	3.1	5.4	2.4	-2.8	-5.4	-8.5	8.5	2.2
Italy									-4.2	11.9	
Latvia										58.8	
Luxembourg											
Netherlands						-5.0	-9.3	11.2	-34.2	33.6	-8.6
New Zealand		299.4	-51.2	-12.8	44.3	9.6	95.2				
Norway									0.9	-8.2	11.2
Poland											
Portugal	5.8	3.1	9.8	4.5	14.7	-8.0	3.3	-8.1	27.5	-3.1	54.6
Slovakia											
Spain	-0.6	7.7	-2.5	-1.6	5.6	-18.1	17.3	-1.6	19.0	5.2	28.5
Sweden	1.3	1.6	-8.6	0.8	-6.5	24.8	-21.9	12.8	-17.8	-4.7	-23.6
Switzerland											
United Kingdom	-0.8	-6.2	-16.6	-5.5	-4.5	-7.5	-14.9	3.0	-14.9	12.9	-45.5
United States	-0.4	1.5	3.9	1.0	0.7	5.5	2.9	1.6	0.6	4.8	24.3

Energy - Energy industries by fuel type: gaseous

Trends in CO₂ emissions 1990 to 2000

Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	4,147	4,146	3,854	3,949	4,279	4,756	5,231	4,815	5,136	4,620	3,685
Belgium											
Canada	30,152	27,911	31,486	32,076	33,780	36,013	35,148	34,695	42,025	50,537	53,806
Czech Republic ^{a, b}	1,866								2,417	2,597	2,488
Denmark	1,520	1,769	1,901	2,175	2,740	3,325	4,177	4,703	5,423	5,630	5,915
Estonia ^b											1,644
European Community											
Finland	2,659	2,775	2,998	3,117	3,495	3,552	3,920	4,000	4,738	4,756	5,017
France	1,583	1,891	2,060	2,176	2,092	1,966	2,700	2,697	2,670	2,244	2,242
Greece	97	92	89	85	98	94	99	224	890	2,028	3,067
Hungary ^a									6878	7456	7600
Iceland ^a											0
Ireland	2,000	1,892	1,856	2,423	2,095	2,420	2,923	3,181	3,270	3,598	4,098
Italy ^a									29,888	36,795	41,498
Latvia										1,528	1,745
Luxembourg ^a										100	
Netherlands	17,284					18,352	21,138	18,906	21,867	11,845	22,615
New Zealand ^{a, b}		4,233	4,523	4,225	3,548	2,935	3,807	5,227			5,104
Norway	5,306								7,303	6,778	7,728
Poland											1,508
Portugal								56	331	871	2,053
Slovakia ^b											3,683
Spain	655	1,016	940	279	248	391	1,117	4,520	2,420	2,767	3,704
Sweden	435	527	668	725	631	692	685	690	663	670	649
Switzerland ^b											321
United Kingdom	8,215	8,698	12,139	24,837	32,620	39,690	49,863	58,635	62,507	71,014	71,711
United States	213,796	221,162	234,119	237,941	257,373	276,760	252,493	270,406	302,853	310,400	341,912

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	0.0	-7.1	2.5	8.4	11.2	10.0	-8.0	6.7	-10.1	-20.2	-11.1
Belgium											
Canada	-7.4	12.8	1.9	5.3	6.6	-2.4	-1.3	21.1	20.3	6.5	78.4
Czech Republic									7.4	-4.2	33.4
Denmark	16.4	7.5	14.4	26.0	21.4	25.6	12.6	15.3	3.8	5.1	289.3
Estonia											
European Community											
Finland	4.3	8.0	4.0	12.1	1.6	10.4	2.0	18.5	0.4	5.5	88.7
France	19.4	9.0	5.6	-3.9	-6.0	37.3	-0.1	-1.0	-16.0	-0.1	41.6
Greece	-4.7	-3.2	-5.0	15.3	-4.4	5.4	126.4	298.3	127.8	51.2	3063.5
Hungary									8.4	1.9	
Iceland											
Ireland	-5.4	-1.9	30.5	-13.5	15.5	20.7	8.8	2.8	10.0	13.9	104.9
Italy									23.1	12.8	
Latvia										14.2	
Luxembourg											
Netherlands						15.2	-10.6	15.7	-45.8	90.9	30.8
New Zealand		6.9	-6.6	-16.0	-17.3	29.7	37.3				
Norway									-7.2	14.0	45.6
Poland											
Portugal								491.2	163.6	135.6	
Slovakia											
Spain	55.1	-7.5	-70.3	-11.4	57.9	185.7	304.5	-46.5	14.3	33.9	465.7
Sweden	21.2	26.7	8.6	-13.0	9.7	-1.1	0.8	-4.0	1.2	-3.2	49.2
Switzerland											
United Kingdom	5.9	39.6	104.6	31.3	21.7	25.6	17.6	6.6	13.6	1.0	773.0
United States	3.4	5.9	1.6	8.2	7.5	-8.8	7.1	12.0	2.5	10.2	59.9

Energy - Energy industriesContribution (%) of each fuel type to total CO₂ emissions 1990 and 2000

	Liquid fuels		Solid fuels		Gaseous fuels	
	1990	2000	1990	2000	1990	2000
Austria	26.9	29.4	44.3	40.2	28.8	30.4
Belgium						
Canada	8.2	18.5	18.2	53.4	7.0	28.1
Czech Republic	3.0	2.6	93.8	93.2	3.2	4.1
Denmark	8.5	18.9	85.7	57.6	5.8	23.4
Estonia		8.0		80.2		11.8
European Community						
Finland	14.1	12.6	50.1	40.5	14.4	25.3
France	32.0	37.5	58.6	52.3	2.4	3.7
Greece	18.4	17.7	81.4	76.8	0.2	5.6
Hungary		15.1		50.8		33.9
Iceland		100.0		0.0		0.0
Ireland		23.6		50.5		25.6
Italy		51.2		21.8		26.8
Latvia		24.7		10.8		64.5
Luxembourg						
Netherlands	10.9	0.2	49.7	39.6	33.6	38.3
New Zealand		2.8		13.8		83.4
Norway	24.7	23.5	0.7	0.6	73.2	74.5
Poland		4.4		94.8		0.9
Portugal	50.2	36.2	49.8	54.6	0.0	9.2
Slovakia		0.8		44.2		30.5
Spain	21.4	22.2	77.5	73.7	0.9	3.6
Sweden	42.0	51.9	47.9	34.8	4.3	6.1
Switzerland		18.3				32.6
United Kingdom	17.1	10.4	79.3	51.7	3.6	37.6
United States	5.6	4.0	82.9	81.4	11.5	14.5

Energy - Manufacturing industries and construction, all fuel types**Trends in CO₂ emissions 1990 to 2000****Gigagrams**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	8,450	7,871	8,017	7,883	7,723	8,546	9,788	10,053	10,690	9,997	10,607
Belgium	33,023	32,405	30,147	28,933	31,710	32,014	29,866	30,648	31,545	31,490	32,344
Canada	62,090	58,301	57,585	57,401	60,670	61,490	64,199	64,334	61,109	60,918	67,778
Czech Republic	59,457						43,867	43,341	35,376	34,156	36,130
Denmark	5,605	6,012	5,873	5,804	6,300	6,705	6,888	6,763	6,081	6,129	5,823
Estonia	2,655	1,903	1,231	653	907	633	730	655	666	660	483
European Community	649,732	626,131	601,231	579,877	598,780	616,996	603,417	613,732	598,785	589,543	594,615
Finland	14,358	13,840	13,505	13,205	13,987	13,866	13,534	15,194	15,282	15,844	15,956
France	84,924	85,806	82,313	79,277	81,946	81,734	82,500	84,439	86,770	80,904	81,081
Greece	9,792	9,695	9,327	9,070	8,897	9,603	10,412	10,570	10,772	9,552	10,415
Hungary	7,893	6,380	5,131	5,548	6,306	6,352	6,199	4,905	8,629	9,924	10,826
Iceland	200	137	202	221	207	211	255	267	269	301	320
Ireland	3,833	3,842	3,620	3,599	3,709	3,528	3,512	3,988	3,917	4,238	4,743
Italy	85,946	82,372	81,907	82,453	84,420	89,369	87,121	91,961	77,811	80,484	79,752
Latvia	2,683	1,682	1,339	1,106	1,772	1,038	741	1,243	1,275	1,146	1,003
Luxembourg ^a										1,785	1,734
Netherlands	41,889	42,660	42,510	39,920	40,950	43,084	42,239	39,010	43,244	43,150	43,003
New Zealand	4,757	5,157	4,818	4,962	5,303	5,448	5,847	5,882	5,829	5,850	6,301
Norway	3,465	3,209	3,117	3,310	4,003	3,637	4,158	4,249	4,427	4,276	4,029
Poland	49,999	37,186	37,259	52,869	68,068	68,122	74,682	70,024	63,186	53,271	52,056
Portugal	8,797	9,062	8,938	8,809	9,325	9,045	9,500	9,376	9,599	10,205	10,056
Slovakia											13,302
Spain	44,530	45,922	44,948	43,601	48,248	53,437	47,941	53,195	53,799	56,699	58,203
Sweden	11,776	11,550	10,261	11,418	12,861	13,370	12,784	12,997	12,660	11,991	12,558
Switzerland	5,237	5,410	4,994	4,862	4,861	5,098	4,853	4,736	4,893	5,500	5,577
United Kingdom	94,133	94,819	93,761	92,436	93,858	91,653	92,534	93,229	90,434	89,698	86,510
United States	871,797	847,509	881,962	872,744	894,570	895,055	936,741	935,376	881,275	858,280	829,417

^a 1999 value is taken from the previous submission.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-6.8	1.9	-1.7	-2.0	10.7	14.5	2.7	6.3	-6.5	6.1	25.5
Belgium	-1.9	-7.0	-4.0	9.6	1.0	-6.7	2.6	2.9	-0.2	2.7	-2.1
Canada	-6.1	-1.2	-0.3	5.7	1.4	4.4	0.2	-5.0	-0.3	11.3	9.2
Czech Republic							-1.2	-18.4	-3.4	5.8	-39.2
Denmark	7.3	-2.3	-1.2	8.6	6.4	2.7	-1.8	-10.1	0.8	-5.0	3.9
Estonia	-28.3	-35.3	-47.0	39.0	-30.2	15.2	-10.2	1.7	-1.0	-26.8	-81.8
European Community	-3.6	-4.0	-3.6	3.3	3.0	-2.2	1.7	-2.4	-1.5	0.9	-8.5
Finland	-3.6	-2.4	-2.2	5.9	-0.9	-2.4	12.3	0.6	3.7	0.7	11.1
France	1.0	-4.1	-3.7	3.4	-0.3	0.9	2.4	2.8	-6.8	0.2	-4.5
Greece	-1.0	-3.8	-2.8	-1.9	7.9	8.4	1.5	1.9	-11.3	9.0	6.4
Hungary	-19.2	-19.6	8.1	13.7	0.7	-2.4	-20.9	75.9	15.0	9.1	37.2
Iceland	-31.5	47.8	9.5	-6.7	2.4	20.8	4.3	1.0	11.9	6.1	60.0
Ireland	0.2	-5.8	-0.6	3.0	-4.9	-0.5	13.5	-1.8	8.2	11.9	23.7
Italy	-4.2	-0.6	0.7	2.4	5.9	-2.5	5.6	-15.4	3.4	-0.9	-7.2
Latvia	-37.3	-20.4	-17.4	60.1	-41.4	-28.6	67.7	2.6	-10.1	-12.5	-62.6
Luxembourg										-2.9	
Netherlands	1.8	-0.4	-6.1	2.6	5.2	-2.0	-7.6	10.9	-0.2	-0.3	2.7
New Zealand	8.4	-6.6	3.0	6.9	2.7	7.3	0.6	-0.9	0.4	7.7	32.5
Norway	-7.4	-2.9	6.2	21.0	-9.2	14.3	2.2	4.2	-3.4	-5.8	16.3
Poland	-25.6	0.2	41.9	28.7	0.1	9.6	-6.2	-9.8	-15.7	-2.3	4.1
Portugal	3.0	-1.4	-1.4	5.9	-3.0	5.0	-1.3	2.4	6.3	-1.5	14.3
Slovakia											
Spain	3.1	-2.1	-3.0	10.7	10.8	-10.3	11.0	1.1	5.4	2.7	30.7
Sweden	-1.9	-11.2	11.3	12.6	4.0	-4.4	1.7	-2.6	-5.3	4.7	6.6
Switzerland	3.3	-7.7	-2.7	0.0	4.9	-4.8	-2.4	3.3	12.4	1.4	6.5
United Kingdom	0.7	-1.1	-1.4	1.5	-2.3	1.0	0.8	-3.0	-0.8	-3.6	-8.1
United States	-2.8	4.1	-1.0	2.5	0.1	4.7	-0.1	-5.8	-2.6	-3.4	-4.9

Energy - Manufacturing industries and construction by fuel type: liquid

Trends in CO₂ emissions 1990 to 2000

Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	3,637	2,854	3,097	2,749	2,537	3,072	3,327	3,260	3,675	2,962	3,110
Belgium											
Canada	15,451	13,177	12,511	12,824	13,559	12,395	12,735	12,367	11,793	11,290	11,697
Czech Republic ^{a, b}	9,917								7,451	7,533	7,689
Denmark	2,843	3,036	3,033	2,750	2,858	3,002	3,071	2,878	2,527	2,500	2,440
Estonia ^b											95
European Community											
Finland	4,294	3,888	3,888	3,754	3,864	3,611	3,580	4,018	4,101	4,790	4,775
France	31,266	31,319	28,489	30,656	28,791	29,071	29,402	29,096	30,415	26,180	24,424
Greece	5,479	5,272	5,274	4,904	4,927	5,654	6,558	6,860	6,576	6,028	6,311
Hungary ^a									1,353	2,477	2,509
Iceland											280
Ireland	2,007	1,973	2,133	2,126	2,514	2,372	2,288	2,761	2,382	2,540	3,132
Italy ^a									24,720	26,109	24,015
Latvia										625	466
Luxembourg ^a										370	
Netherlands	2,978					2,083	3,658	2,445	2,471	670	2,719
New Zealand ^{a, b}		706	763	639	690	704	732	708			693
Norway	2,811								3,156	3,043	2,727
Poland											6,288
Portugal	6,013	6,270	6,113	6,058	6,566	6,639	7,046	7,043	7,178	7,314	6,732
Slovakia ^b											2,014
Spain	22,930	23,217	23,048	23,754	26,562	29,299	25,139	27,925	27,925	27,962	25,578
Sweden	7,391	6,602	6,591	7,269	8,036	8,635	8,099	8,771	8,424	8,116	7,843
Switzerland ^b											2,455
United Kingdom	27,460	29,132	29,988	30,347	30,208	27,376	27,096	25,157	22,709	21,099	20,780
United States	377,803	356,451	391,415	369,164	383,484	365,142	396,239	398,674	381,734	368,175	355,088

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-21.5	8.5	-11.2	-7.7	21.1	8.3	-2.0	12.7	-19.4	5.0	-14.5
Belgium											
Canada	-14.7	-5.1	2.5	5.7	-8.6	2.7	-2.9	-4.6	-4.3	3.6	-24.3
Czech Republic	-100.0								1.1	2.1	-22.5
Denmark	6.8	-0.1	-9.3	3.9	5.0	2.3	-6.3	-12.2	-1.1	-2.4	-14.2
Estonia											
European Community											
Finland	-9.4	0.0	-3.5	2.9	-6.5	-0.9	12.2	2.1	16.8	-0.3	11.2
France	0.2	-9.0	7.6	-6.1	1.0	1.1	-1.0	4.5	-13.9	-6.7	-21.9
Greece	-3.8	0.0	-7.0	0.5	14.8	16.0	4.6	-4.1	-8.3	4.7	15.2
Hungary									83.1	1.3	
Iceland											
Ireland	-1.7	8.1	-0.3	18.2	-5.7	-3.6	20.7	-13.7	6.7	23.3	56.0
Italy									5.6	-8.0	
Latvia										-25.4	
Luxembourg										-100.0	
Netherlands	-100.0					75.7	-33.2	1.1	-72.9	305.9	-8.7
New Zealand		8.1	-16.2	8.0	1.9	4.0	-3.3	-100.0			
Norway	-100.0								-3.6	-10.4	-3.0
Poland											
Portugal	4.3	-2.5	-0.9	8.4	1.1	6.1	0.0	1.9	1.9	-8.0	12.0
Slovakia											
Spain	1.3	-0.7	3.1	11.8	10.3	-14.2	11.1	0.0	0.1	-8.5	11.6
Sweden	-10.7	-0.2	10.3	10.5	7.5	-6.2	8.3	-4.0	-3.7	-3.4	6.1
Switzerland											
United Kingdom	6.1	2.9	1.2	-0.5	-9.4	-1.0	-7.2	-9.7	-7.1	-1.5	-24.3
United States	-5.7	9.8	-5.7	3.9	-4.8	8.5	0.6	-4.2	-3.6	-3.6	-6.0

Energy - Manufacturing industries and construction by fuel type: solid**Trends in CO₂ emissions 1990 to 2000
Gigagrams**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	609	731	636	729	628	629	635	675	704	675	828
Belgium											
Canada	7,175	6,457	6,128	5,768	6,717	6,514	6,773	6,940	6,663	6,817	7,340
Czech Republic ^{a, b}	43,555								20,758	19,370	21,737
Denmark	1,429	1,556	1,369	1,462	1,551	1,589	1,573	1,481	1,207	1,157	1,104
Estonia ^b											324
European Community											
Finland	6,410	5,699	5,467	5,305	5,864	5,665	5,399	5,875	5,780	5,734	5,965
France	27,747	27,611	28,185	22,961	27,131	24,870	23,934	24,904	23,795	23,206	23,282
Greece	4,144	4,254	3,902	4,063	3,948	3,928	3,826	3,557	3,585	2,852	3,347
Hungary ^a									2,535	2,238	2,443
Iceland											34
Ireland	970	1,002	650	686	495	436	511	368	625	763	319
Italy ^a									15,412	15,298	14,558
Latvia										67	53
Luxembourg ^a										549	
Netherlands	5,738					5,229	2,715	2,008	1,400	1,075	1,426
New Zealand ^{a, b}		1,987	1,775	2,000	1,944	1,798	1,733	1,693			1,402
Norway	654								903	775	838
Poland											39,615
Portugal	2,781	2,792	2,826	2,752	2,758	2,406	2,454	2,201	1,866	1,845	1,897
Slovakia ^b											4,163
Spain	13,462	14,349	12,833	10,291	11,426	9,692	8,001	7,913	6,182	5,648	5,922
Sweden	3,211	3,600	3,031	3,101	3,225	3,221	3,156	3,155	3,096	2,921	3,233
Switzerland ^b											80
United Kingdom	37,516	37,797	37,937	35,529	34,102	32,640	30,587	31,115	29,308	27,907	23,108
United States	135,862	134,318	128,466	129,567	132,145	131,214	125,490	126,918	121,359	116,965	102,819

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	20.2	-13.0	14.5	-13.8	0.0	1.1	6.3	4.3	-4.1	22.6	36.0
Belgium											
Canada	-10.0	-5.1	-5.9	16.5	-3.0	4.0	2.5	-4.0	2.3	7.7	2.3
Czech Republic									-6.7	12.2	-50.1
Denmark	8.9	-12.0	6.8	6.1	2.4	-1.0	-5.9	-18.4	-4.2	-4.6	-22.7
Estonia											
European Community											
Finland	-11.1	-4.1	-3.0	10.5	-3.4	-4.7	8.8	-1.6	-0.8	4.0	-6.9
France	-0.5	2.1	-18.5	18.2	-8.3	-3.8	4.1	-4.5	-2.5	0.3	-16.1
Greece	2.7	-8.3	4.1	-2.8	-0.5	-2.6	-7.0	0.8	-20.4	17.3	-19.2
Hungary									-11.7	9.1	
Iceland											
Ireland	3.3	-35.2	5.6	-27.8	-12.0	17.3	-27.9	69.6	22.2	-58.2	-67.1
Italy									-0.7	-4.8	
Latvia										-21.7	
Luxembourg											
Netherlands						-48.1	-26.0	-30.3	-23.2	32.7	-75.1
New Zealand		-10.7	12.7	-2.8	-7.5	-3.6	-2.3				
Norway									-14.2	8.2	28.2
Poland											
Portugal	0.4	1.2	-2.6	0.3	-12.8	2.0	-10.3	-15.2	-1.2	2.9	-31.8
Slovakia											
Spain	6.6	-10.6	-19.8	11.0	-15.2	-17.4	-1.1	-21.9	-8.6	4.8	-56.0
Sweden	12.1	-15.8	2.3	4.0	-0.1	-2.0	-0.1	-1.9	-5.6	10.7	0.7
Switzerland											
United Kingdom	0.7	0.4	-6.3	-4.0	-4.3	-6.3	1.7	-5.8	-4.8	-17.2	-38.4
United States	-1.1	-4.4	0.9	2.0	-0.7	-4.4	1.1	-4.4	-3.6	-12.1	-24.3

Energy - Manufacturing and construction by fuel type: gaseous

Trends in CO₂ emissions 1990 to 2000

Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	4,005	4,095	4,082	4,205	4,549	4,837	5,777	6,066	6,271	6,300	6,618
Belgium											
Canada	39,465	38,667	38,946	38,809	40,394	42,582	44,691	45,027	42,652	42,811	48,741
Czech Republic ^{a, b}	5,984								7,167	7,252	6,704
Denmark	1,333	1,419	1,471	1,592	1,892	2,115	2,244	2,405	2,347	2,472	2,279
Estonia ^b											64
European Community											
Finland	2,094	2,751	2,751	2,620	2,380	2,570	2,419	2,379	2,672	2,724	2,783
France	24,643	25,645	23,958	24,026	24,504	26,195	27,469	28,405	30,940	29,782	31,347
Greece	169	169	151	103	22	21	28	152	611	672	756
Hungary ^a									4,742	4,781	5,254
Iceland											0
Ireland	856	867	837	787	699	720	713	858	911	934	1,293
Italy ^a									37,656	39,046	41,132
Latvia										454	484
Luxembourg ^a										866	
Netherlands	21,014					15,928	22,200	12,284	13,479	14,164	20,473
New Zealand ^{a, b}		2,464	2,279	2,322	2,669	2,946	3,381	3,482			4,206
Norway									369	458	464
Poland											6,153
Portugal								132	554	1,046	1,426
Slovakia ^b											3,412
Spain	8,138	8,356	9,067	9,556	10,260	14,446	14,784	17,338	19,661	23,010	26,613
Sweden	600	560	571	618	712	645	711	686	701	685	663
Switzerland ^b											1,581
United Kingdom	29,157	27,890	25,836	26,559	29,506	31,553	34,767	36,888	38,365	40,637	42,567
United States	357,975	356,581	361,913	373,829	378,746	398,500	414,803	409,570	377,965	372,919	371,292

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	2.2	-0.3	3.0	8.2	6.3	19.4	5.0	3.4	0.4	5.1	65.3
Belgium											
Canada	-2.0	0.7	-0.4	4.1	5.4	5.0	0.8	-5.3	0.4	13.9	23.5
Czech Republic									1.2	-7.6	12.0
Denmark	6.5	3.7	8.2	18.8	11.8	6.1	7.2	-2.4	5.3	-7.8	71.0
Estonia											
European Community											
Finland	31.4	0.0	-4.8	-9.2	8.0	-5.9	-1.6	12.3	1.9	2.2	32.9
France	4.1	-6.6	0.3	2.0	6.9	4.9	3.4	8.9	-3.7	5.3	27.2
Greece	0.1	-10.6	-31.9	-78.2	-8.0	37.7	435.9	300.9	10.0	12.5	347.5
Hungary									0.8	9.9	
Iceland											
Ireland	1.3	-3.4	-6.0	-11.1	3.0	-1.0	20.3	6.2	2.5	38.4	51.1
Italy									3.7	5.3	
Latvia										6.6	
Luxembourg											
Netherlands						39.4	-44.7	9.7	5.1	44.5	-2.6
New Zealand		-7.5	1.9	14.9	10.4	14.8	3.0				
Norway									24.2	1.1	
Poland											
Portugal								319.8	88.7	36.3	
Slovakia											
Spain	2.7	8.5	5.4	7.4	40.8	2.3	17.3	13.4	17.0	15.7	227.0
Sweden	-6.7	2.0	8.2	15.3	-9.5	10.2	-3.5	2.2	-2.3	-3.3	10.5
Switzerland											
United Kingdom	-4.3	-7.4	2.8	11.1	6.9	10.2	6.1	4.0	5.9	4.7	46.0
United States	-0.4	1.5	3.3	1.3	5.2	4.1	-1.3	-7.7	-1.3	-0.4	3.7

Energy - Manufacturing industries and constructionContribution (%) of each fuel type to total CO₂ emissions 1990 and 2000

	Liquid fuels		Solid fuels		Gaseous fuels	
	1990	2000	1990	2000	1990	2000
Austria	43.0	29.3	7.2	7.8	47.4	62.4
Belgium						
Canada	8.3	17.3	3.9	10.8	21.2	71.9
Czech Republic	16.7	21.3	73.3	60.2	10.1	18.6
Denmark	50.7	41.9	25.5	19.0	23.8	39.1
Estonia		19.6		67.1		13.3
European Community						
Finland	29.9	29.9	44.6	37.4	14.6	17.4
France	36.8	30.1	32.7	28.7	29.0	38.7
Greece	56.0	60.6	42.3	32.1	1.7	7.3
Hungary		23.2		22.6		48.5
Iceland		87.8		10.8		0.0
Ireland		66.0		6.7		27.3
Italy		30.1		18.3		51.6
Latvia		46.5		5.2		48.2
Luxembourg						
Netherlands	7.1	6.3	13.7	3.3	50.2	47.6
New Zealand		11.0		22.3		66.7
Norway	81.1	67.7	18.9	20.8	0.0	11.5
Poland		12.1		76.1		11.8
Portugal	68.4	66.9	31.6	18.9	0.0	14.2
Slovakia		15.1		31.3		25.7
Spain	51.5	43.9	30.2	10.2	18.3	45.7
Sweden	62.8	62.5	27.3	25.7	5.1	5.3
Switzerland		44.0		1.4		28.3
United Kingdom	29.2	24.0	39.9	26.7	31.0	49.2
United States	43.3	42.8	15.6	12.4	41.1	44.8

Energy - Other sectors (commercial/institutional, residential, agricultural/forestry/fisheries): all fuel types

Trends in CO₂ emissions 1990 to 2000
Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	13,908	16,391	15,001	15,770	15,297	15,540	15,379	14,749	13,398	14,331	13,638
Belgium	28,005	30,365	30,354	30,510	30,321	30,907	36,166	31,383	31,689	30,850	30,425
Canada	69,415	68,821	71,091	73,881	73,489	73,957	79,476	76,576	68,085	71,828	76,701
Czech Republic	32,577						17,936	20,013	19,624	17,481	15,874
Denmark	8,959	9,238	8,444	9,089	8,407	8,485	9,173	8,494	8,139	8,095	7,482
Estonia	2,392	1,664	1,034	987	969	994	1,153	1,281	1,140	1,083	1,036
European Community	635,943	677,812	646,189	658,456	627,881	635,873	697,624	651,076	649,316	636,026	619,478
Finland	7,571	7,206	7,354	6,608	6,883	6,679	6,483	6,598	6,659	6,369	5,796
France	94,375	104,195	103,357	100,784	95,057	97,163	105,557	98,827	102,575	100,945	97,258
Greece	5,341	5,556	5,417	5,352	5,385	5,685	7,517	7,757	8,112	7,914	8,530
Hungary	20,877	21,749	17,306	17,591	16,960	16,762	18,091	16,221	13,451	13,385	13,180
Iceland	704	723	784	817	799	811	870	839	817	801	748
Ireland	9,726	9,696	9,388	9,049	9,549	9,317	9,092	9,421	9,974	9,903	10,364
Italy	75,670	80,801	76,223	76,712	67,964	74,770	76,702	73,807	77,453	81,560	77,349
Latvia	5,957	4,282	3,321	3,502	3,030	2,558	3,054	1,164	1,048		862
Luxembourg ^a										1,515	1,268
Netherlands	34,643	40,390	37,330	40,060	38,460	38,486	42,710	35,827	34,010	32,981	32,935
New Zealand	2,812	2,701	2,956	2,717	2,926	2,797	2,658	2,755	2,801	2,694	2,647
Norway	4,269	3,824	3,506	3,409	3,599	3,556	4,295	3,867	3,791	3,873	3,241
Poland	55,749	59,658	70,184	70,701	64,151	56,324	64,106	60,857	50,103	54,011	45,400
Portugal	3,621	3,772	3,881	3,899	4,188	4,003	4,584	5,022	4,977	4,873	5,040
Slovakia											6,161
Spain	25,953	29,501	29,116	28,392	29,475	29,191	30,300	30,408	31,112	32,676	34,436
Sweden	10,673	10,486	9,739	9,713	9,736	9,359	9,422	8,617	8,470	8,692	7,627
Switzerland	18,631	19,810	19,830	19,100	18,023	19,013	19,810	18,785	19,402	18,435	17,167
United Kingdom	112,538	123,788	120,136	123,323	118,211	113,874	127,121	117,295	118,779	117,674	118,322
United States	549,373	560,840	570,246	588,644	580,617	586,246	623,239	608,569	559,331	580,296	614,089

^a 1999 value is taken from the previous submission.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	17.9	-8.5	5.1	-3.0	1.6	-1.0	-4.1	-9.2	7.0	-4.8	-1.9
Belgium	8.4	0.0	0.5	-0.6	1.9	17.0	-13.2	1.0	-2.6	-1.4	8.6
Canada	-0.9	3.3	3.9	-0.5	0.6	7.5	-3.6	-11.1	5.5	6.8	10.5
Czech Republic							11.6	-1.9	-10.9	-9.2	-51.3
Denmark	3.1	-8.6	7.6	-7.5	0.9	8.1	-7.4	-4.2	-0.5	-7.6	-16.5
Estonia	-30.4	-37.9	-4.5	-1.8	2.5	16.0	11.1	-11.0	-5.0	-4.3	-56.7
European Community	6.6	-4.7	1.9	-4.6	1.3	9.7	-6.7	-0.3	-2.0	-2.6	-2.6
Finland	-4.8	2.1	-10.1	4.2	-3.0	-2.9	1.8	0.9	-4.4	-9.0	-23.4
France	10.4	-0.8	-2.5	-5.7	2.2	8.6	-6.4	3.8	-1.6	-3.7	3.1
Greece	4.0	-2.5	-1.2	0.6	5.6	32.2	3.2	4.6	-2.4	7.8	59.7
Hungary	4.2	-20.4	1.6	-3.6	-1.2	7.9	-10.3	-17.1	-0.5	-1.5	-36.9
Iceland	2.6	8.6	4.1	-2.2	1.5	7.3	-3.6	-2.6	-1.9	-6.6	6.2
Ireland	-0.3	-3.2	-3.6	5.5	-2.4	-2.4	3.6	5.9	-0.7	4.7	6.6
Italy	6.8	-5.7	0.6	-11.4	10.0	2.6	-3.8	4.9	5.3	-5.2	2.2
Latvia	-28.1	-22.4	5.4	-13.5	-15.6	19.4	-61.9	-10.0	-6.6	-11.8	-85.5
Luxembourg											-16.3
Netherlands	16.6	-7.6	7.3	-4.0	0.1	11.0	-16.1	-5.1	-3.0	-0.1	-4.9
New Zealand	-3.9	9.4	-8.1	7.7	-4.4	-5.0	3.6	1.7	-3.8	-1.7	-5.9
Norway	-10.4	-8.3	-2.7	5.6	-1.2	20.8	-10.0	-2.0	2.2	-16.3	-24.1
Poland	7.0	17.6	0.7	-9.3	-12.2	13.8	-5.1	-17.7	7.8	-15.9	-18.6
Portugal	4.2	2.9	0.5	7.4	-4.4	14.5	9.6	-0.9	-2.1	3.4	39.2
Slovakia											
Spain	13.7	-1.3	-2.5	3.8	-1.0	3.8	0.4	2.3	5.0	5.4	32.7
Sweden	-1.7	-7.1	-0.3	0.2	-3.9	0.7	-8.5	-1.7	2.6	-12.2	-28.5
Switzerland	6.3	0.1	-3.7	-5.6	5.5	4.2	-5.2	3.3	-5.0	-6.9	-7.9
United Kingdom	10.0	-2.9	2.7	-4.1	-3.7	11.6	-7.7	1.3	-0.9	0.5	5.1
United States	2.1	1.7	3.2	-1.4	1.0	6.3	-2.4	-8.1	3.7	5.8	11.8

Energy - Other sectors (commercial/institutional, residential, agricultural/forestry/fisheries) by fuel type: liquid**Trends in CO₂ emissions 1990 to 2000****Gigagrams**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	8,456	9,934	8,944	9,563	9,084	9,258	9,470	9,549	8,568	8,913	8,080
Belgium											
Canada	22,239	20,718	21,249	21,095	20,601	20,055	21,012	20,486	17,721	18,258	19,418
Czech Republic ^{a, b}	2,618								1,074	960	774
Denmark	7,163	7,105	6,346	6,685	6,080	5,982	6,297	5,807	5,559	5,419	4,948
Estonia ^b											794
European Community											
Finland	7,274	6,969	7,117	6,437	6,703	6,488	5,989	6,090	6,265	5,972	5,490
France	59,845	64,117	64,590	61,938	57,469	59,299	62,489	58,632	59,443	58,174	53,736
Greece	5,204	5,365	5,220	5,139	5,188	5,484	7,295	7,546	7,914	7,775	8,369
Hungary ^a									2,081	1,146	1,165
Iceland											748
Ireland	3,670	3,849	3,918	3,971	4,782	4,712	4,829	5,000	5,235	5,840	6,247
Italy ^a									23,677	23,918	22,204
Latvia										418	373
Luxembourg ^a										870	
Netherlands	1,748					1,093	818	602	607	611	571
New Zealand ^{a, b}		1,464	1,787	1,451	1,676	1,612	1,489	1,615			1,600
Norway	4,230								3,775	3,858	3,226
Poland											14,312
Portugal	3,621	3,772	3,881	3,899	4,188	4,003	4,584	5,016	4,941	4,746	4,734
Slovakia ^b											35
Spain	22,285	24,830	23,819	23,363	24,642	24,792	25,365	25,086	25,182	26,128	27,219
Sweden	10,332	10,160	9,454	9,407	9,457	9,062	9,116	8,321	8,158	8,372	7,315
Switzerland ^b											13,069
United Kingdom	20,156	21,157	21,443	21,721	21,228	20,456	21,917	20,036	19,825	17,912	16,792
United States	153,824	152,004	149,967	150,747	147,528	145,946	154,258	149,658	138,809	147,608	154,001

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/ or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	17.5	-10.0	6.9	-5.0	1.9	2.3	0.8	-10.3	4.0	-9.3	-4.4
Belgium											
Canada	-6.8	2.6	-0.7	-2.3	-2.6	4.8	-2.5	-13.5	3.0	6.4	-12.7
Czech Republic									-10.6	-19.3	-70.4
Denmark	-0.8	-10.7	5.4	-9.1	-1.6	5.3	-7.8	-4.3	-2.5	-8.7	-30.9
Estonia											
European Community											
Finland	-4.2	2.1	-9.5	4.1	-3.2	-7.7	1.7	2.9	-4.7	-8.1	-24.5
France	7.1	0.7	-4.1	-7.2	3.2	5.4	-6.2	1.4	-2.1	-7.6	-10.2
Greece	3.1	-2.7	-1.6	0.9	5.7	33.0	3.4	4.9	-1.8	7.6	60.8
Hungary									-44.9	1.7	
Iceland											
Ireland	4.9	1.8	1.4	20.4	-1.5	2.5	3.5	4.7	11.5	7.0	70.2
Italy									1.0	-7.2	
Latvia										-10.8	
Luxembourg											
Netherlands						-25.2	-26.4	0.9	0.6	-6.4	-67.3
New Zealand		22.0	-18.8	15.5	-3.8	-7.7	8.5				
Norway									2.2	-16.4	-23.7
Poland											
Portugal	4.2	2.9	0.5	7.4	-4.4	14.5	9.4	-1.5	-4.0	-0.3	30.7
Slovakia											
Spain	11.4	-4.1	-1.9	5.5	0.6	2.3	-1.1	0.4	3.8	4.2	22.1
Sweden	-1.7	-7.0	-0.5	0.5	-4.2	0.6	-8.7	-2.0	2.6	-12.6	-29.2
Switzerland											
United Kingdom	5.0	1.4	1.3	-2.3	-3.6	7.1	-8.6	-1.1	-9.6	-6.3	-16.7
United States	-1.2	-1.3	0.5	-2.1	-1.1	5.7	-3.0	-7.2	6.3	4.3	0.1

Energy - Other sectors (commercial/institutional, residential, agricultural/forestry/fisheries) by fuel type: solid

Trends in CO₂ emissions 1990 to 2000

Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	2,559	3,034	2,256	1,958	2,040	1,650	1,835	1,560	1,243	1,213	1,107
Belgium											
Canada	191	190	166	160	142	195	193	179	158	151	202
Czech Republic ^{a, b}	25,370								9,221	7,060	6,767
Denmark	318	403	319	300	300	224	158	138	98	85	107
Estonia ^b											125
European Community											
Finland	57	13	13	16	15	19	25	9	26	24	24
France	4,403	4,414	3,098	2,549	1,759	2,502	2,216	1,484	1,165	1,205	1,005
Greece	120	172	175	193	180	181	203	191	167	112	131
Hungary ^a									1,082	1,157	901
Iceland											
Ireland	5,587	5,177	4,750	3,830	3,828	3,625	3,103	3,287	3,439	2,607	2,433
Italy ^a									306	297	296
Latvia										268	207
Luxembourg ^a										25	
Netherlands	77					28	32	26	35	27	27
New Zealand ^{a, b}		788	693	770	737	671	637	613			484
Norway	35								14	11	11
Poland											22,670
Portugal											
Slovakia ^b											1,690
Spain	2,300	2,752	2,897	2,325	2,010	1,440	1,371	1,350	1,258	906	885
Sweden	157	104	58	45	25	12	5	16	8	0	0
Switzerland ^b											21
United Kingdom	19,445	20,543	17,443	18,642	15,534	11,190	11,642	10,520	9,406	9,501	7,748
United States	14,562	13,288	13,504	13,392	12,981	12,621	12,835	13,653	10,443	10,997	10,997

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	18.6	-25.6	-13.2	4.2	-19.1	11.2	-15.0	-20.3	-2.5	-8.7	-56.7
Belgium											
Canada	-0.7	-12.5	-4.1	-11.0	36.9	-0.8	-7.3	-12.0	-4.2	33.8	5.4
Czech Republic									-23.4	-4.1	-73.3
Denmark	26.7	-20.9	-6.0	-0.1	-25.2	-29.5	-13.0	-28.7	-13.8	26.2	-66.5
Estonia											
European Community											
Finland	-77.4	0.0	22.7	-3.8	25.2	32.3	-62.8	175.3	-5.1	-2.3	-58.1
France	0.3	-29.8	-17.7	-31.0	42.2	-11.4	-33.0	-21.5	3.4	-16.6	-77.2
Greece	43.8	1.4	10.2	-6.7	0.8	12.2	-6.1	-12.5	-32.8	16.8	9.3
Hungary									6.9	-22.1	
Iceland											
Ireland	-7.3	-8.2	-19.4	0.0	-5.3	-14.4	5.9	4.6	-24.2	-6.7	-56.4
Italy									-3.0	-0.2	
Latvia										-22.6	
Luxembourg											
Netherlands						14.1	-17.1	33.5	-24.2	1.1	-65.0
New Zealand		-12.0	11.0	-4.3	-8.9	-5.1	-3.8				
Norway									-16.4	-7.0	-69.6
Poland											
Portugal											
Slovakia											
Spain	19.6	5.3	-19.8	-13.5	-28.4	-4.8	-1.5	-6.8	-28.0	-2.2	-61.5
Sweden	-33.3	-44.9	-21.4	-45.5	-50.0	-60.0	217.0	-50.0	-100.0		-100.0
Switzerland											
United Kingdom	5.6	-15.1	6.9	-16.7	-28.0	4.0	-9.6	-10.6	1.0	-18.5	-60.2
United States	-8.8	1.6	-0.8	-3.1	-2.8	1.7	6.4	-23.5	5.3	0.0	-24.5

Energy - Other sectors (commercial/institutional, residential, agricultural/forestry/fisheries) by fuel type: gaseous

Trends in CO₂ emissions 1990 to 2000

Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	2,889	3,415	3,800	4,249	4,169	4,626	4,069	3,634	3,581	4,206	4,451
Belgium											
Canada	46,985	47,912	49,675	52,627	52,746	53,708	58,271	55,911	50,207	53,419	57,081
Czech Republic ^{a, b}	4,589								8,185	8,191	8,332
Denmark	1,478	1,729	1,779	2,104	2,027	2,278	2,717	2,550	2,482	2,592	2,427
Estonia ^b											99
European Community											
Finland	99	116	116	132	137	142	297	322	241	260	181
France	30,057	35,594	35,599	36,226	35,758	35,293	40,798	38,639	41,871	41,488	42,446
Greece	17	19	21	20	18	19	19	20	31	26	30
Hungary ^a									10,288	11,082	11,115
Iceland											0
Ireland	469	614	720	849	938	980	1,159	1,134	1,300	1,456	1,684
Italy ^a									48,112	50,286	48,287
Latvia										291	282
Luxembourg ^a										620	
Netherlands	32,468					36,901	41,810	35,162	33,260	32,166	32,294
New Zealand ^{a, b}		449	475	497	513	513	532	528			564
Norway									1	3	3
Poland											8,418
Portugal								6	36	127	306
Slovakia ^b											4,435
Spain	1,367	1,920	2,400	2,704	2,822	2,959	3,564	3,972	4,672	5,642	6,332
Sweden	184	221	227	261	255	285	301	281	304	320	312
Switzerland ^p											3,500
United Kingdom	72,878	82,024	81,190	82,907	81,393	82,169	93,501	86,721	89,519	90,223	93,690
United States	380,987	395,548	406,774	424,505	420,107	427,679	456,146	445,258	410,079	421,691	449,091

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	18.2	11.3	11.8	-1.9	10.9	-12.0	-10.7	-1.5	17.4	5.8	54.0
Belgium											
Canada	2.0	3.7	5.9	0.2	1.8	8.5	-4.0	-10.2	6.4	6.9	21.5
Czech Republic									0.1	1.7	81.6
Denmark	17.0	2.9	18.3	-3.7	12.4	19.3	-6.1	-2.7	4.4	-6.4	64.3
Estonia											
European Community											
Finland	17.7	0.0	13.5	4.5	3.6	108.6	8.5	-25.3	7.9	-30.4	83.6
France	18.4	0.0	1.8	-1.3	-1.3	15.6	-5.3	8.4	-0.9	2.3	41.2
Greece	9.2	14.8	-4.7	-13.0	7.6	0.0	4.4	56.6	-14.8	15.0	79.3
Hungary									7.7	0.3	
Iceland											
Ireland	30.9	17.2	17.9	10.6	4.4	18.3	-2.2	14.6	12.0	15.6	258.8
Italy									4.5	-4.0	
Latvia										-3.0	
Luxembourg											
Netherlands						13.3	-15.9	-5.4	-3.3	0.4	-0.5
New Zealand		5.9	4.5	3.2	0.2	3.7	-0.9				
Norway									106.4	6.2	
Poland											
Portugal								537.6	258.6	140.6	
Slovakia											
Spain	40.4	25.0	12.7	4.4	4.9	20.4	11.4	17.6	20.8	12.2	363.2
Sweden	20.4	2.7	14.8	-2.3	11.6	5.6	-6.6	8.3	5.2	-2.3	69.9
Switzerland											
United Kingdom	12.5	-1.0	2.1	-1.8	1.0	13.8	-7.3	3.2	0.8	3.8	28.6
United States	3.8	2.8	4.4	-1.0	1.8	6.7	-2.4	-7.9	2.8	6.5	17.9

Energy - Other sectors (commercial/institutional, residential, agricultural/forestry/fisheries)Contribution (%) of each fuel type to total CO₂ emissions 1990 and 2000

	Liquid fuels		Solid fuels		Gaseous fuels	
	1990	2000	1990	2000	1990	2000
Austria	60.8	59.2	18.4	8.1	20.8	32.6
Belgium						
Canada	10.7	25.3	0.1	0.3	22.6	74.4
Czech Republic	8.0	4.9	77.9	42.6	14.1	52.5
Denmark	80.0	66.1	3.6	1.4	16.5	32.4
Estonia		76.7		12.1		9.6
European Community						
Finland	96.1	94.7	0.7	0.4	1.3	3.1
France	63.4	55.3	4.7	1.0	31.8	43.6
Greece	97.4	98.1	2.2	1.5	0.3	0.4
Hungary		8.8		6.8		84.3
Iceland		100.0		0.0		0.0
Ireland		60.3		23.5		16.2
Italy		28.7		0.4		62.4
Latvia		43.2		24.1		32.7
Luxembourg						
Netherlands	5.0	1.7	0.2	0.1	93.7	98.1
New Zealand		60.4		18.3		21.3
Norway	99.1	99.5	0.8	0.3	0.0	0.1
Poland		31.5		49.9		18.5
Portugal	100.0	93.9	0.0	0.0	0.0	6.1
Slovakia		0.6		27.4		72.0
Spain	85.9	79.0	8.9	2.6	5.3	18.4
Sweden	96.8	95.9	1.5	0.0	1.7	4.1
Switzerland		76.1		0.1		20.4
United Kingdom	17.9	14.2	17.3	6.5	64.8	79.2
United States	28.0	25.1	2.7	1.8	69.3	73.1

Energy - Stationary fuel combustion: all types of fuel

Total energy consumption from fuel combustion 1990 to 2000

Terajoules

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	709,799	738,156	681,492	688,254	696,128	742,909	787,292	786,891	764,643	754,645	737,511
Belgium											
Canada	4,844,702	4,758,905	4,939,297	4,904,699	5,107,172	5,202,431	5,333,677	5,391,626	5,467,150	5,696,048	6,047,602
Czech Republic ^{a, b}	1,735,609								1347911	1274971	1,340,798
Denmark	556,230	669,945	608,775	641,643	689,167	673,047	832,468	732,507	678,091	647,631	609,415
Estonia ^b											198,404
European Community											
Finland	685,933	688,212	663,712	705,838	796,796	785,829	847,858	858,127	824,918	829,369	817,179
France	3,571,617	3,971,523	3,822,346	3,607,712	3,466,216	3,548,526	3,781,187	3,626,182	3,900,676	3,719,130	3,655,183
Greece	627,642	621,971	634,627	628,600	643,723	653,550	698,083	732,144	771,628	762,566	839,102
Hungary ^a									684,660	739,738	724,341
Iceland ^b										14,889	14,994
Ireland	305,636	313,843	316,815	319,704	336,828	341,099	345,568	365,466	385,470	399,881	417,047
Italy ^a									4,578,953	4,654,091	4,733,205
Latvia										117,881	106,060
Luxembourg ^a										53,278	
Netherlands	1,822,629					1,927,397	2,035,969	1,864,876	1,850,109	1,714,128	1,694,698
New Zealand ^{a, b}		302,627	324,884	309,588	301,668	290,430	311,721	332,754			342,965
Norway	273,759	273,759	273,759	273,759	273,759	273,759	273,759	273,759	326,392	321,077	321,306
Poland											3,178,140
Portugal	475,679	490,975	528,438	501,240	492,153	534,474	498,349	502,428	555,672	636,047	601,906
Slovakia ^b											435,041
Spain	1,895,331	1,965,818	2,032,225	1,929,958	2,040,998	2,195,888	2,045,983	2,245,034	2,271,685	2,669,586	2,632,554
Sweden	548,296	573,548	549,336	569,640	638,077	621,419	693,343	614,216	624,051	606,197	589,735
Switzerland ^b											376,747
United Kingdom	5,699,500	5,866,789	5,698,434	5,621,880	5,600,248	5,598,178	5,902,397	5,656,376	5,760,176	5,722,613	5,856,130
United States	53,556,352	53,465,014	54,678,483	55,909,771	56,963,900	57,566,436	59,646,423	60,450,890	60,039,354	60,789,067	62,489,036

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), Iceland (1999), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Note:

The table accounts for the stationary fuel combustions estimated as the difference between the Fuel combustion and Transport as reported in Table 1.A(a) of the CRF.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	4.0	-7.7	1.0	1.1	6.7	6.0	-0.1	-2.8	-1.3	-2.3	3.9
Belgium											
Canada	-1.8	3.8	-0.7	4.1	1.9	2.5	1.1	1.4	4.2	6.2	24.8
Czech Republic									-5.4	5.2	-22.7
Denmark	20.4	-9.1	5.4	7.4	-2.3	23.7	-12.0	-7.4	-4.5	-5.9	9.6
Estonia											
European Community											
Finland	0.3	-3.6	6.3	12.9	-1.4	7.9	1.2	-3.9	0.5	-1.5	19.1
France	11.2	-3.8	-5.6	-3.9	2.4	6.6	-4.1	7.6	-4.7	-1.7	2.3
Greece	-0.9	2.0	-0.9	2.4	1.5	6.8	4.9	5.4	-1.2	10.0	33.7
Hungary									8.0	-2.1	
Iceland										0.7	
Ireland	2.7	0.9	0.9	5.4	1.3	1.3	5.8	5.5	3.7	4.3	36.5
Italy									1.6	1.7	
Latvia										-10.0	
Luxembourg											
Netherlands						5.6	-8.4	-0.8	-7.3	-1.1	-7.0
New Zealand		7.4	-4.7	-2.6	-3.7	7.3	6.7				
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.2	-1.6	0.1	17.4
Poland											
Portugal	3.2	7.6	-5.1	-1.8	8.6	-6.8	0.8	10.6	14.5	-5.4	26.5
Slovakia											
Spain	3.7	3.4	-5.0	5.8	7.6	-6.8	9.7	1.2	17.5	-1.4	38.9
Sweden	4.6	-4.2	3.7	12.0	-2.6	11.6	-11.4	1.6	-2.9	-2.7	7.6
Switzerland											
United Kingdom	2.9	-2.9	-1.3	-0.4	0.0	5.4	-4.2	1.8	-0.7	2.3	2.7
United States	-0.2	2.3	2.3	1.9	1.1	3.6	1.3	-0.7	1.2	2.8	16.7

Energy - Stationary fuel combustion by fuel type: liquid

Total energy consumption from fuel combustion 1990 to 2000
Terajoules

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	209,561	223,264	208,061	216,224	208,769	209,728	225,390	232,500	227,925	220,114	198,360
Belgium											
Canada	1,055,630	981,193	1,011,775	985,037	962,142	965,910	955,316	976,055	983,092	960,951	974,101
Czech Republic ^{a, b}	238,659								171,260	171,847	167,799
Denmark	178,432	186,657	176,483	180,348	188,604	202,976	231,807	215,546	200,730	197,741	187,055
Estonia ^b											27,516
European Community											
Finland	203,062	204,859	204,859	190,223	202,400	196,766	206,500	196,948	199,528	194,424	186,215
France	1,499,662	1,623,647	1,571,182	1,522,516	1,442,243	1,490,407	1,544,619	1,495,130	1,554,970	1,463,058	1,384,251
Greece	263,985	269,810	266,609	261,973	263,375	287,648	327,137	330,119	331,522	316,097	347,038
Hungary ^a									118,956	131,853	123,637
Iceland ^b										14,266	14,304
Ireland	92,821	104,209	107,726	107,936	129,749	123,594	126,891	137,453	151,437	173,501	174,003
Italy ^a									1,843,687	1,702,094	1,661,199
Latvia										32,538	20,485
Luxembourg ^a										17,863	
Netherlands	158,342	0	0	0	0	135,120	172,841	155,025	167,839	19,986	57,541
New Zealand ^{a, b}		34672	42695	34196	36807	37438	35091	36080			36092
Norway	135,254	135,254	135,254	135,254	135,254	135,254	135,254	135,254	141,150	143,486	127,139
Poland											398,236
Portugal	250,805	258,346	294,609	261,541	251,213	281,501	255,140	262,581	308,798	340,912	280,176
Slovakia ^a											29,016
Spain	800,098	842,253	870,710	824,609	906,391	965,732	901,769	913,604	938,253	997,173	977,470
Sweden	291,258	298,132	280,453	286,494	327,522	308,463	348,534	305,893	302,414	298,830	291,118
Switzerland ^b											212,916
United Kingdom	1,264,630	1,272,287	1,250,639	1,242,709	1,192,333	1,145,349	1,152,132	1,021,679	963,117	896,672	849,923
United States	12,783,738	12,492,015	12,798,020	12,755,571	13,075,330	12,536,855	13,189,007	13,488,630	13,575,749	13,789,536	13,496,676

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), Iceland (1999), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Note:

The table accounts for the stationary fuel combustions estimated as the difference between the Fuel combustion (liquid fuels) and Transport (gasoline + diesel) as reported in Table 1.A(a) of the CRF.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	6.5	-6.8	3.9	-3.4	0.5	7.5	3.2	-2.0	-3.4	-9.9	-5.3
Belgium											
Canada	-7.1	3.1	-2.6	-2.3	0.4	-1.1	2.2	0.7	-2.3	1.4	-7.7
Czech Republic									0.3	-2.4	-29.7
Denmark	4.6	-5.5	2.2	4.6	7.6	14.2	-7.0	-6.9	-1.5	-5.4	4.8
Estonia											
European Community											
Finland	0.9	0.0	-7.1	6.4	-2.8	4.9	-4.6	1.3	-2.6	-4.2	-8.3
France	8.3	-3.2	-3.1	-5.3	3.3	3.6	-3.2	4.0	-5.9	-5.4	-7.7
Greece	2.2	-1.2	-1.7	0.5	9.2	13.7	0.9	0.4	-4.7	9.8	31.5
Hungary									10.8	-6.2	
Iceland										0.3	
Ireland	12.3	3.4	0.2	20.2	-4.7	2.7	8.3	10.2	14.6	0.3	87.5
Italy									-7.7	-2.4	
Latvia										-37.0	
Luxembourg											
Netherlands						27.9	-10.3	8.3	-88.1	187.9	-63.7
New Zealand		23.1	-19.9	7.6	1.7	-6.3	2.8				
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	1.7	-11.4	-6.0
Poland											
Portugal	3.0	14.0	-11.2	-3.9	12.1	-9.4	2.9	17.6	10.4	-17.8	11.7
Slovakia											
Spain	5.3	3.4	-5.3	9.9	6.5	-6.6	1.3	2.7	6.3	-2.0	22.2
Sweden	2.4	-5.9	2.2	14.3	-5.8	13.0	-12.2	-1.1	-1.2	-2.6	0.0
Switzerland											
United Kingdom	0.6	-1.7	-0.6	-4.1	-3.9	0.6	-11.3	-5.7	-6.9	-5.2	-32.8
United States	-2.3	2.4	-0.3	2.5	-4.1	5.2	2.3	0.6	1.6	-2.1	5.6

Energy - Stationary fuel combustion by fuel type: solid

Total energy consumption from fuel combustion 1990 to 2000
Terajoules

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	164,348	175,005	131,345	115,636	120,060	131,113	141,939	148,522	128,103	121,975	141,682
Belgium											
Canada	969,984	1,001,969	1,030,914	938,093	983,735	996,331	1,018,462	1,091,744	1,177,288	1,180,556	1,253,914
Czech Republic ^{a, b}	1,252,660								833,685	754,074	837,053
Denmark	254,837	345,917	288,115	302,082	326,291	273,899	375,387	280,011	233,355	197,985	165,921
Estonia ^b											117,114
European Community											
Finland	167,071	162,668	142,168	161,661	213,607	178,123	220,974	206,643	148,994	149,933	149,177
France	641,150	713,930	651,906	484,185	481,805	484,287	514,004	456,149	548,886	488,642	478,655
Greece	334,230	322,768	339,089	339,093	353,490	339,155	330,268	355,720	371,863	357,388	383,191
Hungary ^a									159,620	157,839	156,413
Iceland ^b										358	371
Ireland	146,999	143,230	142,812	128,367	130,796	130,126	125,520	127,404	126,986	110,448	109,317
Italy ^a									499,944	488,624	509,385
Latvia										5,374	5,666
Luxembourg ^a										5,908	
Netherlands	312,102					322,333	279,157	259,089	267,478	174,954	243,845
New Zealand ^{a, b}		32889	36880	35163	33570	33110	32599	38172			30515
Norway	6,651	6,651	6,651	6,651	6,651	6,651	6,651	6,651	9,088	7,999	8,051
Poland											2,325,870
Portugal	112,569	118,293	120,079	128,458	133,382	145,998	137,446	137,419	124,893	153,907	150,426
Slovakia ^b											119,387
Spain	752,578	761,006	787,217	729,569	746,504	764,532	648,010	710,963	697,068	941,976	840,560
Sweden	90,035	94,304	88,426	84,347	86,207	82,739	94,759	79,571	84,479	74,154	74,171
Switzerland ^b											1,069
United Kingdom	2,512,868	2,527,153	2,375,319	2,055,485	1,913,225	1,810,570	1,684,052	1,485,926	1,500,150	1,319,830	1,389,493
United States	19,176,293	19,067,907	19,285,209	19,971,233	20,165,878	20,263,234	21,234,979	21,808,760	22,021,085	22,103,320	22,928,762

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), Iceland (1999), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Note:

The table accounts for the stationary fuel combustions estimated as the difference between the Fuel combustion (Solid fuels) and Transport (Solid fuels) as reported in Table 1.A(a) of the CRF.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	6.5	-24.9	-12.0	3.8	9.2	8.3	4.6	-13.7	-4.8	16.2	-13.8
Belgium											
Canada	3.3	2.9	-9.0	4.9	1.3	2.2	7.2	7.8	0.3	6.2	29.3
Czech Republic									-9.5	11.0	-33.2
Denmark	35.7	-16.7	4.8	8.0	-16.1	37.1	-25.4	-16.7	-15.2	-16.2	-34.9
Estonia											
European Community											
Finland	-2.6	-12.6	13.7	32.1	-16.6	24.1	-6.5	-27.9	0.6	-0.5	-10.7
France	11.4	-8.7	-25.7	-0.5	0.5	6.1	-11.3	20.3	-11.0	-2.0	-25.3
Greece	-3.4	5.1	0.0	4.2	-4.1	-2.6	7.7	4.5	-3.9	7.2	14.6
Hungary									-1.1	-0.9	
Iceland										3.6	
Ireland	-2.6	-0.3	-10.1	1.9	-0.5	-3.5	1.5	-0.3	-13.0	-1.0	-25.6
Italy									-2.3	4.2	
Latvia										5.4	
Luxembourg											
Netherlands						-13.4	-7.2	3.2	-34.6	39.4	-21.9
New Zealand		12.1	-4.7	-4.5	-1.4	-1.5	17.1				
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.6	-12.0	0.6	21.0
Poland											
Portugal	5.1	1.5	7.0	3.8	9.5	-5.9	0.0	-9.1	23.2	-2.3	33.6
Slovakia											
Spain	1.1	3.4	-7.3	2.3	2.4	-15.2	9.7	-2.0	35.1	-10.8	11.7
Sweden	4.7	-6.2	-4.6	2.2	-4.0	14.5	-16.0	6.2	-12.2	0.0	-17.6
Switzerland											
United Kingdom	0.6	-6.0	-13.5	-6.9	-5.4	-7.0	-11.8	1.0	-12.0	5.3	-44.7
United States	-0.6	1.1	3.6	1.0	0.5	4.8	2.7	1.0	0.4	3.7	19.6

Energy - Stationary fuel combustion by fuel type: gaseous

**Total energy consumption from fuel combustion 1990 to 2000
Terajoules**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	201,600	212,477	213,977	226,120	236,872	259,066	274,696	264,550	273,156	275,740	269,005
Belgium											
Canada	2,316,119	2,283,233	2,393,553	2,475,910	2,575,540	2,661,930	2,785,576	2,747,867	2,711,398	2,923,309	3,171,145
Czech Republic ^{a, b}	222,830								318,335	323,192	313,937
Denmark	76,099	86,422	90,524	103,173	117,014	135,645	160,599	169,726	180,202	187,959	186,020
Estonia ^b											32,379
European Community											
Finland	91,838	99,351	103,351	107,168	116,200	120,535	124,229	122,778	143,722	141,643	146,263
France	976,249	1,099,315	1,087,187	1,095,676	1,093,426	1,116,431	1,241,494	1,224,719	1,329,752	1,302,668	1,339,009
Greece	6,404	6,370	5,905	4,511	2,552	2,440	2,668	8,212	30,276	51,021	70,814
Hungary ^a									392,466	421,629	409,704
Iceland ^b											0
Ireland	61,253	61,797	62,174	74,064	71,971	79,926	87,295	94,789	100,232	108,941	126,902
Italy ^a									2,086,035	2,267,643	2,360,695
Latvia										41,725	45,660
Luxembourg ^a										28,793	
Netherlands	1,268,331					1,267,233	1,520,760	1,197,195	1,237,931	1,045,949	1,354,048
New Zealand ^{a, b}		152,562	152,606	150,473	149,969	152,871	186,646	218,710			245,717
Norway	86,329	86,329	86,329	86,329	86,329	86,329	86,329	86,329	123,515	114,727	132,230
Poland											298,912
Portugal								3,453	16,424	36,486	67,544
Slovakia ^b											223,479
Spain	184,556	206,133	221,445	224,923	239,039	318,565	348,673	461,161	473,904	490,101	643,364
Sweden	21,566	23,154	25,947	28,392	28,290	28,700	30,019	29,327	29,518	29,615	28,747
Switzerland ^b											98,214
United Kingdom	1,887,821	2,031,549	2,032,180	2,280,157	2,433,571	2,576,518	2,997,490	3,075,674	3,218,289	3,420,827	3,528,969
United States	19,233,472	19,636,365	20,200,670	20,882,719	21,326,354	22,248,279	22,657,826	22,707,061	22,019,724	22,310,609	23,469,795

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), Iceland (1999), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Note:

The table accounts for the stationary fuel combustions estimated as the difference between the Fuel combustion (Gaseous fuels) and Transport (Natural gas) as reported in Table 1.A(a) of the CRF.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	5.4	0.7	5.7	4.8	9.4	6.0	-3.7	3.3	0.9	-2.4	33.4
Belgium											
Canada	-1.4	4.8	3.4	4.0	3.4	4.6	-1.4	-1.3	7.8	8.5	36.9
Czech Republic									1.5	-2.9	40.9
Denmark	13.6	4.7	14.0	13.4	15.9	18.4	5.7	6.2	4.3	-1.0	144.4
Estonia											
European Community											
Finland	8.2	4.0	3.7	8.4	3.7	3.1	-1.2	17.1	-1.4	3.3	59.3
France	12.6	-1.1	0.8	-0.2	2.1	11.2	-1.4	8.6	-2.0	2.8	37.2
Greece	-0.5	-7.3	-23.6	-43.4	-4.4	9.3	207.8	268.7	68.5	38.8	1005.7
Hungary									7.4	-2.8	
Iceland											
Ireland	0.9	0.6	19.1	-2.8	11.1	9.2	8.6	5.7	8.7	16.5	107.2
Italy									8.7	4.1	
Latvia										9.4	
Luxembourg											
Netherlands						20.0	-21.3	3.4	-15.5	29.5	6.8
New Zealand		0.0	-1.4	-0.3	1.9	22.1	17.2				
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1	-7.1	15.3	53.2
Poland											
Portugal								375.6	122.2	85.1	
Slovakia											
Spain	11.7	7.4	1.6	6.3	33.3	9.5	32.3	2.8	3.4	31.3	248.6
Sweden	7.4	12.1	9.4	-0.4	1.5	4.6	-2.3	0.7	0.3	-2.9	33.3
Switzerland											
United Kingdom	7.6	0.0	12.2	6.7	5.9	16.3	2.6	4.6	6.3	3.2	86.9
United States	2.1	2.9	3.4	2.1	4.3	1.8	0.2	-3.0	1.3	5.2	22.0

Energy - Stationary fuel combustion by fuel type: biomass

**Total energy consumption from fuel combustion 1990 to 2000
Terajoules**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	113,316	106,717	107,048	109,448	128,602	140,696	138,931	134,772	130,173	129,378	122,013
Belgium											
Canada	502,969	492,510	503,055	505,659	585,755	578,260	574,323	575,960	595,372	631,232	648,442
Czech Republic ^{a, b}	21,460								24,631	25,858	22,009
Denmark	46,862	50,949	53,653	56,040	57,258	60,527	64,674	67,224	63,805	63,946	70,418
Estonia ^b											21,119
European Community											
Finland	169,787	162,777	155,777	183,640	193,034	212,224	210,949	244,134	250,617	266,829	268,697
France	406,701	487,918	459,819	454,867	397,644	404,186	428,926	395,097	413,591	401,596	386,609
Greece	23,023	23,023	23,023	23,023	24,307	24,307	38,010	38,094	37,967	38,059	38,059
Hungary ^a									13,618	13,600	14,925
Iceland ^b					0					227	272
Ireland	4,564	4,605	4,103	4,312	4,312	7,453	5,862	5,820	5,945	5,652	5,862
Italy ^a									56,308	71,740	100,565
Latvia										38,244	34,250
Luxembourg ^a										0	
Netherlands	11,577					9,855	10,050	10,308	9,611	8,872	8,537
New Zealand ^{a, b}		29,280	28,030	29,430	33,390	33,690	34,030	32,600			30,640
Norway	41,338	41,338	41,338	41,338	41,338	41,338	41,338	41,338	47,730	49,744	47,762
Poland											155,122
Portugal	112,265	114,335	113,750	111,242	107,558	106,969	105,757	98,966	105,550	104,734	103,751
Slovakia ^b											4,068
Spain	157,767	156,071	152,498	150,539	148,752	146,740	145,188	153,224	156,065	150,655	158,312
Sweden	119,252	124,609	133,377	142,726	158,881	167,719	185,799	171,780	176,271	177,141	159,546
Switzerland ^b											20,279
United Kingdom	27,816	29,233	32,925	34,230	45,101	48,782	50,376	52,778	53,306	60,168	61,851
United States	1,975,470	1,943,284	2,026,597	1,949,011	2,030,466	2,156,057	2,200,045	2,103,241	2,107,517	2,296,736	2,307,705

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), Iceland (1999), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Note:

The table accounts for the stationary fuel combustions estimated as the difference between the Fuel combustion (Biomass) and Transport (Biomass, if any) as reported in Table 1.A(a) of the CRF.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-5.8	0.3	2.2	17.5	9.4	-1.3	-3.0	-3.4	-0.6	-5.7	7.7
Belgium											
Canada	-2.1	2.1	0.5	15.8	-1.3	-0.7	0.3	3.4	6.0	2.7	28.9
Czech Republic									5.0	-14.9	2.6
Denmark	8.7	5.3	4.4	2.2	5.7	6.9	3.9	-5.1	0.2	10.1	50.3
Estonia											
European Community											
Finland	-4.1	-4.3	17.9	5.1	9.9	-0.6	15.7	2.7	6.5	0.7	58.3
France	20.0	-5.8	-1.1	-12.6	1.6	6.1	-7.9	4.7	-2.9	-3.7	-4.9
Greece	0.0	0.0	0.0	5.6	0.0	56.4	0.2	-0.3	0.2	0.0	65.3
Hungary									-0.1	9.7	
Iceland										19.9	
Ireland	0.9	-10.9	5.1	0.0	72.8	-21.3	-0.7	2.2	-4.9	3.7	28.4
Italy									27.4	40.2	
Latvia										-10.4	
Luxembourg											
Netherlands						2.0	2.6	-6.8	-7.7	-3.8	-26.3
New Zealand		-4.3	5.0	13.5	0.9	1.0	-4.2				
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.5	4.2	-4.0	15.5
Poland											
Portugal	1.8	-0.5	-2.2	-3.3	-0.5	-1.1	-6.4	6.7	-0.8	-0.9	-7.6
Slovakia											
Spain	-1.1	-2.3	-1.3	-1.2	-1.4	-1.1	5.5	1.9	-3.5	5.1	0.3
Sweden	4.5	7.0	7.0	11.3	5.6	10.8	-7.5	2.6	0.5	-9.9	33.8
Switzerland											
United Kingdom	5.1	12.6	4.0	31.8	8.2	3.3	4.8	1.0	12.9	2.8	122.4
United States	-1.6	4.3	-3.8	4.2	6.2	2.0	-4.4	0.2	9.0	0.5	16.8

Energy - Stationary fuel combustion by fuel type: other fuels

Total energy consumption from fuel combustion 1990 to 2000
Terajoules

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	20,973	20,693	21,060	20,826	1,825	2,306	6,336	6,548	5,286	7,438	6,452
Belgium											
Canada	0	0	0	0	0	0	0	0	0	0	0
Czech Republic ^{a, b}									0	0	0
Denmark	0	0	0	0	0	0	0	0	0	0	0
Estonia ^b											276
European Community											
Finland	54,175	58,557	57,557	63,146	71,555	78,181	85,206	87,624	82,057	76,540	66,827
France	47,854	46,713	52,253	50,467	51,098	53,215	52,144	55,087	53,477	63,166	66,658
Greece											
Hungary ^a										14,817	19,662
Iceland											47
Ireland	0	0	0	5,024	0	0	0	0	871	1,340	963
Italy ^a									92,978	123,991	101,361
Latvia										0	0
Luxembourg ^a											
Netherlands	72,277					192,855	53,162	243,259	167,250	464,368	30,727
New Zealand ^{a, b}		0	0	0	0	0	0	0			0
Norway	4,188	4,188	4,188	4,188	4,188	4,188	4,188	4,188	4,910	5,121	6,123
Poland											0
Portugal	40	1				7	6	8	7	8	8
Slovakia ^a											59,091
Spain	331	355	355	318	312	319	2,343	6,083	6,394	89,681	12,849
Sweden	26,185	33,349	21,133	27,681	37,176	33,798	34,232	27,644	31,369	26,457	36,154
Switzerland ^b											44,269
United Kingdom	6,364	6,567	7,371	9,300	16,017	16,959	18,348	20,319	25,314	25,116	25,895
United States	387,379	325,442	367,988	351,236	365,873	362,011	364,565	343,198	315,278	288,866	286,098

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Note:

The table accounts for the stationary fuel combustions estimated as the difference between the Fuel combustion (Other fuels) and Transport (Other fuels) as reported in Table 1.A(a) of the CRF.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-1.3	1.8	-1.1	-91.2	26.3	174.8	3.4	-19.3	40.7	-13.3	-69.2
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											
Finland	8.1	-1.7	9.7	13.3	9.3	9.0	2.8	-6.4	-6.7	-12.7	23.4
France	-2.4	11.9	-3.4	1.2	4.1	-2.0	5.6	-2.9	18.1	5.5	39.3
Greece											
Hungary											32.7
Iceland											
Ireland				-100.0					53.8	-28.1	
Italy									33.4	-18.3	
Latvia											
Luxembourg											
Netherlands						-72.4	357.6	-31.2	177.6	-93.4	-57.5
New Zealand											
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.3	4.3	19.6	46.2
Poland											
Portugal	-97.0	-100.0				-23.4	47.7	-13.1	5.5	0.3	-81.1
Slovakia											
Spain	7.3	0.0	-10.4	-2.0	2.4	633.3	159.7	5.1	1302.5	-85.7	3782.1
Sweden	27.4	-36.6	31.0	34.3	-9.1	1.3	-19.2	13.5	-15.7	36.7	38.1
Switzerland											
United Kingdom	3.2	12.2	26.2	72.2	5.9	8.2	10.7	24.6	-0.8	3.1	306.9
United States	-16.0	13.1	-4.6	4.2	-1.1	0.7	-5.9	-8.1	-8.4	-1.0	-26.1

Energy - Stationary fuel combustion

Contribution (%) of each fuel type to total energy consumption 1990 and 2000

	Liquid fuel		Solid fuel		Gaseous fuel		Biomass		Other fuels	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
Austria	29.5	26.9	23.2	19.2	28.4	36.5	16.0	16.5	3.0	0.9
Belgium										
Canada	21.8	16.1	20.0	20.7	47.8	52.4	10.4	10.7	0.0	0.0
Czech Republic	13.8	12.5	72.2	62.4	12.8	23.4	1.2	1.6		0.0
Denmark	32.1	30.7	45.8	27.2	13.7	30.5	8.4	11.6	0.0	0.0
Estonia		13.9		59.0		16.3		10.6		0.1
European Community										
Finland	29.6	22.8	24.4	18.3	13.4	17.9	24.8	32.9	7.9	8.2
France	42.0	37.9	18.0	13.1	27.3	36.6	11.4	10.6	1.3	1.8
Greece	42.1	41.4	53.3	45.7	1.0	8.4	3.7	4.5		
Hungary		17.1		21.6		56.6		2.1		2.7
Iceland		95.4		2.5				1.8		0.3
Ireland	30.4	41.7	48.1	26.2	20.0	30.4	1.5	1.4	0.0	0.2
Italy		35.1		10.8		49.9		2.1		2.1
Latvia		19.3		5.3		43.1		32.3		0.0
Luxembourg										
Netherlands	8.7	3.4	17.1	14.4	69.6	79.9	0.6	0.5	4.0	1.8
New Zealand		10.5		8.9		71.6		8.9		0.0
Norway	49.4	39.6	2.4	2.5	31.5	41.2	15.1	14.9	1.5	1.9
Poland		12.5		73.2		9.4		4.9		0.0
Portugal	52.7	46.5	23.7	25.0		11.2	23.6	17.2	0.0	0.0
Slovakia		6.7		27.4		51.4		0.9		13.6
Spain	42.2	37.1	39.7	31.9	9.7	24.4	8.3	6.0	0.0	0.5
Sweden	53.1	49.4	16.4	12.6	3.9	4.9	21.7	27.1	4.8	6.1
Switzerland		56.5		0.3		26.1		5.4		11.8
United Kingdom	22.2	14.5	44.1	23.7	33.1	60.3	0.5	1.1	0.1	0.4
United States	23.9	21.6	35.8	36.7	35.9	37.6	3.7	3.7	0.7	0.5

Energy - Road transportation: emission factors (2000)

1.A.3.b Road transportation (CO ₂ and N ₂ O)														
CO ₂ emissions							N ₂ O emissions							
Key source	Percentage of national total	Methods and EF used ^a		CO ₂ IEF			Key source	Percentage of national total	Methods and EF used ^a		N ₂ O IEF			
		Methods	EF	IEF in CRF based on	Gasoline	Diesel oil			Methods	EF	IEF in CRF based on	Gasoline	Diesel oil	
					(t/TJ)							(kg/TJ)		
	(%)			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)	
IPCC default EF ^b				NCV							NCV			
Austria	L, T	20.8	M	CS	NCV	73.88	73.67	L, T	0.7	M	CS	NCV	17.29	2.37
Belgium ^c	L	15.3	C,M,T1,T2	C,D,M					0.5	C,M	C,M			
Canada	L, T	17.2	CS	CS	GCV	67.43	71.28	L	0.8	CS	CS	GCV	13.23	2.13
Czech Republic	L, T	7.0	T1	D	NCV	68.61	73.33	T	0.3	T2	PS	NCV	19.44	3.00
Denmark	L	16.4	M/C	CS	NCV	73.00	74.00		0.5	M/C	M/C	NCV	10.25	4.95
Estonia	L	3.9		b	NCV	73.33			0.0			NCV	0.37	
European Community														
Finland	L	14.4	CS (M)	CS	NCV	72.70	73.00	L, T	0.7	CS (M)	CS/M	NCV	13.97	3.59
France	L, T	23.7	C/CS	C/M/CS	NCV	72.35	75.04	L, T	0.7	C/CS	C/M/CS	NCV	7.47	6.29
Greece	L, T	12.4	C	C	NCV	68.61	72.79		0.3	C	C	NCV	5.04	4.25
Hungary	L	9.8	D	D	NCV	68.61	73.33		0.0	D	CS, D	NCV	1.50	0.60
Iceland	L	26.9	T1	D	NCV	68.61	73.33		1.0	T1	D	NCV	13.20	2.74
Ireland	L	14.2	T1	CS	NCV	69.96	73.30		0.5	T1	C	NCV	9.50	5.50
Italy	L	20.2	D, T2	CS	NCV	71.17	72.70	L	0.6	D, T3	D, C	NCV	7.11	5.85
Latvia	L	17.1	T1, CS	D	NCV	73.00	74.00		0.2	T1, CS	D	NCV	1.56	3.29
Luxembourg ^c														
Netherlands	L, T	14.5	CS	CS	NCV	72.30	73.30		0.3	CS/T3 (road)	CS	NCV	5.16	3.49
New Zealand	L	14.2	T1	CS/D	GCV	65.93	68.01		0.2	T1	D	GCV	3.00	3.00
Norway	L, T	16.3	M, T1, CS/T2	CS	NCV	71.30	73.55	L, T	0.9	CS, T2, CS/T2	CS, D, C	NCV	21.38	3.38
Poland	L	7.0	T2	CS	NCV	64.76	70.94		0.1	T2	CS	NCV	5.12	3.57
Portugal	L, T	21.0	C	C	NCV	71.10	72.45	L, T	0.6	C	C	NCV	11.26	3.61
Slovakia	L	8.2	M	M	NCV	72.99	73.79		0.2	M	M	NCV	10.15	4.15
Spain	L, T	20.0	C	C	NCV	71.33	78.44	L, T	0.5	C	C	NCV	5.42	6.69
Sweden	L, T	25.8	CS	CS	NCV	72.60	75.30	L, T	0.8	CS	CS	NCV	8.97	3.49
Switzerland	L	28.9	CS	CS	NCV	73.90	73.60	L	1.2	CS	CS, D	NCV	11.75	2.76
United Kingdom	L, T	17.8	T2	CS	NCV	70.21	72.54	L, T	0.6	T2/T3	D	NCV	10.13	4.65
United States	L, T	19.6	T1, T2	CS	GCV	66.54	67.18	L	0.8	T1, T2, M	D, CS, M	GCV	10.33	2.27

^a Information on methods and emission factors is included in this table as reported by Parties. It may not reflect the actual method used or type of emission factor 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.

^c The Party provided insufficient data.

Energy - Transport (total)**Trends in CO₂ emissions 1990 to 2000
Gigagrams**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	11,944	13,396	13,377	13,700	14,602	13,791	13,785	14,185	15,155	15,996	16,937
Belgium	19,610	20,340	21,719	21,608	21,535	21,727	22,195	22,903	23,276	23,832	23,999
Canada	145,831	140,612	144,676	147,836	155,251	159,470	163,962	170,373	174,291	179,052	180,591
Czech Republic	7,275						9,896	11,392	10,779	12,016	11,110
Denmark	10,381	10,974	11,006	11,183	11,619	11,764	11,960	12,080	12,102	12,184	12,028
Estonia	2,392	3,078	1,498	1,713	1,522	1,103	1,047	1,212	1,352	1,203	1,030
European Community	694,767	709,478	733,572	738,008	745,853	752,232	767,183	777,733	802,565	823,166	822,954
Finland	12,475	11,610	11,583	10,963	11,366	11,125	10,994	11,531	12,299	12,734	12,379
France	119,159	121,677	126,243	126,201	127,407	129,345	130,800	133,021	135,191	138,279	137,783
Greece	18,039	19,051	19,251	19,403	19,446	19,435	19,925	20,523	22,149	22,908	21,678
Hungary	8,208	7,383	7,189	7,141	7,212	7,001	6,612	7,741	8,381	9,568	9,325
Iceland	721	727	729	738	743	749	735	776	781	819	830
Ireland	4,961	5,206	5,625	5,605	5,824	6,306	7,063	7,684	8,768	9,734	10,115
Italy	101,490	103,984	108,298	110,022	109,905	111,626	112,696	114,424	118,212	119,223	121,024
Latvia	6,011	3,267	2,931	2,667	2,229	1,749	1,612	2,178	2,126	2,087	2,120
Luxembourg ^a										1,337	1,451
Netherlands	29,085	29,119	30,362	30,944	31,184	32,130	32,610	33,047	33,984	34,682	35,120
New Zealand	8,664	8,662	9,047	9,458	10,160	10,869	10,989	11,242	11,439	11,732	12,330
Norway	11,086	10,988	11,194	11,846	11,632	12,067	12,706	12,944	13,342	13,937	13,138
Poland	29,103	27,815	30,475	27,675	29,533	25,285	28,098	26,662	28,126	31,382	28,207
Portugal	11,221	11,948	12,931	13,512	13,900	14,459	15,263	16,118	17,273	18,520	19,633
Slovakia	5,070	4,229	3,947	3,892	4,118	4,378	4,434	4,591	4,950	4,821	4,319
Spain	57,656	60,068	63,693	60,106	64,476	65,412	70,181	70,803	77,831	82,314	85,118
Sweden	18,736	18,807	19,032	18,237	18,561	18,993	18,834	18,966	19,481	19,886	19,568
Switzerland	14,140	14,657	14,958	13,913	14,107	13,809	13,870	14,446	14,672	15,297	15,563
United Kingdom	116,581	116,058	117,503	118,690	119,035	117,928	122,554	123,624	122,763	123,488	123,046
United States	1,471,806	1,437,749	1,472,984	1,502,583	1,551,377	1,579,355	1,618,680	1,628,819	1,654,989	1,728,238	1,789,522

^a 1999 value is taken from the previous submission.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	12.2	-0.1	2.4	6.6	-5.6	0.0	2.9	6.8	5.5	5.9	41.8
Belgium	3.7	6.8	-0.5	-0.3	0.9	2.2	3.2	1.6	2.4	0.7	22.4
Canada	-3.6	2.9	2.2	5.0	2.7	2.8	3.9	2.3	2.7	0.9	23.8
Czech Republic							15.1	-5.4	11.5	-7.5	52.7
Denmark	5.7	0.3	1.6	3.9	1.3	1.7	1.0	0.2	0.7	-1.3	15.9
Estonia	28.6	-51.3	14.4	-11.2	-27.5	-5.1	15.7	11.6	-11.0	-14.4	-56.9
European Community	2.1	3.4	0.6	1.1	0.9	2.0	1.4	3.2	2.6	0.0	18.5
Finland	-6.9	-0.2	-5.4	3.7	-2.1	-1.2	4.9	6.7	3.5	-2.8	-0.8
France	2.1	3.8	0.0	1.0	1.5	1.1	1.7	1.6	2.3	-0.4	15.6
Greece	5.6	1.0	0.8	0.2	-0.1	2.5	3.0	7.9	3.4	-5.4	20.2
Hungary	-10.1	-2.6	-0.7	1.0	-2.9	-5.5	17.1	8.3	14.2	-2.5	13.6
Iceland	0.8	0.3	1.3	0.7	0.8	-1.9	5.6	0.6	4.9	1.3	15.1
Ireland	4.9	8.0	-0.3	3.9	8.3	12.0	8.8	14.1	11.0	3.9	103.9
Italy	2.5	4.1	1.6	-0.1	1.6	1.0	1.5	3.3	0.9	1.5	19.2
Latvia	-45.7	-10.3	-9.0	-16.4	-21.5	-7.8	35.1	-2.4	-1.8	1.6	-64.7
Luxembourg										8.5	
Netherlands	0.1	4.3	1.9	0.8	3.0	1.5	1.3	2.8	2.1	1.3	20.7
New Zealand	0.0	4.5	4.5	7.4	7.0	1.1	2.3	1.8	2.6	5.1	42.3
Norway	-0.9	1.9	5.8	-1.8	3.7	5.3	1.9	3.1	4.5	-5.7	18.5
Poland	-4.4	9.6	-9.2	6.7	-14.4	11.1	-5.1	5.5	11.6	-10.1	-3.1
Portugal	6.5	8.2	4.5	2.9	4.0	5.6	5.6	7.2	7.2	6.0	75.0
Slovakia	-16.6	-6.7	-1.4	5.8	6.3	1.3	3.5	7.8	-2.6	-10.4	-14.8
Spain	4.2	6.0	-5.6	7.3	1.5	7.3	0.9	9.9	5.8	3.4	47.6
Sweden	0.4	1.2	-4.2	1.8	2.3	-0.8	0.7	2.7	2.1	-1.6	4.4
Switzerland	3.7	2.1	-7.0	1.4	-2.1	0.4	4.1	1.6	4.3	1.7	10.1
United Kingdom	-0.4	1.2	1.0	0.3	-0.9	3.9	0.9	-0.7	0.6	-0.4	5.5
United States	-2.3	2.5	2.0	3.2	1.8	2.5	0.6	1.6	4.4	3.5	21.6

Trends in N₂O emissions 1990 to 2000
Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	0.99	1.24	1.40	1.56	1.74	1.78	1.76	1.74	1.83	1.82	1.80
Belgium	0.86	0.99	1.13	1.33	1.47	1.61	1.74	1.86	1.95	2.26	2.35
Canada	20.63	21.03	22.87	25.04	27.48	28.34	28.37	29.00	28.84	29.33	29.52
Czech Republic	0.26						1.77	1.94	1.41	1.58	1.66
Denmark	0.48	0.56	0.61	0.67	0.79	0.87	0.95	1.07	1.12	1.20	1.24
Estonia	0.02	0.03	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
European Community	37.68	40.84	44.70	49.43	53.34	57.93	62.35	66.24	70.93	74.74	76.52
Finland	2.03	1.75	1.74	1.84	1.87	1.80	1.94	2.02	2.45	2.30	2.21
France	5.24	5.63	6.09	6.57	7.41	8.25	9.10	9.84	10.53	11.35	11.83
Greece	1.66	1.83	1.83	1.87	1.91	1.88	1.95	2.04	2.12	2.16	2.18
Hungary									0.12	0.13	0.13
Iceland	0.02	0.02	0.02	0.02	0.02	0.04	0.04	0.07	0.07	0.10	0.10
Ireland	0.28	0.30	0.33	0.45	0.54	0.56	0.71	0.86	1.02	1.26	1.20
Italy	5.58	5.63	5.81	6.05	6.46	7.03	7.58	8.13	9.18	9.91	10.35
Latvia	0.86	0.30	0.25	0.20	0.12	0.11	0.25	0.17	0.16	0.15	0.15
Luxembourg										0.14	0.16
Netherlands	1.21	1.36	1.56	1.71	1.80	1.95	1.98	2.01	2.03	2.04	2.00
New Zealand	0.36	0.37	0.39	0.40	0.43	0.46	0.47	0.48	0.49	0.50	0.52
Norway	0.52	0.56	0.61	0.72	0.85	1.01	1.19	1.37	1.49	1.79	1.92
Poland	1.37	1.21	1.39	1.20	1.23	1.31	1.44	1.36	1.67	1.87	1.89
Portugal	0.44	0.47	0.51	0.64	0.76	0.86	1.01	1.15	1.31	1.48	1.64
Slovakia	0.23	0.19	0.17	0.17	0.31	0.36	0.40	0.45	0.53	0.54	0.50
Spain	2.74	2.89	3.09	3.21	3.72	4.07	4.51	4.96	5.80	6.43	6.71
Sweden	1.46	1.36	1.39	1.46	1.53	1.56	1.65	1.77	1.71	1.84	2.02
Switzerland	0.99	1.14	1.29	1.40	1.54	1.62	1.69	1.75	2.02	2.09	2.06
United Kingdom	4.34	4.49	4.86	5.73	6.94	8.09	9.44	10.55	11.66	12.72	13.56
United States	164.29	171.72	181.95	188.75	193.56	194.85	193.90	192.44	190.73	189.29	188.03

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	24.9	13.6	11.0	11.9	2.0	-1.3	-0.7	4.9	-0.6	-0.9	82.0
Belgium	14.7	14.2	17.7	10.8	9.6	7.8	6.7	4.9	15.8	4.3	172.9
Canada	1.9	8.8	9.5	9.8	3.1	0.1	2.2	-0.6	1.7	0.6	43.1
Czech Republic							9.5	-27.6	12.4	5.1	538.4
Denmark	16.0	10.5	9.6	16.6	11.0	9.1	12.1	5.3	6.8	3.2	158.0
Estonia	4.1	-46.9	13.6	-8.4	-26.8	-4.4	17.0	6.7	-7.0	-13.9	-59.8
European Community	8.4	9.5	10.6	7.9	8.6	7.6	6.2	7.1	5.4	2.4	103.1
Finland	-13.6	-0.7	5.3	2.0	-3.8	7.5	4.1	21.5	-6.0	-4.1	8.8
France	7.4	8.2	8.0	12.7	11.3	10.3	8.1	7.1	7.8	4.2	125.8
Greece	10.0	0.1	2.4	1.8	-1.6	4.0	4.5	4.1	1.7	1.2	31.3
Hungary									9.3	-3.2	
Iceland	0.5	-0.3	1.8	0.8	106.8	-0.9	56.2	2.0	46.1	-0.6	388.3
Ireland	7.1	10.0	36.4	20.0	3.7	26.8	21.1	18.6	23.5	-4.6	329.5
Italy	0.8	3.3	4.1	6.8	8.8	7.8	7.3	12.9	8.0	4.5	85.5
Latvia	-65.1	-17.0	-20.5	-40.4	-9.3	131.8	-29.8	-8.0	-3.1	-3.2	-82.6
Luxembourg										17.5	
Netherlands	12.1	14.5	9.7	5.7	8.3	1.4	1.3	1.3	0.5	-1.9	65.2
New Zealand	2.8	5.4	2.6	7.5	7.0	2.2	2.1	2.1	2.0	4.5	45.2
Norway	7.8	9.1	17.2	18.3	18.8	17.7	14.9	8.8	20.3	7.4	268.3
Poland	-11.7	14.9	-13.7	2.5	6.5	9.9	-5.6	22.8	12.0	1.1	38.0
Portugal	7.0	7.6	25.5	18.4	14.5	16.3	14.0	14.0	13.0	11.1	271.4
Slovakia	-17.9	-9.6	-0.6	85.2	16.0	11.3	12.1	17.0	1.7	-8.0	116.5
Spain	5.3	7.0	3.9	15.8	9.6	10.7	9.9	17.0	10.9	4.4	144.5
Sweden	-6.9	2.2	5.1	5.0	2.1	5.9	7.1	-3.3	7.2	9.8	38.5
Switzerland	15.1	13.6	8.5	9.5	5.5	4.3	3.2	15.4	3.8	-1.4	108.4
United Kingdom	3.6	8.1	18.0	21.1	16.6	16.7	11.8	10.5	9.1	6.6	212.4
United States	4.5	6.0	3.7	2.5	0.7	-0.5	-0.8	-0.9	-0.8	-0.7	14.4

Energy - Road transportation

Trends in CO₂ emissions 1990 to 2000
Gigagrams

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	11,649	13,089	13,068	13,396	14,286	13,480	13,481	13,871	14,835	15,647	16,580
Belgium	18,976	19,404	20,012	20,301	20,925	21,116	21,575	22,326	22,654	23,100	23,219
Canada	102,812	99,901	102,785	104,974	109,881	112,440	114,246	119,533	120,502	124,115	124,429
Czech Republic ^{a, b}	5,995								10,316	11,348	10,344
Denmark	9,351	9,855	9,926	10,055	10,550	10,651	10,822	11,026	11,219	11,345	11,230
Estonia ^b											762
European Community											
Finland	11,111	10,823	10,807	10,174	10,515	10,325	10,192	10,701	10,807	10,880	10,648
France	111,403	114,130	118,740	118,844	119,610	120,789	121,884	124,078	126,008	128,833	128,462
Greece	11,873	12,683	12,985	13,284	13,462	13,872	14,509	14,851	15,561	15,845	16,031
Hungary ^a									8,062	8,568	8,272
Iceland ^a										769	786
Ireland	4,680	4,886	5,297	5,278	5,496	5,915	6,609	7,205	8,264	9,121	9,544
Italy ^a									109,371	110,251	110,291
Latvia										1,749	1,814
Luxembourg ^a										1,313	
Netherlands	25,369	25,624	26,855	27,489	27,844	28,396	29,158	29,518	30,236	31,111	31,468
New Zealand ^{a, b}		7,641	7,984	8,262	8,816	9,527	9,727	10,067			10,876
Norway	7,852								9,100	9,317	8,999
Poland											26,920
Portugal	9,761	10,470	11,424	12,056	12,534	12,985	13,733	14,663	15,708	16,801	17,792
Slovakia ^b											4,017
Spain	51,313	53,721	56,842	56,289	59,334	60,119	64,251	64,879	71,387	75,304	77,325
Sweden	16,871	17,093	17,376	16,669	17,002	17,346	17,349	17,349	17,752	18,073	17,885
Switzerland ^b											15,229
United Kingdom	109,039	108,245	109,677	110,951	111,541	110,484	114,770	116,198	115,468	116,438	115,656
United States	1,121,269	1,108,214	1,129,224	1,159,402	1,192,291	1,218,330	1,248,750	1,268,093	1,301,837	1,350,950	1,370,853

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	12.36	-0.16	2.51	6.64	-5.64	0.01	2.90	6.95	5.47	5.96	42.33
Belgium	2.25	3.14	1.44	3.07	0.92	2.17	3.48	1.47	1.97	0.51	22.36
Canada	-2.83	2.89	2.13	4.68	2.33	1.61	4.63	0.81	3.00	0.25	21.03
Czech Republic									10.01	-8.85	72.54
Denmark	5.39	0.72	1.29	4.92	0.96	1.61	1.89	1.75	1.12	-1.02	20.09
Estonia											
European Community											
Finland	-2.59	-0.15	-5.86	3.35	-1.80	-1.29	5.00	0.99	0.68	-2.13	-4.16
France	2.45	4.04	0.09	0.64	0.99	0.91	1.80	1.56	2.24	-0.29	15.31
Greece	6.83	2.38	2.30	1.34	3.04	4.59	2.36	4.78	1.82	1.18	35.03
Hungary									6.28	-3.46	
Iceland										2.11	
Ireland	4.41	8.40	-0.35	4.12	7.62	11.74	9.01	14.70	10.37	4.64	103.94
Italy									0.80	0.04	
Latvia										3.73	
Luxembourg											
Netherlands	1.00	4.80	2.36	1.29	1.98	2.68	1.23	2.43	2.89	1.15	24.04
New Zealand		4.48	3.49	6.71	8.06	2.10	3.50				
Norway									2.38	-3.41	14.62
Poland											
Portugal	7.27	9.11	5.54	3.96	3.60	5.76	6.77	7.13	6.96	5.90	82.28
Slovakia											
Spain	4.69	5.81	-0.97	5.41	1.32	6.87	0.98	10.03	5.49	2.68	50.69
Sweden	1.31	1.65	-4.07	2.00	2.02	-0.45	0.47	2.32	1.81	-1.04	6.01
Switzerland											
United Kingdom	-0.73	1.32	1.16	0.53	-0.95	3.88	1.24	-0.63	0.84	-0.67	6.07
United States	-1.16	1.90	2.67	2.84	2.18	2.50	1.55	2.66	3.77	1.47	22.26

Energy - Road transportation**Trends in N₂O emissions 1990 to 2000****Gigagrams**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	0.95	1.20	1.37	1.52	1.71	1.75	1.72	1.71	1.80	1.78	1.77
Belgium	0.85	0.98	1.12	1.32	1.46	1.60	1.73	1.84	1.93	2.23	2.33
Canada	11.75	12.94	14.78	16.55	18.36	19.11	18.86	19.10	18.69	18.64	17.90
Czech Republic ^{a, b}	0.23								1.39	1.57	1.64
Denmark	0.43	0.50	0.56	0.62	0.73	0.82	0.89	1.02	1.08	1.16	1.20
Estonia ^b											0.01
European Community											
Finland	1.34	1.37	1.37	1.45	1.46	1.41	1.55	1.62	1.68	1.75	1.75
France	5.14	5.53	5.99	6.47	7.30	8.14	8.99	9.72	10.42	11.23	11.72
Greece	0.46	0.56	0.64	0.71	0.74	0.80	0.86	0.95	1.00	1.03	1.09
Hungary ^a									0.12	0.13	0.12
Iceland ^a										0.10	0.10
Ireland	0.18	0.20	0.22	0.33	0.42	0.43	0.55	0.68	1.85	1.05	1.00
Italy ^a									8.79	9.57	9.92
Latvia										0.05	0.06
Luxembourg ^a										0.14	
Netherlands	1.10	1.26	1.46	1.61	1.71	1.84	1.88	1.90	1.91	1.93	1.90
New Zealand ^{a, b}		0.35	0.36	0.38	0.40	0.43	0.44	0.45	0.46	0.48	0.49
Norway	0.30								1.21	1.50	1.65
Poland											1.82
Portugal	0.38	0.41	0.44	0.58	0.69	0.80	0.94	1.09	1.25	1.41	1.57
Slovakia ^b											0.38
Spain	2.40	2.54	2.73	2.97	3.44	3.79	4.19	4.63	5.47	6.09	6.34
Sweden	1.00	0.90	0.93	1.00	1.10	1.22	1.29	1.40	1.50	1.58	1.73
Switzerland ^b											2.05
United Kingdom	3.31	3.43	3.78	4.70	5.93	7.09	8.44	9.67	10.79	11.89	12.74
United States	154.84	162.54	172.60	179.54	184.05	185.32	184.14	183.13	181.56	179.61	177.19

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	25.84	14.02	11.29	12.07	2.19	-1.19	-0.77	5.04	-0.86	-0.90	85.06
Belgium	14.77	14.43	17.73	10.87	9.51	7.73	6.77	4.78	15.65	4.34	173.02
Canada	10.08	14.27	11.93	10.95	4.10	-1.29	1.25	-2.16	-0.23	-3.97	52.33
Czech Republic									12.95	4.69	620.92
Denmark	15.70	12.15	9.91	18.57	11.45	9.41	13.49	6.43	7.39	3.46	176.68
Estonia											
European Community											
Finland	2.28	-0.41	6.20	0.42	-3.10	9.71	4.26	3.89	4.31	0.02	30.51
France	7.61	8.32	8.12	12.79	11.48	10.44	8.20	7.19	7.75	4.37	128.29
Greece	21.04	15.05	10.44	3.95	8.14	7.78	10.13	5.81	2.70	5.64	135.57
Hungary								8.33		-7.42	
Iceland										-2.70	
Ireland	13.39	7.79	50.00	27.27	2.38	27.91	23.64	172.06	-43.24	-5.18	453.13
Italy								8.90		3.63	
Latvia										10.04	
Luxembourg											
Netherlands	14.50	15.97	10.57	5.98	7.88	2.00	1.20	0.54	1.08	-1.82	72.89
New Zealand		4.32	4.42	5.56	7.77	2.09	3.42	1.98	2.94	2.67	
Norway									23.89	10.14	455.47
Poland											
Portugal	7.71	8.75	30.19	20.77	15.34	17.74	15.26	14.61	13.42	11.24	316.88
Slovakia											
Spain	6.07	7.39	8.74	15.79	10.17	10.69	10.45	18.10	11.21	4.15	164.22
Sweden	-10.00	3.33	7.53	10.00	10.69	5.75	8.47	7.72	4.69	9.73	72.82
Switzerland											
United Kingdom	3.61	9.99	24.41	26.32	19.44	19.08	14.57	11.61	10.11	7.18	284.40
United States	4.97	6.19	4.03	2.51	0.69	-0.64	-0.55	-0.86	-1.08	-1.34	14.43

Energy - Domestic aviation and marine transport: emission factors (2000)

Domestic aviation and marine transport (CO ₂)															
Methods and EF used ^a		IEF in CRF based on	1.A.3.a Civil aviation (domestic)				International aviation transport		1.A.3.d Navigation (domestic)				International marine transport		
Methods	EF		Key source	Percentage of national total	CO ₂ IEF		CO ₂ IEF		Key source	Percentage of national total	CO ₂ IEF		CO ₂ IEF		
					Jet kerosene	Aviation gasoline	Jet kerosene	Aviation gasoline			Residual oil	Gas/diesel oil	Residual oil	Gas/diesel oil	
					(%)	(t/TJ)	(t/TJ)	(t/TJ)			(%)	(t/TJ)	(t/TJ)	(t/TJ)	
IPCC Default EF ^b		NCV			72.8	72.1	72.8	72.1			77.6	73	77.6	75.0-77.6	
Austria	M	CS	NCV	0.1	72.7	74.0	72.7		0.1		73.7		NO	NO	
Belgium	C,M,T1,T2	C,D,M		0.1					0.3						
Canada	CS	CS	GCV	L, T	1.8	68.2	69.5	70.1		0.7	72.7	71.3	74.1	70.5	
Czech Republic	T1	D	NCV		0.1	70.8		70.8		0.0		73.3			
Denmark	M/C	CS	NCV		0.2	72.0	73.0	72.0	73.0	0.6	78.0	74.0	78.0	74.0	
Estonia			NCV		0.3	70.8				0.1	75.8	73.3	75.8	73.3	
European Community															
Finland	CS (M)	CS	NCV		0.5	70.8	71.7	70.8	L, T	0.7	76.6	73.4	76.6	73.4	
France	C/CS	C/M/CS	NCV	L, T	1.1	71.6		71.6		0.3	78.0	75.0	78.0	75.0	
Greece	C	C	NCV	L, T	1.1	65.2		88.8	L, T	1.2	76.6	71.8	76.6	73.3	
Hungary	D	D			NO	NO	NO	70.8		0.0	NO	68.6	NO	NO	
Iceland	T1	D	NCV		1.0	70.8	68.6	70.8	68.6	0.6	76.6	73.3	1228.8	73.3	
Ireland	T1	CS						71.4		0.2	76.0	73.3	76.0	73.3	
Italy	D, T2	CS	NCV		0.5	70.6	70.8	70.7	NO	L	1.1	74.6	73.2	76.4	
Latvia	T1, CS	D	NCV		0.8	70.8				0.2		73.0			
Luxembourg															
Netherlands	CS	CS	NCV		0.1	73.0		73.0		0.5		73.0	77.0	73.0	
New Zealand	T1	CS/D	GCV	L	1.1	68.3	68.3	68.3	NE	0.5	NE	NE	73.0	68.0	
Norway	M, T1, CS/T2	CS	NCV	L, T	1.9	73.1	71.3	73.1	L, T	4.3	78.8	73.5	78.8	73.5	
Poland	T2	CS	NCV		0.1	70.3		70.3	NO	0.0	75.1	70.4	75.2	72.0	
Portugal	C	C	NCV	L, T	1.7	72.5	71.7	72.5	71.7	T	0.3	76.4	74.9	76.4	
Slovakia	M	M			0.1					0.2		75.0			
Spain	C	C	NCV	L, T	1.4	72.9	72.9	73.1		0.5	78.9	74.2	78.9	74.2	
Sweden	CS	CS	NCV	L, T	0.9	73.1	72.3	73.1	72.3	L	1.0	76.2	75.3	76.2	
Switzerland	CS	CS	NCV		0.4	73.2	IE	73.2	IE	0.1	NO	73.6			
United Kingdom	T2	CS	NCV		0.5	71.8	70.6	71.8		0.4	76.1	72.5	76.1	72.5	
United States	T1, T2	CS	GCV	L, T	2.8	66.5	64.9	66.5	NE	L, T	1.3	73.9	72.0	73.9	

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

^b Default emission factors (for gas/diesel oil: single value for internal waterways and range for sea-going ships, boats; IPCC Guidelines volume 3, pages 1.89, 1.91).

Energy - Domestic and international aviation transport: activity data (2000)

Domestic and international aviation transport													
Activity data in CRF based on	1.A.3.a Civil aviation (domestic)						International aviation			Total jet kerosene and aviation gasoline			
	Jet kerosene			Aviation gasoline			Jet kerosene			Total jet kerosene and aviation gasoline			
	CRF	IEA ^a	Difference	CRF	IEA ^a	Difference	CRF	IEA ^a	Difference	CRF	IEA	Difference	
	(TJ)		(%)	(TJ)		(%)	(TJ)		(%)	(TJ)		(%)	
Austria	NCV	1,474	1,471	-0.2	93	90	-3.5	23,008	23,945	4.1	24,574	25,505	3.8
Belgium			1,962			134			64,075			66,171	
Canada	GCV	191,495	179,532	-6.2	3,567	15,515	335.0	43,168	45,857	6.2	238,230	240,903	1.1
Czech Republic	NCV	1,349	1,650	22.3	123	45	-63.6	4,846	6,911	42.6	6,318	8,606	36.2
Denmark	NCV	1,806	1,917	6.2	101	90	-11.6	32,858	33,665	2.5	34,765	35,672	2.6
Estonia	NCV	919	0	-100.0	0	0	0.0	0	847	100.0	919	847	-7.8
European Community			421,815			11,603			1,475,954			1,909,372	
Finland	NCV	5,109	7,001	37.0	78	134	72.3	14,506	14,937	3.0	19,693	22,073	12.1
France	NCV	86,477	67,196	-22.3	0	1,254	100.0	200,347	222,947	11.3	286,825	291,397	1.6
Greece	NCV	22,161	21,403	-3.4	0	762	100.0	35,360	35,359	0.0	57,521	57,524	0.0
Hungary		NO	0	0.0	NO	0	0.0	8,957	9,498	6.0	8,957	9,498	6.0
Iceland	NCV	345	357	3.6	49	45	-9.3	5,759	5,752	-0.1	6,153	6,154	0.0
Ireland		NE	1,293	100.0	NO	45	100.0	23,237	23,632	1.7	23,237	24,970	7.5
Italy	NCV	37,815	7,223	-80.9	483	269	-44.3	109,957	151,559	37.8	148,255	159,051	7.3
Latvia	NCV	1,123	0	100.0	0	0	0.0	NE	1,159	0.0	1,123	1,159	3.2
Luxembourg								0	13,912	100.0	0	13,912	100.0
Netherlands	NCV	3,870	3,835	-0.9	IE	134		137,957	141,304	2.4	141,827	145,273	2.4
New Zealand	GCV	11,659	8,026	-31.2	685	141	-79.3	26,056	21,825	-16.2	38,400	29,993	-21.9
Norway	NCV	14,345	12,173	-15.1	104	672	543.4	12,490	25,059	100.6	26,940	37,904	40.7
Poland	NCV	6,809		-100.0	0	0	0.0	5,094	16,008	214.2	11,903	16,008	34.5
Portugal	NCV	19,372	9,587	-50.5	93	134	44.2	12,823	24,703	92.6	32,289	34,424	6.6
Slovakia	NCV	0	1,159	100.0	0	0	0.0	NO	0	0.0	0	1,159	100.0
Spain	NCV	74,969	72,636	-3.1	434	4,928	1036.5	113,777	117,671	3.4	189,180	195,235	3.2
Sweden	NCV	8,849	19,753	123.2	55	224	309.4	26,098	20,556	-21.2	35,001	40,533	15.8
Switzerland	NCV	3,234	4,236	31.0	IE	269		64,792	66,037	1.9	68,026	70,542	3.7
United Kingdom	NCV	44,101	195,079	342.3	2,337	2,240	-4.1	397,749	280,690	-29.4	444,186	478,009	7.6
United States	GCV	2,916,340	2,981,389	2.2	38,283	42,064	9.9	861,130	826,265	-4.0	3,815,752	3,849,719	0.9

^a Data from the International Energy Agency (conversion factors used: 44.59 TJ/kt for jet kerosene and 44.80 TJ/kt for aviation gasoline; source of conversion factors: IPCC Guidelines, volume 3, page 1.23, tables 1-3). For those Parties using GCV, the above conversion factors were increased by 5 per cent.

Energy - Domestic and international marine transport: activity data (2000)

Domestic and international marine transport																			
Activity data in CRF based on	1.A.3.d Navigation (domestic)						International marine transport						Total fuel consumption						
	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	Difference	CRF	IEA	Difference	
	(TJ)	(%)	(TJ)	(%)	(TJ)	(%)	(TJ)	(%)	(TJ)	(%)	(TJ)	(%)	(TJ)	(%)	(TJ)	(%)			
Austria	NCV	0	0	0.0	736	303	-58.8	0	0	0.0	0	0	0.0	0	0	0.0	736	303	-58.8
Belgium			5,466			3,120			190,998			34,103		0	196,465	100.0	0	37,223	100.0
Canada	GCV	28,407	27,416	-3.5	38,032	38,590	1.5	38,663	38,036	-1.6	8,262	8,302	0.5	67,070	65,452	-2.4	46,294	46,891	1.3
Czech Republic	NCV	0	0	0.0	400	217	-45.8	0	0	0.0	0	0	0.0	0	0	0.0	400	217	-45.8
Denmark	NCV	1,509	1,487	-1.4	3,731	3,423	-8.2	33,185	32,798	-1.2	22,872	23,227	1.5	34,694	34,285	-1.2	26,603	26,650	0.2
Estonia	NCV	8	0	-100.0	225	303	34.8	2,605	2,613	0.3	1,788	1,820	1.8	2,613	2,613	0.0	2,013	2,123	5.5
European Community			32,717			186,854			1,391,491			375,397		0	1,424,209	100.0	0	562,251	100.0
Finland	NCV	2,069	2,050	-0.9	2,378	2,990	25.7	20,056	19,855	-1.0	6,742	8,147	20.8	22,125	21,905	-1.0	9,120	11,137	22.1
France	NCV	1,469	1,206	-17.9	16,203	20,973	29.4	102,166	102,935	0.8	22,002	20,930	-4.9	103,635	104,141	0.5	38,205	41,903	9.7
Greece	NCV	9,485	9,486	0.0	11,878	11,397	-4.1	116,471	116,480	0.0	32,498	32,500	0.0	125,956	125,966	0.0	44,376	43,897	-1.1
Hungary	NCV	NO	0	0.0	32	0	-100.0	NO	0	0.0	NO	0	0.0	NO	0	0.0	32	0	-100.0
Iceland	NCV	50	40	-19.2	173	173	0.3	332	322	-3.1	2,634	2,600	-1.3	381	362	-5.2	2,807	2,773	-1.2
Ireland	NCV	879	844	-4.0	754	780	3.5	1,507	1,487	-1.3	4,899	4,897	0.0	2,386	2,331	-2.3	5,652	5,677	0.4
Italy	NCV	64,832	0	-100.0	9,815	8,667	-11.7	48,260	78,618	62.9	IE	33,410		113,092	78,618	-30.5	9,815	42,077	328.7
Latvia	NCV	0	0	0.0	340	347	2.0	NE	0	0.0	NE	0	0.0	NE	0	0.0	340	347	2.0
Luxembourg			0			0								0	0	0.0	0	0	0.0
Netherlands	NCV	0	0		13,750	28,600	108.0	474,895	465,519	-2.0	87,735	89,050	1.5	474,895	465,519	-2.0	101,485	117,650	15.9
New Zealand	GCV	NE	635	100.0	NE	29,604	100.0	8,255	15,570	88.6	2,111	20,982	894.0	8,255	16,204	96.3	2,111	50,586	2296.3
Norway	NCV	610	0	-100.0	31,806	4,983	-84.3	15,898	7,114	-55.3	19,830	2,427	-87.8	16,508	7,114	-56.9	51,636	7,410	-85.6
Poland	NCV	205	0	-100.0	910	260	-71.4	15,781	9,968	-36.8	1,083	1,907	76.1	15,986	9,968	-37.6	1,993	2,167	8.7
Portugal	NCV	956	0	-100.0	2,583	1,863	-27.9	16,661	18,931	13.6	4,409	8,883	101.5	17,616	18,931	7.5	6,993	10,747	53.7
Slovakia	NCV	0	0	0.0	1,518	0	-100.0	NO	0	0.0	NO	0	0.0	0	0	0.0	1,518	0	-100.0
Spain	NCV	15,628	8,923	-42.9	8,316	50,007	501.3	208,293	208,322	0.0	41,291	41,903	1.5	223,921	217,245	-3.0	49,607	91,910	85.3
Sweden	NCV	1,590	1,568	-1.4	4,847	5,027	3.7	53,336	49,317	-7.5	7,414	7,193	-3.0	54,926	50,885	-7.4	12,262	12,220	-0.3
Switzerland	NCV	NO	0		952	390	-59.0	NO	0	0.0	NO	477	100.0	NO	0	0.0	952	867	-9.0
United Kingdom	NCV	1,761	1,688	-4.1	34,656	37,743	8.9	38,406	37,701	-1.8	36,813	49,443	34.3	40,167	39,389	-1.9	71,469	87,187	22.0
United States	GCV	676,634	1,227	-99.8	554,157	0	-100.0	468,523	1,132,224	141.7	121,096	302,878	150.1	1,145,158	1,133,450	-1.0	675,253	302,878	-55.1

^a Data from the International Energy Agency (conversion factors used: for residual oil 40.19 TJ/kt and for gas/diesel oil 43.33 TJ/kt; source of conversion factors: IPCC Guidelines, volume 3, page 1.23, tables 1-3). For those Parties using GCV, the above conversion factors were increased by 5 per cent.

Energy - Transport: civil aviation

Trends in CO₂ emissions 1990 to 2000

Gigagrams

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	69	69	80	84	82	84	92	101	104	111	106	114
Belgium	8	8	8	8	8	6	7	5	4	4	146	146
Canada	10,385	10,385	9,239	9,426	9,125	9,772	10,527	11,558	12,054	12,582	13,168	13,304
Czech Republic ^{b,c}	82	82								14	13	95
Denmark	193	193	177	177	167	173	185	189	190	168	156	137
Estonia ^c												65
European Community												
Finland	403	403	409	386	374	380	353	380	413	447	465	367
France	4,541	4,541	4,518	4,498	4,368	4,571	5,305	5,726	5,778	6,080	6,053	6,191
Greece	1,458	1,458	1,461	1,524	1,600	1,341	1,215	1,278	1,228	1,149	1,679	1,445
Hungary ^b												NO
Iceland ^b											32	28
Ireland												
Italy ^b										2,240	2,397	2,703
Latvia											89	80
Luxembourg ^b												
Netherlands	492	492	311	197	137	219	346	298	321	578	420	283
New Zealand ^{b,c}			663	639	684	839	861	830	811			843
Norway	678	678								1,005	1,155	1,056
Poland												479
Portugal	799	799	840	893	857	837	965	1,033	1,065	1,216	1,317	1,411
Slovakia ^c												32
Spain	4,372	4,372	4,392	4,923	1,740	2,883	3,308	3,831	4,128	4,722	4,833	5,497
Sweden	818	818	793	758	770	780	814	755	745	784	795	651
Switzerland ^c												237
United Kingdom	2,158	2,158	2,121	2,221	2,281	2,326	2,448	2,550	2,641	2,764	2,825	3,330
United States	176,881	176,881	169,345	167,015	168,039	175,853	171,450	180,156	178,935	182,972	186,691	196,452

^a Base year refers to 1990, except for the following Parties with economies in transition which, in accordance with decision 9/CP.2, use base years other than 1990: Poland (1988) and Hungary (average of 1985-1987).

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^c The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	15.3	4.6	-1.9	1.7	10.0	9.7	2.7	7.3	-4.9	7.8	64.0
Belgium	0.0	0.0	-1.0	-24.1	18.0	-27.2	-18.1	1.7	3180.1	0.0	1662.1
Canada	-11.0	2.0	-3.2	7.1	7.7	9.8	4.3	4.4	4.7	1.0	28.1
Czech Republic									-5.4	621.2	16.3
Denmark	-8.1	0.1	-5.9	3.8	6.5	2.5	0.5	-11.9	-7.0	-11.9	-28.7
Estonia											
European Community											
Finland	1.5	-5.6	-3.0	1.6	-7.0	7.7	8.6	8.3	4.0	-21.0	-8.8
France	-0.5	-0.4	-2.9	4.6	16.1	7.9	0.9	5.2	-0.4	2.3	36.3
Greece	0.2	4.3	5.0	-16.2	-9.4	5.2	-4.0	-6.4	46.2	-14.0	-0.9
Hungary											
Iceland										-12.1	
Ireland											
Italy									7.0	12.8	
Latvia										-10.7	
Luxembourg											
Netherlands	-36.8	-36.7	-30.6	60.5	58.0	-13.8	7.4	80.2	-27.4	-32.7	-42.6
New Zealand			7.1	22.5	2.7	-3.6	-2.3				
Norway									14.9	-8.6	55.6
Poland											
Portugal	5.1	6.4	-4.1	-2.3	15.3	7.1	3.1	14.2	8.3	7.2	76.5
Slovakia											
Spain	0.5	12.1	-64.6	65.7	14.7	15.8	7.7	14.4	2.3	13.7	25.7
Sweden	-3.1	-4.4	1.6	1.3	4.4	-7.2	-1.3	5.2	1.5	-18.2	-20.4
Switzerland											
United Kingdom	-1.7	4.7	2.7	2.0	5.2	4.2	3.6	4.7	2.2	17.9	54.3
United States	-4.3	-1.4	0.6	4.6	-2.5	5.1	-0.7	2.3	2.0	5.2	11.1

Energy - International bunkers: aviation**Trends in CO₂ emissions 1990 to 2000****Gigagrams**

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	941	941	1,101	1,172	1,143	1,201	1,332	1,471	1,522	1,628	1,543	1,672
Belgium	3,095	3,095	2,598	2,584	2,530	2,686	2,418	3,109	3,912	4,709	4,381	3,675
Canada	2,729	2,729	2,483	2,685	2,472	2,461	2,604	3,074	2,992	2,878	3,032	3,026
Czech Republic	617	617						459	407	225	539	343
Denmark	1,786	1,786	1,654	1,709	1,682	1,840	1,881	1,987	2,032	2,185	2,308	2,366
Estonia												
European Community	56,516	56,516	55,672	60,102	67,305	68,334	70,934	75,473	80,478	86,876	92,443	103,156
Finland	974	974	917	811	762	802	867	957	965	990	1,058	1,027
France	8,618	8,618	8,442	9,831	10,244	10,605	10,513	11,240	11,634	12,255	13,761	14,343
Greece	2,840	2,840	2,501	1,460	3,373	3,290	3,108	2,959	2,945	3,090	2,881	3,139
Hungary			376	386	361	532	524	560	531	556	596	634
Iceland	220	220	222	204	196	214	236	272	292	338	363	408
Ireland	1,116	1,116	1,209	1,299	1,379	1,163	1,146	1,269	1,325	1,373	1,624	1,659
Italy	4,195	4,195	4,247	4,710	4,974	5,263	5,854	6,435	6,648	7,189	7,712	7,778
Latvia											NE	NE
Luxembourg											1,019	971
Netherlands	4,497	4,497	4,960	5,910	6,500	6,720	7,665	8,249	8,979	9,709	10,070	10,071
New Zealand	1,359	1,359	1,293	1,323	1,341	1,444	1,582	1,649	1,724	1,723	1,968	1,780
Norway	619	619	560	603	635	617	586	691	771	821	942	913
Poland	NE	NE	317	227	248	NE	308	280	346	342	346	358
Portugal	883	883	872	917	856	900	853	770	792	843	868	930
Slovakia												
Spain	3,161	3,161	3,173	3,557	6,484	5,869	6,211	6,554	7,071	7,478	7,746	8,314
Sweden	1,826	1,826	1,910	2,133	1,820	1,811	1,849	1,940	1,929	2,103	2,103	1,919
Switzerland												4,743
United Kingdom	14,791	14,791	14,570	16,121	17,241	17,856	19,012	20,238	21,552	24,122	26,424	28,544
United States	46,591	46,591	46,545	47,031	47,552	48,311	51,117	52,164	55,925	55,012	58,913	57,274

^a Base year refers to 1990, except for the following Parties with economies in transition which, in accordance with decision 9/CP.2, use base years other than 1990: Poland (1988) and Hungary (average of 1985-1987).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	17.0	6.5	-2.5	5.2	10.8	10.4	3.5	7.0	-5.2	8.3	77.6
Belgium	-16.1	-0.5	-2.1	6.2	-10.0	28.6	25.8	20.4	-7.0	-16.1	18.7
Canada	-9.0	8.2	-7.9	-0.5	5.8	18.1	-2.7	-3.8	5.4	-0.2	10.9
Czech Republic							-11.3	-44.8	139.7	-36.3	-44.4
Denmark	-7.4	3.3	-1.6	9.4	2.2	5.6	2.3	7.5	5.6	2.5	32.5
Estonia											
European Community	-1.5	8.0	12.0	1.5	3.8	6.4	6.6	8.0	6.4	11.6	82.5
Finland	-5.9	-11.6	-6.0	5.2	8.1	10.4	0.8	2.6	6.9	-2.9	5.4
France	-2.0	16.5	4.2	3.5	-0.9	6.9	3.5	5.3	12.3	4.2	66.4
Greece	-11.9	-41.6	131.1	-2.5	-5.5	-4.8	-0.5	4.9	-6.8	9.0	10.5
Hungary		2.7	-6.4	47.4	-1.6	6.8	-5.1	4.6	7.3	6.3	
Iceland	1.1	-8.3	-3.9	9.2	10.5	15.0	7.6	15.8	7.5	12.2	85.6
Ireland	8.3	7.4	6.2	-15.7	-1.4	10.7	4.5	3.6	18.3	2.2	48.6
Italy	1.3	10.9	5.6	5.8	11.2	9.9	3.3	8.1	7.3	0.9	85.4
Latvia											
Luxembourg										-4.7	
Netherlands	10.3	19.2	10.0	3.4	14.1	7.6	8.8	8.1	3.7	0.0	123.9
New Zealand	-4.9	2.3	1.4	7.7	9.6	4.2	4.5	-0.1	14.2	-9.5	31.0
Norway	-9.7	7.7	5.4	-2.9	-5.0	18.1	11.5	6.6	14.6	-3.1	47.4
Poland		-28.3	9.1				-9.2	23.6	-1.0	1.0	3.6
Portugal	-1.3	5.2	-6.6	5.1	-5.2	-9.7	2.9	6.4	3.0	7.1	5.2
Slovakia											
Spain	0.4	12.1	82.3	-9.5	5.8	5.5	7.9	5.7	3.6	7.3	163.1
Sweden	4.6	11.7	-14.7	-0.5	2.1	4.9	-0.6	9.0	0.0	-8.7	5.1
Switzerland											
United Kingdom	-1.5	10.6	6.9	3.6	6.5	6.4	6.5	11.9	9.5	8.0	93.0
United States	-0.1	1.0	1.1	1.6	5.8	2.0	7.2	-1.6	7.1	-2.8	22.9

Energy - Transport: navigation (domestic)**Trends in CO₂ emissions 1990 to 2000**
Gigagrams

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	52	52	47	46	47	56	54	54	62	62	63	63
Belgium	312	312	601	1,451	1,049	292	312	313	325	336	368	427
Canada	4,733	4,733	4,935	4,788	4,188	4,352	4,064	4,158	4,216	4,827	4,646	4,776
Czech Republic ^{b,c}	56	56								32	32	29
Denmark	539	539	638	582	630	595	625	648	571	468	426	433
Estonia ^c												24
European Community												
Finland	227	227	200	211	227	273	264	258	249	257	501	481
France	1,908	1,908	1,710	1,713	1,816	1,964	2,015	1,865	1,906	1,886	2,048	1,828
Greece	1,825	1,825	1,851	1,899	1,738	1,831	1,744	1,493	1,812	2,793	2,761	1,580
Hungary ^b										4	2	2
Iceland ^b											18	16
Ireland	85.12	85.12	85.01	91.37	94.44	107.17	103.87	103.65	109.9	116.03	131.5	122
Italy ^b										7,626	6,956	6,257
Latvia											71	25
Luxembourg ^b											6	
Netherlands	877	877	838	963	1,037	774	920	800	848	817	807	1,004
New Zealand ^{b,c}			258	300	289	366	332	285	210			376
Norway	1,929	1,929								2,534	2,766	2,387
Poland												80
Portugal	487	487	455	430	431	363	337	341	242	200	254	266
Slovakia ^c												114
Spain	1,536	1,536	1,523	1,503	1,697	1,878	1,603	1,652	1,317	1,322	1,770	1,850
Sweden	649	649	525	506	409	394	452	442	506	593	661	670
Switzerland ^c												70
United Kingdom	3,461	3,461	3,718	3,557	3,538	3,282	3,102	3,415	3,262	3,005	2,741	2,648
United States	59,431	59,431	52,824	67,676	63,385	62,184	66,920	63,779	50,173	47,830	63,020	89,909

^a Base year refers to 1990, except for the following Parties with economies in transition which, in accordance with decision 9/CP.2, use base years other than 1990: Poland (1988) and Hungary (average of 1985-1987).

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^c The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: Czech Republic (1996, 1997), Estonia (1990, 1995), New Zealand (1990, 1998, 1999), Slovakia (1999), Switzerland (1990-1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-9.2	-2.1	0.8	19.1	-3.0	0.1	14.5	1.0	0.7	0.7	21.7
Belgium	92.7	141.4	-27.7	-72.2	6.9	0.1	3.9	3.5	9.5	15.9	36.7
Canada	4.3	-3.0	-12.5	3.9	-6.6	2.3	1.4	14.5	-3.8	2.8	0.9
Czech Republic									0.8	-9.1	-47.6
Denmark	18.4	-8.7	8.2	-5.5	5.0	3.6	-11.9	-17.9	-9.0	1.5	-19.7
Estonia											
European Community											
Finland	-11.9	5.7	7.4	20.5	-3.4	-2.3	-3.4	3.0	95.4	-4.1	112.1
France	-10.4	0.2	6.0	8.1	2.6	-7.4	2.2	-1.0	8.6	-10.8	-4.2
Greece	1.4	2.6	-8.5	5.3	-4.8	-14.3	21.4	54.1	-1.2	-42.8	-13.4
Hungary									-48.3	6.7	
Iceland										-8.9	
Ireland	-0.1	7.5	3.4	13.5	-3.1	-0.2	6.0	5.6	13.3	-7.2	43.4
Italy									-8.8	-10.0	
Latvia										-65.1	
Luxembourg											
Netherlands	-4.5	15.0	7.7	-25.4	18.8	-12.9	5.9	-3.7	-1.1	24.3	14.4
New Zealand		16.3	-3.5	26.3	-9.1	-14.3	-26.1				
Norway									9.2	-13.7	23.7
Poland											
Portugal	-6.5	-5.4	0.2	-15.7	-7.1	1.0	-29.1	-17.1	26.7	5.0	-45.2
Slovakia											
Spain	-0.9	-1.3	12.9	10.6	-14.6	3.1	-20.3	0.3	33.9	4.5	20.4
Sweden	-19.0	-3.7	-19.2	-3.5	14.6	-2.1	14.4	17.2	11.5	1.3	3.3
Switzerland											
United Kingdom	7.4	-4.3	-0.6	-7.2	-5.5	10.1	-4.5	-7.9	-8.8	-3.4	-23.5
United States	-11.1	28.1	-6.3	-1.9	7.6	-4.7	-21.3	-4.7	31.8	42.7	51.3

Energy - International bunkers: marine

Trends in CO₂ emissions 1990 to 2000
Gigagrams

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium	13,303	13,303	13,459	13,257	13,651	14,212	12,955	15,376	17,605	18,159	14,586	16,046
Canada	2,995	2,995	3,099	3,181	2,838	3,189	3,312	3,086	3,046	3,776	3,395	3,446
Czech Republic												
Denmark	3,095	3,095	2,772	2,895	4,312	4,846	5,073	4,820	4,419	4,429	4,166	4,281
Estonia	0	0	0	0	0	0	276	289	319	339	362	329
European Community	99,341	99,341	100,696	100,524	103,933	101,161	102,375	109,905	120,505	125,754	119,683	129,092
Finland	1,800	1,800	2,898	2,164	1,695	1,318	1,044	1,181	1,286	1,658	1,764	2,032
France	8,137	8,137	8,441	8,157	7,860	7,002	7,217	7,568	8,379	9,166	9,311	9,619
Greece	8,028	8,028	7,368	8,464	9,869	10,470	11,254	9,864	9,927	11,058	9,838	11,359
Hungary												NO
Iceland	99	99	38	60	97	93	141	124	149	177	164	219
Ireland	56	56	107	54	171	124	368	497	484	503	543	477
Italy	4,396	4,396	3,600	3,462	3,686	3,673	4,043	3,006	3,062	3,339	3,089	3,857
Latvia												
Luxembourg												
Netherlands	35,267	35,267	36,330	36,490	37,780	36,140	36,621	37,196	39,530	39,822	41,143	43,429
New Zealand	1,031	1,031	912	866	915	1,324	1,125	1,063	1,112	1,073	916	746
Norway	1,478	1,478	1,252	1,567	1,677	1,846	2,256	2,480	3,000	2,899	2,733	2,712
Poland	NE	NE	2,643	3,489	1,773	NE	1,814	1,789	1,903	1,749	1,338	1,265
Portugal	1,173	1,173	1,191	1,210	987	944	1,021	1,093	1,139	1,204	1,466	1,596
Slovakia												
Spain	11,780	11,780	12,496	12,655	11,079	10,027	10,296	15,029	18,532	19,546	19,074	19,496
Sweden	2,163	2,163	2,560	2,920	2,932	3,452	3,394	3,596	4,218	4,855	4,750	4,622
Switzerland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
United Kingdom	6,559	6,559	6,340	6,640	6,573	6,150	6,599	7,213	8,064	8,788	6,357	5,594
United States	67,272	67,272	73,337	62,822	52,270	49,690	49,921	50,109	53,960	57,900	46,429	42,954

^a Base year refers to 1990, except for the following Parties with economies in transition which, in accordance with decision 9/CP.2, use base years other than 1990: Poland (1988) and Hungary (average of 1985-1987).

Percentage change relative from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium	1.2	-1.5	3.0	4.1	-8.8	18.7	14.5	3.1	-19.7	10.0	20.6
Canada	3.5	2.7	-10.8	12.4	3.9	-6.9	-1.3	24.0	-10.1	1.5	15.1
Czech Republic											
Denmark	-10.4	4.5	48.9	12.4	4.7	-5.0	-8.3	0.2	-5.9	2.8	38.3
Estonia						4.5	10.7	6.2	6.7	-9.3	
European Community	1.4	-0.2	3.4	-2.7	1.2	7.4	9.6	4.4	-4.8	7.9	29.9
Finland	61.0	-25.3	-21.7	-22.2	-20.8	13.1	8.9	28.9	6.4	15.2	12.9
France	3.7	-3.4	-3.7	-10.9	3.1	4.9	10.7	9.4	1.6	3.3	18.2
Greece	-8.2	14.9	16.6	6.1	7.5	-12.4	0.6	11.4	-11.0	15.5	41.5
Hungary											
Iceland	-62.0	59.2	62.4	-4.0	50.5	-11.9	20.0	18.7	-7.2	33.4	120.8
Ireland	89.9	-49.9	219.5	-27.7	197.4	35.2	-2.7	3.8	8.0	-12.2	747.2
Italy	-18.1	-3.8	6.5	-0.4	10.1	-25.7	1.9	9.0	-7.5	24.9	-12.3
Latvia											
Luxembourg											
Netherlands	3.0	0.4	3.5	-4.3	1.3	1.6	6.3	0.7	3.3	5.6	23.1
New Zealand	-11.6	-5.0	5.6	44.7	-15.0	-5.6	4.7	-3.5	-14.6	-18.6	-27.7
Norway	-15.3	25.1	7.0	10.1	22.2	10.0	21.0	-3.4	-5.7	-0.8	83.5
Poland		32.0	-49.2			-1.4	6.4	-8.1	-23.5	-5.4	
Portugal	1.5	1.6	-18.5	-4.3	8.1	7.0	4.2	5.8	21.8	8.9	36.1
Slovakia											
Spain	6.1	1.3	-12.4	-9.5	2.7	46.0	23.3	5.5	-2.4	2.2	65.5
Sweden	18.4	14.1	0.4	17.7	-1.7	6.0	17.3	15.1	-2.2	-2.7	113.7
Switzerland											
United Kingdom	-3.3	4.7	-1.0	-6.4	7.3	9.3	11.8	9.0	-27.7	-12.0	-14.7
United States	9.0	-14.3	-16.8	-4.9	0.5	0.4	7.7	7.3	-19.8	-7.5	-36.1

Energy - Fugitive emissions from fuels: coal mining and handling (2000)

Activity data and emission factors

1.B.1 Fugitive emissions from solid fuels (CH ₄)														
Key source	Percentage of national total	Methods and EF used ^b		1.B.1.a Coal mining and handling										
		Methods	EF	Activity data					CH ₄ IEF					
				CRF			IEA Total	Difference	Underground mines		Surface mines			
				Underground mines	Surface mines	Total			Mining activities	Post-mining activities	Mining activities	Post-mining activities		
(%)	(Mt)	(%)	(kg/t)											
IPCC Default EF ^a										4.50-16.75	0.60-2.68	0.20-1.34	0-0.13	
Austria	0.00	C	CS	NO	1.25	1.25	1.25	0.1	NO	NO	0.01	NE		
Belgium	0.01	C	C				0.00							
Canada	0.13	CS	CS		1.53	83.20	84.72	69.16	-18.4	9.04	IE	0.38	IE	
Czech Republic	L, T	3.40	T3	CS	14.86	46.66	61.51	65.16	5.9	11.89	1.57	0.77	0.07	
Denmark		0.10	D	D	0.00	0.00	0.00	0.00	0.0					
Estonia		1.20			6.72	5.01	11.73	11.73	0.0	1.34	0.13	0.20	0.07	
European Community			C, CS, T1, T2	C, CS, D	NE	NE	NE	327.75		NE	NE	NE	NE	
Finland		0.03	CS	CS	NO	NO	NO	0.00	0.0	NO	NO	NO	NO	
France	T	0.47	C	CS	2.84	0.63	3.46	3.46	0.0	39.02		1.14		
Greece		0.88	T1	IPCC	NA	63.89	63.89	63.89	0.0	NO	NO	0.77	0.08	
Hungary	L	1.92	D	D	5.18	8.85	14.03	14.03	0.0	11.73	1.68	0.80	0.07	
Iceland		NO			NO	NO	NO	0.00	0.0	NO	NO	NO	NO	
Ireland		NO	NA	NA	NO	NO	NO	0.00	0.0	NO	NO	NO	NO	
Italy		0.01	D, C	D, CS	0.12	0.01	0.13	0.01	-89.3	6.70		1.34		
Latvia		NO			NO		NO	0.00	0.0					
Luxembourg							0.00	0.00	0.0					
Netherlands		NO	IE		NO	NO	NO	0.00	0.0	NO	NO	NO	NO	
New Zealand	L	0.70	T1	CS/D	0.88	2.70	3.59	3.57	-0.5	26.17	1.81	0.29	0.02	
Norway		0.01	T1	D	0.63		0.63	0.63	0.0	0.54				
Poland	L	3.08	CS	CS	103.35	59.49	162.84	161.73	-0.7	4.75	0.73	0.01	0.00	
Portugal		NO	C+T2	C	NO	NO	NO	0.00	0.0	NO	NO	NO	NO	
Slovakia	L	1.09	T1	CS	3.65	NO	3.65	3.65	0.0	6.70	0.30	NO	NO	
Spain	T	0.31	T1	CS	14,151.75	13,841.17	27,992.92	23.47	-99.9	0.00	0.00	0.00	0.00	
Sweden		0.00	CS	CS	NO	NO	NO	0.00	0.0	NO	NO	NO	NO	
Switzerland		NO			NO	NO	NO	0.00	0.0	NO	NO	NO	NO	
United Kingdom	L, T	0.86	T2	CS	17.19	13.41	30.60	30.60	0.0	13.96	1.16	0.34	IE	
United States	L	0.87	T2, T3	CS	338.17	635.59	973.76	975.69	0.2	5.55	1.59	0.66	0.11	

^a Range of default emission factors for the IPCC tier 1 approach (source: IPCC Guidelines, volume 3, pages 1.105-1.110).

^b Information on methods and emission factors is included in this table as reported by Parties. It may not reflect the actual method used or type of emission factors for all subcategories within the category 1.B.1 Solid fuels.

Energy - Fugitive emissions from fuels: solid fuels**Trends in CH₄ emissions 1990 to 2000**

Gigagrams

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Belgium	1.21	1.21	1.21	0.96	0.88	0.83	0.83	0.83	0.63	0.65	0.62	0.62
Canada	91.16	91.16	99.35	87.35	87.32	84.09	81.58	84.13	78.07	64.95	51.48	45.19
Czech Republic	361.90	361.90						268.42	263.47	253.05	228.96	239.00
Denmark	3.30	3.30	3.87	3.94	4.74	5.58	6.27	6.27	6.27	3.97	3.32	3.32
Estonia	19.41	19.41	17.55	16.25	13.40	13.17	12.13	13.47	13.02	10.76	9.74	11.25
European Community	2,395.69	2,395.69	2,285.02	2,213.10	1,985.35	1,609.31	1,681.27	1,505.46	1,404.66	1,268.12	1,141.19	981.02
Finland	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
France	206.26	206.26	191.52	199.88	208.50	212.93	211.03	160.81	137.09	133.20	126.55	122.10
Greece	44.11	44.11	44.79	46.79	46.58	48.17	49.03	50.81	50.02	51.75	52.74	54.30
Hungary	222.85	167.00	160.64	124.40	109.47	104.81	105.90	107.75	107.65	94.28	89.45	77.17
Iceland												NO
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	5.58	5.58	5.25	4.91	3.86	3.39	3.07	2.88	2.85	2.63	2.52	3.05
Latvia												NO
Luxembourg												0.00
Netherlands	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
New Zealand	11.83	11.83	10.58	10.92	10.96	13.20	19.77	29.95	18.70	24.72	25.86	25.58
Norway	0.16	0.16	0.18	0.19	0.14	0.16	0.16	0.12	0.21	0.18	0.22	0.34
Poland	1,043.35	798.74	759.01	628.50	705.54	724.18	741.62	746.04	744.78	625.80	585.99	566.55
Portugal	3.14	3.14	3.04	2.84	2.64	1.97						NO
Slovakia	33.40	33.40	29.00	24.70	24.80	25.40	26.30	26.80	27.40	27.70	26.20	25.54
Spain	85.19	85.19	75.16	75.51	72.85	67.83	67.90	69.42	68.26	61.42	56.65	57.57
Sweden	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Switzerland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
United Kingdom	819.20	819.20	838.26	803.85	724.34	456.59	504.25	473.63	445.57	375.57	310.88	264.99
United States	4,148.60	4,148.60	3,984.95	3,874.55	3,317.92	3,348.46	3,501.74	3,255.03	3,244.29	3,235.37	3,032.65	2,903.10

^a Base year refers to 1990, except for the following Parties with economies in transition which, in accordance with decision 9/CP.2, use base years other than 1990: Poland (1988) and Hungary (average of 1985-1987).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-15.0	-16.1	-3.2	-19.1	-5.2	-14.6	2.0	0.9	-0.2	-53.5	-53.5
Belgium	0.0	-20.7	-8.3	-5.7	0.0	0.0	-24.1	2.8	-3.6	-48.4	-48.4
Canada	9.0	-12.1	0.0	-3.7	-3.0	3.1	-7.2	-16.8	-20.7	-50.4	-50.4
Czech Republic							-1.8	-4.0	-9.5	-34.0	-34.0
Denmark	17.6	1.7	20.1	17.8	12.4	0.0	0.0	-36.7	-16.3	0.7	0.7
Estonia	-9.6	-7.4	-17.6	-1.7	-7.9	11.0	-3.3	-17.4	-9.5	-42.1	-42.1
European Community	-4.6	-3.1	-10.3	-18.9	4.5	-10.5	-6.7	-9.7	-10.0	-59.1	-59.1
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
France	-7.1	4.4	4.3	2.1	-0.9	-23.8	-14.7	-2.8	-5.0	-40.8	-40.8
Greece	1.5	4.5	-0.5	3.4	1.8	3.6	-1.6	3.5	1.9	23.1	23.1
Hungary	-3.8	-22.6	-12.0	-4.3	1.0	1.7	-0.1	-12.4	-5.1	-53.8	-53.8
Iceland											
Ireland											
Italy	-5.9	-6.5	-21.3	-12.2	-9.4	-6.4	-1.0	-7.8	-4.1	-45.2	-45.2
Latvia											
Luxembourg											
Netherlands											
New Zealand	-10.6	3.2	0.4	20.4	49.7	51.5	-37.6	32.2	4.6	116.3	116.3
Norway	8.9	8.8	-25.4	12.5	-3.0	-21.4	68.3	-15.1	23.1	108.7	108.7
Poland	-5.0	-17.2	12.3	2.6	2.4	0.6	-0.2	-16.0	-6.4	-29.1	-29.1
Portugal	-3.2	-6.8	-7.0	-25.4	-100.0						
Slovakia	-13.2	-14.8	0.4	2.4	3.5	1.9	2.2	1.1	-5.4	-23.5	-23.5
Spain	-11.8	0.5	-3.5	-6.9	0.1	2.2	-1.7	-10.0	-7.8	-32.4	-32.4
Sweden											
Switzerland											
United Kingdom	2.3	-4.1	-9.9	-37.0	10.4	-6.1	-5.9	-15.7	-17.2	-67.7	-67.7
United States	-3.9	-2.8	-14.4	0.9	4.6	-7.0	-0.3	-0.3	-6.3	-30.0	-30.0

Energy - Fugitive emissions from fuels: oil and natural gas (2000)

1.B.2 Fugitive emissions from oil and natural gas (CH ₄)																		
Key source	Percentage of national total	Methods and EF used ^a		1.B.2.a Oil						1.B.2.b Natural gas								
		Methods	EF	CH ₄ IEF ^b						CH ₄ IEF ^b								
				Production		Transport		Refining (R)/ Storage (S)		Production/Processing		Transmission		Distribution		Other leakage ^b		
(%)	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit		
IPCC Default EF ^c				300-5,000	kg/PJ	745.00	kg/PJ	90-1,400 (R) 20-250 (S)	kg/PJ	46,000-314,000	kg/PJ	57,000-628,000	kg/PJ	57,000-288,000	kg/PJ	0-384,000	kg/PJ	
Austria		0.2	C	CS	IE		IE	33,345	kg/Mt	IE				698	kg/10 ⁶ m ³			
Belgium		0.6	C,CS,O	CS,O														
Canada	L, T	5.3	CS	CS	6,702	kg/10 ³ m ³	NA		NE	2,881	kg/10 ⁶ m ³	3,255	kg/km	744	kg/km	NA		
Czech Republic		0.4	T1, T3	D,CS	5,287	kg/PJ	NO		1,400	kg/PJ	49,778	kg/PJ	1,985	kg/PJ	177,178	kg/PJ	49,748	kg/PJ
Denmark		0.4	C	C						1	kg/10 ³ m ³	2	kg/10 ³ m ³					
Estonia	L	2.2			4,000	kg/PJ	745	kg/PJ	192	kg/PJ	458,000	kg/PJ	458,000	kg/PJ				
European Community			C, CS, O, T1, T2, T3	C, CS, O, PS	NE		NE		NE	NE		NE		NE		NE		
Finland		0.0	CS	PS	NO		NE/0		NE/0	NO		NE/0		NE/0		1,000	kg/t	
France	T	0.4	C	CS				66	kg/PJ	559	kg/PJ	60,672	kg/PJ					
Greece		0.0	C	C	3	kg/GJ								21	kg/TJ			
Hungary	L	4.7	T1	D	2,600	kg/PJ	NE		887	kg/PJ	458,000	kg/PJ	133,000	kg/PJ	IE		237,401	kg/PJ
Iceland					NO		NO		NO	NO		NO		NO		NO		
Ireland		0.1	T1	CS	NO		NO		NO	NE		NE		82,940	kg/PJ	NO		
Italy	L	1.0	C, CS	CS	281	kg/Gg			20	kg/Gg	178	kg/10 ⁶ m ³	496	kg/10 ⁶ m ³	7,953	kg/10 ⁶ m ³		
Latvia	L	3.2	T1	D								340,000	kg/PJ					
Luxembourg																		
Netherlands	L, T	1.3	CS	CS	IE			118	kg/PJ	32,436	kg/PJ	1,474	kg/PJ	81,049	kg/PJ			
New Zealand		0.5	T1	CS/D	NE		1	kg/TJ	1	kg/TJ	NE		207	kg/TJ	NE		NE	
Norway	L, T	0.9	CS	CS	NE		2,146	kg/PJ	NE		NE		NE				NE	
Poland		1.1	CS	CS	61,800	kg/PJ	NE		NE		99,169	kg/PJ	441,690	kg/PJ			NE	
Portugal		0.2	C+T2	C			60,000	kg/Mt	83,793	kg/Mt			100	kg/TJ				
Slovakia	L	1.5	D	D,CS	2,651	kg/PJ	745	kg/PJ	745	kg/PJ	67,000	kg/PJ	2,000	kg/PJ			120,000	kg/PJ
Spain		0.1	CS	PS	9	kg/Mg	27	kg/Gg	1	kg/Gg	70,889	kg/PJ	3,600	kg/PJ	35,273	kg/PJ		
Sweden		0.0	CS	CS	NO		IE		IE		NO		IE		IE			
Switzerland		0.5	C	CS	NO		NO		1,071	kg/PJ	NO		117,763	kg/PJ	IE		IE	
United Kingdom	L	1.3	T3	CS	645	kg/PJ	118	kg/Gg	29	kg/PJ	IE		IE		96,761	kg/PJ	IE	
United States	L	2.0	M	M	476,874	kg/mm_Bbl_yr	2,572	kg/mm_Bbl_yr	13,149	kg/mm_Bbl_yr	102,459	kg/bill_ft^3_yr	90,472	kg/bill_ft^3_yr	66,984	kg/bill_ft^3_yr	IE	

^a Information on methods and emission factors is included in this table as reported by Parties. It may not reflect the actual method or type of emission factors used for all sub categories within the category 1.B.2 Oil and natural gas.

^b The units for the implied emission factors (IEF) vary from Party to Party depending on the unit of the activity data used.

^c Source of default emission factors: IPCC Guidelines, vol. 3, pages 1.119 -1.121. Emission factors (in kg/PJ) for natural gas activities by regions are provided in the table below.

	Basis	Western Europe	US & Canada	Former USSR, Central and Eastern Europe	Rest of the world
Fugitive and other maintenance emissions from gas production	Gas produced	15,000-27,000	46,000-84,000	140,000-314,000	46,000-96,000
Emissions from processing, distribution and transmission	Gas produced			288,000-628,000	288,000 (high)
	Gas consumed	72,000-133,000	57,000-118,000		118,000 (low)

Energy - Fugitive emissions from fuels: oil and natural gas (2000) - continued

Fugitive emissions from oil and natural gas (CH ₄)										
1.B.2.d Venting and flaring										
CH ₄ IEF										
	Oil		Gas				Combined			
	Venting ^a		Venting ^a		Flaring ^a		Venting ^a		Flaring ^a	
	value	unit	value	unit	value	unit	value	unit	value	unit
IPCC default EF ^b	1,000-3000	kg/PJ	6,000-209,000		kg/PJ		3,000-14,000		kg/PJ	
Austria	IE		IE		IE		IE		IE	
Belgium										
Canada	NA		NA		NA		NA		141.44	kg/million m ³
Czech Republic	NE		NE		NE		NE		NE	
Denmark					0.16	kg/GJ				
Estonia	4,000	kg/PJ	18,000	kg/PJ						
European Community										
Finland	NE/0		NE/0		NE/0		NE/0		NE/0	
France								378,803.90	kg/PJ	
Greece										
Hungary	2,000	kg/PJ	24,000	kg/PJ						
Iceland	NO		NO		NO		NO		NO	
Ireland	NO		NE		NE		NO		NO	
Italy										
Latvia										
Luxembourg										
Netherlands	IE		IE		IE		IE		IE	
New Zealand	IE		IE		IE		IE		109.84	kg/TJ
Norway					6,845.31	kg/PJ	744	kg/PJ		
Poland	NE		NE		NE		NE		NE	
Portugal	340	kg/Mt	NE		NE		NE		NE	
Slovakia										
Spain	NE		NE		5.45	kg/PJ				
Sweden	IE		IE							
Switzerland	IE		IE		IE		NO		NO	
United Kingdom	IE		IE		IE		NE		327,045.41	kg/PJ
United States	IE		IE		IE		IE		IE	kg/TBtu

	Basis	Former USSR, Central & Eastern Europe	Rest of the world
Venting & flaring	Gas Produced	6,000-30,000	175,000-209,000

^a The units for the IEF vary from Party to Party depending on the unit of activity data used.

^b Source of default emission factors: IPCC Guidelines, volume 3, pages 1.119-1.121. Emission factors (in kg/PJ) for venting & flaring from gas production by regions are provided in the table above.

Energy - Fugitive emissions from fuels: oil and natural gas

Trends in CH₄ emissions from oil and natural gas 1990 to 2000
Gigagrams

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	4.50	4.50	4.76	4.69	4.93	5.07	5.50	5.85	5.67	5.81	5.91	5.71
Belgium	35.57	35.57	37.96	38.69	41.06	41.76	32.79	35.64	35.50	39.79	42.99	42.50
Canada	1,246.72	1,246.72	1,305.43	1,423.84	1,485.66	1,571.77	1,671.19	1,785.19	1,787.10	1,774.28	1,776.11	1,822.25
Czech Republic	32.17	32.17						32.26	34.98	28.18	28.77	28.77
Denmark	9.17	9.17	9.89	9.94	9.76	11.39	11.10	11.22	11.69	11.27	12.63	11.85
Estonia	37.77	37.77	37.64	21.95	10.76	15.54	17.92	19.82	19.30	18.23	17.76	20.38
European Community	1,544.25	1,544.25	1,535.55	1,535.02	1,541.99	1,523.26	1,449.10	1,470.15	1,402.48	1,387.26	1,369.44	1,331.50
Finland	0.17	0.17	0.20	0.20	0.20	0.20	0.20	0.59	0.41	0.60	0.35	0.37
France	117.68	117.68	113.45	109.06	104.58	100.36	96.10	91.74	91.71	91.62	91.16	91.23
Greece	0.22	0.22	0.22	0.19	0.15	0.10	0.09	0.10	0.20	0.67	1.07	1.52
Hungary	225.42	199.00	292.14	259.02	275.70	274.34	292.46	317.35	299.71	305.24	289.23	187.70
Iceland												NO
Ireland	6.05	6.05	5.79	5.54	5.29	5.04	4.84	4.71	4.59	4.03	4.30	4.16
Italy	317.39	317.39	310.40	302.89	290.50	286.07	274.37	270.88	266.89	266.27	263.17	262.49
Latvia	53.24	53.24	51.11	36.34	24.53	18.27	21.60	18.78	23.04	22.59	14.93	15.99
Luxembourg											2.06	2.11
Netherlands	178.75	178.75	188.10	163.10	158.00	168.50	170.31	188.34	156.46	146.56	144.28	131.22
New Zealand												17.63
Norway	13.74	13.74	15.38	19.67	23.05	24.42	24.58	24.67	27.75	25.10	23.41	24.54
Poland	204.86	195.15	166.25	164.19	171.25	172.07	185.57	196.56	192.64	195.72	191.39	205.72
Portugal	1.68	1.68	1.54	1.81	1.73	2.16	2.06	1.88	2.27	4.71	9.71	6.74
Slovakia	35.11	35.11	33.51	30.85	32.10	31.87	34.52	36.14	36.47	34.78	35.86	34.96
Spain	24.47	24.47	20.34	19.84	18.59	17.77	19.97	25.79	24.69	24.09	25.68	27.45
Sweden	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NE	0.00	0.00
Switzerland	14.63	14.63	14.63	14.16	13.77	13.27	12.78	12.68	12.58	12.48	12.38	12.27
United Kingdom	513.29	513.29	490.59	488.76	476.66	475.34	471.04	458.02	438.31	430.29	410.67	393.73
United States	7,030.51	7,030.51	7,119.34	7,159.70	7,333.74	7,233.86	7,137.75	7,174.63	6,988.70	6,933.96	6,706.89	6,581.74

^a Base year refers to 1990, except for the following Parties with economies in transition which, in accordance with decision 9/CP.2, use base years other than 1990: Poland (1988) and Hungary (average of 1985-1987).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	5.7	-1.4	5.0	2.9	8.5	6.3	-3.1	2.5	1.8	-3.4	26.9
Belgium	6.7	1.9	6.1	1.7	-21.5	8.7	-0.4	12.1	8.0	-1.1	19.5
Canada	4.7	9.1	4.3	5.8	6.3	6.8	0.1	-0.7	0.1	2.6	46.2
Czech Republic							8.4	-19.4	2.1	0.0	-10.6
Denmark	7.9	0.5	-1.9	16.7	-2.5	1.0	4.2	-3.6	12.1	-6.2	29.2
Estonia	-0.3	-41.7	-51.0	44.4	15.3	10.6	-2.6	-5.5	-2.6	14.8	-46.1
European Community	-0.6	0.0	0.5	-1.2	-4.9	1.5	-4.6	-1.1	-1.3	-2.8	-13.8
Finland	17.6	0.0	0.0	0.0	0.0	194.0	-30.3	47.1	-41.6	5.4	118.2
France	-3.6	-3.9	-4.1	-4.0	-4.2	-4.5	0.0	-0.1	-0.5	0.1	-22.5
Greece	0.0	-12.6	-22.9	-29.7	-11.8	12.2	101.0	230.5	59.2	42.5	607.9
Hungary	46.8	-11.3	6.4	-0.5	6.6	8.5	-5.6	1.8	-5.2	-35.1	-5.7
Iceland											
Ireland	-4.3	-4.3	-4.5	-4.7	-4.0	-2.7	-2.5	-12.2	6.7	-3.3	-31.2
Italy	-2.2	-2.4	-4.1	-1.5	-4.1	-1.3	-1.5	-0.2	-1.2	-0.3	-17.3
Latvia	-4.0	-28.9	-32.5	-25.5	18.2	-13.1	22.7	-2.0	-33.9	7.1	-70.0
Luxembourg										2.2	
Netherlands	5.2	-13.3	-3.1	6.6	1.1	10.6	-16.9	-6.3	-1.6	-9.0	-26.6
New Zealand											
Norway	11.9	27.9	17.2	6.0	0.6	0.3	12.5	-9.5	-6.7	4.8	78.6
Poland	-14.8	-1.2	4.3	0.5	7.8	5.9	-2.0	1.6	-2.2	7.5	5.4
Portugal	-8.5	17.6	-4.1	24.8	-4.6	-8.6	20.6	107.3	106.2	-30.5	301.5
Slovakia	-4.6	-8.0	4.1	-0.7	8.3	4.7	0.9	-4.6	3.1	-2.5	-0.4
Spain	-16.9	-2.5	-6.3	-4.4	12.4	29.1	-4.3	-2.4	6.6	6.9	12.2
Sweden	-17.2	14.4	-11.9	-36.1	0.0	173.7	8.7				-88.1
Switzerland	0.0	-3.2	-2.8	-3.6	-3.7	-0.8	-0.8	-0.8	-0.8	-0.8	-16.1
United Kingdom	-4.4	-0.4	-2.5	-0.3	-0.9	-2.8	-4.3	-1.8	-4.6	-4.1	-23.3
United States	1.3	0.6	2.4	-1.4	-1.3	0.5	-2.6	-0.8	-3.3	-1.9	-6.4

2. Industrial processes

FCCC/WEB/SAI/2002

Industrial processes - Mineral products, CO₂ (2000)

2.A Mineral products																				
	Methods and EF used ^a		2.A.1 Cement production						2.A.2 Lime production		2.A.3 Limestone and dolomite use									
	Methods	EF	Key source	Percentage of national total	Activity data (production)				CO ₂ IEF	Key source	Percentage of national total	CO ₂ IEF	Key source	Percentage of national total	CO ₂ IEF					
					Description ^b	CRF	UN ^c	Difference ^d								t / t	%	t / t	%	t / t
						kt	kt	%												
IPCC default EF ^e									0.499 (cement)		0.79 - 0.91			0.44 - 0.48						
IPCC default EF ^e									0.507 (clinker)											
Austria	C, CS	CS	L/T	2.9/4.6	Cement produced	3,581			0.65		0.80			NE						
Belgium	CS	CS					8,580													
Canada	T1	CS	L/T	0.9/1.8	Cement production data	12,612	12,612	0.00	0.50		0.79			0.45						
Czech Republic	T1	D	L/T	1.4/1.4	(e.g. cement production)	4,093	4,093	0.00	0.50					NE						
Denmark	CS	CS	L/T	2/2.3	(e.g. cement or clinker production)	2,506	2,639	5.31	0.54		0.21									
Estonia			L	1.7	(e.g. cement or clinker production)	679	329	-51.55	0.50		0.79									
European Community						NE			NE		NE			NE						
Finland	D	PS/D	L	0.9	Cement production	1,422	1,422	0.00	0.47		0.79			NE						
France	C	CS	L/T	1.6/2.2	Production	16,323	20,004	22.55	0.53		0.44									
Greece	C	C	L/T	5.7/4.5	Cement production	14,700			0.50		0.79			NE						
Hungary	D	D	L	1.9	Clinker production	3,160	3,326	5.25	0.50		0.79			0.44						
Iceland	D	D	L	2.2	(e.g. cement or clinker production)	143	144	0.98	0.44											
Ireland	D	D	L	2.4	Clinker production	3,150	2,000		0.50		0.75			0						
Italy	D	D	L	3.5	Cement production	38,302	38,302	0.00	0.50	L	0.6	0.79		IE						
Latvia	T1	D			Cement production		C 301		0.50			C		C						
Luxembourg							749							IE						
Netherlands	CS	PS, CS			Clinker production	869			0.50			IE		NA						
New Zealand	T1	CS			Cement production	1,064	975		0.49		0.72			NA						
Norway	D	CS	L/T	1.6/1.4																
Poland	T1	CS	L	2.0	Production	15,046	15,046	0.00	0.50		0.79			NE						
Portugal	D+C	D+C	L	4.6	Total cement production	9,575	10,343	8.02	0.40			IE		0.32						
Slovakia	D	D	L	3.3	Clinker production	3,182	3,045	-4.29	0.51	L	1.1	0.77	L	2.9						
Spain	CS,C,D,T2	CS,C,D,T2	L/T	3.9/2.2	Clinker production	27,840	30,000	7.76	0.54			0.72		NE						
Sweden	CS	CS	L/T	1.7/1.7	Use of limestone	3,056	2,613	-14.50	0.40			0.77		IE						
Switzerland	C	CS	L	4.2	Cement production	3,720	3,600		0.59			0.37		NO						
United Kingdom	T2	D	L	0.9	Clinker production	11,456	12,528	9.36	0.50			0.44		0.45						
United States	D,CS	D,CS	L	0.60	Clinker production	79,417	87,846	10.61	0.52			0.68		0.45						

^a Information on methods and emission factors is included in this table as reported by Parties. It may not reflect the actual method used or type of emission factor 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 Cement production from the UN Industrial Commodity Production Statistics Database (as of 19 June 2002), United Nations, or the Monthly Bulletin of Statistics, Department of Economic and Social Affairs, Statistics Division, United Nations, New York, volume LVI, no.3, March 2002. Data are for the year 2000, except for the Ireland, Latvia, New Zealand and Switzerland for which data are the year 1999.

^d As the UN data given in this table are for cement production, the comparisons with the CRF data specified as clinker are likely to differ. In instances where only 1999 data from the U.N. was available no percentage comparisons with the CRF data for 2000 are given here.

^e Source of default emission factors: IPCC Guidelines, volume 3, pages 2.6, 2.9 and 2.10

Industrial processes - Mineral products**Trends in CO₂ emissions 1990 to 2000 (Gigagram)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	3,974.6	3,838.0	3,899.6	3,728.9	3,863.9	3,232.1	3,229.2	3,370.1	3,109.5	3,108.2	3,055.8
Belgium	4,569.4	4,915.3	4,921.4	5,038.8	5,223.2	5,619.5	5,620.4	5,253.6	5,327.4	5,297.7	5,297.7
Canada	8,160.7	6,980.6	6,635.7	6,875.2	7,507.4	7,691.4	8,034.3	8,183.9	8,683.2	9,101.8	9,075.6
Czech Republic	3,380.3						2,479.0	2,498.0	2,661.5	2,362.1	2,250.7
Denmark	1,005.5	1,178.1	1,300.5	1,311.0	1,317.8	1,311.0	1,388.1	1,539.3	1,436.2	1,401.6	1,453.0
Estonia	613.7	614.7	313.5	193.1	214.9	221.4	207.0	226.0	367.6	346.8	354.3
European Community	111,937.0	106,747.9	105,033.4	100,403.1	104,385.7	105,297.8	102,618.0	105,895.7	108,432.3	109,607.6	111,009.1
Finland	1,175.5	1,036.9	936.9	793.1	836.3	836.4	862.6	878.5	921.4	1,001.8	1,072.3
France	13,612.1	12,992.5	11,828.2	11,053.6	11,359.9	11,091.4	10,839.2	10,544.5	11,153.1	10,738.9	10,934.6
Greece	6,984.2	6,979.3	7,021.7	7,252.7	7,045.8	7,386.4	7,578.7	7,634.8	7,565.5	7,618.7	7,625.0
Hungary	3,568.0	1,264.8	1,118.2	1,266.7	1,396.7	1,437.7	1,373.5	1,405.5	1,971.4	2,053.1	2,099.4
Iceland	50.5	47.0	44.2	38.3	35.9	36.2	40.1	44.7	52.2	59.2	63.5
Ireland	941.4	923.6	961.8	932.3	1,085.2	1,067.6	1,080.1	1,189.8	1,192.1	1,279.3	1,693.0
Italy	24,193.0	24,095.2	24,553.6	20,850.0	20,205.2	20,744.6	20,262.1	20,386.4	21,164.7	21,853.2	22,722.1
Latvia	562.9	584.0	286.3	89.3	154.2	127.4	185.4	153.5	236.1	160.7	100.9
Luxembourg ^a										519.8	547.2
Netherlands	1,124.4	700.0	750.0	1,050.0	1,050.0	1,114.3	900.0	1,087.2	1,025.4	975.0	981.3
New Zealand	448.3	437.2	500.5	553.3	566.0	586.0	580.9	598.7	574.0	632.3	629.8
Norway	707.4	652.0	710.5	897.2	912.0	959.3	961.6	1,026.6	968.5	959.5	950.4
Poland	7,715.0	8,301.0	9,439.0	8,468.0	8,292.0	9,364.0	8,193.0	9,872.0	9,790.0	9,983.0	10,133.8
Portugal	3,425.7	3,521.7	3,455.8	3,638.5	3,694.6	3,908.1	3,855.4	4,409.7	4,273.2	4,391.9	4,510.7
Slovakia	4,021.5	3,171.0	3,447.3	3,324.4	3,563.4	3,835.6	3,527.4	3,753.0	4,721.7	4,713.8	3,969.8
Spain	14,288.8	13,755.6	12,541.7	11,878.4	13,834.8	14,805.9	14,482.1	15,312.1	16,506.5	17,216.0	17,487.9
Sweden	1,765.0	1,621.9	1,521.5	1,536.8	1,628.6	1,801.5	1,709.1	1,642.2	1,645.4	1,589.8	1,592.1
Switzerland	3,113.0	2,812.0	2,540.0	2,388.0	2,597.0	2,515.0	2,125.0	2,075.0	2,071.0	2,100.0	2,225.0
United Kingdom	9,628.7	8,224.0	7,675.8	7,691.3	8,476.5	8,584.6	8,803.7	9,623.4	9,631.5	9,090.8	8,534.1
United States	53,838.7	52,545.5	52,783.6	54,364.3	57,367.7	60,984.1	62,192.2	64,764.3	65,644.4	66,789.4	67,759.8

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-3.4	1.6	-4.4	3.6	-16.4	-0.1	4.4	-7.7	0.0	-1.7	-23.1
Belgium	7.6	0.1	2.4	3.7	7.6	0.0	-6.5	1.4	-0.6	0.0	15.9
Canada	-14.5	-4.9	3.6	9.2	2.5	4.5	1.9	6.1	4.8	-0.3	11.2
Czech Republic							0.8	6.5	-11.2	-4.7	-33.4
Denmark	17.2	10.4	0.8	0.5	-0.5	5.9	10.9	-6.7	-2.4	3.7	44.5
Estonia	0.2	-49.0	-38.4	11.3	3.1	-6.5	9.2	62.7	-5.7	2.2	-42.3
European Community	-4.6	-1.6	-4.4	4.0	0.9	-2.5	3.2	2.4	1.1	1.3	-0.8
Finland	-11.8	-9.6	-15.4	5.4	0.0	3.1	1.8	4.9	8.7	7.0	-8.8
France	-4.6	-9.0	-6.5	2.8	-2.4	-2.3	-2.7	5.8	-3.7	1.8	-19.7
Greece	-0.1	0.6	3.3	-2.9	4.8	2.6	0.7	-0.9	0.7	0.1	9.2
Hungary	-64.6	-11.6	13.3	10.3	2.9	-4.5	2.3	40.3	4.1	2.3	-41.2
Iceland	-7.0	-6.0	-13.3	-6.3	1.0	10.7	11.4	16.9	13.4	7.3	25.7
Ireland	-1.9	4.1	-3.1	16.4	-1.6	1.2	10.2	0.2	7.3	32.3	79.8
Italy	-0.4	1.9	-15.1	-3.1	2.7	-2.3	0.6	3.8	3.3	4.0	-6.1
Latvia	3.7	-51.0	-68.8	72.7	-17.4	45.5	-17.2	53.8	-32.0	-37.2	-82.1
Luxembourg										5.3	
Netherlands	-37.7	7.1	40.0	0.0	6.1	-19.2	20.8	-5.7	-4.9	0.6	-12.7
New Zealand	-2.5	14.5	10.5	2.3	3.5	-0.9	3.1	-4.1	10.1	-0.4	40.5
Norway	-7.8	9.0	26.3	1.6	5.2	0.2	6.8	-5.7	-0.9	-0.9	34.3
Poland	7.6	13.7	-10.3	-2.1	12.9	-12.5	20.5	-0.8	2.0	1.5	31.4
Portugal	2.8	-1.9	5.3	1.5	5.8	-1.3	14.4	-3.1	2.8	2.7	31.7
Slovakia	-21.1	8.7	-3.6	7.2	7.6	-8.0	6.4	25.8	-0.2	-15.8	-1.3
Spain	-3.7	-8.8	-5.3	16.5	7.0	-2.2	5.7	7.8	4.3	1.6	22.4
Sweden	-8.1	-6.2	1.0	6.0	10.6	-5.1	-3.9	0.2	-3.4	0.1	-9.8
Switzerland	-9.7	-9.7	-6.0	8.8	-3.2	-15.5	-2.4	-0.2	1.4	6.0	-28.5
United Kingdom	-14.6	-6.7	0.2	10.2	1.3	2.6	9.3	0.1	-5.6	-6.1	-11.4
United States	-2.4	0.5	3.0	5.5	6.3	2.0	4.1	1.4	1.7	1.5	25.9

Industrial processes - Chemical industry, CO₂ and N₂O (2000)

2.B Chemical industry																					
Methods and EF used ^a		CO ₂							Methods and EF used ^a		N ₂ O										
Method	EF	Key source	2.B.1 Ammonia production					CO ₂ IEF	Methods	EF	2.B.2 Nitric acid production					2.B.3 Adipic acid production					
			Percentage of national total	Activity data (production)							N ₂ O IEF	Key source	Percentage of national total	Activity data (production)				Key source	Percentage of national total	N ₂ O IEF	
				CRF (2000) ^b	CRF (1999) ^b	UN (2000/1999) ^{b,c}	Difference							CRF (2000) ^b	CRF (1999) ^b	U.N. (2000/1999) ^{b,c}	Difference				%
%	kt	kt	kt	%	t / t	%	kt	kt	kt	%	t / t	%	t / t								
IPCC default EF ^d							1.5 - 1.6									0.002 - 0.009		0.264 - 0.3			
Austria	C	PS	L	0.6	490	490		1.0	C	PS			513	513					NE		
Belgium	CS,T1	CS				314			C,CS	C,CS											
Canada	T1	CS	L/T	0.9/1.2	4,888	4,889	4,888	0	1.4	NA	NA		1,074	1,007	1,074	-0.02	0.002	T	5.70		
Czech Republic	IE				307		253	-17.6	IE	T2	PS	L	0.7	505	455	106	-79.01	0.007		NO	
Denmark					0	0	1							433	0						
Estonia							86							0	0						
European Community							NE												NE		
Finland	NO	NO			NO	NO	5		NO	D	PS	L/T	1.8/1.6	451	453			0.009		NO	
France	C	CS	L	0.5	1,862	1,746	1,509	-13.6	1.6	C	CS/PS	L/T	0.8/3.6	2,900	2,750			0.005	L/T	0.6/3.6	
Greece	C	C			na	na	160		NO	C	C	T	1.4	406	406			0.005	T	1.40	
Hungary	D	D			444	331	358	8.1	1.5	D	D				0				IE	NO	
Iceland	D	D								CS	CS										
Ireland	D,T1a	D	L	1.3	384	410	405	-1.2	2.3	D	CS			260	260			0.010			
Italy	D	D, C, CS			508	451	367	-18.5	1.5	D	D, CS			556	432			0.007		0.30	
Latvia					NO	NO			NO					NO	NO				NO	NO	
Luxembourg							2,430		IE	CS/T1	PS	L/T	3.3/1.3	C					C	L/T	3.3/1.3
Netherlands	CS	PS, CS					110	-32.6	NO					NA	NA				NA	NA	
New Zealand	T1	CS			163	163															
Norway	D	CS,D	L	1.1			122			CS3	PS	L/T	3.1/3.5								
Poland	T1/CS	CS			1,208		1,151		1.0	CS	CS			2,007		1,635			0.006		NO
Portugal ^e	MB+D+C	D+C	T	2.0	138	138	274	98.6	2.9	D+C	D+C	L/T	0.7/1.0	244	244				0.008		
Slovakia							349		IE	D	CS			407	441				0.001		NO
Spain	C,D	C,D			544	531	466	-12.4	0.9	C	CS,C	L/T	0.6/1.9	1,063	1,082				0.007		NO
Sweden	CS	CS			NO	NO	5		NO	C	CS	L/T	0.9/2.2	430	383	95	-77.90		0.005		NO
Switzerland	C	CS							NO	C	CS			65	65				0.005		NO
United Kingdom	T1	CS			46	42	214	410.4	30.0	PS	CS	L	0.7	1,916	2,438				0.008	T	6.80
United States	D	D			15,014	15,728	12,300	-21.8	1.2	D	CS,PS			7,981	8,115	7,690	-3.64		0.008	T	1.20

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

^b As UN data for the year 2000 were not available for all Parties at the time of preparation of this synthesis and assessment report, for the comparisons of UN and CRF data in this table, data for the years 2000 and 1999 from the CRF are provided together with the respective UN data for 1999 or 2000.

^c Source of data: Industrial Commodity Production Statistics Database (as of 19 June 2002), Department of Economic and Social Affairs, Statistics Division, United Nations, New York. Data are for 2000, except for ammonia data are for 1999 for Belgium, Finland, France, Greece, Ireland, Italy, Netherlands, New Zealand, Norway, Poland, Portugal and Spain, and for nitric acid data are for 1999 for Poland.

^d Source of default emission factors: IPCC Guidelines, volume 3, pages 2.16, 2.18 and 2.19.

^e Mass balance is indicated by MB.

Industrial processes - Chemical industry: ammonia production

Trends in CO₂ emissions 1990 to 2000 (Gigagram)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	396.0	408.0	371.1	402.9	381.4	468.3	465.3	457.1	501.2	472.1	472.1
Belgium	778.0	790.6	1,061.8	1,163.9	1,441.4	1,571.1	1,501.2	1,504.9	1,452.2	1,503.6	1,530.5
Canada	5,007.5	4,936.3	5,111.0	5,692.2	5,813.0	6,482.5	6,523.7	6,675.5	6,609.7	6,847.2	6,845.0
Czech Republic	IE										IE
Denmark											
Estonia											0.0
European Community											NE
Finland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
France	3,007.4	3,035.8	2,666.4	2,810.0	2,821.5	2,826.3	2,966.5	2,888.8	2,844.5	2,723.2	2,905.4
Greece	469.5	383.4	251.9		0.0	119.8	165.4	150.9	181.5	no	no
Hungary ^a									9.6	496.9	665.6
Iceland											
Ireland	989.2	1,030.6	1,003.0	945.5	1,055.8	973.0	922.5	1,074.2	1,058.1	943.1	883.3
Italy ^a									497.28	450.51	761.9
Latvia										NO	NO
Luxembourg											
Netherlands	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
New Zealand ^a	NE	NE	NE	NE	NE	NE	NE	NA	NO	NO	NO
Norway	646.3								500.2	249.8	621.4
Poland											1,208.0
Portugal	569.2	549.7	334.5	281.3	190.5	170.3	563.3	396.5	396.5	396.5	396.5
Slovakia										IE	IE
Spain	549.7	624.2	540.0	400.3	505.0	505.4	519.1	546.2	512.4	486.9	498.7
Sweden	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Switzerland ^b											NO
United Kingdom	1,358.3	1,358.3	1,379.0	1,379.0	1,379.0	1,379.0	1,379.0	888.5	1,110.5	1,112.9	1,389.3
United States	18,510.1	18,690.9	19,512.8	18,719.2	19,452.9	18,945.6	19,511.7	19,476.9	20,112.6	18,873.8	18,017.0

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Trends in CO₂ implied emission factor 1990 to 2000 tonnes per tonne

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	0.86	0.86	0.86	0.86	0.86	0.99	0.96	0.95	1.03	0.96	0.96
Belgium											
Canada	1.35	1.35	1.35	1.37	1.38	1.39	1.39	1.40	1.35	1.40	1.40
Czech Republic											
Denmark											
Estonia											
European Community											NE
Finland											
France	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
Greece	1.50	1.50									
Hungary ^a									1.50	1.50	1.50
Iceland											
Ireland	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Italy ^a									1.00	1.00	1.50
Latvia											
Luxembourg											
Netherlands											
New Zealand											NO
Norway											
Poland											1.00
Portugal	3.08	3.59	2.73	2.55	2.71	0.91	4.08	2.87	2.87	2.87	2.87
Slovakia											
Spain	0.91	0.91	0.91	0.91	0.92	0.91	0.92	0.92	0.92	0.92	0.92
Sweden											
Switzerland ^b											NO
United Kingdom	31.75	31.24	31.46	31.46	31.46	31.46	31.46	25.12	28.62	26.54	30.03
United States	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	3.0	-9.1	8.6	-5.3	22.8	-0.6	-1.8	9.7	-5.8	0.0	19.2
Belgium	1.6	34.3	9.6	23.8	9.0	-4.4	0.2	-3.5	3.5	1.8	96.7
Canada	-1.4	3.5	11.4	2.1	11.5	0.6	2.3	-1.0	3.6	0.0	36.7
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	0.9	-12.2	5.4	0.4	0.2	5.0	-2.6	-1.5	-4.3	6.7	-3.4
Greece	-18.3	-34.3				38.1	-8.8	20.3			
Hungary									5092.5	33.9	
Iceland											
Ireland	4.2	-2.7	-5.7	11.7	-7.8	-5.2	16.5	-1.5	-10.9	-6.3	-10.7
Italy									-9.4	69.1	
Latvia											
Luxembourg											
Netherlands											
New Zealand									-50.1	148.8	-3.9
Norway											
Poland											
Portugal	-3.4	-39.1	-15.9	-32.3	-10.6	230.8	-29.6	0.0	0.0	0.0	-30.3
Slovakia											
Spain	13.5	-13.5	-25.9	26.2	0.1	2.7	5.2	-6.2	-5.0	2.4	-9.3
Sweden											
Switzerland											
United Kingdom	0.0	1.5	0.0	0.0	0.0	0.0	-35.6	25.0	0.2	24.8	2.3
United States	1.0	4.4	-4.1	3.9	-2.6	3.0	-0.2	3.3	-6.2	-4.5	-2.7

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	0.0	0.0	0.0	0.0	15.3	-3.1	-0.7	8.6	-7.0	0.0	12.1
Belgium											
Canada	-0.2	0.5	1.4	0.3	1.2	0.1	0.2	-3.2	3.6	0.0	3.8
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greece	0.0										-100.0
Hungary									0.0	0.0	
Iceland											
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy									0.0	50.0	
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal	16.7	-23.9	-6.9	6.3	-66.5	350.4	-29.6	0.0	0.0	0.0	-6.6
Slovakia											
Spain	0.0	0.0	0.0	0.3	-0.3	0.4	-0.2	0.1	-0.2	0.0	0.2
Sweden											
Switzerland											
United Kingdom	-1.6	0.7	0.0	0.0	0.0	0.0	-20.2	14.0	-7.3	13.1	-5.4
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Industrial processes - Chemical industry: nitric acid production**Trends in N₂O emissions 1990 to 2000 (Gigagram)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6
Belgium	11.5	11.2	10.1	10.9	12.6	13.8	15.1		15.1	14.4	13.3
Canada	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.5	2.5	2.5	2.6
Czech Republic	3.6										3.4
Denmark											
Estonia											0.0
European Community											NE
Finland	5.1	4.5	4.0	4.2	4.4	4.5	4.5	4.5	4.3	4.3	4.3
France	25.6	22.4	18.3	13.8	13.0	13.6	14.2	13.3	13.0	12.9	13.6
Greece	2.3	1.9	2.0	1.9	1.8	1.8	2.1	1.8	1.8	1.8	1.8
Hungary ^a									0.0	0.0	IE
Iceland											
Ireland	3.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Italy ^a									3.24	2.91	3.8
Latvia										NO	NO
Luxembourg											
Netherlands	24.4	32.3	30.4	30.0	31.6	24.2	31.7	35.0	24.7	23.2	23.0
New Zealand ^a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Norway	6.7								5.4	6.1	5.6
Poland											12.9
Portugal	1.9	1.9	2.0	1.6	1.2	2.0	2.0	2.0	2.0	2.0	2.0
Slovakia											0.5
Spain	9.3	8.3	7.1	5.9	7.0	7.7	7.9	7.5	7.0	7.6	7.4
Sweden	2.6	2.5	2.5	2.5	2.3	2.3	2.2	2.2	2.4	2.4	2.0
Switzerland ^b											0.3
United Kingdom	13.3	13.5	13.7	13.8	14.2	9.9	10.2	9.7	11.1	16.0	14.7
United States	57.6	57.5	59.0	59.9	63.2	64.2	66.8	68.5	67.4	64.9	63.8

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	0.9	-9.3	5.8	-2.1	-3.6	2.4	-1.3	3.2	1.5	0.0	-3.2
Belgium	-2.8	-9.3	7.9	15.4	9.2	9.5			-4.7	-7.5	16.0
Canada	-1.4	1.3	0.1	-1.5	2.2	1.3	-0.8	-1.9	1.9	1.8	2.9
Czech Republic											-7.6
Denmark											
Estonia											
European Community											
Finland	-12.1	-10.5	3.9	3.5	3.3	0.0	0.6	-5.8	0.3	-0.3	-17.2
France	-12.4	-18.3	-24.5	-6.0	4.4	4.4	-6.0	-2.6	-0.4	5.5	-46.8
Greece	-17.6	4.6	-5.0	-2.8	-0.5	14.2	-12.0	-0.2	0.2	0.0	-20.4
Hungary										0.0	
Iceland											
Ireland	-21.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-21.5
Italy									-10.0	28.9	
Latvia											
Luxembourg											
Netherlands	32.6	-5.9	-1.3	5.3	-23.5	31.1	10.3	-29.4	-6.1	-1.0	-5.8
New Zealand											
Norway									11.2	-7.7	-15.9
Poland											
Portugal	0.0	0.8	-16.5	-24.9	59.2	0.0	0.0	0.0	0.0	0.0	0.6
Slovakia											
Spain	-10.4	-14.9	-17.3	19.1	10.0	2.4	-5.4	-6.1	8.3	-1.7	-20.0
Sweden	-4.8	0.0	0.0	-9.0	0.4	-4.0	-1.2	12.7	0.0	-16.5	-22.4
Switzerland											
United Kingdom	1.1	1.8	0.4	3.3	-30.2	2.8	-5.4	15.2	43.5	-8.4	9.9
United States	-0.1	2.6	1.5	5.6	1.4	4.1	2.5	-1.6	-3.7	-1.7	10.9

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/ or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Industrial processes - Chemical industry: adipic acid production

Trends in N₂O emissions 1990 to 2000 (Gigagram)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Belgium											
Canada	34.6	32.3	32.1	29.3	35.4	34.6	37.0	31.9	16.3	5.6	2.9
Czech Republic	NO										
Denmark											
Estonia											0.0
European Community											NE
Finland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
France	47.8	46.8	49.8	54.2	52.7	55.2	56.7	59.2	31.4	14.7	10.3
Greece											
Hungary ^a										0.0	NO
Iceland											
Ireland	NO	NO	NO	NO	NO	NO	0.0	NO	NO	NO	0.0
Italy ^a									18.64	18.64	21.4
Latvia										NO	NO
Luxembourg											
Netherlands	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
New Zealand ^a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Norway											
Poland											NO
Portugal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia											NO
Spain											
Sweden	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Switzerland ^b											NO
United Kingdom	81.1	75.0	57.9	47.2	57.2	51.3	55.2	57.3	48.3	2.1	5.3
United States	48.0	47.4	40.8	44.9	49.7	57.7	57.3	37.1	24.9	24.8	26.2

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Trends in N₂O implied emission factor 1990 to 2000 tonnes per tonne

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											NE
Finland											
France											
Greece											
Hungary											
Iceland											
Ireland											
Italy ^a									0.30	0.30	0.30
Latvia											
Luxembourg											
Netherlands											
New Zealand											NA
Norway											
Poland											NO
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland ^b											NO
United Kingdom	0.31	0.28	0.28	0.30	0.33	0.33	0.36	0.37	0.29	0.01	0.03
United States	0.07	0.06	0.06	0.06	0.06	0.07	0.07	0.04	0.03	0.02	0.02

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	-6.7	-0.5	-8.8	20.8	-2.2	6.9	-13.8	-48.8	-65.5	-48.6	-91.6
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	-2.1	6.5	8.9	-2.7	4.6	2.8	4.4	-47.0	-53.2	-29.6	-78.4
Greece											
Hungary											
Iceland											
Ireland											
Italy									0.0	14.9	
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom	-7.5	-22.9	-18.3	21.1	-10.3	7.6	3.8	-15.8	-95.6	148.0	-93.5
United States	-1.3	-14.0	10.2	10.6	16.2	-0.7	-35.2	-32.9	-0.4	5.6	-45.6

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece											
Hungary											
Iceland											
Ireland											
Italy									0.0	0.0	
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom	-8.0	0.0	8.5	9.2	0.2	8.9	0.9	-20.5	-94.9	111.0	-89.8
United States	-5.9	-6.3	1.9	3.8	16.0	-2.9	-37.1	-33.4	-21.6	2.9	-64.5

Industrial processes - Metal production, CO₂ (2000)

IPCC default EF ⁹	Methods and EF used ^a		Key source	2.C Metal production											Key source	2.C.3 Aluminium production					CO ₂ IEF																
	Methods	EF		Percentage of national total	CO ₂ IEF	2.C.1 Iron & steel ^b								2.C.1.2 Pig iron					Percentage of national total	Activity data (production)																	
						2.C.1.1 Steel				2.C.1.2 Pig iron				CO ₂ IEF		CRF (1999) ^c	CRF (2000)	UN ^d		Difference		CO ₂ IEF	CRF (1999) ^c	CRF (2000)	UN ^d	Difference											
						Activity data (production)				Activity data (production)																	%	t / t	kt	kt	kt	%	t / t	kt	kt	UN ^d	Difference
						CRF (1999) ^c	CRF (2000)	UN ^d	Difference	CRF (1999) ^c	CRF (2000)	UN ^d	Difference																								
%	t / t	kt	kt	kt	%	t / t	kt	kt	kt	%	t / t	kt	kt	kt	%	t / t	kt	kt	UN ^d	Difference	t / t																
				1.5 - 1.6																		1.5 - 1.8															
Austria	C	CS, PS	L	10.8		4,752.0	5,150	1,417	-72.5	1.7	4,752.0	5,150	3,913	-17.7	IE			NO	NO			NE															
Belgium	CS	CS						11,616					8,472																								
Canada	CS	CS	L/T	1.2/2.2	NA	NA	NA	16,500		NA	NA	NA	8,904		NA			2,401	2,385	2,390	-0.5	1.6															
Czech Republic	IE					6,219.4	6,219	2,613	-58.0		4,008.0	4,620	4,603	-0.4				NO	NO			NO															
Denmark						0.0	0	10			0.0	0						0	0	32																	
Estonia																		0	0																		
European Community								NE					NE						NE			NE															
Finland	NO	NO				NA	NA	4,092		IE	NA	NA	2,983		IE			NO	NO			NO															
France	C	CS	L/T	0.4/1.6		20,198.0	21,215	21,000	-1.0	0.04	13,864.0	13,924	13,620	-2.2	0.085			452	438	455	0.7	1.5															
Greece	C	C				na	na	1,092		NO	na	na			NE			C	C	161		C															
Hungary	T1b	D						1,970					1,310					89	34	89	0.0	1.8															
Iceland	D	D				NO																1.0															
Ireland	NA	NA						360		NO					NO							NO															
Italy	D, C	D, C, CS				24,780.4	26,623	26,623	0.0	0.04	10,664.5	11,176	10,960	-1.9				187	190	190	0.0	1.6															
Latvia						C	C	482		IE	NO	NO			NO			NO	NO			NO															
Luxembourg								2,571																													
Netherlands	CS	PS, CS				6,075.0	5,659	5,664	0.1				4,968					287	302	300	-0.7	IE															
New Zealand	T1	CS	L	1.9		758.9	730	765	4.8	2.0	NE	12,000	600	-95.0	IE			328	329	325	-1.2	1.6															
Norway ^h	D, CS3	D, PS						595			C		60		C	L/T	3.3/1.3	496	510	1,026	101.1	3.6															
Poland	T1/CS	CS						IE		IE		IE	5,036		IE				47	51		1.8															
Portugal	D+C	D+C			0.0	IE	IE	1,092		IE	NO	NO	382					18	19			1.8															
Slovakia	IE					NA	IE	17		IE	NA	IE	3,166		IE			NA	IE	110		IE															
Spain	C	C				15,010.5	16,000	15,888	-0.7	0.1	4,267.3	4,267	4,056	-5.0				364	366	366	0.1	1.6															
Sweden ⁱ	CS	CS	L/T	3.3/5.5		NE		5,232		NE	102.7	116	1,411	1,112.2	0.477332			51	53	101	89.7	3.7															
Switzerland	C	CS				765.0	765	1,140	49.0	0.1					IE			35	36	35	-1.4	1.6															
United Kingdom	T2	CS				3,576.0	3,518	13,992	297.7	0.01	12,139.0	10,891	10,032	-7.9	-0.14667			272	305	270	-0.9	1.5															
United States	D	D,CS	L/T	0.9/4.3	NA	45,063.5	47,859	102,000	126.3	0.00	2,404.0	1,588	47,900	2,915.5	0.146667			3,779	3,468	3,668	5.8	1.6															

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

^b CO₂ emission estimates from Sinter (2.C.1.3) were reported by only Poland; CO₂ emission estimates from coke (2.C.1.4) were reported by only Canada, Sweden, the United Kingdom and the United States of America.

^c As UN data for 2000 were not available for all Parties at the time of preparation of this synthesis and assessment report, for the comparisons of UN and CRF data in this table, data for the years 2000 and 1999 from the CRF are provided along with the respective UN data for 1999 or 2000.

^d Source of data for crude steel: UN Industrial Commodity Production Statistics Database (as of 19 June 2002), United Nations, or the Monthly Bulletin of Statistics, Department of Economic and Social Affairs, Statistics Division, United Nations, New York, volume LVI, no.3, March 2002. Data are for the year 2000, except for Denmark, Latvia, Norway and Poland for which data are for the year 1999.

^e Source of data for pig iron: UN Industrial Commodity Production Statistics Database (as of 19 June 2002), United Nations, or the Monthly Bulletin of Statistics, Department of Economic and Social Affairs, Statistics Division, United Nations, New York, volume LVI, no.3, March 2002. Data are for the year 2000, except for Austria, Hungary and Poland for which data are for the year 1999.

^f Source of data for aluminium: Industrial Commodity Production Statistics Database (1950-1999), Department of Economic and Social Affairs, Statistics Division, United Nations, New York. Data are for 2000, except for Canada, France, Greece, Hungary, Poland and the United Kingdom for which data are for 1999. Data are for primary production, except for Denmark and Slovakia where only total production data was available.

⁹ Source of default emission factors: IPCC Guidelines, Volume 3, pages 2.28 and 2.33.

^h Activity data are described in the CRF as use of petrol coke, coal electrodes and not aluminium production.

ⁱ Activity data are described in the CRF as use of coal elements and not aluminium production.

Industrial processes - Metal production: iron and steel

Trends in CO₂ emissions 1990 to 2000 (Gigagram)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	8,461.0	8,040.8	6,948.6	7,254.3	7,771.0	8,585.4	8,084.4	9,107.3	8,384.6	8,456.0	8,590.5
Belgium	1,671.1	1,679.0	1,556.2	1,543.7	1,575.0	1,604.4	1,591.9	1,500.3	1,616.7	1,610.5	1,601.5
Canada	7,585.3	8,904.4	9,084.0	8,759.9	8,090.5	8,439.7	8,288.7	8,100.2	8,315.7	8,500.9	8,511.1
Czech Republic	IE										IE
Denmark											
Estonia											
European Community											
Finland	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
France	4,008.5	3,020.2	2,580.6	2,489.7	3,275.3	4,014.1	2,782.9	3,293.2	3,150.0	2,722.5	2,372.5
Greece											
Hungary											IE
Iceland											
Ireland	NE	NE	NE	NE	NO	NO	NO	NO	NO	NE	NO
Italy ^a								997.04	961.85	991.3	
Latvia										IE	IE/NO
Luxembourg											
Netherlands	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
New Zealand ^b											1,492.9
Norway	170.0							191.5	193.6	207.4	
Poland											207.3
Portugal	15.4	16.1	20.3	22.3	21.5	16.9	15.0	20.9	20.0	22.4	24.0
Slovakia											
Spain	689.6	664.2	634.3	675.0	707.0	658.5	603.8	716.5	775.8	776.9	826.5
Sweden	1,866.0	1,894.4	2,036.5	2,043.7	2,092.8	2,236.8	2,331.9	2,241.9	2,052.8	2,021.2	2,262.8
Switzerland ^b											76.0
United Kingdom	2,711.1	1,733.3	1,720.7	1,844.4	2,246.3	2,171.3	2,759.3	1,689.3	1,209.4	2,531.8	2,717.3
United States	85,414.0	76,243.9	75,010.0	69,861.6	73,610.4	74,357.1	68,323.7	76,126.6	67,429.3	64,376.5	65,709.4

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Trends in CO₂ implied emission factor 1990 to 2000 tonnes per tonne

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria											
Belgium											
Canada	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece											
Hungary											
Iceland											
Ireland											
Italy ^a								0.04	0.04		
Latvia											
Luxembourg											
Netherlands											
New Zealand ^b											
Norway											
Poland											
Portugal	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
Slovakia											
Spain											
Sweden											
Switzerland ^b											
United Kingdom											
United States		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-5.0	-13.6	4.4	7.1	10.5	-5.8	12.7	-7.9	0.9	1.6	1.5
Belgium	0.5	-7.3	-0.8	2.0	1.9	-0.8	-5.8	7.8	-0.4	-0.6	-4.2
Canada	17.4	2.0	-3.6	-7.6	4.3	-1.8	-2.3	2.7	2.2	0.1	12.2
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	-24.7	-14.6	-3.5	31.6	22.6	-30.7	18.3	-4.3	-13.6	-12.9	-40.8
Greece											
Hungary											
Iceland											
Ireland											
Italy									-3.5	3.1	
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway									1.1	7.1	21.9
Poland											
Portugal	4.4	25.9	9.9	-3.7	-21.3	-11.1	39.3	-4.7	12.3	7.2	55.7
Slovakia											
Spain	-3.7	-4.5	6.4	4.7	-6.9	-8.3	18.7	8.3	0.1	6.4	19.8
Sweden	1.5	7.5	0.4	2.4	6.9	4.3	-3.9	-8.4	-1.5	12.0	21.3
Switzerland											
United Kingdom	-36.1	-0.7	7.2	21.8	-3.3	27.1	-38.8	-28.4	109.3	7.3	0.2
United States	-10.7	-1.6	-6.9	5.4	1.0	-8.1	11.4	-11.4	-4.5	2.1	-23.1

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece											
Hungary											
Iceland											
Ireland											
Italy									0.0		
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal	-0.9	-24.9	10.4	-9.5	4.5	0.9	-15.4	-0.3	-5.0	-3.5	-39.3
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

Industrial processes - Metal production: aluminium

Trends in CO₂ emissions 1990 to 2000 (Gigagram)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Belgium											
Canada	2,636.2	3,013.8	3,213.0	3,768.4	3,676.8	3,544.6	3,725.9	3,794.5	3,817.4	3,918.7	3,891.8
Czech Republic											
Denmark											
Estonia											0.0
European Community											NE
Finland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
France	511.7	449.2	655.8	669.1	603.0	572.3	596.8	616.1	637.5	672.2	639.1
Greece	232.0	236.2	237.4	228.9	213.9	202.9	202.9	205.6	226.4	247.9	252.0
Hungary ^a									170.6	159.4	60.9
Iceland ^a									347.2	223.3	
Ireland	NE	NO	NO	NO	NO	NO	0.0	NO	NO	NE	NO
Italy ^a									289.85	290.16	294.2
Latvia										NO	NO
Luxembourg											
Netherlands	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
New Zealand ^b											519.9
Norway	1,560.4								1,732.3	1,781.4	1,832.0
Poland											84.4
Portugal	16.8	14.5	21.7	21.3	20.9	25.8	26.5	28.3	30.2	32.0	33.8
Slovakia										IE	IE
Spain	550.7	549.7	554.8	551.0	523.5	560.3	560.3	557.5	558.4	564.0	566.6
Sweden	179.3	179.7	134.7	162.3	161.0	173.8	184.4	183.5	187.3	188.4	195.1
Switzerland ^b											56.8
United Kingdom	450.3	456.0	380.0	371.1	359.0	369.2	372.3	384.1	400.6	421.4	469.9
United States	6,314.9	6,428.8	6,305.5	5,764.2	5,146.4	5,265.0	5,580.1	5,620.7	5,792.3	5,895.2	5,410.1

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Trends in CO₂ implied emission factor 1990 to 2000 tonnes per tonne

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria											
Belgium											
Canada	1.68	1.65	1.65	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.54	1.52	1.49	1.46
Greece											
Hungary ^a									1.85	1.80	1.80
Iceland ^a										1.56	0.99
Ireland											
Italy ^a									1.55	1.55	1.55
Latvia											
Luxembourg											
Netherlands											
New Zealand ^b											1.58
Norway	1.80								3.59	3.59	3.59
Poland											1.80
Portugal	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Slovakia											
Spain	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Sweden	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
Switzerland ^b											1.80
United Kingdom	1.55	1.55	1.56	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.54
United States	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	14.3	6.6	17.3	-2.4	-3.6	5.1	1.8	0.6	2.7	-0.7	47.6
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	-12.2	46.0	2.0	-9.9	-5.1	4.3	3.2	3.5	5.5	-4.9	24.9
Greece	1.8	0.5	-3.6	-6.5	-5.2	0.0	1.3	10.1	9.5	1.7	8.6
Hungary										-6.6	-61.8
Iceland											-36
Ireland											
Italy									0.1	1.4	
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway									2.8	2.8	17.4
Poland											
Portugal	-13.6	49.6	-2.0	-2.0	23.5	2.9	6.8	6.4	6.0	5.7	100.7
Slovakia											
Spain	-0.2	0.9	-0.7	-5.0	7.0	0.0	-0.5	0.2	1.0	0.5	2.9
Sweden	0.2	-25.0	20.5	-0.8	8.0	6.1	-0.5	2.1	0.6	3.6	8.8
Switzerland											
United Kingdom	1.3	-16.7	-2.3	-3.3	2.8	0.9	3.2	4.3	5.2	11.5	4.3
United States	1.8	-1.9	-8.6	-10.7	2.3	6.0	0.7	3.1	1.8	-8.2	-14.3

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	-1.7	-0.4	-0.9	-0.1	0.0	0.0	-0.1	0.1	0.0	0.0	-3.0
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	0.0	0.0	0.0	0.0	0.0	0.0	-1.8	-1.8	-1.8	-1.8	-7.0
Greece											
Hungary										-2.7	0.0
Iceland											-36.9
Ireland											
Italy									0.0	0.0	
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway									0.0	0.0	99.5
Poland											
Portugal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia											
Spain	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland											
United Kingdom	0.0	0.2	-0.3	0.0	-0.1	0.0	-0.1	0.0	-0.1	-0.5	-0.9
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Industrial processes - Metal production: PFC and SF₆ emissions (2000)

2.C Metal production (PFCs and SF ₆)																				
2.C Metal production - PFCs											2.C Metal production - SF ₆									
Methods and EF used ^a				2.C.3 Aluminium production - PFCs							Methods and EF used ^b				2.C.4.2 SF ₆ used in magnesium foundries					
Methods	EF	Key source	Percentage of national total	Activity data (Aluminium production)				IEF		Ratio IEF CF ₄ / IEF C ₂ F ₆	Methods	EF	Key source	Percentage of national total	Activity data		SF ₆ -IEF	Actual emissions SF ₆ ^g		
				CRF (1999) ^c	CRF (2000) ^{c,d}	UN ^e	Difference	CF ₄	C ₂ F ₆						Description	Value				
				%	kt	kt	kt	%	kg / t						kg / t	%			t	kg/t
IPCC default Ef ^f									0.02 - 1.19	0.001 - 0.14							1,000			
Austria				NO	NO				NO	NO				cast Magnesium [t]	3,600			0.0		
Belgium									NO	NO							NO	NO		
Canada	CS	CS	L/T	0.8/1.8	2,401	2,385	2,390	-0.5	0.00	0.000	11.83	D	D	T	1.0		NA	NA	96.8	
Czech Republic					NO	NO														
Denmark					0	0	32												0.9	
Estonia					0	0														
European Community						NE			NE	NE							NE	NE	NE	
Finland	NO	NO			NO	NO			NO	NO		T2	NA				C	C	C	
France			T	1.4	452	452	455	0.7	0.25	0.025	10.00					(SF6 consumption)	48	1,000	47.5	
Greece					C	C	161		C	C							NE	NE	NE	
Hungary	T1b	D			89	34	89	-0.0	0.85	0.085	10.00	D	D					NO	NO	
Iceland	CS	CS	L	3.7	222	226	167	-26.4	0.06	0.007	9.00									
Ireland	NA	NA			NO	NO			NO	NO		NA	NA				NO	NO	NO	
Italy	D, T1	CS			187	190	190	0.0	0.06	0.006	10.00					(SF6 consumption)	7	1,000	7.2	
Latvia					NO	NO			NO	NO							NO	NO	NO	
Luxembourg																				
Netherlands	CS	PS	T	2.0		302	300	-0.7				NO								
New Zealand					328	329	325	-1.2	0.00	0.000	9.00							NA	NA	
Norway			L/T	1.6/17.8	1,008	1,031	1,026	-0.5	0.00	0.000	25.87			L/T	1.4/11.5	(SF6 consumption)	32	1	32.0	
Poland	T1c	D				47	51		2.00	0.200	10.00									
Portugal	D	D			18	19														
Slovakia					NA	110	110	0.0	0.01	0.001	9.98							NO	NO	NO
Spain	NO		T	0.9	364	366	366	0.1	0.14	0.011	12.24	NO					NO	NO		
Sweden ^h	T2	PS	T	2.2	51	53	101	89.7				T2	CS			SF6 consumption	2	1,000	1.7	
Switzerland	T2	M			35	36	35	-1.4	0.03	0.003	10.00	T2	M						0.8	
United Kingdom	T2/PS	CS	T	0.5	258	305	270	4.4	0.10	IE		T2/PS	CS			SF6 consumption	25	1,000	25.0	
United States	CS	PS	T	1.7	3,779	3,468	3,668	5.8	0.00	0.000	12.24	CS	CS				C	C	167.2	

Note
IEF for SF₆ used in aluminium foundries has not been reported by any Party. This category has therefore not been included in this table.

^a Information on methods and emission factors is included in this table as reported by Parties. It may not reflect the actual method used or type of emission factor for PFCs for all subcategories within the category 2.C. Metal production.
^b Information on methods and emission factors is included in this table as reported by Parties. It may not reflect the actual method used or type of emission factor for SF₆ for all subcategories within the category 2.C. Metal production.
^c As UN data for 2000 were not available for all Parties for the comparisons of UN and CRF data in this table, data for the years 1999 from the CRF are provided together with the respective UN data for 1999.
^d This column includes aluminium production data provided for CF₄ and C₂F₆ in tables 2 (II). C, E of the CRF, complemented by that provided for CO₂ (Netherlands, Portugal and Sweden).
^e Source of data for aluminium: Industrial Commodity Production Statistics Database (1950-1999), Department of Economic and Social Affairs, Statistics Division, United Nations, New York. Data are for 2000, except for Canada, France, Greece, Hungary, Poland and the United Kingdom for which data are for 1999. Data are for primary production, except for Denmark and Slovakia where only total production data was available.
^f Source of default emission factors: IPCC Guidelines, volume 3, page 2.35.
^g IPCC Guidelines state that emissions equal consumption (IPCC Guidelines, volume 3, page 2.39).
^h Activity data are described in the CRF as use of coal elements and not aluminium production.

Industrial processes - Metal production: aluminium

Trends in CF₄ actual emissions 1990 to 2000 (tonnes)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	129.5	130.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium						NO	NO	NO	NO	NO	NO
Canada	813.9	865.2	904.7	1,016.7	945.4	826.6	807.8	819.5	827.6	849.6	843.8
Czech Republic											
Denmark											
Estonia											0.0
European Community											NE
Finland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
France	308.6	220.3	186.7	128.3	103.3	88.9	87.4	92.7	120.8	157.3	115.1
Greece	34.7	34.7	34.0	20.6	12.6	11.2	9.7	22.3	27.5	17.8	20.0
Hungary ^a									78.6	75.5	28.9
Iceland ^a										17.7	14.3
Ireland	NO	NO	NO	NO	0.0	NO	NO	NO	NO	NO	NO
Italy ^a									11.22	11.23	11.4
Latvia										NO	NO
Luxembourg											
Netherlands	301.0	301.0	258.0	260.0	228.0	223.0	247.0	261.0	195.2	153.9	160.4
New Zealand ^a	80.1	86.4	84.6	30.3	30.6	24.3	24.3	27.8	8.3	9.9	7.6
Norway	441.0								184.8	163.7	131.1
Poland											93.9
Portugal	NE					20.1	20.1	20.1	20.1	20.1	20.1
Slovakia										1.5	1.5
Spain	114.3	108.5	107.7	108.9	107.4	108.0	103.0	105.7	99.7	91.2	50.7
Sweden	58.5	56.7	54.9	53.1	51.3	50.6	43.9	40.1	38.9	42.8	35.1
Switzerland											1.0
United Kingdom	300.0	230.0	110.0	70.0	60.0	55.0	44.0	35.0	33.0	31.0	30.0
United States	2,433.9	2,114.5	1,964.2	1,884.9	1,656.2	1,613.9	1,709.3	1,510.4	1,243.1	1,231.0	1,096.3

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

The following check has been performed in order to verify the consistency of the data provided in various CRF tables (1999):

Activity data reported in different tables of the CRF:

Aluminum production			
	for CO ₂	for CF ₄	for C ₂ F ₆
CRF table:	2(I)A-G	2(II)C,E	2(II)C,E
	kt	t	t
Austria	NO	NO	NO
Belgium			
Canada	2,384.9	2,384,936	2,384,936
Czech Republic	NO		
Denmark	0		
Estonia	0		
European Community			
Finland	NO	NO	NO
France	437.7	451,927	451,927
Greece	C	C	C
Hungary	33.9	33,850	33,850
Iceland	226.4	226	226
Ireland	0.0	NO	NO
Italy	189.8	189,800	189,800

Aluminum production			
	for CO ₂	for CF ₄	for C ₂ F ₆
CRF table:	2(I)A-G	2(II)C,E	2(II)C,E
	kt	t	t
Latvia	NO	NO	NO
Luxembourg			
Netherlands	302.0		
New Zealand	329.0	329,000	329,000
Norway	510.3	1,031,000	1,031,000
Poland	46.9	46,941	46,941
Portugal	18.8		
Slovakia	IE	109,813	109,813
Spain	365.6	365,568	365,568
Sweden	53.2		
Switzerland	35.5	35,500	35,500
United Kingdom	305.1	305,099	IE
United States	3,468.0	3,468,000	3,468,000

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	0.4	-42.3	-100.0								-100.0
Belgium											
Canada	6.3	4.6	12.4	-7.0	-12.6	-2.3	1.5	1.0	2.7	-0.7	3.7
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	-28.6	-15.2	-31.3	-19.5	-13.9	-1.7	6.0	30.3	30.2	-26.8	-62.7
Greece	0.0	-2.0	-39.5	-38.6	-11.4	-13.5	130.2	23.4	-35.4	12.6	-42.4
Hungary										-4.0	-61.8
Iceland											-19.5
Ireland											
Italy									0.1	1.4	
Latvia											
Luxembourg											
Netherlands	0.0	-14.3	0.8	-12.3	-2.2	10.8	5.7	-25.2	-21.1	4.2	-46.7
New Zealand	7.9	-2.1	-64.1	0.9	-20.6	0.0	14.4	-70.0	18.8	-23.6	-90.6
Norway										-11.4	-19.9
Poland											
Portugal						0.0	0.0	0.0	0.0	0.0	
Slovakia											0.5
Spain	-5.1	-0.7	1.1	-1.4	0.6	-4.6	2.6	-5.7	-8.5	-44.5	-55.7
Sweden	-3.1	-3.2	-3.3	-3.4	-1.4	-13.2	-8.6	-3.1	10.0	-17.9	-40.0
Switzerland											
United Kingdom	-23.3	-52.2	-36.4	-14.3	-8.3	-20.0	-20.5	-5.7	-6.1	-3.2	-90.0
United States	-13.1	-7.1	-4.0	-12.1	-2.6	5.9	-11.6	-17.7	-1.0	-10.9	-55.0

Industrial processes - Production of halocarbons and SF₆ (2000)

2.E Production of halocarbons and SF ₆											
2.E Production of halocarbons and SF ₆ - HFCs								2.E Production of halocarbons and SF ₆ - PFCs		2.E Production of Halocarbons and SF ₆ - SF ₆ ^a	
Methods and EF used ^a		2.E.1 By-product emissions, production of HCFC-22						Methods and EF used ^a		Methods and EF used	
Methods	EF	Key source	Percentage of national total	Activity data (HCFC-22 production)			IEF	Method	EF	Method	EF
				CRF	International ^b	HFC23					
IPCC default EF ^c											
Austria							NO				
Belgium											
Canada	NA	NA					X	NO	NA	NA	NA
Czech Republic	NO								NO		NO
Denmark	NO								NO		NO
Estonia											
European Community							NE		NE		
Finland	NO	NO					NO	NO	NO	NO	NO
France	CS	CS	T	1.7			NA	X	NA	CS	CS
Greece	T1	D	L/T	2.9/11.1			C	X	C	CS	CS
Hungary							NO		NO		
Iceland											
Ireland	NA	NA					NO		NO	NA	NA
Italy	CS	CS						X	CS	CS	CS
Latvia							NO		NO		
Luxembourg											
Netherlands	CS/T2	PS	L/T	1.1/4.0				X		NO	NO
New Zealand							NO		NO		
Norway											
Poland							NE		NE		
Portugal											
Slovakia	NO	NO					NO		NO	NO	NO
Spain	D,CS,T2	D,PS,T2	L/T	1.6/3.7			16,339	X	33,074	CS,T3	PS,T3
Sweden	NO								NO		NO
Switzerland									NO		
United Kingdom ^d	T2/PS	CS	L/T	0.7/1.8			IE	X	IE	T2/PS	CS
United States	M	M	T	1.4			186,905	X	0.014	M	M

^a Information on methods and emission factors is included in this table as reported by Parties. 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 SF₆.

^b An 'X' in this column indicates that an estimate of aggregated production of HCFCs for 2000 is available from the Secretariat of the Montreal Protocol. Usually HFC-23 occurs only during the production of HCFC-22.

^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. Under that category, activity data were 41,016 t for 2000 and the implied emission factor was 9.46.

Industrial processes - HFC emissions from production of halocarbons and SF₆**Trends in HFC-23 actual emissions 1990 to 2000 (tonnes)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	0	0	0	0	0	0	0	0	0	0	0.0
Belgium						NO	NO	NO	NO	NO	NO
Canada		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Czech Republic											
Denmark											
Estonia											
European Community											NE
Finland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
France	166	103	63	39	24	15	10	10	19	28	16.8
Greece	80	95	78	137	183	278	320	338	320	320	320.0
Hungary											
Iceland											
Ireland	NE	NE	NE	NE	0	NO	NO	NO	NO	NO	NO
Italy ^a									0		0.0
Latvia										NO	NO
Luxembourg											
Netherlands	379	412	388	433	536	492	573	573	666	294	206.9
New Zealand ^a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
Norway											
Poland											NE
Portugal											
Slovakia										NO	NO
Spain	205	186	236	193	296	396	432	495	434	504	540.4
Sweden	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Switzerland											NO
United Kingdom	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
United States	2,990	2,630	2,980	2,720	2,700	2,310	2,660	2,563	3,432	2,599	2,546.0

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	-38.2	-38.2	-38.2	-38.2	-38.2	-33.3	0.0	90.0	47.9	-40.2	-89.9
Greece	18.4	-17.9	76.9	33.4	51.7	15.2	5.7	-5.5	0.0	0.0	300.4
Hungary											
Iceland											
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands	8.8	-5.8	11.6	23.8	-8.2	16.5	0.0	16.1	-55.8	-29.6	-45.4
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain	-9.3	26.8	-18.3	53.1	34.1	9.0	14.4	-12.2	16.0	7.3	163.1
Sweden											
Switzerland											
United Kingdom											
United States	-12.0	13.3	-8.7	-0.7	-14.4	15.2	-3.6	33.9	-24.3	-2.0	-14.8

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

Industrial processes - HFC emissions from consumption of halocarbons and SF₆ (2000)

		2.F Consumption of halocarbons and SF ₆ - HFCs																											
Method and EF used ^a		HFC-23			HFC-32			HFC-41			HFC-43-10mee			HFC-125			HFC-134			HFC-134a			HFC-152A						
Method	EF	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A				
		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.		2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.	2.F(p) Gg CO ₂ equ.	2.F(a) Gg CO ₂ equ.
Austria	CS	CS	362.7	6.4	56.3	16.0	1.1	14.1						817.6	61.3	13.3							3,115.8	849.0	3.7	64.7	63.3	1.0	
Belgium									NO				NO				224.0	93.0	2.4	NO			1,033.5	526.0	2.0	57.0	10.0	5.7	
Canada	T2	D	1.7	1.6	1.0	0.4	0.1	3.0						39.2	118.0	0.3						1,720.4	679.5	2.5	2.6	4.4	0.6		
Czech Republic	D		1.9			2.4								133.3								332.4			0.5				
Denmark	M/CS	CS					5.8								161.7									365.5			2.4		
Estonia																													
European Community																													
Finland	T2, T1a & T1b	D				5.3	0.8	6.6						303.8	91.9	3.3						498.9	312.5	1.6	3.6	3.2		1.1	
France	CS/ T2	CS		71.9			10.4					131.7			893.2									3,313.1				0.0	
Greece							57.5								253.8									225.7					
Hungary	T1a, D	CS	1.5	0.6	2.4	1.4	0.6	2.3						82.7	35.6	2.3						275.9	45.4	6.1	0.1	0.1		1.0	
Iceland	T1	D				0.1								14.5									6.0			0.1			
Ireland	T2	D, CS	18.6	12.0	1.5	26.2	1.3	19.9						487.6	48.8	10.0						318.8	57.0	5.6					
Italy	D, T2	CS		10.4			50.3							854.0	381.7	-2.2						2,887.3	1,262.0	2.3					
Latvia			NE/NO	NE		NE/NO	NE		NE/NO	NE		NE/NO	NE	NE/NO	NE		NE/NO	NE				NE/NO	NE		NE/NO	NE			
Luxembourg																													
Netherlands	M,CS/T2	CS												728.0	100.8	7.2						1,391.0	829.4	1.7					
New Zealand	T2	D	NO			NE			NO	NO		NO	NO	NE	11.5		NO	NO				NE	135.1			NE			
Norway	T2	CS	0.9	0.8	1.1	2.1	0.7	3.1						259.6	72.6	3.6						354.2	79.4	4.5	7.8	1.1		7.2	
Poland	T1a, T1b, T2	D		2.0		1.2	0.8	1.6						189.6	81.8	2.3						802.2	699.8	1.1	1.1	0.9		1.2	
Portugal																													
Slovakia	D	D,CS	0.7	0.6	1.1	1.5	0.2	7.3						36.7	5.3	6.9						107.3	62.0	1.7	0.4	0.1		3.8	
Spain	D,CS,T2	D,PS,T2				388.6									117.0								2,755.7						
Sweden	T2	D, CS	0.7	0.5	1.5	1.0	0.2	4.4	NO	NO		NO	NO	19.3	8.7	2.2	NO	NO				664.3	328.6	2.0	21.7	21.2		1.0	
Switzerland	T2	M	NO	NO		12.4	2.6	4.7	NO	NO		NO	NO	218.9	71.7	3.1	NO	NO				547.1	310.6	1.8	0.2	0.3		0.7	
United Kingdom	T2	D/CS					IE			IE			IE		IE			IE					IE			IE			
United States	M	M	4,560.3	771.3	5.9	1547.4	61.0	25.4						29,760.0	4,365.9	6.8						86,513.4	37,577.7	2.3					

		2.F Consumption of halocarbons and SF ₆ - HFCs																	
		HFC-143			HFC-143a			HFC-227ea			HFC-236fa			HFC-245ca			Total		
P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A		
			2.F.(p) Gg CO ₂ equ.	2.F.(a) Gg CO ₂ equ.		2.F.(p) Gg CO ₂ equ.	2.F.(a) Gg CO ₂ equ.		2.F.(p) Gg CO ₂ equ.	2.F.(a) Gg CO ₂ equ.		2.F.(p) Gg CO ₂ equ.	2.F.(a) Gg CO ₂ equ.		2.F.(p) Gg CO ₂ equ.	2.F.(a) Gg CO ₂ equ.			
Austria			680.3	51.5	13.2	33.4	0.5	67.3				5,090.5	1,033.2	4.9					
Belgium	NO		456.0	176.0	2.6				NO			1,770.5	805.0	2.2					
Canada			47.2	113.7	0.4	3.1						1,814.5	917.4	2.0					
Czech Republic			200.6						3.3			674.3							
Denmark				194.7								1,707.7	730.1	2.3					
Estonia												NE	NE						
European Community												NE	29,722.8						
Finland			384.3	93.2	4.1							1,196.0	501.6	2.4					
France				2,283.8		18.4							6,722.6						
Greece													537.0						
Hungary			122.2	52.5	2.3							483.7	134.8	3.6					
Iceland			11.6									32.3							
Ireland			582.2	62.6	9.3	91.7	8.4	11.0				1,525.1	190.1	8.0					
Italy			729.6	234.9	3.1	29.0	0.1	285.7				2,791.9	1,939.5	1.4					
Latvia	NE/NO	NE	NE/NO	NE		NO	NE		NO	NE		NE	NE						
Luxembourg																			
Netherlands			790.4	125.8	6.3	33.0	22.9	1.4				2,942.4	1,078.9	2.7					
New Zealand	NO	NO	NE	24.3		NO	0.4		NO	NO		NE	171.3						
Norway			288.3	77.1	3.7	1.2	0.5	2.4				914.0	232.1	3.9					
Poland			265.8	102.2	2.6	6.6	2.3	2.9				1,266.4	889.7	1.4					
Portugal																			
Slovakia			48.1	7.3	6.6	23.2	2.3	10.0	3.4	0.3	10.0	221.3	78.3	2.8					
Spain				183.7			35.7						3,483.2						
Sweden	NO	NO	46.4	9.8	4.7	NO	NO		NO	NO		753.4	369.1	2.0					
Switzerland	NO	NO	252.6	93.1	2.7	1.6			NO	NO		1,031.2	480.0	2.1					
United Kingdom		IE		IE			IE			IE		10,732.4	4,999.5	2.1					
United States			29,736.4	3,430.6	8.7				2,970.3	1,865.5	1.6				203,383.5	58,025.7	3.5		

	ODS substitutes (HFCs and PFCs)		Fugitive emissions (prod. halocarbons and SF ₆)		PFCs, HFCs, SF ₆ (semiconductor manufacturing)	
	Key source ^b	Percentage of national total ^c	Key source ^b	Percentage of national total ^c	Key source ^b	Percentage of national total ^c
Austria	L/T	1.3/5.6			T	1.2
Belgium						
Canada						
Czech Republic						
Denmark	L	1.1				
Estonia						
European Community						
Finland	L/T	0.7/4.1				
France	L	1.2	T	0.70	T	0.6
Greece						
Hungary						
Iceland						
Ireland						
Italy						
Latvia						
Luxembourg						
Netherlands						
New Zealand						
Norway	T	1.80				
Poland						
Portugal						
Slovakia						
Spain	L	0.9				
Sweden	L/T	0.5/4.7				
Switzerland	L	0.9				
United Kingdom	L/T	0.8/1.7				
United States	L/T	0.7/6.3				

^a Information on methods and emission factors is included in this table as reported by Parties. 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 SF₆.

^b Key source assessments here refer to categories including HFCs, PFCs and SF₆ rather than by individual gas species.

^c The percentage refers to the actual emissions where available; otherwise to potential emissions.

2. Industrial processes

Industrial processes - PFC and SF₆ emissions from consumption of halocarbons and SF₆ (2000)

2.F Consumption of halocarbons and SF ₆ - PFCs ^a																										
Method and EF used ^b			CF ₄			C ₂ F ₆			C ₃ F ₈			C ₄ F ₁₀			c-C ₄ F ₈			C ₅ F ₁₂			C ₆ F ₁₄			Total		
			Method	EF	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	P	A	Ratio P/A	
2.F(p)	2.F(a)	2.F(p)			2.F(a)	2.F(p)		2.F(a)	2.F(p)		2.F(a)	2.F(p)		2.F(a)	2.F(p)		2.F(a)	2.F(p)		2.F(a)	2.F(p)		2.F(a)			
			Gg CO ₂ equ.			Gg CO ₂ equ.			Gg CO ₂ equ.			Gg CO ₂ equ.			Gg CO ₂ equ.			Gg CO ₂ equ.			Gg CO ₂ equ.					
Austria	CS	CS	NO	9.53		NO	15.63														NE	25.16				
Belgium											NO				NO											
Canada	T2	D	5.46	3.12	1.75	29.49	11.75	2.51	18.88	1.67	11.32	0.12	0.00	336.63	0.00	0.07	0.01	0.15	0.08	1.85	2.23	2.42	0.92	56.34	19.12	2.95
Czech Republic		D	2.67			0.28			6.48														9.42			
Denmark	M/CS	CS								28.30													48.18	28.30	1.70	
Estonia																							NE	NE		
European Community																							NE	2,147.62		
Finland	T2, T1a & T1b	NA							23.80	22.18	1.07												23.80	22.18	1.07	
France	CS/ T2	CS		192.72			413.74																126.41		732.92	
Greece																										
Hungary	T1a	CS							1.76	0.75	2.36													1.76	0.75	2.36
Iceland																										
Ireland	T2	D, CS	53.27	38.27	1.39	403.05	267.14	1.51																456.32	305.41	1.49
Italy	D, T1	CS		64.81			81.98									0.37									147.17	
Latvia			NO	NE		NO	NE		NO	NE		NO	NE		NO	NE		NO	NE		NO	NE		NO	NE	
Luxembourg																										
Netherlands ^c	T2/T3b	D												CBI	136.08										140.94	
New Zealand	T2	D	NO			NO			NE																NE	
Norway									0.39	0.39	1.00													0.39	0.39	1.00
Poland	T1a, T2	D										66.71	23.36	2.86										66.74	23.36	2.86
Portugal																										
Slovakia	D	D,CS	0.24	0.24	1.00																			0.24	0.24	1.00
Spain	D,CS,T2	D,PS,T2								39.12						2.31										41.43
Sweden	T2	CS	3.25	2.41	1.35	NO	NO		5.60			NO	NO		NO	NO		NO	NO		NO	NO		8.85	2.41	3.68
Switzerland	T2	M	72.15	43.21	1.67	20.20	12.57	1.61		1.87		NO	NO		NO	NO		NO	NO		NO	NO		92.35	57.66	1.60
United Kingdom	T2	D/CS					IE			IE			IE			IE			IE			IE		534.78	465.13	1.15
United States	M	M	64.05	1,862.18	0.03		3,962.40			247.65														64.05	6,072.24	0.01

^a An assessment of key sources is provided in a separate table presented together with the table on HFC emissions from consumption of halocarbons and SF₆.

^b Information on methods and emission factors is included in this table as reported by Parties. It may not reflect the actual method or type of emission factor used for all PFCs for all subcategories within the category 2.F.Consumption of halocarbons and SF₆.

^c The Netherlands reported aggregated emissions of all PFCs for the industrial processes sector. They are reported as unspecified and not as c-QF₁₀.

2.F Consumption of halocarbons and SF ₆ - SF ₆ ^a					
Method and EF used ^b		P	A	Ratio P/A	
					2.F(p)
Method	EF	Gg CO ₂ equ.			
Austria	CS	CS	9,184.46	669.30	13.72
Belgium			239.00	95.60	2.50
Canada	NA	NA			
Czech Republic		D	205.90		
Denmark	M/CS	CS	194.28	37.95	5.12
Estonia				NO	
European Community			NE	6,908.65	
Finland	T2, T1a & T1b	D	88.43	16.73	5.29
France	CS/ T2	CS		1,143.56	
Greece					
Hungary	D	CS	406.92	232.00	1.75
Iceland		D	5.38		
Ireland	T2	D, CS	72.97	51.89	1.41
Italy	D, T3c	CS	3,393.80	155.64	21.81
Latvia			0.02	NE	
Luxembourg					
Netherlands	T2/T3b	PS/CS/D	CBI	326.95	
New Zealand	T2	D	41.89	16.41	2.55
Norway	T2	D	256.17	64.74	3.96
Poland	T1a, T2	D	47.80	17.11	2.79
Portugal		D		1.01	
Slovakia	D	D,CS	69.62	13.11	5.31
Spain	CS,T2	CS,T2		208.56	
Sweden	T2	CS	31.07	36.33	0.86
Switzerland	T2	M	209.67	149.05	1.41
United Kingdom	T2	CS	1,879.60	942.72	1.99
United States	CS	CS	29,221.85	15,499.18	1.89

Industrial processes - Consumption of halocarbons and SF₆**Trends in HFC134-a actual emissions 1990 to 2000 (tonnes)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	1	2	3	5	7	414	458	509	568	602	653.1
Belgium						248	296	351	369	405	405.0
Canada						285	543	406	523	523	522.7
Czech Republic											
Denmark			2	70	101	155	210	190	231	260	281.2
Estonia											
European Community											
Finland					5	15	38	89	92	127	240.4
France					118	523	1,174	1,708	1,887	2,164	2,548.5
Greece				7	13	29	47	70	95	132	173.6
Hungary^a										93	34.9
Iceland											
Ireland	NE	NE	NE	NE	NE	10	10	17	31	34	43.9
Italy^a									554.1	1,789.0	970.8
Latvia											NE
Luxembourg											
Netherlands					50	149	339	531	614	636	638.0
New Zealand^b											103.9
Norway									38	50	61.1
Poland											538.3
Portugal											
Slovakia										58	47.7
Spain						2	168	437	995	1,654	2,119.8
Sweden	2	4	6	23	51	88	117	176	200	239	252.8
Switzerland											239.0
United Kingdom											
United States	564	564	626	2,885	4,464	12,232	16,211	20,166	23,089	26,095	28,905.9

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	57.5	47.9	46.0	46.2	6,059.6	10.5	11.2	11.5	6.0	8.5	48,146.9
Belgium						19.2	18.7	5.1	9.8	0.0	
Canada						90.7	-25.3	28.9	0.0	0.0	
Czech Republic											
Denmark			2,736.7	43.9	53.0	35.6	-9.5	21.4	12.9	7.9	
Estonia											
European Community											
Finland					208.0	158.8	136.6	2.6	38.1	90.0	
France					344.5	124.3	45.4	10.5	14.7	17.8	
Greece				88.7	126.1	62.9	46.7	36.7	38.5	31.9	
Hungary										-62.3	
Iceland											
Ireland						0.6	77.3	80.2	12.2	27.5	
Italy									222.9	-45.7	
Latvia											
Luxembourg											
Netherlands					199.5	127.0	56.6	15.7	3.6	0.3	
New Zealand^b											
Norway									31.5	21.6	
Poland											
Portugal											
Slovakia											-17.4
Spain						10,254.0	160.3	127.8	66.3	28.1	
Sweden	101.5	55.4	266.9	127.0	71.5	32.9	51.0	13.4	19.9	5.6	12,797.4
Switzerland											
United Kingdom											
United States	0.0	11.1	360.5	54.7	174.0	32.5	24.4	14.5	13.0	10.8	5,024.2

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions was therefore not included in this table.

Industrial processes - Consumption of halocarbons and SF₆**Trends in SF₆ emissions 1990 to 2000 (tonnes)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	11	17	20	23	28	31	27	33	33	30	28.0
Belgium						9	9	9	4	4	4.0
Canada											
Czech Republic											
Denmark	1	1	2	4	3	3	2	2	2	2	1.6
Estonia											
European Community											
Finland	3	2	1	1	1	1	1	1	0	1	0.7
France	44	45	46	47	48	49	51	52	48	48	47.8
Greece											
Hungary ^a									4.2	4.2	9.7
Iceland											
Ireland	NE	NE	NE	NE	NE	3.5	4.2	5.5	3.8	2.7	2.2
Italy ^a									15.6	16.1	6.5
Latvia											NE
Luxembourg											
Netherlands	8	4	4	5	6	15	15	16	15	14	13.7
New Zealand ^a	NE	NE	NE	NE	1.0	0.7	1.0	1.1	1.2	1.3	0.7
Norway	2	2	2	2	2	2	2	2	3	3	2.7
Poland											0.7
Portugal						0	0	0	0	0	0.0
Slovakia										1	0.5
Spain	2	3	3	3	3	4	4	5	6	8	8.7
Sweden	3	4	4	3	3	4	3	5	2	3	1.5
Switzerland											6.2
United Kingdom	10	12	15	17	19	22	23	23	37	38	39.4
United States	1,324	1,376	1,279	1,448	1,338	1,143	1,153	1,064	886	695	648.5

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	53.4	16.4	15.5	21.0	10.9	-13.1	25.7	-1.0	-10.5	-5.4	153.1
Belgium						0.0	0.0	-53.7	0.0	0.0	
Canada											
Czech Republic											
Denmark	159.4	87.4	49.6	-11.8	-6.7	-28.1	14.2	-27.3	13.9	-22.0	217.6
Estonia											
European Community											
Finland	-32.8	-32.1	-19.1	-0.2	-46.9	0.0	15.3	-26.5	173.7	-48.3	-76.5
France	2.0	2.0	2.2	2.3	2.3	3.1	1.5	-6.3	-0.7	-0.4	7.9
Greece											
Hungary									0.1	129.3	
Iceland											
Ireland						21.6	30.8	-31.4	-30.0	-18.2	
Italy									3.5	-59.7	
Latvia											
Luxembourg											
Netherlands	-46.3	6.0	3.4	34.6	143.9	1.1	5.7	-4.3	-8.9	-2.8	74.9
New Zealand					-32.8	53.9	5.1	11.3	5.1	-46.1	
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.2	2.1	2.1	61.9
Poland											
Portugal						2.2	2.1	2.1	2.0	2.0	
Slovakia										3.4	
Spain	10.0	4.1	5.8	12.2	23.6	8.3	20.3	15.3	31.2	13.1	274.1
Sweden	3.5	-0.6	-13.4	2.3	36.5	-23.4	45.7	-47.9	1.6	-39.2	-55.3
Switzerland											
United Kingdom	21.1	19.0	15.8	12.8	15.6	3.3	-1.4	62.6	2.9	3.3	283.0
United States	4.0	-7.1	13.2	-7.6	-14.6	0.8	-7.7	-16.7	-21.6	-6.7	-51.0

^a Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

Industrial processes: Activity data from international sources

Aluminium production in thousands of tonnes (1999 or 2000) ^a		
	Primary	Total
Austria		
Belgium		
Canada (1999)	2,390	2,390
Czech Republic		
Denmark		32
Estonia		
European Community		
Finland		
France (1999)	455	455
Greece (1999)	161	161
Hungary (1999)	89	89
Iceland	167	167
Ireland		
Italy	190	757
Latvia		
Luxembourg		
Netherlands	300	300
New Zealand	325	325
Norway	1,026	1,026
Poland	51	
Portugal		
Slovakia		110
Spain	366	366
Sweden	101	101
Switzerland	35	35
United Kingdom (1999)	270	528
United States	3,668	7,118
	Unwrought primary	Unwrought total

HFC-134a Sales by end-use category (tonnes)

Year	Refrigeration and Air Conditioning	Closed Cell Foams	Medical Aerosols	Solvent Applications	Other Short-Term Uses	Total Sales
1990	77				112	189
1991	2,129	1	28		40	2,198
1992	5,967	102	71	1	263	6,404
1993	24,526	291	279	102	1,328	26,526
1994	46,111	1,461	535	16	2,277	50,400
1995	61,291	1,981	1,531	28	8,938	73,769
1996	71,044	2,658	630	25	9,317	83,674
1997	90,930	3,579	2,643	46	4,739	101,937
1998	96,611	9,087	1,336	71	5,130	112,235
1999	111,221	8,108	2,112	2,010	10,211	133,662
2000	110,708	5,682	1,737	1,719	12,167	132,013
TOTAL	620,615	32,950	10,902	4,018	54,522	723,007

Notes:

Closed cell foams -- e.g., insulating foams, safety foam

Medical aerosols -- e.g., metered dose inhalers

Uncategorized short-term uses -- e.g., sterilants, non-medical aerosols, open cell foams plus fugitive emissions

Total sales equals sales for dispersive uses plus fugitive emissions

Source: AFEAS (www.afeas.org)

Source: UN Industrial Commodity Production Statistics Database (as of 19 June 2002), Department of Economic and Social Affairs, Statistics Division, United Nations, New York.

^a For a comparison of aluminium production data as reported in the CRF by Parties please refer to table Industrial processes - PFC and SF₆ emissions from metal production.

Solvent and other product use, CO₂, N₂O and NMVOC (2000)

Solvent and other product use																
Methods and EF used, CO ₂		Methods and EF used, N ₂ O		3.A Paint application						3.B Degreasing and dry cleaning						
				CO ₂			N ₂ O			CO ₂			N ₂ O			
Method	EF	Method	EF	Key source	Percentage of national total	CO ₂ IEF	Key source	Percentage of national total	N ₂ O IEF	Key source	Percentage of national total	CO ₂ IEF	Key source	Percentage of national total	N ₂ O IEF	
					%	t / t		%	t / t		%	t / t		%	t / t	
Austria	C, CS	CS	CS	CS		2.649			NE			IE			IE	
Belgium						NE			NE			NE			NE	
Canada	NA	NA	CS	CS		NA			NA			NA			NA	
Czech Republic	C	C, CS	D	D		1.059						2.031				
Denmark																
Estonia																
European Community						NE			NE			NE			NE	
Finland	NO	NO	CS	CS					NO			NE			NO	
France	C	CS				2.977						2.299				
Greece	C	C				0.003						0.001				
Hungary	CS	CS				0.260						0.125				
Iceland																
Ireland	CS, C	CS, C	NA	NA		3.117						3.116				
Italy	D	D				0.745			NO			2.445			NO	
Latvia			T1	D		NO			NO			NO				
Luxembourg																
Netherlands	CS	CS	CS	CS												
New Zealand						NE			NE			NE			NE	
Norway	M	CS	CS			3.000						3.000				
Poland						NE			NE			NE			NE	
Portugal	MB					0.756						3.117				
Slovakia			NO	NO		NE			NE			NE			NE	
Spain	D	D	CS	CS		0.657						6.046				
Sweden	CS	CS							NE						NE	
Switzerland	CS	CS	CS	CS		NO			NO			NO			NO	
United Kingdom	T2	CS	NE			NE			NA			NE			NA	
United States	NE	NE	NE	NE		NE			NE			NE			NE	

3. Agriculture

Agriculture - Enteric fermentation, CH₄ (2000)

4.A Enteric fermentation (CH ₄)																			
Methods and EF used ^a		Key source	Per centage of national total	4.A.1 Cattle						4.A.3 Sheep				4.A.8 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	kg CH ₄ /head/yr	CRF	FAO ^b	Difference	kg CH ₄ /head/yr				
				(1,000 head)		%	kg CH ₄ /head/yr	(1,000 head)		%		(1,000 head)		%					
IPCC default EF^c																			
Austria	C	D, CS	L, T	3.3	2,155	2,172	0.8	56 - 118 ^d	92.0	38.0	8	339	352	3.8	8.0	2,495	3,431	37.5	1.5
Belgium ^e	CS,M	CS	L	2.9		3,288							152				7,404		
Canada	T1	D	L, T	2.4	13,616	12,815	-5.9	99.8	54.0			504	695	37.9	8.0	12,222	12,254	0.3	1.5
Czech Republic	T2	CS	L, T	1.2	1,574	1,574	0.0	68.2	23.6			84	84	0.0	5.0	3,688	3,688	0.0	3.4
Denmark	T1/T2	CS	L, T	3.9	1,868	1,868	0.0	104.0	37.0			68	145	114.1	8.0	9,553	11,922	24.8	1.5
Estonia			L	1.9	253	267	5.6	81.0	56.0			32	28	-13.0	8.0	300	286	-4.7	1.5
European Community	C, CS, D, T1, T2	CS, D, T1, T2	L	3.2	NE			NE	NE			NE			NE	NE			NE
Finland	T2	CS/D	L, T	2.1	1,057	1,068	1.1	111.1	42.2			99	100	1.1	8.0	1,298	1,296	-0.1	1.5
France	C	CS	L, T	5.4	20,520	20,527	0.0	101.7	51.7			10,034	10,004	-0.3	8.0	7,161	14,635	104.4	1.5
Greece	T1	D	L, T	2.3	541	590	9.1	81.0	56.0			8,982	9,041	0.7	8.0	997	906	-9.1	1.5
Hungary	D	D	L	1.9	805	857	6.5	100.0	48.0			1,129	934	-17.3	8.0	4,834	5,335	10.4	1.5
Iceland	D	D	L	7.1	72	72	-0.2	100.0	48.0			466	466	0.1	8.0	4	44	1,039.3	1.5
Ireland	D	CS, D	L	14.4	6,846	6,708	-2.0	100.0	50.0			6,384	5,393	-15.5	8.0	1,753	1,763	0.6	1.5
Italy	D, T1, T2	D, CS	L	2.3	7,053	7,162	1.5	113.0	49.9			11,089	11,017	-0.6	8.0	8,307	8,415	1.3	1.5
Latvia	T1	D	L	5.3	367	378	3.1	81.0	56.0			29	27	-5.6	8.0	394	404	2.7	1.5
Luxembourg ^e			L	5.5		3,288							152				7,404		
Netherlands	cattle 90: T2; rest: T1	cattle: CS; rest: D	L, T	3.1	4,070	4,097	0.7	81.2	44.9			1,308	1,308	0.0	8.0	13,118	13,139	0.2	1.5
New Zealand	T1	CS	L	38.2	9,150	9,120	-0.3	76.8	67.5			45,015	45,379	0.8	15.1	355	369	3.9	NE
Norway	T1	D	L	3.1	975	1,019	4.5	100.0	48.0			1,769	2,332	31.8	8.0	608	412	-32.3	1.5
Poland	T2	CS	L	2.4	6,083	6,093	0.2	90.0	38.2			362	372	2.8	10.1	17,122	18,224	6.4	1.5
Portugal	T1	D	L, T	3.0	1,414	1,245	-12.0	100.0	48.0			3,579	5,900	64.9	8.0	2,338	2,330	-0.3	1.5
Slovakia	IPCCT1,T2	IPCC,CS	L	2.2	646	665	2.9	100.0	56.0			348	340	-2.3	8.0	1,488	1,562	5.0	1.5
Spain	CS,T1,T2	T1,T2	L, T	3.6	6,102	6,291	3.1	103.1	57.3			24,400	23,965	-1.8	8.7	24,385	21,526	-11.7	1.4
Sweden	T1, CS	D, CS	L, T	4.3	1,684	1,684	0.0	154.0	49.0			432	432	0.0	8.0	1,918	1,918	0.0	1.6
Switzerland	CS	CS	L	4.7	1,588	1,588	0.0	102.7	43.3			421	420	-0.2	7.1	1,498	1,498	0.0	1.0
United Kingdom	T2	D/CS	L	2.8	11,133	11,133	0.0	94.9	45.6			42,261	42,261	0.0	4.7	6,482	6,482	0.0	1.5
United States	M,T1	M,D	L, T	1.8	77,349	98,198	27.0	97.2	68.0			7,032	7,032	0.0	8.0	58,892	59,342	0.8	1.5
Average								97.2	49.0						8.1				1.6
Maximum								154.0	68.0						15.1				3.4
Minimum								68.2	23.6						4.7				1.0

^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 the various livestock types within the category CH₄ from 4.A Enteric fermentation.

^b Source of international statistics: FAO, <http://apps.fao.org>: follow the link "Agriculture" and then the link "Live Animals".

^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/ yr) are provided by regions as shown below (see footnote c for source reference):

^e In the FAO statistics, Belgium and Luxembourg are aggregated.

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

Agriculture - Enteric fermentation**Trends in CH₄ emissions 1990 to 2000 (Gigagram)**

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Max	Min
Austria	154	154	151	144	142	141	135	133	131	131	128	124	138	154	124
Belgium	220	220	220	218	220	220	221	218	212	212	210	209	216	221	209
Canada	762	762	769	789	795	834	861	867	875	855	849	843	827	875	762
Czech Republic	156	156						98	93	86	85	81	100	156	81
Denmark	150	150	149	146	148	143	143	142	138	138	128	127	141	150	127
Estonia	52	52	49	47	36	34	27	24	26	22	19	18	32	52	18
European Community	6,857	6,857	6,679	6,542	6,490	6,492	6,487	6,519	6,436	6,408	6,365	6,256	6,503	6,857	6,256
Finland	87	87	83	81	81	81	76	76	77	75	74	73	79	87	73
France	1,468	1,468	1,444	1,418	1,405	1,405	1,413	1,413	1,397	1,398	1,387	1,387	1,412	1,468	1,387
Greece	142	142	140	139	139	139	140	140	140	139	139	139	140	142	139
Hungary	157	126	122	105	90	85	84	82	79	81	80	76	97	157	76
Iceland	11	11	11	10	10	10	10	10	10	10	10	10	10	11	10
Ireland	453	453	457	458	460	462	468	477	488	494	483	460	469	494	453
Italy	649	649	661	632	620	629	636	628	627	619	606	607	629	661	606
Latvia	98	98	95	79	49	41	39	37	35	32	28	27	51	98	27
Luxembourg ^b												16	16	16	16
Netherlands	402	402	412	401	393	382	377	366	353	341	334	319	371	412	319
New Zealand	1,493	1,493	1,462	1,429	1,417	1,424	1,427	1,420	1,398	1,392	1,398	1,398	1,423	1,493	1,392
Norway	82	82	80	82	81	83	84	84	85	86	85	83	83	86	80
Poland	793	793	715	647	606	596	565	545	534	469	432	604	793	432	
Portugal	124	124	126	121	119	118	119	118	117	116	124	123	120	126	116
Slovakia	116	116	101	87	74	69	71	68	62	56	54	52	74	116	52
Spain	595	595	604	597	595	598	604	649	639	656	672	670	625	672	595
Sweden	153	153	148	154	155	155	152	152	149	147	143	151	155	143	
Switzerland	130	130	132	131	130	127	128	126	124	120	118	118	126	132	118
United Kingdom	908	908	895	900	900	907	897	905	893	894	894	864	896	908	864
United States	6,089	6,089	6,058	6,198	6,118	6,196	6,342	6,171	6,037	5,948	5,929	5,898	6,089	6,342	5,898
Average	858	857	870	862	851	855	860	826	814	807	771	761			
Minimum	11	11	11	10	10	10	10	10	10	10	10	10			
Maximum	6,857	6,857	6,679	6,542	6,490	6,492	6,487	6,519	6,436	6,408	6,365	6,256			

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change base year to 2000
Austria	-2.1	-4.6	-1.8	-0.8	-3.8	-1.8	-1.1	-0.4	-2.1	-3.3	-19.9
Belgium	-0.2	-0.6	0.8	-0.2	0.6	-1.2	-2.8	0.1	-0.8	-0.8	-5.0
Canada	1.0	2.6	0.8	4.8	3.3	0.7	1.0	-2.2	-0.8	-0.7	10.6
Czech Republic							-5.1	-7.6	-0.8	-4.9	-48.0
Denmark	-1.0	-1.5	1.2	-3.7	-0.1	-0.1	-3.1	0.1	-7.3	-0.5	-15.2
Estonia	-6.3	-3.8	-22.5	-7.1	-21.4	-8.3	5.8	-14.6	-12.8	-5.0	-65.0
European Community	-2.6	-2.1	-0.8	0.0	-0.1	0.5	-1.3	-0.4	-0.7	-1.7	-8.8
Finland	-4.8	-2.3	0.1	-0.2	-5.9	0.4	1.1	-2.3	-1.7	-0.7	-15.4
France	-1.7	-1.8	-0.9	0.0	0.6	0.0	-1.1	0.1	-0.8	0.0	-5.5
Greece	-1.2	-0.6	-0.1	0.3	0.5	0.3	-0.2	-0.3	-0.3	-0.1	-1.9
Hungary	-2.7	-14.0	-13.9	-5.8	-2.0	-2.0	-3.7	2.8	-1.3	-5.0	-51.5
Iceland	-1.5	-2.9	-0.8	0.4	-2.6	0.9	1.1	0.9	-1.1	-4.3	-9.5
Ireland	0.9	0.1	0.5	0.5	1.2	2.1	2.2	1.2	-2.2	-4.7	1.7
Italy	1.8	-4.3	-1.9	1.4	1.2	-1.2	-0.2	-1.3	-2.0	0.1	-6.5
Latvia	-3.4	-16.2	-38.3	-16.9	-3.2	-5.7	-6.4	-8.8	-13.1	-2.4	-72.6
Luxembourg											-1.4
Netherlands	2.4	-2.5	-2.1	-2.8	-1.3	-2.9	-3.6	-3.2	-2.2	-4.3	-20.5
New Zealand	-2.1	-2.3	-0.8	0.5	0.2	-0.5	-1.6	-0.4	0.4	0.0	-6.4
Norway	-2.1	1.5	-1.1	2.7	0.9	0.7	0.4	1.8	-1.5	-2.7	0.6
Poland	-9.9	-9.5	-6.3	-1.6	-5.3	-3.5	1.0	-3.0	-12.1	-7.9	-45.5
Portugal	1.7	-4.0	-1.9	-0.3	0.5	-1.1	-0.8	-0.3	6.2	-0.5	-0.9
Slovakia	-13.3	-13.9	-14.8	-6.4	2.3	-4.2	-8.1	-10.2	-4.3	-2.4	-55.0
Spain	1.6	-1.2	-0.4	0.5	1.0	7.6	-1.6	2.8	2.5	-0.4	12.6
Sweden	-3.1	3.8	0.9	-0.2	-2.2	0.1	0.2	-2.4	-1.2	-2.9	-7.0
Switzerland	1.1	-0.8	-0.6	-1.9	0.3	-1.3	-1.5	-3.0	-1.5	-0.4	-9.4
United Kingdom	-1.4	0.5	0.0	0.8	-1.1	0.9	-1.3	0.1	0.0	-3.3	-4.9
United States	-0.5	2.3	-1.3	1.3	2.4	-2.7	-2.2	-1.5	-0.3	-0.5	-3.1

^a Base year refers 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: Hungary (average of 1985 – 1987), Poland (1988).

^b Data for inventory years prior to 2000 are taken from earlier submissions (2000 and/or 2001), as neither CRF tables for the entire time series were provided as part of the 2002 submission nor were 1990 to 1999 data reported in the trend tables of the last CRF.

Agriculture - Enteric fermentation: Dairy cattle

Trends in CH₄ emissions 1990 to 2000 (Gigagram)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	83	81	77	76	75	65	64	66	67	64	57	71	83	57
Belgium	99	98	98	100	99	99	96	87	94	89	88	95	100	87
Canada	196	190	187	179	180	181	181	176	173	166	160	179	196	160
Czech Republic ^a	80								44	44	42	52	80	42
Denmark	78	77	74	74	73	73	73	70	70	67	66	72	78	66
Estonia ^a										11	11	11	11	11
European Community														
Finland	48	44	42	42	42	41	40	41	41	40	40	42	48	40
France	533	510	486	477	476	472	465	458	451	453	452	476	533	451
Greece	20	20	19	19	19	19	19	18	18	18	17	19	20	17
Hungary ^a									41	40	36	39	41	36
Iceland ^a									3	3	3	3	3	3
Ireland	140	135	130	128	128	129	129	129	129	128	125	130	140	125
Italy ^a									241	248	233	241	248	233
Latvia ^a									20	17	17	18	20	17
Luxembourg														
Netherlands	291	291	280	271	264	266	262	252	248	242	230	263	291	230
New Zealand ^b											342	342	342	342
Norway	34								35	35	34	34	35	34
Poland										279	279	279	279	279
Portugal	40	40	38	38	36	36	36	36	36	36	36	37	40	36
Slovakia ^a									26	26	24	26	26	24
Spain	140	146	137	133	129	126	127	119	126	125	119	130	146	119
Sweden	89	81	81	81	78	74	72	72	69	69	66	76	89	66
Switzerland ^b												73	73	73
United Kingdom	296	289	285	286	291	284	285	281	277	282	272	284	296	272
United States	1,369	1,370	1,368	1,307	1,307	1,308	1,241	1,240	1,234	1,246	1,283	1,297	1,370	1,234
Average	221	241	236	229	228	227	221	218	172	157	164			
Minimum	20	20	19	19	19	19	19	18	18	3	3			
Maximum	1,369	1,370	1,368	1,307	1,307	1,308	1,241	1,240	1,234	1,246	1,283			

^a In this table, data for the years prior to 2000 are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following the information provided by the Party in table 8 of the CRF, no recalculation of this source category seem to have been undertaken for the inventory years prior to 2000 since the last submission. The following data were therefore taken from previous submissions: Czech Republic (1998, 1999), Estonia (1999), Hungary (1998, 1999), Iceland (1999), Italy (1998, 1999), Latvia (1998), Slovakia (1998, 1999).

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: New Zealand (1990 - 1999), Switzerland (1998, 1999).

Trends in CH₄ implied emission factor 1990 to 2000 (kg/head/year)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	92	92	92	92	92	92	92	92	92	92	92	92	92	92
Belgium														
Canada	99	98	98	99	99	99	99	99	99	100	100	99	100	98
Czech Republic ^a	67								68	68	68	68	68	67
Denmark	104	104	104	104	104	104	104	104	104	104	104	104	104	104
Estonia ^a										81	81	81	81	81
European Community														
Finland	97	98	98	99	101	103	103	105	106	108	111	103	111	97
France	99	99	100	100	101	101	101	101	102	102	102	101	102	99
Greece	81	81	81	81	81	81	81	81	81	81	81	81	81	81
Hungary ^a										100	100	100	100	100
Iceland ^a										100	100	100	100	100
Ireland	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Italy ^a										118	113	115	118	113
Latvia ^a									81	81	81	81	81	81
Luxembourg														
Netherlands	81	80	80	81	81	81	80	81	81	81	81	81	81	80
New Zealand ^b											77	77	77	77
Norway	100								100	100	100	100	100	100
Poland										90	90	90	90	90
Portugal	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Slovakia ^a									92	96	100	96	100	92
Spain	87	93	92	94	95	99	96	100	97	101	103	96	103	87
Sweden	154	154	154	154	154	154	154	154	154	154	154	154	154	154
Switzerland ^b										103	103	103	103	103
United Kingdom	104	104	106	107	107	109	110	113	114	115	95	108	115	95
United States	97	97	99	95	96	96	92	93	94	95	97	95	99	92
Average	97	100	100	100	101	101	101	102	98	99	97			
Minimum	67.2	80.2	80.2	80.6	80.5	80.5	80.1	80.0	68.2	68.2	68			

^a In this table, data for the years prior to 2000 are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following the information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since the last submission. The following data were therefore taken from previous submissions: Czech Republic (1998, 1999), Estonia (1999), Hungary (1999), Iceland (1999), Italy (1999), Latvia (1998), Slovakia (1998, 1999).

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: New Zealand (1990 - 1999), Switzerland (1998, 1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change base year to 2000
Austria	-3.1	-3.9	-1.6	-2.2	-12.8	-1.3	3.3	1.2	-4.2	-11.0	-31.4
Belgium	-0.7	-0.7	2.6	-1.6	0.3	-2.9	-8.9	7.2	-5.5	-0.5	-11.0
Canada	-3.3	-1.6	-4.0	0.5	0.4	0.2	-3.2	-1.4	-4.3	-3.3	-18.4
Czech Republic									-0.3	-4.2	-47.7
Denmark	-1.5	-4.0	0.3	-2.0	0.4	-0.3	-4.3	-0.2	-4.3	-0.7	-15.6
Estonia ^a											-5.3
European Community											
Finland	-8.2	-3.7	0.6	-0.1	-3.1	-1.2	1.7	-1.5	-1.2	1.0	-15.0
France	-4.4	-4.7	-1.9	-0.2	-0.8	-1.5	-1.6	-1.4	0.3	-0.3	-15.3
Greece	-2.0	-1.4	-1.2	-1.0	-1.0	-0.7	-1.6	-1.6	-1.6	-1.5	-12.9
Hungary									-2.0	-11.0	
Iceland ^a											-4.3
Ireland	-3.9	-3.6	-1.7	0.2	0.4	0.3	0.2	-0.1	-1.1	-1.9	-10.7
Italy									2.7	-5.8	
Latvia ^a									-14.9	-0.8	
Luxembourg											
Netherlands	0.1	-3.8	-3.2	-2.6	0.6	-1.2	-3.9	-1.7	-2.5	-4.6	-20.7
New Zealand											
Norway									-0.6	-2.7	-1.2
Poland											
Portugal	0.2	-5.7	-1.6	-5.1	2.2	-0.5	0.0	-1.9	0.6	-0.6	-11.9
Slovakia									0.7	-7.6	
Spain	4.0	-6.1	-3.2	-3.0	-2.2	1.2	-6.4	5.4	-0.4	-5.4	-15.5
Sweden	-8.3	-0.4	-0.2	-3.0	-5.3	-3.3	0.4	-4.1	1.0	-4.7	-25.7
Switzerland											
United Kingdom	-2.4	-1.2	0.2	2.0	-2.7	0.4	-1.4	-1.3	1.7	-3.4	-8.1
United States	0.1	-0.2	-4.4	0.0	0.1	-5.2	-0.1	-0.4	1.0	3.0	-6.3

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change 1990 to 2000
Austria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium											
Canada	-0.3	-0.3	0.6	0.3	0.0	0.0	0.1	0.0	0.3	0.2	1.1
Czech Republic									0.0	0.0	1.5
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Estonia ^a											0.0
European Community											
Finland	0.9	0.2	1.0	2.3	1.3	0.4	2.0	0.5	1.6	3.3	14.4
France	0.5	0.9	0.1	0.5	0.4	0.1	0.3	0.3	-0.1	0.1	3.1
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary											0.0
Iceland ^a											0.0
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy											-3.9
Latvia ^a									0.0	0.0	
Luxembourg											
Netherlands	-0.5	0.0	0.5	-0.1	0.0	-0.5	0.0	1.1	0.4	-0.2	0.7
New Zealand											
Norway									0.0	0.0	0.0
Poland											
Portugal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia									4.3	4.2	
Spain	6.9	-0.8	2.0	0.6	4.0	-2.4	4.4	-3.3	4.1	2.1	18.4
Sweden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland											
United Kingdom	0.4	1.9	0.8	0.2	1.5	1.0	3.0	0.9	1.0	-17.8	-8.7
United States	0.7	1.2	-4.1	1.1	0.5	-4.4	1.2	0.7	1.1	2.7	0.5

Agriculture - Enteric fermentation: Non-dairy Cattle

Trends in CH₄ emissions 1990 to 2000 (Gigagram)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	64	63	59	57	58	62	60	56	55	55	58	59	64	55
Belgium	114	114	113	113	114	115	115	117	111	114	113	114	117	111
Canada	538	551	574	587	624	650	653	668	650	650	649	618	668	538
Czech Republic ^a	53								25	24	23	31	53	23
Denmark	56	55	55	55	52	51	52	49	48	46	46	51	56	46
Estonia ^a										7	7	7	7	7
European Community														
Finland	36	35	35	35	35	31	31	32	31	30	29	33	36	29
France	821	822	822	819	821	833	840	833	840	829	831	828	840	819
Greece	21	20	20	19	19	20	20	19	19	19	18	20	21	18
Hungary ^a									22	22	22	22	22	22
Iceland ^a									2	2	2	2	2	2
Ireland	252	260	265	270	273	280	290	300	305	297	280	279	305	252
Italy ^a									283	276	249	270	283	249
Latvia ^a									11	10	9	10	11	9
Luxembourg														
Netherlands	75	84	82	82	80	74	66	63	59	57	55	71	84	55
New Zealand ^b											317	317	317	317
Norway	31								33	32	31	32	33	31
Poland										114	114	114	114	114
Portugal	47	49	46	46	46	46	46	44	44	51	51	47	51	44
Slovakia ^a									24	17	23	21	24	17
Spain	203	211	205	208	222	252	268	265	274	289	284	244	289	203
Sweden	49	51	57	58	60	61	63	64	63	62	62	59	64	49
Switzerland ^b											38	38	38	38
United Kingdom	391	386	393	391	393	394	404	392	389	386	377	391	404	377
United States	4,444	4,408	4,550	4,536	4,615	4,768	4,673	4,541	4,453	4,429	4,365	4,526	4,768	4,365
Average	450	508	520	520	529	545	541	532	387	350	322			
Minimum	21	20	20	19	19	20	20	19	11	2	2			
Maximum	4,444	4,408	4,550	4,536	4,615	4,768	4,673	4,541	4,453	4,429	4,365			

^a In this table, data for the years prior to 2000 are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following the information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since the last submission. The following data were therefore taken from previous submissions: Czech Republic (1998, 1999), Estonia (1999), Hungary (1998, 1999), Iceland (1999), Italy (1998, 1999), Latvia (1998), Slovakia (1998, 1999).

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table; New Zealand (1990 - 1999), Switzerland (1998, 1999).

Trends in CH₄ implied emission factor 1990 to 2000 (kg/head/year)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38	38	38
Belgium														
Canada	54.3	54.4	54.4	54.5	54.6	54.6	54.5	54.3	54.3	54.1	54.0	54	55	54
Czech Republic ^a	24.5								24	24.0	23.6	24	24	24
Denmark	37.4	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37	37	37
European Community														
Estonia ^a										56	56.0	56	56	56
Finland	40.9	40.9	41.4	42.1	42.4	40.9	41.8	41.9	41.7	42.1	42.2	42	42	41
France	50.3	50.5	51.0	51.2	51.2	51.3	51.4	51.6	51.4	51.6	51.7	51	52	50
Greece	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56	56	56
Hungary ^a										48.0	48.0	48	48	48
Iceland ^a										48.0	48.0	48	48	48
Ireland	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Italy ^a										53.6	49.9	52	54	50
Latvia ^a										56.0	56.0	56	56	56
Luxembourg														
Netherlands	56.8	58.4	57.6	57.0	55.3	54.4	51.9	50.0	48.5	46.5	44.9	53	58	45
New Zealand ^b											67.5	67	67	67
Norway	48.0								48.0	48.0	48.0	48	48	48
Poland										38.2	38	38	38	38
Portugal	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48	48	48
Slovakia ^a										56.0	56.0	56	56	56
Spain	58.5	58.0	57.4	57.3	57.2	57.8	57.7	57.3	57.0	57.0	57.3	58	59	57
Sweden	42.6	43.4	45.4	44.9	45.3	47.2	47.9	48.5	49.2	49.1	49.0	47	49	43
Switzerland ^b											43.3	43	43	43
United Kingdom	42.4	42.4	42.5	42.6	42.6	42.6	42.7	42.8	42.9	42.9	45.6	43	46	42
United States	71.5	71.7	71.7	70.8	70.5	70.3	69.5	69.1	69.1	68.0	68.0	70	72	68
Average	47.9	49.9	50.0	49.9	49.9	49.9	49.7	49.6	48.6	49.0	49.0			
Minimum	24.5	37.0	37.0	37.0	37.0	37.0	37.0	37.0	23.6	24.0	23.6			
Maximum	71.5	71.7	71.7	70.8	70.5	70.3	69.5	69.1	69.1	68.0	68.0			

In this table, data for the years prior to 2000 are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following the information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since the last submission. The following data were therefore taken from previous submissions: Czech Republic (1998, 1999), Estonia (1999), Hungary (1999), Iceland (1999), Italy (1999), Latvia (1998), Slovakia (1998, 1999).

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table; New Zealand (1990 - 1999), Switzerland (1998, 1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change base year to 2000
Austria	-1.3	-6.0	-3.4	0.9	6.6	-2.8	-6.2	-2.3	0.8	5.5	-8.6
Belgium	0.3	-0.6	-0.8	1.0	0.8	0.0	2.2	-5.5	2.9	-0.9	-0.7
Canada	2.5	4.1	2.4	6.3	4.1	0.5	2.3	-2.7	0.1	-0.2	20.7
Czech Republic									-3.0	-5.5	-57.3
Denmark	-1.5	-0.1	0.2	-5.1	-1.2	0.3	-4.2	-1.9	-4.7	-1.2	-18.0
Estonia										-5.5	
European Community											
Finland	-0.6	-0.9	-0.6	-0.5	-11.4	2.6	0.2	-3.0	-1.7	-2.7	-17.7
France	0.2	-0.1	-0.3	0.2	1.4	0.8	-0.9	0.9	-1.4	0.3	1.3
Greece	-4.5	-3.1	-1.5	0.0	0.7	0.7	-1.3	-2.0	-2.9	-1.5	-14.3
Hungary									-1.9	-1.7	
Iceland										-2.6	
Ireland	2.9	1.9	2.0	1.2	2.5	3.4	3.5	1.7	-2.5	-5.8	10.8
Italy									-2.4	-10.0	
Latvia									-10.4	-5.7	
Luxembourg											
Netherlands	12.0	-1.8	-0.6	-2.8	-7.2	-10.4	-4.7	-6.0	-3.1	-3.7	-26.2
New Zealand									-3.0	-4.7	0.1
Norway											
Poland											
Portugal	4.1	-4.7	-1.7	1.4	-0.1	-1.1	-2.7	-1.2	16.7	-0.5	9.0
Slovakia									-29.7	36.1	
Spain	3.7	-2.7	1.5	6.8	13.5	6.2	-0.9	3.5	5.3	-1.8	39.9
Sweden	5.1	11.0	1.6	3.6	2.4	3.7	0.4	-0.3	-2.1	-0.9	26.6
Switzerland											
United Kingdom	-1.3	1.7	-0.5	0.6	0.2	2.4	-2.9	-0.9	-0.8	-2.3	-3.7
United States	-0.8	3.2	-0.3	1.8	3.3	-2.0	-2.8	-1.9	-0.5	-1.5	-1.8

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change 1990 to 2000
Austria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium											
Canada	0.1	0.0	0.2	0.3	0.0	-0.3	-0.4	0.1	-0.3	-0.2	-0.5
Czech Republic									1.5	-1.5	-3.5
Denmark	-1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.1
European Community											
Estonia										0.0	
Finland	0.0	1.3	1.7	0.6	-3.5	2.1	0.4	-0.7	1.0	0.3	3.3
France	0.5	1.0	0.3	0.1	0.1	0.3	0.3	-0.4	0.4	0.2	2.8
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary										0.0	
Iceland										0.0	
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy										-7.0	
Latvia									0.0	0.0	
Luxembourg											
Netherlands	3.0	-1.4	-1.1	-2.9	-1.6	-4.7	-3.6	-3.1	-3.9	-3.5	-20.9
New Zealand											
Norway									0.0	0.0	0.0
Poland											
Portugal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia										0.0	
Spain	-0.9	-1.0	-0.2	-0.1	1.0	-0.2	-0.8	-0.5	0.1	0.5	-2.0
Sweden	1.9	4.7	-1.2	0.9	4.2	1.4	1.3	1.5	-0.1	-0.3	15.1
Switzerland											
United Kingdom	0.0	0.3	0.1	0.0	0.0	0.3	0.3	0.1	0.1	6.2	7.5
United States	0.2	0.0									

Trends in CH₄ emissions 1990 to 2000 (Gigagram)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	2.5	2.6	2.5	2.7	2.7	2.9	3.0	3.1	2.9	2.8	2.7	3	3	2
Belgium	1.1	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.9	1	1	1
Canada	3.3	3.5	3.5	3.6	3.4	3.4	3.7	3.6	3.5	3.5	4.0	4	4	3
Czech Republic ^a	3.4								0.5	0.4	0.4	1	3	0
Denmark	1.3	1.5	1.5	1.3	1.2	1.2	1.4	1.1	1.2	0.6	0.5	1	2	1
Estonia ^a										0.2	0.3	0	0	0
European Community														
Finland	0.8	0.9	0.9	1.0	1.0	1.3	1.2	1.2	1.0	0.9	0.8	1	1	1
France	92.3	89.4	87.6	86.1	85.2	84.7	83.9	82.6	82.1	81.2	80.2	85	92	80
Greece	69.5	69.4	69.5	69.8	70.3	70.8	71.1	71.2	71.3	71.6	71.9	71	72	69
Hungary ^a									7.8	7.5	9.0	8	9	7
Iceland ^d										3.9	3.7	4	4	4
Ireland	57.1	59.3	59.4	58.5	57.1	55.3	54.8	54.9	55.6	54.1	51.1	56	59	51
Italy ^a									87.2	88.7	88.7	88	89	87
Latvia ^a									0.2	0.2	0.2	0	0	0
Luxembourg														
Netherlands	13.6	15.1	15.6	15.3	14.1	13.4	13.0	11.7	11.2	11.2	10.5	13	16	10
New Zealand ^b											679.7	680	680	680
Norway	13.0								13.9	13.8	14.2	14	14	13
Poland											3.7	4	4	4
Portugal	26.9	27.0	26.8	26.4	27.3	27.4	27.0	27.3	28.2	28.7	28.6	27	29	26
Slovakia ^a									2.6	2.7	2.8	3	3	3
Spain	203.6	202.9	209.3	206.9	198.3	180.3	206.9	205.7	207.1	208.2	212.3	204	212	180
Sweden	3.2	3.4	3.6	3.8	3.9	3.7	3.8	3.5	3.4	3.5	3.5	4	4	3
Switzerland ^b											3.0	3	3	3
United Kingdom	205.2	204.0	204.9	205.7	204.6	202.1	199.5	201.8	209.5	209.7	199.2	204	210	199
United States	90.9	89.4	86.4	81.6	78.7	71.9	67.7	64.2	62.6	57.7	56.3	73	91	56
Average	49.2	54.9	55.2	54.6	53.5	51.4	52.7	52.3	42.6	38.7	61.1			
Minimum	0.8	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.2	0.2	0.2			
Maximum	205.2	204.0	209.3	206.9	204.6	202.1	206.9	205.7	209.5	209.7	679.7			

^a In this table, data for the years prior to 2000 are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following the information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since the last submission. The following data were therefore taken from previous submissions: Czech Republic (1998, 1999), Estonia (1999), Hungary (1998, 1999), Iceland (1999), Italy (1998, 1999), Latvia (1998), Slovakia (1998, 1999).

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: New Zealand (1990-1999), Switzerland (1998, 1999).

Trends in CH₄ implied emission factor 1990 to 2000 (kg/head/year)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
Belgium														
Canada	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
Czech Republic ^a	7.9								5.0	5.0	5.0	6	8	5
Denmark	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
Estonia ^a										8.0	8.0	8	8	8
European Community														
Finland	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
France	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
Greece	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
Hungary ^a										8.0	8.0	8	8	8
Iceland ^d										8.0	8.0	8	8	8
Ireland	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Italy ^a										8.0	8.0	8	8	8
Latvia ^a									8.0	8.0	8.0	8	8	8
Luxembourg														
Netherlands	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
New Zealand ^b											15.1	15	15	15
Norway	8.0								8.0	8.0	8.0	8	8	8
Poland											10.1	10	10	10
Portugal	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
Slovakia ^a										8.0	8.0	8	8	8
Spain	8.5	8.7	8.5	8.7	8.7	8.6	8.6	8.3	8.6	8.7	8.7	9	9	8
Sweden	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
Switzerland ^b											7.1	7	7	7
United Kingdom	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7	5	5	5
United States	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8	8	8
Average	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7	8.1			
Minimum	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7			
Maximum	8.5	8.7	8.5	8.7	8.7	8.6	8.6	8.3	8.6	8.7	15.1			

^a In this table, data for the years prior to 2000 are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following the information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since the last submission. The following data were therefore taken from previous submissions: Czech Republic (1998, 1999), Estonia (1999), Hungary (1999), Iceland (1999), Italy (1999), Latvia (1998), Slovakia (1998, 1999).

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: New Zealand (1990-1999), Switzerland (1998, 1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change base year to 2000
Austria	5.4	-4.3	7.0	2.5	6.8	4.3	0.7	-6.0	-2.4	-3.7	9.7
Belgium	-2.7	0.6	0.0	0.0	-5.8	0.1	-11.3	2.2	-8.3	6.7	-18.2
Canada	-5.3	1.9	2.1	-5.4	0.5	6.5	-1.9	-1.2	-2.2	16.5	22.5
Czech Republic									-8.7	-2.1	-87.6
Denmark	18.8	-3.5	-13.5	-7.9	0.2	17.2	-16.3	9.6	-55.9	-1.6	-57.3
Estonia											4.2
European Community											
Finland	3.3	1.6	11.1	0.6	31.0	-5.7	0.4	-14.5	-16.9	-7.2	-4.2
France	-3.1	-1.9	-1.7	-1.1	-0.6	-0.9	-1.5	-0.6	-1.1	-1.2	-13.1
Greece	-0.2	0.2	0.4	0.8	0.7	0.3	0.2	0.2	0.4	0.3	3.3
Hungary									-4.2	20.9	
Iceland											-5.1
Ireland	3.8	0.2	-1.5	-2.5	-3.1	-0.9	0.1	1.4	-2.8	-5.5	-10.6
Italy										1.8	0.0
Latvia										-6.1	6.5
Luxembourg											
Netherlands	10.6	3.7	-1.9	-7.8	-5.2	-2.8	-10.0	-4.9	0.5	-6.7	-23.2
New Zealand											
Norway									-1.1	2.6	9.2
Poland											
Portugal	0.6	-0.9	-1.3	3.4	0.4	-1.4	1.0	3.1	1.8	-0.1	6.5
Slovakia										4.2	2.4
Spain	-0.3	3.2	-1.1	-4.2	-9.1	14.7	-0.6	0.7	0.6	1.9	4.3
Sweden	3.2	6.7	5.4	2.8	-4.8	1.7	-5.8	-4.8	4.0	-1.4	6.4
Switzerland											
United Kingdom	-0.6	0.5	0.4	-0.5	-1.2	-1.3	1.2	3.8	0.1	-5.0	-2.9
United States	-1.6	-3.4	-5.5	-3.6	-8.6	-5.8	-5.2	-2.5	-7.8	-2.5	-38.1

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change 1990 to 2000
Austria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium											
Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic											-36.3
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Estonia											0.0
European Community											
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary											0.0
Iceland											0.0
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy											0.0
Latvia										0.0	0.0
Luxembourg											
Netherlands	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
New Zealand											
Norway									0.0	0.0	0.0
Poland											
Portugal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia											0.0
Spain	2.2	-2.0	1.9	0.4	-1.7	0.8	-4.1	3.4	1.5	0.1	2.4
Sweden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland											
United Kingdom	0.1	-0.4	0.6	0.9	0.5	1.0	-0.6	-0.8	0.1	0.8	2.2
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Trends in CH₄ emissions 1990 to 2000 (Gigagram)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	3.8	3.8	3.9	4.2	4.1	4.1	4.1	4.1	4.3	3.9	3.7	4.0	4.3	3.7
Belgium	5.4	5.4	5.5	5.7	5.7	5.8	5.8	5.8	6.0	6.1	5.9	5.7	6.1	5.4
Canada	15.3	15.5	16.1	16.1	16.9	17.9	18.1	17.4	18.2	18.5	18.3	17.1	18.5	15.3
Czech Republic ^a	15.6								13.6	13.6	12.6	13.9	15.6	12.6
Denmark	14.2	14.7	15.7	17.4	16.4	16.6	16.3	17.1	18.1	14.0	14.3	15.9	18.1	14.0
Estonia ^a										0.4	0.5	0.4	0.5	0.4
European Community														
Finland	2.1	2.0	1.9	1.9	1.9	2.1	2.1	2.2	2.1	2.0	1.9	2.0	2.2	1.9
France	9.1	9.1	9.5	9.9	9.9	10.1	10.5	10.5	10.6	10.6	10.6	10.0	10.6	9.1
Greece	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Hungary ^a									8.2	8.0	7.3	7.8	8.2	7.3
Iceland ^a										0.0	0.0	0.0	0.0	0.0
Ireland	1.7	1.9	2.1	2.2	2.3	2.4	2.4	2.6	2.6	2.7	2.6	2.3	2.7	1.7
Italy ^a									12.38	12.4	12.5	12.4	12.5	12.4
Latvia ^a									0.6	0.6	0.6	0.6	0.6	0.6
Luxembourg														
Netherlands	20.9	19.8	21.2	22.5	21.9	21.6	21.6	22.8	20.2	20.4	19.7	21.1	22.8	19.7
New Zealand ^b										NE				
Norway	0.8								1.0	0.9	0.9	0.9	1.0	0.8
Poland											25.7	25.7	25.7	25.7
Portugal	4.0	3.8	3.8	3.4	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.6	4.0	3.4
Slovakia ^a									2.4	2.3	2.2	2.3	2.4	2.2
Spain	23.4	23.6	25.4	26.3	26.9	26.4	26.4	27.2	29.7	30.3	34.7	27.3	34.7	23.4
Sweden	3.4	3.4	3.5	3.7	3.7	3.6	4.2	4.1	3.9	3.4	3.1	3.6	4.2	3.1
Switzerland ^b											1.6	1.6	1.6	1.6
United Kingdom	11.3	11.5	11.6	11.8	11.8	11.4	11.4	12.1	12.2	11.0	9.7	11.4	12.2	9.7
United States	80.9	84.7	87.8	87.0	89.9	88.3	84.3	88.1	93.0	90.4	88.3	87.5	93.0	80.9
Average	13.3	14.3	15.0	15.3	15.5	15.4	15.2	15.6	13.2	11.7	11.7			
Minimum	0.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.6	0.0	0.0			
Maximum	80.9	84.7	87.8	87.0	89.9	88.3	84.3	88.1	93.0	90.4	88.3			

^a In this table, data for the years prior to 2000 are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following the information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since the last submission. The following data were therefore taken from previous submissions: Czech Republic (1998, 1999), Estonia (1999), Hungary (1998, 1999), Iceland (1999), Italy (1998, 1999), Latvia (1998), Slovakia (1998, 1999).

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: New Zealand (1990-1999), Switzerland (1998, 1999).

Trends in CH₄ implied emission factor 1990 to 2000 (kg/head/year)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Belgium														
Canada	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Czech Republic ^a	3.4								3.4	3.4	3.4	3.4	3.4	3.4
Denmark	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Estonia ^a										1.5	1.5	1.5	1.5	1.5
European Community														
Finland	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
France	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Greece	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Hungary ^a										1.5	1.5	1.5	1.5	1.5
Iceland ^a										1.5	1.5	1.5	1.5	1.5
Ireland	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.5	1.5	1.5
Italy ^a										1.5	1.5	1.5	1.5	1.5
Latvia ^a										1.5	1.5	1.5	1.5	1.5
Luxembourg														
Netherlands	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
New Zealand ^b										NE				
Norway	1.5								1.5	1.5	1.5	1.5	1.5	1.5
Poland											1.5	1.5	1.5	1.5
Portugal	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Slovakia ^a										1.5	1.5	1.5	1.5	1.5
Spain	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Sweden	1.5	1.5	1.5	1.6	1.6	1.6	1.8	1.8	1.7	1.6	1.6	1.6	1.8	1.5
Switzerland ^b											1.0	1.0	1.0	1.0
United Kingdom	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
United States	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Average	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6			
Minimum	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4			
Maximum	3.4	1.5	1.5	1.6	1.6	1.6	1.8	1.8	3.4	3.4	3.4			

^a In this table, data for the years prior to 2000 are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following the information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since the last submission. The following data were therefore taken from previous submissions: Czech Republic (1998, 1999), Estonia (1999), Hungary (1999), Iceland (1999), Italy (1999), Latvia (1998), Slovakia (1998, 1999).

^b The Party reported that recalculations of this source category were performed but did not provide full CRF tables for the recalculated year(s). Information on trends using data from previous inventory submissions for the following years and Parties was therefore not included in this table: New Zealand (1990-1999), Switzerland (1998, 1999).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change base year to 2000
Austria	-1.2	1.9	9.8	-2.1	-0.2	-1.7	0.6	4.2	-9.6	-2.9	-2.4
Belgium	-0.7	2.5	3.6	-0.9	2.4	0.1	-0.7	3.4	2.2	-3.5	8.6
Canada	1.3	3.7	0.2	4.8	6.0	1.1	-3.8	4.8	1.3	-0.8	19.7
Czech Republic									0.1	-7.8	-19.3
Denmark	3.0	6.9	10.6	-5.6	1.5	-2.2	5.0	6.3	-23.1	2.7	0.6
Estonia											5.1
European Community											
Finland	-3.6	-3.5	-1.9	2.0	7.9	-0.3	5.1	-4.5	-3.5	-4.0	-6.9
France	0.3	4.8	3.9	0.5	1.8	3.7	0.1	0.7	-0.4	0.7	17.3
Greece	0.1	0.6	0.7	-0.3	-0.9	-0.3	0.1	0.3	0.0	0.0	0.3
Hungary										-2.4	-9.4
Iceland											-1.6
Ireland	11.8	12.7	5.4	3.7	2.1	3.6	5.5	2.7	1.6	-1.9	57.4
Italy											
Latvia									-3.6	-2.9	
Luxembourg											
Netherlands	-5.0	7.2	5.7	-2.7	-1.1	0.1	5.3	-11.5	0.9	-3.3	-5.7
New Zealand											
Norway									-1.7	-3.4	14.0
Poland											
Portugal	-3.8	-0.7	-11.1	6.7	-0.6	-2.4	0.9	-1.0	0.4	-0.5	-12.2
Slovakia										-2.1	-4.7
Spain	0.8	7.4	3.4	2.4	-1.8	-0.2	3.1	9.5	2.0	14.3	48.0
Sweden	-0.9	2.7	7.1	0.0	-1.7	15.1	-1.5	-5.2	-13.7	-8.2	-8.8
Switzerland											
United Kingdom	1.9	0.2	1.9	0.5	-3.4	-0.5	6.4	0.7	-10.2	-11.2	-14.1
United States	4.7	3.6	-0.9	3.3	-1.8	-4.5	4.5	5.6	-2.8	-2.2	9.2

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change 1990 to 2000
Austria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium											
Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic											0.0
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Estonia											
European Community											
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
France	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.4
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary											0.0
Iceland											0.0
Ireland	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Italy											0.0
Latvia										0.0	0.0
Luxembourg											
Netherlands	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Zealand											
Norway										0.0	0.0
Poland											
Portugal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia											0.0
Spain	0.1	0.3	-0.1	-0.3	0.0	0.1	-0.3	-0.1	0.3	0.4	0.3
Sweden	1.8	-0.7	7.2	-2.2	-1.0	13.4	-1.7	-2.5	-6.7	1.2	7.7
Switzerland											
United Kingdom	0.0	0.0	0.0								

Agriculture - Manure management: CH₄ (2000)

4.B Manure management (CH ₄)								
Methods and EF used ^a		Key source	Percentage of national total	4.B.1 Cattle		4.B.3 Sheep	4.B.8 Swine	
Methods	EF			Dairy cattle	Non-dairy cattle	CH ₄ IEF		kg CH ₄ /head/yr
IPCC default EF ^b				6 to 81 ^b	1 to 38 ^b	0.19 to 0.37 ^b	3 to 20 ^b	
Austria	C	CS	L	0.6	8.70	4.30	0.22	4.30
Belgium	CS,M	CS	L	1.6				
Canada	T1	D	L, T	0.7	36.00	1.00	0.19	10.00
Czech Republic	T2	CS		0.5	3.29	1.01	0.23	7.87
Denmark	T2	CS	L	1.3	21.80	1.60	0.46	2.54
Estonia				0.7	19.00	13.00	0.16	7.00
European Community	C, CS, D, M, T1, T2	CS, D, T1, T2	L	0.8	NE	NE	NE	NE
Finland	T2	CS/D		0.3	7.72	2.29	0.19	3.37
France	CS/ T2	CS	L	0.7	5.85	3.77	0.28	7.62
Greece	T1	D		0.4	19.00	13.00	0.28	7.00
Hungary	D	D	L	0.8	14.00	6.00	0.19	4.00
Iceland	D	D		0.6	14.00	6.00	0.19	3.00
Ireland	D	CS, D	L	2.1	15.90	6.40	NA	5.40
Italy	D, T1, T2	D, CS	L	0.7	20.05	11.82	0.19	7.97
Latvia	T1	D		0.7	6.00	4.00	0.19	4.00
Luxembourg								
Netherlands	CS	CS (=D,corrected)	L	0.9	7.27	12.30	0.50	3.24
New Zealand	T1	CS		0.5	0.89	0.91	0.18	NE
Norway	T2	D, CS		0.6	14.41	8.53	0.73	1.99
Poland	T2	CS		0.2	3.00	0.95	0.18	1.11
Portugal	T2	D (CS)	L, T	3.7	25.73	1.88	1.60	54.53
Slovakia	IPCC	IPCC		0.4	6.01	4.00	0.19	4.00
Spain	CS,T1,T2	T1,T2	L	2.0	13.79	3.75	0.23	13.15
Sweden	T1, T2	D, CS		0.4	11.52	1.84	0.19	2.35
Switzerland	CS	CS		0.8	14.34	3.46	0.14	3.51
United Kingdom	T2	D/CS		0.3	10.67	4.48	0.11	3.00
United States	M	M		0.5	49.93	1.80	0.26	13.83
Average					14.54	4.92	0.31	7.60
Maximum					49.93	13.00	1.60	54.53
Minimum					0.89	0.91	0.11	1.11

^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 the various livestock types within the category CH₄ from 4.B Manure management.

^b Source of default emission factors: IPCC Guidelines, Volume 3, tables 4-5 and 4-6 (pages 4.12 to 4.13). Default emission factors are provided according to climate regions (cool, temperate, warm), as shown in box 1.

Box 1. Default IPCC default emission factors according to climate regions^b

	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						

4.B Manure management (N ₂ O)													
Methods and EF used ^a		Key source	Percentage of national total	Animal waste management systems (AWMS)				N - excretion rates					
				Anaerobic lagoons 4.B.10	Liquid systems 4.B.11	Solid storage and dry lot 4.B.12	Other 4.B.13	Dairy cattle 4.B.1.1	Non-dairy Cattle 4.B.1.2	Swine 4.B.8	Sheep 4.B.3	Poultry 4.B.9	
Methods	EF		%	N ₂ O IEF				kg N / head / yr					
				kg N ₂ O-N / kg N									
IPCC default EF ^b				0.001 (<0.002) ^b	0.001 (<0.001) ^b	0.02 (0.005-0.03) ^b	0.005 ^b	60 to 100 ^c	40 to 70 ^c	16 to 20 ^c	12 to 20 ^c	0.6 ^c	
Austria				NO	NE	NE	NE	NE	NE	NE	NE		
Belgium	M	CS	L	1.3									
Canada	T1	D		0.6	0	0.0010	0.0200	0.0050	105.20	44.70	11.60	4.10	0.36
Czech Republic ^d	D	D		0.3		0.9975	19.9972	4.9972	100.00	70.00	20.00	20.00	1.00
Denmark				0.6									
Estonia				0.0	0	0.0010	0.0200	0.0050	0.07	0.05	0.02	0.02	0.001
European Community	CS, D, M, T1, T2	CS, D, T2	L	0.7	NE	NE	NE	NE	NE	NE	NE	NE	NE
Finland	D	D/CS	T	0.5	0	0.0010	0.0200	0	96.00	35.02	9.60	16.20	0.40
France	T2	T2	L	0.5	0	0.0010	0.0200	0.0050	100.00	71.74	20.00	20.00	0.60
Greece	T1	D		0.2	0	0.0010	0.0200	0.0050	70.00	50.00	16.00	12.00	0.60
Hungary	D	D	L	0.9	0	0.0010	0.0200	0	70.00	50.00	20.00	16.00	0.60
Iceland					NE	NE	NE	NE	0.07	0.05	0.01	0.01	0.00
Ireland	D	CS, D	L	1.0	0.0010	0.0010	0.0200		0.09	0.05	0.01	0.01	0.00
Italy	D	D, CS	L	0.7	NO	0.0010	0.0128	0.0050	108.81	45.24	11.52	16.20	0.56
Latvia	T1	D	L	1.4	0.0010	0.0010	0.0200	0.0050	70.00	50.00	20.00	16.00	0.60
Luxembourg													
Netherlands	CS	CS		0.1				0.0011					
New Zealand				0.2	0.0010	NO	0.0198	0.0050	86.70	63.10	16.00	11.80	0.60
Norway	D	D, CS											
Poland	T2	CS	L	1.5	NE	0.0010	0.0200		70.00	50.00	20.00	16.00	0.60
Portugal	T2	D (CS)	L, T	1.4	0.0030	0.0026	0.0183	0	108.07	54.03	16.95	40.93	1.07
Slovakia	IPCC	IPCC, CS		1.1	NO	0.0010	0.0200	NO	90.00	56.00	20.00	16.00	0.60
Spain	CS, D	D		0.4	0	0.0010	0.0200	0.0050	70.00	31.82	11.90	9.82	0.42
Sweden	T1, T2	D, CS	L, T	0.8	NO	0.0010	0.0195	IE	118.00	41.56	8.79	5.96	0.41
Switzerland				0.8	0	0.0010	0.0200	0	109.90			16.00	0.53
United Kingdom	T1	D/CS		0.2	0	0.0010	0.0201	0.0040	110.57	48.19	10.14	6.73	0.69
United States	M	M		0.3	0.0055	0.0061	0.0170	0.0143	84.29	48.30	7.16	4.14	0.45
Average					0.002	0.057	1.071	0.421	78.39	42.62	12.62	12.40	0.50
Maximum					0.005	0.997	19.997	4.997	118.00	71.74	20.00	40.93	1.07
Minimum					0.001	0.001	0.013	0.001	0.07	0.05	0.01	0.01	0.00

Notes

^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 N₂O from 4.B Manure management.

^b Source of default emission factors: IPCC Guidelines, Volume 3, table 4-22 (page 4-104). See also IPCC good practice guidance, table 4.12 (page 4.43).

^c Source of default N excretion rates: IPCC Guidelines, Volume 3, table 4-20 page 4.99. Default values are provided by regions as shown below:

^d The Czech Republic reported activity data for N excretion per AWMS in the unit *t N/year* instead of *kg N/year* as required in the CRF. The values for the N₂O IEF from the Czech Republic do therefore not correspond to the unit given in this table.

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				

Agriculture - Agricultural soils: N₂O (2000)

4.D Agricultural soils (N ₂ O)																			
Methods and EF used ^a		4.D.1 Direct soil emissions								4.D.2 Animal production				4.D.3 Indirect soil emissions					
		Key source ^b	Percentage of national total ^b	Synthetic fertilizers		Animal wastes applied to soils	N-fixing crops	Crop residue	Cultivation of histosols	Key source	Percentage of national total	Pasture range and paddock (grazing)	Key source	Percentage of national total	Atmospheric deposition		Nitrogen leaching and run-off		
Activity data	N ₂ O IEF			Activity data	N ₂ O IEF										Activity data	N ₂ O IEF	Activity data	N ₂ O IEF	
Methods	EF		%	kg N / yr	kg N ₂ O-N / kg N	kg N ₂ O-N / kg dry biomass ^c	kg N ₂ O-N / ha			kg N ₂ O-N / kg N			kg N / year	kg N ₂ O-N / kg N	kg N/year	kg N ₂ O-N / kg N			
IPCC default EF ^c					0.0125 (0.0025 - 0.0225) ^e		5, 10 (2-15) ^d			0.02 (0.005-0.03) ^e				0.01 (0.002-0.2) ^f		0.025 (0.002-0.12) ^f			
Austria ^b	CS	CS	L	1.2	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
Belgium ^b	CS,M	CS,M	L	3.2															
Canada	T1	D	L, T	3.3	1,682,072,000	0.0113	0.0092	0.0125	0.0138	5.0	0.4	0.020	L, T	1.0	389,325,313	0.0100	376,921,705	0.0277	
Czech Republic	D	D	L	1.7	180,222,300	0.0125	0.0125	0.0125	0.0125	5.0	0.2	0.020	L, T	1.3	64,678,520	0.0100	127,054,830	0.0250	
Denmark	CS/M	CS/M	L, T	7.2	256,900,000	0.0117	0.0090	0.0125	0.0125	5.0	0.4	0.019	L, T	3.8	73,318,150	0.0100	183,000,000	0.0250	
Estonia			L	1.3	20,156,400	0.0125	0.0125	0.0007	0.0002		0.0	0.020		0.5	2,706,882	0.0100	7,419,722	0.0250	
European Community ^b	C, CS, D, M, T1a, T1b, T2	CS, D, M, T2	L	4.7	NE	NE	NE	NE	NE	NE	NE	NE			NE	NE	NE	NE	
Finland	D	D/CS	L, T	3.7	167,904,492	0.0125	0.0125	0.0125	0.0125	8.0	0.3	0.020	L, T	0.8	26,422,146	0.0100	37,632,202	0.0250	
France	T2	T2	L	5.1	2,571,438,000	0.0115	0.0100	0.0008	0.0001		L	1.1	0.020	L	3.1		1,359,070,089	0.0251	
Greece	T1	D	L, T	2.2	377,311,000	0.0112	0.0125	0.0007	0.0002	NE	L, T	2.7	1.000						
Hungary	D	D	L	11.0	232,200,000	0.0125	0.0125	0.0125	0.0000	2.0	0.1	0.020	L	2.2	62,631,320	0.0100	132,646,980	0.0250	
Iceland	D	D	L	2.4	10,948,619	0.0114	1.0000	NO	NO	NO		NE			NE	NE	NE	NE	
Ireland	D	CS, D	L, T	4.2	391,701,678	0.0125	0.0125				L, T	4.4	0.020	L, T	1.4	96,701,111	0.0100	37,082,652	0.0250
Italy	D	D, CS	L	1.7	714,896,942	0.0125	0.0125	NA	0.0001	5.0	0.4	0.020	L	1.3	254,898,915	0.0100	501,145,648	0.0250	
Latvia	T1	D	L	6.6	20,700,000	0.0125	0.0125	0.0008	0.0002	5.0	0.5	0.020	L	2.0	7,409,658	0.0100	14,219,486	0.0250	
Luxembourg																			
Netherlands	CS	CS	L, T	2.3	373,300,000	0.0110	0.0200	0.0098			0.4	0.016			NE		IE		
New Zealand	D	CS/D	L	2.7	191,400,000	0.0125	0.0125	0.0008	0.0001	5.0	L	7.7	0.010	L	5.4	281,160,597	0.0100	226,820,447	0.0250
Norway	D	D, CS	L, T	3.3	107,410,000	0.0119	0.0125	^h	ⁱ	5.0	0.3	0.020	L	0.9	18,124,079	0.0100	35,192,505	0.0250	
Poland	T2	CS	L	2.6	775,170,000	0.0080	0.0100	0.0100	0.0100	5.0	0.2	0.020			NE	NE	NE	NE	
Portugal	D	D	L, T	1.7	130,000,000	0.0113	0.0108	0.0011	0.0001	NE	L, T	1.9	0.019	L, T	1.8	35,494,154	0.0100	112,354,820	0.0250
Slovakia ^g	IPCC,CS	IPCC,CS	L	3.8	65,387,700	0.0125	0.0125	0.0125	0.0125	IE	0.1	0.020		0.5	24,867,575	0.0100	11,873,097	0.0250	
Spain	CS,D	CS,D	L, T	2.7	1,215,821,448	0.0125	0.0125	0.0125	0.0125	NO	L, T	0.9	0.020	L, T	1.2	191,350,699	0.0100	302,652,110	0.0250
Sweden	D, C	CS	L, T	3.3	189,400,000	0.0079	0.0250	0.0006	0.0001	3.3	L, T	0.7	0.020	0.2	40,442,000	0.0020	73,062,000	0.0025	
Switzerland			L	2.4	60,400,000	0.0117	0.0125	0.0004	0.0001	5.0	0.3	0.020	L	1.4	52,085,173	0.0101	39,446,158	0.0250	
United Kingdom	T1a/T1b	D	L	1.9	1,114,105,703	0.0126	0.0125	0.0008	0.0002	5.0	L	0.8	0.020	L	1.4	357,262,304	0.0100	605,397,615	0.0250
United States	D	D	L	2.5	10,245,604,248	0.0125	0.0125	0.0125	0.0125	9.2	L, T	0.6	0.020	L, T	1.1	2,566,668,515	0.0100	5,526,516,172	0.0250
Average						0.0117	0.0557	0.0066	0.0053	5.2					0.0096		0.0240		
Maximum						0.0126	1.0000	0.0125	0.0138	9.2					0.0101		0.0277		
Minimum						0.0079	0.0090	0.0004	0.0000	2.0					0.0020		0.0025		

^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 N₂O from 4.D Agricultural soils.

^b Information on key sources and the percentage of national total refers to subcategory 4.D.1 Direct soil emissions, except for Austria, Belgium and the European Community, where the information refers to the entire category 4.D Agricultural soils.

^c Source of default emission factors: IPCC Guidelines, Volume 3; table 4-18, page 4.89. (See also IPCC good practice guidance, table 4-17, page 4.60.) It should be noted that for the sub-sources N-fixing crops and crop residue the IPCC default emission factors are not directly comparable to the N₂O implied emission factors because of the use of different units; the unit of default emission factors is kg N₂O-N/kg N, while in the CRF the unit relates to the amount of dry biomass (kg N₂O-N/kg dry biomass).

^d For cultivation of histosols the two default values refer to temperate and tropical, respectively. The values in parenthesis indicate the range. 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).

^e 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.

^f 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.

^g Slovakia reported the IEF for N-fixing crops and crop residue in the unit kg N₂O-N/kg N.

^h Norway indicated in the CRF that biological N-fixation is estimated to 8 Gg N/yr.

ⁱ Norway indicated in the CRF that the N amount in crop residues is assumed to be equal to the amount of N in all the yield (78,069 tonnes in 2000).

Agriculture - Agricultural soils (2000)Parameters (fractions) used to estimate N₂O emissions in the agricultural soils category (direct and indirect emissions)

	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 of N excreted	kg N / kg of fertilizer or manure N
IPCC defaults EF ^a	0.25	no default ^b	no default ^b	0.03	0.015	0.45	0.1	0.2	0.3 (0.1 - 0.8)
Austria									
Belgium									
Canada	0.0000	0.0000	0.0000	0.0150	0.0300	0.4500	0.1000	0.2000	0.1500
Czech Republic									
Denmark	0.0000	0.0000					0.0200	0.2820	
Estonia	0.9000	0.0000	0.2000	0.0150	0.0300	0.5500	0.1000	0.2000	0.3000
European Community									
Finland	0.0000	0.0000	0.2367	0.0151	0.0415	0.4324	0.0060	0.3100	0.1500
France									
Greece	0.2500	0.0000		0.0300	0.0150	0.4500	0.1000	0.2000	
Hungary	0.2500	0.2500	0.2250	0.0150	0.0300	0.4500	0.1000	0.2000	0.3000
Iceland									
Ireland			0.6500				0.0390	0.1700	0.0420
Italy	0.1000	0.0000	0.2500	0.0300	0.0150	0.4500	0.1000	0.2000	0.3000
Latvia	NO	NO	0.0200	0.0300	0.0150	0.4500	0.1000	0.2000	0.3000
Luxembourg									
Netherlands									
New Zealand	0.5000	0		0.0300	0.0150	0.4500	0.1000	0.2000	0.1500
Norway									
Poland									
Portugal	0.0501	0.0000	0.4914	0.0129	0.0226	0.7176	0.1000	0.1195	0.2740
Slovakia			0.0570				0.1000	0.2000	0.0739
Spain	NA	0	NA	NA	NA	NA	0.0317	0.2000	0.1500
Sweden	NO	NO	0.3755	0.0102	0.0186	0.2000	0.0078	0.3686	0.2154
Switzerland	0	0.0000	0.1338				0.0750	0.3359	0.2000
United Kingdom	0	0	0.5406	0.0300	0.0150	0.4500	0.1000	0.2000	0.3000
United States	0.1400	NO	0.01, 0.05, 0.22, 0.86, 0.91, 0.92	0.0300	0.0048, 0.0058, 0.0062, 0.0072, 0.0077, 0.0106, 0.0108, 0.023, 0.03	0.38, 0.5, 0.39, 0.43, 0.43, 0.42, 0.42, 0.45, 0.5, 0.42, 0.32, 1	0.1000	0.2000	0.3000

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 which volatilizes as NH ₃ and Nox
Frac _{NCRBF}	Fraction of N in non-N-fixing crop	Frac _{GASM}	Fraction livestock N excretion that volatilizes as NH ₃ and NOx
Frac _{NCRO}	Fraction of N in N-fixing crop	Frac _{LEACH}	Fraction of N input to soils which is lost through leaching and runoff
Frac _R	Fraction of crop residue removed from the field as crop		

^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.

Agriculture - Agricultural soils

Trends in N₂O emissions 1990 to 2000 (Gigagram)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Average	Maximum	Minimum
Austria	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3	3	3
Belgium	15.8	15.8	15.5	15.4	15.5	15.3	15.5	15.4	15.7	15.8	16.0	15.8	16	16	15
Canada	88.3	88.3	86.0	87.4	90.9	96.0	97.9	103.5	103.6	105.2	107.8	108.6	98	109	86
Czech Republic	24.4	24.4						19.0	17.7	15.9	15.7	15.3	18	24	15
Denmark	31.6	31.6	30.8	28.8	29.0	28.1	27.9	27.0	25.9	26.1	26.0	25.3	28	32	25
Estonia	3.1	3.1	3.0	2.5	1.6	1.4	1.1	1.1	1.2	1.2	1.0	1.2	2	3	1
European Community	638.8	638.8	627.7	609.8	598.4	600.6	603.1	611.9	614.6	613.1	614.2	612.0	613	639	598
Finland	14.1	14.1	13.1	11.8	12.1	12.0	12.3	11.9	11.6	11.4	11.0	11.3	12	14	11
France	167.7	167.7	165.3	160.2	155.8	157.5	158.8	161.3	163.6	163.9	163.4	163.1	162	168	156
Greece	21.0	21.0	20.9	19.9	19.6	19.7	18.7	19.2	20.0	19.5	19.4	20.5	20	21	19
Hungary	4.6	4.1	1.7	1.6	1.5	1.8	1.6	1.7	1.7	32.9	33.2	36.6	10	37	1
Iceland	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0
Ireland	20.8	20.8	20.8	20.5	21.0	21.6	22.2	22.5	21.7	23.0	22.9	21.5	22	23	21
Italy	65.6	65.6	68.2	68.8	69.7	68.6	66.9	66.0	69.2	66.8	66.7	66.3	68	70	66
Latvia	9.7	9.7	7.0	6.5	4.5	3.8	3.2	3.1	3.2	2.8	2.9	3.1	5	10	3
Luxembourg															
Netherlands	21.5	21.5	22.0	25.2	25.4	25.3	26.1	25.7	25.3	24.6	24.6	23.7	24	26	21
New Zealand	36.9	36.9	36.5	36.2	36.5	37.1	37.3	37.3	37.4	37.3	38.5	39.0	37	39	36
Norway	8.5	8.5	8.5	8.2	8.4	8.2	8.3	8.2	8.2	8.3	8.1	8.2	8	8	8
Poland	40.7	40.7	32.5	31.4	30.0	29.7	31.4	30.4	31.2	31.2	35.5	34.6	33	41	30
Portugal	15.5	15.5	15.3	14.5	14.4	14.6	14.5	14.6	14.3	14.7	15.1	14.9	15	15	14
Slovakia	13.4	13.4	10.9	9.5	7.7	7.2	7.5	7.5	7.5	7.2	6.9	7.0	8	13	7
Spain	51.7	51.7	51.1	49.3	45.1	49.7	47.0	54.9	51.7	53.4	55.5	59.9	52	60	45
Sweden	12.2	12.2	11.7	11.4	11.9	12.1	11.9	11.9	12.3	12.3	11.7	11.6	12	12	11
Switzerland	7.8	7.8	7.7	7.6	7.6	7.5	7.3	7.3	7.1	7.1	7.0	7.0	7	8	7
United Kingdom	97.9	97.9	97.5	92.3	90.7	93.1	93.6	94.2	97.1	94.3	92.4	86.5	94	98	87
United States	861.6	861.6	871.2	896.9	880.8	952.0	914.2	943.8	959.6	962.6	955.7	959.9	923	963	862
Average	87.6	87.5	89.1	88.8	87.3	90.6	89.3	88.6	89.4	90.5	90.6	90.6			
Minimum	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2			
Maximum	861.6	861.6	871.2	896.9	880.8	952.0	914.2	943.8	959.6	962.6	955.7	959.9			

^a Base year refers 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: Hungary (average of 1985 – 1987), Poland (1988).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change baseyear to 2000
Austria	0.3	0.3	0.3	-1.0	-1.0	0.0	0.0	-1.0	-1.0	-0.4	-3.6
Belgium	-1.9	-1.0	1.0	-1.2	0.9	-0.7	2.1	0.7	1.4	-1.6	-0.4
Canada	-2.6	1.7	4.0	5.6	2.0	5.6	0.1	1.5	2.5	0.7	23.0
Czech Republic							-6.8	-10.1	-1.5	-2.8	-37.5
Denmark	-2.4	-6.7	0.8	-3.1	-0.7	-3.4	-3.8	0.8	-0.6	-2.4	-19.8
Estonia	-1.9	-18.2	-36.8	-12.0	-16.3	-7.9	10.8	4.0	-18.2	18.5	-61.6
European Community	-1.7	-2.9	-1.9	0.4	0.4	1.5	0.4	-0.2	0.2	-0.4	-4.2
Finland	-7.3	-9.5	2.2	-0.4	2.2	-3.2	-2.4	-2.2	-3.4	2.7	-20.0
France	-1.4	-3.1	-2.7	1.0	0.9	1.5	1.4	0.2	-0.3	-0.1	-2.7
Greece	-0.2	-4.8	-1.9	0.6	-5.1	2.8	4.1	-2.4	-0.6	6.1	-2.0
Hungary	-59.0	-3.0	-10.4	23.3	-10.6	4.3	-0.4	1,865.9	0.7	10.3	792.2
Iceland	-2.8	-9.5	4.1	0.7	-1.7	3.0	-10.3	3.5	8.8	4.6	-1.3
Ireland	0.2	-1.5	2.3	2.8	2.9	1.3	-3.4	5.7	-0.3	-6.1	3.4
Italy	4.0	0.8	1.3	-1.5	-2.5	-1.4	4.9	-3.6	0.0	-0.7	1.1
Latvia	-27.6	-7.5	-30.9	-15.1	-15.4	-2.8	1.2	-12.0	4.0	6.1	-68.2
Luxembourg											
Netherlands	2.5	14.7	0.9	-0.6	3.3	-1.7	-1.5	-2.8	0.0	-3.5	10.6
New Zealand	-1.2	-0.8	0.9	1.6	0.7	-0.1	0.2	-0.3	3.1	1.5	5.6
Norway	0.0	-3.4	2.3	-2.2	2.0	-1.9	0.7	0.5	-1.6	0.3	-3.3
Poland	-20.0	-3.4	-4.7	-1.0	5.8	-3.1	2.5	0.0	13.8	-2.6	-15.0
Portugal	-1.0	-5.1	-0.9	1.3	-0.6	1.0	-2.5	3.3	2.3	-0.9	-3.3
Slovakia	-18.9	-12.8	-18.4	-7.4	4.3	-0.3	0.4	-4.1	-3.8	1.8	-47.5
Spain	-1.1	-3.6	-8.5	10.4	-5.6	16.9	-5.9	3.3	4.0	7.9	15.9
Sweden	-4.1	-2.6	4.3	1.5	-1.7	0.3	2.6	0.0	-4.8	-0.3	-5.0
Switzerland	-0.7	-1.1	-0.8	-1.2	-1.6	-1.1	-1.8	-1.2	-1.3	0.1	-10.3
United Kingdom	-0.4	-5.4	-1.7	2.6	0.6	0.6	3.1	-2.9	-2.0	-6.3	-11.6
United States	1.1	3.0	-1.8	8.1	-4.0	3.2	1.7	0.3	-0.7	0.4	11.4

Agriculture - Agricultural soils: CO₂ emissions/removals^a**Trends in CO₂ emissions/removals^b 1990 to 2000****Gigagrams**

4.D Agricultural soils - CO ₂															
2000				Trends											
Methods and emission factors used		Key sources	Percentage of national total	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Methods	EF														%
Austria															
Belgium															
Canada	CS	CS	-0.03	7,255	6,652	5,777	4,662	4,224	3,166	1,784	1,241	713	177	-236	
Czech Republic	NE														
Denmark	NE													NE	
Estonia															
European Community	NE	NE		3,215	2,815	2,321	2,230	2,069	1,726	1,825	2,065	2,031	2,016	2,046	
Finland	D	D/CS	L, T	2.8	3,215	2,815	2,321	2,230	2,069	1,726	1,825	2,065	2,031	2,016	2,046
France															
Greece															
Hungary															
Iceland	CS	D	0.2	4.24	4.05	4.18	4.63	4.25	4.46	4.69	5.01	5.31	4.66	4.93	
Ireland	NA	NA													
Italy															
Latvia															
Luxembourg															
Netherlands	NE			IE					NE			NE	NE	NE	
New Zealand															
Norway	CS	CS	0.2	217	185	151	179	155	171	152	149	134	129	108	
Poland															
Portugal				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	
Slovakia															
Spain	NO														
Sweden				IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	
Switzerland															
United Kingdom	IE	IE		IE/NO	IE/NO	IE/NO	IE/NO	IE/NO	IE/NO	IE/NO	IE/NO	IE/NO	IE/NO	IE	
United States	IE	IE		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change 1990 to 2000
Austria											
Belgium											
Canada	-8.31	-13.15	-19.30	-9.40	-25.05	-43.65	-30.45	-42.58	-75.19	-233.70	-103.26
Czech Republic											
Denmark											
Estonia											
European Community	-12.43	-17.57	-3.91	-7.21	-16.56	5.71	13.14	-1.63	-0.77	1.48	-36.37
Finland	-12.43	-17.57	-3.91	-7.21	-16.56	5.71	13.14	-1.63	-0.77	1.48	-36.37
France											
Greece											
Hungary											
Iceland	-4.45	3.15	10.61	-8.19	5.06	5.00	7.00	5.81	-12.16	5.85	16.23
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway	-14.47	-18.64	18.53	-13.23	10.20	-11.32	-1.59	-10.29	-3.25	-16.41	-50.06
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

^a According to the IPCC Guidelines (Volume 3. Reference Manual, pp. 4.2, 4.87), CO₂ emissions from agricultural soils are to be included under land-use change and forestry (LUCF). At the same time, the Summary Report 7A (Volume 1. Reporting Instructions, tables 27) allows for reporting CO₂ emissions or removals from agricultural soils, either in the agriculture sector, under 4.D. Agricultural soils or in the land-use change and forestry sector under 5.D. Emissions and removals from soil. Parties may choose either way to report emissions or removals from this source in the common reporting format, but the way they have chosen to report should be clearly indicated, by inserting explanatory comments to the corresponding cells of Summary 1.A and Summary 1.B. (See footnote 4 of Summary 1.A, sheet 2, of the CRF.)

^b This part of the table displays information as reported by Parties in table Summary 1.A of the CRF (under the column CO₂ emissions or removals) or in the trend table of the CRF (table 10, sheet 1).

Agriculture - Rice cultivation

Rice cultivation: CH₄ (2000)

4.C Rice cultivation (CH ₄)						
Methods and emission factors used		Key source	Percentage of national total	4.C.1 Irrigated		CH ₄ IEF
Methods	EF			Continuously flooded	Intermittently flooded - single aeration	
			%	g CH ₄ / m ²		
Austria				NO	NO	
Belgium						
Canada	NA	NA		NO	NO	
Czech Republic	NO					
Denmark	NO					
Estonia						
European Community	NE	NE		NE	NE	
Finland	NO	NO		NO	NO	
France	C	CS	0.03	36.00		
Greece	T1	D	0.09	0.29		
Hungary	D	D	0.02	NO	20.00	
Iceland				NO	NO	
Ireland	NA	NA				
Italy	D	D	0.29	59.40	44.55	
Latvia				NO	NO	
Luxembourg						
Netherlands	NO			NO	NO	
New Zealand				NO	NO	
Norway	-	-				
Poland						
Portugal	D	D (CS)	0.21	36.00		
Slovakia	NO	NO				
Spain	CS	CS	0.08	12.00		
Sweden				NO	NO	
Switzerland						
United Kingdom	NO			NO	NO	
United States	D	CS	0.11	26.20	NO	

Trends in CH₄ emissions 1990 to 2000 (Gigagram)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium												
Canada	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Czech Republic												
Denmark												
Estonia												
European Community	109.6	109.6	106.7	105.7	105.9	115.0	113.9	121.4	120.7	114.9	111.4	111.2
Finland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
France	8.6	8.6	8.9	9.9	10.7	11.3	10.5	9.5	9.1	8.3	7.5	8.1
Greece	4.8	4.8	4.3	4.3	5.9	6.9	7.6	8.3	8.5	7.6	6.5	5.8
Hungary	3.7	3.1	3.8	2.1	2.1	2.1	2.1	1.3	0.9	0.6	0.5	0.6
Iceland												
Ireland												
Italy	73.3	73.3	70.2	73.6	78.8	80.2	81.4	80.8	79.2	75.8	75.1	74.9
Latvia											NO	NO
Luxembourg												
Netherlands	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
New Zealand	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Norway												
Poland												
Portugal	12.2	12.2	12.0	7.6	4.8	8.7	7.8	10.2	10.3	9.7	9.1	8.6
Slovakia												
Spain	10.8	10.8	11.2	10.3	5.7	8.0	6.5	12.6	13.6	13.5	13.3	13.8
Sweden	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Switzerland												
United Kingdom	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
United States	339.1	339.1	333.1	374.8	334.2	391.1	362.8	331.7	356.2	376.3	394.8	357.2
Average	70.3	70.2	68.8	73.5	68.5	77.9	74.1	72.0	74.8	75.8	77.3	72.5
Minimum	3.7	3.1	3.8	2.1	2.1	2.1	2.1	1.3	0.9	0.6	0.5	0.6
Maximum	339.1	339.1	333.1	374.8	334.2	391.1	362.8	331.7	356.2	376.3	394.8	357.2

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change base year to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community	-2.7	-1.0	0.2	8.7	-1.0	6.6	-0.6	-4.8	-3.0	-0.2	1.5
Finland											
France	4.4	11.1	7.6	5.5	-6.4	-9.7	-4.7	-8.9	-9.6	7.7	-5.8
Greece	-10.3	-0.4	37.7	17.1	10.3	9.6	1.7	-10.8	-13.8	-11.0	21.0
Hungary	21.3	-44.4	0.0	0.0	0.0	-40.2	-26.4	-38.0	-20.8	42.7	-79.2
Iceland											
Ireland											
Italy	-4.2	4.9	7.1	1.8	1.4	-0.7	-1.9	-4.3	-1.0	-0.2	2.3
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal	-1.1	-36.9	-37.5	82.2	-9.7	30.2	0.9	-5.3	-6.3	-5.3	-29.2
Slovakia											
Spain	3.8	-8.6	-44.2	39.2	-18.3	93.1	8.0	-0.8	-2.0	4.3	27.6
Sweden											
Switzerland											
United Kingdom											
United States	-1.8	12.5	-10.8	17.0	-7.2	-8.6	7.4	5.6	4.9	-9.5	5.3

^a Base year refers 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: Hungary (average of 1985 – 1987), Poland (1988).

Consistency checks performed in the agriculture sector (Inventory 2000)

The following checks have been performed in order to verify the consistency of the data provided in various CRF tables for the inventory year 2000. The tables below only include Parties which provided numerical information, and for which differences in the data or any other inconsistencies were found.

1. Comparison of activity data (livestock population size) reported in tables 4.A and 4.B(a). This comparison was made for dairy and non-dairy cattle, swine and sheep.

	Dairy cattle			Non-dairy cattle			Swine			Sheep			Poultry		
	Table 4.A	Table 4.B(a)	Difference	Table 4.A	Table 4.B(a)	Difference	Table 4.A	Table 4.B(a)	Difference	Table 4.A	Table 4.B(a)	Difference	Table 4.A	Table 4.B(a)	Difference
	4.A.1.1	4.B.1.1		4.A.1.2	4.B.1.2		4.A.8	4.B.8		4.A.3	4.B.3		4.A.9	4.B.9	
	Population size			Population size			Population size			Population size			Population size		
	1,000 head		%	1,000 head		%	1,000 head		%	1,000 head		%	1,000 head		%
Italy	2,065	2,065	0.0	4,988	4,988	0.0	8,307	8,307	0.0	11,089	11,089	0.0	171,832	164,242	4.6
United States	13,195	13,070	1.0	64,154	89,403	-28.2	58,892	58,892	0.0	7,032	7,032	0.0		2,022,362	

2. Comparison of total nitrogen (N) (kg N/yr) reported for Pasture range and paddock in table 4.B(b) with N excretion on Pasture range and paddock reported under category 4.D.2, Animal production, in table 4.D.

	Pasture range and paddock		N excretion	
	Table 4.B(b)	Table 4.D	Difference	
			A - B	(B-A)/A*100
	kg N / yr	kg N / yr	kg N / yr	%
	A	B	C	D
Canada	274,797,196.6	274,797,197.0	-0.4	0.0
Czech Republic ^a	30,247,900	30,247,908	-8.0	0.0
Denmark		28,950,000		
France	616,515,054	607,129,167	9,385,886.9	-1.5
Greece	360,035,000	7,201,000	352,834,000.0	-98
Italy		225,490,184		
Latvia	5,035	5,035,400	-5,030,364.6	99,899
Netherlands		104,100,000		
Norway		18,221,883		
Spain	432,317,378	345,853,903	86,463,475.7	-20
Sweden	NO	46,086,000		
United States	4,152,931,620	4,152,290,059	641,560.5	-0.02

^a For the Czech Republic, activity data from table 4B(b) had to be converted into kg N/yr prior to the comparison, as data were reported in t N/yr.

3. Comparison of data provided in table 4.B(b) per livestock type:

Multiplication of livestock population size with the corresponding nitrogen (N) excretion rate (in kg/head/yr) compared to the sum of N excretion from all animal waste management systems (AWMS)

This comparison has been performed for dairy cattle, non-dairy cattle, sheep and swine based on 2000 inventory data.

The tables below only include Parties which provided numerical information, and for which differences in the data or any other inconsistencies were found.

	Population size * N	Sum N excretion	Difference
	excretion	all AWMS	(B-A)/A*100
	kt	kt	%
	A	B	C
Dairy cattle			
Estonia	0.01	917.00	9,999,900.00
Iceland	1.89	NE	
Ireland	116.02	116,022.75	99,900.00
Latvia	14,315.00	14.17	-99.90
New Zealand	385,901.70	385,940.08	0.01
Slovakia	21,870.00	21,826.26	-0.20
Sweden	50,504.00	31,881.09	-36.87
United Kingdom	317,025.09	253,620.07	-20.00

Non-dairy cattle			
	Population size * N	Sum N excretion	Difference
	excretion	all AWMS	(B-A)/A*100
	kt	kt	%
	A	B	C
Canada	536,847.00	536,860.41	0.00
Czech Republic	67,130.00	66,458.70	-1.00
Estonia	0.01	609.00	9,999,900.00
Finland	24,256.51	24,302.72	0.19
France	1,153,578.66	1,142,808.76	-0.93
Iceland	1.08	NE	
Ireland	279.58	279,577.50	99,900.00
Latvia	8,110.00	8.11	-99.90
New Zealand	296,506.90	296,479.66	-0.01
Slovakia	22,568.00	22,522.86	-0.20
Spain	157,554.11	162,105.58	2.89
Sweden	52,204.00	30,030.98	-42.47
United Kingdom	398,348.93	318,679.15	-20.00
United States	4,318,258.45	4,318,270.71	0.00

	Population size * N	Sum N excretion	Difference
	excretion	all AWMS	(B-A)/A*100
	kt	kt	%
	A	B	C
Sheep			
Estonia	0.00	51.52	9,999,900.00
Iceland	0.71	NE	
Ireland	51.07	51,071.20	99,900.00
Latvia	457.60	0.46	-99.90
New Zealand	531,177.00	531,180.51	0.00
Slovakia	5,568.00	5,506.75	-1.10
Spain	239,504.52	239,026.24	-0.20
Sweden	2,574.00	1,261.00	-51.01
United Kingdom	284,448.57	227,558.85	-20.00

Swine			
	Population size * N	Sum N excretion	Difference
	excretion	all AWMS	(B-A)/A*100
	kt	kt	%
	A	B	C
Canada	141,771.72	141,771.14	0.00
Estonia	0.01	606.40	10,099,900.00
Iceland	0.06	NE	
Ireland	21.03	21,032.40	99,900.00
Latvia	7,870.00	7.95	-99.90
New Zealand	5,680.00	5,685.33	0.09
Portugal	39,618.64	39,714.82	0.24
Sweden	16,866.80	17,473.96	3.60
United Kingdom	65,758.64	52,606.89	-20.00
United States	421,548.57	419,866.42	-0.40

4. Land-use change and forestry

Land-use change and forestry

1. Methods and emission factors used and provision of activity data

1.1 CO₂ emissions and removals

	5.A Changes in forest and other woody biomass stocks			5.B Forest/grassland conversion			5.C Abandonment of lands			5.D CO ₂ emissions/removals from soils			5.E Others		
	Methods	EF	Provision of activity data in CRF or NIR ^a	Methods	EF	Provision of activity data in CRF or NIR	Methods	EF	Provision of activity data in CRF or NIR	Methods	EF	Provision of activity data in CRF or NIR	Methods	EF	Provision of activity data in CRF or NIR
Austria	D	CS	CRF												
Belgium	D	CS,D	NIR												
Canada	NA/CS/D	NA/CS	CRF	CS/D	CS	CRF	CS/D	CS	CRF	D	CS	CRF	CS/D	CS	CRF
Czech Republic	CS	CS	CRF	NO			NO			NE					
Denmark															
Estonia															
European Community	NE	NE	CRF	NE	NE	CRF	NE	NE	CRF	NE	NE	CRF	NE	NE	
Finland	CS	CS		NO	NO		NO	NO		D	D				
France	CS	CS	CRF	CS	CS	CRF	CS	CS	CRF	CS	CS	CRF			
Greece			CRF									CRF			
Hungary	D	D	CRF	D	D	CFR				D	D	CRF			
Iceland	CS	CS	CRF							CS	CS				
Ireland	D	CS	CRF	NA	NA		NA	NA		D	D	CRF	NA	NA	
Italy	D, CS	D, CS	CRF			CRF	D	D	CRF	D	D, CS	CRF			
Latvia	T1	D	CRF							T1	D	CRF			
Luxembourg															
Netherlands	T1	CS	CRF	NE			NE			NE			NO		
New Zealand	CS/M	CS/M	NIR	CS/D	CS/D		NE	NE		NE	NE	NIR			
Norway	CS	D, CS	NIR	-	-		-	-		-	-		-	-	
Poland	T1	D	CRF	T1	D		D	D		T1	D	CRF	T1	D	
Portugal	D	D	CRF	D	D										
Slovakia	IPCC,CS	IPCC,CS	CRF	IPCC,CS	IPCC,CS		IPCC,CS	IPCC,CS		IPCC,CS	IPCC,CS	CRF			
Spain	CS	CS	CRF	NE			NE			NE			NO		
Sweden	D	CS	NIR							D, CS	CS	NIR			
Switzerland	CS	CS	CRF												
United Kingdom	M	M		NO	NO		NE	NE		D/CS/M	CS/CS/CS		CS	CS	
United States	CS	CS	CRF	IE, NE	IE, NE		IE, NE	IE, NE		CS, D	CS, D	CRF	CS	CS	CRF

^a If activity data are reported in the CRF, this does not necessarily mean that they are not reported in the NIR.

Land-use change and forestry**2. Changes in forest and other woody biomass stocks (5.A)****2.1 Temperate forests**

Average annual growth rates (t dm/ ha/ yr) and implied carbon uptake factors (t C/ ha/ yr)

Species as specified by Parties	Temperate forests								C/dm ratio for Temperate Forests				
	Plantations		Commercial evergreen		Commercial deciduous		Other						
	Average annual growth rate	Implied carbon uptake	Average annual growth rate	Implied carbon uptake	Average annual growth rate	Implied carbon uptake factor	Average annual growth rate	Implied carbon uptake factor	Plantations	Temp Com Evrg	Temp Com Dec	Other	
	t dm/ha/yr	t C/ha/yr	t dm/ha/yr	t C/ha/yr	t dm/ha/yr	t C/ha/yr	t dm/ha/yr	t C/ha/yr					
IPCC defaults ^a	4.0-6.0												
IPCC defaults			3.0		2.0								
Austria			4.91	2.41	5.15	2.49				0.4896	0.4831		
Belgium													
Canada			NA	NA	NA	NA							
Czech Republic													
	Evergreen+Deciduous							4.60	2.07			0.4500	
Denmark													
Estonia													
European Community			NE	NE	NE	NE	NE	NE	NE				
Finland													
France													
	Forest as a whole							4.91	2.46			0.5000	
Greece		na						na					
	Oxia				1.58	0.79						0.5000	
	Dris				0.27	0.14						0.5000	
	Other				1.26	0.63						0.5000	
	Fir		0.84	0.42								0.5000	
	Red Fir		5.90	2.95								0.5000	
	Pine sp		0.71	0.36								0.5000	
	Other		1.26	0.63								0.5000	
Hungary		3.76	1.69	4.57	2.06	4.71	2.12	3.51	1.58	0.4495	0.4500	0.4500	
		2.92	1.31							0.4486			
Iceland													
Ireland													
Italy													
	Total							2.88	1.38				
Latvia				5.70	2.85	5.54	2.77				0.5000	0.5000	
	Clearing and rough afforestation							0.95	0.48			0.5000	
Luxembourg													
Netherlands													
	forest land coniferous							4.67	2.33			0.5000	
	forest land broadleaved							5.68	2.84			0.5000	
New Zealand													
Norway													
Poland								3.41	1.71			0.5007	
	Other forest evergreen							3.48	1.74			0.5000	
	Other forest deciduous							5.87	2.94			0.5000	
	State owned forest deciduous							4.67	2.34			0.5003	
	State owned forest evergreen												
Portugal													
	FOREST (with new areas)							2.30	1.03			0.4500	
Slovakia		NO		NO		NO							
	Abies alba							2.69	1.35			0.5019	
	Acer sp.							3.16	1.55			0.4905	
	Alnus sp.							1.76	0.86			0.4886	
	Betulus sp.							1.01	0.50			0.4950	
	Breeding poplars							2.42	1.18			0.4890	
	Carpinus betulus							2.40	1.18			0.4917	
	Fagus sylvatica							4.42	2.16			0.4887	
	Fraxinus excelsior							3.22	1.58			0.4907	
	Larix dedicua							2.58	1.29			0.5000	
	Other broadleaves							1.64	0.81			0.4914	
	Other coniferous							1.10	0.55			0.5018	
	Picea abies							2.55	1.28			0.5020	
	Pinus sp.							2.39	1.20			0.5021	
	Populus sp.							2.69	1.32			0.4907	
	Quercus cerris							3.74	1.83			0.4893	
	Quercus ruber., petr.							3.89	1.90			0.4884	
	Robinia pseudo ac.							2.76	1.35			0.4891	
	Salix sp.							2.65	1.32			0.4981	
	Tilia sp.							1.93	0.95			0.4922	
	Ulmus sp.							2.99	1.47			0.4916	
Spain				1.56	0.70	1.16	0.52				0.4485	0.4494	
	Pinus radiata	8.51	3.82							0.4489			
	Eucalyptus	7.39	3.32							0.4493			
Sweden				5.06	2.53	7.33	3.66				0.5002	0.4997	
Switzerland													
United Kingdom													
United States				NA	NA	NA	NA	NA	NA				
Average		5.65	2.54	3.18	1.55	2.81	1.35	3.09	1.52	0.45	0.49	0.48	
Minimum		2.92	1.31	0.71	0.36	0.27	0.14	0.95	0.48	0.45	0.45	0.45	
Maximum		8.51	3.82	5.90	2.95	5.54	2.77	5.87	2.94	0.45	0.50	0.50	
Number of submissions		4	4	8	8	7	7	32	32	4	8	7	31

^a IPCC defaults for temperate plantations (table 5-3, page 5.21, volume 3)

Land-use change and forestry**2. Changes in forest and other woody biomass stocks (5.A)****2.2 Boreal forests**

Average annual growth rates (t dm/ha/yr) and implied carbon uptake factors (t C/ha/yr)

IPCC default	Species as specified by Parties	Boreal forests		C/dm ratio for Boreal Forests
		Average annual growth rate	Implied carbon uptake factor	
		t dm/ha/yr	t C/ha/yr	
Austria				
Belgium				
Canada				
Czech Republic				
Denmark		1.26	0.63	0.5000
Estonia				
Finland				
France		4.12	1.85	0.4490
Greece				
Hungary				
Iceland				
Ireland				
Italy		2.4	1.2	0.5000
Latvia				
Luxembourg				
Netherlands				
New Zealand				
Norway				
Poland				
Portugal				
Slovakia				
Spain				
Sweden				
Switzerland				
United Kingdom				
United States				
Minimum		1.26	0.63	0.4490
Maximum		4.12	1.85	0.5000
Average		2.59	1.23	0.4830

Land-use change and forestry

3. Changes in forest and other woody biomass stocks (5.A)

Temperate Forests: Trends in area of forest/biomass stocks (ha) and average annual growth rates (t dm/ha/yr)

3.1 Temperate forests - Plantations

Area of forest/biomass stocks and average annual growth rate (per hectare and year)

	Evergreen/deciduous	IPCC default growth rate, t dm/ha/yr	Base year ^a		Plantations																				Statistics by Party						
					1990		1991		1992		1993		1994		1995		1996		1997		1998		1999		2000		min	max	average		
					Area	Growth rate	Area	Growth rate	Area	Growth rate	Area	Growth rate	Area	Growth rate	Area	Growth rate	Area	Growth rate	Area	Growth rate	Area	Growth rate	Area	Growth rate	Area	Growth rate					
k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr	k ha	t dm/ha/yr						
Austria	(not reported)	6.0-4.0	2	NE	2.00	NE	2.00	NE	2.00	NE	2.00	NE	2.00	NE	2.00	NE	2.00	NE	2.00	NE	2.00	NE	2.00	NE	2.00	NE	NE	NE	NE		
Hungary	(not reported)	6.0-4.0	not reported																												
	(not reported)	6.0-4.0	not reported																												
Portugal	(not reported)	6.0-4.0	127.63	1.84	127.63	1.84	146.87	1.65	166.11	1.50	185.35	1.39	204.59	1.30	223.83	1.22	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE			
Spain	Pinus radiata	6.0-4.0	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	245.00	8.51	8.51	8.51	8.51
	Eucalyptus	6.0-4.0	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	553.00	7.39	7.39

^a Base year refers 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: Hungary (average of 1995 - 1987), Poland (1988)

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/ or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided 9 6 2...P 66 16 0 üÜU xy this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

3.1.1 Annual change of average annual growth rate, t dm/ha/yr (Temperate forests: Plantations)

	Change from previous year (%)										Percentage change from 1990 to 2000
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Austria											
Hungary											-1.09
Hungary											
Portugal	-10.29	-8.82	-7.66	-6.74	-5.98						
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.1.2 Annual change of forest surface, kha/yr (Temperate forests: Plantations)

	Change from previous year (%)										Percentage change from 1990 to 2000
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Austria	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hungary											
Hungary											
Portugal	15.08	13.10	11.58	10.38	9.40						
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Land-use change and forestry

4. Changes in forest and other woody biomass stocks (5. A): CO₂ emissions and removals

4.1 Trends in gross CO₂ emissions (Gg CO₂ /yr)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria	26,679.48	26,679.48	19,560.66	20,203.73	20,171.55	23,477.66	22,554.30	24,423.08	22,174.94	22,174.94	22,174.94	22,174.94	26,679.5	19,560.7	26,679.5
Belgium	5,067.00	5,067.00	5,067.00	4,827.00	4,748.00	4,668.00	4,668.00	4,668.00	4,668.00	4,668.00	4,668.00	4,668.00	5,067.0	4,668.0	5,067.0
Canada	222,195.29	222,195.29	219,183.88	234,685.68	242,811.46	252,229.58	259,721.17	262,351.46	264,360.93	249,079.27	259,640.80	261,172.90	264,360.9	219,183.9	264,360.9
Czech Republic ^b	15,503.26	15,503.26									16,047.72	16,441.71	16,441.7	15,503.3	16,441.7
Denmark													0.0	0.0	0.0
Estonia ^b											5,752.03	5,524.66	5,524.7	5,524.7	5,524.7
European Community													0.0	0.0	0.0
Finland	72,141.34	72,141.34	58,629.65	66,656.67	70,425.49	80,557.40	83,129.49	76,968.69	85,934.05	90,424.25	90,447.42	91,139.43	91,139.4	58,629.6	91,139.4
France	74,176.00	74,176.00	81,703.00	77,850.00	73,689.00	71,130.00	74,783.00	74,061.00	71,526.00	73,723.00	73,150.00	76,119.00	81,703.0	71,130.0	81,703.0
Greece	3,831.67	3,831.67	3,830.51	3,656.91	3,720.79	3,923.41	3,227.91	3,503.10	3,584.97	2,823.88	3,986.07	3,854.33	3,986.1	2,823.9	3,986.1
Hungary ^b	not reported										5,559.03	6,146.12	6,146.1	6,146.1	6,146.1
Iceland													0.0	0.0	0.0
Ireland	1,180.67	1,180.67	1,435.71	1,468.90	1,481.58	1,613.34	1,680.67	1,738.92	1,638.44	1,861.04	1,959.40	2,122.36	2,122.4	1,180.7	2,122.4
Italy												9,106.38	9,106.4	9,106.4	9,106.4
Latvia													25,038.39	25,038.4	25,038.4
Luxembourg													0.0	0.0	0.0
Netherlands													0.0	0.0	0.0
New Zealand												2,180.08	2,180.1	2,180.1	2,180.1
Norway													0.0	0.0	0.0
Poland												33,307.62	33,307.6	15,925.6	33,307.6
Portugal												10,720.46	10,720.5	10,720.5	10,720.5
Slovakia												10,020.80	10,020.8	10,020.8	10,020.8
Spain	11,022.21	11,022.21	11,022.21	11,022.21	11,022.21	11,022.21	11,022.21	11,022.21	11,022.21	11,022.21	11,022.21	11,022.21	11,022.2	11,022.2	11,022.2
Sweden													0.0	0.0	0.0
Switzerland												9,852.33	9,852.3	9,852.3	9,852.3
United Kingdom													0.0	0.0	0.0
United States	25,098.33	25,098.33	25,098.33	25,098.33	25,098.33	25,098.33	25,098.33	25,098.33	25,098.33	25,098.33	25,098.33	25,098.33	25,098.3	25,098.3	25,098.3

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988).

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-26.7	3.3	-0.2	16.4	-3.9	8.3	-9.2	0.0	0.0	0.0	-16.9
Belgium	0.0	-4.7	-1.6	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	-7.9
Canada	-1.4	7.1	3.5	3.9	3.0	1.0	0.8	-5.8	4.2	0.6	17.5
Czech Republic	-100.0										6.1
Denmark											
Estonia											
European Community											
Finland	-18.7	13.7	5.7	14.4	3.2	-7.4	11.6	5.2	0.0	0.8	26.3
France	10.1	-4.7	-5.3	-3.5	5.1	-1.0	-3.4	3.1	-0.8	4.1	2.6
Greece	0.0	-4.5	1.7	5.4	-17.7	8.5	2.3	-21.2	41.2	-3.3	0.6
Hungary										10.6	
Iceland											
Ireland	21.6	2.3	0.9	8.9	4.2	3.5	-5.8	13.6	5.3	8.3	79.8
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland										-52.2	
Portugal											
Slovakia										0.0	
Spain	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweden											
Switzerland										0.0	
United Kingdom											
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Land-use change and forestry

4.2 Trends in gross CO₂ removals (Gg CO₂ /yr)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria	-35,894.29	-35,894.29	-33,064.55	-28,860.19	-29,153.91	-31,339.24	-29,808.30	-29,808.30	-29,808.30	-29,808.30	-29,808.30	-29,808.30	-28,860.2	-35,894.3	-28,860.2
Belgium	-6,667.00	-6,667.00	-6,667.00	-6,645.00	-6,624.00	-6,601.00	-6,579.00	-6,557.00	-6,535.00	-6,513.00	-6,491.00	-6,469.00	-6,491.0	-6,667.0	-6,491.0
Canada	-290,264.33	-290,264.33	-290,231.33	-290,260.67	-290,293.67	-290,323.00	-290,363.33	-290,396.33	-289,582.33	-289,494.33	-289,410.00	-289,311.00	-289,311.0	-290,396.3	-289,311.0
Czech Republic ^b	-17,631.12	-17,631.12									-19,449	-20,457.90	-17,631.1	-20,457.9	-17,631.1
Denmark	-916.00	-916.00	-918.00	-921.00	-924.00	-928.00	-931.00	-941.00	-951.00	-964.00	-976.00	-995.00	-916.0	-995.0	-916.0
Estonia ^b	0.00										-12,244.8	-11,923.69	-11,923.7	-12,244.8	-11,923.7
European Community													0.0	0.0	0.0
Finland	-95,939.07	-95,939.07	-96,836.53	-98,550.19	-99,541.82	-97,816.84	-97,816.84	-98,001.13	-98,571.18	-100,136.83	-101,268.30	-103,092.79	-95,939.1	-103,092.8	-95,939.1
France	-142,262.00	-142,262.00	-145,583.00	-146,226.00	-147,509.00	-147,905.00	-149,183.00	-151,289.00	-152,086.00	-154,241.00	-155,112.00	-152,259.00	-142,262.0	-155,112.0	-142,262.0
Greece	-4,004.90	-4,004.90	-4,004.85	-4,004.85	-4,004.85	-4,004.90	-4,004.90	-4,004.90	-4,004.90	-4,004.90	-4,004.90	-4,004.90	-4,004.9	-4,004.9	-4,004.9
Hungary ^{a,b}	not reported														
Iceland													-39.18	-39.2	-39.2
Ireland	-1,630.78	-1,630.78	-1,858.66	-1,786.95	-1,862.43	-2,020.59	-2,109.35	-2,159.07	-2,136.35	-2,434.66	-2,459.65	-2,529.69	-1,630.8	-2,529.7	-1,630.8
Italy ^b										-24,969.19	-25,314.518	-34,805.10	-24,969.2	-34,805.1	-24,969.2
Latvia													-29,376.80	-29,376.8	-29,376.8
Luxembourg													0.0	0.0	0.0
Netherlands	-1,421.91	-1,421.91	-1,527.61	-1,487.27	-1,805.73	-1,929.35	-1,232.28	-1,397.68	-1,180.35	-1,379.57	-1,235.57	-1,413.26	-1,180.3	-1,929.4	-1,180.3
New Zealand													-25,126.00	-25,126.0	-25,126.0
Norway	-9,765.17	-9,765.17											-18,743.41	-9,765.2	-18,743.4
Poland ^a													-17,587.82	-17,767.33	-17,587.82
Portugal	-1,839.00	-1,839.00	-1,921.87	-2,004.73	-2,087.60	-2,170.46	-2,253.33	-2,258.15	-2,262.97	-2,267.78	-2,272.60	-2,272.60	-76,051.18	-76,051.2	-76,051.2
Slovakia													-2,277.42	-1,839.0	-2,277.4
Spain	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-40,274.67	-11,431.30	-11,431.3	-11,431.3
Sweden		-24,100.00	-33,100.00	-27,100.00	-33,100.00	-30,100.00	-25,100.00	-26,100.00	-31,100.00	-28,100.00	-31,100.00	-31,100.00	-40,274.67	-40,274.7	-40,274.7
Switzerland													-24,100.00	-33,100.0	-24,100.0
United Kingdom		-7,304.00	-7,395.67	-7,670.67	-7,982.33	-8,191.33	-8,517.67	-8,426.00	-8,316.00	-8,184.00	-8,121.67	-8,308.67	-11,672.83	-11,672.8	-11,672.8
United States	-853,765.00	-853,765.00	-842,765.00	-847,531.67	-848,631.67	-855,231.67	-850,098.33	-850,098.33	-787,765.00	-780,431.67	-791,431.67	-798,765.00	-780,431.7	-855,231.7	-780,431.7

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

6

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	-7.9	-12.7	1.0	7.5	-4.9	0.0	0.0	0.0	0.0	0.0	-17.0
Belgium	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-2.6
Canada	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	-0.3
Czech Republic	-100.0									5.2	16.0
Denmark	0.2	0.3	0.3	0.4	0.3	1.1	1.1	1.4	1.2	1.9	8.6
Estonia										-2.6	
European Community											
Finland	0.9	1.8	1.0	-1.7	0.0	0.2	0.6	1.6	1.1	1.8	7.5
France	2.3	0.4	0.9	0.3	0.9	1.4	0.5	1.4	0.6	-1.8	7.0
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary											-2.7
Iceland											
Ireland	14.0	-3.9	4.2	8.5	4.4	2.4	-1.1	14.0		2.8	55.1
Italy									1.4	37.5	-28.3
Latvia											0.0
Luxembourg											
Netherlands											
New Zealand											
Norway	-100.0								1.0	5.5	91.9
Poland											
Portugal	4.5	4.3	4.1	4.0	3.8	0.2	0.2	0.2	0.2	0.2	23.8
Slovakia											
Spain	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweden	37.3	-18.1	22.1	-9.1	-16.6	4.0	19.2	-9.6	10.7	0.0	29.0
Switzerland											
United Kingdom	1.3	3.7	4.1	2.6	4.0	-1.1	-1.3	-1.6	-0.8	2.3	13.8
United States	-1.3	0.6	0.1	0.8	-0.6	0.0	-7.3	-0.9	1.4	0.9	-6.4

Land-use change and forestry**4.3 Trends in net CO₂ emissions/removals (Gg CO₂/yr)**

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria	-9,214.81	-9,214.81	-13,503.89	-8,656.47	-8,982.36	-7,861.58	-7,254.00	-5,385.22	-7,633.36	-7,633.36	-7,633.36	-7,633.36	-5,385.2	-13,503.9	-5,385.2
Belgium	-1,600.00	-1,600.00	-1,600.00	-1,818.00	-1,876.00	-1,933.00	-1,911.00	-1,889.00	-1,867.00	-1,845.00	-1,823.00	-1,823.00	-1,600.0	-1,933.0	-1,600.0
Canada	-68,193.71	-68,193.71	-71,179.45	-55,714.32	-47,625.21	-38,236.42	-30,792.49	-28,195.20	-25,371.74	-40,565.40	-29,919.54	-28,288.44	-25,371.7	-71,179.5	-25,371.7
Czech Republic ^b	-2,127.86	-2,127.86						-4,485.71	-4,638.90	-3,757.48	-3,401.2341	-4,016.19	-2,127.9	-4,638.9	-2,127.9
Denmark	-916.00	-916.00	-918.00	-921.00	-924.00	-928.00	-931.00	-941.00	-951.00	-964.00	-976.00	-995.00	-916.0	-995.0	-916.0
Estonia ^b	-7,462.80	-7,462.80	-7,809.96	-8,568.95	-8,513.53	-7,632.71	-7,900.68	-8,345.38	-7,216.98	-6,906.05	92.769940727	-6,399.03	-6,399.0	-8,568.9	-6,399.0
European Community	-235,705.73	-235,705.73	-259,934.14	-247,538.81	-256,549.96	-243,275.08	-233,391.19	-242,554.97	-243,855.17	-237,379.69	-241,705.83	-220,738.67	-220,738.7	-259,934.1	-220,738.7
Finland	-23,797.73	-23,797.73	-38,206.89	-31,893.52	-29,116.33	-17,259.44	-14,687.35	-21,032.44	-12,637.13	-9,712.58	-10,820.88	-11,953.37	-9,712.6	-38,206.9	-9,712.6
France	-68,085.46	-68,085.46	-63,879.67	-68,376.00	-73,820.01	-76,774.58	-74,399.87	-77,228.20	-80,559.90	-80,518.01	-81,961.77	-76,139.33	-63,879.7	-81,961.8	-63,879.7
Greece	-173.23	-173.23	-174.34	-284.94	-284.07	-81.49	-776.99	-501.80	-419.93	-1,181.02	-18.83	-150.57	-18.8	-1,181.0	-18.8
Hungary ^{a,b}	-3,097.00	-4,467.00	-4,747.36	-5,336.46	-6,194.02	-6,271.32	-6,199.94	-5,421.04	-5,702.53	-6,101.69	-6,191.22	-5,285.76	-4,467.0	-6,271.3	-4,467.0
Iceland	-2.29	-2.29	-6.06	-10.37	-14.52	-18.04	-21.63	-24.92	-27.74	-31.42	-35.29	-39.18	-2.3	-39.2	-2.3
Ireland	-450.11	-450.11	-422.95	-318.05	-380.85	-407.25	-428.68	-420.15	-497.91	-573.62	-500.25	-407.33	-318.1	-573.6	-318.1
Italy	-28,605.24	-28,605.24	-28,955.32	-28,311.96	-27,424.72	-26,976.17	-27,315.56	-27,886.27	-27,255.27	-25,745.11	-25,667.98	-25,698.76	-25,668.0	-28,955.3	-25,668.0
Latvia	-10,960.00	-10,960.00	-10,960.00	-10,960.00	-10,960.00	-10,960.00	-10,600.00	-10,600.00	-10,600.00	-10,600.00	-10,600.00	-4,338.36	-4,338.4	-10,960.0	-4,338.4
Luxembourg													0.0	0.0	0.0
Netherlands	1,421.91	1,421.91	1,527.61	1,487.27	1,805.73	1,929.35	1,232.28	1,397.68	1,180.35	1,379.57	1,235.57	1,413.26	1,929.4	1,180.3	1,929.4
New Zealand	-22,514.00	-22,514.00	-21,627.00	-20,090.00	-18,667.00	-18,258.00	-18,157.00	-18,627.00	-20,011.00	-21,856.00	-23,859.00	-25,126.00	-18,157.0	-25,126.0	-18,157.0
Norway	-9,590.00	-9,590.00	-11,700.00	-13,250.00	-13,510.00	-15,680.00	-13,640.00	-17,611.00	-16,499.00	-17,587.82	-17,767.33	-18,743.41	-9,590.0	-18,743.4	-9,590.0
Poland ^a	-24,990.00	-34,514.00	-32,531.00	-30,460.00	-30,151.00	-31,427.00	-33,125.00	-31,996.00	-29,880.00	-19,151.00	-39,767.00	-42,743.56	-19,151.0	-42,743.6	-19,151.0
Portugal	1,839.00	1,839.00	1,921.87	2,004.73	2,087.60	2,170.46	2,253.33	2,258.15	2,262.97	2,267.78	2,272.60	2,277.42	2,277.4	1,839.0	2,277.4
Slovakia	-1,753.00	-1,753.00	-2,603.00	-3,333.00	-3,344.00	-2,479.00	-1,786.00	-1,734.00	-975.00	-1,474.00	-1,107.00	-1,410.50	-975.0	-3,344.0	-975.0
Spain	29,252.46	29,252.46	29,252.46	29,252.46	29,252.46	29,252.46	29,252.46	29,252.46	29,252.46	29,252.46	29,252.46	29,252.46	29,252.5	29,252.5	29,252.5
Sweden	-24,100.00	-24,100.00	-33,100.00	-27,100.00	-33,100.00	-30,100.00	-25,100.00	-26,100.00	-31,100.00	-28,100.00	-31,100.00	-31,100.00	-24,100.0	-33,100.0	-24,100.0
Switzerland	-3,188.00	-3,188.00	-3,257.00	-3,355.00	-4,325.00	-4,340.00	-4,310.00	-4,460.00	-4,636.00	-4,570.00	-4,226.00	1,820.50	1,820.5	-4,636.0	1,820.5
United Kingdom	-7,304.00	-7,304.00	-7,395.67	-7,670.67	-7,982.33	-8,191.33	-8,517.67	-8,426.00	-8,316.00	-8,184.00	-8,121.67	-8,308.67	-7,304.0	-8,517.7	-7,304.0
United States	-828,666.67	-828,666.67	-817,666.67	-822,433.33	-823,533.33	-830,133.33	-825,000.00	-825,000.00	-762,666.67	-755,333.33	-766,333.33	-773,666.67	-755,333.3	-830,133.3	-755,333.3

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Follower information provided Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

6

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	46.5	-35.9	3.8	-12.5	-7.7	-25.8	41.7	0.0	0.0	0.0	-17.2
Belgium	0.0	13.6	3.2	3.0	-1.1	-1.2	-1.2	-1.2	-1.2	0.0	13.9
Canada	4.4	-21.7	-14.5	-19.7	-19.5	-8.4	-10.0	59.9	-26.2	-5.5	-58.5
Czech Republic	-100.0						3.4	-19.0	-9.5	18.1	88.7
Denmark	0.2	0.3	0.3	0.4	0.3	1.1	1.1	1.4	1.2	1.9	8.6
Estonia	4.7	9.7	-0.6	-10.3	3.5	5.6	-13.5	-4.3	-6.0	-1.4	-14.3
European Community	10.3	-4.8	3.6	-5.2	-4.1	3.9	0.5	-2.7	1.8	-8.7	-6.3
Finland	60.5	-16.5	-8.7	-40.7	-14.9	43.2	-39.9	-23.1	11.4	10.5	-49.8
France	-6.2	7.0	8.0	4.0	-3.1	3.8	4.3	-0.1	1.8	-7.1	11.8
Greece	0.6	99.6	-18.4	-71.3	853.4	-35.4	-16.3	181.2	-98.4	699.6	-13.1
Hungary	6.3	12.4	16.1	1.2	-1.1	-12.6	5.2	7.0	1.5	-14.6	70.7
Iceland	164.6	71.1	40.0	24.2	19.9	15.2	11.3	13.3	12.3	11.0	1610.9
Ireland	-6.0	-24.8	19.7	6.9	5.3	-2.0	18.5	15.2	-12.8	-18.6	-9.5
Italy	1.2	-2.2	-3.1	-1.6	1.3	2.1	-2.3	-5.5	-0.3	0.1	-10.2
Latvia	0.0	0.0	0.0	0.0	-3.3	0.0	0.0	0.0	-49.8	-18.5	-60.4
Luxembourg											
Netherlands	7.4	-2.6	21.4	6.8	-36.1	13.4	-15.5	16.9	-10.4	14.4	-0.6
New Zealand	-3.9	-7.1	-7.1	-2.2	-0.6	2.6	7.4	9.2	9.2	5.3	11.6
Norway	22.0	13.2	2.0	16.1	-13.0	29.1	-6.3	6.6	1.0	5.5	95.4
Poland	-5.7	-6.4	-1.0	4.2	5.4	-3.4	-6.6	-35.9	107.6	7.5	71.0
Portugal	4.5	4.3	4.1	4.0	3.8	0.2	0.2	0.2	0.2	0.2	23.8
Slovakia	48.5	28.0	0.3	-25.9	-28.0	-2.9	-43.8	51.2	-24.9	27.4	-19.5
Spain	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sweden	37.3	-18.1	22.1	-9.1	-16.6	4.0	19.2	-9.6	10.7	0.0	29.0
Switzerland	2.2	3.0	28.9	0.3	-0.7	3.5	3.9	-1.4	-7.5	-143.1	-157.1
United Kingdom	1.3	3.7	4.1	2.6	4.0	-1.1	-1.3	-1.6	-0.8	2.3	13.8
United States	-1.3	0.6	0.1	0.8	-0.6	0.0	-7.6	-1.0	1.5	1.0	-6.6

Land-use change and forestry**5. Forest/grassland conversion (5.B)****Average annual net loss of biomass (t dm/ha)**

	On- & off-site burning			Decay			Sum of average annual net loss of biomass t dm/ha
	Area converted annually	Average annual net loss of biomass	Annual net loss of biomass	Average area converted	Average annual net loss of biomass	Annual net loss of biomass	
	kha/yr	t dm/ha	kt dm/yr	kha/yr	t dm/ha	kt dm/yr	
	Original natural ecosystem: Tropical, wet/very moist						
IPCC default^a	Average annual net loss of biomass not higher than 225-300 t dm/ha						
France	0.8	142.5	114				142.5
	Original natural ecosystem: Temperate - coniferous						
IPCC default^b	Average annual net loss of biomass not higher than 220-295 t dm/ha						
Greece	29.93	33.85	1013.1305				33.9
Hungary	134.54	1.00	134.54	118.12	118.12	13952.33	119.1
Poland	0.72	138.68	99.85	0.51	139.07	70.93	277.8
Slovakia	NA		769.22	0.87	61.77	53.74	61.8
	Original natural ecosystem: Temperate - broadleaf						
IPCC default^b	Average annual net loss of biomass not higher than 175-250 t dm/ha						
Greece	21.43	19.72	422.600				19.7
Hungary	755.55	1.00	755.55	685.94	685.94	470513.68	686.9
Slovakia	NA		1077.51	NA	61.77		
	Original natural ecosystem: Temperate - mixed broadleaf / coniferous						
IPCC default^b	Average annual net loss of biomass not higher than 175-295 t dm/ha						
Canada	17.1	102.28	1749				102.3
France	58.625	85.70	5023.948				85.7
Greece	63.72	19.72	1256.560				19.7
	Original natural ecosystem: Grasslands						
IPCC default^c							
Canada	64.2	1.09	70				1.1
Greece	19.2		NR				
Hungary	9.79		NR	6.286			
Poland	0.62	10.00	6.2	0.94	10.00	9.4	20.0
	Original natural ecosystem: Boreal, mixed coniferous/broadleaf						
IPCC default^b	Average annual net loss of biomass not higher than 40-87 t dm/ha						
Canada	11	39.91	439				39.9
Estonia	0.06	146.20	8.772	0.32	46.78	14.97	193.0

^a IPCC defaults (Table 5-4, page 5.26, volume 3)

^b IPCC defaults (Table 5-6, page 5.30, volume 3)

^c No IPCC defaults

Land-use change and forestry

6. Forest/grassland conversion (5.B)

Trend in area converted annually (kha/yr)

6.1. Temperate coniferous, Area converted annually, On- and off-site burning

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium												
Canada	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Czech Republic												
Denmark												
Estonia												
European Community												NE
Finland												
France												
Greece	14	13.6	1.2	19.5	12.3	8.6	4.9	4.1	4.9	33.5	3.2	29.9
Hungary	not reported											134.5
Iceland												
Ireland												0.0
Italy												
Latvia												
Luxembourg												
Netherlands												
New Zealand												
Norway												
Poland												0.7
Portugal												
Slovakia												NA
Spain												
Sweden	NO	NO										
Switzerland												
United Kingdom												
United States	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988).

6.2. Temperate broadleaf, Area converted annually, On- and off-site burning

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium												
Canada	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Czech Republic												
Denmark												
Estonia												
European Community												NE
Finland												
France												
Greece	5	5.0	1.8	3.8	7.2	7.8	1.2	1.9	1.1	12.5	1.2	21.4
Hungary	not reported											755.6
Iceland												
Ireland												
Italy												
Latvia												
Luxembourg												
Netherlands												
New Zealand												
Norway												
Poland												
Portugal												
Slovakia												NA
Spain												
Sweden	NO	NO										
Switzerland												
United Kingdom												
United States	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988).

Percentage change to previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece	-91.1	1,507.4	-36.6	-30.3	-43.1	-16.4	19.8	583.7	-90.4	835.3	119.9
Hungary											
Iceland											
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

Percentage change to previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece	-63.7	111.6	88.5	7.5	-84.9	59.0	-40.9	1,036.4	-90.4	1,685.8	330.3
Hungary											
Iceland											
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

Land-use change and forestry

6.3. Temperate mixed broadleaf/coniferous, Area converted annually, On- and off-site burning

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium	0											
Canada	3	3.1	2.9	3.0	4.6	6.5	8.3	10.5	13.7	14.9	16.0	17.1
Czech Republic	0											
Denmark	0											
Estonia	0											
European Community	0											NE
Finland	0											
France	59	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
Greece	0											
Hungary	not reported											
Iceland	0											
Ireland	0											NE
Italy	0											
Latvia	0											
Luxembourg	0											
Netherlands	0											
New Zealand	0											
Norway	0											
Poland	0											0.0
Portugal	0											
Slovakia	0											NO
Spain	0											
Sweden	NO	NO										
Switzerland	0											
United Kingdom	0											
United States	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988).

Percentage change to previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	-6.5	3.4	53.3	41.3	27.7	26.5	30.5	8.8	7.4	6.9	451.6
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greece											
Hungary											
Iceland											
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

6.4. Temperate mixed broadleaf/evergreen, Area converted annually, On- and off-site burning

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium	0											
Canada	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Czech Republic	0											
Denmark	0											
Estonia	0											
European Community	0											NE
Finland	0											
France	14	13.6	1.2	19.5	12.3	8.6	4.9	4.1	4.9	33.5	3.2	29.9
Greece	14	13.6	1.2	19.5	12.3	8.6	4.9	4.1	4.9	33.5	3.2	29.9
Hungary	not reported											134.5
Iceland	0											
Ireland	0											0.0
Italy	0											
Latvia	0											
Luxembourg	0											
Netherlands	0											
New Zealand	0											
Norway	0											
Poland	0											0.7
Portugal	0											
Slovakia	0											NA
Spain	0											
Sweden	NO	NO										
Switzerland	0											
United Kingdom	0											
United States	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988).

Percentage change to previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece	-91.1	1507.4	-36.6	-30.3	-43.1	-16.4	19.8	583.7	-90.4	835.3	119.9
Hungary											
Iceland											
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

Land-use change and forestry**6.5. Boreal mixed broadleaf/coniferous, Area converted annually, On- and off-site burning**

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium	0											
Canada	9	8.8	9.1	8.7	8.1	7.5	6.8	6.9	10.7	10.7	10.8	11.0
Czech Republic	0											
Denmark	0											
Estonia	0											0.1
European Community	0											NE
Finland	0											
France	0											
Greece	NA	NA				NA	NA	NA	NA	NA	NA	NA
Hungary	not reported											
Iceland	0											
Ireland	0											
Italy	0											
Latvia	0											
Luxembourg	0											
Netherlands	0											
New Zealand	0											
Norway	0											
Poland	0											NO
Portugal	0											NO
Slovakia	0											NO
Spain	0											
Sweden	0											
Switzerland	0											
United Kingdom	0											
United States	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

6.6. Boreal grasslands, Area converted annually, On- and off-site burning

	Base year ¹	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Belgium	0											
Canada	59	58.7	61.6	56.1	50.7	46.6	42.5	40.5	66.3	65.3	65.2	64.2
Czech Republic	0											
Denmark	0											
Estonia	0											
European Community	0											NE
Finland	0											
France	0											
Greece	5	4.9	5.3	9.7	6.1	15.5	2.9	9.3	8.3	19.8	2.4	19.2
Hungary	not reported											9.8
Iceland	0											
Ireland	0											
Italy	0											
Latvia	0											
Luxembourg	0											
Netherlands	0											
New Zealand	0											
Norway	0											
Poland	0											0.6
Portugal	0											
Slovakia	0											NO
Spain	0											
Sweden	NO	NO										
Switzerland	0											
United Kingdom	0											
United States	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

Percentage change to previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	3.4	-4.4	-6.9	-7.4	-9.3	1.5	55.1	0.0	0.9	1.9	25.0
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece											
Hungary											
Iceland											
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

Percentage change to previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	4.9	-8.9	-9.6	-8.1	-8.8	-4.7	63.7	-1.5	-0.2	-1.5	9.4
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece	9.9	81.1	-36.6	153.3	-81.3	221.0	-11.0	139.3	-87.9	700.0	295.9
Hungary											
Iceland											
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

Land-use change and forestry
7. Forest/grassland conversion (5.B)
Trend in CO₂ emissions (Gg CO₂/yr)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE			
Belgium												NA			
Canada	1,419.0	1,419.00	1,393.00	1,420.00	1,699.00	2,056.00	2,381.00	2,840.00	3,694.00	3,924.00	4,172.00	4,393.00	4,393.00	1,393.00	4,393.00
Czech Republic															
Denmark															
Estonia	75.4	75.38	69.46	64.77	59.46	55.43	47.48	39.27	36.89	37.73	35.12	27.02	75.38	27.02	75.38
European Community	8273.7	8,273.70	7,458.82	9,328.83	8,830.32	8,583.74	7,969.70	7,989.10	8,101.68	11,572.41	8,438.02	12,107.98			
Finland															
France	8,763.0	8,763.00	8,762.15	8,965.00	9,024.00	9,095.00	9,225.32	9,225.32	9,369.75	9,818.81	9,818.69	9,818.81	9,818.81	8,762.15	9,818.81
Greece	1,422.7	1,422.70	608.62	2,277.43	1,720.72	1,402.94	659.70	683.70	655.88	3,682.20	552.42	4,226.98	4,226.98	552.42	4,226.98
Hungary	NAD	NAD	1,508.84	1,513.93	1,496.55	1,451.62	1,402.52	1,490.19	1,497.96	1,487.68	1,487.65	1,316.07	1,513.93	1,316.07	1,513.93
Iceland															
Ireland												0			
Italy															
Latvia											NO				
Luxembourg															
Netherlands	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO			
New Zealand	669.2	669.24	1,014.79	1,585.76	1,094.40	2,330.77	1,753.25	1,930.34	1,732.24	871.79	1,095.20	1,119.01	2,330.8	669.2	2,330.8
Norway															
Poland	959.0	785.00	75.00	720.00	190.00	705.00	157.00	81.00	101.00	87.00	42.00	61.68	785.0	42.0	785.0
Portugal	-1,912.0	-1,912.00	-1,912.80	-1,913.60	-1,914.40	-1,915.20	-1,916.00	-1,920.60	-1,925.20	-1,929.80	-1,934.40	-1,939.00	-1,939.00	-1,912.0	-1,912.0
Slovakia	140.6	140.60	130.20	128.90	127.60	126.30	118.50	111.30	110.60	130.90	125.00	113.25	140.6	110.6	140.6
Spain															
Sweden															
Switzerland												NO			
United Kingdom															
United States															

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

7.1 Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	-1.8	1.9	19.6	21.0	15.8	19.3	30.1	6.2	6.3	5.3	209.6
Czech Republic											
Denmark											
Estonia	-7.8	-6.8	-8.2	-6.8	-14.4	-17.3	-6.1	2.3	-6.9	-23.1	-64.2
European Community	-9.8	25.1	-5.3	-2.8	-7.2	0.2	1.4	42.8	-27.1	43.5	46.3
Finland											
France	0.0	2.3	0.7	0.8	1.4	0.0	1.6	4.8	0.0	0.0	12.0
Greece	-57.2	274.2	-24.4	-18.5	-53.0	3.6	-4.1	461.4	-85.0	665.2	197.1
Hungary		0.3	-1.1	-3.0	-3.4	6.3	0.5	-0.7	0.0	-11.5	
Iceland											
Ireland											
Italy											
Latvia											
Luxembourg											
Netherlands											
New Zealand	51.6	56.3	-31.0	113.0	-24.8	10.1	-10.3	-49.7	25.6	2.2	67.2
Norway											
Poland	-90.4	860.0	-73.6	271.1	-77.7	-48.4	24.7	-13.9	-51.7	46.9	-93.6
Portugal	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	1.4
Slovakia	-7.4	-1.0	-1.0	-1.0	-6.2	-6.1	-0.6	18.4	-4.5	-9.4	-19.5
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

Land-use change and forestry**8. Abandonment of managed lands (5.C)**

Annual above-ground biomass growth rate (t dm/ ha/ yr) and rate of biomass C uptake (t C/ ha/ yr)

	Annual rate of biomass growth		C fraction of biomass		Rate of biomass C uptake	
	<20 yrs t dm/ha/yr	> 20 yrs t dm/ha/yr	<20 yrs	> 20 yrs	<20 yrs t C/ha/yr	> 20 yrs t C/ha/yr
	Temperate: Mixed coniferous / broadleaf					
IPCC default ^a	2.0-3.0	2.0-3.0				
Canada	0.95	0.95	0.50	0.50	0.47	0.48
Italy	2.00		0.50		0.03	
Poland			0.50	0.50		
	Temperate: Broadleaf					
IPCC default ^a	2	2				
Poland			0.5	0.5		
	Temperate: Coniferous					
IPCC default ^a	3	3				
Poland			0.5	0.5		
	Boreal: Mixed Broadleaf / Coniferous					
IPCC default ^b	0.7-2.0	0.7-6.4				
Canada	0.21	0.21	0.50	0.50	0.11	0.10
Estonia	4.12		0.45	0.45	1.85	
	Boreal: Mixed Broadleaf / Coniferous					
IPCC default ^a						
Canada			0.5	0.5		
Poland			0.5	0.5		

^a IPCC defaults for Temperate natural regeneration (Table 5-2, page 5.20, Volume 3)^b IPCC defaults for Temperate natural regeneration (Table 5-8, page 5.22, Volume 2)

Land-use change and forestry**9. Abandonment of managed lands (5.C)****9.1. Trends for total area abandoned (Kha) (first twenty years)^a**

	Subcategory	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada	Temperate Forests : Mixed Broadleaf/Coniferous	883.5	780.5	717.5	655.5	593.0	531.0	469.0	852.5	868.5	885.5	902
Canada	Grasslands/Tundra : Grasslands	300.5	264.0	242.0	220.5	199.0	178.0	156.0	290.0	296.0	303.0	309
Estonia	Boreal Forests : Mixed Broadleaf/ Coniferous	130.5	112.5	102.0	93.0	82.5	73.0	63.0	128.5	132.0	135.5	361.3

^a Only Parties reporting data under this category were included in the table.

9.2. Percentage of change to previous year and for the period 1990/2000

	Subcategory	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Canada	Temperate Forests : Mixed Broadleaf/Coniferous	-11.7	-8.1	-8.6	-9.5	-10.5	-11.7	81.8	1.9	2.0	1.9	2.1
Canada	Grasslands/Tundra : Grasslands	-12.1	-8.3	-8.9	-9.8	-10.6	-12.4	85.9	2.1	2.4	2.0	2.8
Estonia	Boreal Forests : Mixed Broadleaf/ Coniferous	-13.8	-9.3	-8.8	-11.3	-11.5	-13.7	104.0	2.7	2.7	166.6	176.9

Land-use change and forestry
10. Abandonment of managed lands (5.C)
Trends in CO₂ Removals 1990 to 2000 (Gigagrams)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	0.0	0.0	0.0
Belgium													0.0	0.0	0.0
Canada	-3,245	-3,245	-3,304	-3,271	-3,242	-3,216	-3,183	-3,157	-3,913	-4,008	-4,103	-4,195	-3,157.0	-4,195.0	-3,157.0
Czech Republic													0.0	0.0	0.0
Denmark													0.0	0.0	0.0
Estonia	-1,985	-1,985	-1,991	-1,997	-2,002	-1,441	-1,339	-1,721	-1,580	-1,612	-2,296	-2,456	-1,339.5	-2,456.1	-1,339.5
European Community													0.0	0.0	0.0
Finland													0.0	0.0	0.0
France	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48.0	-48.0	-48.0
Greece													0.0	0.0	0.0
Hungary													0.0	0.0	0.0
Iceland													0.0	0.0	0.0
Ireland													0.0	0.0	0.0
Italy	-102	-102	-104	-119	-132	-142	-148	-151	-153	-154	-159	-160	-102.0	-160.3	-102.0
Latvia													0.0	0.0	0.0
Luxembourg													0.0	0.0	0.0
Netherlands	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	0.0	0.0	0.0
New Zealand													0.0	0.0	0.0
Norway													0.0	0.0	0.0
Poland	-10,715	-10,934	-7,558	-11,075	-7,368	-11,231	-7,125	-7,919	-7,905	-7,881	IE	IE	-7,125.0	-11,231.0	-7,125.0
Portugal													0.0	0.0	0.0
Slovakia													0.0	0.0	0.0
Spain													0.0	0.0	0.0
Sweden													0.0	0.0	0.0
Switzerland												IE	0.0	0.0	0.0
United Kingdom													0.0	0.0	0.0
United States													0.0	0.0	0.0
Average	-3,219	-3,263	-2,601	-3,302	-2,558	-3,216	-2,369	-2,599	-2,720	-2,740	-1,651	-1,715			
Minimum	-10,715	-10,934	-7,558	-11,075	-7,368	-11,231	-7,125	-7,919	-7,905	-7,881	-4,103	-4,195			
Maximum	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48			

^a Base year refers 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: Hungary (average of 1985 - 1987), Poland (1988).

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	1.8	-1.0	-0.9	-0.8	-1.0	-0.8	23.9	2.4	2.4	2.2	29.3
Czech Republic											
Denmark											
Estonia	0.3	0.3	0.3	-28.0	-7.0	28.5	-8.2	2.0	42.5	7.0	23.7
European Community											
Finland											
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greece											
Hungary											
Iceland											
Ireland											
Italy	1.7	15.0	10.5	7.6	4.5	2.0	1.5	0.1	3.3	1.1	57.1
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland	-30.9	46.5	-33.5	52.4	-36.6	11.1	-0.2	-0.3			
Portugal											
Slovakia											
Spain											
Sweden											
Switzerland											
United Kingdom											
United States											

Land-use change and forestry

11. CO₂ emissions and removals from soils (5.D)

11.1 Cultivation of mineral soils

	Average annual rate of soil C uptake/removal, T C/ha/yr					
	High activity	Low activity	Sandy	Volcanic	Wetland	Other
IPCC default						
Austria						
Belgium						
Canada	IE	IE	IE	IE	IE	
Czech Republic						
Denmark						
Estonia		-0.3170	0.1724			
European Community	NE	NE	NE	NE	NE	
Finland	-0.0683	-0.0683	-0.0171			
France						
Greece	2.3138					
Hungary	-0.0004		-0.0004		0.0061	
Iceland						
Ireland						
Italy ^a	-0.1100					
Latvia						
Luxembourg						
Netherlands						
New Zealand						
Norway						
Poland	0.0238	-0.0074	-0.0051		0.1114	
Portugal						
Slovakia						
Spain						
Sweden						
Switzerland						
United Kingdom						
United States	NA	NA	NA	NA	NA	
Minimum	-0.1100	-0.3170	-0.0171			
Maximum	2.3138	-0.0074	0.1724			
Average	0.4318	-0.1309	0.0375			

^a Italy reported value for upland crops, pasture and forests

11.2 Cultivation of organic soils

	Annual loss rate, Mg C/ha/yr						Histosol cultivation	
	Cool temperate		Warm temperate		Tropical		Table 4.D	Table 5.D
	Upland crops	Pasture/forest	Upland crops	Pasture/forest	Upland crops	Pasture/forest	ha	ha
IPCC default	(1.0)	(0,25)	(10.0)	(2,5)	(20.0)	(5.0)		
Austria								
Belgium								
Canada	IE	IE	NO	NO	NO	NO		
Czech Republic								
Denmark								
Estonia		4.3						
European Community	NE	NE	NE	NE	NE	NE		
Finland	1.194	1.088						
France								
Greece								
Hungary								
Iceland								
Ireland								
Italy								
Latvia	1.000							
Luxembourg								
Netherlands								
New Zealand								
Norway								
Poland								
Portugal								
Slovakia								
Spain								
Sweden	5.441	2.813						
Switzerland								
United Kingdom								
United States	NA	NA	NA	NA	NA	NA		
Minimum	1.00	1.09						
Maximum	5.44	4.30						
Average	2.54	2.73						

11.3 Liming of agricultural soils

	C conversion factor	
	Limestone	Dolomite
IPCC default ¹		
Austria		
Belgium		
Canada	IE	IE
Czech Republic		
Denmark		
Estonia		
European Community	NE	NE
Finland	0.123	0.130
France		
Greece		
Hungary	0.120	
Iceland		
Ireland	0.120	
Italy		
Latvia	0.396	
Luxembourg		
Netherlands		
New Zealand		
Norway		
Poland		
Portugal		
Slovakia	0.120	0.122
Spain		
Sweden	0.120	0.122
Switzerland		
United Kingdom		
United States	NA	NA
Minimum	0.12	0.12
Maximum	0.40	0.13
Average	0.17	0.12

¹ No default values

Land-use change and forestry

12. CO₂ emissions and removals from soils

CO₂ Area trends of emissions from mineral soils in mha (5.D) ^a

	Detail	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	High Activity Soils	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
	Low Activity Soils	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
	Sandy	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
	Volcanic	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
	Wetland (Aquic)	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Canada	High Activity Soils	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
	Low Activity Soils	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
	Sandy	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
	Volcanic	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
	Wetland (Aquic)	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
Estonia	High Activity Soils											0.41
	Low Activity Soils											0.53
	Sandy											0.29
	Volcanic											0.00
	Wetland (Aquic)											0.00
European Community	High Activity Soils											NE
	Low Activity Soils											NE
	Sandy											NE
	Volcanic											NE
	Wetland (Aquic)											NE
Finland	High Activity Soils	0.283	0.272	0.271	0.271	0.269	0.270	0.271	0.266	0.265	0.265	0.261
	Low Activity Soils	1.055	1.013	1.010	0.998	1.003	1.006	1.010	0.992	0.989	0.985	0.973
	Sandy	0.849	0.815	0.813	0.804	0.808	0.810	0.813	0.799	0.796	0.792	0.783
	Volcanic	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Wetland (Aquic)	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Greece	High Activity Soils	NA	NA	NA		0.02	0.03	0.03	0.06	0.01	0.04	0.02
	Low Activity Soils	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sandy	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Volcanic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Wetland (Aquic)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hungary	High Activity Soils											4.61
	Low Activity Soils											0.01
	Sandy											0.81
	Volcanic											0.05
	Wetland (Aquic)											2.40
Ireland	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
Poland	High Activity Soils											8.04
	Low Activity Soils											9.13
	Sandy											9.88
	Volcanic											0.00
	Wetland (Aquic)											0.35
Slovakia	High Activity Soils											NO
	Low Activity Soils											NO
	Sandy											NO
	Volcanic											NO
	Wetland (Aquic)											NO
United States	High Activity Soils	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Low Activity Soils	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sandy	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Volcanic	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Wetland (Aquic)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

^a Only Parties reporting data under this category were included in the table.

Percentage of change to previous year

	Detail	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
Canada	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
Estonia	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
European Community	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
Finland	High Activity Soils	-4.0	-0.3	0.0	-0.7	0.3	0.4	-1.8	-0.4	0.0	-1.7	-7.9
	Low Activity Soils	-4.0	-0.3	-1.2	0.5	0.3	0.4	-1.8	-0.4	-0.4	-1.2	-7.9
	Sandy	-4.0	-0.3	-1.2	0.5	0.3	0.4	-1.8	-0.4	-0.4	-1.2	-7.9
	Volcanic											
	Wetland (Aquic)											
Greece	High Activity Soils						50.0	0.0	100.0	-83.3	300.0	-40.6
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
Hungary	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
Ireland	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
Poland	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
Slovakia	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											
United States	High Activity Soils											
	Low Activity Soils											
	Sandy											
	Volcanic											
	Wetland (Aquic)											

Land-use change and forestry

13. CO₂ emissions/removals from soils (5.D)13.1. Trends in CO₂ Net emission/removal (Gigagram)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
Belgium															
Canada	3,525	3,525	3,776	3,137	2,841	2,630	2,391	2,636	5,270	5,261	5,262	5,259	5,269.6	2,391.2	5,269.6
Czech Republic															
Denmark															
Estonia	3,053	3,053	2,569	2,685	761	1,413	1,411	420	-347	-42	646	463	3,052.7	-347.1	3,052.7
European Community	28,887	28,887	29,484	29,758	28,550	27,757	27,619	28,077	29,133	28,432	27,619	28,442	29,758.5	27,618.5	29,758.5
Finland	3,215	3,215	2,815	2,321				1,825	2,065	2,031	2,016	2,046	3,214.9	1,825.1	3,214.9
France	3,139	3,139	2,958	2,782	2,711	2,299	2,427	2,591	2,386	2,320	2,463	3,121	3,139.0	2,299.0	3,139.0
Greece						-169	-253	-253	-508	-84	-339	-202	-84.3	-507.8	-84.3
Hungary ^b	not reported									203.49	203	-41	203.5	-41.2	203.5
Iceland	0														
Ireland	361	361	309	309	294	374	416	467	413	379	360	366	467.4	294.2	467.4
Italy	5,175	5,175	5,883	6,614	6,865	7,672	7,866	7,815	9,645	8,472	8,110	9,415	9,644.7	5,174.8	9,644.7
Latvia	134	134	134	85	92	114	116	104	92	92	92	95	134.4	84.6	134.4
Luxembourg	0														
Netherlands	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
New Zealand	0											492	492.0	492.0	492.0
Norway															
Poland	IE	IE	-2,743	IE	-2,850	IE	-2,787	-2,782	-2,837	-2,876	-3,739	-412	-412.0	-3,739.0	-412.0
Portugal	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE			
Slovakia	-815	-815	-1,003	-924	-1,050	-935	-1,016	-805	-547	-593	-669	-1,146	-546.6	-1,146.1	-546.6
Spain															
Sweden	3,808	3,808	3,772	3,747	3,768	3,795	3,807	3,831	3,812	3,769	3,795	3,794	3,831.0	3,746.9	3,831.0
Switzerland	0											NE			
United Kingdom	16,404	16,404	16,562	16,306	14,912	13,787	13,355	13,626	13,374	13,576	13,228	11,947	16,562.0	11,946.9	16,562.0
United States	-249,975	-249,975	-249,280	-250,488	-274,072	-273,349	-272,839	-272,888	-115,401	-122,210	-122,739	-122,445	-115,400.9	-274,072.4	-115,400.9

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

Land-use change and forestry

13.2. Cultivation of mineral soils (5.D.1)

Trends in CO₂ Net emission/removal (Gigagram)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria															
Belgium															
Canada												NE			
Czech Republic															
Denmark															
Estonia ^b											616.00	433	616.0	432.7	616.0
European Community															
Finland															
France															
Greece							-253	-253	-508	-84	-339	-202	-84.3	-507.8	-84.3
Hungary	Not reported												-45	-45.5	-45.5
Iceland															
Ireland															
Italy ^b										8,634.30	8,374.33	9,415	9,414.8	8,374.3	9,414.8
Latvia															
Luxembourg															
Netherlands															
New Zealand												NE			
Norway															
Poland												681	681.0	681.0	681.0
Portugal															
Slovakia ^b											-669.48	-1,147	-669.5	-1,147.2	-669.5
Spain															
Sweden															
Switzerland															
United Kingdom	14,187	14,187	14,145	13,880	13,231	13,439	12,810	12,843	12,316	12,106	12,198	11,743	14,186.6	11,743.4	14,186.6
United States	-69,300	-69,300	-69,300	-69,300	-92,033	-92,033	-92,033	-92,033	-92,033	-99,733	-99,733	-99,733	-69,300.0	-99,733.3	-69,300.0

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada	7.1	-16.9	-9.4	-7.4	-9.1	10.3	99.9	-0.2	0.0	-0.1	49.2
Czech Republic											
Denmark											
Estonia	-15.9	4.5	-71.7	85.7	-0.2	-70.2	-182.6	-87.8	-1623.1	-28.4	-84.8
European Community	2.1	0.9	-4.1	-2.8	-0.5	1.7	3.8	-2.4	-2.9	3.0	-1.5
Finland	-12.4	-17.6	-100.0				13.1	-1.6	-0.8	1.5	-36.4
France	-6.8	-5.9	-2.6	-15.2	5.6	6.8	-7.9	-2.8	6.2	26.7	-0.6
Greece					50.0	0.0	100.7	-83.4	302.2	-40.5	
Hungary									0.0	-120.2	
Iceland											
Ireland	-14.6	0.2	-4.9	27.1	11.3	12.3	-11.7	-8.1	-5.0	1.8	1.4
Italy	13.7	12.4	3.8	11.8	2.5	-0.6	23.4	-12.2	-4.3	16.1	81.9
Latvia	-0.3	-36.9	9.1	23.1	2.6	-11.0	-11.7	0.0	0.9	3.3	-29.0
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland						-0.2	2.0	1.4	30.0	-89.0	
Portugal											
Slovakia	23.1	-7.9	13.6	-11.0	8.7	-20.8	-32.1	8.4	12.8	71.4	40.7
Spain											
Sweden	-0.9	-0.7	0.6	0.7	0.3	0.6	-0.5	-1.1	0.7	0.0	-0.4
Switzerland											
United Kingdom	1.0	-1.5	-8.5	-7.5	-3.1	2.0	-1.8	1.5	-2.6	-9.7	-27.2
United States	-0.3	0.5	9.4	-0.3	-0.2	0.0	-57.7	5.9	0.4	-0.2	-51.0

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia										-29.8	
European Community											
Finland											
France											
Greece						0.0	100.7	-83.4	302.2	-40.5	
Hungary											
Iceland											
Ireland											
Italy									-3.0	12.4	0.0
Latvia											
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											0.0
Portugal											
Slovakia										71.3	-41.6
Spain											
Sweden											
Switzerland											
United Kingdom	-0.3	-1.9	-4.7	1.6	-4.7	0.3	-4.1	-1.7	0.8	-3.7	-17.2
United States	0.0	0.0	32.8	0.0	0.0	0.0	0.0	8.4	0.0	0.0	43.9

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

Land-use change and forestry

13.3. Cultivation of Organic soils (5.D.2)

Trends in CO₂ Net emission/removal (Gigagram)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria															
Belgium												NE			
Canada															
Czech Republic															
Denmark															
Estonia ^b	0										30.33	30	30.3	30.3	30.3
European Community															
Finland															
France															
Greece						-169							-168.7	-168.7	-168.7
Hungary															
Iceland	0														
Ireland	0														
Italy	0														
Latvia ^b	0									90	90	91	90.9	90.2	90.6
Luxembourg	0														
Netherlands															
New Zealand	0											NE			
Norway															
Poland	0														
Portugal															
Slovakia	0														
Spain															
Sweden	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638	3,638.3	3,638.3	3,638.3
Switzerland	0														
United Kingdom															
United States	22,502	22,502	22,502	22,502	22,930	22,930	22,930	22,930	22,930	22,930	22,930	22,930	22,930.4	22,501.6	22,813.5

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/ or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

13.4. Liming of agricultural soils (5.D.3)

Trends in CO₂ Net emission/removal (Gigagram)

	Base year ^a	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Max	Min	Average
Austria															
Belgium												NE			
Canada															
Czech Republic															
Denmark															
Estonia	0														
European Community															
Finland															
France															
Greece															
Hungary ^b											14.59	4	4.3	4.3	4.3
Iceland	0														
Ireland	361	361	309	309	294	374	416	467	413	379	360	375	467.4	294.2	368.8
Italy	0														
Latvia ^b	0									1.32	2.2	4.5	4.5	2.2	3.3
Luxembourg	0														
Netherlands															
New Zealand	0											492	492.0	492.0	492.0
Norway															
Poland	0														
Portugal															
Slovakia ^b	0									0.44	1	1.1	1.1	1.1	1.1
Spain															
Sweden	170	170	134	109	130	156	169	193	174	131	156	156	192.7	108.7	152.5
Switzerland	0														
United Kingdom	1,430	1,430	1,772	1,810	1,130	1,270	1,529	1,515	1,346	1,027	859	769	1,809.6	768.7	1,314.3
United States	9,490	9,490	10,186	8,977	7,697	8,421	8,931	8,882	8,702	9,593	9,064	9,358	10,185.5	7,697.2	9,027.2

^a In accordance with decisions 9/CP.2 and 11/CP.4, some Parties with economies in transition use base years other than 1990, as follows: Hungary (average of 1985-1987), Poland (1988)

^b Data for the years prior to 2000 presented in this table are taken from the 2001 and/ or 2000 submissions, as available, as the Party did not provide CRF tables for the entire time series in its 2002 inventory submission. Following information provided by the Party in table 8 of the CRF, no recalculations of this source category seem to have been undertaken for the inventory years prior to 2000 since its last inventory submission.

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia										-0.04	0.0
European Community											
Finland											
France											
Greece					-100.0						
Hungary											
Iceland											
Ireland											
Italy											
Latvia									0.0	0.8	
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											
Sweden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland											
United Kingdom											
United States	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Austria											
Belgium											
Canada											
Czech Republic											
Denmark											
Estonia											
European Community											
Finland											
France											
Greece											
Hungary										-70.3	0.0
Iceland											
Ireland	-14.6	0.2	-4.9	27.1	11.3	12.3	-11.7	-8.1	-5.0	4.2	3.7
Italy											
Latvia									63.6	107.9	
Luxembourg											
Netherlands											
New Zealand											
Norway											
Poland											
Portugal											
Slovakia											
Spain											-100.0
Sweden	-21.0	-19.0	19.3	20.6	8.1	14.0	-9.6	-24.9	19.6	-0.1	-8.0
Switzerland											
United Kingdom	23.9	2.1	-37.5	12.3	20.4	-0.9	-11.1	-23.8	-16.3	-10.5	-46.3
United States	7.3	-11.9	-14.3	9.4	6.1	-0.5	-2.0	10.2	-5.5	3.2	-1.4

Land-use change and forestry**14. CO₂ emissions/removals from Others (5.E)****Trend in CO₂ net emission/removal and non-CO₂ gases emissions ases (Gigagrams/yr)^a**

	Specification	Gas	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Canada	Prescribed Burning	CH ₄	46.5	60.1	46.5	42.0	16.0	12.1	13.2	13.2	13.2	16.7	17.3
		N ₂ O	1.9	2.4	1.9	1.7	0.6	0.5	0.5	0.5	0.5	0.7	0.7
		NO _x	9.8	12.6	9.7	8.8	3.4	2.5	2.8	2.8	2.8	3.5	3.6
		CO	757.6	979.0	757.3	684.5	260.7	196.9	215.5	215.5	215.5	272.1	282.5
	Other anthropogenic fires in the Wood Production Forest	CH ₄	10.9	18.5	10.1	22.9	73.3	82.7	21.6	7.3	42.6	14.7	30.1
		N ₂ O	0.9	1.5	0.8	1.8	5.9	6.6	1.7	0.6	3.4	1.2	2.4
		NO _x	6.4	10.8	5.9	13.4	42.8	48.2	12.6	4.3	24.8	8.6	17.6
		CO	319.3	541.6	296.9	672.4	2,151.6	2,424.7	633.9	215.5	1,248.5	431.6	882.9
	Anthropogenic fires outside the Wood Production Forest	CO ₂	4,872.1	4,710.1	6,358.0	7,190.6	2,053.1	11,406.5	2,105.8	1,114.9	8,354.0	13,757.3	6,192.2
		CH ₄	8.9	8.6	11.7	13.2	3.8	20.9	3.9	2.0	15.3	25.2	11.4
		N ₂ O	0.7	0.7	0.9	1.1	0.3	1.7	0.3	0.2	1.2	2.0	0.9
		NO _x	5.2	5.0	6.8	7.7	2.2	12.2	2.3	1.2	8.9	14.7	6.6
Czech Republic	On-site burning of Cleared Forest	CO	262.2	253.5	342.2	387.0	110.5	613.9	113.3	60.0	449.6	740.5	333.3
		CH ₄	2.6						2.3	2.2	2.2	2.6	2.4
		N ₂ O	0.0						0.0	0.0	0.0	0.0	0.0
		NO _x	0.0										0.0
France	Managed forests for CH ₄ , N ₂ O, NMVOC	CO											20.7
		CH ₄	88.6								90.7	90.7	90.7
Iceland	Revegetation	N ₂ O	17.7								18.1	18.1	18.1
		CO ₂	-3.1	-8.1	-14.1	-22.6	-28.6	-34.3	-40.7	-52.7	-62.3	-76.7	-91.7
Spain	Managed forests	NO _x	2.3	2.2	2.2	2.1	2.3	2.3	2.3	2.2	2.1	2.2	2.2
United States	Landfilled Yard Trimmings	CO ₂	-19,105.2	-18,657.3	-18,212.5	-16,146.8	-14,341.5	-12,177.4	-10,178.2	-9,463.3	-8,340.2	-7,319.2	-6,383.2

^a Only Parties reporting data under this category were included in the table.

Percentage change from previous year

	Specification	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000
Canada	Prescribed Burning	29.2	-22.6	-9.6	-61.9	-24.5	9.4	0.0	0.0	26.3	3.8	-62.7
		29.2	-22.6	-9.6	-61.9	-24.5	9.4	-0.2	0.2	26.3	3.8	-62.7
		29.2	-22.6	-9.6	-61.9	-24.5	9.4	0.0	0.0	26.3	3.8	-62.7
		29.2	-22.6	-9.6	-61.9	-24.5	9.4	0.0	0.0	26.3	3.8	-62.7
	Other anthropogenic fires in the Wood Production Forest	69.6	-45.2	126.5	220.0	12.7	-73.9	-66.0	479.2	-65.4	104.5	176.5
		69.6	-45.2	126.5	220.0	12.7	-73.9	-66.0	479.2	-65.4	104.5	176.5
		69.6	-45.2	126.5	220.0	12.7	-73.9	-66.0	479.2	-65.4	104.5	176.5
		69.6	-45.2	126.5	220.0	12.7	-73.9	-66.0	479.2	-65.4	104.5	176.5
	Anthropogenic fires outside the Wood Production Forest	-3.3	35.0	13.1	-71.4	455.6	-81.5	-47.1	649.3	64.7	-55.0	27.1
		-3.3	35.0	13.1	-71.4	455.6	-81.5	-47.1	649.3	64.7	-55.0	27.1
		-3.3	35.0	13.1	-71.4	455.6	-81.5	-47.1	649.3	64.7	-55.0	27.1
		-3.3	35.0	13.1	-71.4	455.6	-81.5	-47.1	649.3	64.7	-55.0	27.1
Czech Republic	On-site burning of Cleared Forest	-100.0						-2.7	0.0	14.8	-8.3	
		-100.0						-2.7	0.0	14.8	-100.0	
		-100.0									-8.3	
		-100.0									-8.3	
France	Managed forests for CH ₄ , N ₂ O, NMVOC	-100.0								0.0	0.0	2.4
		-100.0								0.0	0.0	2.4
Iceland	Revegetation	159.0	74.9	60.2	26.5	19.9	18.4	29.6	18.3	23.0	19.6	2,838.1
Spain	Managed forests	-4.1	-2.2	-3.1	9.3	1.5	0.0	-6.9	-0.8	0.9	0.0	-6.1
United States	Landfilled Yard Trimmings	-2.3	-2.4	-11.3	-11.2	-15.1	-16.4	-7.0	-11.9	-12.2	-12.8	-66.6

5. Waste

Waste - Solid waste disposal on land, waste-water handling and waste incineration (2000)

Activity data		6. Waste														
		6.A Solid waste disposal on land							6.B Waste-water handling			6.C Waste incineration				
		CH ₄							CH ₄			CO ₂ from non-biogenic waste				
		Population (million)		Methods and EF used		Key source	Percentage of national total	Emissions per capita	CH ₄ IEF		Methods and EF used		Key source	Methods and EF used		Key source
CRF	IEA	Methods	EF	Managed	Unmanaged				Methods	EF	Methods	EF		kg/t		
					%	kg	t/t	t/t								
<i>IPCC default EF</i>																
Austria	8	8.1	CS	CS	L/T	5.5/6.4	26	0.06		C	CS		C	CS		0.18 ^a
Belgium		10.3			L	1.6	11		CS,M	C,CS		CS	CS			
Bulgaria																
Canada	31	30.8	M	CS	L/T	3.1/5.0	35	NA	NA	CS	CS		CS	CS		
Czech Republic	10	10.3	T1, T3	CS	L	1.1	7	0.03		D	D, CS					3,500.0
Denmark		5.3	CS/M	CS/M	L	1.7	11	0.04		NE			IE			
Estonia					L	4.9										
European Community			CS,D,M,T1	CS,D,T2	L	2.4		NE	NE	NE	NE		NE	NE		NE
Finland	5	5.2	D	D/CS	L/T	2.2/14.5	15	0.04		D	D/CS		NO	NO		
France	61	60.4	CS/ T2	CS/ T2	L/T	2.9/1.7	12	0.02		C	CS		C	CS/ PS	L	0.40
Greece	11	10.6	T1	D	L/T	3.7/5.5	22	0.06		T1	D					
Hungary	10	10.0	CS	CS, D	L	2.3	9	0.03		D, CS	CS, D	L	CS	CS		1,681.2
Iceland		0.3	CS	CS	L	1.6	8	0.01		D	CS		?	?		
Ireland	4	3.8	D	CS, D	L	2.3	19	0.07		NA	NA		NA	NA		
Italy	58	57.7	D, T2	D, CS	L	1.7	7.8	0.02		D	D, CS		D	CS		1,153.4
Latvia	2		T1	D	L	11.6		0.50	0.50	T1	D	L				
Luxembourg		0.4					6									
Netherlands	16	15.9	M, CS	CS	L/T	3.9/6.7	25	0.08		CS	CS		NO (IE)			
New Zealand	4	3.8	T2	CS	L	2.7	26	0.03	NE	D/CS	D/CS					
Norway		4.5	M3)	CS	L/T	7.1/1.1	42	0.13								1,849,822.2
Poland	39	38.7	T1	D/CS	L	4.4	21	0.08		T1	D/CS					NE
Portugal	10	10.0	D	D (CS)	L/T	7.3/5.6	30	0.01	1.21	D	D (CS)	L	MB			1,105.5
Slovakia	5		IPCC	IPCC	L	2.1				IPCC	IPCC	L	IE	IE		
Spain	40	39.9	T2	CS,T2	L/T	2.6/3.4	12	0.04	0.06	D	CS,D	L	C	CS,C		
Sweden		8.9	T2	D, CS	L/T	2.9/6.1	11	0.07								
Switzerland	7	7.2	CS	CS	L	2.4	8			CS	CS		CS	CS	L	2.40
United Kingdom	59.8	59.8	M	CS	L/T	2.1/2.2	11	0.01		M	CS		T2	CS		410.2
United States ^b	275.0 ^b	275.0	M	M	L/T	2.9/5.4		0.05	NA	D	D		CS	CS		IE

Notes

MB: mass balance (used by Portugal).

^a This value of IEF is provided for incineration of corpses. Austria provided two more IEFs in this category: IEF for incineration of municipal solid waste and IEF for waste oil.

^b This population data were provided in CRF Table 6.B. In Table 6.A the population indicated as 285.2 mln

Waste - Solid waste disposal on land**Trends in emissions per capita 1990 to 2000 (kg CH₄ per capita)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	33.55	32.54	31.65	30.59	29.76	28.96	28.33	27.34	26.08	26.03	25.97
Belgium	15.23	15.37	15.48	14.43	14.93	14.65	13.89	13.68	12.95	12.00	11.30
Canada	31.85	32.54	32.86	33.27	33.26	33.03	32.78	33.21	33.66	34.53	34.97
Czech Republic	9.04						9.20	7.85	7.95	7.38	7.39
Denmark	12.14	12.37	12.54	12.48	12.59	12.01	11.82	11.19	10.45	9.93	10.68
Estonia											33.20
Finland	34.79	32.19	29.29	25.55	22.15	21.47	19.48	17.65	15.89	14.94	15.18
France	14.62	15.52	16.37	17.06	17.75	18.32	18.41	15.18	14.46	13.52	12.42
Greece	13.17	13.35	14.05	14.72	15.62	16.37	17.13	17.81	18.99	20.33	21.50
Hungary		6.60	6.58	6.62	6.67	6.66	6.69	6.71	7.16	10.14	9.20
Iceland											7.91
Ireland	24.17	24.53	24.7	24.88	25.09	25.23	25.28	23.94	20.49	19.31	19.36
Italy	8.00	8.13	7.30	7.35	7.61	7.94	8.01	8.01	7.86	7.71	7.78
Latvia	8.16	8.16	9.52	9.8	10.12	10.5	10.8	11.02	11.58	22.4	24.47
Luxembourg											6.02
Netherlands	37.61	36.91	35.58	34.17	32.82	31.04	30.65	29.67	28.31	27.09	25.36
New Zealand	36.84	36.12	33.72	33.71	32.98	31.59	31.10	26.75	26.66	26.19	25.74
Norway	42.84	42.84	42.84	42.84	42.84	42.84	42.84	42.84	42.09	41.92	41.53
Poland	20.12	19.22	22.01	19.13	19.75	19.67	14.56	15.22	20.28	21.34	20.95
Portugal	26.70	27.13	27.50	27.84	28.14	28.26	28.59	28.90	28.71	29.09	29.62
Slovakia	9.49	9.52	9.47	9.44	9.40	9.37	9.47	11.07	9.46	8.49	8.62
Spain	6.61	7.05	7.74	8.29	8.86	9.51	10.10	10.74	11.21	11.57	12.04
Sweden	14.20	14.36	14.32	13.74	13.05	12.94	12.76	12.57	12.29	11.54	10.92
Switzerland	9.97	9.78	9.61	9.46	9.32	9.20	9.02	8.86	8.71	8.52	8.34
United Kingdom	19.41	18.68	17.77	16.91	16.18	15.56	14.83	14.00	13.07	12.03	11.04
United States	40.65	40.17	40.24	40.19	39.79	39.21	37.93	36.66	35.37	35.43	35.18
Average	21.33	21.05	20.96	20.57	20.39	20.20	19.29	18.73	18.42	18.76	18.34
Minimum	6.61	6.60	6.58	6.62	6.67	6.66	6.69	6.71	7.16	7.38	6.02
Maximum	42.84	42.84	42.84	42.84	42.84	42.84	42.84	42.84	42.09	41.92	41.53

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000/ to1990
Austria	-3.1	-2.8	-3.5	-2.8	-2.7	-2.2	-3.6	-4.8	-0.2	-0.2	-22.6
Belgium	0.9	0.7	-7.3	3.4	-1.9	-5.4	-1.6	-5.6	-7.9	-6.2	-25.8
Canada	2.1	1.0	1.3	0.0	-0.7	-0.8	1.3	1.3	2.5	1.3	9.8
Czech Republic							-17.2	1.3	-7.8	0.2	-18.3
Denmark	1.8	1.4	-0.5	0.9	-4.9	-1.6	-5.6	-7.1	-5.2	7.0	-12.1
Estonia											
Finland	-8.1	-9.9	-14.7	-15.3	-3.2	-10.2	-10.4	-11.1	-6.4	1.6	-56.4
France	5.8	5.2	4.0	3.9	3.1	0.5	-21.3	-5.0	-6.9	-8.8	-15.0
Greece	1.3	5.0	4.5	5.8	4.6	4.4	3.8	6.2	6.6	5.4	63.2
Hungary		-0.3	0.6	0.7	-0.2	0.4	0.3	6.3	29.4	-10.2	
Iceland											
Ireland	1.5	0.7	0.7	0.8	0.6	0.2	-5.6	-16.8	-6.1	0.3	-19.9
Italy	1.6	-11.4	0.7	3.4	4.2	0.9	0.0	-1.9	-1.9	0.9	-2.8
Latvia	0.0	14.3	2.9	3.2	3.6	2.8	2.0	4.8	48.3	8.5	199.9
Luxembourg											
Netherlands	-1.9	-3.7	-4.1	-4.1	-5.8	-1.3	-3.3	-4.8	-4.5	-6.8	-32.6
New Zealand	-2.0	-7.1	0.0	-2.2	-4.4	-1.6	-16.3	-0.3	-1.8	-1.7	-30.1
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.8	-0.4	-0.9	-3.1
Poland	-4.7	12.7	-15.1	3.1	-0.4	-35.1	4.3	25.0	5.0	-1.9	4.1
Portugal	1.6	1.4	1.2	1.1	0.4	1.1	1.1	-0.7	1.3	1.8	11.0
Slovakia	0.3	-0.5	-0.3	-0.4	-0.3	1.0	14.5	-17.1	-11.4	1.5	-9.2
Spain	6.2	8.9	6.7	6.4	6.8	5.9	6.0	4.2	3.1	4.0	82.3
Sweden	1.1	-0.3	-4.2	-5.3	-0.8	-1.4	-1.5	-2.3	-6.4	-5.7	-23.1
Switzerland	-1.9	-1.7	-1.7	-1.4	-1.3	-2.0	-1.8	-1.8	-2.2	-2.2	-16.4
United Kingdom	-3.9	-5.1	-5.1	-4.5	-4.0	-4.9	-5.9	-7.1	-8.6	-8.9	-43.1
United States	-1.2	0.2	-0.1	-1.0	-1.5	-3.4	-3.5	-3.6	0.1	-0.7	-13.5

Waste - Waste-water handling**Trends in emissions per capita 1990 to 2000 (kg CH₄ per capita)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
Belgium	0.03	0.04	0.04	0.04	0.04	0.03	0.02		0.03	0.03	0.03
Canada	0.61	0.61	0.61	0.61	0.61	0.62	0.62	0.62	0.62	0.62	0.62
Czech Republic	3.20						2.57	2.62	2.99	2.66	2.68
Denmark											NE
Estonia											10.40
Finland	0.34	0.31	0.30	0.31	0.32	0.32	0.31	0.30	0.31	0.31	0.31
France	0.21	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Greece	4.40	4.27	4.13	3.93	3.86	3.77	3.67	3.54	3.38	3.20	2.49
Hungary		18.22	18.22	18.23	18.23	18.23	18.23	18.23	2.52	5.29	5.28
Iceland											0.06
Ireland											NE
Italy	1.76	1.74	1.75	1.70	1.76	1.81	1.82	1.85	1.87	1.91	1.94
Latvia											1.84
Luxembourg	0.50										0.50
Netherlands	0.44	0.42	0.41	0.41	0.33	0.09	0.04	0.08	0.24	0.16	0.16
New Zealand	2.22	2.16	2.14	2.13	2.11	2.09	2.06	2.04	2.04	2.04	2.03
Norway	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Poland	3.66	3.12	2.51	2.53	2.44	2.30	2.32	2.30	2.23	2.08	1.97
Portugal	1.94	2.03	2.12	2.20	2.20	2.21	2.22	2.22	2.23	2.24	2.25
Slovakia	0.61	0.69	0.85	0.84	0.86	0.91	0.89	0.89	0.91	0.98	1.03
Spain	1.86	1.93	1.97	2.04	2.14	2.21	2.28	2.41	2.52	2.61	2.67
Sweden											NE
Switzerland	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.22
United Kingdom	0.58	0.54	0.60	0.59	0.62	0.59	0.60	0.61	0.63	0.61	0.62
United States	4.62	4.64	4.70	4.72	4.79	4.85	4.85	4.89	4.90	4.94	4.96
Average	1.53	2.39	2.37	2.37	2.37	2.35	2.36	2.50	1.56	1.68	1.92
Minimum	0.03	0.04	0.04	0.04	0.04	0.03	0.02	0.08	0.03	0.03	0.03
Maximum	4.62	18.22	18.22	18.23	18.23	18.23	18.23	18.23	4.90	5.29	10.40

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000/to 1990
Austria	0.1	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
Belgium	32.5	-6.5	-0.4	-0.3	-49.9	-0.2			-0.6	-0.3	-2.7
Canada	0.0	0.1	0.2	0.2	0.2	0.2	0.1	0.0	0.0	-0.1	0.9
Czech Republic							2.1	12.2	-12.2	0.6	-16.2
Denmark											
Estonia											
Finland	-9.6	-5.3	3.7	3.3	-0.4	-2.0	-2.7	1.9	0.5	-1.4	-10.7
France	0.6	0.6	0.9	0.3	0.3	0.3	0.5	0.5	0.6	0.5	5.4
Greece	-2.9	-3.4	-5.2	-1.9	-2.3	-2.6	-3.7	-4.6	-5.8	-28.5	-43.4
Hungary		0.0	0.1	0.0	0.0	0.0	0.0	-623.4	52.4	-0.2	
Iceland											
Ireland											
Italy	-1.1	0.6	-2.9	3.4	2.8	0.5	1.6	1.1	2.1	1.5	10.2
Latvia											
Luxembourg											0.1
Netherlands	-4.8	-0.8	-0.7	-24.3	-251.2	-157.2	55.8	65.5	-51.4	-0.7	-63.9
New Zealand	-2.8	-0.7	-0.7	-0.9	-1.0	-1.2	-0.9	-0.4	0.0	-0.1	-8.3
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3
Poland	-17.4	-24.2	0.7	-3.6	-6.4	1.0	-0.7	-3.2	-7.4	-5.4	-46.2
Portugal	4.5	4.1	3.8	0.1	0.2	0.5	0.2	0.1	0.5	0.4	15.9
Slovakia	12.4	18.9	-1.4	2.5	5.1	-2.2	-0.1	2.7	6.9	5.0	70.5
Spain	3.5	2.4	3.1	4.7	3.4	2.9	5.6	4.2	3.4	2.3	43.6
Sweden											
Switzerland	0.9	0.3	1.2	1.3	0.7	1.6	1.7	1.6	1.1	-1.3	9.6
United Kingdom	-7.2	9.7	-1.2	3.9	-5.1	2.3	2.3	2.2	-3.6	1.9	6.4
United States	0.3	1.4	0.4	1.4	1.2	0.0	0.9	0.2	0.9	0.4	7.4

Waste - Waste-water handling**Trends in emissions per capita 1990 to 2000 (kg N₂O per capita)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Austria	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.010	0.009	0.009
Belgium	0.023								0.033	0.033	0.033
Canada	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101
Czech Republic	0.054						0.058	0.058	0.058	0.064	0.064
Denmark											
Estonia											
Finland	0.072	0.069	0.066	0.063	0.063	0.062	0.059	0.058	0.055	0.052	0.052
France	0.034	0.034	0.034	0.035	0.035	0.035	0.035	0.035	0.035	0.036	0.036
Greece											
Hungary											
Iceland											
Ireland											NE
Italy	0.056	0.0561	0.0563	0.0562	0.0564	0.0566	0.0567	0.0569	0.057	0.0572	0.0574
Latvia											
Luxembourg											0.040
Netherlands	0.027	0.033	0.033	0.033	0.033	0.033	0.032	0.036	0.034	0.036	0.036
New Zealand	0.140	0.135	0.137	0.135	0.133	0.134	0.132	0.130	0.132	0.131	0.131
Norway	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.087	0.087	0.077
Poland											0.067
Portugal	0.138	0.144	0.150	0.156	0.156	0.156	0.157	0.157	0.157	0.158	0.159
Slovakia	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Spain	0.083	0.084	0.086	0.087	0.087	0.086	0.087	0.086	0.087	0.087	0.087
Sweden											NE
Switzerland	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.010	0.010	0.010	0.010
United Kingdom	0.058	0.057	0.058	0.057	0.057	0.058	0.060	0.059	0.059	0.058	0.061
United States	0.091	0.092	0.093	0.093	0.096	0.094	0.095	0.096	0.096	0.099	0.099
Average	0.061	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.064	0.064	0.063
Minimum	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.009	0.010	0.009	0.009
Maximum	0.140	0.144	0.150	0.156	0.156	0.156	0.157	0.157	0.157	0.158	0.159

Percentage change from previous year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Percentage change from 1990 to 2000/to 1990
Austria	0.9	0.7	-1.4	1.0	1.4	1.6	-0.8	2.8	-2.6	0.0	3.7
Belgium									0.0	-0.3	40.9
Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Republic							0.0	0.0	9.0	0.0	19.7
Denmark											
Estonia											
Finland	-4.6	-4.3	-4.4	-0.5	-1.3	-4.3	-2.4	-6.1	-4.9	0.6	-27.1
France	0.6	0.6	0.9	0.3	0.3	0.3	0.5	0.5	0.6	0.5	5.4
Greece											
Hungary											
Iceland											
Ireland											
Italy	0.2	0.4	-0.2	0.4	0.4	0.2	0.4	0.2	0.3	0.3	2.5
Latvia											
Luxembourg											
Netherlands	18.4	-0.8	-0.7	-0.6	0.3	-3.3	13.5	-8.1	6.8	-0.7	32.7
New Zealand	-3.4	1.0	-1.1	-1.4	0.6	-1.6	-1.3	1.2	-0.5	-0.5	-6.6
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.4	-12.3	11.9
Poland											
Portugal	4.3	3.9	3.6	0.1	0.2	0.5	0.2	0.1	0.5	0.3	14.8
Slovakia	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Spain	1.3	1.6	1.0	0.0	-0.1	0.2	-0.3	0.6	0.1	0.3	4.7
Sweden											
Switzerland	0.3	0.5	0.6	0.7	0.8	2.5	1.2	1.1	2.3	-2.0	8.5
United Kingdom	-1.3	0.8	-0.8	0.3	0.8	3.1	-0.5	-0.6	-1.8	4.7	5.1
United States	1.3	0.7	0.4	2.7	-1.6	0.4	1.0	0.8	2.4	0.3	9.0