EEA Technical report | No 7/2007

Annual European Community greenhouse gas inventory 1990–2005 and inventory report 2007

Submission to the UNFCCC Secretariat

ISSN 1725-2237

European Environment Agency

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2007 — XX pp. — 21 x 29.7 cm

ISBN 978-92-9167-937-9

TH-AK-07-013-EN-N

ISBN 978-92-9167-937-9

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Cover design: EEA
Layout: EEA

Luxembourg: Office for Official Publications of the European Communities, 2007

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Executive summary

ES.1 Background information on greenhouse gas inventories and climate change

The European Community (EC), as a party to the United Nations Framework Convention on Climate Change (UNFCCC), reports annually on greenhouse gas (GHG) inventories within the area covered by its Member States.

The legal basis of the compilation of the EC inventory is Council Decision No 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol ([1]). The purpose of this decision is to: (1) monitor all anthropogenic GHG emissions covered by the Kyoto Protocol in the Member States; (2) evaluate progress towards meeting GHG reduction commitments under the UNFCCC and the Kyoto Protocol; (3) implement the UNFCCC and the Kyoto Protocol as regards national programmes, greenhouse gas inventories, national systems and registries of the Community and its Member States, and the relevant procedures under the Kyoto Protocol; (4) ensure the timeliness, completeness, accuracy, consistency, comparability and transparency of reporting by the Community and its Member States to the UNFCCC Secretariat.

The EC GHG inventory is compiled on the basis of the inventories of the EC Member States for EU-15 and EU-27. It constitutes the direct total of the national inventories. For EU-15, energy data from Eurostat are used for the reference approach to CO_2 emissions from fossil fuels, developed by the Intergovernmental Panel on Climate Change (IPCC). The main institutions involved in the compilation of the EC GHG inventory are the Member States, the European Commission (DG ENV), the European Environment Agency (EEA) and its European Topic Centre on Air and Climate Change (ETC/ACC), Eurostat, and the Joint Research Centre (JRC).

The process of compiling the EC GHG inventory is as follows: Member States submit their annual GHG inventories by 15 January each year to the European Commission, DG Environment. Then, the EEA's ETC/ACC, Eurostat and JRC perform initial checks on the submitted data. The draft EC GHG inventory and inventory report are circulated to Member States for review and comments by 28 February. Member States check their national data and information used in the EC GHG inventory report, send updates (if necessary) and review the EC inventory report itself by 15 March. The final EC GHG inventory and inventory reports are prepared by the ETC/ACC by 15 April for submission by the European Commission to the UNFCCC Secretariat; a resubmission is prepared by 27 May (if needed).

ES.2 Summary of greenhouse gas emission trends in the EC

EU-27: total GHG emissions without LULUCF in the EU-27 decreased by 7.9 % between 1990 and 2005 (Figure ES.1). Emissions decreased by 0.7 % (+ 38 million tonnes) between 2004 and 2005.

EU-15: In 2005 total GHG emissions in the EU-15, without LULUCF, were 1.5 % (65 million tonnes CO_2 equivalents) below 1990. Compared to the base year ([2]), emissions in 2005 were 2.0 % or 86 million tonnes CO_2 equivalents lower. In the Kyoto Protocol, the EC agreed to reduce its GHG emissions by 8 % during the period 2008–2012, from base year levels. Assuming a linear target path from 1990 to 2010, in 2005 total EU-15 GHG emissions were 4.1 index points above this target path (Figure ES.2).

([1]) OJ L 49, 19.2.2004, p. 1. Note that Council Decision No 280/2004/EC entered into force in March 2004. Therefore, the compilation of the inventory report 2004 started under the previous Council Decision 1999/296/EC.

([2]) For EU-15, the base year for CO_2, CH_4 and N_2O is 1990; for the fluorinated gases 12 Member States have selected 1995 as the base year, whereas Austria, France and Italy have chosen 1990. As the EC inventory represents the sum total of Member States' inventories, the EC base year estimates for fluorinated gas emissions are the sum total of 1995 emissions for 12 Member States and 1990 emissions for Austria, France and Italy. The EU-15 base year emissions also include emissions from deforestation for the Netherlands, Portugal and the United Kingom (see EC Initial report, EEA, 2006c).

Compared to 2004, EU-15 GHG emissions decreased by 0.8 % or 35.2 million tonnes CO_2 equivalents in 2004.

The decrease in GHG emissions between 2004–2005 was mainly due to:

- Lower CO_2 emissions from Public Electricity and Heat Production (– 9.6 million tonnes or – 0.9 %) mainly in Finland and Germany. According to Eurostat data in Finland and Denmark, total electricity generation decreased and net imports increased, while Sweden and Norway saw major increases in electricity from hydropower generation and increased export. This explains the decrease in emissions for Sweden, Finland and Denmark. In Germany the total electricity production from fossil thermal power stations did not change, although the fuel input decreased. In addition, the fuel switch from solid to liquid and gaseous fuels contributed to emission reductions.

- Lower CO_2 emissions from households and services (– 7.0 million tonnes or – 1.7 %). Important decreases in CO_2 emissions from household and services were reported by Germany, the United Kingdom and the Netherlands, while Italy reported substantial increases. One reason for the decrease in Germany and the Netherlands is the warmer weather conditions (milder winter) compared to the previous year.

- Lower CO_2 emissions from road transport (– 6.0 million tonnes or – 0.8 %). The decrease in CO_2 emissions from road transport came mainly in Germany, and was due to the increased amount of diesel oil cars on the road, the effects of the eco-tax and fuel buying abroad (fuel tourism).

- Lower N_2O emissions from agricultural soils (– 4.0 million tonnes or – 2.0 %) mainly in Spain, Italy and Germany. The reduction of N_2O emissions from agricultural soils is partly due to a drop in the use of synthetic fertiliser in Spain and Italy, and a decline in the use of nitrogen fixing crops in Germany.

- Lower CH4 emissions from solid waste disposal (– 2.1 million tonnes or – 2.7 %). CH_4 emissions from solid waste disposal decreased most in Germany, the Netherlands and the United Kingdom.

- Lower fugitive CH4 emissions from coal mining (– 2.5 million tonnes or – 17.4 %) mainly in France and the United Kingdom due to declining coal mining.

Figure ES.1 EU-27 GHG emissions 1990–2005 (excl. LULUCF)

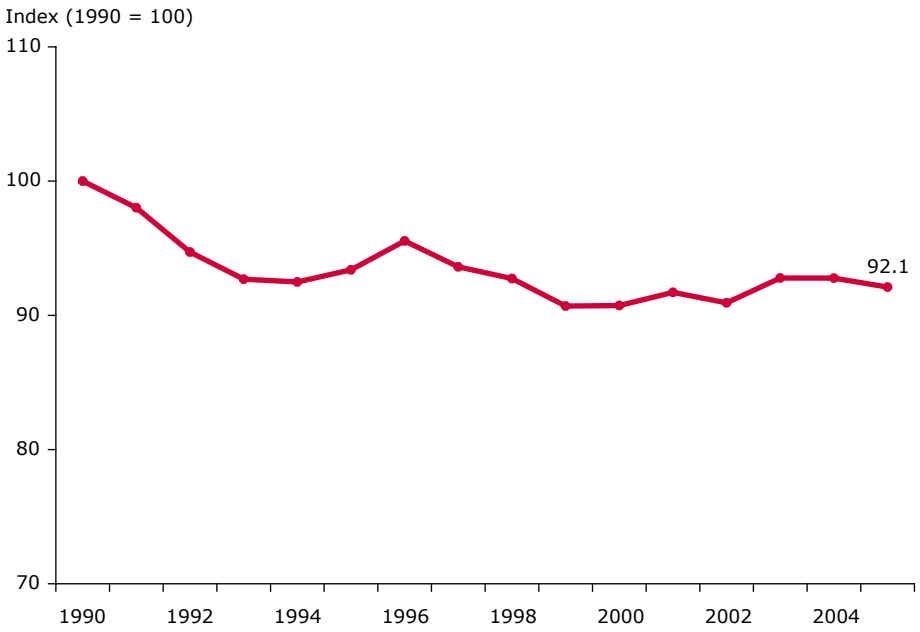
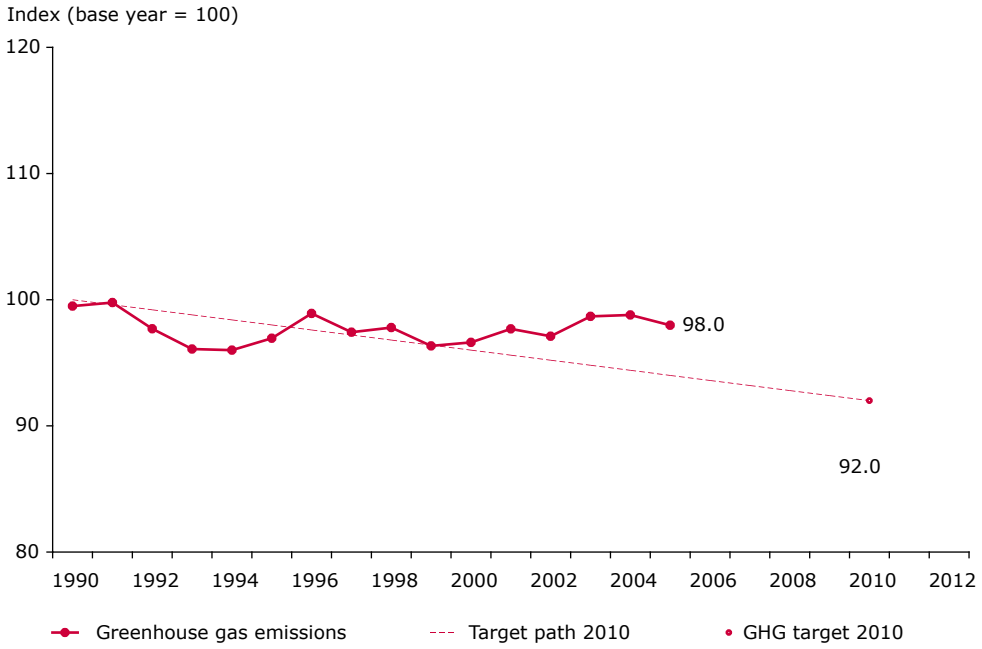


Figure ES.2 EU-15 GHG emissions 1990–2005 compared with target for 2008–2012 (excl. LULUCF)



Note: The linear target path is not intended as an approximation of past and future emission trends. It provides a measure of how close the EU-15 emissions in 2005 are to a linear path of emissions reductions from 1990 to the Kyoto target for 2008–2012, assuming that only domestic measures will be used. Therefore, it does not deliver a measure of (possible) compliance of the EU-15 with its GHG targets between 2008–2012, but aims at evaluating overall EU-15 GHG emissions by 2005; the unit is the index points with base year emissions being 100.

GHG emission data for the EU-15 as a whole do not include emissions and removals from LULUCF. In addition, no adjustments for temperature variations or electricity trade are considered.

For the fluorinated gases the EU-15 base year is the sum of Member States base years. 12 Member States have selected 1995 as the base year under the Kyoto Protocol, whereas Austria, France and Italy use 1990. Therefore, the EU-15 base year estimates for fluorinated gas emissions are the sum total of 1995 emissions for 12 Member States and 1990 emissions for Austria, France and Italy. The EU-15 base year emissions also include emissions from deforestation for the Netherlands, Portugal and the United Kingdom (see EC Initial report, EEA, 2006c).

The index on the y axis refers to the base year (1995 for fluorinated gases for all Member States except Austria, France and Italy, 1990 for fluorinated gases for Austria, France and Italy and for all other gases). This means that the value for 1990 does not need to be exactly 100.

Substantial increases in GHG emissions between 2004–2005 took place in the following source categories:

- HFC emissions from refrigeration and air conditioning (+ 3.2 million tonnes or + 9.9 %)
- N_2O emissions from nitric acid production (+ 2.1 million tonnes or 6.9 %)
- CO_2 emissions from petroleum refining (+ 1.9 million tonnes or + 1.6 %)
- CO_2 emissions from civil aviation (+ 1.7 million tonnes or + 7.2 %).

Table 2.1 shows that between 2004 and 2005 Spain saw the largest emission increases in absolute terms (+ 15.4 million tonnes CO_2 equivalents), whereas the largest emission reductions were seen in Germany (– 23.5 million tonnes CO_2 equivalents), Finland (– 11.9 million tonnes CO_2 equivalents) and the Netherlands (– 6.3 million tonnes CO_2 equivalents):

- Spanish emission increases occurred mainly in CO_2 from electricity and heat production (+ 10.4 million tonnes), CO_2 from iron and steel production (+ 0.7 million tonnes, both energy and process related emissions), CO_2 from cement production (+ 0.5 million tonnes) and CH4 solid waste disposal (+ 0.2 million tonnes,). The increase in energy related emissions is due to an increase in electricity generation from fossil thermal power stations (17 %) and a decrease in electricity generation from hydropower plants (– 33 %).

- The German emission reductions occurred primarily in CO_2 from public electricity and heat production (– 8.1 million tonnes), CO_2 from road transport (– 7.8 million tonnes) and CO_2 from household and services (– 5.3 million tonnes), whereas N_2O emissions from nitric acid production increased by 3.5 million tonnes.
- In Finland and the Netherlands emission reductions are mainly due to CO_2 in public electricity and heat production (– 10.7 and –2.8 million tonnes respectively). In the Netherlands CO_2 emission reductions in households and services also played an significant role.

Table ES.1 Greenhouse gas emissions in CO_2 equivalents (excl. LULUCF) and Kyoto Protocol targets for 2008–2012

Member State	Base year (1) million tonnes	2005 million tonnes	Change 2004–2005 million tonnes	Change 2004–2005 %	Change base year 2005 %	Target 2008–2012 under Kyoto Protocol and 'EU burden sharing'
Austria	79.0	93.3	2.1	2.3 %	18.1 %	– 13.0 %
Belgium	146.9	143.8	– 3.8	– 2.6 %	– 2.1 %	– 7.5 %
Bulgaria	132.1	69.8	0.9	1.3 %	– 47.2 %	– 8.0 %
Cyprus	6.0	9.9	0.0	0.2 %	63.7 %	–
Czech Republic	196.3	145.6	– 1.5	– 1.0 %	– 25.8 %	– 8.0 %
Denmark	69.3	63.9	– 4.3	– 6.3 %	– 7.8 %	– 21.0 %
Estonia	43.0	20.7	– 0.5	– 2.3 %	– 52.0 %	– 8.0 %
Finland	71.1	69.3	– 11.9	– 14.6 %	– 2.6 %	0.0 %
France	563.9	553.4	– 2.7	– 0.5 %	– 1.9 %	0.0 %
Germany	1232.5	1001.5	– 23.5	– 2.3 %	– 18.7 %	– 21.0 %
Greece	111.1	139.2	1.6	1.2 %	25.4 %	25.0 %
Hungary	123.0	80.5	1.0	1.2 %	– 34.5 %	– 6.0 %
Ireland	55.8	69.9	1.3	1.9 %	25.4 %	13.0 %
Italy	519.5	582.2	1.7	0.3 %	12.1 %	– 6.5 %
Latvia	25.9	10.9	0.2	1.5 %	– 58.0 %	– 8.0 %
Lithuania	48.1	22.6	1.5	7.2 %	– 53.1 %	– 8.0 %
Luxembourg	12.7	12.7	– 0.1	– 0.4 %	0.4 %	– 28.0 %
Malta (2)	2.2	3.4	0.2	6.1 %	54.8 %	–
Netherlands	214.6	212.1	– 6.3	– 2.9 %	– 1.1 %	– 6.0 %
Poland	586.9	399.0	2.3	0.6 %	– 32.0 %	– 6.0 %
Portugal	60.9	85.5	0.9	1.0 %	40.4 %	27.0 %
Romania	282.5	153.7	– 6.4	– 4.0 %	– 45.6 %	– 8.0 %
Slovakia	73.4	48.7	– 0.8	– 1.6 %	– 33.6 %	– 8.0 %
Slovenia	20.2	20.3	0.4	2.1 %	0.4 %	– 8.0 %
Spain	289.4	440.6	15.4	3.6 %	52.3 %	15.0 %
Sweden	72.3	67.0	– 2.7	– 3.9 %	– 7.4 %	4.0 %
United Kingdom	779.9	657.4	– 3.0	– 0.5 %	– 15.7 %	– 12.5 %
EU-15	4278.8	4192.0	– 35.2	– 0.8 %	– 2.0 %	– 8.0 %

(1) For EU-15, the base year for CO_2, CH_4 and N_2O is 1990; for the fluorinated gases 12 Member States have selected 1995 as the base year, whereas Austria, France and Italy have chosen 1990. As the EU-15 inventory is the sum total of Member States' inventories, the EU-15 base year estimates for fluorinated gas emissions are the sum of 1995 emissions for 12 Member States and 1990 emissions for Austria, France and Italy. The EU-15 base year emissions also include emissions from deforestation for the Netherlands, Portugal and the United Kingdom (see EC Initial report, EEA, 2006c).

(2) Malta did not provide GHG emission estimates for 2005, therefore the data provided in this table are based on gap filling (see Chapter 1.8.2.).

Note: Malta and Cyprus do not have Kyoto targets.

In 2005, GHG emissions in 15 Member States (including Cyprus and Malta, which do not have a Kyoto target) were above base year levels, whereas emissions were below base year levels for the remaining 12 Member States.

In 2005 the EU Emission Trading Scheme (EU ETS) covered approx. 47 % of the total CO_2 emissions and approx. 39 % of total greenhouse gas emissions in EU-15. The EU ETS covered approx. 49 % of total CO_2 emissions and 41 % of total greenhouse gas emissions in EU-25. In general, EU ETS information has been used by EU Member States as one input for calculating total CO_2 emissions for the Energy and Industrial Processes sectors in this report. However, explicit quantification of the contribution of the EU ETS to total CO_2 emissions on sectoral and sub-sectoral level is not yet available for EU-15 or EU-25.

ES.3 Summary of emissions and removals by main greenhouse gas

EU-27: Table ES.2 gives an overview of the main trends in EU-27 GHG emissions and removals for 1990–2005. The most important GHG by far is CO_2, accounting for 82 % of total EU-27 emissions in 2005, excluding LULUCF. In 2005, EU-27 CO_2 emissions without LULUCF were 4 269 Tg, which was 3.5 % below 1990 levels. Compared to 2004, CO_2 emissions decreased by 0.7 %.

EU-15: Table ES.3 gives an overview of the main trends in EU-15 GHG emissions and removals for 1990–2005. In the EU-15 the most important GHG is CO_2, which accounted for 83 % of total EU-15 emissions in 2005. In 2005, EU-15 CO_2 emissions without LULUCF were 3 482 Tg, which was 3.7 % above 1990 levels. Compared to 2004, CO_2 emissions decreased by 0.7 %. The largest four key sources account for 79 % of total CO_2 emissions in 2005. Figure 2.4 shows that the main reason for increases between 1990 and 2005 was growing road transport demand. The large increase in road transport-related CO_2 emissions was only partly offset by reductions in energy-related emissions from manufacturing industries and other sectors. The largest reductions of other occurred in 1A1c manufacture of solid fuels and other energy industries and in 1A5 other.

The increase of CO_2 emissions was compensated by decreases in CH4 and N_2O during the same period: CH4 decreased by 128 Tg CO_2 equivalents and N_2O by 74 Tg CO_2 equivalents between 1990 and 2005. The main reasons for declining CH4 emissions were reductions in solid waste disposal on land, the decline of coal-mining and falling cattle population. The main reason for large N_2O emissions cuts were reduction measures in the adipic acid production. Fluorinated gas emissions are subject to two opposing trends. While HFCs from consumption of halocarbons showed large increases between 1990 and 2005 (mainly due to the replacement of ozone depleting substances), HFC emissions from the production of halocarbons decreased substantially.

Table ES.2 Overview of EU-27 GHG emissions and removals from 1990 to 2005 in CO_2 equivalents (Tg)

GHG-emissions	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Net CO_2 emissions/ removals	4 057	3 918	3 787	3 702	3 680	3 726	3 830	3 748	3 748	3 669	3 697	3 741	3 711	3 844	3 858	3 815
CO_2 emissions (without LULUCF)	4 426	4 359	4 213	4 130	4 122	4 165	4 280	4 188	4 175	4 103	4 122	4 201	4 176	4 289	4 298	4 269
CH_4	604	588	568	556	543	541	536	519	505	492	479	463	452	441	429	420
N_2O	536	509	490	470	475	476	483	481	459	437	436	430	420	420	423	419
HFCs	28	28	29	30	34	41	47	54	56	49	47	46	48	53	54	57
PFCs	21	19	16	15	15	14	13	11	10	10	8	8	9	8	6	6
SF_6	11	11	12	13	14	16	16	14	13	11	11	11	10	9	9	9
Total (with net CO_2 emissions/ removals)	5 257	5 073	4 902	4 786	4 761	4 814	4 924	4 826	4 790	4 667	4 679	4 699	4 650	4 774	4 779	4 727
Total (without CO_2 from LULUCF)	5 626	5 514	5 328	5 214	5 203	5 253	5 374	5 266	5 217	5 102	5 104	5 159	5 115	5 219	5 219	5 181
Total (without LULUCF)	5 621	5 509	5 324	5 210	5 199	5 249	5 371	5 262	5 213	5 098	5 100	5 155	5 111	5 215	5 215	5 177

Table ES.3 Overview of EU-15 GHG emissions and removals from 1990 to 2005 in CO_2 equivalents (Tg)

GHG emissions	Base year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Net CO_2 emissions/ removals	3 135	3 135	3 101	3 041	2 983	2 963	2 993	3 054	3 004	3 061	3 026	3 062	3 105	3 084	3 175	3 203	3 164
CO_2 emissions (without LULUCF)	3 357	3 357	3 380	3 305	3 251	3 249	3 282	3 359	3 306	3 351	3 326	3 354	3 422	3 413	3 492	3 508	3 482
CH_4	440	440	437	430	428	416	414	409	397	387	378	367	354	343	331	320	312
N_2O	409	409	403	395	381	387	388	394	393	374	355	353	346	339	338	339	335
HFCs	41	28	28	29	30	34	41	47	53	54	47	46	44	46	49	50	53
PFCs	15	17	15	13	12	12	11	11	10	9	9	7	7	8	7	5	5
SF_6	14	11	11	12	13	14	16	16	14	13	11	11	10	10	9	9	9
Total (with net CO_2 emissions/ removals)	4 054	4 040	3 995	3 921	3 847	3 826	3 863	3 930	3 871	3 898	3 825	3 846	3 867	3 829	3 909	3 926	3 877
Total (without CO_2 from LULUCF)	4 276	4 262	4 273	4 185	4 115	4 111	4 152	4 236	4 172	4 188	4 126	4 138	4 184	4 158	4 226	4 231	4 195
Total (without LULUCF)	4 272	4 257	4 269	4 180	4 111	4 108	4 148	4 232	4 169	4 184	4 122	4 134	4 180	4 155	4 222	4 227	4 192

ES.4 Summary of emissions and removals by main source category

EU-27: Table ES.4 gives an overview of EU-27 GHG emissions in the main source categories for 1990–2005. The most important sector by far is Energy which accounted for 80 % of total EU-27 emissions in 2005. The second largest sector is Agriculture (9 %), followed by industrial processes (8 %).

EU-15: Table ES.5 gives an overview of EU-15 GHG emissions in the main source categories for 1990–2005. More detailed trend descriptions are included in Chapters 3 to 9.

ES.5 Summary of the emission trends by EU Member States

Table ES.6 gives an overview of Member States' contributions to the EC GHG emissions for 1990–2005. Member States showed significant variations in GHG emission trends.

The overall EC GHG emission trend was dominated by the two largest emitters: Germany and the United Kingdom, accounting for about one third of total EU-27 GHG emissions. These two Member States achieved total GHG emission reductions of 340 million tonnes CO_2 equivalents compared to 1990 ([3]).

Table ES.4 Overview of EU-27 GHG emissions in the main source and sink categories 1990 to 2005 in CO_2 equivalents (Tg)

GHG source and sink	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1. Energy	4 320	4 276	4 132	4 058	4 023	4 059	4 186	4 077	4 064	3 999	4 004	4 089	4 060	4 166	4 162	4 131
2. Industrial Processes	475	439	425	408	435	454	450	459	432	393	404	392	389	399	409	412
3. Solvent and other product use	13	12	11	11	11	11	11	11	11	11	11	10	10	10	10	10
4. Agriculture	595	562	538	518	516	515	517	517	514	510	502	494	487	482	481	476
5. Land use, land use change and forestry	– 364	– 436	– 421	– 424	– 438	– 436	– 446	– 436	– 423	– 431	– 421	– 457	– 462	– 441	– 436	– 450
6. Waste	219	220	217	215	213	211	207	198	192	185	179	170	165	158	153	149
7. Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (with net CO_2 emissions/ removals)	5 257	5 073	4 902	4 786	4 761	4 814	4 924	4 826	4 790	4 667	4 679	4 699	4 650	4 774	4 779	4 727
Total (without LULUCF)	5 621	5 509	5 324	5 210	5 199	5 249	5 371	5 262	5 213	5 098	5 100	5 155	5 111	5 215	5 215	5 177

(3) The EU-15 as a whole needs a total emission reduction of GHG of 8 %, i.e. 342 million tonnes on the basis of the 2006 inventory in order to meet its Kyoto target.

Table ES.5 Overview of EU-15 GHG emissions in the main source and sink categories 1990 to 2005 in CO_2 equivalents (Tg)

GHG source and sink	Base year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1. Energy	3 263	3 263	3 296	3 226	3 179	3 155	3 185	3 270	3 205	3 247	3 225	3 243	3 314	3 303	3 377	3 384	3 357
2. Industrial processes	390	375	363	351	339	360	373	370	380	359	328	331	323	320	325	331	332
3. Solvent and other product use	10	10.166	10	10	9	9	9	9	9	9	9	9	9	9	8	8	8.019
4. Agriculture	434	434	423	417	409	410	412	417	417	417	415	412	403	397	393	391	386
5. Land use, land use change and forestry	-217	-217	-274	-260	-265	-282	-285	-302	-298	-286	-297	-288	-313	-326	-314	-301	-315
6. Waste	176	176	177	176	174	173	169	166	157	152	145	139	131	125	119	113	109
7. Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (with net CO_2 emissions/ removals)	4 054	4 040	3 995	3 921	3 847	3 826	3 863	3 930	3 871	3 898	3 825	3 846	3 867	3 829	3 909	3 926	3 877
Total (without LULUCF)	4 272	4 257	4 269	4 180	4 111	4 108	4 148	4 232	4 169	4 184	4 122	4 134	4 180	4 155	4 222	4 227	4 192

Table ES.6 Overview of Member States' contributions to EC GHG emissions excluding LULUCF from 1990 to 2005 in CO_2 equivalents (Tg)

Member State	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Austria	79	83	76	76	77	80	84	83	83	81	81	85	87	93	91	93
Belgium	146	149	147	146	151	152	156	148	153	147	148	147	145	148	148	144
Bulgaria	116	95	85	86	83	87	85	82	73	67	67	67	64	70	69	70
Cyprus	6	6	7	7	7	7	8	8	8	8	9	9	9	10	10	10
Czech Republic	196	183	166	160	154	154	161	154	150	142	149	149	144	148	147	146
Denmark	69	80	73	76	79	76	90	80	76	73	68	70	69	74	68	64
Estonia	44	41	31	24	25	23	24	24	21	19	20	20	19	22	21	21
Finland	71	69	67	69	75	72	77	76	72	72	70	75	77	85	81	69
France	564	586	580	554	550	559	575	568	582	565	560	562	554	556	556	553
Germany	1 228	1 180	1 130	1 116	1 098	1 096	1 115	1 078	1 052	1 021	1 020	1 037	1 018	1 031	1 025	1 001
Greece	109	108	109	109	112	113	117	122	127	127	132	133	133	137	138	139
Hungary	99	92	82	83	83	81	83	81	81	81	79	81	79	82	80	81
Ireland	55	56	56	57	58	59	61	63	66	67	69	71	69	69	69	70
Italy	519	521	519	513	505	533	525	532	543	549	554	560	560	575	580	582
Latvia	26	24	20	16	14	12	13	12	11	11	10	11	11	11	11	11
Lithuania	48	50	30	24	23	22	23	22	23	20	19	20	20	20	21	23
Luxembourg	13	13	13	13	12	10	10	9	8	9	10	10	11	11	13	13
Malta	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Netherlands	213	218	217	222	222	225	233	226	228	215	214	216	216	217	218	212
Poland	486	471	458	440	452	453	474	462	433	419	405	402	387	402	397	399
Portugal	60	62	66	65	67	71	69	72	77	85	82	83	88	83	85	86
Romania	249	196	186	184	179	187	193	173	154	136	139	143	151	158	160	154
Slovakia	73	63	58	54	51	53	54	54	52	51	48	52	50	50	49	49
Slovenia	18	17	17	18	18	18	19	19	19	18	19	20	20	20	20	20
Spain	287	294	301	290	306	318	311	332	342	370	384	385	402	409	425	441
Sweden	72	73	72	72	75	74	77	73	73	70	68	69	70	71	70	67
United Kingdom	771	778	754	733	720	710	731	708	703	672	674	677	657	663	660	657
EU-27	5 621	5 509	5 324	5 210	5 199	5 249	5 371	5 262	5 213	5 098	5 100	5 155	5 111	5 215	5 215	5 177
EU-15	4 257	4 269	4 180	4 111	4 108	4 148	4 232	4 169	4 184	4 122	4 134	4 180	4 155	4 222	4 227	4 192