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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 1990–2005**

National greenhouse gas inventory data for the period 1990–2005

Note by the secretariat*

Summary

Thirty-eight of the 41 Parties included in Annex I to the Convention (Annex I Parties) submitted their national greenhouse gas (GHG) inventories in 2007; 18 of them submitted by the deadline of 15 April. Thirty-six Annex I Parties provided a national inventory report.

For all Annex I Parties taken together, total aggregate GHG emissions excluding emissions/removals from land use, land-use change and forestry (LULUCF) decreased by 2.8 per cent between 1990 and 2005 (by 4.6 per cent for GHG emissions including LULUCF). For Annex I Parties with economies in transition (Annex I EIT Parties) GHG emissions excluding LULUCF decreased by 35.2 per cent; GHG emissions including LULUCF decreased by 36.2 per cent. For the Annex I non-EIT Parties, GHG emissions excluding LULUCF increased by 11.0 per cent and GHG emissions including LULUCF increased by 10.0 per cent.

* This document was submitted late in order to take into account the most recent resubmissions of greenhouse gas inventories.

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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 from 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 requested¹ 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. This document is based on the national GHG inventories from Annex I Parties received by the secretariat by 21 September 2007. It shows the status of reporting of annual GHG inventories from Annex I Parties in 2007 (chapter II), and provides a summary of the latest available data on GHG emissions and removals from Annex I Parties for the period 1990–2005 (chapter III).

3. Data are provided for carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), as well as for hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆) taken together. Data are also provided for total² aggregate³ GHG emissions, both including and excluding net GHG emissions/removals from land use, land-use change and forestry (LULUCF).

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

4. The COP and the SBI may wish to take note of the information contained in this document and provide further guidance to Parties and the secretariat.

II. Status of reporting

A. Timeliness and completeness of submissions

5. In accordance with the UNFCCC reporting guidelines on annual inventories, Annex I Parties are required to submit annually a national inventory report (NIR) and common reporting format (CRF) tables comprising data from the base year up to two years before the year of submission,⁴ that is from 1990 up to 2005 in the 2007 submission. Table 1 presents the status of reporting of GHG inventory submissions for 2007.

6. As shown in table 1, 38 of 41 Parties provided complete CRF tables for all years from 1990⁵ to 2005. Of the 38 inventories submitted, 18 were received by the due date of 15 April and 36 included an

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 up; the inclusion of land use, land-use change and forestry into the sum is indicated separately.

³ The term ‘aggregate’ implies that GHG emissions are calculated as a weighted sum of CO₂, CH₄, N₂O, HFCs, PFCs and SF₆; the sum is made using the global warming potentials agreed under the Convention (1 for CO₂, 21 for CH₄, 310 for N₂O, and specific values for individual HFCs, PFCs and SF₆).

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” (FCCC/SBSTA/2006/9).

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).

NIR. After the initial submission, 12 Parties sent a revised version of their inventory reflecting improvements in their GHG estimates.

Table 1. Greenhouse gas inventory submissions from Annex I Parties in 2007

Party	CRF submission date^a	Years reported	Submission of NIR
Australia	<i>8 May 2007</i>	1990–2005	✓
Austria	13 April 2007	1990–2005	✓
Belarus	<i>25 May 2007</i>	1990–2005	✓
Belgium	<i>18 April 2007</i>	1990–2005	✓
Bulgaria	<i>23 May 2007</i>	1988–2005	✓
Canada	<i>25 May 2007</i>	1990–2005	✓
Croatia	–	–	–
Czech Republic	<i>17 April 2007</i>	1990–2005	✓
Denmark	15 April 2007	1990–2005	✓
Estonia	13 April 2007	1990–2005	✓
European Community	15 April 2007	1990–2005	✓
Finland	13 April 2007	1990–2005	✓
France	11 April 2007	1990–2005	✓
Germany	<i>2 May 2007</i>	1990–2005	✓
Greece	–	–	–
		Average of 1985–1987,	
Hungary	<i>20 April 2007</i>	1985–2005	✓
Iceland	<i>24 April 2007</i>	1990–2005	✓
Ireland	13 April 2007	1990–2005	✓
Italy	13 April 2007	1990–2005	✓
Japan	<i>26 May 2007</i>	1990–2005	✓
Latvia	12 April 2007	1990–2005	✓
Liechtenstein	<i>10 May 2007</i>	1990–2005	✓
Lithuania	<i>17 April 2007</i>	1990–2005	✓
Luxembourg	<i>17 May 2007</i>	1990–2005	✓
Monaco	<i>10 July 2007</i>	1990–2005	✓
Netherlands	13 April 2007	1990–2005	✓
New Zealand	<i>4 May 2007</i>	1990–2005	✓
Norway	13 April 2007	1990–2005	✓
Poland	10 April 2007	1988–2005	✓
Portugal	13 April 2007	1990–2005	✓
Romania	12 April 2007	1989–2005	✓
Russian Federation	<i>22 April 2007</i>	1990–2005	–
Slovakia	<i>16 April 2007</i>	1990–2005	–
Slovenia	13 April 2007	1986–2005	✓
Spain	<i>24 April 2007</i>	1990–2005	✓
Sweden	<i>17 April 2007</i>	1990–2005	✓
Switzerland	13 April 2007	1990–2005	✓
Turkey	–	–	–
Ukraine	<i>14 June 2007</i>	1990–2005	✓
United Kingdom of Great Britain and Northern Ireland	13 April 2007	1990–2005	✓
United States of America	11 April 2007	1990–2005	✓

^a The date of submission of common reporting format (CRF) data is meant here; the submission date for the national inventory report (NIR) may be different. The dates after 15 April 2007 are shown in italics; the dates after 27 May 2007 (six weeks after the submission deadline) are shown in bold.

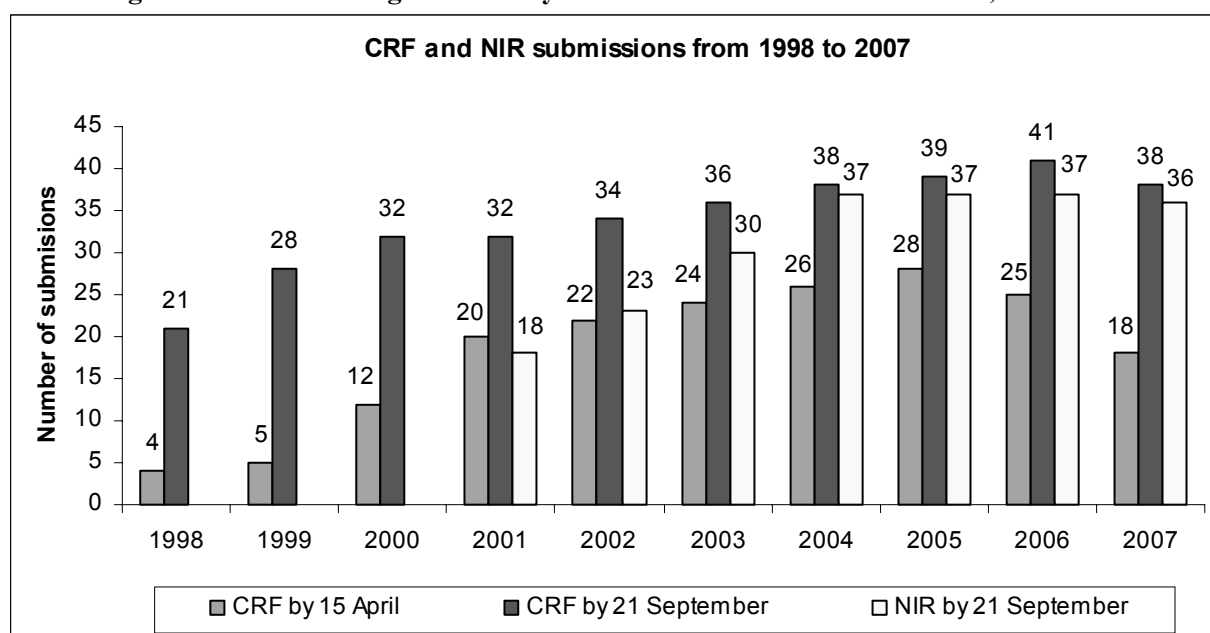
7. This year (2007) is the first year when all reporting Parties used the CRF Reporter software for the submission of their inventories. It is also the first year when all reporting Parties submitted data for the LULUCF sector.

8. Two Parties (Monaco and Ukraine) were late by more than six weeks in submitting their CRF tables, and six Parties (Hungary, Iceland, Italy, Luxembourg, Monaco and Ukraine) were equally late in submitting their NIR.

9. At the time of preparation of this document, three Parties (Croatia, Greece and Turkey) had not yet submitted their 2007 inventories and two Parties (Russian Federation and Slovakia) had not yet provided their NIRs.

10. Figure 1 illustrates the number of national inventory submissions from Annex I Parties since 1998. It shows a steady increase in the number of submissions until 2006. However, the total number of submissions, as well as the number of GHG inventories submitted on time, decreased in 2007.

Figure 1. Greenhouse gas inventory submissions from Annex I Parties, 1998–2007



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

B. Recalculations

11. Parties implement recalculations, when required, in order to improve the quality of emission estimates. In 2007, 31 Parties conducted recalculations reflecting changes in activity data, emission factors and the 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 recalculations on GHG emissions in the base year varied widely. For total aggregate GHG emissions excluding LULUCF, the change was less than 1 per cent for 24 Parties and above 5 per cent for two Parties. For total aggregate GHG emissions including LULUCF, the change was less than 1 per cent for 16 Parties and above 5 per cent for nine Parties (table 2).

13. Many Parties recalculated their 2006 inventories after the publication of the 2006 report containing the summary of GHG data (FCCC/SBI/2006/26), in response to issues identified by expert review teams during the 2006 review process. Such changes are reflected in paragraph 12 above only partially, that is, only for those Parties which made a complete resubmission of the 2006 inventory to the secretariat; some Parties did not make such resubmissions. Also as a result of the 2006 reviews, some Parties made, or intend to make, changes in their 2007 submissions; this report reflects such changes only for Parties which have resubmitted their 2007 inventories with those changes.

Table 2. Inventory recalculations by Annex I Parties in 2007

Party	Recalculations conducted in 2007	Impact on base year GHG emissions excluding LULUCF (%)	Impact on base year GHG emissions including LULUCF (%)
Australia	✓	-1.13	-1.38
Austria	✓	0.12	0.23
Belarus	✓	-0.01	-9.24
Belgium	–	–	–
Bulgaria	✓	0.23	19.24
Canada	✓	-0.49	-8.48
Croatia	–	–	–
Czech Republic	✓	Less than ±0.001	0.01
Denmark	✓	-0.01	-0.01
Estonia	✓	-3.51	-4.46
European Community	✓	-0.13	-0.44
Finland	✓	-0.13	-0.20
France	✓	0.04	-1.91
Germany	✓	-0.08	-0.08
Greece	–	–	–
Hungary	✓	-6.06	-6.51
Iceland	✓	-0.10	-0.16
Ireland	✓	-0.43	-0.41
Italy	✓	Less than ±0.001	-0.02
Japan	✓	-0.004	-1.46
Latvia	✓	2.12	10.52
Liechtenstein	✓	0.004	0.005
Lithuania	–	–	–
Luxembourg	–	–	–
Monaco	–	–	–
Netherlands	–	–	–
New Zealand	✓	0.01	0.82
Norway	✓	-0.08	-0.54
Poland	–	–	–
Portugal	✓	-0.05	-0.04
Romania	–	–	–
Russian Federation	✓	-7.04	-7.05
Slovakia	✓	-1.78	-1.84
Slovenia	✓	0.75	0.81
Spain	✓	0.07	-7.39
Sweden	✓	-0.24	36.64
Switzerland	✓	Less than ±0.001	Less than ±0.001
Turkey	–	–	–
Ukraine	✓	-0.16	-2.15
United Kingdom of Great Britain and Northern Ireland	✓	-0.61	-0.61
United States of America	✓	2.06	6.36

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

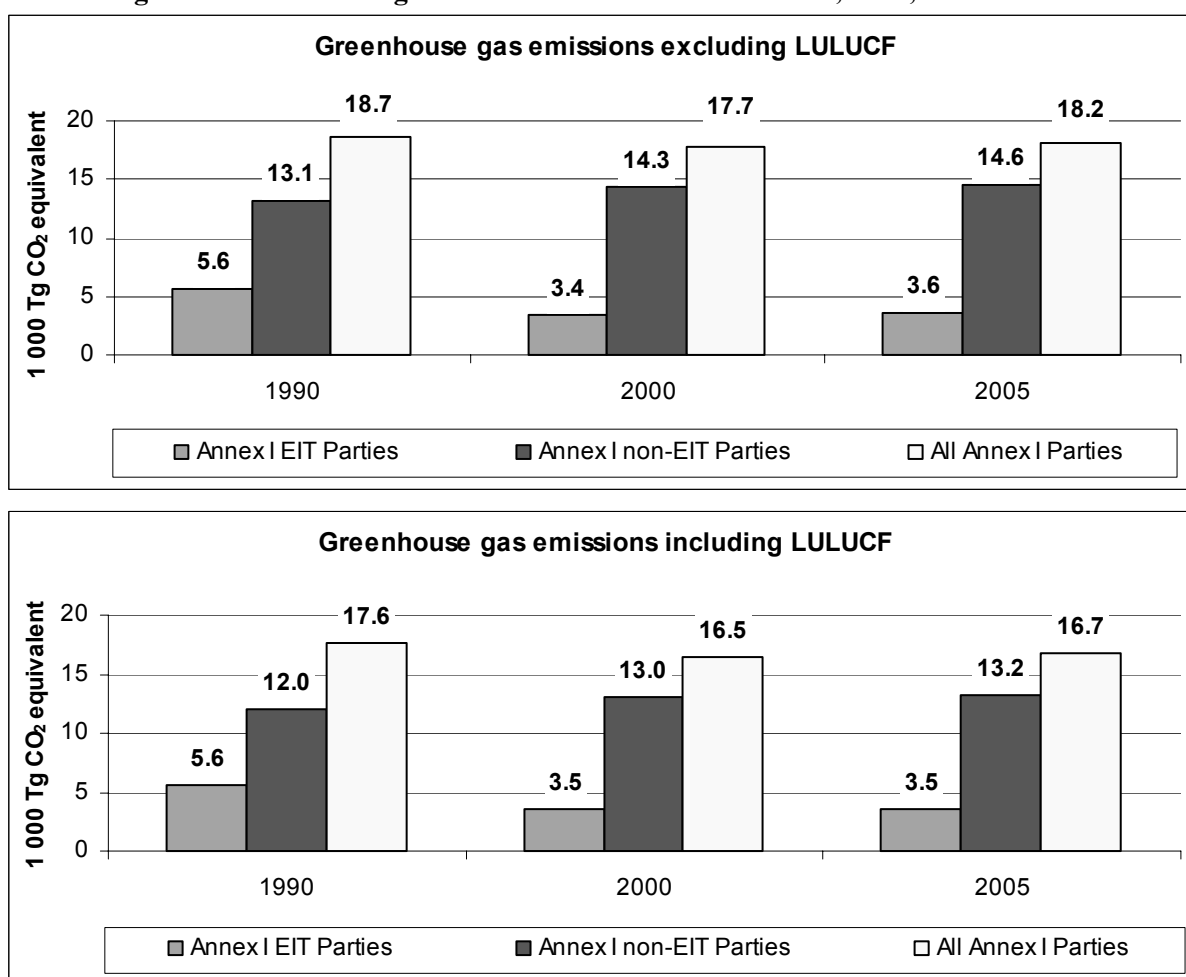
Note: The information in this table is based on the latest available 2007 inventory submissions. As a result of the 2006 inventory reviews, some Parties made, or intend to make, changes in their 2007 submissions; this report reflects such changes only for Parties which have resubmitted their 2007 inventories with those changes.

III. Overview of emission trends and sources in Parties included in Annex I to the Convention

A. Total aggregate greenhouse gas emissions

14. From 1990⁶ to 2005, the total aggregate GHG emissions excluding emissions/removals from LULUCF for all Annex I Parties decreased by 2.8 per cent, from 18,709.2 to 18,181.2 Tg⁷ CO₂ equivalent (figures 2 and 3⁸). Total aggregate emissions including LULUCF decreased by 4.6 per cent, from 17,551.2 to 16,738.7 Tg CO₂ equivalent. Since 2000, GHG emissions from Annex I Parties increased by 2.6 per cent (excluding LULUCF) and by 1.4 per cent (including LULUCF).

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



Abbreviations: Annex I Parties = Parties included in Annex I to the Convention, EIT Parties = Parties with economies in transition, LULUCF = land use, land-use change and forestry.

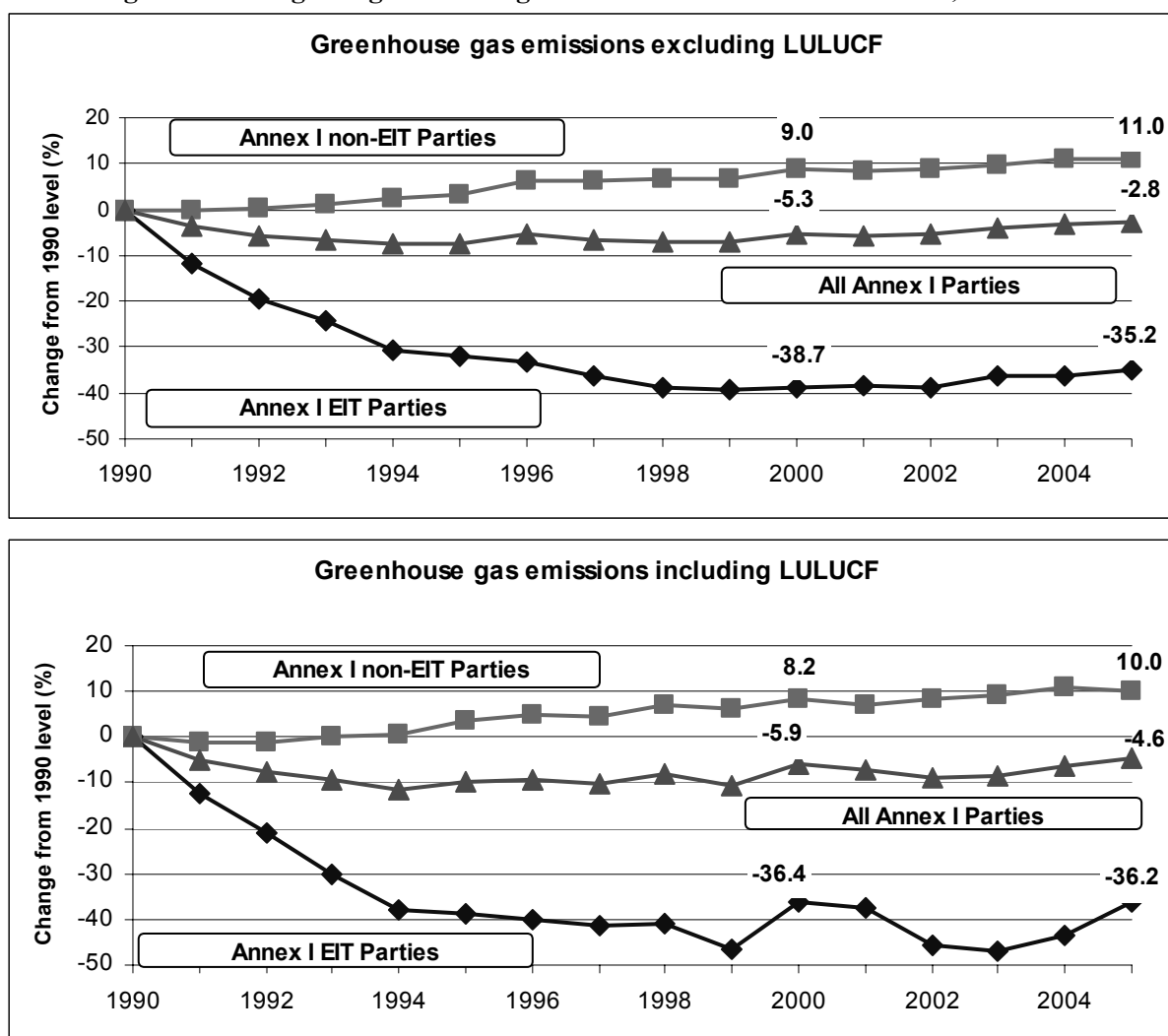
Note: For Croatia, Greece and Turkey, data from their 2006 submissions are used; for 2005, 2004 values are used as the latest available estimate.

⁶ Unless otherwise specified, base year data are used in totals instead of 1990 data (as per 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; one thousand Tg equals one billion tonnes.

⁸ In these and other figures, 2004 data were used for 2005 for those Parties that have not submitted their 2007 inventory.

Figure 3. Changes in greenhouse gas emissions from Annex I Parties, 1990–2005



Abbreviations: Annex I Parties = Parties included in Annex I to the Convention, EIT Parties = Parties with economies in transition, LULUCF = land use, land-use change and forestry.

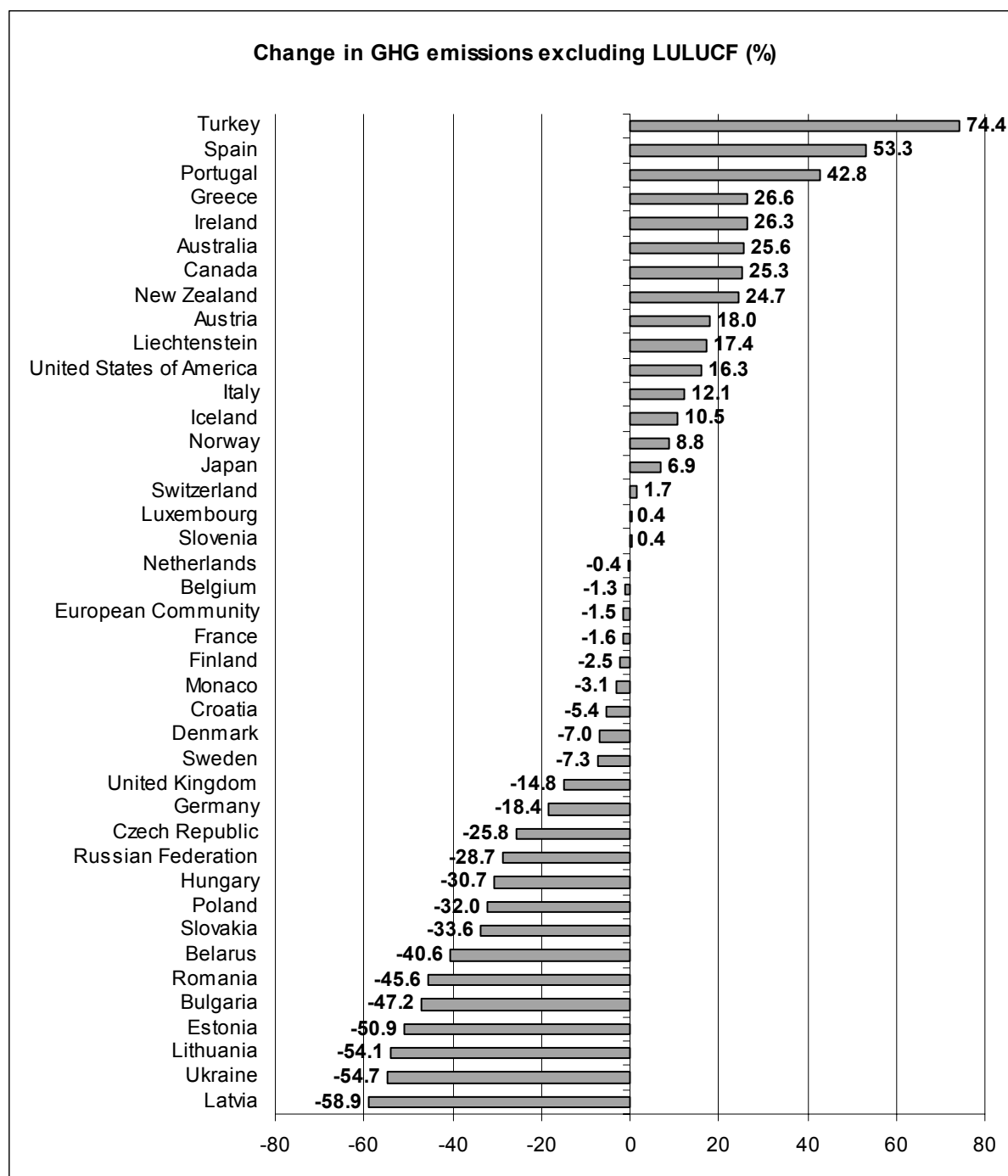
Note: (1) For Croatia, Greece and Turkey, data from their 2006 submissions are used; for 2005, 2004 values are used as the latest available estimate; (2) The 1991 data for the Russian Federation used in this graph are obtained by the interpolation of the 1990 and 1992 data. The reported 1991 value for the emissions from the energy sector appears to contain a technical error (182,722.3 Gg compared with 2,382,402.0 Gg in 1990 and 2,017,364.5 Gg in 1992).

15. For Annex I Parties with economies in transition (Annex I EIT Parties), total aggregate emissions excluding LULUCF decreased by 35.2 per cent, from 5,596.8 Tg CO₂ equivalent in 1990 to 3,627.7 Tg CO₂ equivalent in 2005 (by 36.2 per cent for GHG emissions including LULUCF). Between 2000 and 2005, GHG emissions from these Parties increased by 5.8 per cent excluding LULUCF and by 0.2 per cent including LULUCF. For the Annex I non-EIT Parties, total aggregate emissions excluding LULUCF increased from 13,112.4 Tg CO₂ equivalent in 1990 to 14,553.6 Tg CO₂ equivalent in 2005, representing an 11.0 per cent increase (10.0 per cent increase for GHG emissions including LULUCF). Between 2000 and 2005, GHG emissions from these Parties increased by 1.9 per cent excluding LULUCF and by 1.7 per cent including LULUCF.

16. The changes in total aggregate GHG emissions from 1990 to 2005 varied considerably among countries. Latvia has the largest decrease in emissions: 58.9 per cent for emissions excluding LULUCF

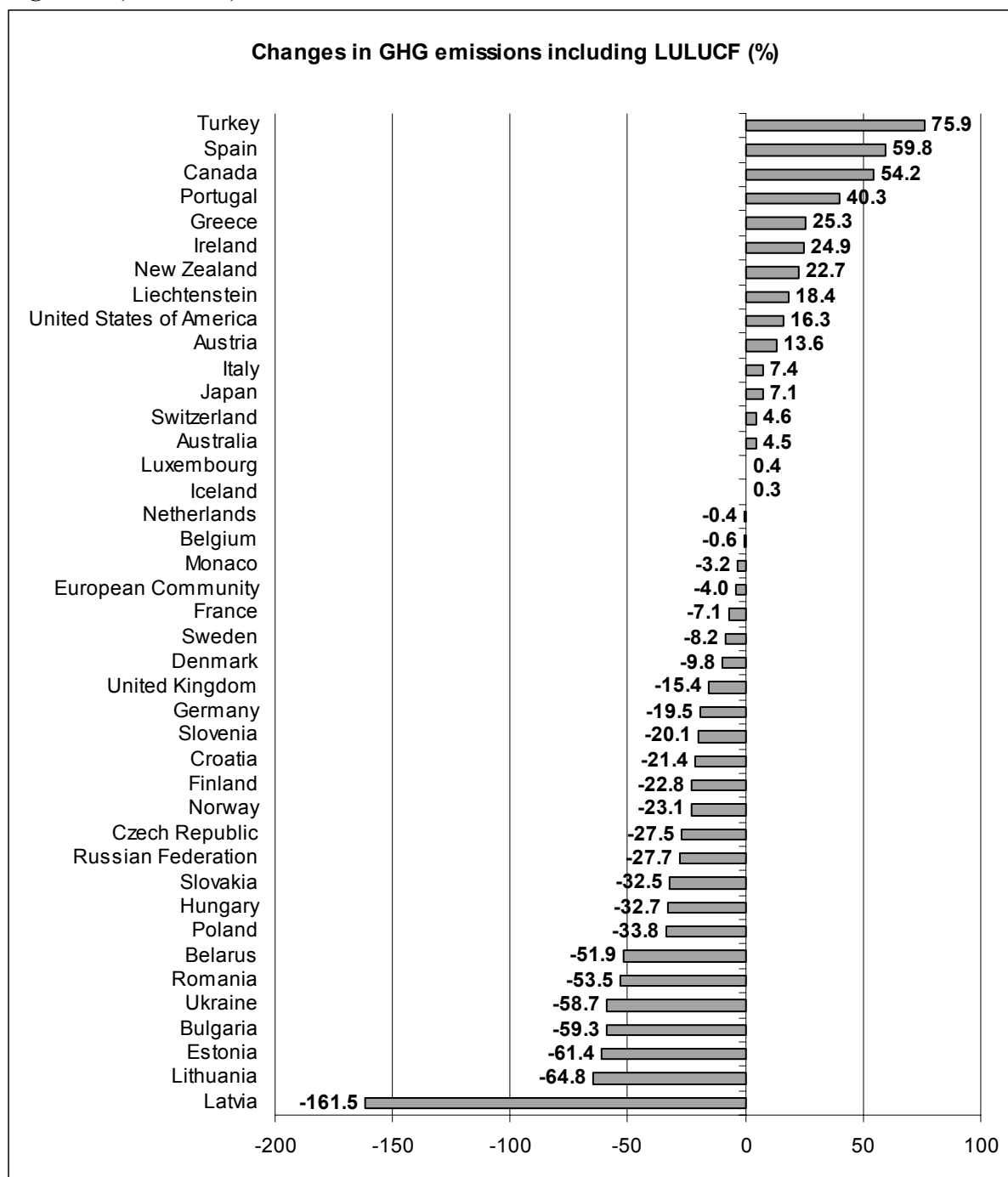
and 161.5 per cent for emissions including LULUCF. Turkey, on the other hand, had the greatest increase in emissions: 74.4 per cent for emissions excluding LULUCF, and 75.9 per cent for emissions including LULUCF (figure 4).⁹

Figure 4. Changes in total aggregate greenhouse gas emissions of individual Annex I Parties, 1990–2005



⁹ As Turkey has not submitted its 2007 inventory, these numbers relate to the change in emissions between 1990 and 2004. Among the Parties which have reported the 2007 inventory, Spain has the greatest change in emissions between 1990 and 2005.

Figure 4. (continued)



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

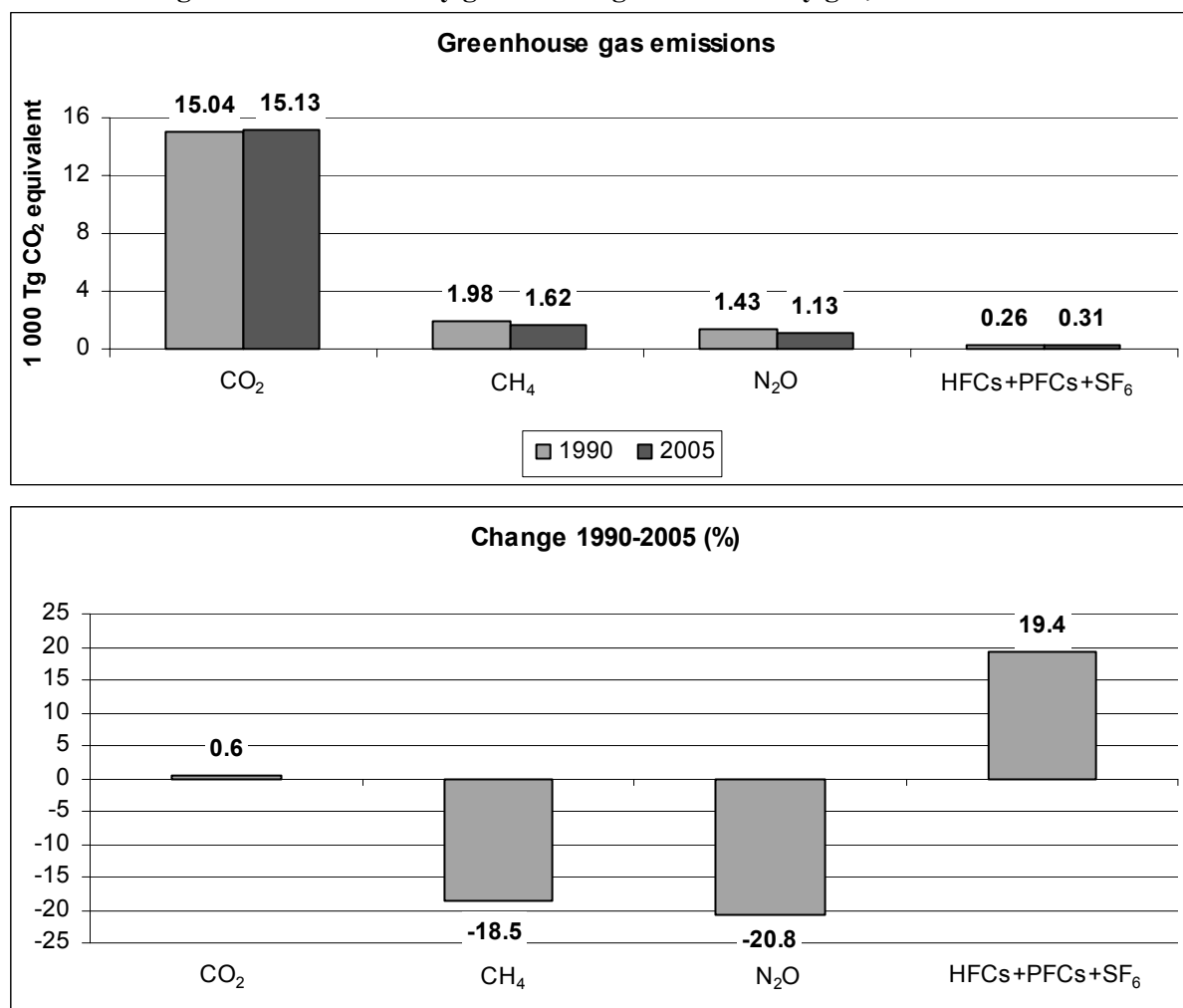
Note: For Croatia, Greece and Turkey, data from their 2006 submissions are used; for 2005, 2004 values are used as the latest available estimate.

B. Greenhouse gas emissions by gas

17. Figure 5 illustrates the share of each GHG in total emissions without LULUCF for 1990 and 2005. For both years, CO₂ has the greatest contribution to the total emissions (80.4 per cent in 1990 and 83.2 per cent in 2005). It also illustrates the changes in total emissions of each GHG from 1990 to 2005.

CO₂ emissions increased by 0.6 per cent, while CH₄ and N₂O emissions decreased by 18.5 and 20.8 per cent, respectively. The emissions of HFCs, PFCs and SF₆ taken together increased by 19.4 per cent.

Figure 5. Annex I Party greenhouse gas emissions by gas, 1990 and 2005

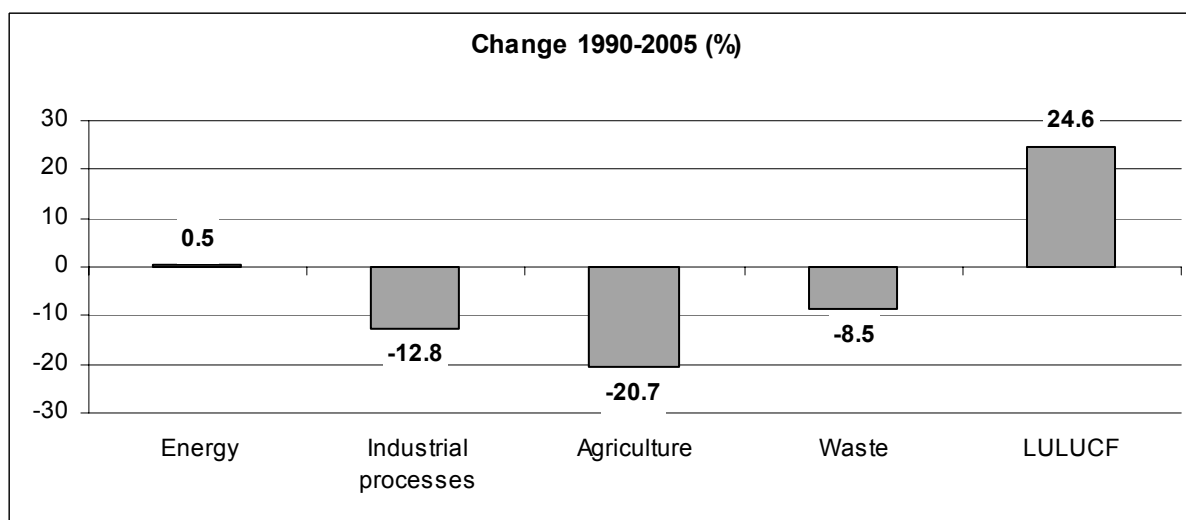
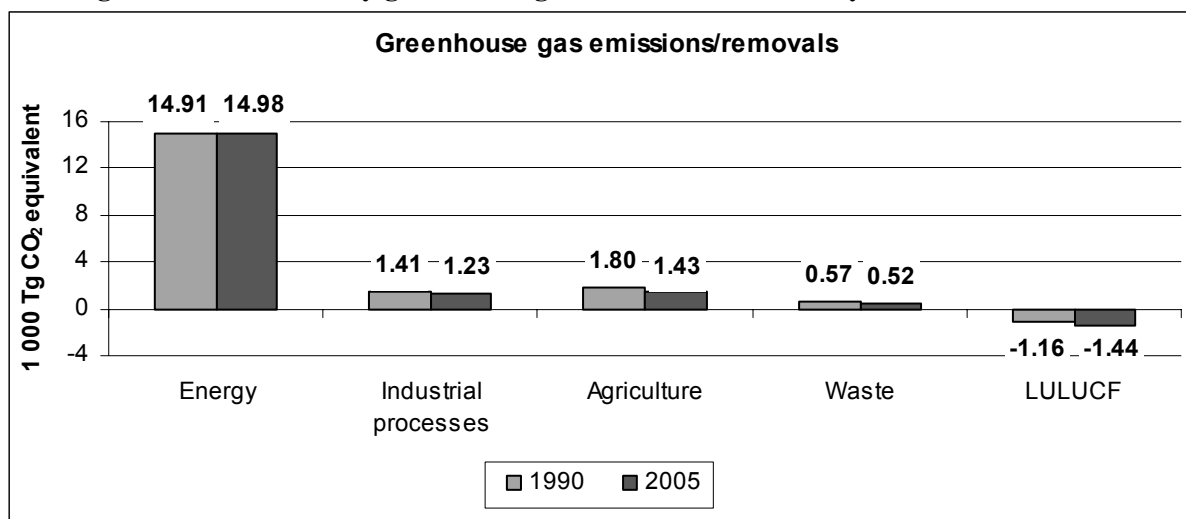


Note: For Croatia, Greece and Turkey, data from their 2006 submissions are used; for 2005, 2004 values are used as the latest available estimate.

C. Greenhouse gas emissions by sector

18. 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, except energy, decreased between 1990 and 2005. GHG emissions from the energy sector increased by 0.5 per cent. The decreases from the industrial processes, agriculture and waste sectors are 12.8, 20.7 and 8.5 per cent, respectively. Net GHG removals by LULUCF increased by 24.6 per cent.

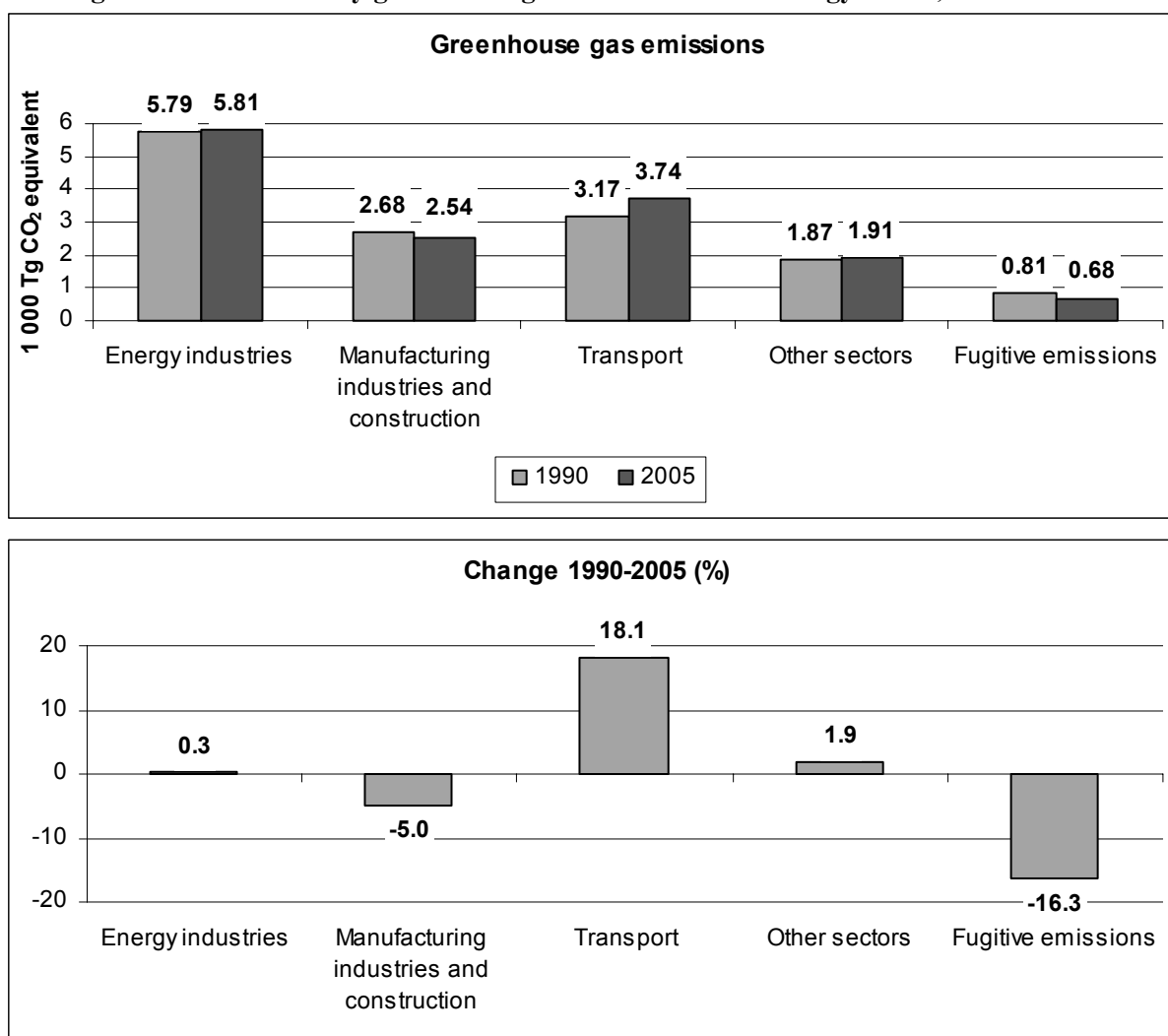
Figure 6. Annex I Party greenhouse gas emissions/removals by sector, 1990 and 2005



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

Note: For Croatia, Greece and Turkey, data from their 2006 submissions are used; for 2005, 2004 values are used as the latest available estimate.

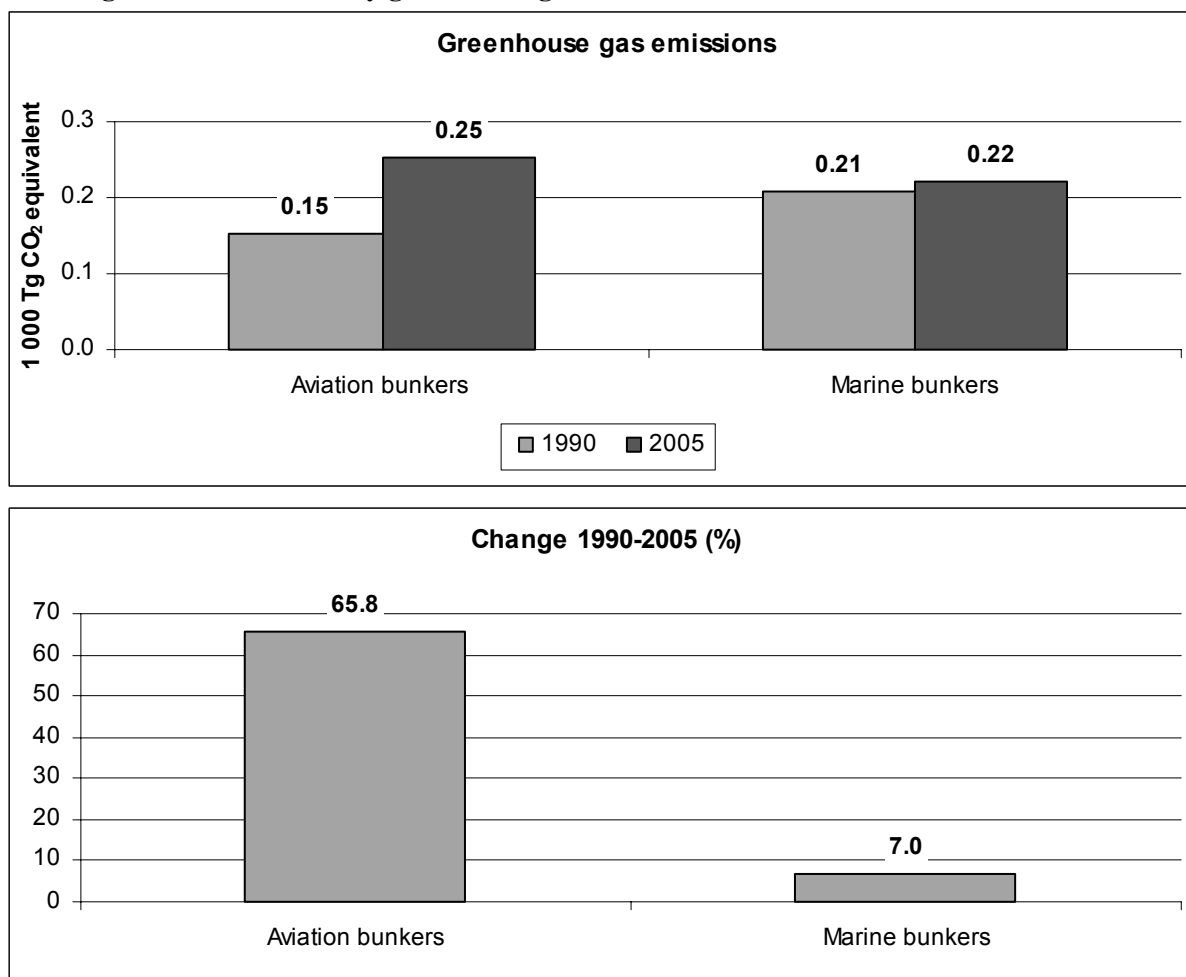
19. Figure 7 illustrates the profile and trend of emissions within the energy sector. The greatest increase occurred in transport (18.1 per cent from 1990 to 2005); and the greatest decline occurred for fugitive emissions (16.3 per cent). The emissions from energy industries and other sectors increased slightly, while emissions from manufacturing industries and construction decreased by 5.0 per cent.

Figure 7. Annex I Party greenhouse gas emissions in the energy sector, 1990 and 2005

Note: For Croatia, Greece and Turkey, data from their 2006 submissions are used; for 2005, 2004 values are used as the latest available estimate.

20. The changes in emissions relating to international bunkers are shown in figure 8. GHG emissions from fuels sold for use in international aviation and international marine transportation increased by 65.8 and 7.0 per cent, respectively.

Figure 8. Annex I Party greenhouse gas emissions from bunker fuels, 1990 and 2005



Note: For Croatia, Greece and Turkey, data from their 2006 submissions are used; for 2005, 2004 values are used as the latest available estimate.

D. Comparison of emission estimates in 2006 and 2007 reports

21. In 2006, the secretariat published a similar document with summary information on GHG emissions from Annex I Parties (FCCC/SBI/2006/26), based on the 2006 inventory submissions. Table 3 shows a comparison of the estimates for total aggregate GHG emissions reported in that document and in this document, based on the 2007 inventory submissions. The table also provides explanations for the differences in estimates between the two documents.

Table 3. Comparison of the 2007 and 2006 estimates for total aggregate GHG emissions from Annex I Parties

	Last year's document (FCCC/SBI/2006/26)	This document (FCCC/SBI/2007/30)	Explanation for the difference between the 2007 and 2006 estimates
Total aggregate GHG emissions without LULUCF in 1990 (1,000 Tg CO₂ equivalent)			
All Annex I Parties	18.6	18.7	Impact of inventory recalculations for Annex I EIT and Annex I non-EIT Parties, see the relevant explanations below.
Annex I EIT Parties	5.55	5.60	Inventory recalculations, in particular for Lithuania, Hungary and the Russian Federation.
Annex I non-EIT Parties	13.0	13.1	Inventory recalculations, in particular for Australia and the United States of America.
Total aggregate GHG emissions with LULUCF in 1990 (1,000 Tg CO₂ equivalent)			
All Annex I Parties	16.5	17.6	Impact of the addition of new data and inventory recalculations for Annex I EIT and Annex I non-EIT Parties, see the relevant explanations below.
Annex I EIT Parties	4.91	5.60	Addition of LULUCF data for Estonia, Lithuania, Poland and Slovenia (LULUCF data were not available for the 2006 report); inventory recalculations, in particular for Hungary and the Russian Federation.
Annex I non-EIT Parties	11.6	12.0	Addition of LULUCF data for Switzerland (LULUCF data were not available for the 2006 report); inventory recalculations, in particular for Australia and the United States.
Changes in total aggregate GHG emissions without LULUCF from 1990 to the latest available year (%)			
All Annex I Parties	-3.3	-2.8	A combination of changes for Annex I EIT and Annex I non-EIT Parties, see the relevant explanations below.
Annex I EIT Parties	-36.8	-35.2	Inventory recalculations coupled with increases in emissions between 2004 and 2005, in particular for Lithuania and the Russian Federation.
Annex I non-EIT Parties	10.96	10.99	Inventory recalculations and increases in emissions between 2004 and 2005 (for example in Austria, New Zealand, Spain and the United States) offset by decreases in emissions (for example in Denmark, Finland, the Netherlands and Sweden).
Changes in total aggregate GHG emissions with LULUCF from 1990 to the latest available year (%)			
All Annex I Parties	-4.9	-4.6	A combination of changes for Annex I EIT and Annex I non-EIT Parties, see the relevant explanations below.
Annex I EIT Parties	-44.8	-36.2	Addition of LULUCF data for Estonia, Lithuania, Poland and Slovenia (LULUCF data were not available for the 2006 report); inventory recalculations; increases in emissions from 2004 to 2005.
Annex I non-EIT Parties	12.1	10.0	Addition of LULUCF data for Switzerland (LULUCF data were not available for the 2006 report) and inventory recalculations.

Abbreviations: Annex I Parties = Parties included in Annex I to the Convention, EIT Parties = Parties with economies in transition, GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

Note: As a result of the review process in 2006, some Parties recalculated and resubmitted their 2006 inventories after publication of the document FCCC/SBI/2006/26. Such recalculations were not accounted for in that document.

E. Emissions data for individual Annex I Parties

22. Detailed GHG data for Annex I Parties are presented in tables 4–15. Total aggregate anthropogenic emissions excluding and including emissions/removals from LULUCF are provided in tables 4 and 5; emissions of CO₂, CH₄, N₂O (both including and excluding emissions/removals from LULUCF) in tables 6–11; the total of HFCs, PFCs and SF₆ in table 12; and emissions/removals from LULUCF in tables 13–15.

23. 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.

24. The changes in emissions from 1990 to 2005 were calculated using the exact (not rounded) values and they may differ from a ratio calculated with the rounded numbers provided in the tables.

25. As Croatia, Greece and Turkey have not submitted their 2007 inventories, tables 4–15 contain data from their 2006 submissions. For 2005, 2004 values are used as the latest available estimate. These values are shown in italics in tables 4–15.

26. Due to a page limitation on this report, data are presented only for 1990, 1995, 2000, 2004 and 2005. More detailed data for the whole period 1990–2005, including disaggregated data by gas and by sector, can be found on the GHG emissions data page¹⁰ at the UNFCCC website.

¹⁰ <http://unfccc.int/ghg_emissions_data/items/3800.php>.

Table 4. Total aggregate anthropogenic emissions of CO₂, CH₄, N₂O, HFCs, PFCs and SF₆, excluding emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	418 275	444 656	497 611	523 590	525 408	25.6
Austria	79 053	80 294	81 116	91 177	93 280	18.0
Belarus*	127 361	72 941	69 798	74 308	75 594	-40.6
Belgium	145 766	152 143	147 529	147 651	143 848	-1.3
Bulgaria* ^a	132 613	87 102	67 188	69 100	69 995	-47.2
Canada	595 954	645 654	720 898	747 350	746 889	25.3
Croatia*	31 124	21 913	25 268	29 432	29 432 ^c	-5.4
Czech Republic*	196 204	154 463	149 024	147 130	145 611	-25.8
Denmark	70 442	77 447	69 657	69 755	65 486	-7.0
Estonia*	42 625	22 475	19 218	21 457	20 939	-50.9
European Community ^b	4 257 837	4 148 804	4 134 582	4 227 825	4 192 634	-1.5
Finland	71 000	71 537	70 016	80 896	69 241	-2.5
France	567 303	562 729	564 073	561 028	558 392	-1.6
Germany	1 227 860	1 095 654	1 019 764	1 024 957	1 001 476	-18.4
Greece	108 742	113 195	131 756	137 633	137 633 ^c	26.6
Hungary* ^a	115 682	79 217	77 310	79 176	80 219	-30.7
Iceland	3 352	3 138	3 684	3 678	3 705	10.5
Ireland	55 374	59 372	69 127	68 659	69 945	26.3
Italy	516 851	530 264	551 594	577 859	579 548	12.1
Japan	1 272 043	1 343 636	1 347 622	1 356 989	1 359 914	6.9
Latvia*	26 442	12 484	10 050	10 715	10 880	-58.9
Liechtenstein	230	236	255	270	271	17.4
Lithuania*	49 370	21 980	19 370	21 754	22 682	-54.1
Luxembourg	12 687	9 775	9 548	12 789	12 738	0.4
Monaco	107	115	117	104	104	-3.1
Netherlands	212 963	225 070	214 433	218 445	212 134	-0.4
New Zealand	61 900	64 456	70 326	75 118	77 159	24.7
Norway	49 751	49 854	53 549	54 892	54 153	8.8
Poland* ^a	586 903	453 170	405 078	396 651	398 952	-32.0
Portugal	59 921	71 127	82 260	84 660	85 540	42.8
Romania* ^a	282 467	186 967	138 584	160 059	153 654	-45.6
Russian Federation*	2 989 833	2 092 063	1 987 315	2 086 409	2 132 518	-28.7
Slovakia*	72 051	52 548	47 448	48 595	47 866	-33.6
Slovenia* ^a	20 314	18 593	18 804	19 983	20 391	0.4
Spain	287 366	318 370	384 419	425 236	440 649	53.3
Sweden	72 191	73 747	68 315	69 688	66 955	-7.3
Switzerland	52 749	51 044	51 709	53 036	53 636	1.7
Turkey**	170 059	220 719	279 956	296 602	296 602 ^c	74.4
Ukraine*	923 844	522 882	394 561	413 381	418 923	-54.7
United Kingdom	771 415	710 129	673 967	660 424	657 396	-14.8
United States of America	6 229 041	6 560 936	7 125 881	7 189 715	7 241 482	16.3
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						22
<i>Change in emissions within 1 per cent (number of Parties)</i>						3
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						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.

^c Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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

Table 5. Total aggregate anthropogenic emissions of CO₂, CH₄, N₂O, HFCs, PFCs and SF₆, including emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	499 903	458 947	510 200	523 350	522 189	4.5
Austria	67 151	65 585	64 772	74 215	76 253	13.6
Belarus*	105 333	46 267	42 550	50 597	50 662	-51.9
Belgium	144 335	150 757	145 979	146 478	143 478	-0.6
Bulgaria* ^a	127 587	79 569	58 290	60 925	51 958	-59.3
Canada	473 310	800 624	614 027	828 115	729 710	54.2
Croatia*	16 687	1 378	5 983	13 111	13 111 ^c	-21.4
Czech Republic*	194 493	146 743	142 244	142 370	140 966	-27.5
Denmark	70 993	75 782	71 298	66 688	64 033	-9.8
Estonia*	33 262	13 261	10 418	13 470	12 843	-61.4
European Community ^b	4 040 425	3 863 993	3 846 862	3 926 864	3 877 452	-4.0
Finland	49 610	56 156	53 722	62 410	38 308	-22.8
France	533 314	521 249	526 735	500 295	495 440	-7.1
Germany	1 199 619	1 064 492	985 832	989 126	965 400	-19.5
Greece	105 549	108 826	128 797	132 231	132 231 ^c	25.3
Hungary* ^a	112 564	71 299	75 441	74 735	75 743	-32.7
Iceland	5 442	5 137	5 564	5 462	5 460	0.3
Ireland	55 495	59 553	69 235	68 465	69 288	24.9
Italy	437 033	427 042	454 473	473 920	469 538	7.4
Japan	1 179 935	1 250 055	1 254 700	1 254 578	1 263 872	7.1
Latvia*	5 772	-5 166	-4 060	-3 189	-3 552	-161.5
Liechtenstein	223	227	249	264	264	18.4
Lithuania*	38 631	14 125	10 680	13 122	13 581	-64.8
Luxembourg	12 413	9 502	9 275	12 516	12 465	0.4
Monaco	107	115	117	104	104	-3.2
Netherlands	215 355	227 271	216 850	220 800	214 475	-0.4
New Zealand	42 920	49 356	50 081	51 737	52 658	22.7
Norway	35 032	35 933	28 237	29 387	26 934	-23.1
Poland* ^a	553 976	420 389	377 035	369 927	366 848	-33.8
Portugal	63 749	69 519	78 476	86 983	89 467	40.3
Romania* ^a	249 826	147 683	100 295	124 291	116 233	-53.5
Russian Federation*	3 166 421	1 933 981	2 335 309	1 868 897	2 289 167	-27.7
Slovakia*	69 662	49 864	45 062	44 365	47 017	-32.5
Slovenia* ^a	18 725	13 688	13 629	14 340	14 961	-20.1
Spain	244 603	274 253	335 945	373 672	390 972	59.8
Sweden	68 652	45 579	35 585	64 248	63 042	-8.2
Switzerland	51 045	47 842	52 972	52 215	53 387	4.6
Turkey**	126 527	160 631	215 434	222 528	222 528 ^c	75.9
Ukraine*	872 377	463 802	329 312	352 202	360 358	-58.7
United Kingdom	774 310	711 132	673 541	658 511	655 361	-15.4
United States of America	5 529 241	5 742 196	6 390 514	6 378 871	6 431 935	16.3
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						23
<i>Change in emissions within 1 per cent (number of Parties)</i>						4
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						14

Note: Negative values in Gg mean removals; positive values in Gg mean emissions.

^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 Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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

Table 6. Total anthropogenic carbon dioxide emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	279 764	306 856	352 415	381 446	384 161	37.3
Austria	61 930	63 661	65 960	77 140	79 650	28.6
Belarus*	101 947	56 233	51 911	54 920	55 292	-45.8
Belgium	119 081	123 658	124 053	126 748	123 329	3.6
Bulgaria**a	98 792	66 340	50 463	53 264	54 978	-44.3
Canada	458 915	491 809	563 578	583 428	583 379	27.1
Croatia*	23 035	16 250	19 417	22 551	22 551 ^c	-2.1
Czech Republic*	165 060	132 125	129 017	127 297	125 932	-23.7
Denmark	54 044	61 542	54 445	55 447	51 885	-4.0
Estonia*	37 681	19 458	16 469	18 799	18 270	-51.5
European Community ^b	3 357 427	3 282 193	3 353 686	3 508 074	3 482 238	3.7
Finland	56 768	58 210	57 209	68 605	57 011	0.4
France	395 106	393 177	407 900	417 508	416 610	5.4
Germany	1 032 348	921 190	883 055	896 775	872 943	-15.4
Greece	84 314	87 426	103 963	110 280	110 280 ^c	30.8
Hungary**a	85 969	61 940	58 931	60 267	61 808	-28.1
Iceland	2 151	2 299	2 745	2 863	2 872	33.5
Ireland	32 553	35 481	44 884	45 747	47 292	45.3
Italy	434 782	445 712	463 607	490 933	493 372	13.5
Japan	1 144 197	1 228 053	1 256 736	1 287 602	1 293 469	13.0
Latvia*	19 136	9 074	7 021	7 502	7 574	-60.4
Liechtenstein	203	209	228	240	240	18.1
Lithuania*	36 169	15 158	12 085	13 597	14 315	-60.4
Luxembourg	12 104	9 158	8 828	11 978	11 874	-1.9
Monaco	105	112	113	100	98	-6.4
Netherlands	159 389	170 625	169 577	181 290	175 905	10.4
New Zealand	25 462	27 208	31 043	34 050	35 880	40.9
Norway	34 786	37 810	41 553	43 855	43 149	24.0
Poland**a	494 886	377 448	333 253	325 382	326 511	-34.0
Portugal	43 352	53 077	63 538	66 146	67 918	56.7
Romania**a	193 926	134 825	97 474	116 747	110 532	-43.0
Russian Federation*	2 442 217	1 690 171	1 622 708	1 698 064	1 744 084	-28.6
Slovakia*	60 222	43 716	39 382	40 244	39 757	-34.0
Slovenia**a	16 282	14 952	15 196	16 407	16 754	2.9
Spain	228 517	255 585	307 674	351 816	368 282	61.2
Sweden	56 421	58 043	53 416	55 182	52 569	-6.8
Switzerland	44 512	43 329	43 912	45 327	45 966	3.3
Turkey**	139 594	171 854	223 806	241 884	241 884 ^c	73.3
Ukraine*	714 044	392 067	294 585	315 631	321 541	-55.0
United Kingdom	590 341	549 788	550 494	557 841	557 546	-5.6
United States of America	5 061 634	5 384 615	5 939 968	6 064 329	6 089 490	20.3
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						<i>19</i>
<i>Change in emissions within 1 per cent (number of Parties)</i>						<i>1</i>
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						<i>21</i>

^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 Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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

Table 7. Total anthropogenic carbon dioxide emissions including emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	355 135	317 435	361 470	374 452	377 369	6.3
Austria	50 017	48 940	49 605	60 166	62 613	25.2
Belarus*	79 911	29 549	24 649	31 196	30 348	-62.0
Belgium	117 650	122 272	122 502	125 574	122 959	4.5
Bulgaria* ^a	93 766	58 807	41 565	45 089	36 941	-60.6
Canada	331 107	613 949	454 977	644 480	557 471	68.4
Croatia*	8 598	-4 285	131	6 230	6 230 ^c	-27.5
Czech Republic*	163 298	124 358	122 180	122 467	121 220	-25.8
Denmark	54 596	59 878	56 087	52 380	50 432	-7.6
Estonia*	28 310	10 241	7 664	10 809	10 173	-64.1
European Community ^b	3 135 341	2 993 432	3 061 747	3 203 027	3 163 669	0.9
Finland	35 328	42 802	40 884	50 092	26 047	-26.3
France	357 471	348 678	367 669	354 409	351 355	-1.7
Germany	1 003 732	889 654	848 700	860 522	836 446	-16.7
Greece	81 065	83 019	100 821	104 866	104 866 ^c	29.4
Hungary* ^a	82 819	53 998	57 033	55 797	57 302	-30.8
Iceland	3 773	3 832	4 159	4 178	4 158	10.2
Ireland	32 674	35 663	44 992	45 552	46 635	42.7
Italy	354 790	342 380	366 170	386 088	383 195	8.0
Japan	1 051 886	1 134 339	1 163 733	1 185 135	1 197 370	13.8
Latvia*	-1 555	-8 615	-7 151	-6 439	-6 896	343.4
Liechtenstein	196	200	222	234	233	19.3
Lithuania*	25 411	7 284	3 375	4 946	5 196	-79.6
Luxembourg	11 810	8 863	8 533	11 683	11 580	-1.9
Monaco	105	111	113	100	98	-6.4
Netherlands	161 781	172 826	171 993	183 646	178 246	10.2
New Zealand	6 379	11 961	10 691	10 577	11 285	76.9
Norway	20 052	23 875	16 227	18 337	15 916	-20.6
Poland* ^a	461 951	344 664	305 205	298 654	294 403	-36.3
Portugal	47 002	51 277	59 597	68 336	71 582	52.3
Romania* ^a	161 284	95 540	59 177	80 978	73 111	-54.7
Russian Federation*	2 614 804	1 531 148	1 967 064	1 478 999	1 899 004	-27.4
Slovakia*	57 815	41 020	36 979	35 993	38 880	-32.8
Slovenia* ^a	14 693	10 047	10 021	10 763	11 324	-22.9
Spain	185 754	211 469	259 200	300 252	318 605	71.5
Sweden	52 732	29 732	20 524	49 575	48 512	-8.0
Switzerland	42 801	40 116	45 165	44 496	45 707	6.8
Turkey**	96 056	111 763	159 273	167 809	167 809 ^c	74.7
Ukraine*	662 559	332 962	229 329	254 448	262 966	-60.3
United Kingdom	593 222	550 780	550 045	555 906	555 490	-6.4
United States of America	4 348 857	4 555 816	5 183 264	5 239 544	5 261 038	21.0
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						<i>22</i>
<i>Change in emissions within 1 per cent (number of Parties)</i>						<i>1</i>
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						<i>18</i>

Note: Negative values in Gg mean removals; positive values in Gg mean emissions.

^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 Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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

Table 8. Total anthropogenic methane emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	114 073	113 808	115 788	111 733	111 108	-2.6
Austria	9 181	8 522	7 605	7 222	7 057	-23.1
Belarus*	15 122	11 719	11 479	12 647	12 806	-15.3
Belgium	10 825	10 605	9 463	7 964	7 833	-27.6
Bulgaria* ^a	21 759	14 921	11 708	11 222	10 260	-52.8
Canada	79 732	94 875	103 936	108 626	109 233	37.0
Croatia*	3 233	2 532	2 544	3 015	3 015 ^c	-6.7
Czech Republic*	18 546	13 542	11 477	10 835	10 950	-41.0
Denmark	5 733	6 017	5 935	5 828	5 670	-1.1
Estonia*	3 125	2 140	2 022	1 891	1 897	-39.3
European Community ^b	439 464	413 912	366 220	319 829	311 777	-29.1
Finland	6 286	6 074	5 382	4 699	4 487	-28.6
France	68 766	69 786	64 160	57 927	56 742	-17.5
Germany	99 266	81 494	64 722	49 611	47 632	-52.0
Greece	9 119	9 188	8 950	8 412	8 412 ^c	-7.8
Hungary* ^a	10 139	8 217	8 269	7 836	7 777	-23.3
Iceland	413	407	423	411	416	0.6
Ireland	13 287	13 723	13 438	13 338	13 102	-1.4
Italy	41 569	44 058	44 280	39 876	39 721	-4.4
Japan	33 372	30 954	26 975	24 339	24 071	-27.9
Latvia*	3 493	2 035	1 755	1 758	1 800	-48.5
Liechtenstein	13	12	12	13	14	6.0
Lithuania*	6 133	3 651	3 230	3 324	3 331	-45.7
Luxembourg	364	353	355	349	349	-4.1
Monaco	0.64	0.79	0.79	0.63	0.62	-3.5
Netherlands	25 441	23 792	19 251	17 299	16 711	-34.3
New Zealand	25 493	25 752	26 859	27 131	27 175	6.6
Norway	4 645	4 941	4 912	4 758	4 600	-1.0
Poland* ^a	49 249	42 886	39 629	38 110	38 308	-22.2
Portugal	11 227	12 353	12 406	12 290	11 147	-0.7
Romania* ^a	51 352	31 321	25 685	25 935	25 750	-49.9
Russian Federation*	305 152	239 888	228 060	255 199	253 062	-17.1
Slovakia*	5 393	4 620	4 464	4 351	4 155	-23.0
Slovenia* ^a	2 376	2 118	2 136	2 093	2 106	-11.4
Spain	27 729	30 695	35 366	37 090	37 269	34.4
Sweden	6 681	6 678	6 094	5 750	5 613	-16.0
Switzerland	4 370	3 983	3 694	3 525	3 518	-19.5
Turkey**	29 207	42 539	49 269	46 290	46 290 ^c	58.5
Ukraine*	154 983	97 509	78 296	75 392	74 805	-51.7
United Kingdom	103 635	90 301	68 554	51 737	49 492	-52.2
United States of America	601 979	594 712	549 681	533 334	527 717	-12.3
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						33
<i>Change in emissions within 1 per cent (number of Parties)</i>						3
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						5

^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 Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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

Table 9. Total anthropogenic methane emissions including emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	118 988	116 724	118 564	117 038	113 914	-4.3
Austria	9 181	8 522	7 605	7 222	7 057	-23.1
Belarus*	15 126	11 725	11 484	12 650	12 809	-15.3
Belgium	10 825	10 605	9 463	7 964	7 833	-27.6
Bulgaria* ^a	21 759	14 921	11 708	11 222	10 260	-52.8
Canada	82 898	115 110	104 986	120 770	114 600	38.2
Croatia*	3 233	2 532	2 544	3 015	3 015 ^c	-6.7
Czech Republic*	18 591	13 584	11 529	10 899	11 012	-40.8
Denmark	5 732	6 017	5 934	5 827	5 670	-1.1
Estonia*	3 132	2 142	2 027	1 893	1 898	-39.4
European Community ^b	440 600	414 810	367 396	320 578	312 652	-29.0
Finland	6 301	6 085	5 391	4 707	4 498	-28.6
France	69 532	70 438	64 923	58 494	57 321	-17.6
Germany	99 266	81 494	64 722	49 611	47 632	-52.0
Greece	9 169	9 222	9 117	8 423	8 423 ^c	-8.1
Hungary* ^a	10 169	8 239	8 296	7 862	7 804	-23.3
Iceland	463	456	472	460	465	0.5
Ireland	13 287	13 723	13 438	13 338	13 102	-1.4
Italy	41 712	44 086	44 367	39 911	39 756	-4.7
Japan	33 471	31 025	27 022	24 372	24 108	-28.0
Latvia*	3 512	2 070	1 811	1 792	1 834	-47.8
Liechtenstein	13	12	12	13	14	6.0
Lithuania*	6 134	3 653	3 232	3 326	3 332	-45.7
Luxembourg	364	353	355	349	349	-4.1
Monaco	0.64	0.79	0.79	0.63	0.62	-3.5
Netherlands	25 441	23 792	19 251	17 299	16 711	-34.3
New Zealand	25 586	25 886	26 956	27 214	27 260	6.5
Norway	4 646	4 941	4 912	4 759	4 601	-1.0
Poland* ^a	49 256	42 888	39 633	38 114	38 311	-22.2
Portugal	11 364	12 504	12 524	12 387	11 362	-0.01
Romania* ^a	51 353	31 322	25 693	25 935	25 750	-49.9
Russian Federation*	308 784	240 742	231 364	256 610	254 634	-17.5
Slovakia*	5 407	4 630	4 478	4 369	4 177	-22.7
Slovenia* ^a	2 376	2 118	2 136	2 093	2 106	-11.4
Spain	27 729	30 695	35 366	37 090	37 269	34.4
Sweden	6 693	6 689	6 106	5 763	5 626	-15.9
Switzerland	4 372	3 984	3 694	3 525	3 519	-19.5
Turkey**	29 207	42 539	49 269	46 290	46 290 ^c	58.5
Ukraine*	154 992	97 523	78 300	75 393	74 810	-51.7
United Kingdom	103 647	90 310	68 575	51 756	49 511	-52.2
United States of America	609 054	598 683	563 683	540 264	539 295	-11.5
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						33
<i>Change in emissions within 1 per cent (number of Parties)</i>						3
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						5

^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 Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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Table 10. Total anthropogenic nitrous oxide emissions excluding emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	18 852	20 741	25 534	24 520	23 799	26.2
Austria	6 337	6 636	6 249	5 289	5 256	-17.1
Belarus*	10 293	4 985	6 398	6 718	7 468	-27.4
Belgium	12 010	12 905	12 651	11 121	11 049	-8.0
Bulgaria**a	12 061	5 838	4 918	4 394	4 366	-63.8
Canada	45 791	49 294	41 741	44 503	43 837	-4.3
Croatia*	3 920	3 123	3 284	3 677	3 677 ^c	-6.2
Czech Republic*	12 599	8 720	8 118	8 328	8 039	-36.2
Denmark	10 620	9 562	8 593	7 676	7 084	-33.3
Estonia*	1 820	877	721	755	758	-58.3
European Community ^b	405 102	384 976	350 444	335 831	332 318	-18.0
Finland	7 851	7 155	6 849	6 861	6 850	-12.8
France	93 406	91 554	80 199	71 361	70 819	-24.2
Germany	84 385	77 507	59 322	64 512	66 079	-21.7
Greece	14 113	13 073	13 408	13 155	13 155 ^c	-6.8
Hungary**a	19 224	8 821	9 553	10 167	9 707	-49.5
Iceland	363	342	352	302	309	-14.8
Ireland	9 499	9 965	10 214	8 936	8 850	-6.8
Italy	38 009	38 730	40 881	41 694	40 366	6.2
Japan	32 633	33 442	29 892	25 906	25 450	-22.0
Latvia*	3 814	1 375	1 264	1 433	1 480	-61.2
Liechtenstein	14	14	13	13	13	-11.1
Lithuania*	7 068	3 125	4 025	4 795	5 015	-29.0
Luxembourg	202	248	319	415	428	112.3
Monaco	1.63	2.62	3.28	3.10	3.01	84.9
Netherlands	21 219	22 394	19 867	17 728	17 562	-17.2
New Zealand	10 417	11 188	12 106	13 231	13 260	27.3
Norway	4 751	4 461	4 593	4 682	4 781	0.6
Poland**a	42 478	32 546	31 361	30 415	31 099	-26.8
Portugal	5 340	5 682	6 171	5 879	6 072	13.7
Romania**a	33 839	19 047	15 008	16 857	16 798	-50.4
Russian Federation*	219 946	139 895	107 841	104 594	101 919	-53.7
Slovakia*	6 165	4 066	3 501	3 810	3 743	-39.3
Slovenia**a	1 370	1 197	1 319	1 265	1 294	-5.5
Spain	27 767	26 503	32 593	31 124	29 571	6.5
Sweden	8 537	8 383	7 890	7 644	7 558	-11.5
Switzerland	3 623	3 453	3 382	3 294	3 260	-10.0
Turkey**	1 257	6 327	5 740	5 494	5 494 ^c	336.9
Ukraine*	54 614	33 153	21 579	22 277	22 495	-58.8
United Kingdom	63 633	52 831	43 504	40 435	39 643	-37.7
United States of America	476 113	478 148	492 442	438 200	461 267	-3.1
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						32
<i>Change in emissions within 1 per cent (number of Parties)</i>						1
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						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.

^c Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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

Table 11. Total anthropogenic nitrous oxide emissions including emissions/removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	20 195	21 538	26 292	25 968	24 566	21.6
Austria	6 348	6 647	6 260	5 300	5 266	-17.0
Belarus*	10 296	4 990	6 407	6 726	7 477	-27.4
Belgium	12 010	12 905	12 651	11 121	11 049	-8.0
Bulgaria* ^a	12 061	5 838	4 918	4 394	4 366	-63.8
Canada	47 790	61 890	42 420	52 072	47 198	-1.2
Croatia*	3 920	3 123	3 284	3 677	3 677 ^c	-6.2
Czech Republic*	12 604	8 725	8 123	8 334	8 045	-36.2
Denmark	10 620	9 562	8 593	7 676	7 085	-33.3
Estonia*	1 820	877	722	755	758	-58.4
European Community ^b	408 640	388 028	353 487	339 169	334 832	-18.1
Finland	7 887	7 170	6 871	6 881	6 870	-12.9
France	96 284	93 921	82 329	73 161	72 543	-24.7
Germany	84 760	77 882	59 744	64 933	66 501	-21.5
Greece	14 119	13 077	13 425	13 156	13 156 ^c	-6.8
Hungary* ^a	19 227	8 824	9 556	10 170	9 709	-49.5
Iceland	781	759	769	721	728	-6.7
Ireland	9 499	9 965	10 214	8 936	8 850	-6.8
Italy	38 040	38 813	41 111	42 564	40 498	6.5
Japan	32 737	33 505	29 926	25 928	25 470	-22.2
Latvia*	3 815	1 379	1 270	1 437	1 483	-61.1
Liechtenstein	14	14	13	13	13	-11.1
Lithuania*	7 086	3 143	4 043	4 813	5 033	-29.0
Luxembourg	223	270	341	437	450	101.4
Monaco	1.63	2.62	3.28	3.10	3.01	84.9
Netherlands	21 219	22 394	19 867	17 728	17 562	-17.2
New Zealand	10 427	11 202	12 116	13 240	13 269	27.3
Norway	4 764	4 475	4 606	4 695	4 794	0.6
Poland* ^a	42 479	32 547	31 361	30 415	31 100	-26.8
Portugal	5 380	5 724	6 209	5 915	6 120	13.8
Romania* ^a	33 839	19 047	15 009	16 857	16 798	-50.4
Russian Federation*	220 315	139 982	108 175	104 737	102 077	-53.7
Slovakia*	6 168	4 068	3 504	3 813	3 748	-39.2
Slovenia* ^a	1 370	1 197	1 319	1 265	1 294	-5.5
Spain	27 767	26 503	32 593	31 124	29 571	6.5
Sweden	8 675	8 516	8 039	7 798	7 690	-11.4
Switzerland	3 628	3 464	3 392	3 303	3 270	-9.9
Turkey**	1 263	6 330	5 751	5 496	5 496 ^c	335.1
Ukraine*	54 624	33 163	21 584	22 281	22 500	-58.8
United Kingdom	63 634	52 832	43 507	40 437	39 645	-37.7
United States of America	482 016	484 236	499 779	445 210	468 594	-2.8
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						<i>32</i>
<i>Change in emissions within 1 per cent (number of Parties)</i>						<i>1</i>
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						<i>8</i>

^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 Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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

Table 12. Total aggregate anthropogenic emissions of hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	5 586	3 250	3 874	5 891	6 339	13.5
Austria	1 605	1 475	1 302	1 527	1 316	-18.0
Belarus*		3	10	24	28	
Belgium	3 850	4 974	1 363	1 819	1 638	-57.5
Bulgaria**a		4	98	221	391	
Canada	11 516	9 676	11 643	10 793	10 440	-9.3
Croatia*	937	8	23	189	189 ^c	-79.8
Czech Republic*		76	413	670	690	
Denmark	44	326	684	803	846	1 803.5
Estonia*		0.38	5.62	12.49	13.75	
European Community ^b	55 844	67 723	64 232	64 091	66 300	18.7
Finland	94	98	576	730	893	845.5
France	10 026	8 211	11 814	14 232	14 221	41.8
Germany	11 861	15 463	12 666	14 060	14 822	25.0
Greece	1 196	3 508	5 435	5 786	5 786 ^c	383.8
Hungary**a	350	239	557	905	928	165.5
Iceland	425	89	165	102	108	-74.5
Ireland	36	203	590	638	701	1 836.8
Italy	2 492	1 764	2 825	5 357	6 089	144.4
Japan	61 840	51 187	34 019	19 142	16 924	-72.6
Latvia*		1	10	22	27	
Liechtenstein	0.00	0.38	2.35	4.09	4.12	-
Lithuania*		45	30	38	20	
Luxembourg	17	17	47	47	86	422.9
Monaco		0.02	0.04	0.34	1.98	
Netherlands	6 914	8 259	5 739	2 128	1 956	-71.7
New Zealand	528	308	318	706	844	59.9
Norway	5 570	2 641	2 491	1 596	1 624	-70.9
Poland**a	290	290	835	2 744	3 034	947.2
Portugal	3	15	147	345	403	-
Romania**a	3 350	1 774	416	520	574	-82.9
Russian Federation*	22 519	22 109	28 706	28 551	33 453	48.6
Slovakia*	271	146	101	190	212	-22.1
Slovenia**a	287	326	152	218	237	-17.2
Spain	3 353	5 586	8 786	5 206	5 527	64.8
Sweden	551	642	916	1 112	1 215	120.3
Switzerland	244	278	721	891	892	265.6
Turkey**			1 141	2 933	2 933 ^c	
Ukraine*	203	153	100	80	81	-59.9
United Kingdom	13 807	17 210	11 414	10 412	10 715	-22.4
United States of America	89 315	103 461	143 789	153 852	163 008	82.5
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						<i>13</i>
<i>Change in emissions within 1 per cent (number of Parties)</i>						<i>0</i>
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						<i>20</i>

^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 Values for 2004 are used here as the latest available estimate.

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

Table 13. Net anthropogenic carbon dioxide emissions and removals from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	75 371	10 579	9 055	-6 993	-6 792	-109.0
Austria	-11 913	-14 721	-16 355	-16 974	-17 037	43.0
Belarus*	-22 035	-26 684	-27 262	-23 724	-24 944	13.2
Belgium	-1 431	-1 386	-1 550	-1 173	-370	-74.1
Bulgaria* ^a	-5 026	-7 533	-8 898	-8 174	-18 037	258.9
Canada	-127 808	122 140	-108 601	61 052	-25 908	-79.7
Croatia*	-14 437	-20 535	-19 285	-16 321	-16 321 ^c	13.0
Czech Republic*	-1 762	-7 767	-6 837	-4 830	-4 712	167.5
Denmark	552	-1 664	1 642	-3 067	-1 453	-363.4
Estonia*	-9 371	-9 216	-8 805	-7 990	-8 097	-13.6
European Community ^b	-222 085	-288 760	-291 939	-305 047	-318 570	43.4
Finland	-21 440	-15 408	-16 325	-18 513	-30 964	44.4
France	-37 635	-44 499	-40 231	-63 099	-65 255	73.4
Germany	-28 616	-31 537	-34 354	-36 252	-36 497	27.5
Greece	-3 248	-4 407	-3 142	-5 415	-5 415 ^c	66.7
Hungary* ^a	-3 150	-7 942	-1 898	-4 470	-4 505	43.0
Iceland	1 623	1 533	1 414	1 316	1 286	-20.7
Ireland	121	182	108	-195	-657	-644.0
Italy	-79 992	-103 332	-97 437	-104 844	-110 176	37.7
Japan	-92 311	-93 714	-93 003	-102 467	-96 099	4.1
Latvia*	-20 691	-17 688	-14 172	-13 942	-14 470	-30.1
Liechtenstein	-7.35	-9.39	-5.64	-6.38	-6.39	-13.0
Lithuania*	-10 757	-7 875	-8 710	-8 651	-9 119	-15.2
Luxembourg	-295	-295	-295	-295	-295	0.0
Monaco	-0.03	-0.04	-0.04	-0.04	-0.05	48.1
Netherlands	2 392	2 201	2 417	2 356	2 341	-2.1
New Zealand	-19 084	-15 247	-20 352	-23 473	-24 594	28.9
Norway	-14 734	-13 935	-25 326	-25 518	-27 232	84.8
Poland* ^a	-32 935	-32 784	-28 048	-26 727	-32 108	-2.5
Portugal	3 650	-1 800	-3 941	2 190	3 664	0.4
Romania* ^a	-32 641	-39 285	-38 297	-35 768	-37 422	14.6
Russian Federation*	172 587	-159 023	344 356	-219 065	154 920	-10.2
Slovakia*	-2 407	-2 696	-2 403	-4 251	-877	-63.5
Slovenia* ^a	-1 589	-4 905	-5 175	-5 644	-5 430	241.7
Spain	-42 763	-44 116	-48 475	-51 564	-49 677	16.2
Sweden	-3 688	-28 311	-32 891	-5 607	-4 057	10.0
Switzerland	-1 711	-3 212	1 254	-830	-259	-84.8
Turkey**	-43 538	-60 091	-64 533	-74 076	-74 076 ^c	70.1
Ukraine*	-51 486	-59 105	-65 256	-61 184	-58 575	13.8
United Kingdom	2 882	992	-449	-1 935	-2 056	-171.4
United States of America	-712 778	-828 798	-756 705	-824 785	-828 453	16.2
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						16
<i>Change in emissions within 1 per cent (number of Parties)</i>						1
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						23

Note: Negative values in Gg mean removals; positive values in Gg mean emissions.

^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 Values for 2004 are used here as the latest available estimate.

* A Party undergoing the process of transition to a market economy (an EIT Party).

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Table 14. Anthropogenic methane emissions from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	4 915	2 916	2 775	5 305	2 807	-42.9
Austria	0.25	0.04	0.06	0.09	0.09	-64.94
Belarus*	4.10	6.25	4.91	3.42	3.63	-11.6
Belgium						
Bulgaria ^a						
Canada	3 165	20 235	1 051	12 144	5 367	69.6
Croatia*						
Czech Republic*	46	42	52	64	61	33.5
Denmark	-0.60	-0.59	-0.50	-0.49	-0.49	-17.3
Estonia*	7.08	2.17	4.63	2.40	0.61	-91.4
European Community ^b	1 136	898	1 176	749	875	-23.0
Finland	15	11	9	8	11	-27.3
France	767	653	763	566	579	-24.5
Germany						
Greece	50	35	166	11	11 ^c	-77.8
Hungary ^a	30	22	27	26	27	-10.5
Iceland	49	49	49	49	49	
Ireland						
Italy	143	27	87	35	34	-76.1
Japan	99	71	47	33	37	-63.0
Latvia*	19	35	56	33	35	83.9
Liechtenstein						
Lithuania*	0.64	1.59	1.76	1.40	0.28	-55.7
Luxembourg						
Monaco						
Netherlands						
New Zealand	94	133	97	83	85	-9.2
Norway	1.77	0.21	0.32	0.23	0.65	-63.2
Poland ^a	7.48	2.28	4.07	3.70	2.79	-62.7
Portugal	137	151	118	97	215	56.7
Romania ^a	0.21	0.47	8.19	0.28	0.48	128.0
Russian Federation*	3 633	854	3 304	1 411	1 572	-56.7
Slovakia*	15	10	14	17	22	52.9
Slovenia ^a						
Spain						
Sweden	11	11	12	13	13	11.8
Switzerland	1.50	0.60	0.05	0.03	0.47	-68.9
Turkey ^{**}	0.08	0.04	0.15	0.03	0.03 ^c	-64.52
Ukraine*	8.39	14.29	3.44	0.88	5.39	-35.8
United Kingdom	12	9	21	20	19	56.3
United States of America	7 075	3 971	14 002	6 931	11 579	63.7
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						<i>20</i>
<i>Change in emissions within 1 per cent (number of Parties)</i>						<i>0</i>
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						<i>9</i>

^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 Values for 2004 are used here as the latest available estimate.

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Table 15. Anthropogenic nitrous oxide emissions from land use, land-use change and forestry, 1990, 1995, 2000, 2004 and 2005

Party	Gg CO ₂ equivalent					Change from 1990 to 2005 (%)
	1990	1995	2000	2004	2005	
Australia	1 343	797	758	1 449	767	-42.9
Austria	11	11	11	12	10	-9.5
Belarus*	2.90	4.40	8.80	8.65	8.68	199.5
Belgium						
Bulgaria**a						
Canada	1 998	12 595	679	7 570	3 362	68.2
Croatia*						
Czech Republic*	4.66	4.28	5.27	6.49	6.22	33.5
Denmark	0.18	0.18	0.15	0.15	0.15	-17.3
Estonia*	0.72	0.22	0.47	0.24	0.06	-91.4
European Community ^b	3 538	3 051	3 043	3 337	2 514	-28.9
Finland	35	15	22	20	20	-42.7
France	2 879	2 367	2 130	1 799	1 724	-40.1
Germany	375	375	422	422	422	12.5
Greece	5.06	3.53	16.86	1.12	1.12 ^c	-77.8
Hungary**a	3.06	2.23	2.73	2.67	2.73	-10.8
Iceland	418	417	417	419	419	0.3
Ireland						
Italy	31	83	230	870	132	327.7
Japan	103	63	34	22	20	-80.7
Latvia*	1.91	3.59	5.83	3.76	3.23	69.1
Liechtenstein		0.07				
Lithuania*	18	18	18	18	18	-0.2
Luxembourg	22	22	22	22	22	0.0
Monaco						
Netherlands						
New Zealand	9.49	13.52	9.82	8.47	8.62	-9.2
Norway	14	14	13	13	13	-5.7
Poland**a	0.76	0.23	0.41	0.38	0.64	-16.0
Portugal	40	42	38	36	48	19.6
Romania**a	0.02	0.05	0.83	0.03	0.05	127.96
Russian Federation*	369	87	335	143	158	-57.1
Slovakia*	3.41	2.26	3.10	3.47	5.34	56.6
Slovenia**a						
Spain						
Sweden	138	132	149	154	131	-4.7
Switzerland	4.98	10.40	9.19	9.13	10.13	103.7
Turkey**	5.67	3.17	10.87	2.01	2.01 ^c	-64.5
Ukraine*	9.71	10.71	4.48	3.38	4.55	-53.1
United Kingdom	1.26	0.96	2.08	1.99	1.97	56.3
United States of America	5 903	6 088	7 337	7 010	7 326	24.1
<i>Decrease in emissions by more than 1 per cent (number of Parties)</i>						17
<i>Change in emissions within 1 per cent (number of Parties)</i>						2
<i>Increase in emissions by more than 1 per cent (number of Parties)</i>						12

^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.

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