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National communications and greenhouse gas inventory data from Parties included in Annex I to the Convention
Report on national greenhouse gas inventory data from Parties included in Annex I to the Convention for the period 1990–2006

National greenhouse gas inventory data for the period 1990–2006

Note by the secretariat*

Summary

In 2008, all 41 Parties included in Annex I to the Convention (Annex I Parties) submitted their national greenhouse gas (GHG) inventory common reporting format tables, 28 of them by the deadline of 15 April; 40 Parties provided a national inventory report, 26 of them by the deadline.

Between 1990 and 2006 total aggregate GHG emissions excluding emissions/removals from land use, land-use change and forestry (LULUCF) for all Annex I Parties taken together decreased by 4.7 per cent; GHG emissions/removals including LULUCF decreased by 5.5 per cent.
For Annex I Parties with economies in transition (Annex I EIT Parties), GHG emissions excluding LULUCF decreased by 37.0 per cent; GHG emissions including LULUCF decreased by 35.0 per cent. For Annex I non-EIT Parties, GHG emissions excluding LULUCF increased by 9.9 per cent, and GHG emissions including LULUCF increased by 9.1 per cent.

* This document was submitted after the due date owing to the need for internal consultations.

CONTENTS

I. Introduction

A. Mandate

1. The Conference of the Parties (COP), by its decisions 9/CP.2, 3/CP.5 and 18/CP.8, requested that Parties included in Annex I to the Convention (Annex I Parties) submit national inventory data on greenhouse gas (GHG) emissions by sources and removals by sinks by 15 April each year. Under the UNFCCC "Guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention" adopted by the COP in decision 19/CP.8, the secretariat is requested[1] to prepare annually a report on GHG inventory data submitted by Annex I Parties for consideration by the COP and the Subsidiary Body for Implementation (SBI).

B. Scope of the note

2. Information provided in this document is based on the national GHG inventories from Annex I Parties received by the secretariat by 15 September 2008. This document shows the status of reporting of GHG inventories by Annex I Parties in 2008 (chapter II), and provides a summary of the latest available data on GHG emissions and removals from Annex I Parties for the period 1990–2006 (chapter III).

3. Data are provided for carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O), as well as for hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6) taken together. Data are also provided for total[2] aggregate[3] GHG emissions, both including and excluding net GHG emissions/removals from land use, land-use change and forestry (LULUCF).

C. Possible action by the Subsidiary Body for Implementation and the Conference of the Parties

4. The SBI may wish to take note of the information contained in this document and seek further guidance from the COP, as appropriate.

II. Status of reporting

A. Timeliness and completeness of submissions

5. In accordance with the UNFCCC reporting guidelines on annual inventories,[4] Annex I Parties are required to submit annually a national inventory report (NIR) and common reporting format (CRF) tables containing data from the base year up to two years before the year of submission, that is, from 1990 up to 2006 in the 2008 submission.

6. Table 1 presents the status of reporting of GHG inventory submissions for 2008. All 41 Annex I Parties provided CRF tables for all years from 1990[5] to 2006, but only 40 of them provided an NIR. Twenty-eight sets of CRF tables and 26 NIRs were received by the due date of 15 April.

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[1] FCCC/CP/2002/8, annex II, paragraphs 42 and 43.

[2] The term 'total' implies that emissions from sectors of the common reporting format are summed; the inclusion of land use, land-use change and forestry into the sum is indicated separately.

[3] The term 'aggregate' implies that GHG emissions/removals are calculated as a weighted sum of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6; the sum is made using the global warming potentials agreed under the Convention (1 for CO_2, 21 for CH_4, 310 for N_2O, and specific values for individual HFCs, PFCs and SF_6).

[4] "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories.

[5] The Parties that may use a base year other than 1990, as stipulated in decisions 9/CP.2 and 11/CP.4, have also provided data for their respective base years. These Parties and their base years are Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986).

Table 1. Greenhouse gas inventory submissions from Annex I Parties in 2008

Party	CRF submission date[a]	Years reported	Submission of NIR
Australia	***13 June 2008***	1990–2006	✓
Austria	15 April 2008	1990–2006	✓
Belarus	*14 May 2008*	1990–2006	✓
Belgium	15 April 2008	1990–2006	✓
Bulgaria	15 April 2008	1988–2006	✓
Canada	*22 May 2008*	1990–2006	✓
Croatia	*24 May 2008*	1990–2006	✓
Czech Republic	9 April 2008	1990–2006	✓
Denmark	15 April 2008	1990–2006	✓
Estonia	15 April 2008	1990–2006	✓
European Community	15 April 2008	1990–2006	✓
Finland	11 April 2008	1990–2006	✓
France	10 April 2008	1990–2006	✓
Germany	15 April 2008	1990–2006	✓
Greece	7 April 2008	1990–2006	✓
Hungary	14 April 2008	Average of 1985–1987, 1985–2006	✓
Iceland	*28 April 2008*	1990–2006	✓
Ireland	11 April 2008	1990–2006	✓
Italy	*16 April 2008*	1990–2006	✓
Japan	*16 May 2008*	1990–2006	✓
Latvia	15 April 2008	1990–2006	✓
Liechtenstein	29 February 2008	1990–2006	✓
Lithuania	11 April 2008	1990–2006	✓
Luxembourg	*23 April 2008*	1990–2006	✓
Monaco	*7 May 2008*	1990–2006	✓
Netherlands	15 April 2008	1990–2006	✓
New Zealand	14 April 2008	1990–2006	✓
Norway	15 April 2008	1990–2006	✓
Poland	15 April 2008	1988–2006	✓
Portugal	15 April 2008	1990–2006	✓
Romania	15 April 2008	1989–2006	✓
Russian Federation	*19 May 2008*	1990–2006	✓
Slovakia	15 April 2008	1990–2006	✓
Slovenia	15 April 2008	1986–2006	✓
Spain	*16 April 2008*	1990–2006	✓
Sweden	14 April 2008	1990–2006	✓
Switzerland	15 April 2008	1990–2006	✓
Turkey	***21 August 2008***	1990–2006	–
Ukraine	*21 May 2008*	1990–2006	✓
United Kingdom of Great Britain and Northern Ireland	15 April 2008	1990–2006	✓
United States of America	10 April 2008	1990–2006	✓

Abbreviations: CRF = common reporting format, NIR = national inventory report.

[a] The date of submission of the NIR may be different. Dates after the submission deadline of 15 April 2008 are shown in italics; dates after 27 May 2008 (six weeks after the submission deadline) are shown in bold.

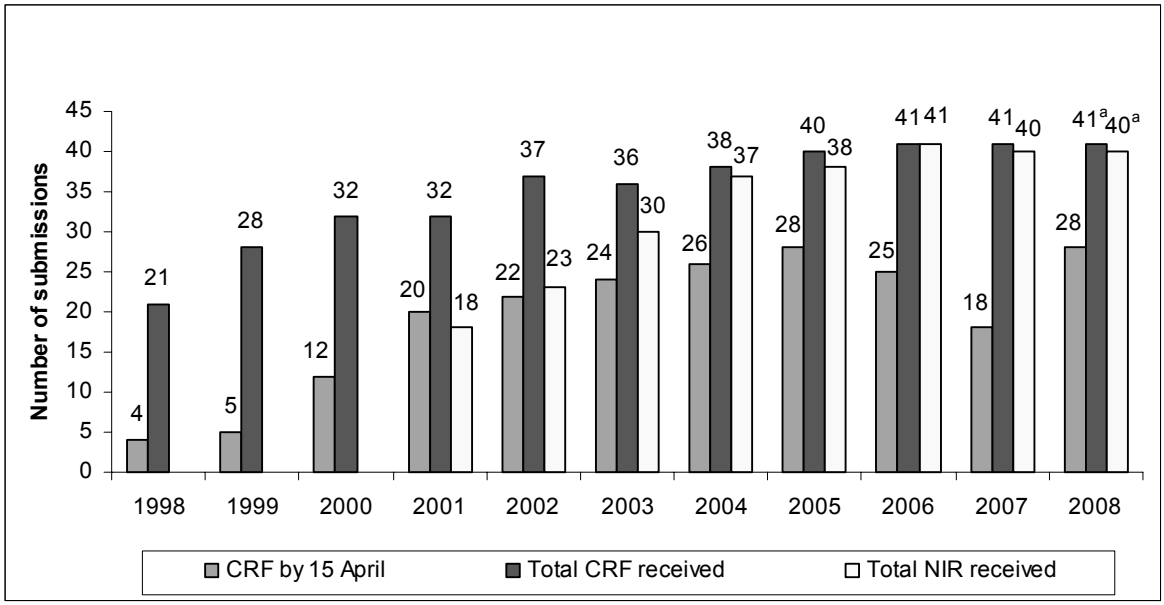
7. After the initial submissions, seven Parties sent a revised version of their CRF tables to include improvements made to the GHG estimates, and five Parties resubmitted their NIR.

8. As they did in 2007, all Parties used the CRF Reporter software for the submission of their inventories in 2008.

9. Two Parties (Australia and Turkey) submitted their CRF tables more than six weeks late and three Parties (Australia, Luxembourg and Monaco) were more than six weeks late in submitting their NIR. At the time of preparation of this document, Turkey had not yet submitted its NIR.

10. Figure 1 displays the number of national inventory submissions from Annex I Parties since 1998. It shows an almost continuous increase in the number of submissions. Since 2006, all Annex I Parties have submitted their CRF tables annually.

Figure 1. Greenhouse gas inventory submissions from Annex I Parties, 1998–2008



Abbreviations: CRF = common reporting format, NIR = national inventory report.
[a] As at 15 September 2008.

B. Recalculations

11. Parties conduct recalculations, when necessary, in order to improve the quality of emission estimates. Thirty-nine Parties performed recalculations in 2008 reflecting changes in activity data, emission factors and methodologies used.

12. Many Parties conducted recalculations for all GHGs and sectors, as well as for all years in order to ensure consistency in the time series. The impact of recalculation on GHG emissions in the base year varied widely (table 2). For total aggregate emissions excluding LULUCF, the change was less than 1 per cent for 28 Parties and more than 3 per cent for 3 Parties. For total aggregate GHG emissions including LULUCF, the change was less than 1 per cent for 17 Parties and more than 3 per cent for 13 Parties. For 2 Parties (Australia and Lithuania), the recalculations had no impact on the total of GHG emissions excluding LULUCF in the base year.

III. Overview of emission trends and sources in Annex I Parties

A. Total aggregate greenhouse gas emissions

13. From 1990[6] to 2006, the total aggregate GHG emissions excluding emissions/removals from LULUCF for all Annex I Parties decreased by 4.7 per cent, from 18,913.5 to 18,019.6 Tg[7] CO_2 equivalent (figures 2 and 3). Total aggregate emissions including LULUCF decreased by 5.5 per cent from 17,694.4 to 16,724.3 Tg CO_2 equivalent. Between 2000 and 2006, GHG emissions from Annex I Parties increased by 2.3 per cent (excluding LULUCF) and by 1.0 per cent (including LULUCF). From 2005 to 2006, emissions excluding LULUCF decreased by 0.1 per cent and emissions including LULUCF increased by 0.4 per cent.

[6] Unless otherwise specified, base year data are used in totals instead of 1990 data (in accordance with decisions 9/CP.2 and 11/CP.4) for Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986).
[7] One teragram (Tg) equals one million tonnes.

Table 2. Inventory recalculations by Annex I Parties in 2008

Party	Recalculations conducted in 2008	Impact on base year GHG emissions excluding LULUCF (%)	Impact on base year GHG emissions including LULUCF (%)
Australia	✓	–	Less than ±0.001
Austria	✓	0.15	–3.46
Belarus	–	–[b]	–
Belgium	✓	–0.85	–0.86
Bulgaria	✓	0.001	–16.02
Canada	✓	–0.29	–5.15
Croatia	✓	3.09[a]	12.16
Czech Republic	✓	–1.00	–2.16
Denmark	✓	–0.14	–0.14
Estonia	✓	–2.42	8.89
European Community	✓	–0.33	–1.48
Finland	✓	–0.08	5.83
France	✓	–0.16	–1.33
Germany	✓	–0.01	–0.01
Greece	✓	–3.74	–3.86
Hungary	✓	0.14	–0.73
Iceland	✓	1.69	–10.24
Ireland	✓	0.27	0.39
Italy	✓	0.01	0.17
Japan	✓	0.001	0.02
Latvia	✓	0.05	–0.06
Liechtenstein	✓	–0.39	–0.84
Lithuania	✓	–[b]	–0.81
Luxembourg	✓	0.14	0.15
Monaco	✓	0.27	0.27
Netherlands	✓	–0.62	–0.48
New Zealand	✓	0.08	–3.45
Norway	✓	–0.11	2.79
Poland	✓	–4.00	–4.23
Portugal	✓	–1.36	–4.86
Romania	✓	–0.20	–0.23
Russian Federation	✓	0.12	0.11
Slovakia	✓	2.26	2.34
Slovenia	✓	0.13	0.14
Spain	✓	0.11	6.60
Sweden	✓	–0.20	–80.81
Switzerland	✓	0.10	–1.60
Turkey	–	–	–
Ukraine	✓	–0.20	–1.98
United Kingdom of Great Britain and Northern Ireland	✓	0.07	0.08
United States of America	✓	–1.51	–2.15

Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

[a] Due to a technical error, there is a discrepancy in the values for the impact on the base year GHG emissions excluding LULUCF for Croatia presented in this report and in the relevant CRF table.

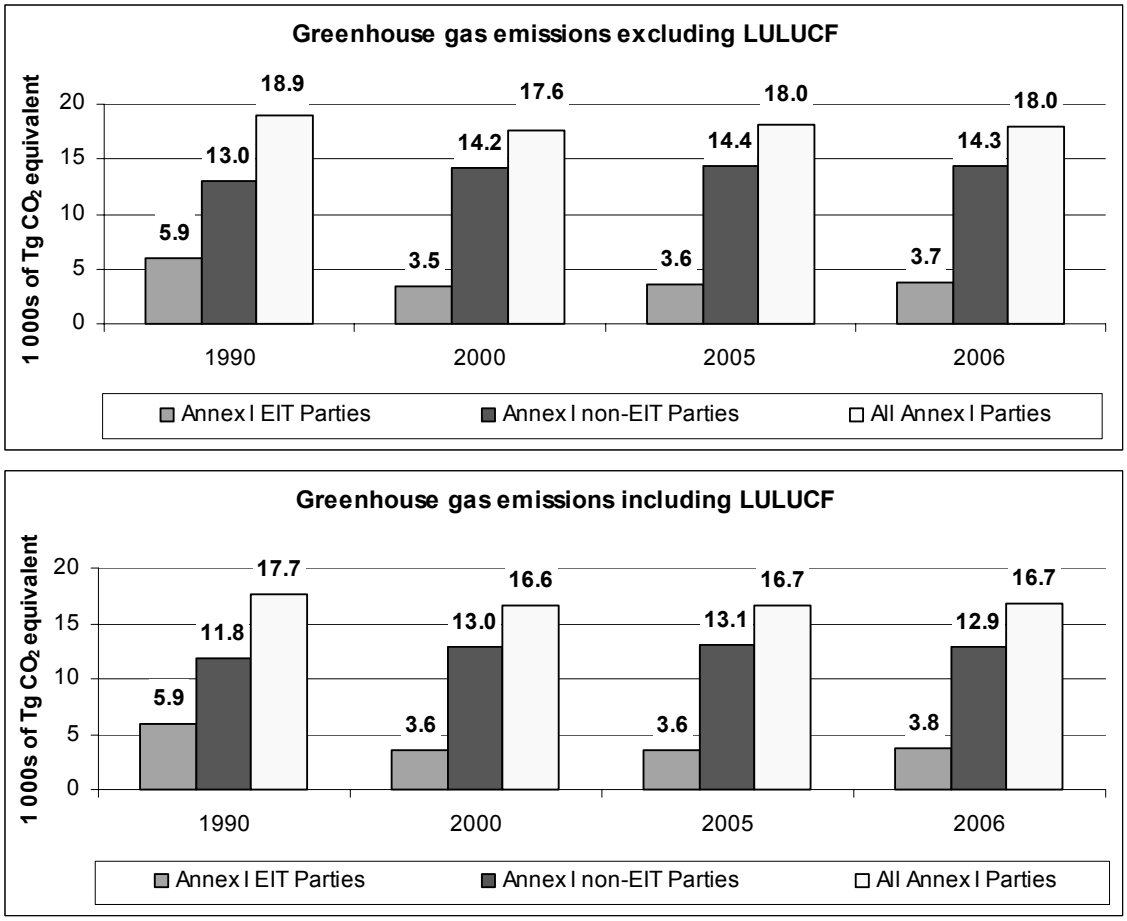
[b] Recalculations had no impact on the total of GHG emissions excluding LULUCF in the base year.

14. For Annex I Parties with economies in transition (Annex I EIT Parties), total aggregate emissions excluding LULUCF decreased by 37.0 per cent, from 5,907.8 Tg CO_2 equivalent in 1990 to 3,723.8 Tg CO_2 equivalent in 2006; GHG emissions including LULUCF decreased by 35.0 per cent over the same period. Between 2000 and 2006, GHG emissions from these Parties increased by 7.4 per cent excluding LULUCF and by 5.2 per cent including LULUCF. From 2005 to 2006, emissions excluding LULUCF increased by 3.1 per cent and emissions including LULUCF by 6.5 per cent.

15. For the Annex I non-EIT Parties, total aggregate emissions excluding LULUCF increased from 13,005.8 Tg CO_2 equivalent in 1990 to 14,295.8 Tg CO_2 equivalent in 2006, an increase of 9.9 per cent; the increase in GHG emissions including LULUCF was 9.1 per cent. Between 2000 and 2006, GHG emissions from these Parties excluding LULUCF increased by 1.0 per cent and emissions including

LULUCF decreased by 0.2 per cent. From 2005 to 2006, the decrease was by 0.9 per cent excluding LULUCF and by 1.2 including LULUCF.

Figure 2. Greenhouse gas emissions from Annex I Parties, 1990, 2000, 2005 and 2006

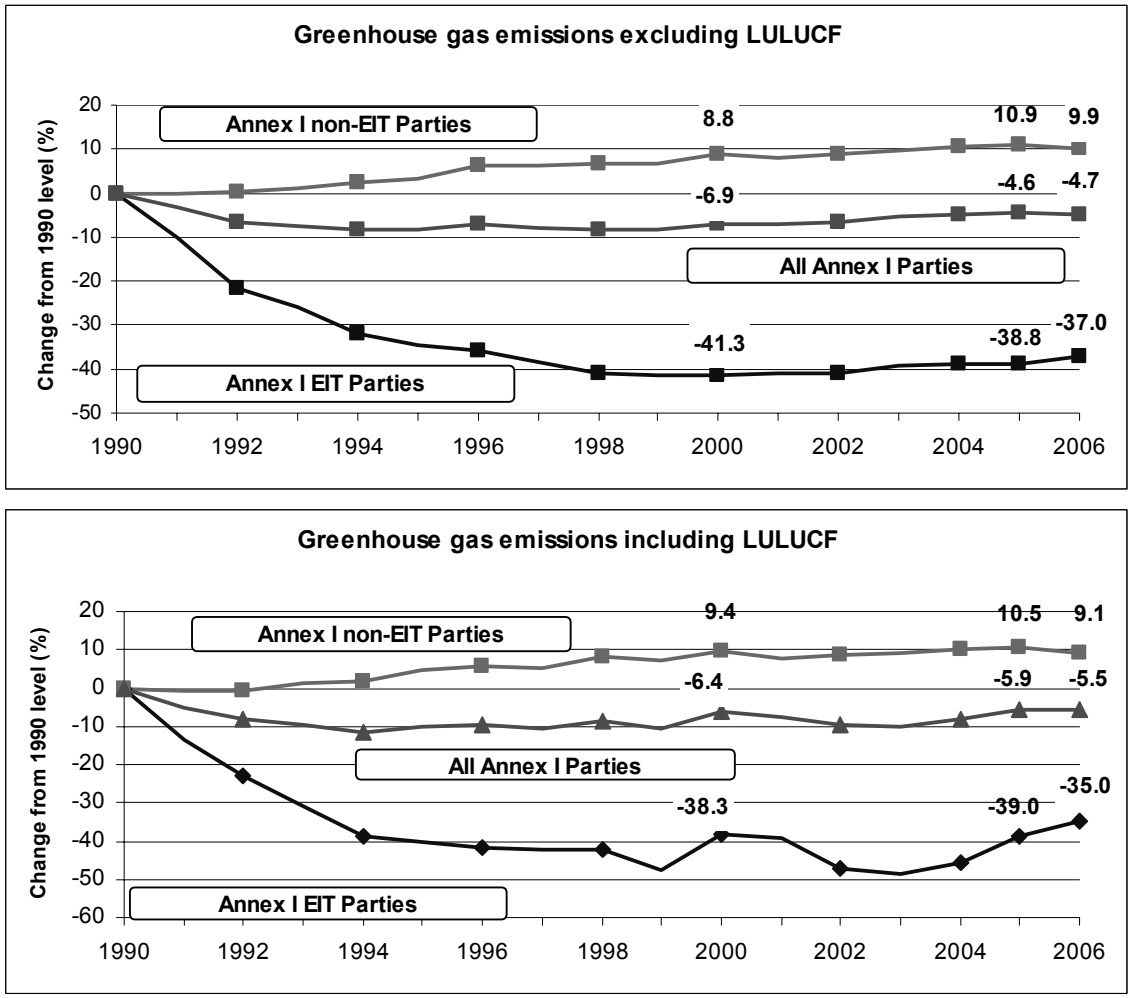


Abbreviations: EIT Parties = Parties with economies in transition, LULUCF = land use, land-use change and forestry.

16. The changes in total aggregate GHG emissions from 1990 to 2006 varied considerably among countries (figure 4). Latvia has the largest decrease in emissions: 56.1 per cent for emissions excluding LULUCF and 207.4 per cent for emissions including LULUCF. On the other hand, Turkey had the greatest increase in emissions excluding LULUCF (95.1 per cent), and Sweden in emissions including LULUCF (110.6 per cent[8]).

[8] The notable increase in total GHG emissions including LULUCF for Sweden is mainly due to the recalculation of the base year estimate which led to an increase in the removals by LULUCF, coupled with the decrease in total GHG emissions excluding LULUCF from 2005 to 2006. In its communication to the secretariat of 23 September 2008, Sweden indicated that it has detected an error in the figures reported for the LULUCF sector in 2008 and that it intends to correct the error in future annual submissions.

Figure 3. Changes in greenhouse gas emissions from Annex I Parties, 1990–2006



Abbreviations: EIT Parties = Parties with economies in transition, LULUCF = land use, land-use change and forestry.

B. Greenhouse gas emissions by gas

17. Figure 5 illustrates the share of each GHG in total emissions excluding LULUCF for 1990 and 2006. For both years, CO_2 made the greatest contribution to total emissions (79.6 per cent in 1990 and 82.5 per cent in 2006).

18. Figure 5 also illustrates the changes in total emissions of each GHG from 1990 to 2006. Emissions of CO_2, CH_4 and N_2O decreased whereas emissions of HFCs, PFCs and SF_6 taken together increased by 10.1 per cent.

19. From 2005 to 2006, CO_2 and N_2O emissions decreased by 0.1 and 1.6 per cent, respectively, whereas CH_4 emissions increased by 0.7 per cent. Emissions of HFCs, PFCs and SF_6 taken together increased by 1.8 per cent.

Figure 4. Changes in total aggregate emissions of individual Annex I Parties, 1990–2006

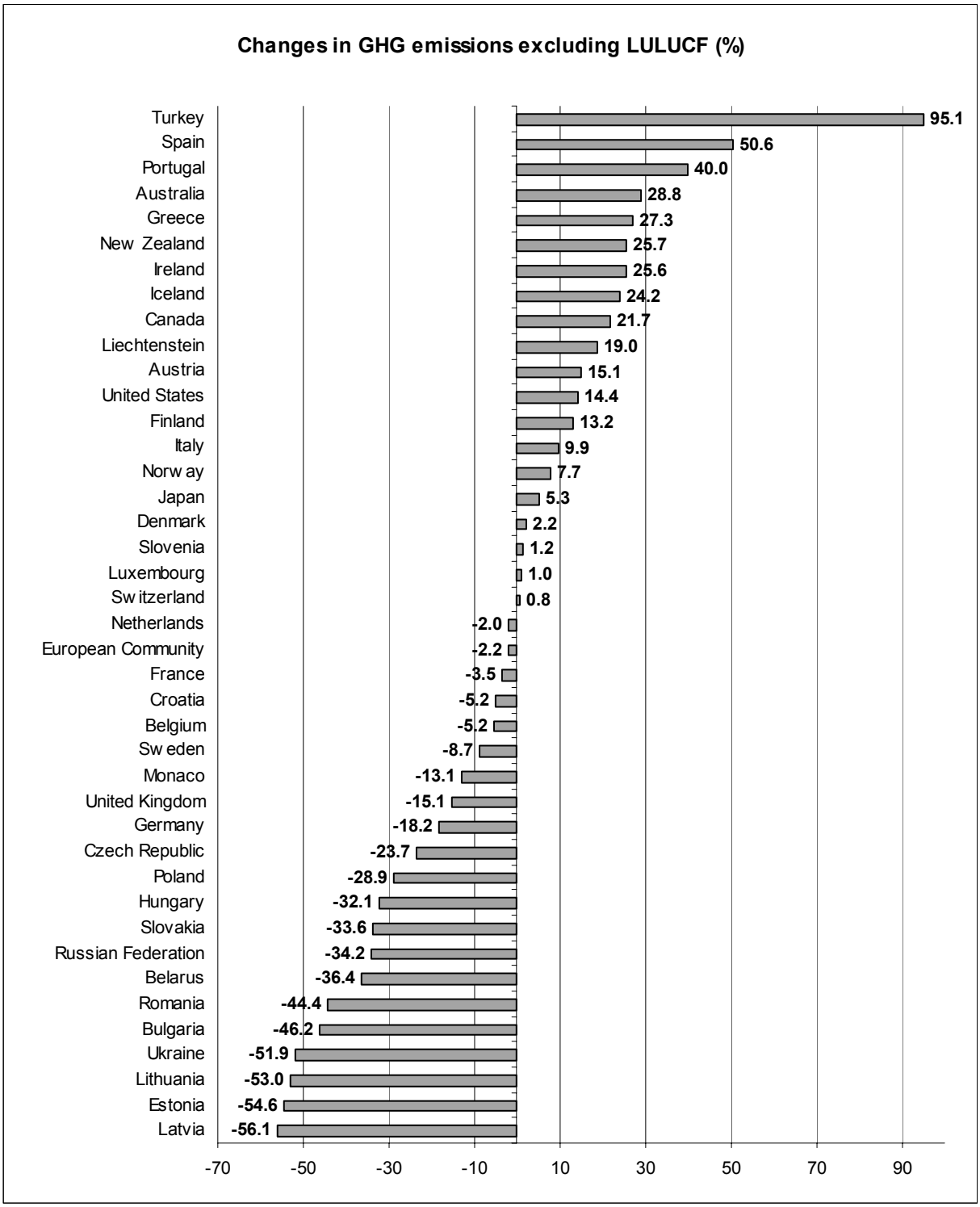
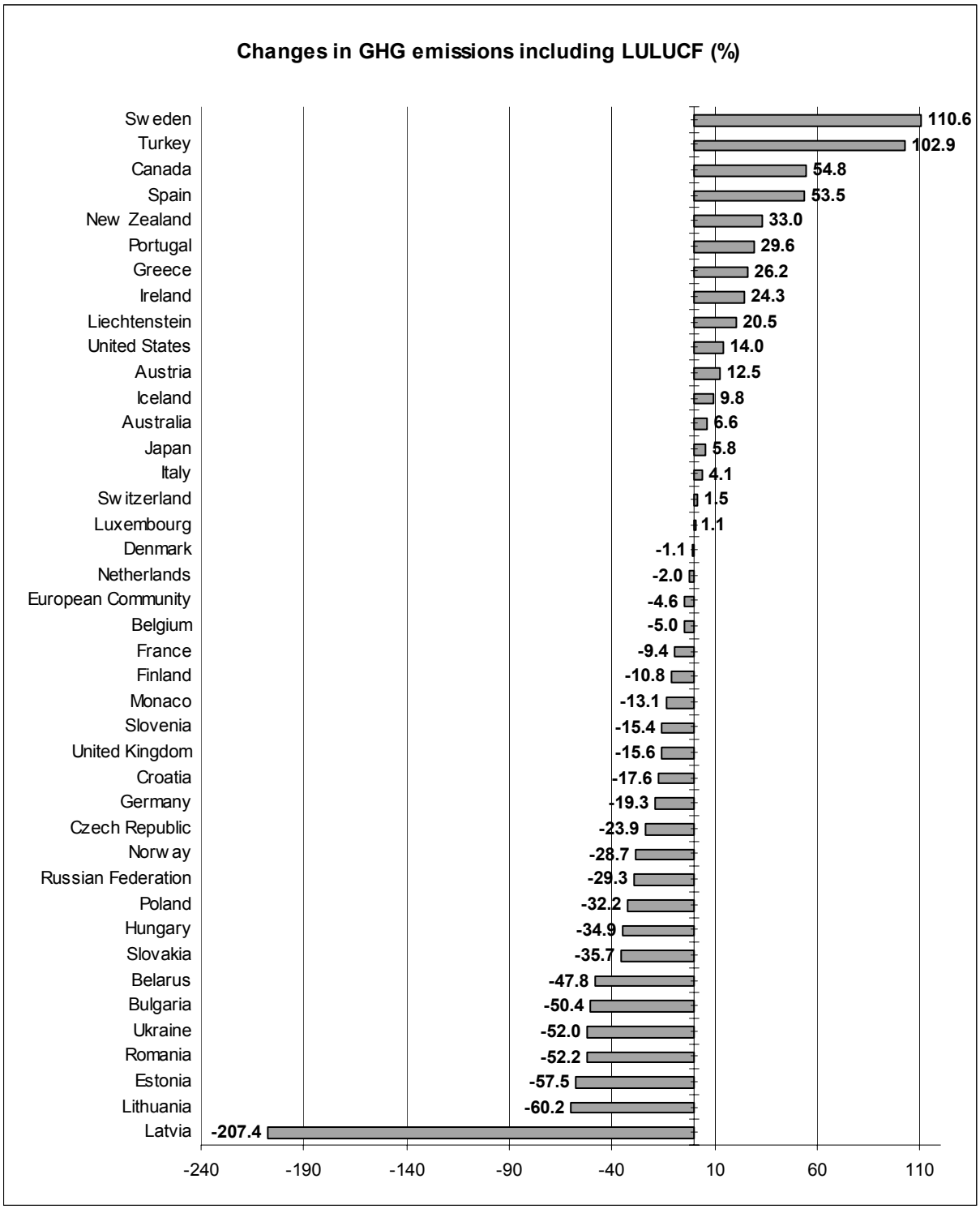
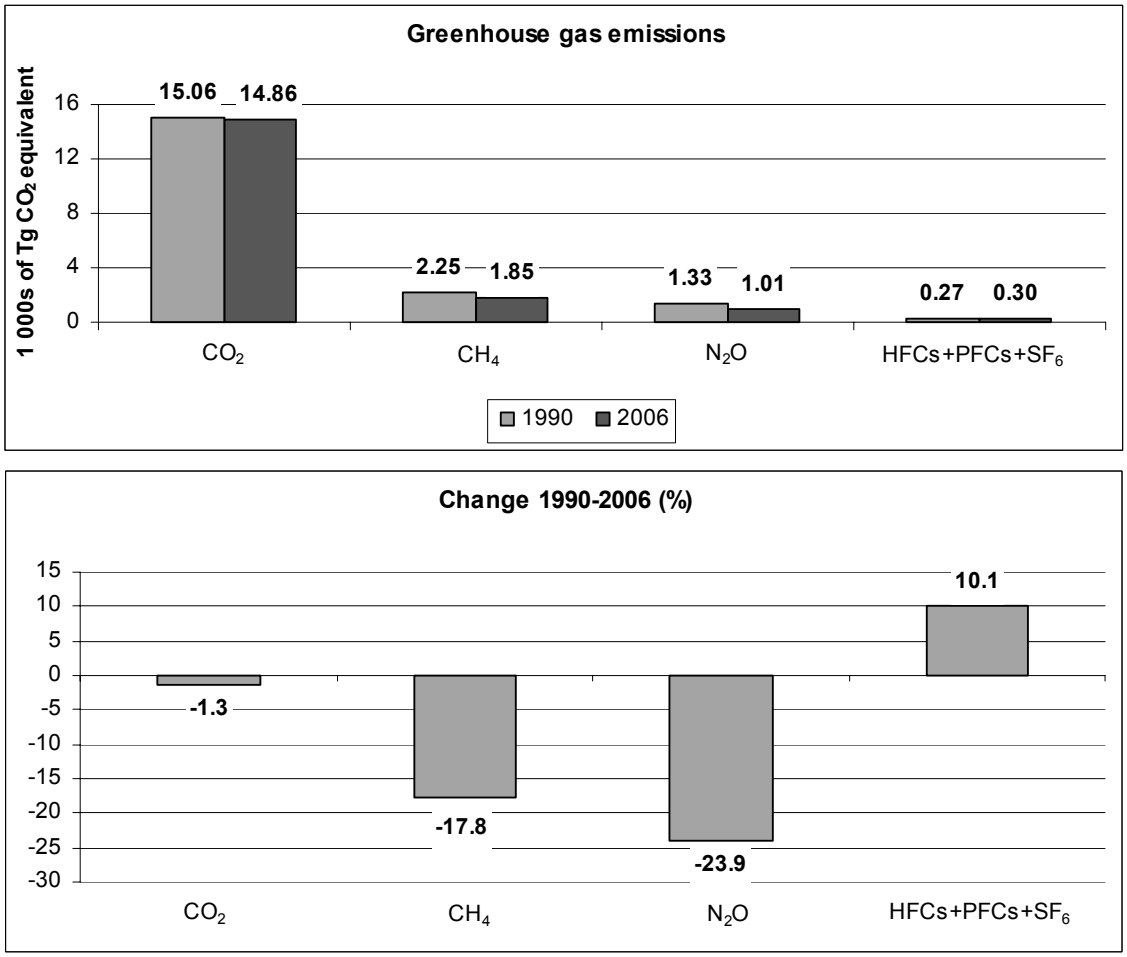


Figure 4 (continued)



Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

Figure 5. Greenhouse gas emissions from Annex I Parties by gas, 1990 and 2006



C. Greenhouse gas emissions by sector

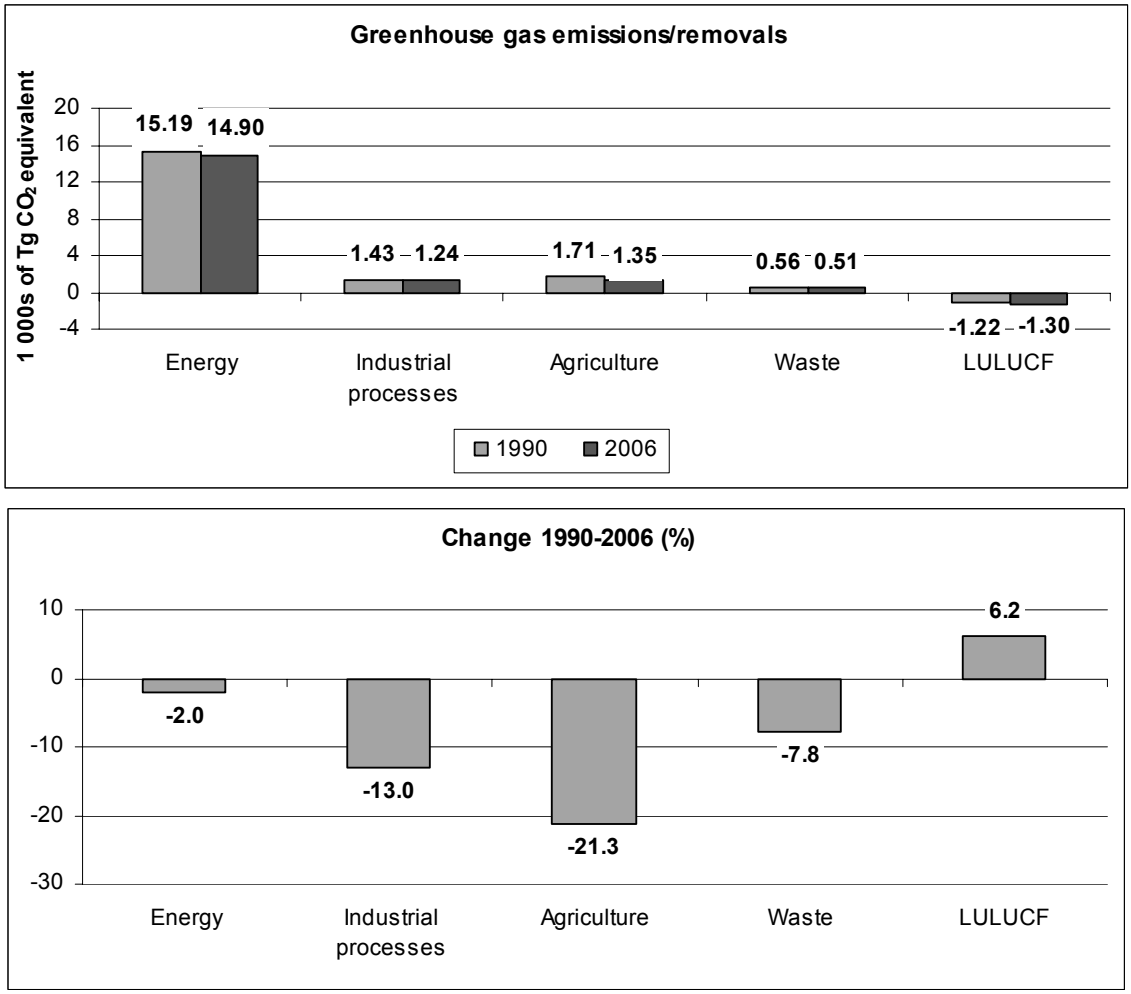
20. Figure 6 shows the trends in aggregate GHG emissions from Annex I Parties by sector. For all Annex I Parties taken together, emissions from all sectors decreased between 1990 and 2006. Net GHG removals by LULUCF increased by 6.2 per cent.

21. Between 2005 and 2006, emissions from the energy sector decreased by 0.3 per cent, and from agriculture by 0.1 per cent. Emissions from the industrial processes and waste sectors increased by 2.1 and 0.5 per cent, respectively. Net GHG removals by LULUCF decreased by 6.7 per cent.

22. Figure 7 illustrates the profile and trend of emissions within the energy sector from 1990 to 2006. The greatest increase occurred in transport (15.8 per cent); and the greatest decline occurred in fugitive emissions (16.3 per cent). Emissions from energy industries increased slightly, while emissions from manufacturing industries and construction, and from other sectors, decreased.

23. From 2005 to 2006, the greatest increase resulted from fugitive emissions (1.4 per cent) and the greatest decrease resulted from other sectors (3.9 per cent). Emissions from energy industries decreased by 0.3 per cent, while emissions from manufacturing industries and construction, and transport, increased (by 1.3 and 0.1 per cent, respectively).

Figure 6. Greenhouse gas emissions/removals from Annex I Parties by sector, 1990 and 2006[a]



Abbreviation: LULUCF = land use, land-use change and forestry.

[a] The sector solvent and other product use is not included in the figure because its contribution to total emissions is negligible. Emissions from this sector decreased by 16.0 per cent.

24. Increases over the period 1990–2006 in emissions relating to fuels sold for use in international aviation and marine transportation are presented in figure 8. GHG emissions increased by 65.9 per cent for aviation and 18.4 per cent for marine transportation.

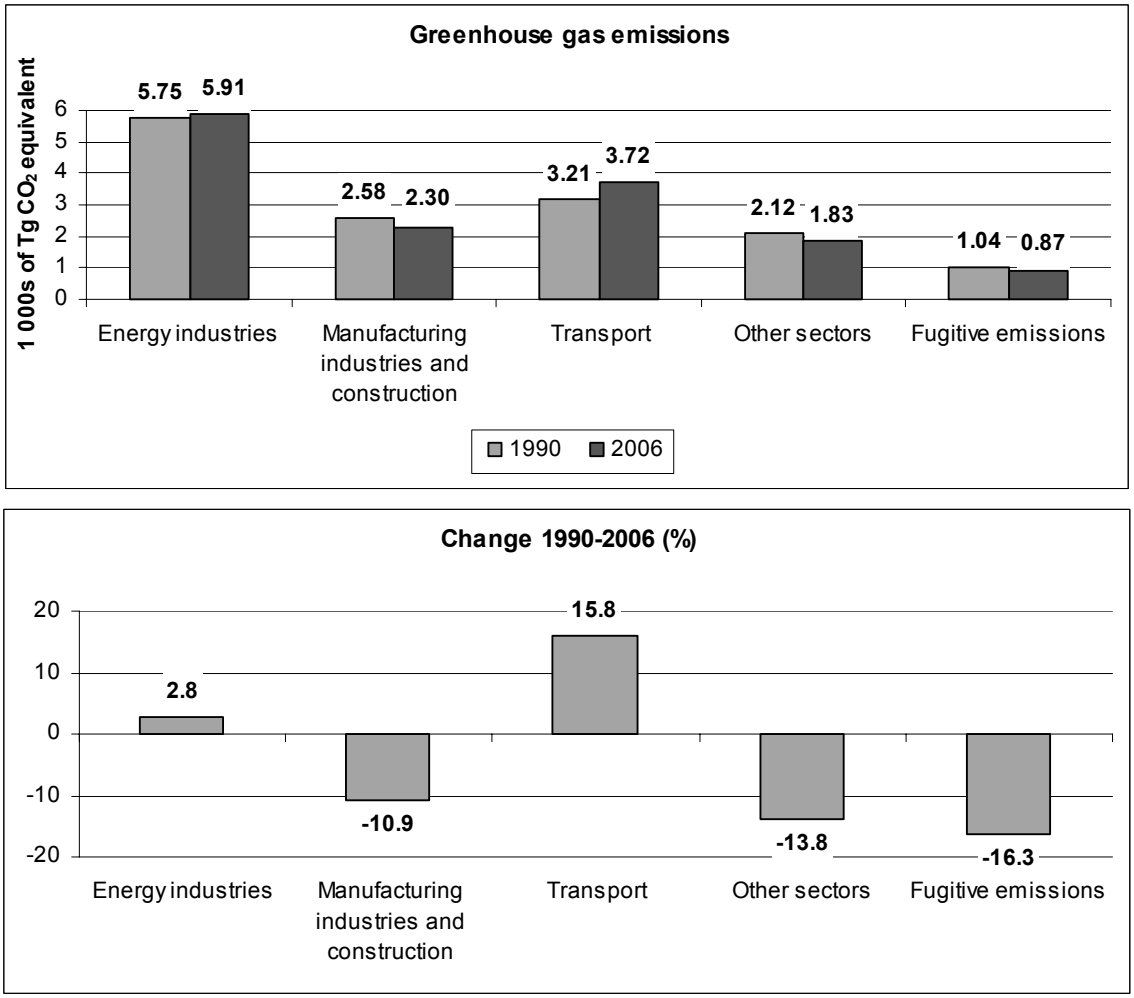
25. Emission from international bunkers also increased between 2005 and 2006. The increase was 3.7 per cent for aviation and 3.8 per cent for marine transportation.

D. Comparison of emission estimates in 2007 and 2008 reports

26. In 2007 the secretariat published a document containing summary information on GHG emissions from Annex I Parties based on 2007 inventory submissions.[9] A comparison of the estimates for total aggregate GHG emissions reported in that document with those reported in this document, based on 2008 inventory submissions, is provided in table 3, together with explanations for the differences in estimates.

[9] FCCC/SBI/2007/30.

Figure 7. Greenhouse gas emissions from Annex I Parties in the energy sector, 1990 and 2006



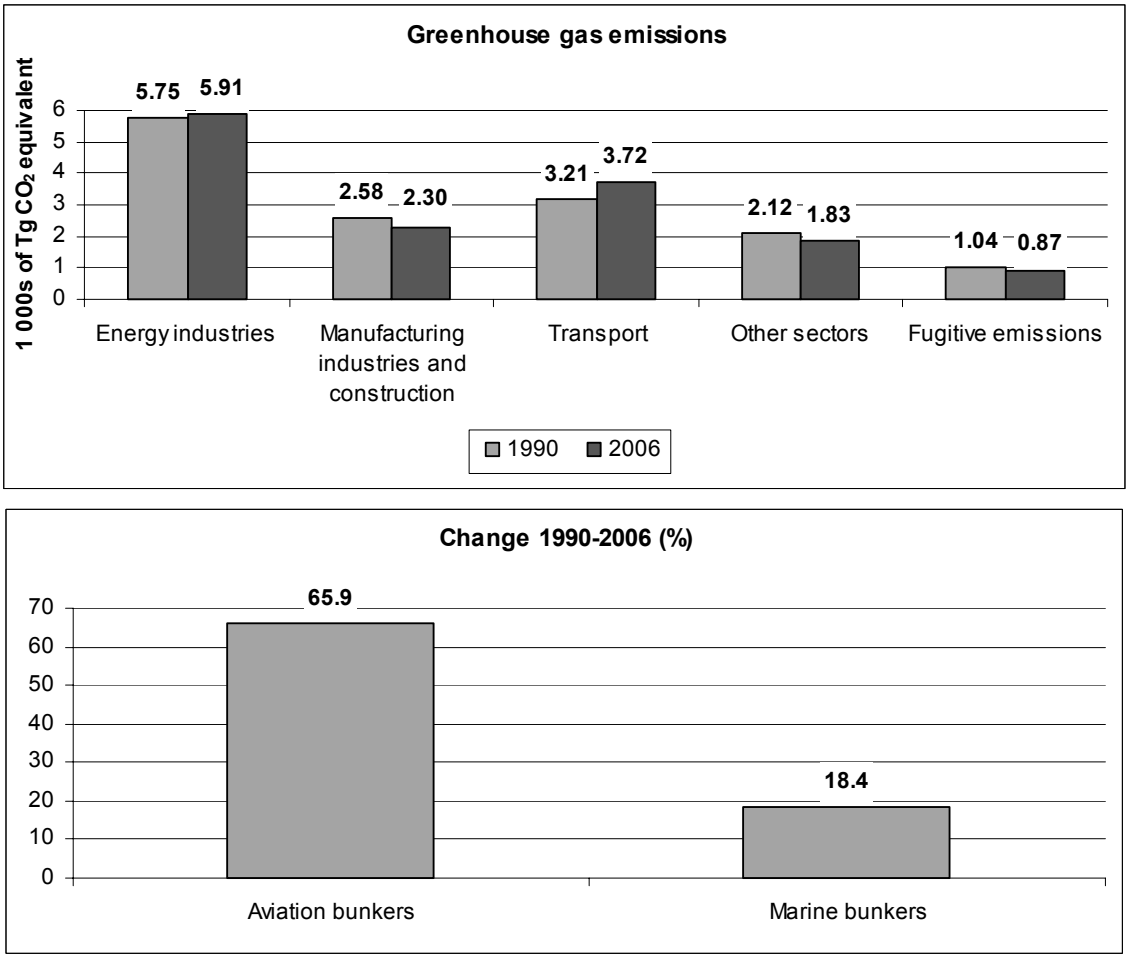
E. Emissions data for individual Annex I Parties

27. Detailed GHG data for Annex I Parties are presented in tables 4–15. Total aggregate anthropogenic GHG emissions excluding and including emissions/removals from LULUCF are provided in tables 4 and 5; emissions of CO_2, CH_4, N_2O (excluding and including emissions/removals from LULUCF) in tables 6–11; emissions of HFCs, PFCs and SF_6 taken together in table 12; and emissions/removals from LULUCF in tables 13–15.

28. Blank spaces in the tables denote that either data were not available or notation keys, such as "not occurring"(NO), "not estimated" (NE), "not applicable" (NA), "included elsewhere" (IE) or "confidential" (C), were used to report emissions data. Negative values mean removals; positive values mean emissions.

29. The changes in emissions from 1990 to 2006 were calculated using the exact (not rounded) values and they may differ from a ratio calculated with the rounded numbers provided in the tables.

Figure 8. Greenhouse gas emissions from Annex I Parties from international bunker fuels, 1990 and 2006



30. Data are presented only for 1990, 1995, 2000, 2005 and 2006. Detailed data for all years of the period 1990–2006, including disaggregated data by gas and by sector, can be found on the GHG data page[10] at the UNFCCC website.

[10] <http://unfccc.int/ghg_data/items/3800.php>.

Table 3. Comparison of the 2008 and 2007 estimates of total aggregate GHG emissions from Annex I Parties

	2007 document (FCCC/SBI/2007/30)	This document (FCCC/SBI/2008/12)	Explanation of the difference between 2008 and 2007 estimates
Total aggregate GHG emissions excluding LULUCF in 1990 (thousands of Tg CO_2 equivalent)			
All Annex I Parties	18.7	18.9	Impact of inventory recalculations for Annex I EIT and Annex I non-EIT Parties
Annex I EIT Parties	5.60	5.91	Inventory recalculations, in particular for Croatia, Slovakia and the Russian Federation
Annex I non-EIT Parties	13.1	13.0	Inventory recalculations, in particular for Greece and the United States of America
Total aggregate GHG emissions including LULUCF in 1990 (thousands of Tg CO_2 equivalent)			
All Annex I Parties	17.6	17.7	Impact of inventory recalculations for Annex I EIT and Annex I non-EIT Parties
Annex I EIT Parties	5.60	5.85	Inventory recalculations, in particular for Croatia and the Russian Federation
Annex I non-EIT Parties	12.0	11.8	Inventory recalculations, in particular for Iceland and Sweden
Changes in total aggregate GHG emissions excluding LULUCF from 1990 to the latest available year (%)			
All Annex I Parties	–2.8	–4.7	A combination of changes for Annex I EIT and Annex non-EIT Parties
Annex I EIT Parties	–35.2	–37.0	Inventory recalculations, including for the base year level for Croatia and the Russian Federation, and decreases in emissions between 2005 and 2006 (for example, in Bulgaria and Estonia)
Annex I non-EIT Parties	10.99	9.9	Inventory recalculations and decreases in emissions (for example, Belgium, Portugal, Spain and Sweden)
Changes in total aggregate GHG emissions including LULUCF from 1990 to the latest available year (%)			
All Annex I Parties	–4.6	–5.5	A combination of changes for Annex I EIT and Annex non-EIT Parties
Annex I EIT Parties	–36.2	–35.0	Increases in emissions between 2005 and 2006 (for example, in Lithuania and Latvia) and inventory recalculations, including for the base year level for Estonia and the Russian Federation
Annex I non-EIT Parties	10.0	9.1	Decreases in emissions between 2005 and 2006 (for example, in Portugal and Sweden) and inventory recalculations

Abbreviations: EIT Parties = Parties with economies in transition, GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

Table 4. Total aggregate anthropogenic emissions of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6 excluding emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

	Gg CO_2 equivalent					Change from 1990 to 2006
Party	**1990**	**1995**	**2000**	**2005**	**2006**	**(%)**
Australia	416 155	442 326	495 171	529 524	536 066	28.8
Austria	79 172	80 624	81 136	93 260	91 090	15.1
Belarus*	127 361	72 941	69 798	75 594	80 996	–36.4
Belgium	144 530	150 199	145 511	142 346	136 970	–5.2
Bulgaria*[a]	132 614	88 009	68 695	70 497	71 343	–46.2
Canada	592 281	641 675	717 703	734 491	720 632	21.7
Croatia*	32 527	22 930	26 228	30 561	30 834	–5.2
Czech Republic*	194 244	152 914	146 957	145 749	148 204	–23.7
Denmark	70 342	77 332	69 338	64 989	71 914	2.2
Estonia*	41 593	20 803	18 246	19 313	18 876	–54.6
European Community[b]	4 243 821	4 132 659	4 117 623	4 186 003	4 151 079	–2.2
Finland	70 946	71 330	69 776	69 027	80 291	13.2
France	566 411	559 081	559 880	560 363	546 527	–3.5
Germany	1 227 688	1 095 011	1 019 494	1 005 000	1 004 794	–18.2
Greece	104 603	110 492	128 231	133 831	133 112	27.3
Hungary*[a]	115 849	79 327	77 588	80 198	78 625	–32.1
Iceland	3 409	3 199	3 733	3 709	4 234	24.2
Ireland	55 526	59 368	69 028	70 345	69 762	25.6
Italy	516 898	530 457	552 274	577 945	567 922	9.9
Japan	1 272 056	1 343 902	1 348 322	1 358 065	1 340 081	5.3
Latvia*	26 456	12 493	10 021	11 130	11 621	–56.1
Liechtenstein	230	236	255	271	273	19.0
Lithuania*	49 370	21 980	19 370	22 681	23 222	–53.0
Luxembourg	13 187	10 335	10 185	13 291	13 322	1.0
Monaco	108	115	120	104	94	–13.1
Netherlands	211 651	223 980	213 630	211 754	207 477	–2.0
New Zealand	61 948	64 461	70 712	77 354	77 868	25.7
Norway	49 698	49 765	53 493	53 800	53 512	7.7
Poland*[a]	563 443	440 608	389 490	386 357	400 459	–28.9
Portugal[c]	59 109	70 255	81 518	87 217	82 739	40.0
Romania*[a]	281 895	184 097	138 719	151 981	156 680	–44.4
Russian Federation*	3 326 404	2 187 120	2 038 247	2 123 359	2 190 239	–34.2
Slovakia*	73 679	52 791	48 500	49 333	48 902	–33.6
Slovenia*[a]	20 340	18 687	18 923	20 468	20 591	1.2
Spain	287 687	318 778	384 981	440 887	433 339	50.6
Sweden	72 043	73 700	68 284	66 900	65 749	–8.7
Switzerland	52 800	51 098	51 759	53 790	53 209	0.8
Turkey**	170 059	220 719	279 956	312 420	331 763	95.1
Ukraine*	922 013	521 733	395 002	425 666	443 183	–51.9
United Kingdom	771 979	710 395	673 774	658 733	655 787	–15.1
United States	6 135 243	6 480 436	7 002 620	7 106 638	7 017 321	14.4
Number of Parties showing decrease in emissions by more than 1 per cent:	*21*					
Number of Parties showing change in emissions within 1 per cent:	*2*					
Number of Parties showing increase in emissions by more than 1 per cent:	*18*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Community are reported separately from those of its member States.

[c] The 2000, 2005 and 2006 data for Portugal differ slightly from those in the common reporting format tables because of an inconsistency in data for F–gases in the XML file that was submitted to the secretariat and has been used for processing data.

[*] A Party undergoing the process of transition to a market economy.

[**] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 5. Total aggregate anthropogenic emissions of CO_2, CH_4, N_2O, HFCs, PFCs and SF_6 including emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

	Gg CO_2 equivalent					Change from 1990 to 2006
Party	**1990**	**1995**	**2000**	**2005**	**2006**	**(%)**
Australia	515 874	472 055	524 919	554 806	549 852	6.6
Austria	64 831	63 510	63 111	75 140	72 936	12.5
Belarus*	105 333	46 267	42 550	50 662	54 999	–47.8
Belgium	143 099	148 813	143 961	141 976	135 909	–5.0
Bulgaria*[a]	107 126	67 465	49 485	52 135	53 121	–50.4
Canada	485 828	805 215	620 050	726 048	751 974	54.8
Croatia*	28 342	13 776	20 947	22 835	23 344	–17.6
Czech Republic*	190 299	145 364	139 594	139 326	144 829	–23.9
Denmark	70 893	75 663	70 968	64 356	70 112	–1.1
Estonia*	36 219	16 623	20 323	14 887	15 405	–57.5
European Community[b]	3 980 665	3 866 068	3 828 717	3 901 756	3 797 708	–4.6
Finland	52 504	53 782	49 317	37 553	46 847	–10.8
France	526 244	511 987	508 434	494 957	476 635	–9.4
Germany	1 199 447	1 063 849	985 561	968 925	968 395	–19.3
Greece	101 389	106 103	125 252	128 596	127 914	26.2
Hungary*[a]	111 748	69 191	79 361	72 941	72 715	–34.9
Iceland	4 884	4 595	5 013	4 863	5 361	9.8
Ireland	55 714	59 661	69 181	69 923	69 273	24.3
Italy	437 766	426 925	455 244	464 480	455 713	4.1
Japan	1 180 213	1 250 622	1 255 723	1 262 194	1 248 580	5.8
Latvia*	5 768	–5 177	–4 112	–3 324	–6 194	–207.4
Liechtenstein	221	227	250	264	267	20.5
Lithuania*	38 319	13 813	10 368	13 268	15 270	–60.2
Luxembourg	12 892	10 040	9 890	12 996	13 027	1.1
Monaco	108	115	120	104	94	–13.1
Netherlands	214 318	226 445	216 299	214 335	210 051	–2.0
New Zealand	41 440	48 536	50 737	53 672	55 119	33.0
Norway	36 009	36 678	30 106	19 332	25 682	–28.7
Poland*[a]	530 516	419 885	365 253	350 983	359 955	–32.2
Portugal[c]	60 652	66 424	75 546	84 242	78 576	29.6
Romania*[a]	249 254	144 813	100 430	114 498	119 185	–52.2
Russian Federation*	3 506 410	2 031 084	2 385 956	2 282 555	2 478 027	–29.3
Slovakia*	71 290	50 107	46 113	48 484	45 874	–35.7
Slovenia*[a]	18 751	13 782	13 748	15 037	15 858	–15.4
Spain	260 757	290 682	353 081	407 816	400 338	53.5
Sweden	13 172	59 188	38 837	89 539	27 742	110.6
Switzerland	50 226	47 324	52 598	52 937	50 979	1.5
Turkey**	125 972	159 982	214 347	242 926	255 659	102.9
Ukraine*	855 072	461 406	344 094	396 207	410 558	–52.0
United Kingdom	774 903	711 602	673 372	656 704	653 825	–15.6
United States	5 410 620	5 718 707	6 359 005	6 251 267	6 170 528	14.0
Number of Parties showing decrease in emissions by more than 1 per cent:	*24*					
Number of Parties showing change in emissions within 1 per cent:	*0*					
Number of Parties showing increase in emissions by more than 1 per cent:	*17*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Community are reported separately from those of its member States.

[c] The 2000, 2005 and 2006 data for Portugal differ slightly from those in the common reporting format tables because of an inconsistency in data for F–gases in the XML file that was submitted to the secretariat and has been used for processing data.

[*] A Party undergoing the process of transition to a market economy.

[**] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 6. Total anthropogenic carbon dioxide emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

Party	Gg CO_2 equivalent					Change from 1990 to 2006 (%)
	1990	1995	2000	2005	2006	
Australia	277 803	304 440	350 032	385 613	390 436	40.5
Austria	62 085	63 965	65 928	79 515	77 283	24.5
Belarus*	101 947	56 233	51 911	55 292	59 203	–41.9
Belgium	118 817	123 688	123 780	123 500	119 107	0.2
Bulgaria*[a]	98 815	66 361	50 482	54 028	55 067	–44.3
Canada	455 999	488 393	559 997	572 235	560 389	22.9
Croatia*	24 069	17 007	20 102	23 595	23 699	–1.5
Czech Republic*	163 865	131 110	126 756	125 943	127 918	–21.9
Denmark	53 989	61 578	54 395	51 673	58 925	9.1
Estonia*	36 358	17 749	15 279	16 489	15 972	–56.1
European Community[b]	3 352 984	3 277 476	3 348 821	3 485 727	3 466 315	3.4
Finland	56 710	58 005	56 969	56 700	68 098	20.1
France	395 597	391 877	406 098	420 169	408 686	3.3
Germany	1 032 172	920 789	883 392	876 811	880 253	–14.7
Greece	82 422	87 017	103 659	110 500	109 666	33.1
Hungary*[a]	86 134	62 046	59 202	61 662	60 389	–29.9
Iceland	2 160	2 311	2 758	2 854	3 035	40.5
Ireland	32 545	35 448	44 847	47 723	47 320	45.4
Italy	434 783	445 845	464 276	491 834	488 039	12.2
Japan	1 144 197	1 228 053	1 256 736	1 290 591	1 273 595	11.3
Latvia*	19 157	9 106	7 031	7 782	8 260	–56.9
Liechtenstein	203	209	228	240	242	19.0
Lithuania*	36 169	15 158	12 085	14 314	14 524	–59.8
Luxembourg	12 219	9 312	9 040	12 064	12 108	–0.9
Monaco	105	112	113	99	90	–15.0
Netherlands	159 356	170 640	169 649	175 926	172 219	8.1
New Zealand	25 382	27 167	31 048	35 970	36 388	43.4
Norway	34 774	37 785	41 577	42 861	43 259	24.4
Poland*[a]	469 144	366 097	320 365	317 669	330 524	–29.5
Portugal	43 444	53 157	63 412	68 447	63 993	47.3
Romania*[a]	193 118	129 511	95 264	105 853	111 011	–42.5
Russian Federation*	2 497 016	1 572 312	1 469 002	1 521 329	1 577 689	–36.8
Slovakia*	61 838	43 917	40 195	40 704	39 984	–35.3
Slovenia*[a]	16 294	14 980	15 223	16 759	16 878	3.6
Spain	228 508	255 601	307 742	368 263	359 627	57.4
Sweden	56 301	58 043	53 416	52 555	51 515	–8.5
Switzerland	44 558	43 338	43 916	46 067	45 561	2.3
Turkey**	139 594	171 854	223 806	256 434	273 705	96.1
Ukraine*	714 575	392 017	295 674	328 637	344 526	–51.8
United Kingdom	590 631	549 857	550 255	558 618	557 855	–5.5
United States	5 061 388	5 387 109	5 932 184	6 066 452	5 975 096	18.1
Number of Parties showing decrease in emissions by more than 1 per cent:	*17*					
Number of Parties showing change in emissions within 1 per cent:	*2*					
Number of Parties showing increase in emissions by more than 1 per cent:	*22*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
* A Party undergoing the process of transition to a market economy.
** Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 7. Total anthropogenic carbon dioxide emissions including emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

Party	Gg CO_2 equivalent					Change from 1990 to 2006 (%)
	1990	1995	2000	2005	2006	
Australia	370 258	329 900	375 573	405 942	398 555	7.6
Austria	47 492	46 596	47 643	61 127	58 861	23.9
Belarus*	79 911	29 549	24 649	30 348	33 192	–58.5
Belgium	117 386	122 302	122 229	123 129	118 046	0.6
Bulgaria*[a]	73 327	45 817	31 272	35 667	36 845	–49.8
Canada	344 331	619 241	460 687	555 032	579 607	68.3
Croatia*	19 884	7 852	14 821	15 869	16 209	–18.5
Czech Republic*	159 812	123 467	119 296	119 407	124 409	–22.2
Denmark	54 541	59 909	56 025	51 040	57 123	4.7
Estonia*	30 980	13 568	17 352	12 062	12 489	–59.7
European Community[b]	3 084 949	3 006 472	3 055 562	3 197 465	3 108 746	0.8
Finland	38 223	40 433	36 484	25 198	34 617	–9.4
France	351 925	341 647	351 747	352 201	336 360	–4.4
Germany	1 003 557	889 252	849 038	840 314	843 433	–16.0
Greece	79 153	82 590	100 497	105 255	104 449	32.0
Hungary*[a]	81 999	51 886	60 945	54 376	54 450	–33.6
Iceland	3 310	3 377	3 707	3 676	3 827	15.6
Ireland	32 717	35 719	44 975	47 268	46 796	43.0
Italy	355 494	342 202	367 151	378 332	375 678	5.7
Japan	1 052 151	1 134 639	1 164 056	1 194 665	1 182 051	12.3
Latvia*	–1 551	–8 602	–7 164	–6 711	–9 592	518.5
Liechtenstein	195	201	223	233	235	20.7
Lithuania*	25 099	6 972	3 063	4 883	6 479	–74.2
Luxembourg	11 924	9 018	8 746	11 769	11 813	–0.9
Monaco	105	112	113	99	89	–15.0
Netherlands	162 023	173 105	172 317	178 507	174 794	7.9
New Zealand	4 827	11 183	11 019	12 224	13 574	181.2
Norway	21 070	24 684	18 176	8 380	15 408	–26.9
Poland*[a]	436 209	343 170	293 868	279 944	287 641	–34.1
Portugal	44 810	49 133	57 284	65 209	59 730	33.3
Romania*[a]	160 477	90 226	56 967	68 370	73 514	–54.2
Russian Federation*	2 673 020	1 415 336	1 813 071	1 678 795	1 862 420	–30.3
Slovakia*	59 432	41 221	37 792	39 827	36 933	–37.9
Slovenia*[a]	14 704	10 075	10 048	11 329	12 145	–17.4
Spain	201 389	227 346	275 667	334 931	326 063	61.9
Sweden	–2 652	43 467	23 893	75 087	13 372	–604.1
Switzerland	41 963	39 552	44 749	45 208	43 324	3.2
Turkey**	95 507	111 117	158 196	186 940	197 600	106.9
Ukraine*	647 623	331 672	244 761	299 171	311 890	–51.8
United Kingdom	593 531	551 027	549 822	556 564	555 861	–6.3
United States	4 330 795	4 618 842	5 266 117	5 195 700	5 099 443	17.7
Number of Parties showing decrease in emissions by more than 1 per cent:	*20*					
Number of Parties showing change in emissions within 1 per cent:	*3*					
Number of Parties showing increase in emissions by more than 1 per cent:	*18*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
* A Party undergoing the process of transition to a market economy.
** Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 8. Total anthropogenic methane emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

Party	Gg CO_2 equivalent					Change from 1990 to 2006 (%)
	1990	1995	2000	2005	2006	
Australia	114 653	114 435	116 282	113 875	116 226	1.4
Austria	9 184	8 543	7 622	7 071	6 937	–24.5
Belarus*	15 122	11 719	11 479	12 806	13 387	–11.5
Belgium	10 404	9 870	8 775	7 275	7 086	–31.9
Bulgaria*[a]	21 685	15 757	13 148	11 666	11 430	–47.3
Canada	74 339	89 233	98 163	102 159	101 863	37.0
Croatia*	3 390	2 684	2 638	2 962	3 110	–8.3
Czech Republic*	18 461	13 644	12 073	11 616	11 933	–35.4
Denmark	5 729	6 006	5 921	5 662	5 548	–3.2
Estonia*	3 186	1 972	1 957	1 998	1 997	–37.3
European Community[b]	437 126	411 103	364 427	312 210	306 446	–29.9
Finland	6 289	6 073	5 381	4 484	4 536	–27.9
France	68 675	69 550	64 548	57 349	56 496	–17.7
Germany	99 266	81 476	64 704	47 678	45 879	–53.8
Greece	8 982	9 063	8 842	8 262	8 403	–6.4
Hungary*[a]	10 139	8 217	8 271	7 891	7 808	–23.0
Iceland	456	453	454	438	461	1.2
Ireland	13 467	13 799	13 539	13 262	13 287	–1.3
Italy	41 614	44 118	44 291	39 594	38 158	–8.3
Japan	33 386	30 964	26 980	23 930	23 637	–29.2
Latvia*	3 493	2 028	1 738	1 794	1 740	–50.2
Liechtenstein	13	13	12	14	14	7.4
Lithuania*	6 133	3 651	3 230	3 331	3 368	–45.1
Luxembourg	460	470	487	469	464	0.8
Monaco	0.65	0.79	0.80	0.62	0.53	–18.4
Netherlands	25 438	23 774	19 230	16 845	16 283	–36.0
New Zealand	25 486	25 743	27 158	27 297	27 499	7.9
Norway	4 635	4 934	4 908	4 582	4 408	–4.9
Poland*[a]	53 665	43 642	38 996	37 044	37 209	–30.7
Portugal	10 103	11 234	11 525	12 236	11 846	17.2
Romania*[a]	52 028	33 575	27 828	28 502	29 059	–44.1
Russian Federation*	578 036	452 259	430 738	470 492	480 941	–16.8
Slovakia*	5 396	4 644	4 685	4 628	4 627	–14.2
Slovenia*[a]	2 384	2 167	2 229	2 191	2 158	–9.5
Spain	28 031	31 049	35 805	37 397	37 516	33.8
Sweden	6 719	6 677	6 081	5 603	5 509	–18.0
Switzerland	4 374	3 987	3 697	3 541	3 538	–19.1
Turkey**	29 207	42 539	49 269	49 317	50 330	72.3
Ukraine*	151 515	95 766	77 349	74 207	74 878	–50.6
United Kingdom	103 672	90 280	68 514	49 727	49 219	–52.5
United States	601 604	594 181	555 285	527 359	530 739	–11.8
Number of Parties showing decrease in emissions by more than 1 per cent: 32						
Number of Parties showing change in emissions within 1 per cent: 1						
Number of Parties showing increase in emissions by more than 1 per cent: 8						

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
* A Party undergoing the process of transition to a market economy.
** Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 9. Total anthropogenic methane emissions including emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

Party	Gg CO_2 equivalent					Change from 1990 to 2006 (%)
	1990	1995	2000	2005	2006	
Australia	119 882	117 456	119 195	117 443	120 364	0.4
Austria	9 184	8 543	7 622	7 072	6 937	–24.5
Belarus*	15 126	11 725	11 484	12 809	13 391	–11.5
Belgium	10 404	9 870	8 775	7 275	7 086	–31.9
Bulgaria*[a]	21 685	15 757	13 148	11 666	11 430	–47.3
Canada	77 537	109 386	99 175	107 554	109 334	41.0
Croatia*	3 390	2 684	2 638	2 962	3 110	–8.3
Czech Republic*	18 540	13 714	12 151	11 712	12 048	–35.0
Denmark	5 729	6 005	5 920	5 662	5 547	–3.2
Estonia*	3 191	1 973	1 960	1 999	2 007	–37.1
European Community[b]	439 076	412 817	366 326	314 029	308 354	–29.8
Finland	6 299	6 082	5 389	4 493	4 545	–27.8
France	70 094	70 866	65 880	58 639	57 734	–17.6
Germany	99 266	81 476	64 704	47 678	45 879	–53.8
Greece	9 032	9 098	9 009	8 271	8 420	–6.8
Hungary*[a]	10 169	8 239	8 298	7 918	7 834	–23.0
Iceland	458	459	462	446	471	2.8
Ireland	13 469	13 801	13 541	13 262	13 289	–1.3
Italy	41 757	44 145	44 378	39 628	38 186	–8.6
Japan	33 485	31 035	27 027	23 966	23 663	–29.3
Latvia*	3 512	2 063	1 794	1 829	1 772	–49.6
Liechtenstein	13	13	12	14	14	7.4
Lithuania*	6 134	3 653	3 232	3 332	3 374	–45.0
Luxembourg	460	470	487	469	464	0.8
Monaco	0.65	0.79	0.80	0.62	0.53	–18.4
Netherlands	25 438	23 774	19 230	16 845	16 283	–36.0
New Zealand	25 528	25 793	27 202	27 346	27 549	7.9
Norway	4 637	4 935	4 908	4 583	4 415	–4.8
Poland*[a]	53 673	45 841	41 253	39 392	39 584	–26.2
Portugal	10 240	11 385	11 644	12 452	11 913	16.3
Romania*[a]	52 028	33 575	27 836	28 503	29 062	–44.1
Russian Federation*	581 668	453 113	434 042	472 063	483 716	–16.8
Slovakia*	5 410	4 654	4 699	4 651	4 646	–14.1
Slovenia*[a]	2 384	2 167	2 229	2 191	2 158	–9.5
Spain	28 202	31 192	35 964	37 633	38 027	34.8
Sweden	6 721	6 678	6 084	5 608	5 517	–17.9
Switzerland	4 382	3 990	3 697	3 542	3 539	–19.2
Turkey**	29 207	42 539	49 269	49 317	50 330	72.3
Ukraine*	151 524	95 780	77 352	74 213	74 887	–50.6
United Kingdom	103 689	90 309	68 539	49 748	49 248	–52.5
United States	606 077	598 878	574 268	539 666	555 291	–8.4
Number of Parties showing decrease in emissions by more than 1 per cent:	*32*					
Number of Parties showing change in emissions within 1 per cent:	*2*					
Number of Parties showing increase in emissions by more than 1 per cent:	*7*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
* A Party undergoing the process of transition to a market economy.
** Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 10. Total anthropogenic nitrous oxide emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

	Gg CO_2 equivalent					Change from 1990 to 2006
Party	**1990**	**1995**	**2000**	**2005**	**2006**	**(%)**
Australia	18 102	20 196	24 990	23 730	23 648	30.6
Austria	6 298	6 640	6 284	5 353	5 397	–14.3
Belarus*	10 293	4 985	6 398	7 468	8 374	–18.6
Belgium	10 774	11 662	11 533	9 851	8 954	–16.9
Bulgaria*[a]	12 114	5 887	4 966	4 411	4 230	–65.1
Canada	49 933	54 372	47 908	49 294	47 730	–4.4
Croatia*	4 079	3 197	3 465	3 654	3 594	–11.9
Czech Republic*	11 841	8 084	7 715	7 500	7 375	–37.7
Denmark	10 579	9 423	8 334	6 796	6 537	–38.2
Estonia*	2 048	1 081	1 005	813	832	–59.4
European Community[b]	397 297	376 596	340 846	321 598	308 660	–22.3
Finland	7 852	7 154	6 850	6 950	6 853	–12.7
France	92 162	89 585	77 173	67 306	64 967	–29.5
Germany	84 388	77 304	59 064	65 697	62 931	–25.4
Greece	12 003	10 988	11 091	10 413	10 320	–14.0
Hungary*[a]	19 227	8 826	9 558	9 717	9 575	–50.2
Iceland	368	346	356	308	335	–8.9
Ireland	9 477	9 917	10 051	8 661	8 433	–11.0
Italy	38 009	38 731	40 882	40 429	35 120	–7.6
Japan	32 633	33 442	29 891	25 566	25 559	–21.7
Latvia*	3 805	1 358	1 242	1 528	1 579	–58.5
Liechtenstein	13	13	13	13	13	–1.7
Lithuania*	7 068	3 125	4 025	5 015	5 215	–26.2
Luxembourg	490	535	611	671	659	34.5
Monaco	1.64	2.63	3.29	3.02	2.76	68.7
Netherlands	19 943	21 308	19 027	17 115	16 944	–15.0
New Zealand	10 426	11 237	12 141	13 349	13 284	27.4
Norway	4 718	4 404	4 518	4 735	4 372	–7.3
Poland*[a]	40 334	30 562	29 285	28 340	29 583	–26.7
Portugal	5 561	5 806	6 258	5 723	6 021	8.3
Romania*[a]	33 399	19 237	15 210	17 052	15 978	–52.2
Russian Federation*	221 005	139 767	107 118	101 440	100 669	–54.4
Slovakia*	6 174	4 084	3 519	3 791	4 039	–34.6
Slovenia*[a]	1 376	1 213	1 318	1 280	1 309	–4.9
Spain	27 795	26 542	32 647	29 706	30 075	8.2
Sweden	8 535	8 383	7 890	7 547	7 546	–11.6
Switzerland	3 625	3 495	3 425	3 291	3 274	–9.7
Turkey**	1 257	6 327	5 740	3 432	4 594	265.4
Ukraine*	55 720	33 797	21 880	22 700	23 654	–57.5
United Kingdom	63 869	53 046	43 602	39 817	38 338	–40.0
United States	381 895	393 757	382 420	366 982	363 574	–4.8
Number of Parties showing decrease in emissions by more than 1 per cent:	*34*					
Number of Parties showing change in emissions within 1 per cent:	*0*					
Number of Parties showing increase in emissions by more than 1 per cent:	*7*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
* A Party undergoing the process of transition to a market economy.
** Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 11. Total anthropogenic nitrous oxide emissions including emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

	Gg CO_2 equivalent					Change from 1990 to 2006
Party	**1990**	**1995**	**2000**	**2005**	**2006**	**(%)**
Australia	20 137	21 445	26 283	25 115	25 177	25.0
Austria	6 550	6 896	6 544	5 622	5 665	–13.5
Belarus*	10 296	4 990	6 407	7 477	8 384	–18.6
Belgium	10 774	11 662	11 533	9 851	8 954	–16.9
Bulgaria*[a]	12 114	5 887	4 966	4 411	4 230	–65.1
Canada	51 949	66 911	48 553	52 658	52 384	0.8
Croatia*	4 079	3 197	3 465	3 654	3 594	–11.9
Czech Republic*	11 870	8 106	7 733	7 517	7 394	–37.7
Denmark	10 579	9 423	8 334	6 796	6 537	–38.2
Estonia*	2 049	1 081	1 005	813	833	–59.4
European Community[b]	400 225	379 295	343 299	323 794	310 949	–22.3
Finland	7 887	7 169	6 868	6 970	6 881	–12.8
France	94 247	91 405	78 746	68 578	66 163	–29.8
Germany	84 763	77 679	59 486	66 119	63 353	–25.3
Greece	12 008	10 992	11 108	10 414	10 322	–14.0
Hungary*[a]	19 230	8 828	9 560	9 720	9 578	–50.2
Iceland	691	669	679	633	661	–4.4
Ireland	9 493	9 937	10 074	8 694	8 465	–10.8
Italy	38 024	38 814	40 891	40 432	35 245	–7.3
Japan	32 737	33 505	29 925	25 586	25 576	–21.9
Latvia*	3 807	1 361	1 248	1 531	1 584	–58.4
Liechtenstein	13	13	13	13	13	–1.7
Lithuania*	7 086	3 143	4 043	5 033	5 302	–25.2
Luxembourg	490	535	611	671	659	34.5
Monaco	1.64	2.63	3.29	3.02	2.76	68.7
Netherlands	19 943	21 308	19 027	17 115	16 944	–15.0
New Zealand	10 431	11 246	12 152	13 363	13 299	27.5
Norway	4 732	4 418	4 531	4 748	4 386	–7.3
Poland*[a]	40 334	30 566	29 288	28 343	29 586	–26.6
Portugal	5 601	5 847	6 297	5 771	6 055	8.1
Romania*[a]	33 399	19 237	15 211	17 052	15 978	–52.2
Russian Federation*	221 374	139 854	107 453	101 598	100 951	–54.4
Slovakia*	6 177	4 086	3 522	3 797	4 042	–34.6
Slovenia*[a]	1 376	1 213	1 318	1 280	1 309	–4.9
Spain	27 812	26 557	32 663	29 730	30 127	8.3
Sweden	8 615	8 447	7 962	7 649	7 674	–10.9
Switzerland	3 637	3 504	3 431	3 297	3 280	–9.8
Turkey**	1 258	6 327	5 741	3 432	4 595	265.2
Ukraine*	55 722	33 801	21 880	22 701	23 656	–57.5
United Kingdom	63 877	53 053	43 607	39 820	38 343	–40.0
United States	383 393	395 599	385 890	370 055	367 881	–4.0
Number of Parties showing decrease in emissions by more than 1 per cent:	*33*					
Number of Parties showing change in emissions within 1 per cent:	*1*					
Number of Parties showing increase in emissions by more than 1 per cent:	*7*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
* A Party undergoing the process of transition to a market economy.
** Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 12. Total aggregate anthropogenic emissions of hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride, 1990, 1995, 2000, 2005 and 2006

	Gg CO_2 equivalent					Change from 1990 to 2006
Party	**1990**	**1995**	**2000**	**2005**	**2006**	**(%)**
Australia	5 597	3 254	3 868	6 306	5 756	2.8
Austria	1 605	1 475	1 302	1 319	1 474	–8.2
Belarus*		3	10	28	32	
Belgium	4 535	4 979	1 424	1 719	1 822	–59.8
Bulgaria*[a]		4	98	391	616	
Canada	12 010	9 676	11 635	10 803	10 649	–11.3
Croatia*	989	43	23	349	431	–56.5
Czech Republic*	78	76	413	690	978	1 159.1
Denmark	44	326	688	858	904	1 933.5
Estonia*		0.38	5.62	13.75	75.98	
European Community[b]	56 415	67 484	63 529	66 468	69 659	23.5
Finland	94	98	576	893	804	750.6
France	9 978	8 069	12 061	15 538	16 377	64.1
Germany	11 861	15 442	12 333	14 814	15 731	32.6
Greece	1 196	3 423	4 638	4 656	4 723	295.0
Hungary*[a]	350	239	557	928	853	144.0
Iceland	425	89	165	108	403	–5.3
Ireland	36	203	592	699	723	1 898.8
Italy	2 492	1 764	2 825	6 089	6 604	165.1
Japan	61 840	51 443	34 716	17 977	17 290	–72.0
Latvia*		1	10	27	43	
Liechtenstein	0.00	0.38	2.35	4.12	4.20	–
Lithuania*		45	30	20	115	
Luxembourg	17	17	47	86	91	431.1
Monaco		0.10	2.69	1.91	0.76	
Netherlands	6 914	8 259	5 725	1 869	2 031	–70.6
New Zealand	654	314	364	738	697	6.6
Norway	5 570	2 641	2 491	1 622	1 473	–73.6
Poland*[a]	300	307	843	3 304	3 143	946.4
Portugal[c]		59	322	811	878	
Romania*[a]	3 350	1 774	416	574	631	–81.1
Russian Federation*	30 348	22 782	31 390	30 098	30 940	2.0
Slovakia*	271	146	100	209	252	–7.2
Slovenia*[a]	287	326	152	238	246	–14.0
Spain	3 353	5 586	8 786	5 522	6 121	82.5
Sweden	488	597	898	1 195	1 179	141.6
Switzerland	244	278	722	891	836	242.8
Turkey**			1 141	3 238	3 134	
Ukraine*	203	153	100	123	126	–38.2
United Kingdom	13 807	17 213	11 404	10 571	10 374	–24.9
United States	90 355	105 389	132 730	145 845	147 912	63.7
Number of Parties showing decrease in emissions by more than 1 per cent:	*13*					
Number of Parties showing change in emissions within 1 per cent:	*0*					
Number of Parties showing increase in emissions by more than 1 per cent:	*20*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.

[b] Emission estimates of the European Community are reported separately from those of its member States.

[c] The 2000, 2005 and 2006 data for Portugal differ slightly from those in the common reporting format tables because of an inconsistency in data for F–gases in the XML file that was submitted to the secretariat and has been used for processing data.

[*] A Party undergoing the process of transition to a market economy.

[**] Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 13. Net anthropogenic carbon dioxide emissions and removals from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

	Gg CO_2 equivalent					Change from 1990 to 2006
Party	**1990**	**1995**	**2000**	**2005**	**2006**	**(%)**
Australia	92 456	25 460	25 541	20 329	8 120	–91.2
Austria	–14 593	–17 369	–18 286	–18 388	–18 422	26.2
Belarus*	–22 035	–26 684	–27 262	–24 944	–26 011	18.0
Belgium	–1 431	–1 386	–1 550	–370	–1 061	–25.9
Bulgaria*[a]	–25 488	–20 544	–19 210	–18 362	–18 223	–28.5
Canada	–111 668	130 847	–99 310	–17 203	19 218	–117.2
Croatia*	–4 185	–9 154	–5 281	–7 726	–7 490	79.0
Czech Republic*	–4 053	–7 642	–7 459	–6 536	–3 509	–13.4
Denmark	552	–1 669	1 631	–633	–1 802	–426.6
Estonia*	–5 379	–4 181	2 074	–4 427	–3 482	–35.3
European Community[b]	–268 035	–271 004	–293 258	–288 263	–357 568	33.4
Finland	–18 487	–17 572	–20 485	–31 502	–33 481	81.1
France	–43 673	–50 230	–54 350	–67 968	–72 326	65.6
Germany	–28 616	–31 537	–34 354	–36 497	–36 821	28.7
Greece	–3 269	–4 428	–3 163	–5 244	–5 217	59.6
Hungary*[a]	–4 135	–10 160	1 743	–7 287	–5 939	43.6
Iceland	1 150	1 066	949	821	792	–31.1
Ireland	172	271	128	–455	–524	–405.0
Italy	–79 289	–103 643	–97 126	–113 502	–112 361	41.7
Japan	–92 046	–93 414	–92 680	–95 926	–91 544	–0.5
Latvia*	–20 708	–17 708	–14 195	–14 493	–17 852	–13.8
Liechtenstein	–8.32	–8.50	–4.92	–6.53	–6.55	–21.3
Lithuania*	–11 069	–8 186	–9 022	–9 431	–8 045	–27.3
Luxembourg	–295	–295	–295	–295	–295	0.0
Monaco	–0.03	–0.04	–0.04	–0.04	–0.04	9.6
Netherlands	2 667	2 465	2 669	2 581	2 574	–3.5
New Zealand	–20 555	–15 983	–20 029	–23 746	–22 814	11.0
Norway	–13 705	–13 101	–23 401	–34 482	–27 850	103.2
Poland*[a]	–32 935	–22 926	–26 497	–37 725	–42 882	30.2
Portugal	1 366	–4 024	–6 128	–3 239	–4 263	–412.1
Romania*[a]	–32 641	–39 285	–38 297	–37 483	–37 497	14.9
Russian Federation*	176 004	–156 976	344 070	157 467	284 731	61.8
Slovakia*	–2 407	–2 696	–2 403	–877	–3 051	26.8
Slovenia*[a]	–1 589	–4 905	–5 175	–5 430	–4 733	197.8
Spain	–27 119	–28 255	–32 076	–33 332	–33 564	23.8
Sweden	–58 953	–14 576	–29 523	22 533	–38 143	–35.3
Switzerland	–2 594	–3 786	833	–859	–2 237	–13.8
Turkey**	–44 087	–60 737	–65 610	–69 494	–76 105	72.6
Ukraine*	–66 952	–60 345	–50 913	–29 466	–32 636	–51.3
United Kingdom	2 899	1 170	–432	–2 054	–1 995	–168.8
United States	–730 593	–768 267	–666 067	–870 752	–875 653	19.9
Number of Parties showing decrease in emissions by more than 1 per cent:	*18*					
Number of Parties showing change in emissions within 1 per cent:	*2*					
Number of Parties showing increase in emissions by more than 1 per cent:	*21*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
* A Party undergoing the process of transition to a market economy.
** Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 14. Anthropogenic methane emissions from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

Party	Gg CO_2 equivalent					Change from 1990 to 2006 (%)
	1990	1995	2000	2005	2006	
Australia	5 229	3 021	2 913	3 568	4 138	–20.9
Austria	0.25	0.04	0.06	0.09	0.09	–64.9
Belarus*	4.10	6.25	4.91	3.63	4.46	8.7
Belgium						
Bulgaria*[a]						
Canada	3 198	20 153	1 012	5 395	7 471	133.6
Croatia*	0.01	0.00	0.04	0.00	0.00	–86.7
Czech Republic*	78	70	78	96	115	47.1
Denmark	–0.60	–0.59	–0.50	–0.49	–0.49	–17.3
Estonia*	4.76	1.46	3.11	0.41	10.01	110.0
European Community[b]	1 951	1 715	1 899	1 819	1 908	–2.2
Finland	10.20	8.71	7.76	8.71	9.52	–6.7
France	1 420	1 316	1 332	1 290	1 238	–12.8
Germany						
Greece	50	35	166	8	17	–66.5
Hungary*[a]	30	22	27	27	26	–13.3
Iceland	1.81	6.53	7.97	7.97	9.45	421.6
Ireland	1.80	2.08	1.27	0.66	1.89	4.6
Italy	143	27	87	34	27	–80.8
Japan	99	71	47	36	26	–73.7
Latvia*	19	35	56	35	32	70.9
Liechtenstein						
Lithuania*	0.64	1.59	1.76	0.28	6.67	945.7
Luxembourg						
Monaco						
Netherlands						
New Zealand	43	50	44	50	49	15.7
Norway	1.77	0.21	0.33	0.65	7.24	309.7
Poland*[a]	7	2 198	2 258	2 349	2 375	–
Portugal	137	151	118	215	67	–51.3
Romania*[a]	0.21	0.47	8.19	0.48	2.15	917.2
Russian Federation*	3 633	854	3 304	1 572	2 775	–23.6
Slovakia*	15	10	14	22	19	28.8
Slovenia*[a]						
Spain	171	144	159	236	511	199.0
Sweden	1.73	1.62	2.95	4.99	8.54	393.5
Switzerland	8.19	3.26	0.27	0.35	0.75	–90.8
Turkey**	0.06	0.03	0.11	0.01	0.03	–45.0
Ukraine*	8.39	14.29	3.44	5.25	8.94	6.5
United Kingdom	17	30	25	21	29	72.4
United States	4 472	4 697	18 983	12 307	24 552	449.0
Number of Parties showing decrease in emissions by more than 1 per cent:	*15*					
Number of Parties showing change in emissions within 1 per cent:	*0*					
Number of Parties showing increase in emissions by more than 1 per cent:	*18*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
* A Party undergoing the process of transition to a market economy.
** Decision 26/CP.7 invited Parties to recognize the special circumstances of Turkey, which place Turkey in a situation different from that of other Annex I Parties.

Table 15. Anthropogenic nitrous oxide emissions from land use, land-use change and forestry, 1990, 1995, 2000, 2005 and 2006

Party	Gg CO_2 equivalent					Change from 1990 to 2006 (%)
	1990	1995	2000	2005	2006	
Australia	2 035	1 248	1 294	1 385	1 529	–24.9
Austria	252	256	260	268	268	6.1
Belarus*	2.90	4.40	8.80	8.68	9.77	236.9
Belgium						
Bulgaria*[a]						
Canada	2 017	12 539	645	3 365	4 653	130.8
Croatia*	0.00	0.00	0.01	0.00	0.00	–86.7
Czech Republic*	29	22	18	17	19	–35.8
Denmark	0.09	0.09	0.07	0.07	0.07	–17.3
Estonia*	0.48	0.15	0.32	0.04	1.02	110.0
European Community[b]	2 928	2 699	2 454	2 196	2 289	–21.8
Finland	35	15	18	20	27	–21.5
France	2 085	1 820	1 573	1 272	1 196	–42.6
Germany	375	375	422	422	422	12.5
Greece	5.06	3.53	16.86	0.84	1.70	–66.5
Hungary*[a]	3.06	2.23	2.73	2.73	2.64	–13.9
Iceland	324	323	323	325	326	0.6
Ireland	15	20	23	33	33	117.3
Italy	15	83	9	3	125	762.1
Japan	103	63	34	20	17	–83.6
Latvia*	1.91	3.59	5.83	3.63	4.68	144.9
Liechtenstein		0.03	0.02	0.03		
Lithuania*	18	18	18	18	86	383.4
Luxembourg						
Monaco						
Netherlands						
New Zealand	5	9	11	15	15	207.1
Norway	13	14	13	13	13	–2.2
Poland*[a]	0.76	4.52	2.86	2.79	2.81	270.5
Portugal	40	42	38	48	33	–17.7
Romania*[a]	0.02	0.05	0.83	0.05	0.22	917.2
Russian Federation*	369	87	335	158	282	–23.5
Slovakia*	3.41	2.26	3.10	5.34	3.17	–7.0
Slovenia*[a]						
Spain	17	15	16	24	52	198.2
Sweden	81	63	72	101	128	58.4
Switzerland	11.98	8.75	6.30	5.46	5.67	–52.7
Turkey**	0.48	0.27	0.92	0.06	0.27	–45.1
Ukraine*	2.17	3.69	0.89	1.36	2.31	6.5
United Kingdom	8.10	6.91	5.33	3.73	4.25	–47.5
United States	1 498	1 842	3 469	3 073	4 308	187.5
Number of Parties showing decrease in emissions by more than 1 per cent:	*17*					
Number of Parties showing change in emissions within 1 per cent:	*1*					
Number of Parties showing increase in emissions by more than 1 per cent:	*16*					

[a] Data for the base year defined by decisions 9/CP.2 and 11/CP.4 (Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989), Slovenia (1986)) are used for this Party instead of 1990 data.
[b] Emission estimates of the European Community are reported separately from those of its member States.
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