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Energy, transport and environment indicators

2008 edition

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Introduction

Energy, Transport and Environment Indicators

The 2008 edition presents facts and figures from the Energy, Transport and Environment sectors, all in a single volume.
The indicators contain national data for the 27 EU Member States, the EFTA and candidate countries. Where aggregated data for EU-27 are available, they are presented, in general, for the period from 1996 to 2006 (Transport mainly from 2001 to 2006). The main data source for indicators is the harmonised EU Energy Statistics although other official Eurostat data sources such as the OECD/Eurostat Joint Questionnaire on the State of the Environment have also been used. The bulk of data on emissions has been provided by the European Environment Agency while the most important data sources for transport indicators are the EU legal acts on transport statistics and the Eurostat/UNECE/ITF Common Questionnaire.

Energy indicators include supply, final consumption, renewable sources, and the structure of the industry; energy dependency, energy efficiency, and energy prices.
The proposal for a new Directive on renewable energy sources, integral part of the Energy Package, defines the share of these sources in final energy consumption. This publication presents the data for 2006 and the proposed targets for all Member States. Energy prices are presented in accordance with the new methodology.

Transport indicators cover infrastructure, equipment, transport of passengers and freight and road safety.

The *Environment* chapter includes indicators on climate change and greenhouse gas emissions, air pollution, waste, water use, biodiversity, toxic chemicals and pesticides, environmental protection expenditure and environmental accounts.

For detailed data please check:
- free data available on the Eurostat web site at http://ec.europa.eu/eurostat
- DG Energy and Transport web site (DG TREN pocketbook updated regularly at http://ec.europa.eu/dgs/energy_transport/figures/pocketbook/).
- European Environment Agency (EEA) web site at http://eea.europa.eu

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Symbols and abbreviations

:	no data available
0	figure less than half of the unit used
-	"Not applicable" or "real zero" or "zero by default"
%	percentage
1234	*Estimates are printed in italic*
c	confidential

Units of measurement

ECU	European currency unit, data up to 31.12.1998
EUR	euro, data from 1.1.1999 on
GJ	Giga Joule
GWh	Gigawatt hour
kg	kilogram
km	kilometre
km^2	square kilometre
m^3	cubic metre
mio	million (10^6)
pkm	passenger-kilometre
tkm	tonne-kilometre
t	tonne
toe	tonne of oil equivalent
TOP	Tropospheric ozone precursors
TOFP	Tropospheric ozone forming potential

Chemical and related symbols

CH_4	Methane
CO_2	Carbon dioxide
HFC	Hydrofluorocarbons
NH_3	Ammonia
N_2O	Nitrous oxide
NOx	Nitrogen oxides
PFC	Perfluorocarbons
SF_6	Sulphur hexafluoride
SO_2	Sulphur dioxide

Other abbreviations

EEA	European Environment Agency
ITF	International Transport Forum
GDP	Gross Domestic Product
GDP in PPS	Gross Domestic Product in Purchasing Power Standard
IEA	International Energy Agency
NACE	Statistical Classification of economic activities in the European Community
OECD	Organisation for Economic Co-operation and Development
OJ	Official Journal of the European Union
OPEC	Organisation of the Petroleum Exporting Countries
UIC	Union International des Chemins de fer
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNFCCC	United Nations Framework Convention on Climate Change

Abbreviations of Countries

EU-27	**The twenty seven Member States of the EU**
EFTA	European Free Trade Association
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom
IS	Iceland
LI	Liechtenstein
NO	Norway
CH	Switzerland
HR	Croatia
TR	Turkey

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Energy Indicators

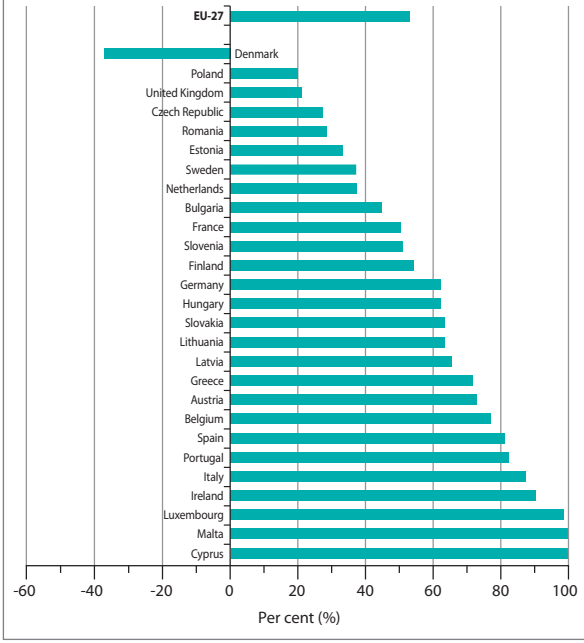
Energy Dependency - All Products

Per cent (%)

	1996	2001	2006
EU-27	**44.1**	**47.5**	**53.8**
Belgium	79.3	78.3	77.9
Bulgaria	56.2	46.3	46.2
Czech Republic	24.6	25.8	28.0
Denmark	22.8	-27.1	-36.8
Germany	59.2	61.0	61.3
Estonia	34.0	31.9	33.5
Ireland	71.3	90.5	90.9
Greece	66.0	68.9	71.9
Spain	70.2	74.5	81.4
France	48.4	50.7	51.4
Italy	82.3	84.0	86.8
Cyprus	98.3	96.0	102.5
Latvia	73.9	59.1	65.7
Lithuania	53.7	47.6	64.0
Luxembourg	99.3	97.9	98.9
Hungary	52.6	54.5	62.5
Malta	100.0	100.0	100.0
Netherlands	16.7	34.8	38.0
Austria	69.8	64.7	72.9
Poland	5.4	10.5	19.9
Portugal	80.7	85.6	83.1
Romania	31.0	25.7	29.1
Slovenia	54.5	50.3	52.1
Slovakia	74.3	63.5	64.0
Finland	55.6	56.1	54.6
Sweden	40.4	36.6	37.4
United Kingdom	-14.5	-9.2	21.3
Iceland	34.6	27.8	25.1
Norway	-759.7	-732.5	-773.8
Switzerland	59.4	55.8	57.3
Croatia	44.4	52.2	54.3
Turkey	60.6	64.3	72.5

Data Source: Eurostat

Energy Dependency - All Products, 2006



Per cent (%)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	44.1	45.0	46.1	45.2	46.8	47.5	47.6	48.9	50.3	52.6	53.8

Data Source: Eurostat

Note: The quantities of fuels delivered to sea-going ships of all flags, including warships, are included. Negative dependency rate indicates a net exporter country. Positive values over 100% indicate stocks build-up during the reference year.

Over the last decade (1996-2006) the EU-27 energy dependency rate has presented an increase of about 22%. In 2006, 53.8% of the energy consumed in the EU was imported against 44.1% in 1996. Among the EU-27 Cyprus (102.5%), Malta (100%) and Luxembourg (98.9%) showed the greatest energy dependency.

During the past ten years, 15 countries have increased their energy dependency. The UK, which exported energy in 1996 and its energy dependency was -14.5%, presented a change in this trend from 2004 on. Between 2004 and 2006 its energy dependency grew 4.5 times and in 2006 it was 21.3% dependent on imports. Poland and the Netherlands also experienced considerable changes throughout the last decade. Poland's overall energy dependency increased 3.7 times, while the Netherlands dependency grew more than 2 times compared to 1996. Still in 2006 Poland was one of the least dependent countries with 19.9% dependency and the Netherlands had a relatively low dependency (38%).

On the contrary, 11 countries decreased their energy dependency. Denmark shifted from being 22.8% energy dependent in 1996 to being a net exporter in 2006 with negative energy dependency equal to 36.8%. Among the non EU-27 countries, Norway was the only country with negative energy dependency that reached 773.8% due to the fact that it is an oil and gas producing country with significant exporting activity.

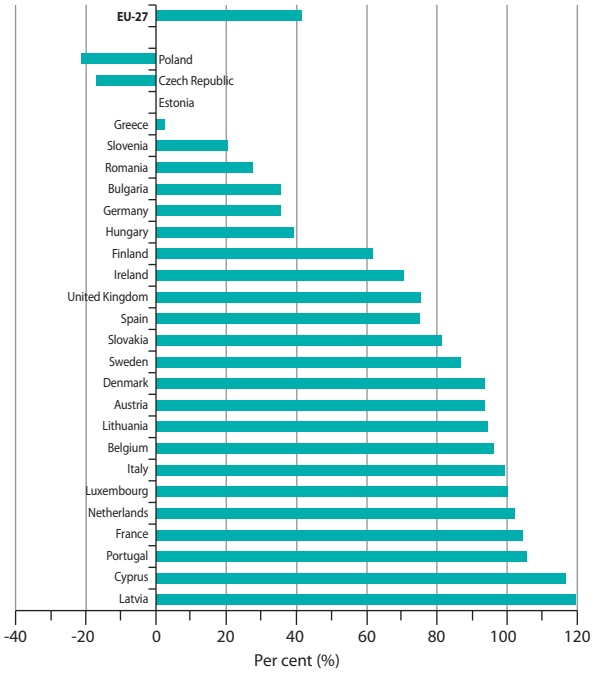
Energy Dependency - Solid Fuels

Per cent (%)

	1996	2001	2006
EU-27	**23.2**	**33.8**	**41.1**
Belgium	97.4	106.7	96.3
Bulgaria	32.9	35.9	35.3
Czech Republic	-22.4	-21.0	-16.1
Denmark	86.8	96.6	93.6
Germany	13.6	29.8	35.4
Estonia	4.9	7.0	-0.1
Ireland	61.3	69.2	70.4
Greece	12.7	9.2	2.7
Spain	47.5	60.1	75.6
France	66.0	89.3	104.8
Italy	101.8	101.0	99.7
Cyprus	100.0	110.4	116.7
Latvia	58.9	52.7	119.7
Lithuania	111.1	78.2	94.6
Luxembourg	100.0	100.0	100.0
Hungary	31.4	27.4	39.2
Malta	-	-	-
Netherlands	97.4	100.8	102.3
Austria	88.0	89.4	93.6
Poland	-25.1	-29.2	-21.6
Portugal	97.9	92.9	105.6
Romania	25.1	29.8	28.4
Slovenia	16.9	18.5	20.1
Slovakia	85.6	78.0	80.8
Finland	63.3	68.9	61.7
Sweden	80.5	89.2	86.9
United Kingdom	26.6	56.1	75.5
Iceland	100.0	100.0	100.0
Norway	85.1	-13.1	-126.2
Switzerland	76.9	87.7	100.7
Croatia	70.1	93.0	109.0
Turkey	32.7	29.3	51.1

Data Source: Eurostat

Energy Dependency - Solid Fuels, 2006



Per cent (%)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	23.2	25.1	26.6	27.8	30.7	33.8	33.1	34.9	38.1	39.6	41.1

Data Source: Eurostat

Note: Negative dependency rate indicates a net exporter country. Positive values over 100% indicate stocks build-up during the reference year.

The EU-27 energy dependency on solid fuels was 41.1% in 2006 showing a 77% increase relatively to 1996 levels. The main exporter of solid fuels in 2006 was Poland with a negative energy dependency (-21.6%), followed by the Czech Republic (-16.1%).

The UK showed the greatest increase in its solid fuels dependency over the last decade (2.8 times) and reached a 75.5% dependency on solid fuels. Germany followed with a 2.5 times increase. In spite of this increase its dependency remained relatively low (35.4%). Latvia on the contrary, showed a 2 times increase in relation to 1996 and had the highest dependency among the EU-27 in 2006 (119.7%). Greece presented the most significant decrease in its energy dependency on solid fuels (79%) and in 2006 it was the least dependent country (2.7%).

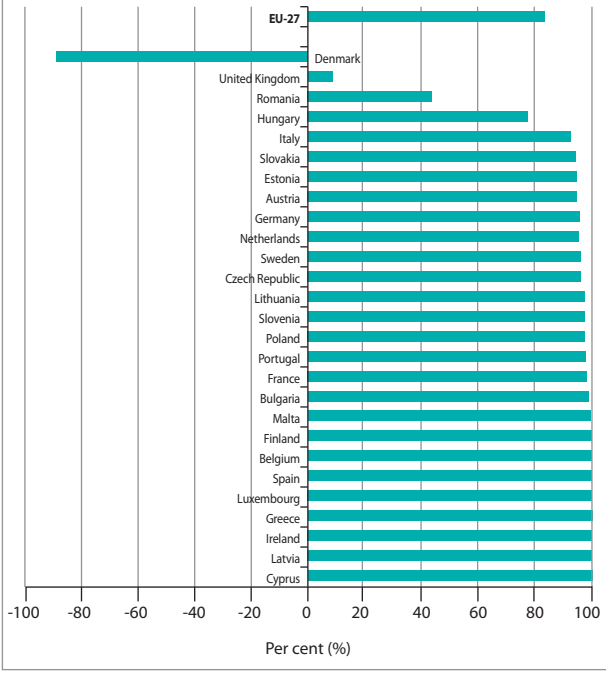
Energy Dependency - Oil

Per cent (%)

	1996	2001	2006
EU-27	**75.6**	**77.4**	**83.6**
Belgium	100.5	100.7	100.8
Bulgaria	101.0	98.5	99.1
Czech Republic	96.8	96.9	96.6
Denmark	7.3	-66.9	-88.5
Germany	97.7	96.7	95.7
Estonia	101.8	74.4	94.9
Ireland	101.2	103.6	101.5
Greece	97.3	98.5	101.3
Spain	97.5	98.3	100.8
France	96.3	97.9	98.7
Italy	94.4	93.5	92.5
Cyprus	100.2	97.6	104.2
Latvia	110.5	101.4	102.3
Lithuania	91.6	75.6	97.7
Luxembourg	100.9	98.8	101.0
Hungary	69.9	72.0	78.0
Malta	100.0	100.0	100.0
Netherlands	92.8	94.9	95.7
Austria	91.1	88.8	95.2
Poland	96.3	91.4	98.1
Portugal	98.7	102.8	98.1
Romania	47.5	44.9	44.0
Slovenia	99.4	97.9	97.8
Slovakia	98.5	89.4	94.6
Finland	99.6	106.4	100.4
Sweden	102.6	100.0	96.5
United Kingdom	-54.9	-43.9	8.9
Iceland	96.7	99.7	97.4
Norway	-1 633.9	-1 740.4	-1 472.9
Switzerland	100.3	98.8	100.4
Croatia	58.7	68.0	76.9
Turkey	91.5	91.8	94.0

Data Source: Eurostat

Energy Dependency - Oil, 2006



Per cent (%)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	75.6	75.9	77.2	73.1	76.0	77.4	76.1	78.4	79.9	82.4	83.6

Data Source: Eurostat

Note: Negative dependency rate indicates a net exporter country. Positive values over 100% indicate stocks build-up during the reference year.

EU-27 appears to be highly oil dependent. In 2006 the dependency of EU-27 on imported oil products reached 83.6%, an increase of 11% compared to 1996 level of 75.6%.

Furthermore, 23 out of the EU-27 countries exceeded a 90% oil dependency rate and the dependency of 8 countries (Cyprus, Latvia, Ireland, Greece, Luxembourg, Spain, Belgium and Finland) surpassed 100%, which implied stocks build-up.

Between 1996 and 2006, the UK was the only country that turned from being an oil exporter with -54.9% dependency into being 8.9% energy dependent. This could be partly due to the decline in the UK's total primary energy production over this period, which was dominated by oil. On the other hand, in this time interval twelve countries decreased their oil dependency. Denmark moved from being 7.3% oil dependent in 1996 to becoming a significant net exporter in 2006.

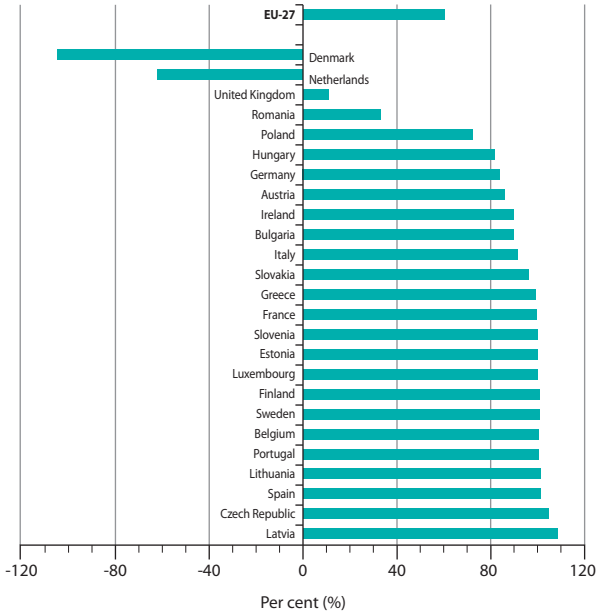
Energy Dependency - Natural Gas

Per cent (%)

	1996	2001	2006
EU-27	**43.5**	**47.3**	**60.8**
Belgium	100.5	99.7	100.2
Bulgaria	101.2	99.7	89.9
Czech Republic	100.1	96.3	104.5
Denmark	-45.7	-66.0	-103.3
Germany	79.7	77.0	83.6
Estonia	100.0	100.0	100.0
Ireland	18.2	81.6	89.8
Greece	15.6	99.2	99.1
Spain	96.2	96.5	101.3
France	90.6	93.1	99.6
Italy	66.1	77.1	91.2
Cyprus	-	-	-
Latvia	100.1	85.6	108.8
Lithuania	100.0	99.9	101.0
Luxembourg	100.0	100.0	100.0
Hungary	71.0	72.7	82.2
Malta	-	-	-
Netherlands	-82.5	-56.7	-61.6
Austria	82.4	72.2	87.7
Poland	66.7	69.2	71.9
Portugal	-	99.9	100.6
Romania	29.1	17.5	32.8
Slovenia	98.5	99.4	99.6
Slovakia	92.1	92.5	96.6
Finland	100.0	100.0	100.0
Sweden	100.0	100.0	100.0
United Kingdom	0.5	-9.6	11.8
Iceland	-	-	-
Norway	-1 132.0	-801.2	-1 554.5
Switzerland	100.0	100.0	100.0
Croatia	33.1	29.6	8.0
Turkey	97.9	98.8	96.9

Data Source: Eurostat

Energy Dependency - Natural Gas, 2006



Per cent (%)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	43.5	45.2	45.7	47.9	48.9	47.3	51.2	52.5	54.0	57.7	60.8

Data Source: Eurostat

Note: Negative dependency rate indicates a net exporter country. Positive values over 100% indicate stocks build-up during the reference year.

The EU-27 increased its dependency on natural gas imports by 40% between 1996 and 2006. Only in 2001 the EU-27 energy dependency showed a slight decrease compared to the previous year. In 2006, fifteen countries had natural gas dependency that exceeded 90%. The UK showed the most remarkable increase in its natural gas dependency (more than 25 times relatively to 1996 levels). It should be noted that from 1997 to 2003 the UK was a net exporter of natural gas, but since 2004 it has been natural gas dependent with notable growth per year.

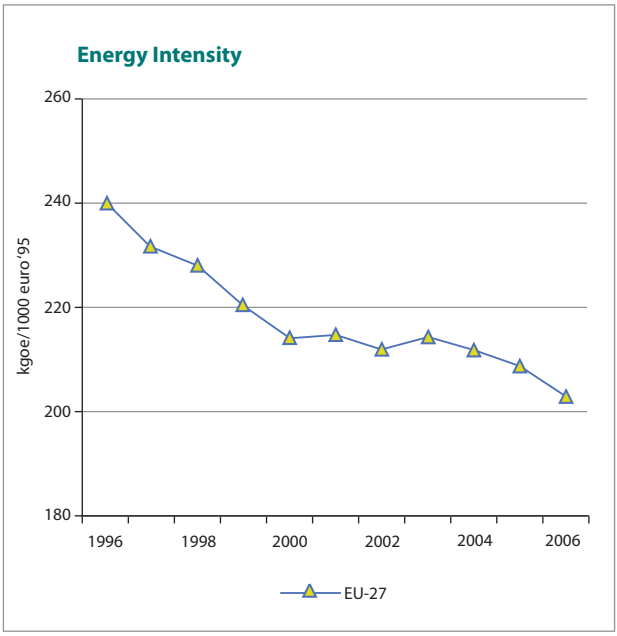
Two EU-27 countries had negative natural gas dependency in 2006, Denmark and the Netherlands. However, the Netherlands appeared to have diminished its natural gas dependency by 25% in relative terms, while Denmark appeared to have a more than 2 times increase. Apart from these two countries solely the UK, Romania and Poland had a natural gas dependency rate less than 80%.

Energy Intensity

	(kgoe/1000 euro '95)			Index (1995=100)		
	1996	**2001**	**2006**	**1996**	**2001**	**2006**
EU-27	**240**	**215**	**202**	**101.7**	**90.9**	**85.7**
Belgium	252	241	219	105.7	100.8	91.6
Bulgaria	2 544	1 939	1 554	109.4	83.3	66.8
Czech Republic	952	890	795	98.6	92.2	82.3
Denmark	162	125	118	110.0	85.1	80.3
Germany	179	164	155	102.3	93.4	88.3
Estonia	1 863	1 230	848	101.5	67.0	46.2
Ireland	213	175	139	98.3	80.6	64.2
Greece	276	233	205	102.8	86.8	76.2
Spain	220	220	211	96.3	96.2	92.4
France	209	190	179	104.8	95.2	89.7
Italy	190	180	185	98.8	93.7	96.1
Cyprus	296	273	251	105.5	97.1	89.3
Latvia	921	767	563	92.6	77.1	56.6
Lithuania	1 735	1 224	862	102.6	72.3	50.9
Luxembourg	238	173	174	98.7	71.7	72.1
Hungary	747	590	521	100.9	79.6	70.4
Malta	340	213	240	106.1	66.5	74.9
Netherlands	233	199	188	100.9	85.9	81.5
Austria	151	145	145	103.6	99.1	99.5
Poland	973	649	574	101.1	67.4	59.6
Portugal	229	231	225	96.3	97.3	94.9
Romania	1 793	1 371	1 128	103.2	78.9	64.9
Slovenia	402	337	299	101.2	84.8	75.3
Slovakia	1 052	1 055	772	91.0	91.3	66.8
Finland	302	256	253	104.1	88.2	86.9
Sweden	268	222	188	101.1	83.8	70.9
United Kingdom	256	222	193	101.8	88.4	76.8
Iceland	451	474	496	109.6	115.2	120.5
Norway	195	194	161	93.1	92.5	76.9
Switzerland	:	101	96	:	:	:
Croatia	408	430	411	60.0	63.1	60.4
Turkey	486	479	447	101.6	100.0	93.4

GDP: constant prices, base year 1995

Data Source: Eurostat



(kgoe/1000 euro '95)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	240	232	228	219	214	215	212	215	212	209	202

Index (1995=100)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	102	98	96	93	91	91	90	91	90	88	86

Data Source: Eurostat

EU-27 energy intensity has been dropping since 1996. In 2006, EU-27 energy intensity was 202 kgoe/1000 euro '95 instead of 240 kgoe/1000 euro '95 in 1996.

Moreover, seventeen countries exceeded the EU-27 average. The most energy intensive countries were Bulgaria and Romania, which surpassed the EU average more than 7 and 5 times respectively, while 7 more countries (Lithuania, Estonia, Czech Republic, Slovakia, Poland, Latvia and Hungary) presented energy intensity at least twice as big as the EU average. Denmark and Ireland showed the lowest energy intensities among the Member States with 118 and 139 kgoe/1000 euro '95 correspondingly.

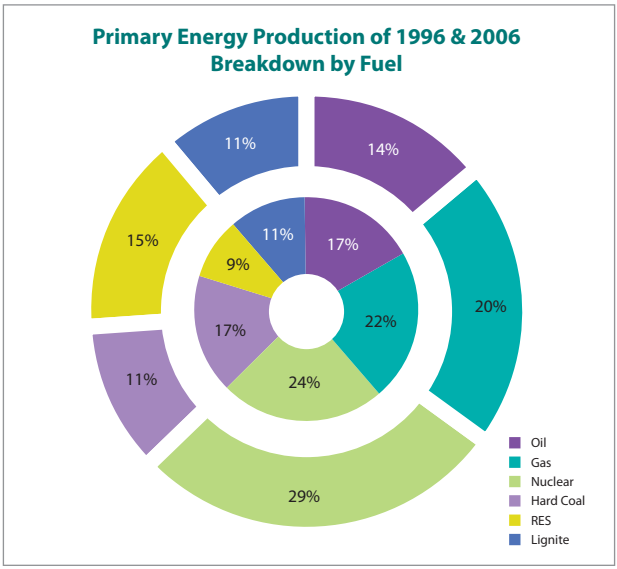
Primary Energy Production, by Fuel

	(ktoe)			Year 2006, share of each fuel to total (%)					
	1996	2001	2006	Hard Coal	Lignite	Oil	Gas	Nuclear	RES
EU-27	**971 370**	**932 987**	**871 247**	**11**	**11**	**14**	**21**	**29**	**15**
BE	11 275	12 675	13 367	-	-	-	-	90	10
BG	10 614	10 290	10 911	0	39	0	3	46	11
CZ	32 230	30 198	33 074	26	46	1	0	20	7
DK	17 669	27 076	29 511	-	-	58	32	-	10
DE	138 844	133 053	136 850	11	28	4	10	32	15
EE	3 723	3 428	3 858	-	80	4	-	-	16
IE	3 471	1 761	1 597	-	48	-	26	-	26
EL	10 138	9 943	10 050	-	81	1	0	-	18
ES	31 968	32 910	31 195	15	4	0	0	50	30
FR	130 968	131 689	135 567	-	-	1	1	86	13
IT	30 119	25 680	27 053	0	-	22	33	-	45
CY	43	44	50	-	-	-	-	-	100
LV	1 436	1 523	1 842	-	0	-	-	-	100
LT	4 307	4 080	3 244	-	0	6	-	69	25
LU	40	50	79	-	-	-	-	-	100
HU	13 130	10 842	10 344	-	18	13	23	34	12
MT	-	-	-	-	-	-	-	-	-
NL	73 962	60 945	60 763	-	-	3	91	1	4
AT	8 408	9 648	9 587	-	0	10	16	-	73
PL	97 794	79 376	76 848	71	16	1	5	-	7
PT	3 795	3 895	4 320	-	-	-	-	-	100
RO	32 950	27 627	27 413	0	24	19	35	5	18
SI	2 963	3 146	3 415	-	35	-	0	42	23
SK	4 691	6 366	6 302	-	9	0	3	74	14
FI	13 440	14 692	17 787	-	18	-	-	33	49
SE	31 468	33 322	32 275	-	1	-	-	54	46
UK	261 924	258 724	183 946	6	-	42	39	11	2
IS	1 616	2 451	3 259	-	-	-	-	-	100
NO	208 083	228 938	223 650	1	-	59	35	-	5
CH	10 013	11 653	11 751	-	-	-	-	61	39
HR	4 219	3 736	4 131	-	-	24	54	-	22
TR	27 182	25 161	26 538	6	43	8	3	-	40

(Mtoe)

	1996	1997	1998	1999	2001	2002	2003	2004	2005	2006
EU-27	971	962	941	943	933	933	927	923	891	871

Data Source: Eurostat



(Mtoe)

EU-27	1996	2006	Change 96-06
Total	971	871	-10%
Oil	170	119	-30%
Gas	210	179	-15%
Nuclear	233	255	9%
Hard Coal	166	94	-44%
RES	88	127	44%
Lignite	105	97	-7%

Data Source: Eurostat

Primary energy commodities originate from natural reserves or flows and can be divided into fossil fuels, nuclear energy and renewable energy sources (RES). RES refer to energy generated by solar, wind, geothermal, hydropower, biomass and ocean resources.

EU-27 primary energy production dropped by 10% in the last decade and in 2006 it amounted to 871 Mtoe. During this period, nuclear energy remained the top primary energy production source and represented 28% of the total production. Natural Gas maintained a large percentage of primary energy production (21%) in spite of the 15% drop it featured. Oil, lignite and hard coal presented a decline in relation to their contribution in primary energy production. Hard coal production dropped by 44% and oil production diminished by 30%, therefore, depleting their contributions to primary energy production to 11% for hard coal and 14% for oil. On the other hand, the production of RES rose by 44%. Due to this increase RES were the third primary energy source in 2006 and were responsible for 15% of total EU-27 primary energy production.

The main energy producer was the UK (183 946 ktoe), the biggest amount of which came from oil (42%) and gas (39%). Yet, the UK presented the biggest reduction over the past years with a 30% decrease in its production. This can justify the increase in its energy dependency during this time. Among the main energy producers were also Germany (136 850 ktoe) with 39% of its production stemming from solid fuels and 32% from nuclear, followed by France (135 567 ktoe), where 86% of its primary energy production came from nuclear power and 13% from RES. On the other hand, Poland was the fourth main producer in 2006 with 71% of its production originating from hard coal after a 21% reduction in its production over the last decade. The countries with the least primary energy production were Cyprus and Luxembourg with only 50 ktoe and 79 ktoe respectively.

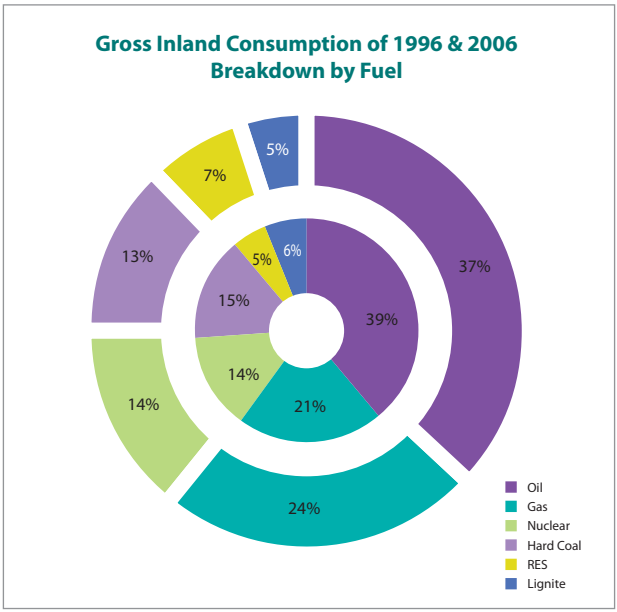
Gross Inland Consumption, by Fuel

			(ktoe)	Year 2006, share of each fuel to total (%)					
	1996	2001	2006	Hard Coal	Lignite	Oil	Gas	Nuclear	RES
EU-27	**1 718 940**	**1 762 453**	**1 825 181**	**13**	**5**	**37**	**24**	**14**	**7**
BE	57 794	60 248	60 411	8	0	39	25	20	3
BG	23 177	19 390	20 547	13	21	25	14	24	6
CZ	42 898	41 511	46 240	14	31	22	16	15	4
DK	22 754	20 167	20 912	26	-	39	22	-	16
DE	350 462	353 163	349 026	13	11	36	23	12	6
EE	5 673	5 116	5 420	0	56	20	15	-	10
IE	11 624	14 956	15 518	11	5	55	26	-	3
EL	25 476	29 061	31 509	1	26	58	9	-	6
ES	101 333	127 283	143 881	11	1	49	22	11	7
FR	255 499	267 108	273 070	5	0	34	15	43	6
IT	161 551	173 672	186 113	9	0	45	37	-	7
CY	2 122	2 420	2 609	1	-	97	-	-	2
LV	4 574	4 091	4 625	2	0	32	30	-	31
LT	9 355	8 135	8 430	3	0	32	29	26	9
LU	3 408	3 776	4 712	2	0	63	26	-	2
HU	26 324	25 496	27 771	5	6	28	41	13	5
MT	778	727	897	-	-	100	-	-	-
NL	77 232	79 105	80 548	10	0	41	43	1	4
AT	28 747	30 858	34 088	11	1	42	22	-	21
PL	103 849	90 958	98 269	45	13	25	13	-	5
PT	20 408	25 055	25 338	13	-	54	14	-	17
RO	48 234	36 887	40 897	6	17	27	36	4	12
SI	6 419	6 746	7 342	4	17	36	12	19	10
SK	17 871	19 259	18 833	19	5	20	29	25	5
FI	31 083	33 167	37 821	14	6	29	10	16	23
SE	51 605	51 380	50 829	5	1	29	2	34	29
UK	228 692	232 720	229 525	18	-	36	35	8	2
IS	2 472	3 354	*4 349*	2	-	23	-	-	75
NO	23 264	26 951	25 031	3	-	31	19	-	46
CH	25 172	27 355	28 086	0	0	46	10	26	16
HR	7 269	7 975	8 966	7	0	51	26	-	10
TR	67 590	71 609	94 661	16	12	33	27	-	11

(Mtoe)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	1 719	1 704	1 722	1 710	1 723	1 762	1 758	1 803	1 824	1 826	1 825

Data Source: Eurostat



(Mtoe)

EU-27	1996	2006	Change 96-06
Total	1 719	1 825	6%
Oil	663	673	2%
Gas	367	438	19%
Nuclear	233	255	9%
Hard Coal	259	229	-11%
RES	89	129	46%
Lignite	104	96	-8%

Data Source: Eurostat

Gross inland consumption has gone up by 6% for the EU-27 within the past decade. The fuel that made up the bulk of inland consumption for the EU-27 was oil (37%). Between 1996 and 2006 oil consumption went up by 2%. Unlike oil, the consumption of gas presented a significant increase (19%) in the past decade. The most noteworthy increase is related to the share of RES, which went up by 46%. Yet, compared to other energy sources the share of RES to total consumption remained low and their contribution was only 7%.

Germany presented the highest gross inland consumption, which reached 349 026 ktoe. More than half of this demand was met by oil (36%) and gas (23%). France had a consumption equal to 273 070 ktoe, 43% of which was covered by nuclear power and 34% by oil. Spain, which was the fifth main consumer in 2006 showed the biggest increase in gross inland consumption among EU countries (42%.) The country with the least gross inland consumption was Malta with only 897 ktoe.

Imports of Energy Products, by Country of Origin

Imports of Natural Gas, by Country of Origin

(PJ)

	2000	2001	2002	2003	2004	2005	2006
Russia	4 540	4 422	4 555	4 895	4 951	4 953	4 928
Norway	1 985	2 136	2 602	2 699	2 802	2 672	2 844
Algeria	2 203	1 957	2 132	2 159	2 042	2 240	2 060
Nigeria	172	216	218	336	410	436	561
Libya	33	33	26	30	48	209	322
Other countries	379	485	519	651	1 001	1 500	1 619
Total	9 313	9 249	10 052	10 771	11 254	12 011	12 334

Imports of Crude Oil, by Country of Origin

(Mt)

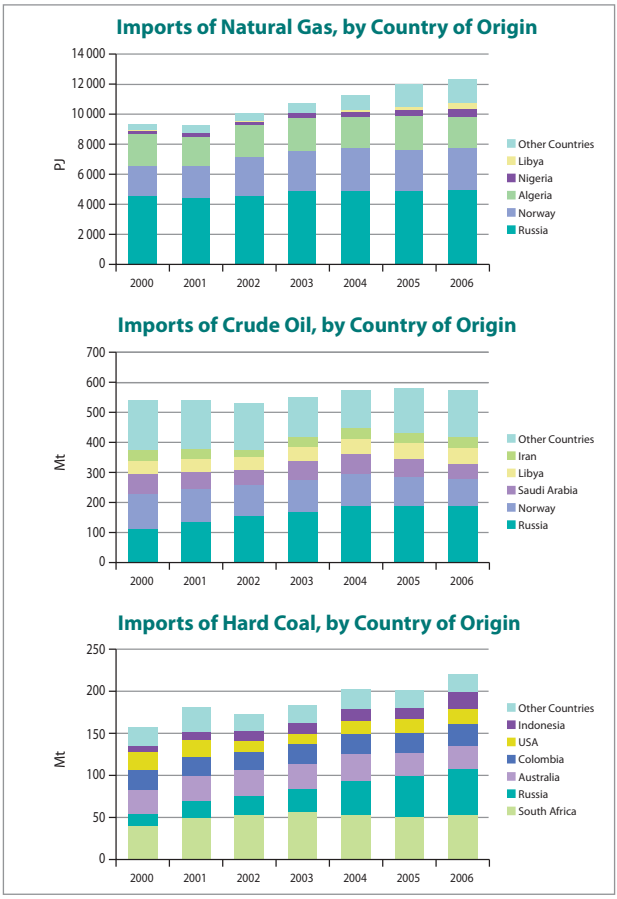
	2000	2001	2002	2003	2004	2005	2006
Russia	112	137	155	171	189	188	189
Norway	116	108	103	106	109	97	89
Saudi Arabia	65	57	53	62	64	61	51
Libya	46	44	39	46	50	51	53
Iran	35	31	26	35	36	35	36
Other countries	166	162	156	133	127	148	155
Total	540	540	532	553	575	580	574

Imports of Hard Coal, by Country of Origin

(Mt)

	2000	2001	2002	2003	2004	2005	2006
South Africa	40	49	54	57	54	52	53
Russia	15	21	23	27	40	48	55
Australia	29	29	29	31	31	27	27
Colombia	23	23	21	23	24	24	26
USA	20	20	14	13	15	16	17
Indonesia	9	10	11	13	14	14	20
Other countries	22	29	20	20	24	21	20
Total	158	181	173	183	203	202	219

Data Source: Eurostat



In 2006, EU-27 imports of natural gas increased by 32% compared to 2000 levels. The main natural gas provider in 2006 was Russia, representing 40% of the EU-27 imports. The second main provider was Norway, which in the last six years increased its natural gas exports to the EU by 43% and made up a portion of 23% of the total EU natural gas imports. Natural gas imports from Libya, Nigeria and other countries presented the most considerable increases, which reached more than 9, 3 and 4 times respectively those of 2000. In spite of this remarkable change, their final contribution to total EU-27 imports was about 3% for Libya, 5% for Nigeria and 13% for other countries. Only in the case of Algeria imports showed a 6% reduction and their contribution to total imports shifted from 24% in 2000 to 17% in 2006.

As far as crude oil imports are concerned, Russia had the biggest contribution (33%) to total imports and rose by 69% within the last 6 years. The contribution of Norway and Saudi Arabia showed a 23% and a 22% reduction in comparison to 2000 levels, lowering their shares to total (16% and 9% respectively). On the contrary, Libya and Iran presented a 15% and a 3% growth, therefore increasing their shares to 9% and 6%. Imports from other countries accounted for 27% of total imports. However, their total contribution was lessened by 7%. Overall, in 2006 the EU-27 crude oil imports increased by 6%.

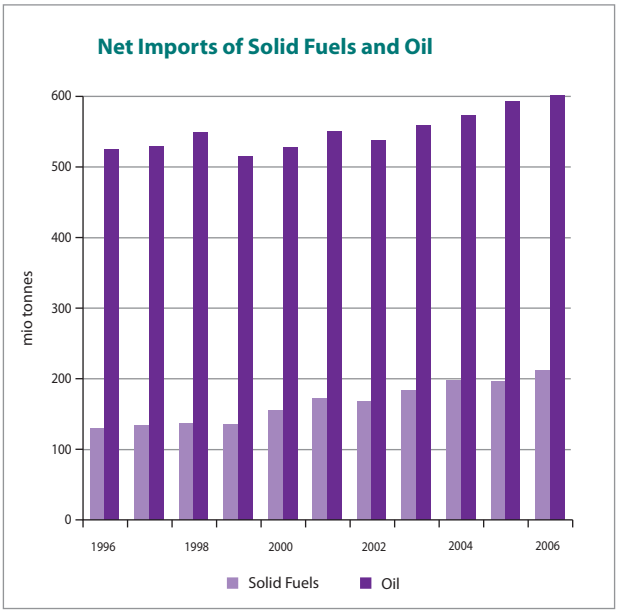
In the case of hard coal, EU-27 imports increased by 39% between 2000 and 2006. In 2006, the EU-27 imported mainly from Russia and South Africa. These two countries were accountable for about 50% of hard coal imports with Russia showing a more than 3 times increase. Indonesia had a more than 2 times increase as well, still its share remained at about 9%. On the contrary the imports from Australia, the USA and other countries showed a downward trend and reduced shares over the total in comparison to 2000.

Net Imports of Solid Fuels and Oil

(1000 tonnes)

	Solid Fuels			Oil		
	1996	2001	2006	1996	2001	2006
EU-27	**129 742**	**172 234**	**211 843**	**524 474**	**550 329**	**601 167**
Belgium	12 131	11 836	7 176	29 094	29 869	32 488
Bulgaria	3 848	4 048	4 068	5 871	4 250	5 128
Czech Republic	-10 883	-7 996	-6 073	8 087	8 121	9 559
Denmark	13 022	6 789	8 617	951	-6 512	-7 955
Germany	20 202	41 592	44 772	133 869	129 315	118 856
Estonia	834	1 070	-58	1 221	794	1 229
Ireland	2 812	3 040	2 572	6 102	8 856	8 690
Greece	1 748	1 318	349	17 616	19 699	21 507
Spain	12 495	18 436	22 812	57 915	72 804	79 185
France	16 059	16 739	21 168	89 111	94 957	92 560
Italy	16 848	20 184	25 135	89 229	84 654	79 791
Cyprus	17	71	63	2 207	2 498	2 989
Latvia	221	93	166	2 296	1 440	1 687
Lithuania	418	111	433	3 137	2 037	2 733
Luxembourg	711	160	160	1 820	2 342	2 942
Hungary	2 281	1 556	1 740	4 910	4 757	5 990
Malta	-	-	-	870	763	913
Netherlands	13 948	13 565	12 731	34 672	41 605	46 943
Austria	4 593	4 958	5 560	11 204	11 499	13 506
Poland	-29 196	-25 060	-17 990	17 322	18 795	23 495
Portugal	5 321	4 807	5 777	13 291	16 642	13 937
Romania	4 598	3 644	4 616	6 652	5 127	4 822
Slovenia	488	506	620	2 609	2 373	2 602
Slovakia	8 909	5 698	5 907	3 401	2 816	3 435
Finland	7 175	6 587	7 176	9 609	9 992	11 342
Sweden	3 814	3 718	3 510	17 236	16 344	15 731
United Kingdom	17 328	34 764	50 836	-45 828	-35 508	7 062
Iceland	97	140	150	803	871	1 028
Norway	1 273	-192	-1 347	-146 236	-155 565	-119 504
Switzerland	166	194	260	12 208	13 134	12 669
Croatia	219	748	1 188	2 212	2 759	3 585
Turkey	8 692	8 562	20 769	27 637	26 463	30 147

Data Source: Eurostat



(mio tonnes)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Solid Fuels	130	135	137	135	155	172	167	183	198	197	212
Oil	524	528	548	514	527	550	537	558	573	593	601

Data Source: Eurostat

The net imports of solid fuels in the EU-27 grew by 63% in 2006 compared to 1996 levels and reached a total amount of 212 million tonnes. The top five importers, the UK, Germany, Italy, Spain and France imported about 78% of the total EU-27 amount. All main importers, except for Netherlands, presented an increase in their imports during the last decade. The UK and Germany increased their imports about 3 and 2 times respectively. The main solid fuel exporting countries among the EU-27 were Poland and the Czech Republic, which appeared to have declining exporting activity.

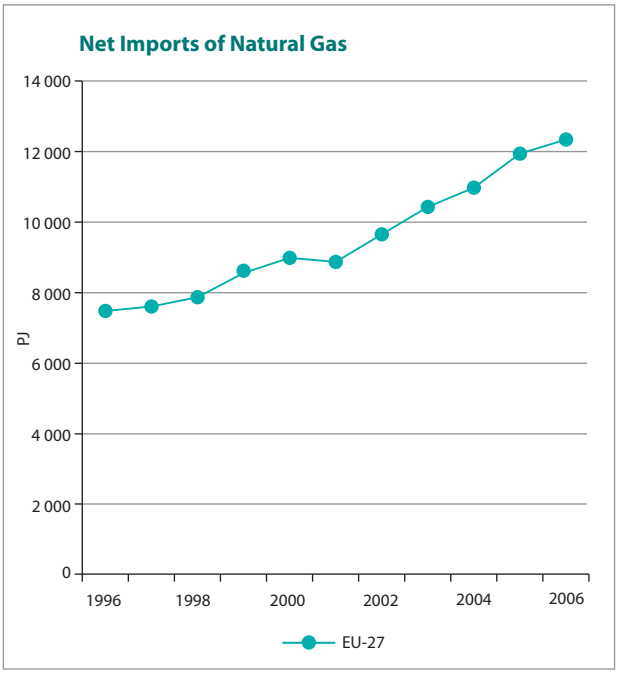
As far as the net imports of oil are concerned, the increase for the EU-27 in the past decade was 15%, which made up a sum of 601 million tonnes. Out of these imports, 69% was imported by the five main importing countries: Germany, France, Italy, Spain and Netherlands. 17 countries increased their oil imports between 1996 and 2006. The UK became an oil importer in 2006 reversing its exporting trend until then. Denmark was the only EU-27 exporting country and had continuous exporting activity since 1997.

Net Imports of Natural Gas

(PJ)

	1996	2001	2006
EU-27	**7 416**	**8 895**	**12 385**
Belgium	553	611	699
Bulgaria	220	127	121
Czech Republic	351	360	368
Denmark	-79	-142	-218
Germany	2 790	2 707	3 091
Estonia	30	33	38
Ireland	22	136	168
Greece	-	78	127
Spain	387	736	1 462
France	1 378	1 626	1 836
Italy	1 416	2 085	2 935
Cyprus	-	-	-
Latvia	40	51	71
Lithuania	101	100	115
Luxembourg	28	32	57
Hungary	338	362	438
Malta	-	-	-
Netherlands	-1 437	-938	-983
Austria	260	232	304
Poland	293	334	414
Portugal	-	105	170
Romania	263	107	223
Slovenia	33	39	42
Slovakia	236	289	242
Finland	138	172	180
Sweden	38	41	41
United Kingdom	17	-388	444
Iceland	-	-	-
Norway	-1 571	-2 022	-3 427
Switzerland	111	118	126
Croatia	33	32	9
Turkey	318	615	1 171

Data Source: Eurostat



(PJ)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	7416	7559	7874	8521	8957	8895	9661	10398	10946	11973	12385

Data Source: Eurostat

The amount of natural gas net imports in the EU-27 in 2006 was 12 385 PJ, which corresponded to a 67% rise since 1996.

The 4 main importers, Germany, Italy, France and Spain, were responsible for 75% of these imports. During the last decade (1996-2006) a big change took place in the UK, which exported natural gas between 1997 and 2003, but has been importing since, because its gas reserves have declined and it no longer has self-sufficiency in gas supply.

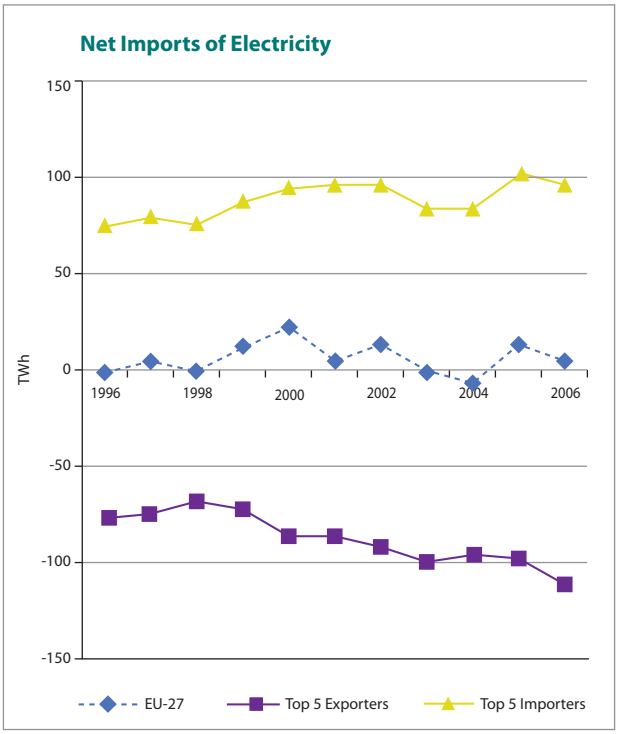
Netherlands and Denmark are the only natural gas exporting countries among the EU-27. The net exports of Denmark have expanded almost 3 times since 1996. Even if its exporting activity has decreased by 32% over the past decade, the Netherlands remain the main exporter among the EU-27.

Net Imports of Electricity

(GWh)

	1996	2001	2006
EU-27	**-3 015**	**4 842**	**3 490**
Belgium	4 191	9 106	10 157
Bulgaria	-449	-6 925	-7 743
Czech Republic	-3	-9 539	-12 631
Denmark	-15 401	-575	-6 935
Germany	-5 266	3 657	-16 977
Estonia	-860	-622	-750
Ireland	-129	-250	1 778
Greece	1 350	2 500	4 202
Spain	1 060	3 450	-3 274
France	-68 811	-68 390	-63 335
Italy	37 389	48 378	44 985
Cyprus	-	-	-
Latvia	3 227	1 883	2 508
Lithuania	-5 159	-3 964	-428
Luxembourg	4 906	5 646	3 557
Hungary	2 197	3 171	7 207
Malta	-	-	-
Netherlands	10 589	17 283	21 459
Austria	952	215	6 850
Poland	-3 124	-6 729	-10 986
Portugal	1 111	239	5 441
Romania	807	-1 310	-4 273
Slovenia	-1 661	-1 772	51
Slovakia	3 592	-3 678	-2 331
Finland	3 661	9 959	11 401
Sweden	6 139	-7 290	6 040
United Kingdom	16 677	10 399	7 517
Iceland	-	-	-
Norway	8 976	3 571	855
Switzerland	-946	-10 444	2 703
Croatia	2 330	3 156	5 622
Turkey	-73	4 146	-1 663

Data Source: Eurostat



(TWh)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	**-3.0**	**2.9**	**-0.9**	**11.2**	**19.6**	**4.8**	**12.5**	**-1.7**	**-7.3**	**11.3**	**3.5**
Top-5 Exporters	-77.7	-74.7	-67.8	-72.3	-87.4	-87.9	-91.8	-100.0	-95.4	-96.3	-111.7
Top-5 Importers	72.5	79.0	75.7	86.7	93.6	95.1	94.9	81.4	82.0	99.1	95.5

Data Source: Eurostat

Note: Top 5 EU-27 Exporters and Importers are drawn according to average activity levels of the last three years
Top 5 Exporting countries are France, Czech Republic, Poland, Germany and Bulgaria.
Top 5 Importing countries are Italy, Netherlands, Finland, Belgium and the United Kingdom.

There has been no clear trend in the EU-27 electricity imports during the past ten years. However, there have been several fluctuations due to trade.

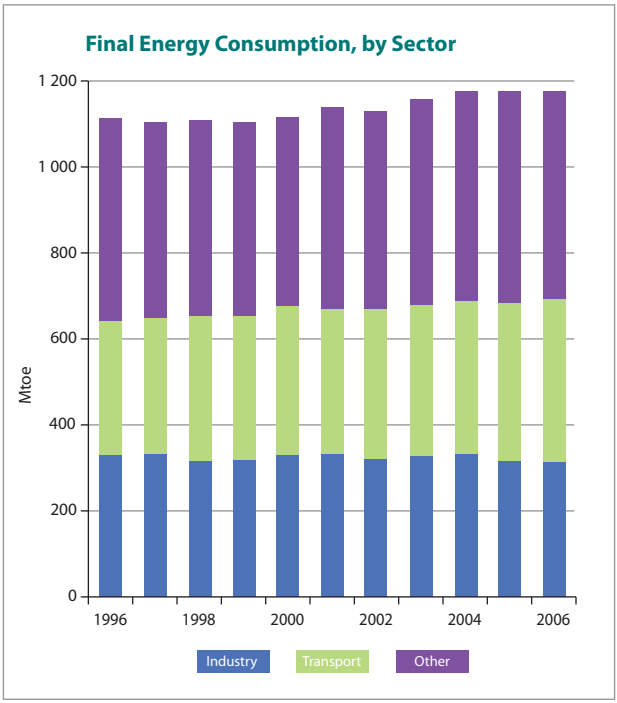
In 2006, France remained the main net exporter, followed by Germany. The Czech Republic, Poland and Bulgaria remained within the 5 top net exporters among the EU -27 Member States.
In terms of imports, Italy, the traditionally main importer, maintained the first place in 2006, followed by the Netherlands, which has held the second place since 1999. Finland, Belgium and the UK held the next three positions in 2006. All three countries were traditionally significant importers with the UK holding one of the top five positions continuously for the last decade.

Final Enery Consumption, by Sector

(Mtoe)

	Total			Industry			Transport			Other	
	1996	2001	2006	1996	2001	2006	1996	2001	2006	1996	2006
EU-27	**1 115**	**1 140**	**1 176**	**331**	**331**	**324**	**311**	**343**	**370**	**473**	**482**
Belgium	37.9	39.3	38.2	13.2	15.5	14.4	8.9	9.5	9.6	15.8	14.1
Bulgaria	11.6	8.6	10.0	6.0	3.7	3.8	1.8	1.9	2.8	3.8	3.4
Czech Republic	25.5	24.0	26.3	12.2	9.5	9.5	3.7	4.6	6.3	9.6	10.5
Denmark	15.4	15.0	15.6	3.0	3.0	2.9	4.6	4.8	5.3	7.8	7.4
Germany	230.9	223.9	223.1	60.6	58.8	55.6	62.8	64.8	63.3	107.5	104.1
Estonia	2.9	2.5	2.8	0.9	0.6	0.6	0.5	0.7	0.8	1.5	1.4
Ireland	8.3	11.1	13.0	1.8	2.3	2.8	2.7	4.3	5.4	3.8	4.9
Greece	16.9	19.2	21.5	4.3	4.5	4.2	6.6	7.4	8.5	6.0	8.7
Spain	65.4	83.5	96.6	19.8	27.2	30.1	27.8	34.4	40.8	17.8	25.7
France	149.7	158.1	157.8	37.3	39.5	35.1	46.3	51.9	50.9	66.1	71.8
Italy	114.6	126.2	130.7	35.9	39.7	38.0	38.1	42.0	44.2	40.7	48.5
Cyprus	1.5	1.7	1.8	0.4	0.4	0.3	0.8	0.9	0.9	0.3	0.6
Latvia	3.8	3.6	4.2	0.7	0.6	0.7	0.7	0.9	1.2	2.4	2.3
Lithuania	4.5	3.9	4.7	1.0	0.8	1.1	1.1	1.1	1.5	2.4	2.2
Luxembourg	3.3	3.7	4.4	1.2	0.9	1.0	1.4	2.0	2.6	0.7	0.7
Hungary	16.3	16.5	17.9	4.0	3.6	3.4	2.7	3.4	4.7	9.7	9.8
Malta	0.4	0.4	0.5	0.0	0.0	0.0	0.2	0.2	0.3	0.1	0.1
Netherlands	51.7	50.9	50.8	13.2	13.7	13.4	13.2	14.3	15.6	25.4	21.8
Austria	22.7	24.5	26.8	6.8	7.9	8.7	5.6	6.4	7.7	10.2	10.3
Poland	65.8	55.7	60.2	24.2	17.4	17.3	9.3	9.2	13.4	32.3	29.4
Portugal	14.5	18.1	18.5	5.0	6.3	5.7	5.1	6.6	7.1	4.4	5.7
Romania	29.6	23.0	24.7	14.8	9.6	9.5	4.1	4.1	4.4	10.7	10.9
Slovenia	4.4	4.6	4.9	1.2	1.3	1.7	1.5	1.4	1.6	1.7	1.7
Slovakia	10.6	10.9	10.7	4.2	3.9	4.5	1.3	1.5	1.8	5.2	4.3
Finland	22.4	24.1	26.7	10.2	11.4	13.3	4.1	4.5	5.0	8.1	8.4
Sweden	34.7	33.4	33.2	12.9	12.4	12.8	7.6	8.6	8.6	14.2	11.9
United Kingdom	150.1	153.3	150.6	35.9	36.3	33.6	48.9	51.8	56.1	65.3	60.9
Iceland	1.8	2.1	2.4	0.5	0.8	0.9	0.3	0.3	0.5	1.0	1.1
Norway	17.7	18.6	18.4	6.2	6.8	6.3	4.5	4.6	5.1	6.9	7.0
Switzerland	20.0	20.9	21.6	3.5	4.1	4.1	6.4	7.1	7.1	10.0	10.4
Croatia	4.7	5.5	6.4	1.3	1.4	1.6	1.3	1.6	2.0	2.1	2.8
Turkey	48.8	50.2	69.1	15.9	16.7	24.7	12.6	11.7	14.9	20.3	29.4

Data Source: Eurostat



(Mtoe)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Industry	331	331	324	317	328	331	326	332	332	326	324
Transport	311	318	329	338	339	343	346	351	360	362	370
Other	473	455	457	453	446	466	454	475	479	484	482

Data Source: Eurostat

The EU-27 total final energy consumption increased by 5% between 1996 and 2006. This was mainly due to the transport sector, which increased by 19%, while the industry sector decreased its consumption by 2%. As a consequence, in 2006 the transport sector's share on final energy consumption was higher than that of the industrial sector. Specifically, the share of transport switched from 28% to 31% and the industry sector's share fell from 30% in 1996 to 28% in 2006. However, the highest share was maintained by other sectors with 42% in 1996 and 41% in 2006.

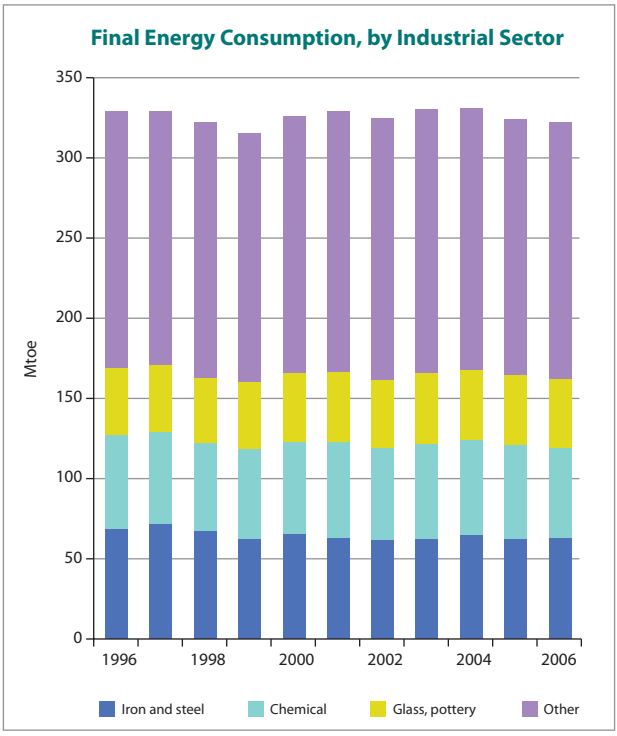
An increase in final energy consumption was observed in nineteen Member States. Among the main final energy consumers, only Germany presented a slight decrease (3%) compared to 1996 levels mainly attributed to the industrial, household and services sectors.

Final Energy Consumption, by Industrial Sector

(ktoe)

	Total industry		Iron and steel		Chemical		Glass, pottery	
	1996	2006	1996	2006	1996	2006	1996	2006
EU-27	**330 630**	**324 270**	**69 299**	**63 801**	**58 578**	**55 734**	**42 323**	**43 643**
Belgium	13 203	14 429	4 046	3 284	3 927	5 123	1 305	1 423
Bulgaria	5 972	3 833	1 266	919	2 124	998	923	681
Czech Republic	12 206	9 477	3 318	2 849	841	1 796	1 273	1 169
Denmark	3 044	2 925	104	73	250	251	693	659
Germany	60 610	55 648	14 188	14 339	11 910	9 654	8 122	5 795
Estonia	857	615	4	1	207	53	163	114
Ireland	1 835	2 754	45	1	299	358	231	506
Greece	4 315	4 213	99	227	284	269	1 335	1 102
Spain	19 816	30 111	3 316	4 340	3 132	5 103	4 393	7 283
France	37 280	35 078	7 454	6 854	5 848	6 510	3 686	4 077
Italy	35 856	38 007	6 819	7 405	6 734	4 600	6 865	8 751
Cyprus	428	331	-	0	4	2	244	187
Latvia	660	741	82	136	62	19	99	117
Lithuania	976	1 055	5	5	179	266	251	234
Luxembourg	1 160	1 019	652	394	73	66	134	80
Hungary	3 960	3 430	1 064	618	834	630	591	626
Malta	44	46	-	-	-	-	-	-
Netherlands	13 210	13 434	2 277	2 267	4 368	4 714	864	730
Austria	6 824	8 746	1 700	2 148	607	843	699	856
Poland	24 192	17 349	5 492	3 536	4 091	3 882	3 521	2 571
Portugal	5 042	5 694	266	199	410	610	1 544	1 769
Romania	14 770	9 481	4 217	3 460	4 217	2 238	1 206	902
Slovenia	1 190	1 699	168	161	106	172	187	269
Slovakia	4 179	4 513	1 642	2 092	706	414	462	458
Finland	10 189	13 273	1 472	1 701	1 076	820	374	362
Sweden	12 864	12 760	1 792	1 895	744	853	487	471
United Kingdom	35 946	33 608	7 811	4 896	5 547	5 491	2 673	2 451
Iceland	474	852	117	176	12	2	7	13
Norway	6 241	6 285	1 203	822	1 017	932	372	391
Switzerland	3 539	4 141	-	235	607	785	340	422
Croatia	1 267	1 637	76	46	233	265	315	510
Turkey	15 895	24 725	3 314	3 813	1 267	2 296	912	1 228

Data Source: Eurostat



(Mtoe)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total	331	331	324	317	328	331	326	332	332	326	324
Iron and Steel	69	72	68	63	66	64	62	63	65	63	64
Chemical	59	58	55	56	57	60	58	60	60	59	56
Glass, Pottery	42	42	41	42	44	44	42	44	44	43	44
Other	160	159	160	156	161	163	164	165	164	160	161

Data Source: Eurostat

The final energy consumption in the industrial sector presented slight changes in the past ten years leading to a 2% cutback. Overall, the three main sectors (iron and steel, chemical and glass, pottery) preserved their share over the total with 50% in 2006 (51% in 1996). The iron and steel sector and the chemical sector had an 8% and 5% decline correspondingly, while the glass, pottery sector presented a 3% increase. In 2006 the main industrial branches had the following shares over total final industry consumption: 20% for iron and steel, 17% for chemicals and 13% for glass, pottery.

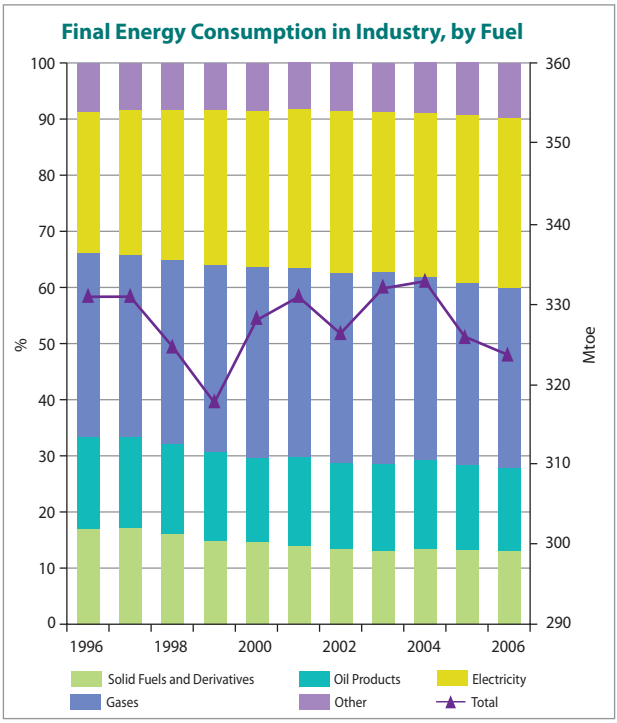
The countries with the greatest growth in their industry's final energy consumption during the past ten years were Spain (52%) and Ireland (50%). On the other hand, Bulgaria and Romania had the largest reduction (36%). As far as the top industry energy consumers are concerned, Germany had an 8% reduction and so did France (6%) and the UK (7%). The Italian industry, on the other hand, increased its consumption by 6%.

Final Energy Consumption in Industry, by Fuel

(ktoe)

	All products		Solid Fuels		Oil products		Gases		Electricity	
	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
EU-27	**330 630**	**324 270**	**56 354**	**42 947**	**53 688**	**47 326**	**108 943**	**104 045**	**83 079**	**98 261**
Belgium	13 203	14 429	2 855	1 888	1 472	1 199	4 099	5 162	2 966	3 458
Bulgaria	5 972	3 833	684	674	603	817	1 647	1 027	1 054	863
Czech Republic	12 206	9 477	3 419	3 022	965	383	3 537	2 833	1 563	2 030
Denmark	3 044	2 925	343	219	880	814	755	715	822	896
Germany	60 610	55 648	10 218	8 802	7 545	4 586	23 450	20 027	17 294	19 725
Estonia	857	615	133	70	248	82	169	116	164	201
Ireland	1 835	2 754	120	134	740	1 089	372	596	532	772
Greece	4 315	4 213	1 015	394	2 042	1 938	10	445	1 043	1 217
Spain	19 816	30 111	1 748	1 332	5 429	5 523	5 756	12 693	5 483	9 185
France	37 280	35 078	5 669	5 004	7 475	6 295	11 985	10 268	10 709	11 943
Italy	35 856	38 007	3 554	4 156	6 139	6 178	15 706	14 741	10 238	12 671
Cyprus	428	331	11	37	382	243	-	-	35	48
Latvia	660	741	8	36	213	102	215	290	119	151
Lithuania	976	1 055	21	135	294	83	211	312	233	252
Luxembourg	1 160	1 019	356	110	127	79	409	436	257	366
Hungary	3 960	3 430	484	443	455	210	2 140	1 405	730	808
Malta	44	46	-	-	-	-	-	-	44	46
Netherlands	13 210	13 434	1 372	1 207	1 121	987	6 629	6 037	3 209	3 573
Austria	6 824	8 746	1 115	1 334	1 347	1 470	2 148	2 639	1 561	2 142
Poland	24 192	17 349	12 412	4 775	1 464	1 650	3 642	3 758	3 973	3 682
Portugal	5 042	5 694	601	27	2 017	1 509	31	964	1 167	1 517
Romania	14 770	9 481	1 474	1 464	2 084	1 176	7 596	4 073	2 108	2 087
Slovenia	1 190	1 699	79	79	132	261	476	550	411	640
Slovakia	4 179	4 513	1 487	1 509	129	250	1 636	1 410	903	1 021
Finland	10 189	13 273	990	918	1 025	1 762	1 493	1 207	3 110	4 036
Sweden	12 864	12 760	1 179	1 202	2 144	1 656	494	658	4 486	4 931
United Kingdom	35 946	33 608	5 009	3 976	7 213	6 986	14 336	11 683	8 867	10 000
Iceland	474	852	65	101	115	115	-	-	256	601
Norway	6 241	6 285	957	609	974	777	22	229	3 843	4 256
Switzerland	3 539	4 141	127	110	788	853	883	867	1 375	1 633
Croatia	1 267	1 637	95	124	310	557	489	527	228	318
Turkey	15 895	24 725	6 351	10 809	4 319	3 115	1 879	4 015	3 301	5 706

Data Source: Eurostat



(Mtoe)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	96-06
Total	331	331	324	317	328	331	326	332	332	326	324	-2%
Solid Fuels and Derivatives	56	57	52	48	48	46	44	44	44	44	43	-24%
Oil	54	53	52	50	49	53	50	51	53	49	47	-12%
Gases	109	107	106	106	112	111	111	114	109	106	104	-4%
Electricity	83	86	87	88	92	94	94	95	97	97	98	18%
Other	29	27	27	26	28	27	28	29	29	30	32	11%

Data Source: Eurostat

An overall reduction of 24% has been observed in solid fuel consumption of the EU-27 industry between 1996 and 2006. Seventeen of the EU-27 countries reduced their solid fuel consumption with Portugal reaching a 96% reduction. Germany, France and Poland, which were the main solid fuel consumers, reduced their consumption by 14%, 12% and 62% respectively. On the other hand, Italy, the fourth main consumer showed an increase in its industry's solid fuel consumption by 17%.

Accordingly, oil consumption in the EU-27 industry showed a declining trend of 12% with seventeen countries achieving a reduction. As far as the top five consumers are concerned, the UK, France and Germany, showed reductions of 3%, 16% and 39% respectively, while Italy and Spain featured slight growths (1% and 2%).

In the case of gases, the EU-27 industry has also achieved a slight reduction of 4%. Among the top five consumers (Germany, Italy, Spain, the UK and France), which were responsible for 67% of the consumption, Germany, Italy, the UK and France diminished their consumption. On the other hand, the Spanish industry more than doubled its gas consumption.

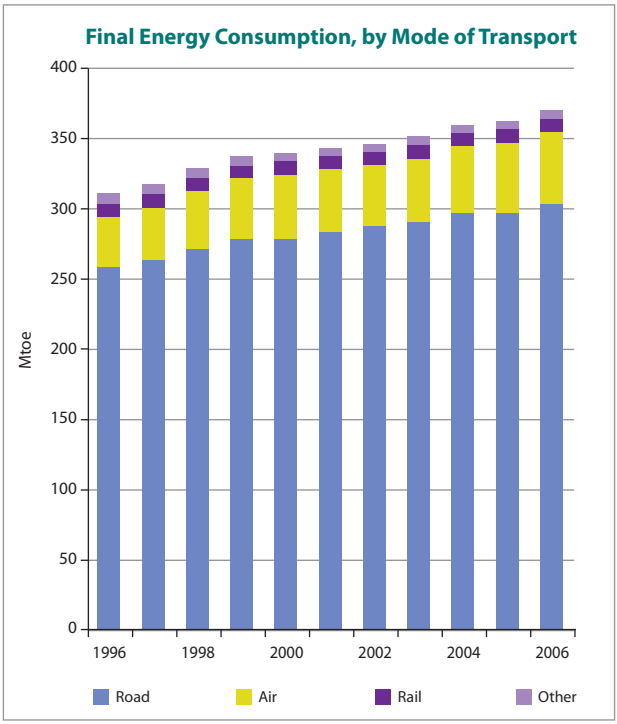
Unlike fossil fuels, in the case of electricity there appears to be an upward trend. Overall, for the EU-27 there has been an 18% rise between 1996 and 2006. Twenty four of the EU countries increased their electricity consumption in industry. Spain presented the greatest increase with 68%, while Bulgaria showed the greatest decline of 18%.

Final Energy Consumption, by Mode of Transport

(ktoe)

	Total transport		Road		Air		Rail	
	1996	2006	1996	2006	1996	2006	1996	2006
EU-27	**311 346**	**370 304**	**258 864**	**303 317**	**35 672**	**51 856**	**9 660**	**9 199**
Belgium	8 929	9 626	7 242	8 056	1 072	1 179	183	180
Bulgaria	1 832	2 772	1 513	2 504	192	204	115	63
Czech Republic	3 734	6 318	3 249	5 692	144	350	342	270
Denmark	4 560	5 339	3 539	4 195	715	919	119	106
Germany	62 783	63 311	53 988	52 444	6 120	8 743	2 162	1 851
Estonia	532	797	462	707	16	32	47	52
Ireland	2 651	5 373	2 178	4 427	362	870	79	50
Greece	6 575	8 502	4 818	6 439	1 230	1 295	60	60
Spain	27 849	40 822	21 798	32 473	3 386	5 579	655	1 092
France	46 262	50 859	39 242	42 212	5 023	7 075	1 259	1 269
Italy	38 102	44 194	34 199	39 022	2 624	3 981	833	949
Cyprus	758	929	499	618	256	308	3	3
Latvia	709	1 177	586	1 027	33	67	90	84
Lithuania	1 131	1 503	1 004	1 367	34	53	89	76
Luxembourg	1 360	2 631	1 144	2 217	205	405	11	10
Hungary	2 665	4 680	2 281	4 303	193	272	191	103
Malta	223	294	181	217	42	77	-	-
Netherlands	13 152	15 620	9 552	11 482	2 772	3 703	166	169
Austria	5 648	7 659	4 823	6 637	510	705	309	308
Poland	9 281	13 426	8 238	12 577	384	429	641	416
Portugal	5 129	7 142	4 379	6 149	626	924	77	68
Romania	4 067	4 359	3 337	3 996	88	139	494	184
Slovenia	1 499	1 554	1 454	1 499	19	26	26	29
Slovakia	1 288	1 832	1 165	1 743	39	43	85	45
Finland	4 091	4 956	3 427	4 018	440	615	94	102
Sweden	7 633	8 569	6 403	7 326	848	870	303	251
United Kingdom	48 903	56 060	38 166	39 969	8 298	12 992	1 228	1 411
Iceland	314	479	205	276	95	187	-	-
Norway	4 533	5 120	3 100	3 429	607	698	179	144
Switzerland	6 370	7 105	4 793	5 542	1 356	1 277	215	277
Croatia	1 250	2 028	1 093	1 838	80	100	49	57
Turkey	12 608	14 904	10 852	12 403	1 242	1 770	294	273

Data Source: Eurostat



(Mtoe)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	96-06
Total	311	318	329	338	339	343	346	351	360	362	370	19%
Road	259	264	272	278	279	284	288	291	298	298	303	17%
Air	36	38	41	43	46	44	44	45	47	50	52	45%
Rail	10	10	10	9	10	9	9	9	10	9	9	-5%
Other	7	7	7	6	6	5	5	6	5	5	6	-17%

Data Source: Eurostat

As already mentioned, the last decade has marked a 19% increase in energy consumption by transport for the EU-27. It is remarkable that all EU-27 countries have increased their consumption.

The final energy consumption by road transport increased in all countries, except for Germany, which showed a 3% reduction. Total EU-27 road transport energy consumption presented an increase of 17% since 1996 and preserved its high share of more than 80% in total transport consumption.

In the case of air transport, which constituted 11% of the total consumption in 1996 and 14% in 2006, energy consumption showed a significant growth of 45% for the EU-27 with all countries presenting increases, but mostly the Czech Republic (143%), Ireland (141%) and Latvia (103%).

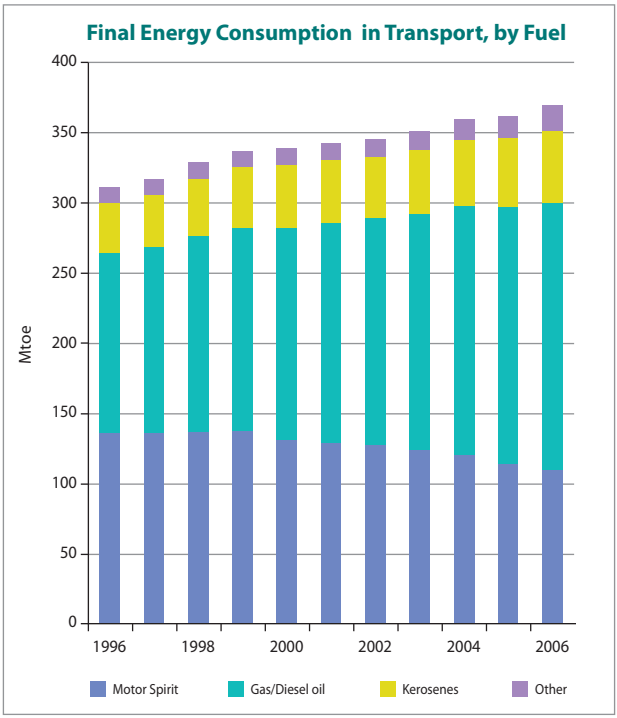
In contrast with road and air transport, rail transport showed a 5% decline. In 2006, rail transport represented only 2% of total transport consumption.

Final Energy Consumption in Transport, by Fuel

(ktoe)

	Total		Motor Spirit		Kerosenes		Gas/Diesel oil	
	1996	2006	1996	2006	1996	2006	1996	2006
EU-27	**311 346**	**370 304**	**136 540**	**110 207**	**35 582**	**51 719**	**128 341**	**190 201**
Belgium	8 929	9 626	2 881	1 542	1 070	1 182	4 541	6 666
Bulgaria	1 832	2 772	979	636	192	204	581	1 467
Czech Republic	3 734	6 318	1 941	2 114	140	348	1 415	3 560
Denmark	4 560	5 339	1 976	1 897	712	917	1 820	2 446
Germany	62 783	63 311	31 315	22 996	6 111	8 727	23 818	26 632
Estonia	532	797	290	326	16	29	215	435
Ireland	2 651	5 373	1 156	1 974	360	864	1 106	2 491
Greece	6 575	8 502	3 037	4 131	1 230	1 295	2 020	2 643
Spain	27 849	40 822	9 564	7 291	3 378	5 569	14 143	27 026
France	46 262	50 859	15 755	10 484	5 000	7 052	24 293	31 393
Italy	38 102	44 194	18 129	13 291	2 618	3 964	14 774	24 445
Cyprus	758	929	195	339	256	308	303	279
Latvia	709	1 177	420	390	33	67	240	678
Lithuania	1 131	1 503	678	362	34	52	385	833
Luxembourg	1 360	2 631	545	472	205	405	598	1 743
Hungary	2 665	4 680	1 413	1 617	193	270	969	2 642
Malta	223	294	78	80	42	77	103	137
Netherlands	13 152	15 620	4 409	4 383	2 768	3 700	5 025	6 950
Austria	5 648	7 659	2 173	2 034	510	705	2 675	4 523
Poland	9 281	13 426	4 727	4 254	382	426	3 483	6 525
Portugal	5 129	7 142	2 067	1 759	623	922	2 410	4 313
Romania	4 067	4 359	1 389	1 513	92	141	2 292	2 575
Slovenia	1 499	1 554	972	668	17	25	496	842
Slovakia	1 288	1 832	473	638	39	40	692	1 058
Finland	4 091	4 956	1 968	1 963	436	608	1 603	2 274
Sweden	7 633	8 569	4 425	3 936	842	866	2 089	3 253
United Kingdom	48 903	56 060	23 581	19 116	8 280	12 956	16 252	22 369
Iceland	314	479	166	170	92	186	50	117
Norway	4 533	5 120	1 764	1 577	603	696	2 001	2 605
Switzerland	6 370	7 105	3 833	3 666	1 350	1 272	976	1 886
Croatia	1 250	2 028	615	731	80	99	516	1 133
Turkey	12 608	14 904	4 803	2 862	1 242	1 770	6 289	8 364

Data Source: Eurostat



(Mtoe)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	96-06
Total	311	318	329	338	339	343	346	351	360	362	370	19%
Motor Spirit	137	136	137	138	132	129	128	124	121	114	110	-19%
Gas/Diesel Oil	128	133	140	145	151	157	162	169	178	183	190	48%
Kerosenes	36	37	41	43	45	44	44	45	47	50	52	45%
Other	11	11	12	11	12	12	13	13	14	16	18	67%

Data Source: Eurostat

During the past decade there has been a significant move from the consumption of motor spirits towards the consumption of gas/diesel oil. Specifically, the consumption of motor spirits decreased by 19%, while the consumption of gas/diesel oil increased by 48%. In addition, the consumption of kerosene increased by 45%, in line with the increasing trend in air transport.

These changes led to a significant decrease in the share of motor spirits from 44% in 1996 to 30% in 2006 and a respective increase in the share of gas/diesel oil to 51% in 2006 instead of 41% in 1996. The share of kerosene increased from 11% in 1996 to 14% in 2006.

In the case of motor spirits a decrease was observed in the bulk of EU-27 countries. All major motor spirit consumers (Germany, UK, Italy and France) reduced their consumption with France recording a 33% reduction. On the other hand, in the case of gas/diesel oil all countries except for Cyprus presented an increase. Among the top three gas/diesel oil consumers (France, Spain and Germany) the largest change was observed in Spain (91%). As far as kerosenes are concerned, all countries presented increases with the Czech Republic reaching 149%, Ireland 140%, Latvia 103%, while the UK, the top consumer, reached a 25% share over the EU-27 total after a 56% increase.

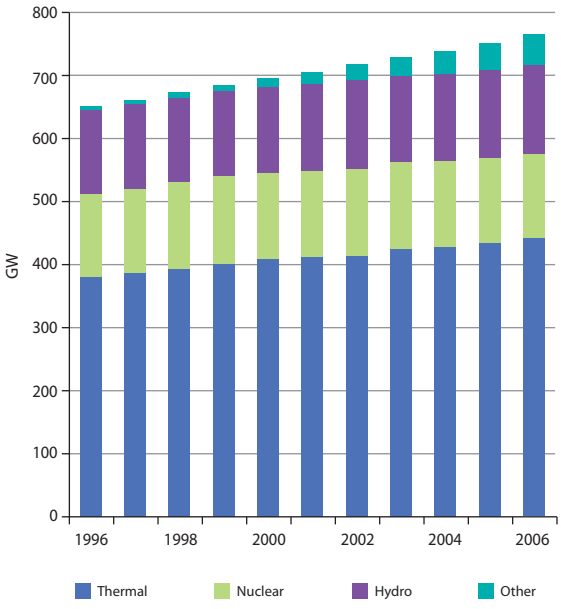
Installed Capacity of Electricity Generation Plants, by Type

(MW)

	Total		Thermal		Nuclear		Hydro		Other	
	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
EU-27	***648 523***	***761 363***	**380 480**	***439 113***	**130 909**	***134 018***	**133 247**	***139 875***	**3 887**	**48 357**
Belgium	14 852	16 258	7 751	8 807	5 693	5 825	1 403	1 414	5	212
Bulgaria	*2 359*	12 015	:	6 418	:	2 722	2 359	*2 848*	-	27
Czech Republic	14 973	17 507	11 199	11 528	1 760	3 760	2 014	2 175	:	44
Denmark	11 064	13 012	10 212	9 868	-	-	10	9	842	3 135
Germany	114 896	125 001	81 500	75 176	22 910	20 208	8 940	8 995	1 546	20 622
Estonia	2 697	2 288	2 697	2 251	-	-	-	5	-	32
Ireland	4 194	6 443	3 666	5 171	-	-	522	526	6	746
Greece	9 125	13 566	6 574	9 682	-	-	2 522	3 135	29	749
Spain	46 921	*78 426*	22 732	*40 799*	7 090	*7 577*	16 888	18 314	211	11 736
France	109 457	115 916	24 406	26 159	59 970	63 260	25 074	25 109	7	1 388
Italy	68 217	89 137	47 786	65 492	-	-	19 876	21 072	555	2 573
Cyprus	699	1 134	699	1 134	-	-	-	-	-	-
Latvia	2 090	2 150	569	588	-	-	1 520	1 536	1	26
Lithuania	5 856	4 562	2 461	2 471	2 730	1 183	665	877	-	31
Luxembourg	1 235	1 638	101	463	-	-	1 134	1 140	-	35
Hungary	7 536	8 620	5 648	6 672	1 840	1 866	48	49	-	33
Malta	466	571	466	571	-	-	-	-	-	-
Netherlands	20 395	22 853	19 554	20 748	505	510	37	37	299	1 558
Austria	17 519	19 166	6 142	6 344	-	-	11 367	11 853	10	969
Poland	29 704	32 360	27 657	29 857	-	-	2 047	2 331	-	172
Portugal	9 380	14 456	4 926	7 685	-	-	4 428	5 065	26	1 706
Romania	22 856	19 224	16 112	12 234	706	707	6 038	6 282	-	1
Slovenia	2 495	3 039	1 097	1 364	664	666	734	1 009	-	-
Slovakia	7 439	8 210	3 289	3 051	1 760	2 640	2 390	2 514	-	5
Finland	14 570	16 557	9 468	10 738	2 310	2 671	2 785	3 062	7	86
Sweden	34 158	34 122	7 795	7 882	10 055	9 454	16 203	16 270	105	516
United Kingdom	73 370	83 132	55 973	65 960	12 916	10 969	4 243	4 248	238	1 955
Iceland	1 081	1 725	146	140	-	-	884	1 163	51	422
Norway	28 736	:	266	:	-	:	28 466	:	4	:
Switzerland	17 299	19 086	688	844	3 080	3 220	13 529	15 010	2	12
Croatia	3 606	3 879	1 525	1 802	-	-	2 081	2 060	-	17
Turkey	21 250	40 565	11 297	27 420	-	-	9 935	13 063	18	82

Data Source: Eurostat

Installed Capacity of Electricity Generation Plants, by Type



(GW)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total	*649*	*658*	671	683	695	704	716	728	737	748	*761*
Thermal	380	386	393	400	407	410	412	424	427	433	*439*
Nuclear	131	133	136	138	137	137	138	137	136	135	*134*
Hydro	*133*	*134*	134	136	137	138	142	137	138	139	140
Other	5	5	8	9	14	19	24	30	36	41	48

Data Source: Eurostat

The installed capacity of electricity generation plants in the EU-27 increased by 17% in the last decade and has been growing in a rather steady rate per year. It can be noted that the countries with the biggest installed capacity are Germany and France. Germany had 125 GW of installed capacity in 2006, 60% of which came from thermal power plants, while France had 116 GW, 54% of which came from nuclear power stations.

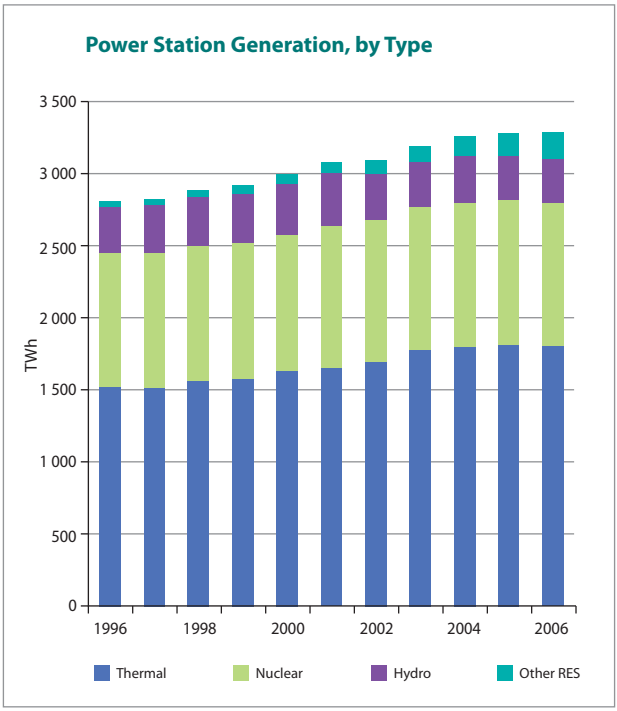
Overall, in the case of the EU-27 the bulk of the installed capacity came from thermal power plants, which were accountable for 58% in 2006 with a 15% increase since 1996. Thermal power plants made up most of the installed capacity in the majority of EU-27 countries in 2006, the only exceptions being France, Latvia, Luxembourg, Austria and Sweden. In the EU-27 the share of nuclear power stations on the total installed capacity of electricity generation fell from 20.2% to 17.6%. Hydro capacity grew by 5% in the last decade but its share to total installed capacity fell from 20.5% in 1996 to 18.4% in 2006.

Power Station Generation, by Type

(GWh)

	Total		Thermal		Nuclear		Hydro		Other RES	
	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
EU-27	**2 810 456**	**3 286 471**	**1 524 965**	**1 808 247**	**927 548**	**989 877**	**323 296**	**308 372**	**34 647**	**179 975**
Belgium	75 187	84 968	30 994	34 597	43 336	46 645	239	359	618	3 367
Bulgaria	42 500	44 728	21 715	20 977	18 082	19 493	2 703	4 238	-	20
Czech Republic	63 823	83 448	48 712	53 876	12 850	26 046	1 969	2 550	292	976
Denmark	53 577	35 851	51 176	25 795	-	-	19	23	2 382	10 033
Germany	552 293	622 147	362 599	380 752	161 613	167 269	21 957	19 931	6 124	54 195
Estonia	9 103	10 218	9 096	10 090	-	-	2	13	5	115
Ireland	18 935	25 616	18 172	23 142	-	-	722	724	41	1 750
Greece	42 399	60 891	38 015	53 029	-	-	4 348	6 048	36	1 814
Spain	172 694	301 051	75 215	189 168	56 330	60 126	39 464	25 562	1 685	26 195
France	508 043	575 400	42 918	61 691	397 340	450 191	65 703	56 350	2 082	7 168
Italy	243 151	303 924	196 701	251 832	-	-	42 037	36 994	4 413	15 098
Cyprus	2 592	4 378	2 592	4 377	-	-	-	-	-	1
Latvia	3 126	4 277	1 265	1 491	-	-	1 860	2 698	1	88
Lithuania	16 241	12 687	1 973	3 600	13 942	8 651	326	397	-	39
Luxembourg	491	3 363	388	3 091	-	-	60	103	43	169
Hungary	35 089	35 398	20 702	20 350	14 180	13 461	207	186	-	1 401
Malta	1 658	2 240	1 658	2 240	-	-	-	-	-	-
Netherlands	85 323	100 410	78 498	87 429	4 160	3 469	80	106	2 585	9 406
Austria	53 575	62 373	17 889	22 573	-	-	34 216	34 878	1 470	4 922
Poland	141 194	155 322	138 861	151 012	-	-	1 931	2 043	402	2 267
Portugal	34 474	53 698	18 682	37 683	-	-	14 761	11 002	1 031	5 013
Romania	61 350	57 640	44 209	33 647	1 386	5 632	15 755	18 356	-	5
Slovenia	12 778	14 911	4 458	5 662	4 647	5 548	3 673	3 591	-	110
Slovakia	25 060	31 397	9 496	8 558	11 261	18 012	4 303	4 399	-	428
Finland	69 372	67 884	31 301	22 465	19 476	22 906	11 860	11 494	6 735	11 019
Sweden	140 598	141 934	12 249	3 037	74 274	66 977	51 740	61 722	2 335	10 198
United Kingdom	345 830	390 317	245 431	296 083	94 671	75 451	3 361	4 605	2 367	14 178
Iceland	5 469	11 591	351	1 665	-	-	4 772	7 293	346	2 633
Norway	104 427	121 186	496	662	-	-	103 591	119 405	340	1 119
Switzerland	56 258	61 993	1 302	1 131	25 142	27 819	28 745	30 959	1 069	2 084
Croatia	10 548	12 030	3 310	6 000	-	-	7 228	6 000	10	30
Turkey	94 946	166 801	54 211	122 278	-	-	40 475	44 244	260	279

Data Source: Eurostat



(TWh)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total	2 810	2 823	2 889	2 916	2 997	3 084	3 089	3 189	3 260	3 280	3 286
Thermal	1 525	1 513	1 565	1 577	1 632	1 658	1 694	1 779	1 794	1 818	1 808
Nuclear	928	937	934	943	945	979	990	996	1 008	998	990
Hydro	323	332	343	341	353	373	315	306	324	307	308
Other RES	35	40	47	55	68	74	89	108	134	157	180

Data Source: Eurostat

The total power generated in the EU-27 increased by 17% over the last ten-year period. In 2006 power generation for the majority of EU-27 countries came mostly from thermal power stations with the exceptions of Belgium, France, Lithuania and Slovakia, where power was generated mainly through nuclear plants and Latvia and Austria where it came from hydro. In the cases of Finland and Slovenia power was generated at almost equal shares from nuclear and thermal, while in Sweden from nuclear and hydro.

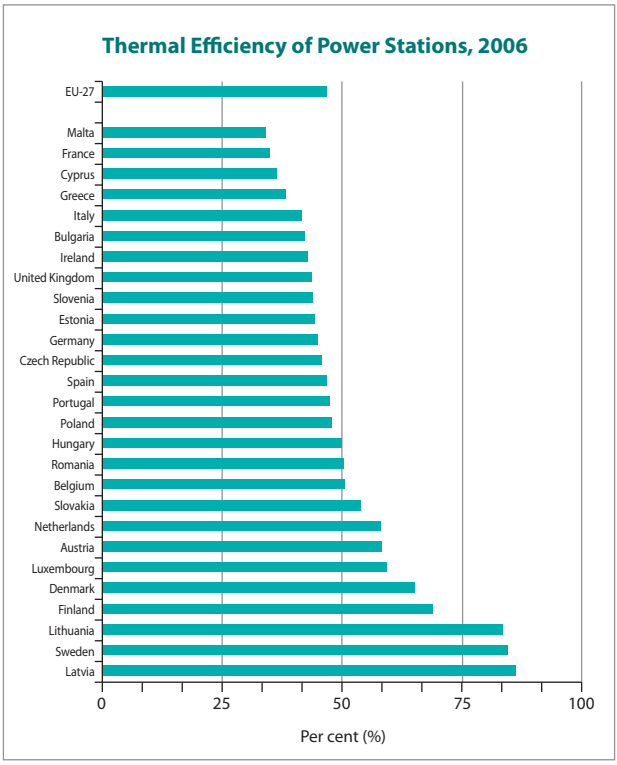
Between 1996 and 2006 power generation from thermal power stations grew by 19% for the EU-27. The growth in power generation from nuclear stations was lesser and equalled 7%, while power generation from hydro declined by 5%. The contribution of other RES featured a remarkable rise (more than 5 times) for the EU-27 over the past ten years. The most considerable contributions of other RES to total power generation were observed in Denmark, where their share reached 28% and in Finland (16%), while in four more countries (Germany, Spain, Netherlands and Portugal) the share of other RES was 9%.

Thermal Efficiency of Power Stations

Per cent (%)

	1996	2001	2006
EU-27	**44.8**	**45.8**	**46.8**
Belgium	41.8	49.8	50.4
Bulgaria	42.1	41.0	42.1
Czech Republic	45.4	47.1	45.7
Denmark	57.2	65.3	65.1
Germany	44.5	43.2	44.8
Estonia	39.3	40.3	44.3
Ireland	39.0	39.6	42.7
Greece	32.4	37.0	38.2
Spain	38.3	42.5	46.7
France	42.5	34.8	34.8
Italy	39.4	41.9	41.5
Cyprus	32.9	35.7	36.4
Latvia	79.7	79.7	85.9
Lithuania	66.2	73.1	83.4
Luxembourg	40.4	72.3	59.2
Hungary	42.5	50.9	49.9
Malta	28.3	34.2	34.1
Netherlands	49.6	53.7	57.9
Austria	53.9	58.1	58.1
Poland	46.0	47.3	47.8
Portugal	40.4	45.9	47.2
Romania	52.7	53.1	50.2
Slovenia	36.5	41.6	43.9
Slovakia	45.0	52.7	53.8
Finland	65.9	70.6	68.8
Sweden	77.1	88.3	84.3
United Kingdom	41.3	42.4	43.5
Iceland	28.5	23.1	21.5
Norway	87.8	84.7	100.0
Switzerland	70.4	72.1	75.2
Croatia	46.5	48.0	50.2
Turkey	33.3	42.6	47.7

Data Source: Eurostat



Per cent (%)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	44.8	45.5	45.8	45.7	45.6	45.8	45.3	45.3	45.7	46.8	46.8

Data Source: Eurostat

The EU-27 average thermal efficiency of power stations reached 46.8% in 2006 compared to 44.8% in 1996. This corresponded to a 5% increase.
The countries that presented the most significant increases within this decade were Luxembourg and Lithuania (46% and 26% respectively), while France and Romania demonstrated decreases in their thermal power stations' efficiencies (18% and 5%). Fourteen countries had thermal efficiency greater than the EU-27 average (46.8%) in 2006 with three countries (Latvia, Sweden and Lithuania) exceeding 80%.

% Share of Renewables to Final Energy Consumption

Per cent (%)

	2006	2020 Proposed Target
EU-27	**9.2**	**20.0**
Belgium	2.7	13.0
Bulgaria	9.0	16.0
Czech Republic	6.4	13.0
Denmark	17.1	30.0
Germany	7.8	18.0
Estonia	16.6	25.0
Ireland	3.0	16.0
Greece	7.2	18.0
Spain	8.7	20.0
France	10.5	23.0
Italy	6.3	17.0
Cyprus	2.7	13.0
Latvia	31.4	42.0
Lithuania	14.6	23.0
Luxembourg	1.0	11.0
Hungary	5.1	13.0
Malta	0.0	10.0
Netherlands	2.7	14.0
Austria	25.2	34.0
Poland	7.5	15.0
Portugal	21.5	31.0
Romania	17.1	24.0
Slovenia	15.6	25.0
Slovakia	6.8	14.0
Finland	28.9	38.0
Sweden	41.4	49.0
United Kingdom	1.5	15.0

Data Source: Eurostat

Note: Final Energy Consumption is the sum of final energy consumption, distribution losses and electricity and heat consumption in the energy sector. Electricity production follows the normalization rule for hydroelectric power plants.

Share of Renewables to Final Energy Consumption and Proposed Target for 2020

The share of renewables to Final Energy Consumption is the sum of final energy consumption of renewables for heat production, the gross electricity generation from renewables and liquid biofuels for transport divided by the final energy consumption (industry, transport, other sectors) of all energy sources, including consumption of the energy branch and distribution losses for electricity and heat production. In the case of hydroelectric power plants, electricity production follows the normalization rule for the last 15 years.

According to 2006 data, in 11 EU-27 countries the share of RES to final energy consumption exceeded 10%. The Member State with the greatest share of RES to final energy consumption was Sweden with 41.4% and it was followed by Latvia and Finland with 31.4% and 28.9% respectively. Moreover, Austria and Portugal presented a share of RES that exceeded 20% and reached 25.2% and 21.5% respectively. On the contrary, Luxembourg and the UK had shares of 1% and 1.5% correspondingly.

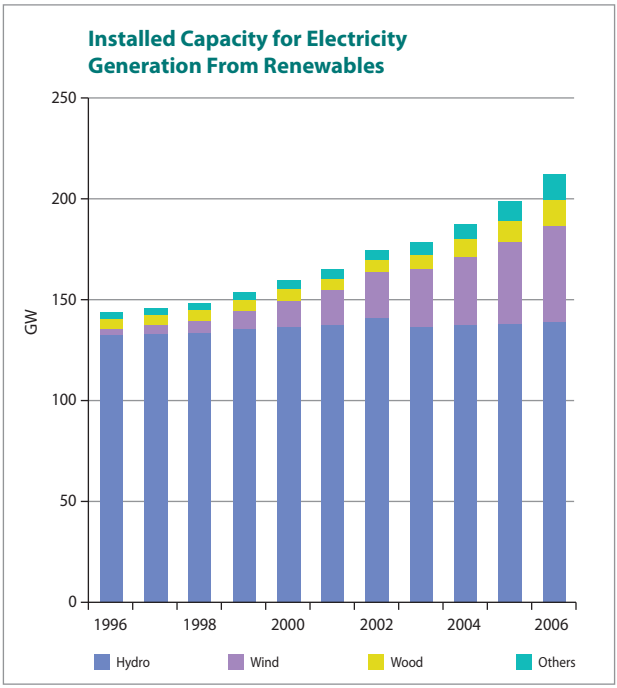
In relation to the proposed targets for 2020, Sweden has the highest target to reach a 49% share of renewables to final energy consumption. However, due to the already high contribution of renewables to final energy consumption, the change demanded is the smallest among the EU-27. The targets for all the other countries lead to a 30% up to a 1 000% increase in the share of renewables until 2020. On average the increase for the EU-27 is 117%.

Installed Capacity for Electricity Generation From Renewables

(MW)

	Total		Hydro		Wind		Wood		Others	
	1996	2006	1996	2006	1996	2006	1996	2006	1996	2006
EU-27	***144 694***	***213 784***	***133 247***	**139 875**	**3 392**	**47 661**	**5 132**	**13 395**	**2 923**	**12 853**
Belgium	1 542	2 184	1 403	1 414	5	212	134	307	-	251
Bulgaria	*2 359*	*2 875*	*2 359*	2 848	-	27	-	-	-	-
Czech Republic	2 014	3 824	2 014	2 175	-	44	-	1 558	-	47
Denmark	1 094	3 961	10	9	842	3 135	40	455	202	362
Germany	11 919	36 320	8 940	8 995	1 546	20 622	625	1 094	808	5 609
Estonia	-	37	-	5	-	32	-	-	-	-
Ireland	538	1 297	522	526	6	746	-	-	10	25
Greece	2 599	3 913	2 522	3 135	27	749	48	-	2	29
Spain	17 327	30 965	16 888	18 314	211	11 736	127	391	101	524
France	25 689	27 520	25 074	25 109	7	1 388	340	220	268	803
Italy	20 699	27 273	19 876	21 072	70	1 902	96	2 078	657	2 221
Cyprus	-	-	-	-	-	-	-	-	-	-
Latvia	1 521	1 572	1 520	1 536	1	26	-	3	-	7
Lithuania	665	937	665	877	-	31	-	26	-	3
Luxembourg	1 144	1 215	1 134	1 140	-	35	-	-	10	40
Hungary	77	447	48	49	-	33	5	328	24	37
Malta	-	-	-	-	-	-	-	-	-	-
Netherlands	739	2 375	37	37	299	1 558	13	299	390	481
Austria	11 999	13 987	11 367	11 853	10	969	607	766	15	399
Poland	2 047	2 560	2 047	2 331	-	172	-	25	-	32
Portugal	4 659	7 138	4 428	5 065	18	1 681	205	279	8	113
Romania	6 347	6 283	6 038	6 282	-	1	309	-	-	-
Slovenia	734	1 029	734	1 009	-	-	-	14	-	6
Slovakia	2 390	2 635	2 390	2 514	-	5	-	108	-	8
Finland	3 894	4 883	2 785	3 062	7	86	1 100	1 730	2	5
Sweden	17 823	20 674	16 203	16 270	105	516	1 437	3 202	78	686
United Kingdom	4 875	7 880	4 243	4 248	238	1 955	46	512	348	1 165
Iceland	935	1 586	884	1 163	-	-	-	-	51	423
Norway	28 603	:	28 466	:	4	:	128	:	5	:
Switzerland	13 774	15 390	13 529	15 010	2	12	-	-	243	368
Croatia	2 081	2 077	2 081	2 060	-	17	-	-	-	-
Turkey	9 967	13 199	9 935	13 063	-	59	14	40	18	37

Data Source: Eurostat



(GW)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	96-06
Total	145	147	149	155	161	166	176	180	189	200	214	48%
Hydro	133	134	134	136	137	139	142	137	138	139	140	5%
Wind	3	5	6	9	13	17	23	29	34	41	48	1 500%
Wood	5	5	5	6	6	6	6	7	9	11	13	160%
Others	3	3	3	4	4	5	5	7	7	10	13	333%

Data Source: Eurostat

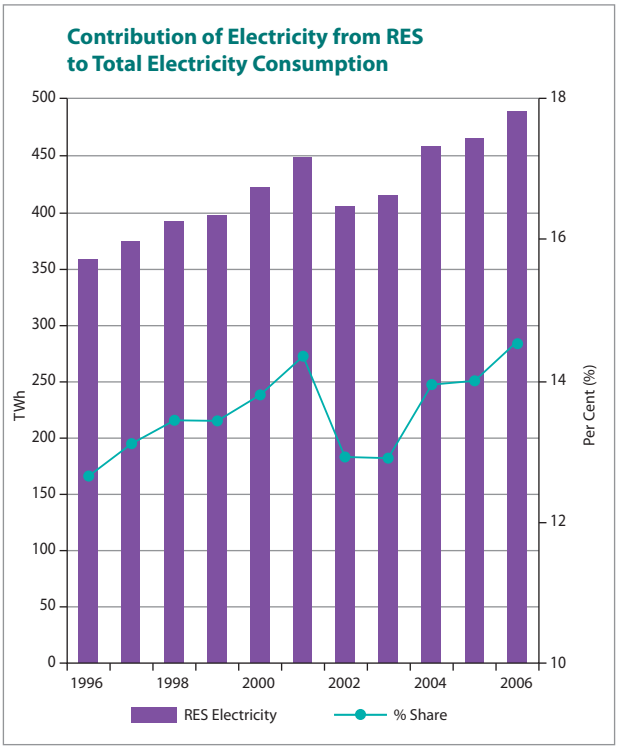
The installed capacity for electricity generation from renewables has increased by 48% between 1996 and 2006. Hydro power remains the sector with the largest share. However, this share has shifted from 92% in 1996 to 65% in 2006. On the contrary, wind power has had a significant increase, 16 times more than its 1996 capacity. Due to this increase the installed wind capacity in 2006 was 48 GW with a 22% share when in 1996 wind capacity was about 3 GW with a 2% share. Biomass-Wood power showed a remarkable increase of almost 3 times compared to 1996 figures, while other renewables, such as geothermal and photovoltaics attained a growth more than 4 times in relation to 1996 levels, therefore reaching a 6% share. As far as geothermal capacity is concerned, Italy was responsible for 96.4% and Portugal for the rest 3.6%. In the case of photovoltaics, Germany managed to boost its capacity more than 100 times and in 2006 its share reached 88% of the EU-27 total.

The countries that held the majority of installed capacity for electricity generation from renewables were Germany, Spain, France and Italy. Germany, apart from photovoltaics, was also responsible for 20 622 MW of wind capacity. Spain had 18 314 MW of hydro capacity in 2006 and also managed to raise its wind capacity 55 times over the last decade and reached an 11 736 MW capacity.

Contribution of Electricity from RES to Total Electricity Consumption

	RES electricity *(GWh)*			Share (%)		
	1996	**2001**	**2006**	**1996**	**2001**	**2006**
EU-27	**357 943**	**446 939**	**488 347**	**12.7**	**14.4**	**14.5**
Belgium	857	1 419	3 726	1.1	1.6	3.9
Bulgaria	2 703	1 737	4 258	6.4	4.7	11.2
Czech Republic	2 261	2 572	3 526	3.5	4.0	4.9
Denmark	2 401	6 445	10 056	6.3	17.3	25.9
Germany	28 081	38 555	74 126	5.1	6.5	12.0
Estonia	7	19	128	0.1	0.2	1.4
Ireland	763	1 027	2 474	4.0	4.2	8.5
Greece	4 384	2 932	7 862	10.0	5.2	12.1
Spain	41 149	49 975	51 757	23.5	20.7	17.3
France	67 785	79 340	63 518	15.3	16.5	12.4
Italy	46 450	55 102	52 092	16.5	16.8	14.5
Cyprus	-	-	1	0.0	0.0	0.0
Latvia	1 861	2 839	2 786	29.3	46.1	37.7
Lithuania	326	328	436	2.8	3.0	3.6
Luxembourg	103	107	272	1.7	1.6	3.4
Hungary	207	310	1 587	0.6	0.8	3.7
Malta	-	-	-	-	-	-
Netherlands	2 665	4 414	9 512	2.8	4.0	7.9
Austria	35 686	42 049	39 800	63.9	67.2	56.6
Poland	2 333	2 782	4 310	1.7	2.0	2.9
Portugal	15 792	15 996	16 015	44.3	34.2	29.4
Romania	15 755	14 923	18 361	25.3	28.4	31.4
Slovenia	3 673	3 868	3 701	33.0	30.5	24.4
Slovakia	4 303	5 081	4 827	14.9	17.9	16.6
Finland	18 595	21 687	22 513	25.5	25.7	24.0
Sweden	54 075	83 424	71 920	36.8	54.1	48.2
United Kingdom	5 728	10 008	18 783	1.6	2.5	4.6
Iceland	5 118	8 029	9 926	99.9	100.0	100.0
Norway	103 931	120 634	120 524	91.4	96.2	98.3
Switzerland	29 814	42 881	33 043	52.7	69.2	49.5
Croatia	7 238	6 547	6 030	56.2	42.7	33.4
Turkey	40 735	24 295	44 523	43.0	19.1	25.5

Data Source: Eurostat



(TWh)

EU-27	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
RES Electricity	358	373	391	396	421	447	405	414	458	464	488
% Share	12.7	13.1	13.4	13.4	13.8	14.4	12.9	12.9	13.9	14.0	14.5

Data Source: Eurostat

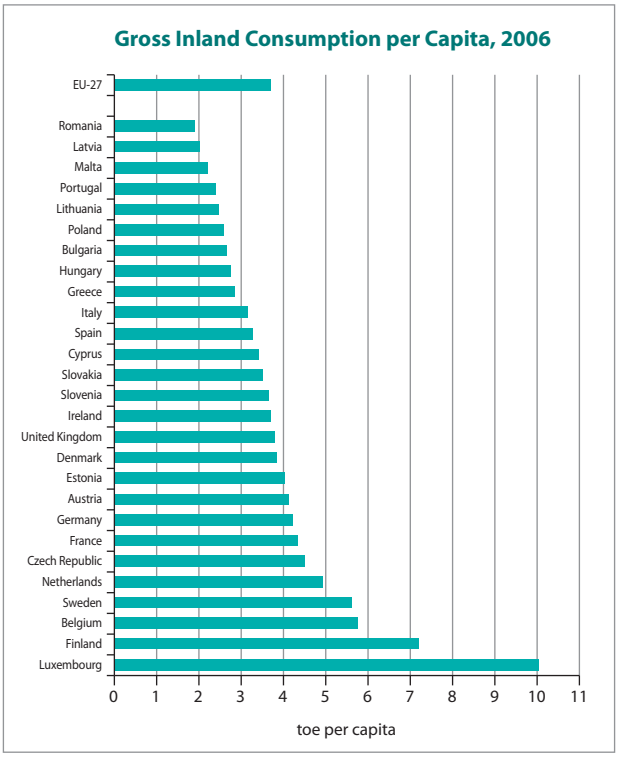
The contribution of renewables to total electricity consumption has shifted from 358 TWh in 1996 to 488 TWh in 2006, which equals a 38% increase. During the same time the share of RES to electricity consumption grew from 12.7% in 1996 to 14.5% in 2006. Although this share kept rising between 1996 and 2001, in 2002 there was a slight reduction and from 2004 on it has slightly risen. Austria and Sweden were the countries where renewables had the highest contribution to their total electricity consumption, 56.6% and 48.2% in 2006, when France was the only country where the amount of electricity from RES declined by 6% over the last decade.

Electricity production from renewables and consequently the share of renewables to total electricity consumption presented several fluctuations over the years mostly due to the fact that the biggest share of renewables comes from hydro power, which presents significant variations from year to year.

Gross Inland Consumption per Capita

	(toe per capita)			*Index (1990=100)*		
	1996	**2001**	**2006**	**1996**	**2001**	**2006**
EU-27	**3.59**	**3.64**	**3.70**	**101.9**	**103.2**	**104.9**
Belgium	5.70	5.87	5.75	116.6	120.1	117.6
Bulgaria	2.76	2.38	2.66	86.6	74.6	83.4
Czech Republic	4.16	4.04	4.51	87.9	85.5	95.4
Denmark	4.33	3.77	3.85	124.4	108.2	110.6
Germany	4.28	4.29	4.23	95.1	95.3	94.0
Estonia	3.98	3.74	4.03	63.0	59.3	63.8
Ireland	3.21	3.90	3.69	109.9	133.6	126.2
Greece	2.39	2.66	2.83	108.1	120.5	128.3
Spain	2.57	3.14	3.29	111.2	136.1	142.3
France	4.29	4.38	4.33	109.3	111.6	110.4
Italy	2.84	3.05	3.17	105.0	112.6	117.0
Cyprus	3.23	3.47	3.40	121.9	130.8	128.3
Latvia	1.85	1.73	2.02	62.3	58.2	67.8
Lithuania	2.59	2.33	2.48	59.5	53.7	57.0
Luxembourg	8.28	8.60	10.05	88.2	91.6	107.0
Hungary	2.55	2.50	2.76	92.3	90.4	99.7
Malta	2.10	1.86	2.22	126.8	112.5	134.1
Netherlands	4.98	4.95	4.93	109.2	108.4	108.1
Austria	3.61	3.85	4.12	109.4	116.5	124.8
Poland	2.69	2.38	2.58	102.2	90.4	97.9
Portugal	2.03	2.44	2.40	116.0	139.5	136.9
Romania	2.13	1.64	1.89	77.6	59.9	68.9
Slovenia	3.22	3.39	3.66	116.6	122.5	132.5
Slovakia	3.33	3.58	3.49	83.9	90.2	88.1
Finland	6.07	6.40	7.20	104.0	109.6	123.2
Sweden	5.84	5.78	5.62	105.5	104.5	101.5
United Kingdom	3.94	3.94	3.80	106.5	106.7	102.8
Iceland	9.22	11.84	*14.50*	108.3	139.0	*170.4*
Norway	5.32	5.98	5.39	104.3	117.2	105.7
Switzerland	3.56	3.80	3.77	96.4	102.6	102.0
Croatia	1.62	1.80	2.02	172.4	191.5	215.1
Turkey	1.08	1.05	1.31	114.9	111.8	138.3

Data Source: Eurostat, national sources



(toe per capita)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	3.59	3.55	3.58	3.55	3.57	3.64	3.63	3.70	3.73	3.72	3.70

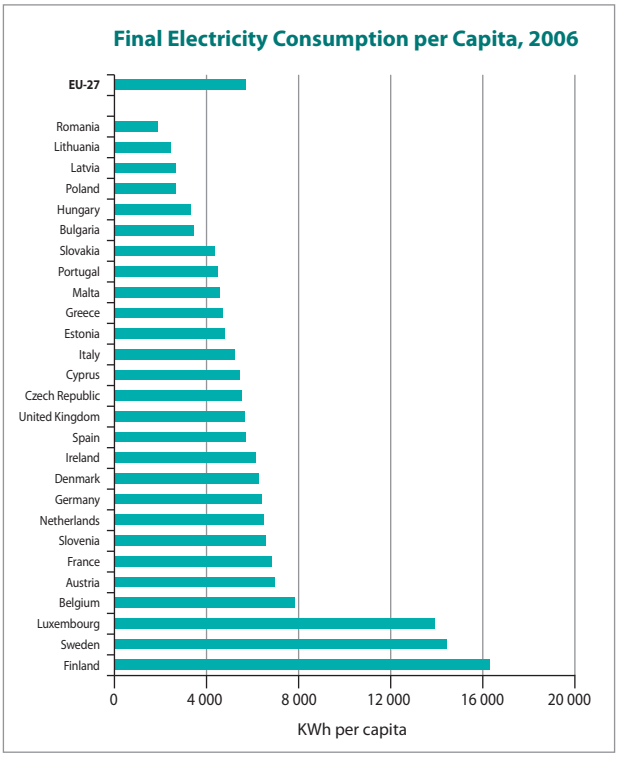
Data Source: Eurostat

Gross inland consumption per capita showed a 3% increase in 2006 compared to 1996 even though within this period there has been variability between years. In 2006, twelve countries had GIC per capita above the EU-27 average (3.7 toe). Luxembourg showed the greatest GIC per capita with 10.05 toe, followed by Finland (7.2 toe) and Belgium (5.75 toe). Romania had the lowest GIC per capita that reached 1.89 toe, followed by Latvia with 2.02 toe.

Final Electricity Consumption per Capita

	(kWh per capita)			Index (1990=100)		
	1996	**2001**	**2006**	**1996**	**2001**	**2006**
EU-27	**4 828**	**5 354**	**5 707**	**106.4**	**117.6**	**125.4**
Belgium	6 888	7 613	7 857	118.2	130.6	134.8
Bulgaria	3 565	3 010	3 481	88.6	74.8	86.5
Czech Republic	4 867	4 954	5 557	104.7	106.5	119.5
Denmark	6 034	6 088	6 278	105.9	106.8	110.1
Germany	5 598	6 143	6 405	99.2	108.8	113.5
Estonia	3 388	3 756	4 814	78.2	86.7	111.1
Ireland	4 379	5 485	6 148	129.4	162.1	181.7
Greece	3 332	4 074	4 721	118.4	144.8	167.8
Spain	3 733	4 965	5 710	115.2	153.2	176.2
France	5 973	6 492	6 824	114.8	124.7	131.1
Italy	4 226	4 869	5 248	111.9	128.9	139.0
Cyprus	3 503	4 459	5 438	114.4	145.6	177.6
Latvia	1 660	1 913	2 658	53.6	61.8	85.8
Lithuania	1 801	1 837	2 468	55.4	56.5	75.9
Luxembourg	11 946	12 831	13 918	109.8	117.9	127.9
Hungary	2 779	2 994	3 299	91.3	98.3	108.3
Malta	3 605	4 009	4 573	139.6	155.2	177.1
Netherlands	5 563	6 219	6 491	112.7	126.0	131.5
Austria	5 976	6 595	7 001	108.2	119.5	126.8
Poland	2 417	2 532	2 699	95.7	100.2	106.8
Portugal	3 010	3 894	4 519	127.8	165.3	191.9
Romania	1 753	1 617	1 893	74.6	68.8	80.6
Slovenia	4 771	5 498	6 571	97.8	112.7	134.7
Slovakia	4 374	4 360	4 376	98.8	98.5	98.8
Finland	12 999	14 919	16 321	109.7	125.9	137.7
Sweden	14 258	14 936	14 457	101.0	105.8	102.4
United Kingdom	5 261	5 639	5 676	109.6	117.5	118.2
Iceland	16 030	25 448	30 003	104.1	165.2	194.7
Norway	23 603	24 912	23 255	103.2	108.9	101.7
Switzerland	6 931	7 502	7 747	98.5	106.6	110.1
Croatia	2 289	2 695	3 381	82.7	97.4	122.2
Turkey	1 146	1 404	1 948	141.5	173.3	240.5

Data Source: Eurostat



(kWh per capita)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	4 828	4 897	4 988	5 061	5 210	5 354	5 361	5 477	5 565	5 616	5 707

Data Source: Eurostat

The EU-27 final electricity consumption per capita increased by 18% during the past ten years and it was 5 707 kWh per capita in 2006. Over the period 1996-2006, the EU-27 electricity consumption per capita increased slightly each year. However, Member States presented some fluctuations throughout this period. In 2006, Finland was the country with the highest final electricity consumption per capita with 16 321 kWh per capita. Sweden and Luxembourg followed with 14 457 kWh and 13 918 kWh. Twelve Member States exceeded the EU-27 average, while fifteen were lower with Romania presenting a consumption of only 1 893 kWh per capita.

Electricity Prices 2nd Semester 2007

Households

(Euro/100KWh)

	Real Price	Taxes	
	All taxes included	VAT	Other Taxes
EU-27	**16.0**	**2.1**	**2.0**
Belgium	16.8	2.6	1.4
Bulgaria	7.2	1.2	-
Czech Republic	10.6	1.7	-
Denmark	24.0	4.8	8.9
Germany	21.1	3.4	4.9
Estonia	7.9	1.2	0.1
Ireland	19.2	2.3	-
Greece	9.8	0.8	-
Spain	14.0	1.9	0.6
France	12.1	1.7	1.3
Italy	23.8	2.2	4.9
Cyprus	15.7	2.0	0.2
Latvia	7.3	0.4	-
Lithuania	8.7	1.3	-
Luxembourg	15.9	0.9	0.8
Hungary	13.0	2.2	1.2
Malta	9.9	0.5	-
Netherlands	17.2	2.8	1.5
Austria	17.4	2.8	2.1
Poland	13.8	2.5	0.6
Portugal	15.6	0.7	-
Romania	11.4	1.9	-
Slovenia	11.2	1.9	0.7
Slovakia	13.7	2.2	-
Finland	11.5	2.1	0.7
Sweden	16.1	3.2	2.8
United Kingdom	14.8	0.7	-
Norway	15.0	3.0	1.3
Croatia	9.8	1.8	0.1

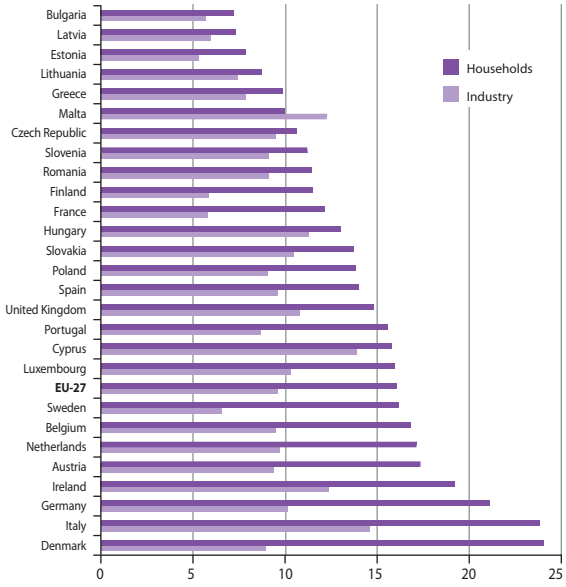
Industry

(Euro/100KWh)

	Price Excluding All Recoverable Taxes	Non Recoverable Taxes
EU-27	**9.6**	**0.9**
Belgium	9.5	1.0
Bulgaria	5.7	0.1
Czech Republic	9.5	-
Denmark	9.0	1.3
Germany	10.1	1.2
Estonia	5.3	0.1
Ireland	12.4	-
Greece	7.9	-
Spain	9.6	0.5
France	5.8	0.6
Italy	14.6	3.0
Cyprus	13.9	0.2
Latvia	5.9	-
Lithuania	7.4	-
Luxembourg	10.3	0.3
Hungary	11.3	1.3
Malta	12.2	-
Netherlands	9.7	1.1
Austria	9.4	1.2
Poland	9.1	0.6
Portugal	8.7	0.9
Romania	9.1	-
Slovenia	9.1	0.4
Slovakia	10.5	-
Finland	5.9	0.2
Sweden	6.6	0.0
United Kingdom	10.8	0.4
Norway	7.6	1.3
Croatia	7.4	0.1

Data Source: Eurostat

Electricity Prices in Households and Industry 2nd Semester 2007



Note: Table and graph prices refer to the following consumption bands:
Households: band Dc (annual consumption between 2500 and 5000 kWh)
Industriy: band Ic (annual consumption between 500 and 2000 MWh)

The legal basis for the collection of industrial gas and electricity prices is defined by Council Directive 90/377/EEC. The collection of prices for household consumers is done on a voluntary agreement with the Member States.
Due to the liberalisation of the electricity market, the methodology that defines the collection of the electricity prices became outdated.
In June 2007, the Commission adopted a proposal from Directorate-General Transport and Energy and Eurostat to change the methodology for these price collections.
The main changes that were introduced for the collection of price information for the second semester of 2007 include:

- Prices are to be reported as national figures.
- Prices are to be reported as an average of the last 6 months.
- Typical standard consumers are replaced by consumption bands.
- Disaggregated data on energy and supply costs and on network costs will be reported for electricity prices.

The following consumption bands apply for Households and Industry:

Band DA : Consumption < 1 000 kWh
Band DB : 1 000 kWh < Consumption < 2 500 kWh
Band DC : 2 500 kWh < Consumption < 5 000 kWh
Band DD : 5 000 kWh < Consumption < 15 000 kWh
Band DE : Consumption > 15 000 kWh
Band IA : Consumption < 20 MWh
Band IB : 20 MWh < Consumption < 500 MWh
Band IC : 500 MWh < Consumption < 2 000 MWh
Band ID : 2 000 MWh < Consumption < 20 000 MWh
Band IE : 20 000 MWh < Consumption < 70 000 MWh
Band IF : 70 000 MWh < Consumption < 150 000 MWh
Band IG : Consumption > 150 000 MWh

Natural Gas Prices 2nd Semester 2007

Households

(Euro/GJ)

	Real Price	Taxes	
	All taxes included	VAT	Other Taxes
EU-27	***14.4***	***2.0***	***1.3***
Belgium	13.9	2.4	0.3
Bulgaria	9.0	1.5	-
Czech Republic	10.1	1.6	-
Denmark	*36.9*	*7.4*	*13.2*
Germany	17.0	2.7	1.6
Estonia	7.3	1.1	-
Ireland	16.9	2.0	-
Spain	16.1	2.2	-
France	14.3	2.1	-
Italy	17.2	2.9	3.2
Latvia	8.6	1.3	-
Lithuania	6.5	1.0	-
Luxembourg	11.0	0.6	0.6
Hungary	10.6	1.8	-
Netherlands	19.1	3.1	4.4
Austria	17.0	2.8	1.8
Poland	11.1	2.0	-
Portugal	18.1	0.9	-
Romania	9.5	1.5	1.7
Slovenia	14.1	2.4	0.8
Slovakia	11.5	1.8	-
Finland	:	:	:
Sweden	25.6	5.1	6.1
United Kingdom	9.9	0.5	-
Croatia	7.6	1.3	0.4

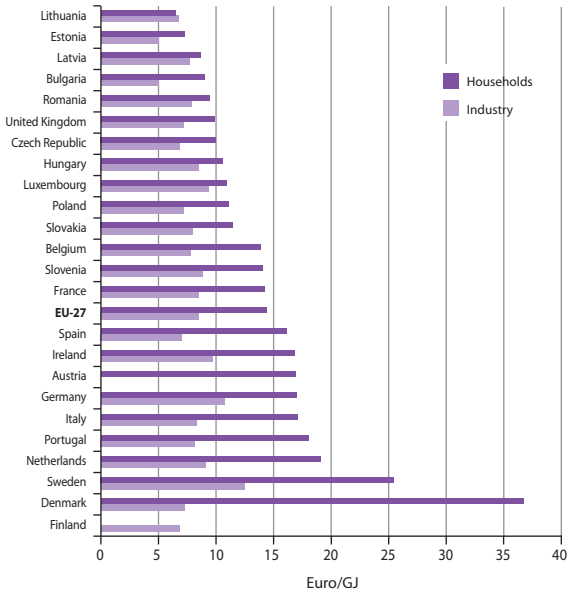
Industry

(Euro/GJ)

	Price Excluding All Recoverable Taxes	Non Recoverable Taxes
EU-27	***8.4***	***0.4***
Belgium	7.8	0.1
Bulgaria	5.0	-
Czech Republic	6.8	-
Denmark	*7.3*	*0.8*
Germany	10.8	0.9
Estonia	5.0	-
Ireland	9.7	-
Spain	7.1	-
France	8.5	0.2
Italy	8.4	0.5
Latvia	7.7	-
Lithuania	6.8	-
Luxembourg	9.4	0.2
Hungary	8.6	0.2
Netherlands	9.1	0.6
Austria	:	:
Poland	7.2	-
Portugal	8.2	-
Romania	7.9	1.4
Slovenia	8.8	0.8
Slovakia	7.9	-
Finland	6.8	0.5
Sweden	12.5	1.8
United Kingdom	7.2	0.4
Croatia	6.4	0.3

Data Source: Eurostat

Natural Gas Prices in Households and Industry 2nd Semester 2007



Note: Table and graph prices refer to the following consumption bands:
Households: band D2 (annual consumption between 20 and 200 GJ)
Industry: band I3 (annual consumption between 10 000 and 100 000 GJ)

The legal basis for the collection of industrial gas and electricity prices is defined by Council Directive 90/377/EEC. The collection of prices for household consumers is done on a voluntary agreement with the Member States.
Due to the liberalisation of the gas market, the methodology that defines the collection of the gas prices became outdated.
In June 2007, the Commission adopted a proposal from Directorate-General Transport and Energy and Eurostat to change the methodology for these price collections.
The main changes that were introduced for the collection of price information for the second semester of 2007 include:

- Prices are to be reported as national figures.
- Prices are to be reported as an average of the last 6 months.
- Typical standard consumers are replaced by consumption bands.

The following consumption bands apply for Households and Industry:

Band D1 : Consumption < 20 GJ
Band D2 : 20 GJ < Consumption < 200 GJ
Band D3 : Consumption > 200 GJ
Band I1 : Consumption < 1 000 GJ
Band I2 : 1 000 GJ < Consumption < 10 000 GJ
Band I3 : 10 000 GJ < Consumption < 100 000 GJ
Band I4 : 100 000 GJ < Consumption < 1 000 000 GJ
Band I5 : 1 000 000 GJ < Consumption < 4 000 000 GJ
Band I6 : Consumption > 4 000 000 GJ

2

Transport Indicators

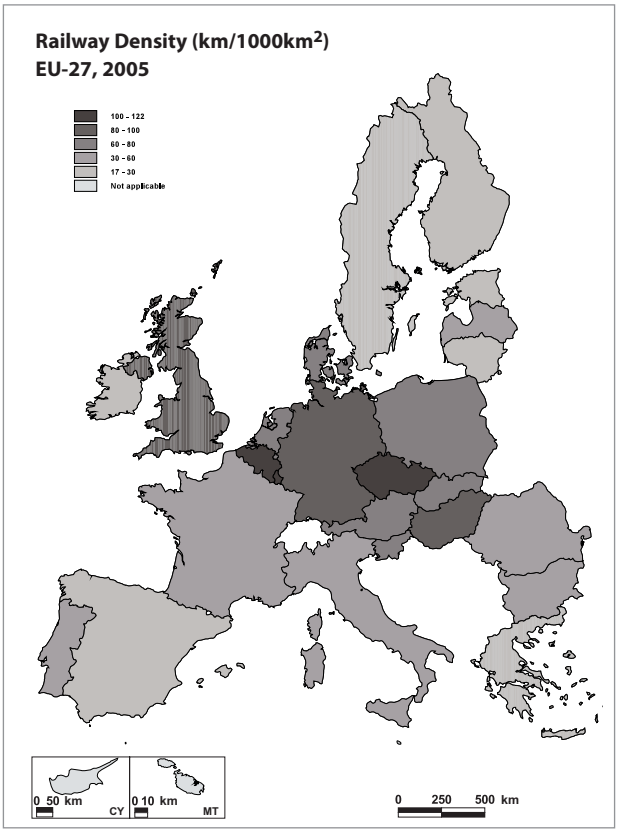
Railway Density

Length(km)/surface (1000km²)

	1970	1980	1990	2000	2005
EU-27	**56**	**54**	**53**	**49**	**49**
Belgium	151	130	114	114	116
Bulgaria	37	39	38	39	37
Czech Republic	:	:	:	120	121
Denmark	55	47	66	64	61
Germany	123	120	115	102	96
Estonia	28	23	23	22	22
Ireland	31	28	28	27	27
Greece	20	19	19	18	20
Spain	31	31	29	27	29
France	59	54	54	46	46
Italy	53	54	53	54	55
Cyprus	-	-	-	-	-
Latvia	40	37	37	36	35
Lithuania	31	31	31	29	27
Luxembourg	105	104	105	106	106
Hungary	91	84	84	86	85
Malta	-	-	-	-	-
Netherlands	76	69	67	67	68
Austria	70	70	67	68	68
Poland	85	87	84	72	62
Portugal	39	39	34	31	31
Romania	46	47	48	46	46
Slovenia	52	52	59	59	61
Slovakia	:	:	:	75	74
Finland	17	18	17	17	17
Sweden	28	27	25	25	25
United Kingdom	79	74	69	70	82
Iceland	-	-	-	-	-
Liechtenstein*	56	56	56	56	56
Norway	13	13	12	13	13
Switzerland	77	77	78	78	82
Croatia	43	43	43	48	48
Turkey	10	11	11	11	11

* The Liechtenstein lines are owned and operated by the ÖBB (Austrian Railways).

Data Source: Eurostat, DG for Energy and Transport



Since 1970 the EU-27 railway density has presented a decline equal to 12.3%, which corresponds to a reduction on the length of railways from 245 858 km in 1970 to 215 439 km in 2005. In 2005, the rail network appeared to be denser in Central Europe and the UK, while its density was lower the more distant a country was from the centre of Europe. In 2005, the longest railway network belonged to Germany (34 221 km), followed by France (29 286 km), the UK (19 956 km) and Poland (19 507 km).

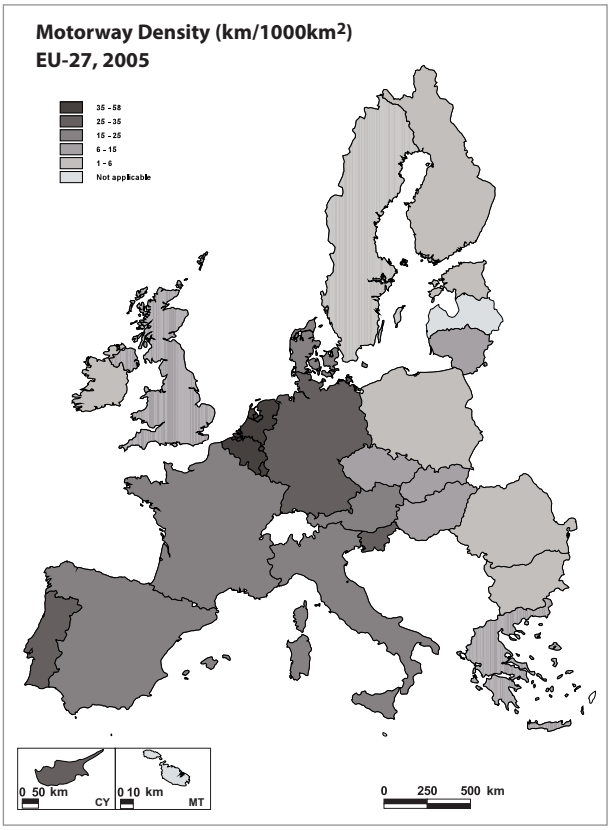
However, the country with the highest railway density in 2005 was the Czech Republic with 121 km of railways for every 1000 km^2 of its surface, followed by Belgium (116 km/1000 km^2 surface) and Luxembourg (106 km/1000 km^2 surface). Finland and Greece had the least dense railway networks (17 and 20 km/1000 km^2 surface correspondingly) due to topographic and population density traits.

Motorway Density

Length(km)/surface (1000km²)

	1970	1980	1990	2000	2005
EU-27	**:**	**:**	**:**	**12**	**14**
Belgium	16	39	55	56	57
Bulgaria	:	:	2	3	3
Czech Republic	:	:	5	6	7
Denmark	4	12	14	21	24
Germany	17	26	30	33	35
Estonia	:	:	1	2	2
Ireland	-	-	0	1	4
Greece	0	1	1	5	7
Spain	1	4	10	18	23
France	2	8	11	15	17
Italy	13	20	21	21	22
Cyprus	:	:	13	28	30
Latvia	-	-	-	-	-
Lithuania	:	:	6	6	6
Luxembourg	3	17	30	44	57
Hungary	:	:	3	5	7
Malta	-	-	-	-	-
Netherlands	29	43	50	55	56
Austria	6	11	17	19	20
Poland	:	:	1	1	2
Portugal	1	1	3	16	25
Romania	:	:	0	0	1
Slovenia	:	:	11	21	28
Slovakia	:	:	4	6	7
Finland	0	1	1	2	2
Sweden	1	2	2	3	4
United Kingdom	5	11	13	15	15
Iceland	-	-	-	-	-
Liechtenstein	-	-	-	-	-
Norway	0	0	0	0	1
Switzerland	:	:	28	31	33
Croatia	:	:	5	7	14
Turkey	:	:	0	2	2

Data Source: Eurostat, DG for Energy and Transport



The total length of motorways in the EU-27 was 61 565 km in 2005, while the density of motorways on the EU-27 surface was 14 km/1000km^2 surface. This number represented a 12% increase compared to 2000 levels. Motorway infrastructure appeared to be denser in Central Europe countries. However, in order for comparisons to be objective other aspects should be taken into account as well, such as population density.

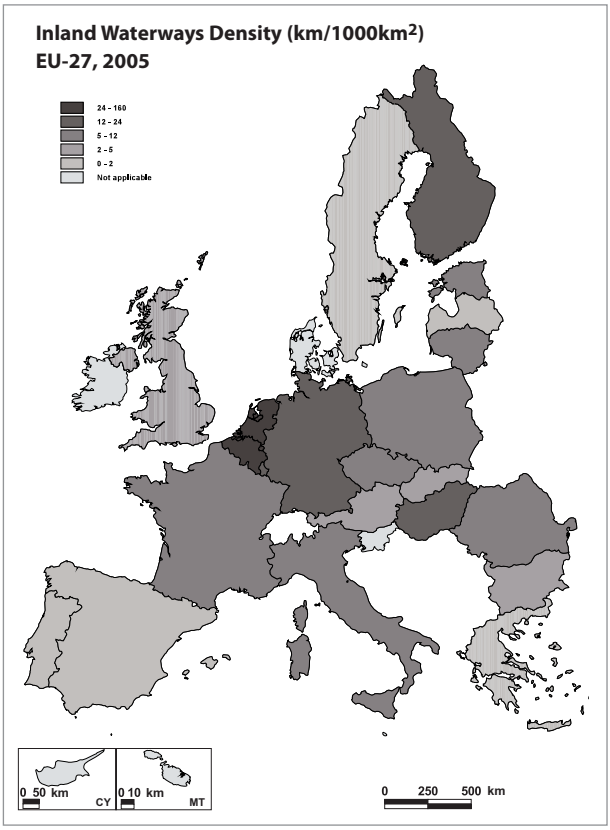
Germany, Spain and France were the countries with the longest motorways (12 363 km, 11 432 km and 10 804 km respectively), while Belgium, Luxembourg and Netherlands presented the greatest density (57, 57 and 56 km/1000 km^2 surface correspondingly).

Inland Waterways Density

Length(km)/surface (1000km²)

	1970	1980	1990	2000	2005
EU-27	**:**	**:**	**:**	**9**	**9**
Belgium	51	49	50	50	50
Bulgaria	:	:	4	4	4
Czech Republic	:	:	:	8	8
Denmark	-	-	-	-	-
Germany	19	19	19	19	19
Estonia	:	:	:	7	7
Ireland	-	-	-	-	-
Greece	0	0	0	0	0
Spain	0	0	0	0	0
France	12	10	10	9	8
Italy	8	8	5	5	5
Cyprus	-	-	-	-	-
Latvia	0	0	0	0	0
Lithuania	:	:	6	6	7
Luxembourg	14	14	14	14	14
Hungary	:	:	15	15	15
Malta	-	-	-	-	-
Netherlands	135	116	121	122	159
Austria	4	4	4	4	4
Poland	:	:	13	12	12
Portugal	1	1	1	1	1
Romania	:	:	7	7	7
Slovenia	-	-	-	-	-
Slovakia	:	:	:	4	4
Finland	18	18	18	23	24
Sweden	1	1	1	1	1
United Kingdom	7	7	7	5	4
Iceland	-	-	-	-	-
Liechtenstein	-	-	-	-	-
Norway	-	-	-	-	-
Switzerland	:	:	29	30	30
Croatia	:	:	:	:	:
Turkey	-	-	-	-	-

Data Source: Eurostat, DG for Energy and Transport



The EU-27 total length of inland waterways reached 40 976 km in 2005, which corresponded to density equal to 9 km/1000 km^2 surface. Inland waterways density remained steady over the past 6 years. Finland had the longest inland waterways (8 018 km) followed by Germany (6 950 km) and Netherlands (6 595 km). The length of the inland waterways of these three countries comprised 53% of the total EU-27 inland waterways length in 2005.

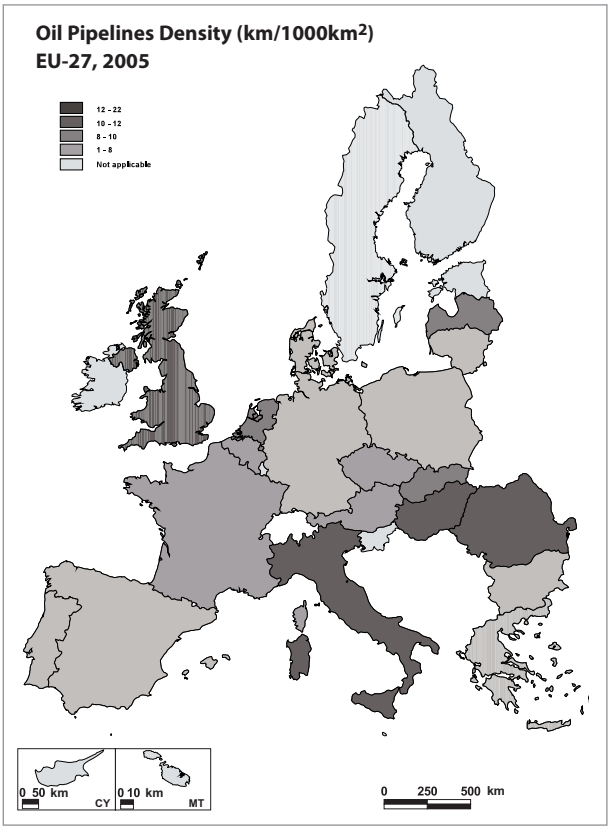
In terms of density the Netherlands and Finland were also among the countries with the highest inland waterways density, which reached 159 km/1000 km^2 surface and 24 km/1000 km^2 surface. Belgium also presented significant inland waterways density of 50 km/1000 km^2 surface.

Oil Pipelines Density

Length(km)/surface (1000km²)

	1970	1980	1990	2000	2005
EU-27	**:**	**:**	**:**	**7**	**8**
Belgium	2	15	10	10	10
Bulgaria	:	:	5	5	5
Czech Republic	:	:	:	9	9
Denmark	-	2	10	8	8
Germany	8	8	9	7	7
Estonia	-	-	-	-	-
Ireland	-	-	-	-	-
Greece	-	-	-	-	1
Spain	2	3	5	7	8
France	6	8	8	9	9
Italy	6	10	14	14	14
Cyprus	-	-	-	-	-
Latvia	:	:	12	12	12
Lithuania	:	:	:	8	8
Luxembourg	-	-	-	-	-
Hungary	:	11	:	22	22
Malta	-	-	-	-	-
Netherlands	8	9	9	10	10
Austria	7	9	9	9	9
Poland	:	6	7	7	7
Portugal	:	:	:	2	2
Romania	:	:	:	14	14
Slovenia	-	-	-	-	-
Slovakia	:	:	:	11	11
Finland	-	-	-	-	-
Sweden	-	-	-	-	-
United Kingdom	7	13	10	16	18
Iceland	-	-	-	-	-
Liechtenstein	-	-	-	-	-
Norway	:	:	:	:	4
Switzerland	:	:	:	3	3
Croatia	:	:	:	11	11
Turkey	:	:	:	3	3

Data Source: Eurostat, DG for Energy and Transport



Oil pipelines density was 8 km/1000 km^2 surface for the EU-27 in 2005, while the length of the EU-27 oil pipelines reached 33 479 km. Hungary and the UK were the countries with the highest densities in 2005 (22 km/1000 km^2 surface and 18 km/1000 km^2 surface respectively).

In terms of length, France had the longest oil pipelines (5 746 km), followed by the UK and Italy with 4 405 km and 4 328 km respectively.

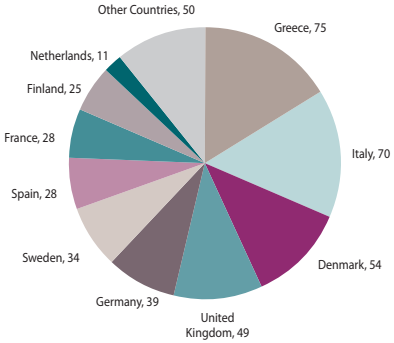
Number of Main Sea Ports

Ports handling more than 1 million tonnes per year or with more than 200 000 passengers movements per year

	2000	2003	2004	2005	2006
EU-27	**:**	**447**	**452**	**457**	**463**
Belgium	4	4	4	4	4
Bulgaria	:	2	2	2	2
Czech Republic	-	-	-	-	-
Denmark	48	52	53	50	54
Germany	38	39	39	40	39
Estonia	:	5	5	6	6
Ireland	10	8	8	9	8
Greece	46	70	75	75	75
Spain	22	27	28	28	28
France	26	27	27	27	28
Italy	64	67	68	70	70
Cyprus	:	3	3	3	3
Latvia	:	3	4	4	4
Lithuania	:	1	1	2	2
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	:	2	2	2	2
Netherlands	10	10	10	10	11
Austria	-	-	-	-	-
Poland	:	5	5	5	5
Portugal	8	7	7	8	10
Romania	:	3	3	3	3
Slovenia	:	1	1	1	1
Slovakia	-	-	-	-	-
Finland	20	24	24	23	25
Sweden	33	34	33	37	34
United Kingdom	56	53	50	48	49
Iceland	1	1	1	1	2
Liechtenstein	-	-	-	-	-
Norway	:	22	22	24	24
Switzerland	-	-	-	-	-
Croatia	20	21	26	27	28
Turkey	:	:	:	:	:

Data Source: Eurostat

Number of Main Sea Ports, 2006
EU-27 Top Ten Countries



The number of main sea ports showed a 4% increase between 2003 and 2006 with the ports handling more than 1 million tonnes per year or with more than 200 000 passenger movements per year reaching 463. However, this increase was not determined by a real change in infrastructure. It rather depended on the unit used, as there is a specific threshold relating to total annual activity.

Taking this into account, the countries where the highest numbers of ports could be found were Greece (75) and Italy (70). Denmark (54) and the UK (49) were next.

Number of Main Commercial Airports

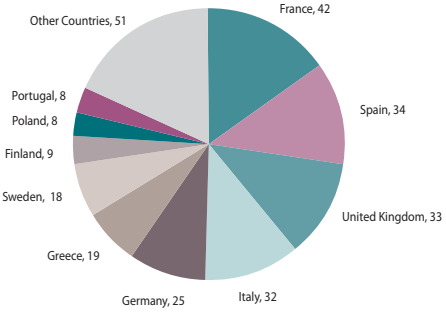
Commercial airports with more than 150 000 passenger units movements per year*

	2003	2004	2005	2006	2007
EU-27	**258**	**269**	**276**	**279**	**:**
Belgium	4	5	5	5	4
Bulgaria	3	3	3	3	3
Czech Republic	3	3	3	3	3
Denmark	6	6	7	7	7
Germany	25	25	24	25	26
Estonia	1	1	1	1	1
Ireland	5	6	6	6	5
Greece	18	18	19	19	19
Spain	33	33	34	34	35
France	36	39	42	42	42
Italy	29	30	30	32	30
Cyprus	2	2	2	2	2
Latvia	1	1	1	1	1
Lithuania	1	1	1	2	2
Luxembourg	1	1	1	1	1
Hungary	1	1	1	1	1
Malta	1	1	1	1	1
Netherlands	4	5	5	5	5
Austria	6	6	6	6	6
Poland	6	6	6	8	10
Portugal	8	8	8	8	7
Romania	2	4	4	4	:
Slovenia	1	1	1	1	1
Slovakia	1	1	2	2	2
Finland	10	11	11	9	8
Sweden	20	19	19	18	18
United Kingdom	30	32	33	33	35
Iceland	3	3	3	4	:
Liechtenstein	-	-	-	-	-
Norway	16	16	16	17	:
Switzerland	5	3	4	4	4
Croatia	:	3	4	5	5
Turkey	12	14	14	14	18

* One passenger unit is equivalent to either one passenger or 100 kg of freight and mail.

Data Source: Eurostat

Number of Main Commercial Airports, 2006
EU-27 Top Ten Countries



The number of main commercial airports in the EU-27 in 2006 was 279. These airports handled more than 150 000 passenger units movements per year. One passenger unit corresponds to either one passenger or 100 kg of freight and mail.

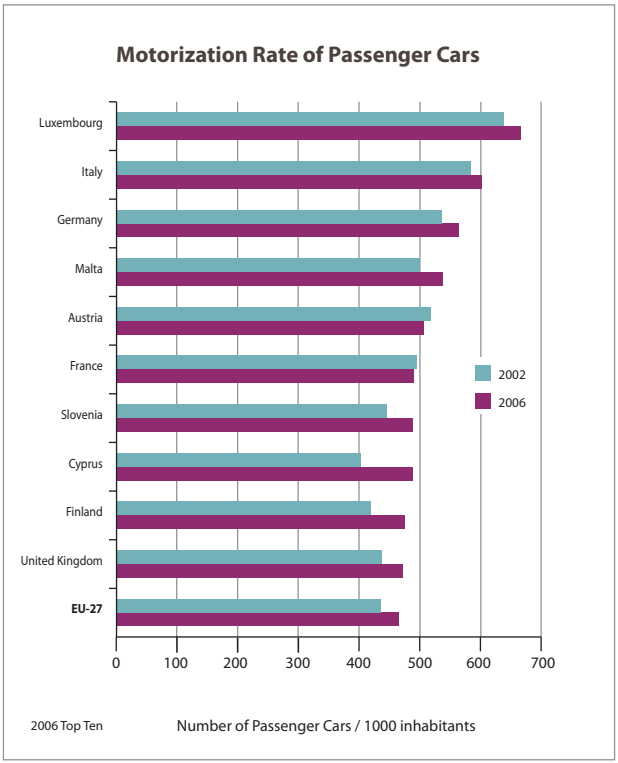
France was the top country in main commercial airports both in 2006 and 2007 with 42, followed by Spain and the UK. Each of them had 35 main commercial airports in 2007.

Motorization Rate of Passenger Cars

Number of Passenger Cars/1 000 inhabitants

	2002	2003	2004	2005	2006
EU-27	**443**	**447**	**452**	**460**	**466**
Belgium	464	466	469	471	473
Bulgaria	276	294	313	327	229
Czech Republic	357	363	374	387	401
Denmark	352	352	355	363	372
Germany	542	545	550	559	565
Estonia	294	320	349	366	412
Ireland	376	385	398	410	428
Greece	332	349	369	388	408
Spain	457	449	461	471	472
France	498	495	491	487	492
Italy	591	599	587	593	601
Cyprus	408	423	460	474	487
Latvia	264	278	296	322	358
Lithuania	340	363	382	425	468
Luxembourg	647	654	659	666	671
Hungary	258	274	280	286	293
Malta	512	526	529	528	539
Netherlands	426	427	430	435	443
Austria	494	500	505	507	509
Poland	288	294	314	323	351
Portugal	376	381	391	399	406
Romania	136	142	149	155	167
Slovenia	449	456	468	481	489
Slovakia	247	252	222	242	247
Finland	422	437	450	464	477
Sweden	454	456	458	461	464
United Kingdom	447	454	466	472	475
Iceland	564	578	604	638	658
Liechtenstein	686	709	700	694	688
Norway	420	425	432	440	449
Switzerland	510	513	518	521	523
Croatia	280	291	301	312	323
Turkey	67	67	76	81	85

Data Source: Eurostat, DG for Energy and Transport, national statistics, United Nations Economic Commission for Europe, estimates



Note: The numbers that have been used represent the stock at the end of the year, except for Belgium: 1 August and Switzerland: 30 September.
In the case of Bulgaria, new more reliable data from 2006, because vehicles had to get new number plates until end-2006. Those which hadn't done so have been removed from the database.
In the case of Germany, the vehicle stock figures may be inflated. According to a new series that started from 01/01/2008 there are about 10% fewer vehicles.
More information at www.kba.de.

In 2006 the motorization rate of passenger cars for the EU-27 was 466 passenger cars/1000 inhabitants, which corresponded to a 5% increase since 2002. Luxembourg and Italy presented the highest motorization rates with 671 and 601 cars/1000 inhabitants, while almost half of the countries were above the EU-27 average rate.

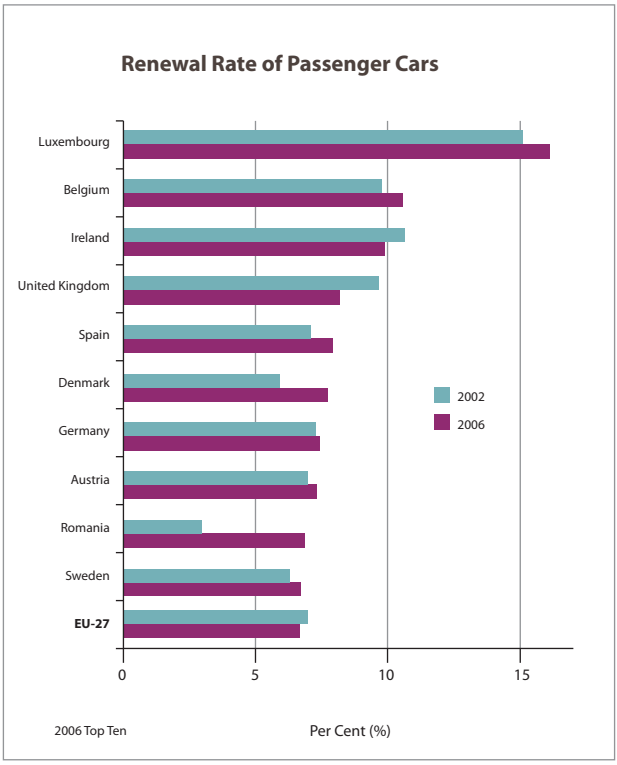
The most significant changes in motorization rates took place in Estonia, Lithuania and Latvia (40%, 38% and 36% respectively) although in absolute terms only Lithuania exceeded slightly the EU-27 average. Romania had the lowest motorization rate, even though it presented a significant increase (22%) in the past 4 years.

Renewal Rate of Passenger Cars

Passenger Cars First Registration/Total Passenger Cars (%)

	2002	2003	2004	2005	2006
EU-27	**:**	**6.8**	**6.9**	**6.7**	**6.7**
Belgium	9.8	9.5	9.9	9.8	10.6
Bulgaria	0.6	0.7	1.0	1.3	2.1
Czech Republic	:	4.1	3.8	3.8	3.0
Denmark	5.9	5.1	6.3	7.5	7.8
Germany	7.3	7.2	7.2	7.2	7.4
Estonia	:	3.6	3.5	4.0	4.6
Ireland	10.6	9.5	9.6	10.2	9.9
Greece	7.4	6.7	7.1	6.3	5.9
Spain	7.1	7.4	7.8	7.5	7.9
France	7.0	6.6	6.6	6.8	6.5
Italy	6.8	6.5	6.7	6.5	6.6
Cyprus	2.8	2.6	5.4	5.0	5.0
Latvia	:	1.3	1.6	2.2	3.1
Lithuania	:	0.6	0.7	0.7	0.9
Luxembourg	15.1	14.9	16.1	15.8	16.2
Hungary	:	7.5	7.3	6.9	6.4
Malta	:	3.5	2.9	3.1	3.1
Netherlands	7.5	7.1	6.9	6.6	6.7
Austria	7.0	7.4	7.6	7.4	7.3
Poland	:	3.2	2.7	1.9	1.8
Portugal	5.8	4.8	4.8	4.9	4.5
Romania	3.0	3.5	4.5	5.1	6.9
Slovenia	:	6.5	6.6	6.2	6.0
Slovakia	:	4.4	4.8	4.4	4.4
Finland	5.3	6.5	6.1	6.1	5.8
Sweden	6.3	6.4	6.4	6.6	6.7
United Kingdom	9.7	9.6	9.2	8.6	8.2
Iceland	4.3	5.9	6.8	9.6	8.7
Liechtenstein	8.7	8.3	8.3	8.3	8.3
Norway	4.7	4.7	5.8	5.4	5.2
Switzerland	8.0	7.2	7.1	6.9	6.9
Croatia	7.7	8.1	7.5	7.4	8.0
Turkey	2.6	6.1	8.4	9.4	:

Data Source: Eurostat, DG for Energy and Transport, ACEA, national sources, United Nations Economic Commission for Europe, estimates



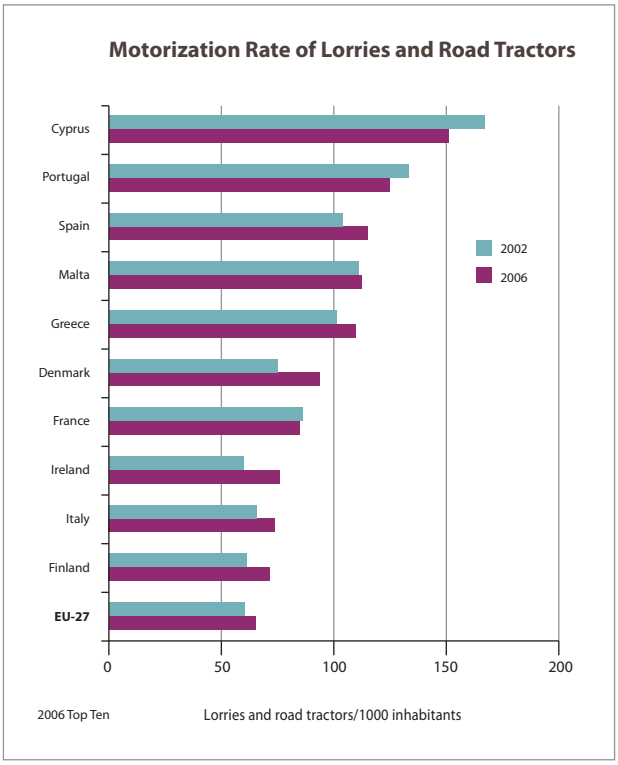
In 2006 the EU-27 had a renewal rate of passenger cars equal to 6.7%. Luxembourg was the country with the highest renewal rate (16.2%), followed by Belgium, which had a renewal rate equal to 10.6%. On the contrary, the renewal rates of passenger cars for Lithuania and Poland were significantly lower than the EU-27 average (0.9% and 1.8%). Bulgaria showed the greatest increase in its passenger cars renewal rate, but even though its rate went up more than 3 times compared to 2002 levels, it remained at the third lowest position in the EU-27 with 2.1%.

Motorisation Rate of Lorries and Road Tractors

Lorries and road tractors/1 000 inhabitants

	2002	2003	2004	2005	2006
EU-27	**60**	**61**	**63**	**64**	**65**
Belgium	57	58	60	62	64
Bulgaria	35	37	41	43	29
Czech Republic	34	36	39	43	48
Denmark	75	77	81	87	94
Germany	34	34	33	34	34
Estonia	59	62	63	64	69
Ireland	60	63	67	70	76
Greece	101	103	105	107	110
Spain	104	105	109	113	115
France	86	86	85	85	85
Italy	66	69	69	71	74
Cyprus	167	167	161	158	151
Latvia	44	45	46	49	53
Lithuania	30	32	34	36	40
Luxembourg	61	62	62	64	66
Hungary	39	40	41	42	44
Malta	111	112	111	110	112
Netherlands	61	62	64	62	61
Austria	42	43	43	44	44
Poland	57	61	63	60	63
Portugal	133	121	124	124	125
Romania	20	21	22	23	25
Slovenia	29	30	32	33	35
Slovakia	26	28	28	32	35
Finland	62	63	68	69	72
Sweden	46	47	49	51	53
United Kingdom	52	53	56	58	59
Iceland	71	74	79	87	94
Liechtenstein	89	89	87	87	86
Norway	95	96	98	101	105
Switzerland	40	40	40	41	42
Croatia	31	33	35	37	38
Turkey	21	22	27	30	33

Data Source: Eurostat, DG for Energy and Transport, national statistics, United Nations Economic Commission for Europe, estimates



Note: The stock at the end of the year has been used except for Belgium: 1 August and Switzerland: 30 September.
Data include heavy and light goods vehicles, lorries and road tractors.
Due to varying concepts of such vehicles, comparisons between countries should be done with caution.
In the case of Bulgaria, new more reliable data from 2006, because vehicles had to get new number plates until end-2006. Those which hadn't done so have been removed from the database.
In the case of Germany, the vehicle stock figures may be inflated. According to a new series that started from 01/01/2008 there are about 10% fewer vehicles.
More information at www.kba.de.

The motorization rate of lorries and road tractors -that is the number of lorries and road tractors per 1000 inhabitants- for the 27 EU Member States was 65 in 2006.

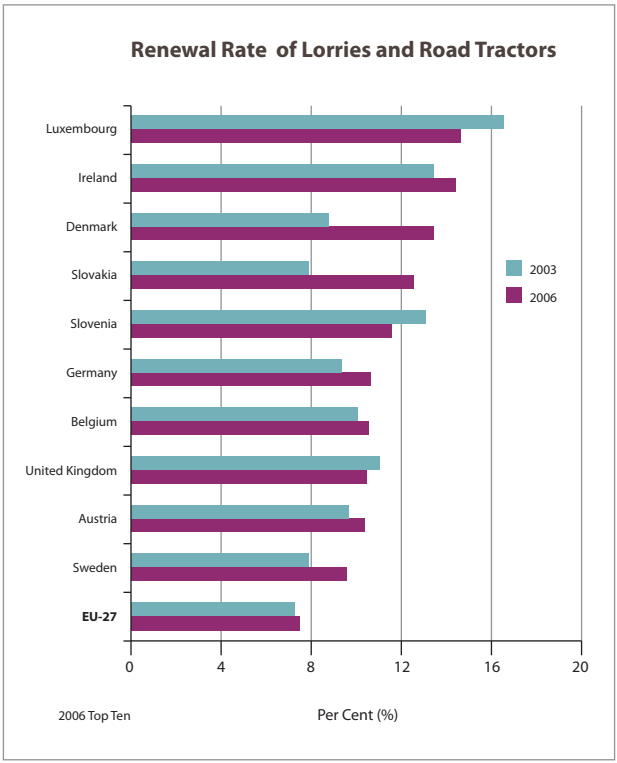
Cyprus, Portugal, Spain, Malta and Greece had the highest motorization rates (151, 125, 115, 112 and 110 lorries and road tractors per 1000 inhabitants correspondingly), while Romania and Bulgaria similarly to the motorization rate of passenger cars, were the countries with the lowest rates, 25 and 29 lorries and road tractors per 1000 inhabitants. The Czech Republic, Slovakia and Lithuania presented increases higher than 30% over the past 4 years. Still their motorization rates remained below the EU-27 average.

Renewal Rate of Lorries and Road Tractors

Lorries and road tractors first registration/Total lorries and road tractors (%)

	2003	2004	2005	2006
EU-27	**:**	**:**	**:**	**7.5**
Belgium	10.1	11.0	11.5	10.6
Bulgaria	:	:	:	4.4
Czech Republic	4.0	6.0	5.5	5.3
Denmark	8.8	11.3	13.7	13.5
Germany	9.4	10.1	10.7	10.7
Estonia	3.7	3.5	4.5	5.6
Ireland	13.5	12.5	14.6	14.5
Greece	1.8	2.1	2.2	2.1
Spain	7.6	8.1	8.9	6.3
France	8.0	8.6	9.0	9.2
Italy	6.1	6.2	5.9	6.2
Cyprus	4.2	3.0	2.7	3.2
Latvia	1.7	2.1	2.7	3.8
Lithuania	2.8	3.2	4.6	5.3
Luxembourg	16.6	13.0	15.6	14.7
Hungary	8.8	8.5	9.7	4.9
Malta	1.0	1.0	1.7	1.4
Netherlands	8.9	9.7	8.0	8.4
Austria	9.7	10.9	10.5	10.4
Poland	1.4	2.0	2.0	2.3
Portugal	5.8	5.8	5.5	5.3
Romania	:	:	:	7.0
Slovenia	13.1	13.4	12.8	11.6
Slovakia	7.9	8.6	10.4	12.6
Finland	5.6	6.1	5.5	5.5
Sweden	7.9	8.2	9.1	9.6
United Kingdom	11.1	11.3	11.2	10.5
Iceland	6.5	8.4	11.0	10.7
Liechtenstein	4.9	7.0	5.9	7.2
Norway	7.0	8.3	9.2	9.9
Switzerland	7.7	8.1	8.7	8.9
Croatia	:	:	:	:
Turkey	:	:	:	:

Data Source: Eurostat, DG for Energy and Transport, ACEA, national statistics, United Nations Economic Commission for Europe, estimates



Note: The data for Cyprus include new and used vehicles.

In 2006, EU-27 had a 7.5% renewal rate of passenger lorries and road tractors. Luxembourg had the highest renewal rate of 14.7% in spite of a 1.9% decline since 2003. Ireland, Denmark, Slovakia and Slovenia had high renewal rates as well, while in total 9 countries had renewal rates higher than 10%.

On the contrary, the countries with the lowest renewal rates were Malta, Greece, Poland and Cyprus. Malta had the lowest rate, which only reached 1.4%, Greece had a 2.1% rate and Poland 2.3%.

Airfleet by Operator Country

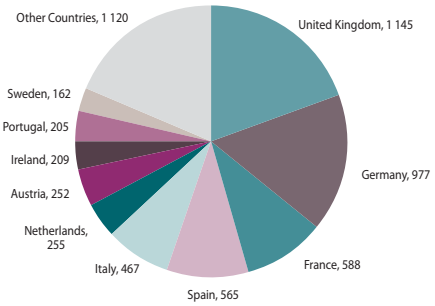
	2nd Quarter 2006
EU-27	**5 945**
Belgium	152
Bulgaria	75
Czech Republic	79
Denmark *	161
Germany	977
Estonia	29
Ireland	209
Greece	89
Spain	565
France	588
Italy	467
Cyprus	22
Latvia	36
Lithuania	29
Luxembourg	80
Hungary	68
Malta	25
Netherlands	255
Austria	252
Poland	92
Portugal	205
Romania	48
Slovenia	19
Slovakia	28
Finland	88
Sweden *	162
United Kingdom	1 145
Iceland	45
Liechtenstein	3
Norway **	101
Switzerland	260
Croatia	27
Turkey	263

* Includes those SAS passenger aircraft registered in Denmark and Sweden respectively, for which the operator country is 'multinational'.

** Excludes SAS passenger aircraft.

Data Source: Airclaims

Airfleet by Operator Country at 2nd quarter 2006
EU-27 Top Ten Countries



Note: All military aircrafts excluded.

In the second quarter of 2006, the number of commercial aircrafts in the EU-27 reached 5 945. Four countries, the UK, Germany, France and Spain made up 55% of the EU-27 total. The UK and Germany were the countries with the major share of airfleet. Specifically, the UK had 1 145 aircrafts and a 19% share, while Germany 977 with a 16% share. France and Spain followed with a 10% share each.

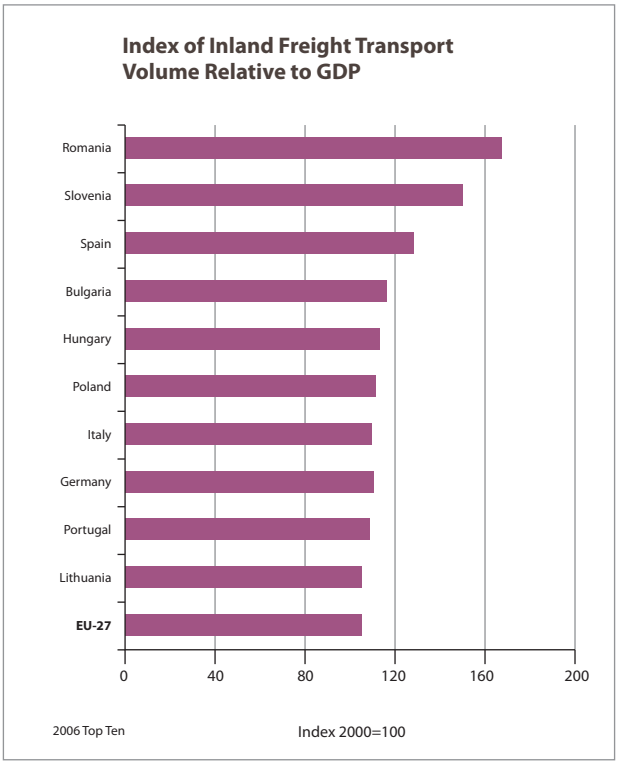
Index of Inland Freight Transport Volume Relative to GDP

Inland Freight Transport Volume measured in tonne-km/GDP (millions of euro, chain-linked volumes at 2000 exchange rates), 2000=100

	2002	2003	2004	2005	2006
EU-27	**100.0**	**99.6**	**103.9**	**104.5**	**105.7**
Belgium	*100.9*	*96.8*	*91.1*	*84.9*	*82.6*
Bulgaria	103.9	108.6	117.9	126.3	116.8
Czech Republic	103.9	105.2	98.8	89.3	94.8
Denmark	94.9	96.6	96.1	92.9	82.4
Germany*	98.9	100.0	104.7	106.3	109.8
Estonia	100.6	90.9	95.9	92.0	80.2
Ireland	101.9	106.5	111.5	109.2	100.1
Greece**	:	100.0	106.7	91.1	91.6
Spain	114.2	114.9	126.7	129.4	128.8
France	95.0	93.0	92.6	87.3	88.0
Italy	100.5	92.0	101.6	108.1	*110.4*
Cyprus	95.0	98.8	75.8	90.7	72.9
Latvia	93.0	92.1	88.8	86.7	76.4
Lithuania	110.4	110.5	103.7	111.6	106.6
Luxembourg	109.8	111.7	107.0	92.2	87.7
Hungary	87.6	84.6	91.7	*101.5*	*113.4*
Malta	:	:	:	:	:
Netherlands	95.8	96.5	104.9	98.5	95.2
Austria	105.8	104.6	103.5	98.8	101.6
Poland	96.3	98.5	106.6	107.0	111.6
Portugal	100.4	99.8	101.3	104.9	108.7
Romania	119.3	125.8	143.5	171.9	168.5
Slovenia	111.1	115.1	129.9	146.4	150.2
Slovakia	*91.8*	*93.0*	*92.7*	*97.1*	*90.7*
Finland	94.8	91.7	91.5	87.1	81.5
Sweden	97.9	97.8	95.5	96.4	95.1
United Kingdom	94.9	93.7	92.2	91.0	90.9
Iceland	*108.3*	*108.8*	*109.7*	*113.2*	*119.2*
Liechtenstein	:	:	:	:	:
Norway	97.1	100.5	106.6	107.6	110.1
Switzerland***	94.3	93.3	96.6	101.1	103.4
Croatia****	100.0	105.0	107.7	109.5	112.5
Turkey*****	81.3	72.5	65.1	*62.5*	*60.7*

* The Oil Pipelines data include only crude oil (i.e. no refined petroleum products).
** For 2003=100%
*** Road transport data cover only haulage by CH vehicles on CH territory
**** For 2002=100%
***** In the case of road transport only national transport data have been used.

Data Source: Eurostat, DG for Energy and Transport, International Transport Forum, national statistics, estimates



Note: Road Transport covers only the haulage of heavy goods vehicles (usually>3.5 tonnes load capacity).
The Oil Pipelines data are not harmonised, so they can not be fully comparable. In most countries, only pipelines longer than 40km are included.

In 2006, the Index of Inland Freight Transport Volume measured in tonne-km relative to GDP increased by 6% in comparison to 2002. Romania and Slovenia were the countries with the most significant changes over the past 4 years with a 41% and a 35% increase respectively. Seven more countries presented increases, while 18 countries recorded decreases in their index of inland freight transport volume relative to GDP.

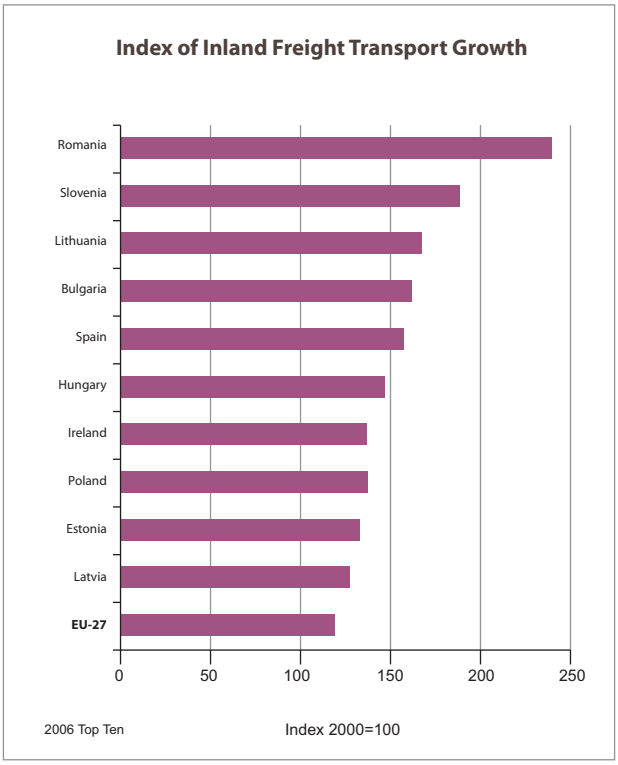
Index of Transport Growth

Total Transport of rail, road, inland waterways and oil pipelines in tonne-kilometres, 2000=100

	2002	2003	2004	2005	2006
EU-27	**103**	**104**	**111**	**114**	**119**
Belgium	*103*	*100*	*97*	*92*	*92*
Bulgaria	113	124	144	163	161
Czech Republic	108	114	112	107	121
Denmark	96	98	100	99	91
Germany*	100	101	107	109	116
Estonia	117	113	130	137	133
Ireland	115	126	137	143	138
Greece	107	114	127	113	118
Spain	122	126	144	152	157
France	98	97	99	95	98
Italy	103	94	106	113	*117*
Cyprus	101	107	85	106	89
Latvia	107	114	119	128	127
Lithuania	126	139	140	163	167
Luxembourg	117	122	122	111	112
Hungary	95	96	109	*125*	*146*
Malta	*100*	*100*	*100*	*100*	*100*
Netherlands	98	99	110	105	104
Austria	108	108	109	106	113
Poland	99	105	120	125	138
Portugal	103	102	105	110	115
Romania	133	147	182	227	240
Slovenia	119	127	149	175	190
Slovakia	*99*	*106*	*111*	*124*	*125*
Finland	99	97	101	99	97
Sweden	101	103	105	109	112
United Kingdom	99	101	102	103	106
Iceland	110	113	117	124	131
Liechtenstein	:	:	:	:	:
Norway	101	105	116	120	126
Switzerland**	96	95	100	108	114
Croatia	214	237	253	268	289
Turkey***	81	76	75	*78*	*81*

* The Oil Pipelines data include only crude oil (i.e. no refined petroleum products).
** Road transport data cover only haulage by CH vehicles on CH territory.
*** In the case of road transport only national transport data have been used.

Data Source: Eurostat, DG for Energy and Transport, International Transport Forum, national statistics (CH), estimates



Note: Road Transport covers only the haulage of heavy goods vehicles (usually>3.5 tonnes load capacity).
The Oil Pipelines data are not harmonised, so they can not be fully comparable. In most countries, only pipelines longer than 40km are included.

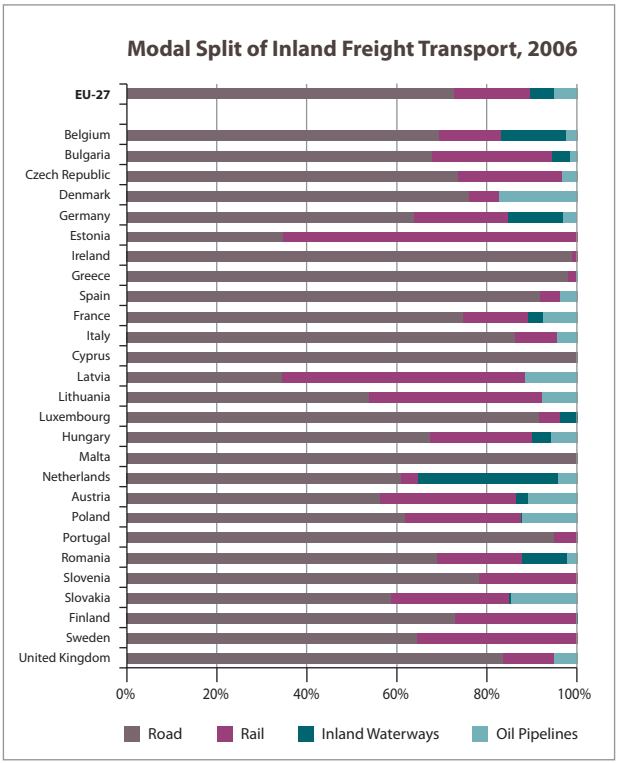
The EU-27 index of freight transport, in tonne-km grew by 15%. Romania, Slovenia and Lithuania presented the highest index with 240, 190 and 167. Moreover, Romania and Slovenia had the highest increases compared to their 2002 indexes (81% and 60%). In total 21 countries presented growths, while 5 showed decreases. The highest declines were recorded in Cyprus and Belgium (12% and 11%).

Modal Split of Freight Transport Shares of Road, IWW, Rail and Oil Pipelines in Total Inland Transport

% of total tonne-kilometres

	2001					2006				
	Rail	**Road**	**IWW**	**Oil**	**Total**	**Rail**	**Road**	**IWW**	**Oil**	**Total**
EU-27	**17**	**71**	**6**	**6**	**100**	**17**	**73**	**5**	**5**	**100**
Belgium	10	77	11	*2*	100	14	69	14	*3*	100
Bulgaria	36	59	3	2	100	27	68	4	2	100
Czech Republic	29	68	0	3	100	23	74	0	3	100
Denmark	7	77	-	16	100	7	76	-	17	100
Germany	18	64	14	3	100	21	64	12	3	100
Estonia	65	35	-	-	100	65	35	-	-	100
Ireland	4	96	-	-	100	1	99	-	-	100
Greece	1	99	-	-	100	2	98	-	0	100
Spain	6	89	-	4	100	4	92	-	4	100
France	18	72	3	7	100	14	75	3	8	100
Italy	10	85	0	5	100	9	*86*	0	4	100
Cyprus	-	100	-	-	100	-	100	-	-	100
Latvia	52	20	-	28	100	54	34	-	12	100
Lithuania	37	40	0	23	100	38	54	0	8	100
Luxembourg	6	90	4	-	100	5	91	4	-	100
Hungary	26	62	4	8	100	22	67	4	*6*	100
Malta	-	100	-	-	100	-	100	-	-	100
Netherlands	3	60	32	4	100	4	61	31	4	100
Austria	26	58	4	12	100	30	56	3	11	100
Poland	32	52	1	14	100	26	62	0	12	100
Portugal	5	95	-	-	100	5	95	-	-	100
Romania	41	47	7	5	100	19	69	10	2	100
Slovenia	29	71	-	-	100	22	78	-	-	100
Slovakia	37	47	0	*16*	100	26	59	0	*15*	100
Finland	24	75	0	-	100	27	73	0	-	100
Sweden	36	64	-	-	100	35	65	-	-	100
United Kingdom	10	84	0	6	100	11	83	0	5	100
Iceland	-	100	-	-	100	-	100	-	-	100
Liechtenstein	-	100	-	-	100	-	100	-	-	100
Norway	13	70	-	17	100	12	71	-	17	100
Switzerland	50	49	0	1	100	53	46	0	1	100
Croatia	21	69	1	9	100	22	69	1	8	100
Turkey	4	75	-	21	100	5	*93*	-	*1*	100

Data Source: Eurostat, DG for Energy and Transport, International Transport Forum, national statistics (CH), estimates



Note:
Road Transport covers only the haulage of heavy goods vehicles (usually>3.5 tonnes load capacity).
TR: national transport only.
CH: data covers only haulage by CH vehicles on CH territory.
The Oil Pipelines data are not harmonised, so they can not be fully comparable. In most countries, only pipelines longer than 40km are included.
DE: includes DE-E: 1970=2.2, 1980=5.0, 1990=3.3; from 1995: only crude oil (i.e. no refined petroleum products).

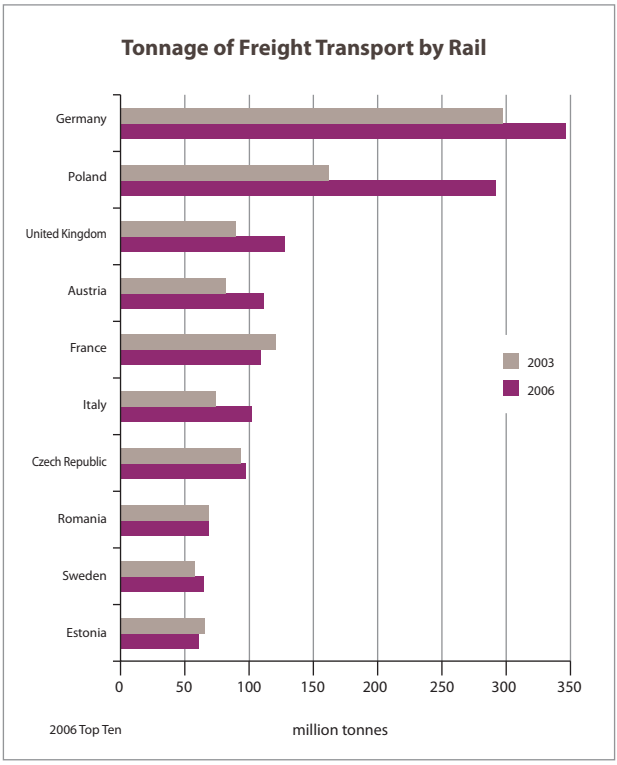
In 2006, 72.7% of the EU-27 freight inland transport was done by road. Compared to the 2001 levels (70.6%), a 3 percentage point increase was recorded. Road transport was the main mode of transport for all European countries, except for Estonia and Latvia, where rail transport made up the majority. In total, seventeen countries presented increases in their road transport shares with Latvia recording a 74% increase in relation to 2001. Unlike road transport, the trend on rail transport recorded noteworthy declines in a number of countries. The highest drops took place in Ireland and Romania (71% and 54%). Similarly, in the case of IWW the overall trend appeared to be towards a reduction in IWW's share. Poland showed the highest drop (84%), while Lithuania showed the greatest increase (107%). In OPE the bulk of countries showed declines as well, Lithuania and Latvia being the ones with the highest drops (66% and 58%).

Tonnage of Freight Transport by Rail

(million tonnes)

	2003	2004	2005	2006
EU-27	**:**	**:**	**:**	**:**
Belgium	56	c	c	c
Bulgaria	:	:	:	22
Czech Republic	93	89	86	97
Denmark	8	8	8	7
Germany	297	310	317	346
Estonia	66	66	68	61
Ireland	:	2	2	1
Greece	*3*	3	3	4
Spain	26	29	30	30
France	121	117	108	109
Italy	74	84	90	102
Cyprus	-	-	-	-
Latvia	48	51	55	49
Lithuania	43	46	49	50
Luxembourg	15	16	11	12
Hungary	43	52	51	55
Malta	-	-	-	-
Netherlands	30	30	29	3
Austria	82	93	102	111
Poland	162	283	270	291
Portugal	9	10	10	10
Romania	:	73	69	68
Slovenia	16	16	16	17
Slovakia	51	50	49	52
Finland	44	43	41	44
Sweden	58	60	63	65
United Kingdom	89	119	121	:
Iceland	-	-	-	-
Liechtenstein	:	2	2	2
Norway	21	23	25	25
Switzerland	:	:	:	:
Croatia	:	12	14	15
Turkey	16	18	19	20

Data Source: Eurostat



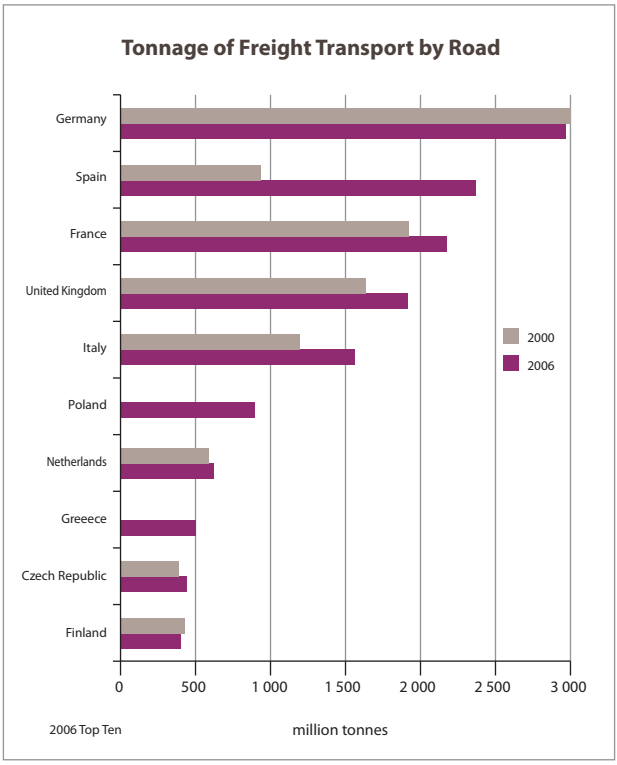
In 2006, Germany was the country with the highest rail freight transport that reached 346 million tonnes. Poland was second with 291 million tonnes and an extremely significant increase since 2003 that amounted to 80%. To a lesser extent Italy increased its tonnage of goods by 38% and Austria by 35%. France showed a 9% decrease in its freight transport by rail. Still the tonnage transported was 109 million tonnes. In Ireland, the Netherlands and Greece on the other hand, the tonnage of goods transferred by rail only amounted to 1, 3 and 4 million tonnes respectively. However, it should be pointed out that the countries that presented significant freight transport by rail had long railway networks contrary to the countries with low transport where the railway networks seemed to extend less.

Tonnage of Freight Transport by Road

(million tonnes)

	2000	2003	2004	2005	2006
EU-27	**:**	**:**	**:**	**:**	**:**
Belgium	412	378	347	338	349
Bulgaria	:	:	:	:	151
Czech Republic	394	448	466	461	445
Denmark	224	206	192	206	193
Germany	3 003	2 744	2 768	2 765	2 920
Estonia	:	28	26	30	34
Ireland	192	252	278	297	306
Greece	:	225	444	433	511
Spain	945	1 850	2 013	2 210	2 387
France	1 924	1 982	2 077	2 060	2 182
Italy	1 205	1 243	1 424	1 509	:
Cyprus	:	55	43	54	44
Latvia	:	44	46	52	55
Lithuania	:	52	51	55	56
Luxembourg	37	52	53	50	53
Hungary	:	214	213	229	251
Malta	:	:	:	:	:
Netherlands	585	571	614	613	615
Austria	277	297	283	288	359
Poland	:	:	732	863	897
Portugal	287	266	326	333	321
Romania	:	:	:	:	336
Slovenia	:	69	74	83	87
Slovakia	:	174	178	195	182
Finland	422	400	400	400	397
Sweden	329	312	325	355	342
United Kingdom	1 648	1 724	1 829	1 830	1 904
Iceland	:	:	:	:	:
Liechtenstein	:	:	:	1	1
Norway	222	230	244	245	251
Switzerland	:	:	:	:	:
Croatia	:	:	:	:	:
Turkey	:	:	:	:	:

Data Source: Eurostat



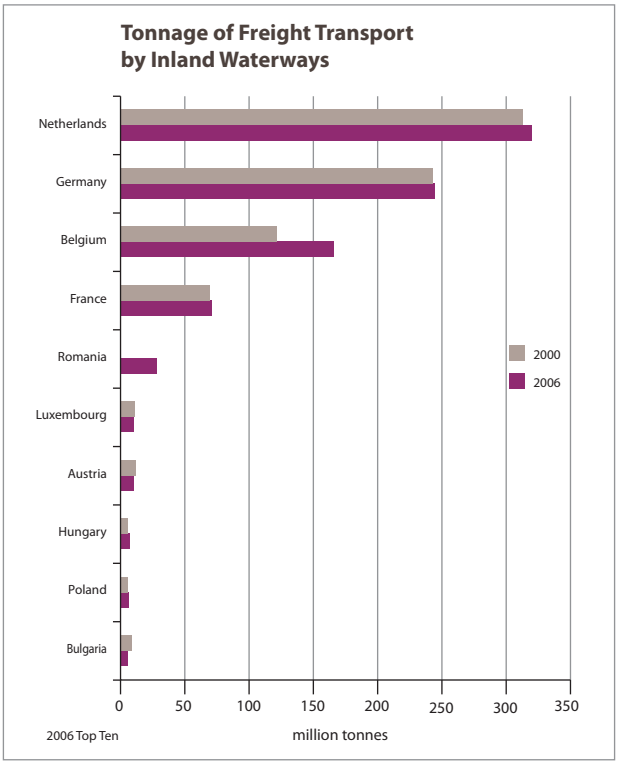
In the EU-27, the country that concentrated most of Europe's freight transport by road was Germany with 2 920 million tonnes, followed by Spain (2 387 million tonnes) and France (2 182 million tonnes). Spain presented the most spectacular increase by more than 2.5 times between 2000 and 2006. Likewise, Greece showed an increase in its freight transport by road more than 2 times in the years between 2003 and 2006.

Tonnage of Freight Transport by Inland Waterways

(million tonnes)

	2000	2003	2004	2005	2006
EU-27	**:**	**:**	**:**	**:**	**:**
Belgium	120	137	147	160	166
Bulgaria	:	7	4	5	6
Czech Republic	2	1	1	2	1
Denmark	-	-	-	-	-
Germany	242	220	236	237	243
Estonia	-	-	-	-	-
Ireland	-	-	-	-	-
Greece	-	-	-	-	-
Spain	-	-	-	-	-
France	71	64	67	68	71
Italy	:	:	:	:	:
Cyprus	-	-	-	-	-
Latvia	-	-	-	-	-
Lithuania	-	-	-	-	-
Luxembourg	12	10	11	10	11
Hungary	:	6	7	8	7
Malta	-	-	-	-	-
Netherlands	314	293	319	318	318
Austria	11	11	9	9	9
Poland	:	:	7	7	7
Portugal	-	-	-	-	-
Romania	:	:	30	33	29
Slovenia	-	-	-	-	-
Slovakia	4	3	3	2	2
Finland	:	:	:	:	:
Sweden	-	-	-	-	-
United Kingdom	:	:	:	:	:
Iceland	-	-	-	-	-
Liechtenstein	-	-	-	-	-
Norway	-	-	-	-	-
Switzerland	:	:	:	:	:
Croatia	:	:	:	1	2
Turkey	:	:	:	:	:

Data Source: Eurostat



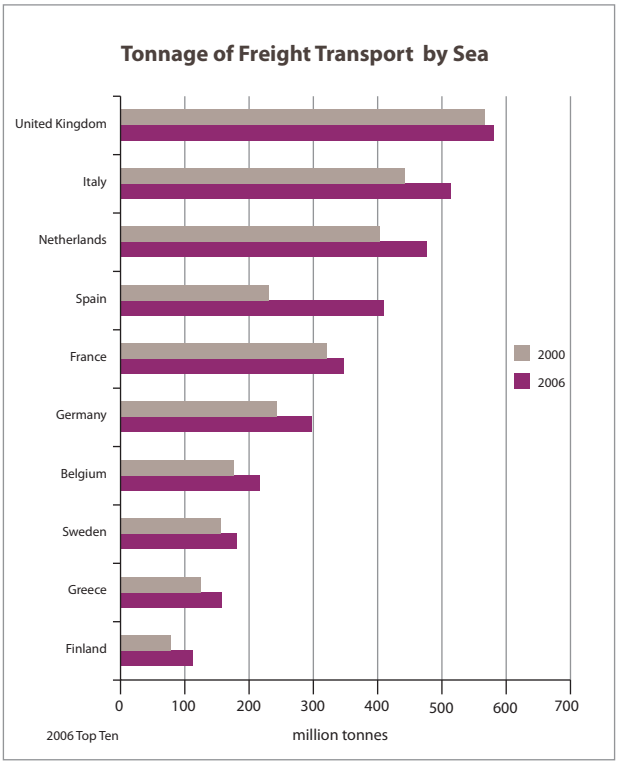
The Netherlands, Germany and Belgium continued to dominate freight transport by inland waterways with 318 million tonnes, 243 million tonnes and 166 million tonnes in 2006. Belgium showed the most significant increase within the past 6 years that reached 38%. All three countries had considerable inland waterways length and/or density.

Tonnage of Freight Transport by Sea

(million tonnes)

	2000	2003	2004	2005	2006
EU-27	**:**	**3 451**	**3 568**	**3 717**	**3 834**
Belgium	179	181	188	207	219
Bulgaria	:	21	23	25	28
Czech Republic	-	-	-	-	-
Denmark	97	104	100	100	108
Germany	243	255	272	285	303
Estonia	:	47	45	47	50
Ireland	45	46	48	52	53
Greece	128	163	158	151	159
Spain	235	344	373	400	414
France	326	330	334	341	350
Italy	447	477	485	509	520
Cyprus	:	7	7	7	8
Latvia	:	55	55	60	57
Lithuania	:	30	26	26	27
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	:	3	3	4	4
Netherlands	406	410	441	461	477
Austria	-	-	-	-	-
Poland	:	51	52	55	53
Portugal	56	57	59	65	67
Romania	:	36	41	48	47
Slovenia	:	11	12	13	15
Slovakia	-	-	-	-	-
Finland	81	104	107	100	111
Sweden	159	161	167	178	180
United Kingdom	573	556	573	585	584
Iceland	5	5	5	6	6
Liechtenstein	-	-	-	-	-
Norway	:	187	198	202	197
Switzerland	-	-	-	-	-
Croatia	17	20	25	26	26
Turkey	:	:	:	:	:

Data Source: Eurostat



The amount of goods handled by EU-27 countries' seaports has kept rising since 2003 with a rather steady rate of about 3% and reached 3 834 million tonnes in 2006 and an overall 11% increase since 2003. The UK, Italy and Netherlands were the countries whose ports handled the highest amounts of goods, followed by Spain, which accomplished a 76% rise relatively to 2000. All EU-27 Member States recorded an increase with the exception of Lithuania.

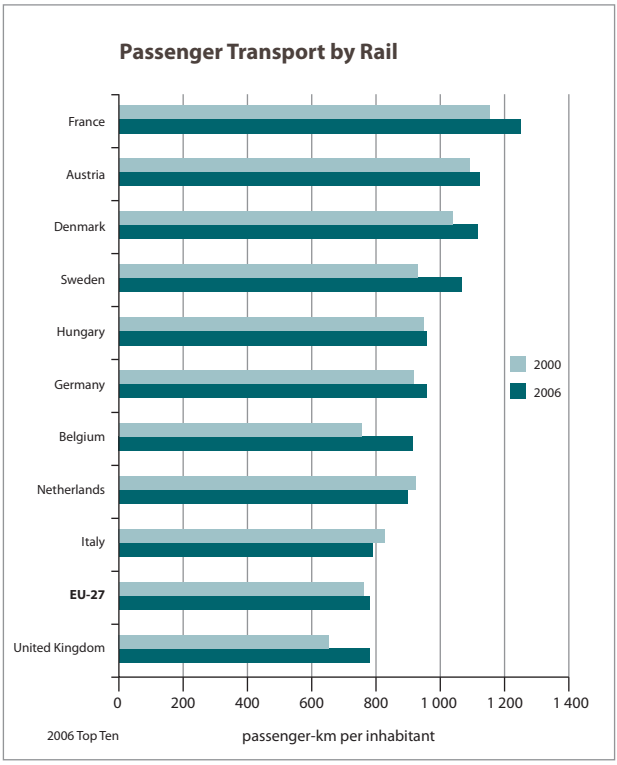
Passenger Transport by Rail

(100 million passenger-km)

	2000	2003	2004	2005	2006
EU-27	**368**	**358**	**363**	**374**	**384**
Belgium	8	8	9	9	10
Bulgaria	3	3	2	2	2
Czech Republic	7	7	7	7	7
Denmark	6	6	6	6	6
Germany	75	71	73	77	79
Estonia	0	0	0	0	0
Ireland	1	2	2	2	2
Greece	2	2	2	2	2
Spain	20	21	20	22	22
France	70	72	74	76	79
Italy	47	45	46	46	46
Cyprus	-	-	-	-	-
Latvia	1	1	1	1	1
Lithuania	1	0	0	0	0
Luxembourg	0	0	0	0	0
Hungary	10	10	10	10	10
Malta	-	-	-	-	-
Netherlands	15	14	14	15	15
Austria	9	9	9	9	9
Poland	24	20	18	18	18
Portugal	4	4	4	4	4
Romania	12	8	9	8	8
Slovenia	1	1	1	1	1
Slovakia	3	2	2	2	2
Finland	3	3	3	3	4
Sweden	8	9	9	9	10
United Kingdom	38	41	43	44	47
Iceland	-	-	-	-	-
Liechtenstein*	-	-	-	-	-
Norway	3	2	3	3	3
Switzerland	13	15	15	16	17
Croatia	1	1	1	1	1
Turkey	6	6	5	5	5

* Rail Transport data are included in the Austrian data as railways in Liechtenstein is owned by the Austrian railways (ÖBB).

Data Source: Eurostat, DG for Energy and Transport, International Transport Forum, Union Internationale des Chemins de Fer, national statistics



EU-27 passenger transport by rail was 38 403 million passenger-km in 2006. Germany and France presented the highest numbers, about 7 900 million passenger-km each, followed by the UK (4 700 million passenger-km). In terms of passenger-km per inhabitant the EU-27 experienced a slight increase of 2% between 2000 and 2006. France recorded the highest number with 1 251 passenger-km per inhabitant. Among the top ten, Belgium recorded the greatest increase (21%).

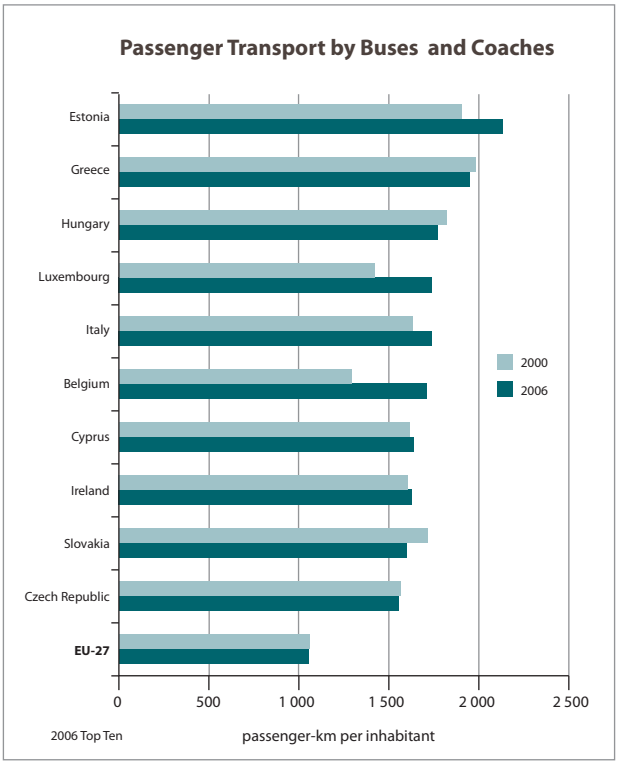
Passenger Transport by Buses and Coaches

(1000 million passenger-km)

	2000	2003	2004	2005	2006
EU-27	**514**	**515**	**521**	**523**	**523**
Belgium	13	16	17	18	18
Bulgaria	14	13	11	11	11
Czech Republic	16	16	15	16	16
Denmark	7	7	7	7	7
Germany	69	68	68	67	66
Estonia	3	2	2	3	3
Ireland	6	7	7	7	7
Greece	*22*	*22*	*22*	*22*	*22*
Spain	50	49	53	53	49
France	43	43	44	44	45
Italy	94	98	100	101	*103*
Cyprus	1	1	1	1	1
Latvia	2	3	3	3	3
Lithuania	3	3	4	4	4
Luxembourg	*1*	*1*	*1*	*1*	*1*
Hungary	19	19	18	18	18
Malta	*0*	*0*	*1*	*1*	*1*
Netherlands	*11*	*11*	*12*	*12*	*12*
Austria*	9	9	10	9	9
Poland	32	30	30	29	28
Portugal	12	11	11	11	11
Romania**	12	12	12	12	12
Slovenia**	2	1	1	1	1
Slovakia	9	9	9	9	9
Finland	8	8	8	8	8
Sweden	10	9	9	9	9
United Kingdom***	47	47	48	49	50
Iceland	0	1	1	1	1
Liechtenstein	:	:	:	:	:
Norway	4	4	4	4	4
Switzerland	5	5	5	6	6
Croatia	3	4	3	3	4
Turkey	87	*81*	*85*	*90*	*95*

* Completely revised series.
** Data include only regular interurban transport.
*** Data refer to Great Britain only.

Data Source: Eurostat, national statistics, International Transport Forum, study for DG Energy and Transport, estimates



Note: Data are not harmonised and therefore not fully comparable.

In terms of passenger-km per inhabitant, the EU-27 reached 1 060 in 2006 recording a slight change compared to 2000 levels. Eighteen countries exceeded the EU-27 average. Estonia presented the highest passenger transport by buses and coaches of 2 143 passenger-km per inhabitant. Greece and Hungary followed with 1 960 and 1 779 passenger-km per inhabitant. Lithuania showed the highest increase between 2000 and 2006 that reached 38%. On the other hand, Slovenia showed the greatest decline of 44% and in 2006 held the last place among the EU-27.

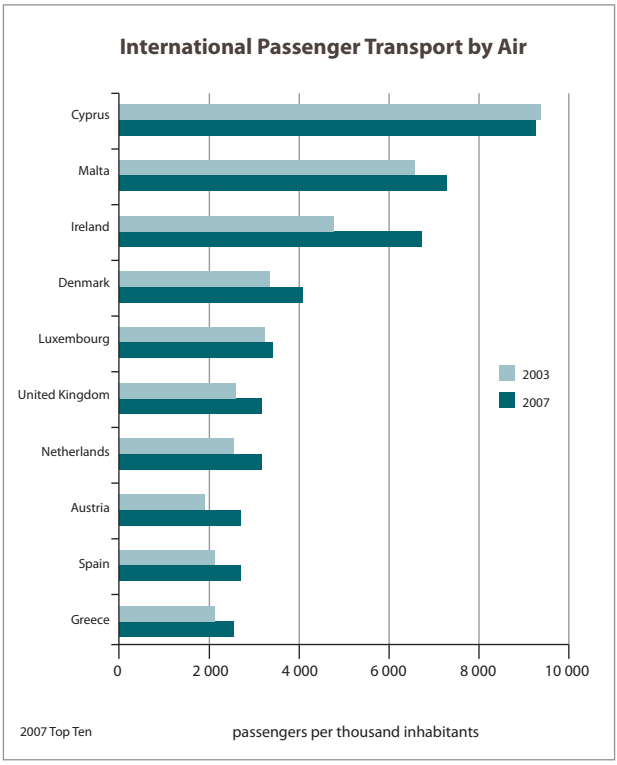
As far as absolute numbers are concerned, the EU-27 passenger transport by buses and coaches was 523 000 million passenger-km in 2006. Italy had the highest passenger transport value (103 000 million passenger-km), while Germany and the UK were second and third with 66 000 and 50 000 million passenger-km.

International Passenger Transport by Air

(100 000 passengers)

	2003	2004	2005	2006	2007
EU-27	**:**	**:**	**:**	**:**	**5 782**
Belgium	152	176	179	192	209
Bulgaria	:	:	:	:	60
Czech Republic	77	99	111	120	129
Denmark	180	196	206	213	222
Germany	1 008	1 156	1 252	1 329	1 411
Estonia	7	10	14	15	17
Ireland	188	202	236	268	290
Greece	232	240	250	266	281
Spain	886	955	1 019	1 068	1 185
France	696	760	813	862	928
Italy	495	578	643	708	:
Cyprus	67	67	70	69	72
Latvia	7	11	19	25	32
Lithuania	:	:	14	18	22
Luxembourg	14	15	15	16	16
Hungary	50	64	79	82	86
Malta	26	27	27	27	30
Netherlands	410	447	466	488	507
Austria	155	180	193	203	223
Poland	:	52	62	126	161
Portugal	151	160	172	190	217
Romania	:	31	33	45	64
Slovenia	:	11	12	13	15
Slovakia	6	11	15	20	21
Finland	77	88	94	104	115
Sweden	136	147	156	190	202
United Kingdom	1 545	1 675	1 783	1 855	1 920
Iceland	16	19	21	23	:
Liechtenstein	:	:	:	:	:
Norway	92	97	115	132	145
Switzerland	251	261	284	315	341
Croatia	:	:	:	:	:
Turkey	:	:	:	:	:

Data Source: Eurostat



In absolute terms, 513.9 million international passengers where transported in the EU-27 in 2007. The UK, Germany and Spain presented the highest international passenger traffic with 191.9, 141.1 and 118.5 million passengers in 2006. Latvia, Slovakia, Estonia and Poland showed the greatest increases over the last years. Specifically, Latvia had an increase that exceeded more than 4 times its previous number, Slovakia had a more than 3 times increase, while Estonia's and Poland's numbers more than doubled. Yet, their numbers remained low. In terms of passengers per thousand inhabitants, Cyprus was first with 9 062 passengers per thousand inhabitants in 2006, followed by Malta (6 647).

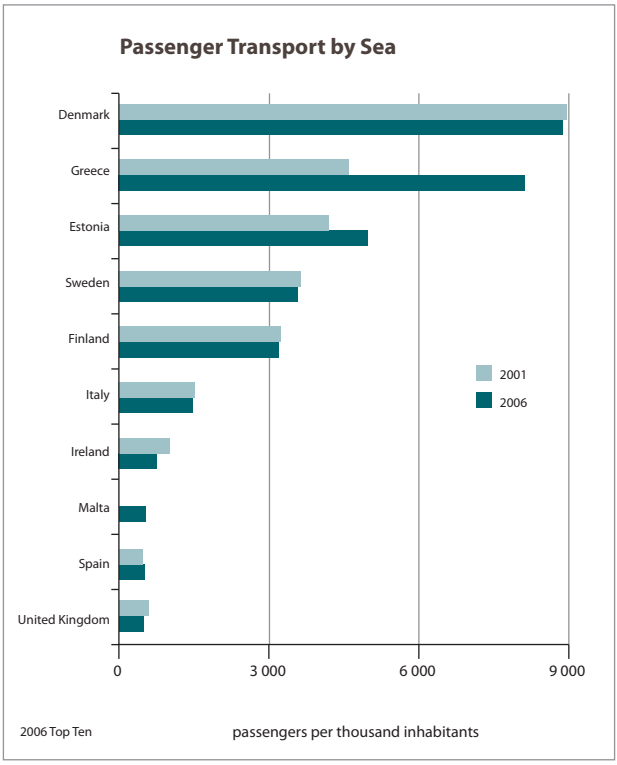
Passenger Transport by Sea

(1 000 passengers)

	2001	2002	2003	2004	2005	2006
EU-27	:	:	:	:	:	:
Belgium	1 377	1 125	739	787	922	891
Bulgaria	3	6	4	6	13	15
Czech Republic	-	-	-	-	-	-
Denmark	47 862	48 178	48 653	48 555	47 924	48 145
Germany	31 817	33 222	32 146	29 815	29 490	29 256
Estonia	5 740	5 136	5 172	6 452	6 885	6 691
Ireland	3 895	3 893	3 747	3 550	3 275	3 207
Greece*	50 149	101 210	102 760	96 744	86 068	90 402
Spain	18 623	18 947	20 041	21 694	22 410	22 167
France	27 724	29 110	27 405	27 068	25 804	26 402
Italy	86 882	82 700	82 576	83 316	78 753	85 984
Cyprus	:	339	287	247	194	182
Latvia	26	23	118	130	144	217
Lithuania	101	107	135	146	166	190
Luxembourg	-	-	-	-	-	-
Hungary	-	-	-	-	-	-
Malta	:	:	166	225	178	218
Netherlands**	2 041	2 202	2 015	2 012	2 116	2 127
Austria	-	-	-	-	-	-
Poland	4 416	3 304	3 188	2 031	1 647	1 737
Portugal**	542	502	616	650	662	686
Romania	:	:	:	:	:	:
Slovenia	34	42	47	42	35	30
Slovakia	-	-	-	-	-	-
Finland	16 729	16 577	16 341	16 806	17 112	16 739
Sweden	32 350	32 112	32 748	33 318	32 617	32 334
United Kingdom	34 516	35 623	33 708	32 837	30 207	29 930
Iceland	360	393	407	404	422	433
Liechtenstein	-	-	-	-	-	-
Norway	:	6 077	4 656	5 787	6 663	6 280
Switzerland	-	-	-	-	-	-
Croatia	16 833	18 410	19 483	21 519	22 182	23 061
Turkey	:	:	:	:	:	:

* 2001: partial data; Up to 2003 data exclude cruise passengers.
** Data exclude cruise passengers.

Data Source: Eurostat



Note: (1) EL from 2000 to 2001: partial data; Up to 2003, data exclude cruise passengers.
2004 value for passengers excluding cruise : 96 416
2005 value for passengers excluding cruise : 85 392
(2) NL and PT: Data excluding cruise passengers.

Greece and Italy showed the highest sea transport of passengers with 90.4 and 85.98 million passengers in 2006. Over the 2001-2006 period, Greece marked a considerable 80% growth. The highest increases were recorded in Latvia and Bulgaria whose numbers in 2006 were 8.5 and 5 times higher in comparison to 2001. Nevertheless, Bulgaria remained in the last position with 15 000 passengers in 2006.

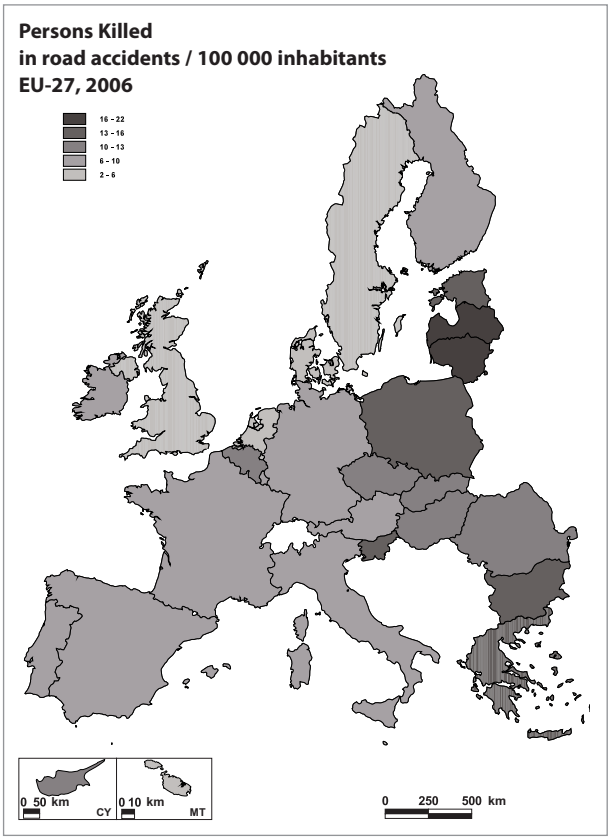
As far as passengers per thousand inhabitants are concerned, Denmark maintained the first place with 8 871. Greece ranked second with 8 126 and a 77% rise compared to 2001, while among the top ten the UK and Ireland presented a 15% and a 25% decrease correspondingly.

Persons Killed in Road Accidents

(Persons killed in road accidents/100 000 inhabitants)

	2001	2002	2003	2004	2005	2006
EU-27	**11**	**11**	**10**	**10**	**9**	**9**
Belgium	14	13	12	11	10	10
Bulgaria	12	12	12	12	12	14
Czech Republic	13	14	14	14	13	10
Denmark	8	9	8	7	6	6
Germany	8	8	8	7	6	6
Estonia	15	16	12	13	13	15
Ireland	11	10	9	9	10	9
Greece	17	15	15	15	15	15
Spain	14	13	13	11	10	9
France	13	12	10	9	8	7
Italy	12	12	11	11	10	10
Cyprus	14	13	14	16	14	11
Latvia	24	24	23	22	19	18
Lithuania	20	20	20	22	22	22
Luxembourg	16	14	12	11	10	8
Hungary	12	14	13	13	13	13
Malta	4	4	4	3	4	2
Netherlands	6	6	6	5	5	4
Austria	12	12	11	11	9	9
Poland	14	15	15	15	14	14
Portugal	16	16	15	12	12	9
Romania	11	11	10	11	12	11
Slovenia	14	13	12	14	13	13
Slovakia	11	11	12	11	10	11
Finland	8	8	7	7	7	6
Sweden	7	6	6	5	5	5
United Kingdom	6	6	6	6	6	5
Iceland	8	9	8	8	6	10
Liechtenstein	6	-	15	3	6	-
Norway	6	7	6	6	5	5
Switzerland	8	7	7	7	6	5
Croatia	15	14	16	14	13	14
Turkey	6	6	6	6	6	6

Data Source: CARE, DG for Energy and Transport, International Transport Forum, national statistics



Note: Persons killed are all persons deceased within 30 days of the accident. Corrective factors have been applied to the figures from MS not currently using this definition.

The trend in the number of persons killed in road accidents presented a slight decrease for the EU-27 between 2001 and 2006. All countries presented decreases with the exceptions of Lithuania, Bulgaria, Hungary, Romania and Estonia, where the number of persons killed in road accidents per inhabitant slightly increased during the past 6 years. The highest number observed was in Lithuania (22 persons killed in road accidents/100 000 inhabitants), followed by Latvia (17) and Estonia (15). In general, numbers appeared to be higher in East Europe.

In absolute terms, Italy was the country with the highest number of fatalities in 2006 (5 669 persons killed) followed by Poland (5 243) and Germany (5 091).

3

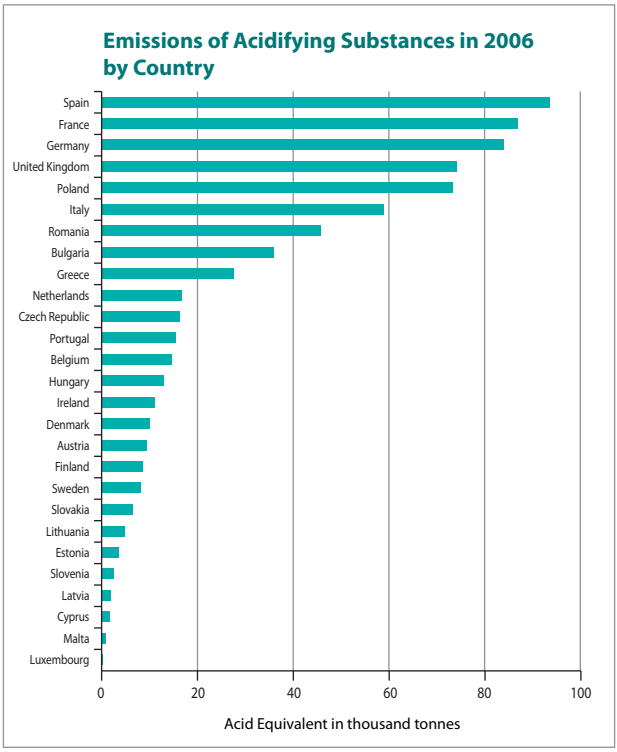
Environment Indicators

Emissions of Acidifying Substances by Country

(Acid Equivalent in thousand tonnes)

	1990	1995	2000	2004	2005	2006
EU-27	**1 492.5**	**1 098.5**	**832.1**	**756.5**	**743.5**	**727.4**
Belgium	25.5	22.3	17.6	15.8	15.0	14.7
Bulgaria	61.2	49.7	*38.8*	36.9	36.6	36.0
Czech Republic	83.9	48.6	21.2	18.3	16.9	16.4
Denmark	19.4	16.8	11.6	10.7	10.2	10.1
Germany	272.9	137.3	96.3	88.3	85.8	84.3
Estonia	11.7	5.2	4.3	4.2	3.7	3.4
Ireland	14.8	14.5	14.4	11.4	11.4	10.9
Greece	26.4	28.7	26.9	27.7	28.5	27.9
Spain	115.0	105.1	101.5	99.3	96.7	93.7
France	128.5	112.7	100.0	91.0	89.7	87.0
Italy	125.6	106.8	79.4	65.8	61.1	59.2
Cyprus	1.7	2.1	2.4	2.1	2.0	1.8
Latvia	7.4	3.3	1.8	1.8	1.8	1.9
Lithuania	14.6	6.0	3.8	4.5	4.9	4.7
Luxembourg	1.2	0.7	0.5	0.4	*0.4*	*0.3*
Hungary	44.0	30.7	23.5	16.1	13.2	13.0
Malta	*0.7*	*1.1*	1.0	0.6	0.6	0.6
Netherlands	32.3	24.9	19.4	17.3	16.9	16.6
Austria	10.7	9.8	9.5	9.8	9.9	9.7
Poland	158.3	121.0	74.7	74.9	75.0	73.6
Portugal	19.4	20.6	20.3	16.8	16.7	15.6
Romania	49.8	40.5	32.5	34.3	45.0	45.8
Slovenia	8.9	6.7	5.3	3.7	3.4	2.7
Slovakia	25.1	13.9	8.1	6.8	6.5	6.2
Finland	17.1	10.7	9.3	9.0	8.1	9.0
Sweden	13.4	11.9	9.5	8.5	8.3	8.1
United Kingdom	203.2	146.7	98.5	80.4	75.2	74.3
Iceland	0.0	0.0	0.0	0.0	*0.0*	*0.0*
Liechtenstein	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Norway	7.4	7.0	6.7	6.4	6.3	6.1
Switzerland	8.7	7.1	6.3	5.8	5.9	5.8
Turkey	40.2	51.9	68.1	50.4	50.9	50.9

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change



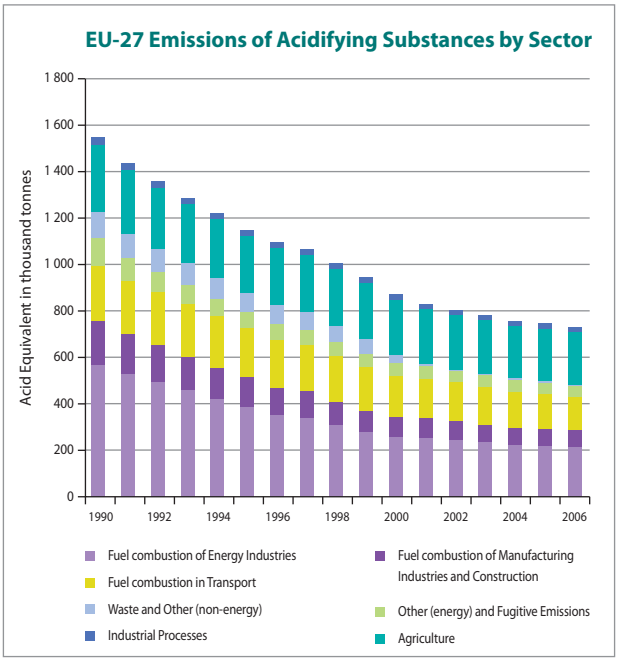
A high level of economic activity requiring extensive use of fossil fuels can result in large atmospheric emissions of acidifying pollutants. Soil, forest, and aquatic ecosystems are highly susceptible to acidifying pollutants. Acidification and eutrophication are harmful effects on the environment (when deposited into sensitive terrestrial or aquatic ecosystems), as well as potential negative consequences for human health. Long-range pollutant transport affects many European regions.

The 1999 Protocol of the United Nations Economic Commission for Europe's Convention on Long-range Transboundary Air Pollution (UNECE LRTAP Convention) to abate acidification, eutrophication and ground level ozone came into force on 17 May 2005.

Acidification substances considered in this publication are SOx, NOx and NH_3 (also called precursor gases). They (partly) turn into their acid forms and cause acid rain. These substances can travel enormous distances in the air.

Weighting factors are used to convert mass-units of SOx, NOx and NH_3 into acid equivalent units. An aggregated weighted sum of the acidifying pollutants can then be obtained.

In the period 1990-2006, emissions of acidifying substances decreased by approximately 51% for the EU-27. This is especially due to substantial reductions in SOx emissions.



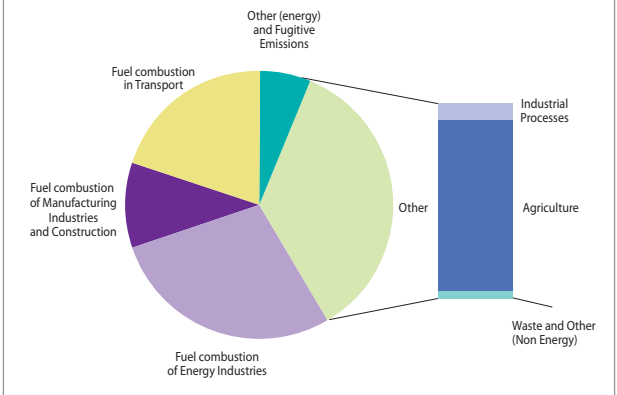
(Acid Equivalent in thousand tonnes)

	1990	1992	1994	1996	1998	2000	2002	2003	2004	2005	2006
Total	1 492	1 296	1 167	1 043	952	832	799	780	757	744	727
Fuel combustion of Energy Industries	564	496	420	353	311	259	247	238	224	219	217
Fuel combustion of Manufacturing Industries and Construction	194	156	137	114	99	86	79	75	72	75	70
Fuel combustion in Transport	237	230	221	209	195	177	166	162	157	149	147
Other (Energy) and Fugitive Emissions	120	87	74	68	62	54	50	50	49	48	43
Industrial Processes	32	26	24	22	22	23	20	20	20	21	20
Agriculture	290	264	252	246	245	237	233	230	228	227	225
Waste and Other (Non-Energy)	110	97	91	82	68	36	6	6	6	6	6

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change

Note: The Total may differ from the sum of parcels due to non allocation of some emissions.

EU-27 Emissions of Acidifying Substances in 2006 by Sector



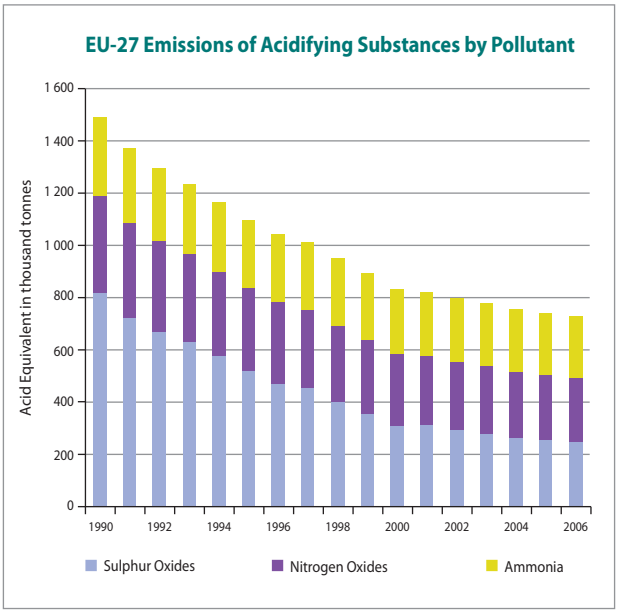
(Acid Equivalent in thousand tonnes)

Sector	SO_x	NO_x	NH_3	Total	% of total
Fuel combustion of Energy Industries	164.1	52.1	0.4	216.5	29.7
Fuel Combustion of Manufacturing Industries and Construction	35.4	34.4	0.5	70.3	9.7
Fuel Combustion in Transport	11.7	130.9	4.2	146.8	20.2
Other (Energy) and Fugitive Emissions	26.4	16.4	0.4	43.2	5.9
Industrial Processes	10.5	5.1	4.6	20.2	2.8
Agriculture	0.1	4.1	221.0	225.2	30.9
Waste and Other (Non-Energy)	0.2	0.6	5.0	5.8	0.8

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change, Eurostat

Note: The Sum of the individual Substances for each sector and their aggregated Total differs from the given Totals due to non allocation of some emissions.

The major sectors contributing to emissions of acidifying substances in 2006 were agriculture, energy industries, and transport with respectively 31, 30 and 20% of total emissions. The energy industries sector contributed approximately half of the total reduction in emissions since 1990, representing the largest absolute decrease in emissions of any single sector.



(Acid Equivalent in thousand tonnes)

	1990	1992	1994	1996	1998	2000	2002	2003	2004	2005	2006
Sulphur Oxides	819	670	579	472	401	310	296	279	262	257	248
Nitrogen Oxides	372	350	324	315	293	273	261	260	255	248	243
Ammonia	302	276	264	256	257	248	243	241	240	238	236

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change

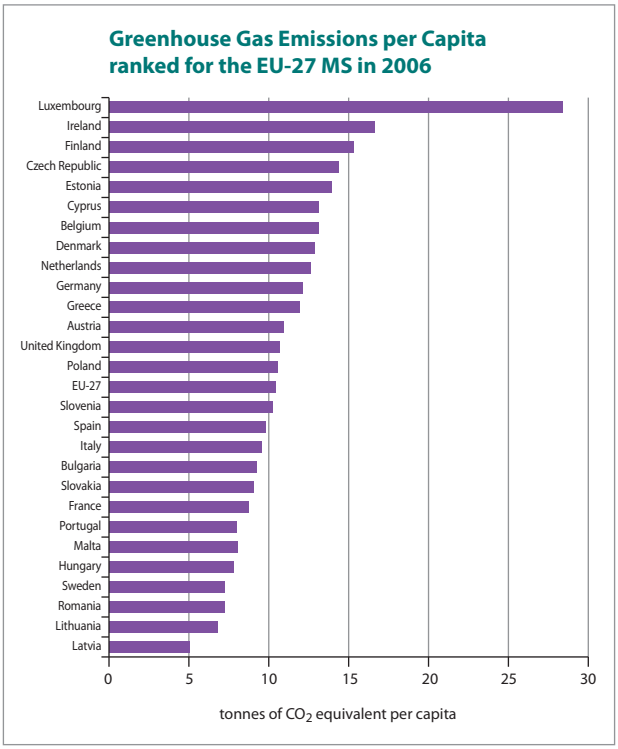
Emissions of acidifying substances in EU-27 amounted to 727 thousand tonnes of acid equivalent. These emissions were evenly distributed by the precursor gases with 248, 243 and 236 thousand tonnes for SOx, NOx and NH_3 respectively. SOx emissions in 2006 were almost 70% less than in 1990. The reduction in emissions of acidifying substances is due to abatement measures in road transport and large combustion plants, as well as fuel switching to natural gas, economic restructuring of the new Laender in Germany and the introduction of flue gas desulphurisation in some power plants.

Greenhouse Gas Emissions per Capita

(Global Warming Potential in tonnes of CO_2 equivalent per capita)

	1990	1995	2000	2004	2005	2006
EU-27	**11.8**	**10.9**	**10.5**	**10.6**	**10.5**	**10.4**
Belgium	14.5	14.8	14.2	14.1	13.6	13.0
Bulgaria	13.3	10.4	8.4	9.0	9.1	9.2
Czech Republic	18.7	14.8	14.3	14.4	14.3	14.5
Denmark	13.4	14.6	12.7	12.6	11.7	13.0
Germany	15.5	13.4	12.4	12.5	12.2	12.2
Estonia	26.5	14.4	13.3	14.8	14.3	14.0
Ireland	15.8	16.5	18.3	17.1	17.1	16.6
Greece	10.3	10.4	11.8	12.1	12.1	12.0
Spain	7.4	8.1	9.6	10.1	10.2	9.9
France	:	9.4	9.2	8.9	8.9	8.6
Italy	9.1	9.3	9.7	10.0	9.9	9.7
Cyprus	*10.3*	*10.9*	*12.2*	*13.1*	*13.2*	13.1
Latvia	9.9	5.0	4.2	4.7	4.8	5.1
Lithuania	13.4	6.0	5.5	6.3	6.6	6.8
Luxembourg	34.8	25.5	23.5	29.5	28.8	28.4
Hungary	9.5	7.7	7.6	7.9	7.9	7.8
Malta	*6.2*	*7.3*	*7.1*	*7.7*	*7.9*	7.9
Netherlands	14.2	14.5	13.5	13.4	13.0	12.7
Austria	10.4	10.1	10.1	11.3	11.4	11.0
Poland	11.9	11.4	10.1	10.1	10.1	10.5
Portugal	5.9	7.0	8.0	8.1	8.3	7.9
Romania	10.7	8.1	6.2	7.3	7.0	7.3
Slovenia	9.3	9.4	9.5	10.1	10.2	10.3
Slovakia	13.9	9.9	9.0	9.3	9.2	9.1
Finland	14.3	14.0	13.5	15.5	13.2	15.3
Sweden	8.4	8.4	7.7	7.8	7.4	7.3
United Kingdom	13.4	12.2	11.4	11.0	10.9	10.8
Iceland	13.4	12.0	13.4	12.9	12.6	14.1
Liechtenstein	8.1	7.7	7.9	7.9	7.8	7.8
Norway	11.7	11.4	11.9	12.0	11.7	11.5
Switzerland	7.9	7.3	7.2	7.2	7.3	7.1
Croatia	6.8	4.9	5.9	6.8	*6.9*	6.9
Turkey	3.1	3.6	4.2	4.2	4.4	4.6

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change, UN Framework Convention on Climate Change



Note: The population used was that on the 1st January 2006.

There is scientific evidence that emissions of greenhouse gases from human activities, such as the burning of coal, oil and gas, are causing an overall warming of the earth's atmosphere and that climate change is the most likely result with potentially major economic and social consequences ('Winning the battle against global climate change', COM(2005) 35). In 2006, the Member States with the highest per capita emissions were Luxembourg and Ireland and the Member States with the lowest per capita emissions were Latvia and Lithuania. The data for Luxembourg includes emissions from road fuel sold in Luxembourg, but consumed abroad (fuel tourism). Although overall per capita emissions in EU-27 have fallen since 1990, they have risen in nine countries. In Spain, Portugal, Cyprus, Malta and Greece, per capita emissions have increased by more than one tonne per capita between 1990 and 2006. For the same period, the largest reductions, of 4 or more tonnes per capita, were in Estonia, Lithuania, Luxembourg, Latvia, Czech Republic, Slovakia and Bulgaria.

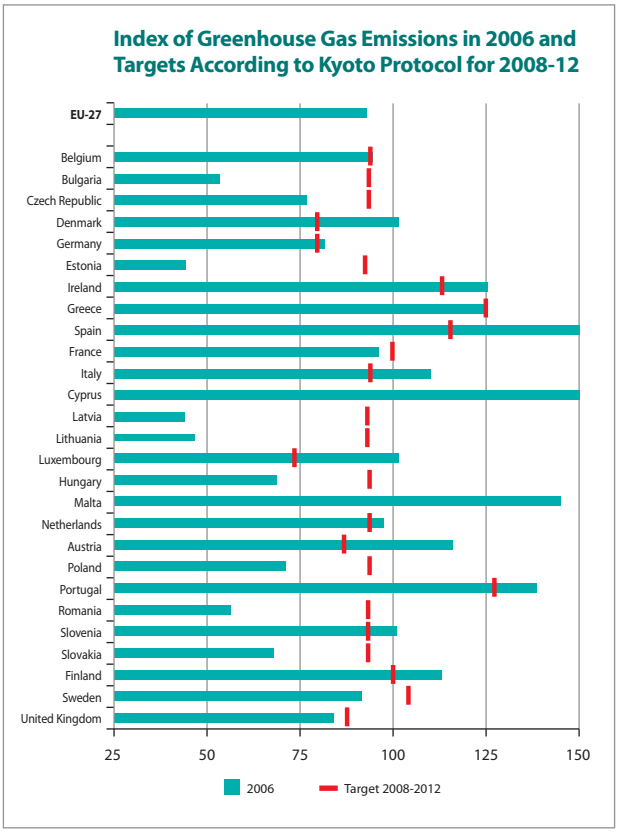
Throughout this section, GHG emissions are to be interpreted without Land Use, Land Use Change and Forestry (LULUCF).

Greenhouse Gas Emissions and Agreed Reduction Targets

Kyoto Base Year emissions: index = 100; for EU-27, CY and MT, base year is 1990

	1990	1995	2000	2004	2005	2006	Target 2008-2012
EU-27	**100.0**	**93.6**	**90.9**	**93.2**	**92.5**	**92.3**	**:**
Belgium	99.2	103.1	99.9	100.3	97.7	94.0	92.5
Bulgaria	88.0	66.4	51.8	53.2	53.2	53.8	92.0
Czech Republic	100.0	78.7	75.7	75.5	75.0	76.3	92.0
Denmark	99.6	110.0	98.0	97.9	91.7	101.7	79.0
Germany	99.6	88.8	82.7	83.4	81.5	81.5	79.0
Estonia	97.6	48.8	42.8	47.0	45.3	44.3	92.0
Ireland	99.9	106.8	124.1	123.5	126.5	125.5	113.0
Greece	97.8	103.3	119.9	125.0	125.1	124.4	125.0
Spain	99.3	110.0	132.9	147.0	152.1	149.5	115.0
France	99.9	98.5	98.5	97.9	98.4	96.0	100.0
Italy	100.0	102.6	106.9	111.8	111.8	109.9	93.5
Cyprus	100.0	119.7	143.0	162.7	167.3	170.1	:
Latvia	102.1	48.2	38.7	41.8	43.0	44.9	92.0
Lithuania	99.9	44.5	39.2	44.0	45.9	47.0	92.0
Luxembourg	100.1	78.5	77.3	101.8	100.9	101.2	72.0
Hungary	85.1	68.7	67.2	68.8	69.5	68.1	94.0
Malta	100.0	123.4	122.7	140.7	145.5	145.0	:
Netherlands	99.4	105.1	100.3	102.2	99.4	97.4	94.0
Austria	100.2	102.0	102.6	116.0	118.0	115.2	87.0
Poland	80.5	78.2	69.1	68.2	68.6	71.1	94.0
Portugal	98.3	116.8	135.9	141.3	145.4	138.3	127.0
Romania	89.0	66.2	49.9	57.1	54.6	56.3	92.0
Slovenia	91.3	91.8	93.0	98.7	100.6	101.2	92.0
Slovakia	102.3	73.3	67.3	69.4	68.5	67.9	92.0
Finland	99.9	100.5	98.3	113.8	97.2	113.1	100.0
Sweden	99.8	102.1	94.6	96.6	92.7	91.1	104.0
United Kingdom	99.0	91.0	86.3	84.7	84.4	84.0	87.5
Iceland	100.0	93.9	109.5	109.9	108.8	124.2	110.0
Liechtenstein	100.0	102.6	110.9	117.7	117.9	119.0	92.0
Norway	100.0	100.1	107.6	110.3	108.3	107.7	101.0
Switzerland	100.0	96.8	98.0	100.6	101.9	100.8	92.0
Croatia	100.0	70.5	80.6	92.5	94.0	94.8	95.0
Turkey	100.0	129.8	164.6	174.4	183.7	195.1	:

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change, UN Framework Convention on Climate Change



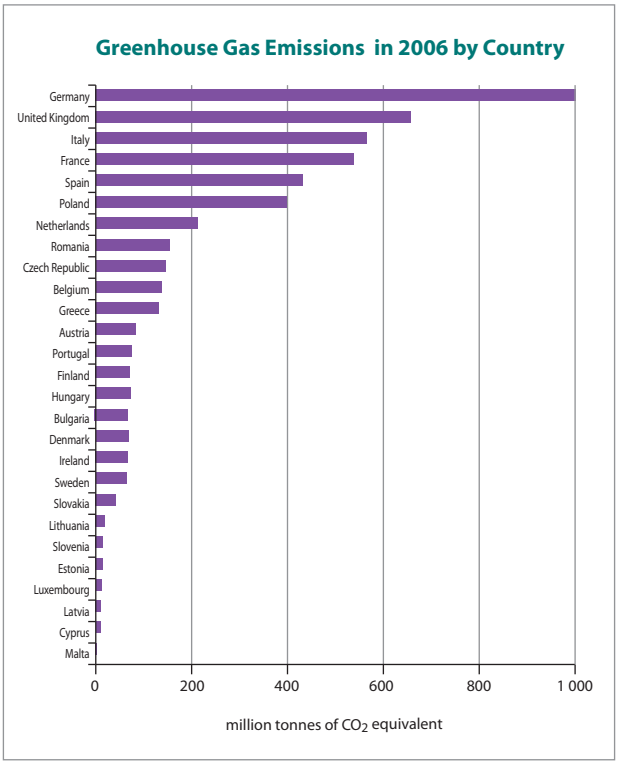
The greenhouse gas emissions are reported under Kyoto Protocol and the EU Decision 280/2004/EC. In the first quantified emission limitation and reduction commitment period, from 2008 to 2012, the European Community has agreed to an 8% reduction in its greenhouse gas emissions compared to the base year. Individual targets for each of the EU-15 countries have been agreed under the EU burden sharing agreement (Council Decision 2002/358/EC). The new EU Member States and candidate countries have differing targets under the Kyoto Protocol. Overall, since the Kyoto base year (1990), emissions in EU-15 have shown a decrease of 2.7% in 2006, determined largely by considerable emission cuts by the EU-15's two greatest emitters, which account for about 40% of total EU-15 GHG emissions: Germany (-18.2%), which is now close to its burden-sharing target and the United Kingdom (-15.2%) which has exceeded its target. Italy and France, the third and fourth largest emitters, increased (9.9%) and decreased (-3.9%) their emissions between 1990 and 2006, respectively. Emissions in Cyprus, Spain, Malta, Portugal, Greece and Ireland have increased by more than 20% since 1990.

Emissions of Greenhouse Gases by Country

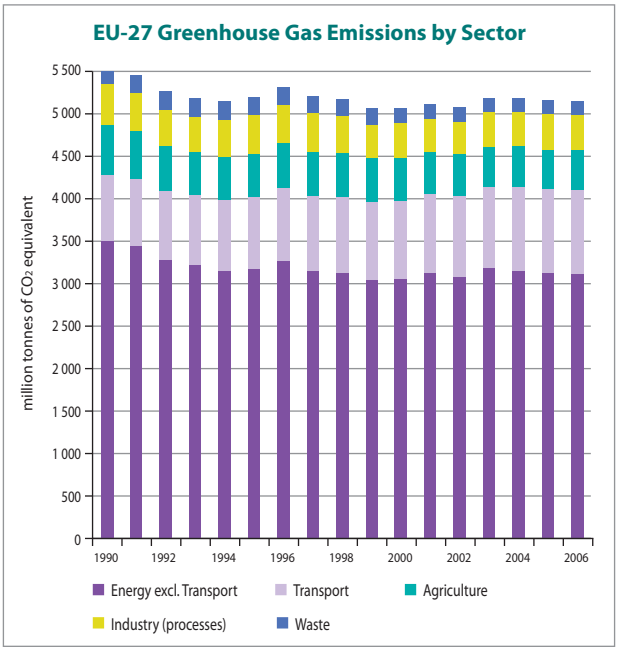
(Global Warming Potential in million tonnes of CO_2 equivalent)

	1990	1995	2000	2004	2005	2006
EU-27	**5 572**	**5 214**	**5 065**	**5 191**	**5 157**	**5 143**
Belgium	145	150	146	146	142	137
Bulgaria	117	88	69	71	71	71
Czech Republic	194	153	147	147	146	148
Denmark	69	76	68	68	64	70
Germany	1 228	1 095	1 019	1 028	1 005	1 005
Estonia	42	21	18	20	19	19
Ireland	56	59	69	69	70	70
Greece	105	110	128	134	134	133
Spain	288	319	385	426	441	433
France	563	555	556	552	555	541
Italy	517	530	552	578	578	568
Cyprus	*6*	*7*	*8*	*10*	*10*	10
Latvia	26	12	10	11	11	12
Lithuania	49	22	19	22	23	23
Luxembourg	13	10	10	13	13	13
Hungary	98	79	78	79	80	79
Malta	*2*	*3*	*3*	*3*	*3*	3
Netherlands	212	224	214	218	212	207
Austria	79	81	81	92	93	91
Poland	454	441	389	384	386	400
Portugal	59	70	82	85	87	83
Romania	248	184	139	159	152	157
Slovenia	19	19	19	20	20	21
Slovakia	74	53	49	50	49	49
Finland	71	71	70	81	69	80
Sweden	72	74	68	70	67	66
United Kingdom	768	707	670	658	655	652
Iceland	3	3	4	4	4	4
Liechtenstein	0	0	0	0	0	0
Norway	50	50	53	55	54	54
Switzerland	53	51	52	53	54	53
Croatia	33	23	26	30	*31*	31
Turkey	170	221	*280*	297	312	332

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change, UN Framework Convention on Climate Change



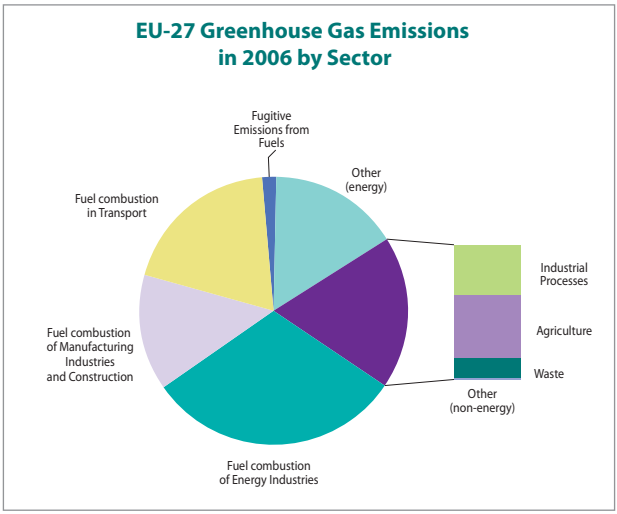
From base year to 2000, significant reductions of 9.1% in EU-27 GHG emissions were achieved, mainly as a result of fuel switching, in particular due to the replacement of coal-fired power stations with more efficient and less carbon-intensive natural gas-fired plants, combined with an increased use of cogeneration. The decrease in emissions in Germany was partly due to structural change after reunification. In the United Kingdom the reduction of greenhouse gas emissions was partly a result of the liberalisation of the energy market and subsequent changes in the choice of fuel used in electricity production from oil and coal to gas. But between 2000 and 2006, greenhouse gas emissions from the EU-27 have increased by 1.5%, mainly as a result of a marked increase in energy use, particularly for electricity and transport, combined with a slowdown in fuel switching to lower carbon sources in power stations.



(Global warming potential in million tonnes of CO_2 equivalent)

	1990	1992	1994	1996	1998	2000	2002	2004	2005	2006
Total	5 572	5 280	5 160	5 319	5 167	5 065	5 080	5 191	5 157	5 143
Energy excl. Transport	3 508	3 286	3 163	3 277	3 127	3 061	3 088	3 157	3 130	3 106
Transport	779	808	824	865	905	924	951	984	984	992
Agriculture	592	536	514	514	512	501	487	480	474	473
Industry (Processes)	478	425	436	452	432	404	389	412	416	417
Waste	216	216	212	206	191	179	167	155	151	148
Other (Non Energy)	13	11	11	11	11	11	10	10	10	7

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change, UN Framework Convention on Climate Change



Sector	(%) of total
Fuel Combustion of Energy Industries	30.9
Fuel Combustion of Manufacturing Industries and Construction	12.9
Fuel Combustion in Transport	19.3
Fugitive Emissions from Fuels	1.7
Other (Energy)	14.8
Industrial Processes	8.1
Agriculture	9.2
Waste	2.9
Other (Non Energy)	0.1

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change, UN Framework Convention on Climate Change

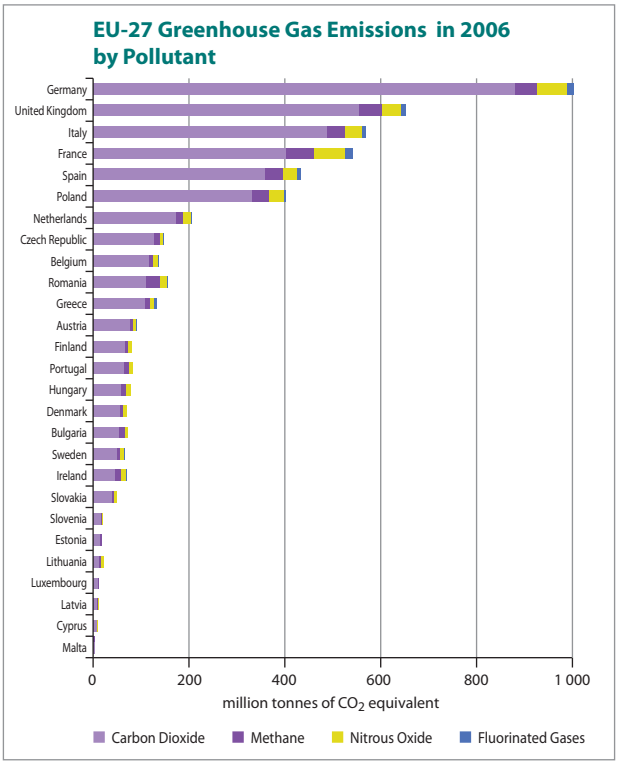
Energy use (including transportation) in 2006 accounted for about 79.6% of total greenhouse gas (GHG) emissions. Energy efficiency increased during the 1990s and therefore GHG emissions decreased over the decade. Emissions from the sector 'Other (energy)', which accounted for about 15% of the total GHG emissions in 2006, are dominated by fuel combustion from households which is more or less stable depending on weather conditions. In 2006, agriculture accounted for about 9% of EU-27 GHG emissions, with a reduction of about 20% between 1990 and 2006. This is mainly due to declining numbers of cattle and lower emissions from agricultural soils. Emissions from the transport sector increased continuously between 1990 and 2006 (+27.3%), due primarily to high growth in both passenger and freight transport by road. The increase in carbon dioxide emissions from international aviation and navigation was even higher, but these are currently not addressed in the Kyoto Protocol.

EU-27 Greenhouse Gas Emissions in 2006 by Pollutant

(Global Warming Potential in thousand tonnes of CO_2 equivalent)

	Carbon Dioxide	Methane	Nitrous Oxide	F-Gases
EU-27	**4 257 623**	**419 161**	**389 270**	**76 742**
Belgium	119 107	7 086	8 956	1 822
Bulgaria	55 067	11 430	4 232	616
Czech Republic	127 918	11 933	7 375	978
Denmark	57 551	5 516	6 519	887
Germany	880 253	45 879	62 930	15 731
Estonia	15 972	1 997	831	76
Ireland	47 320	13 287	8 432	723
Greece	109 666	8 403	10 320	4 723
Spain	359 627	37 516	30 076	6 121
France	404 248	56 080	64 709	16 271
Italy	488 039	38 158	35 120	6 604
Cyprus	8 151	934	874	53
Latvia	8 260	1 740	1 578	43
Lithuania	14 524	3 368	5 214	115
Luxembourg	12 108	463	660	91
Hungary	60 389	7 808	9 576	853
Malta	2 631	452	22	77
Netherlands	172 219	16 283	16 945	2 031
Austria	77 283	6 937	5 397	1 474
Poland	330 524	37 209	29 583	3 143
Portugal	64 450	11 844	6 023	878
Romania	111 011	29 059	15 977	631
Slovenia	16 878	2 158	1 308	246
Slovakia	39 984	4 628	4 039	252
Finland	68 098	4 536	6 854	804
Sweden	51 515	5 509	7 545	1 179
United Kingdom	554 830	48 950	38 180	10 331
Iceland	3 035	461	335	403
Liechtenstein	242	14	13	4
Norway	43 259	4 408	4 372	1 473
Switzerland	45 561	3 538	3 274	836
Croatia	23 699	3 110	3 594	431
Turkey	273 705	50 330	4 594	3 171

Data Source: European Environment Agency / European Topic Centre on Air and Climate Change



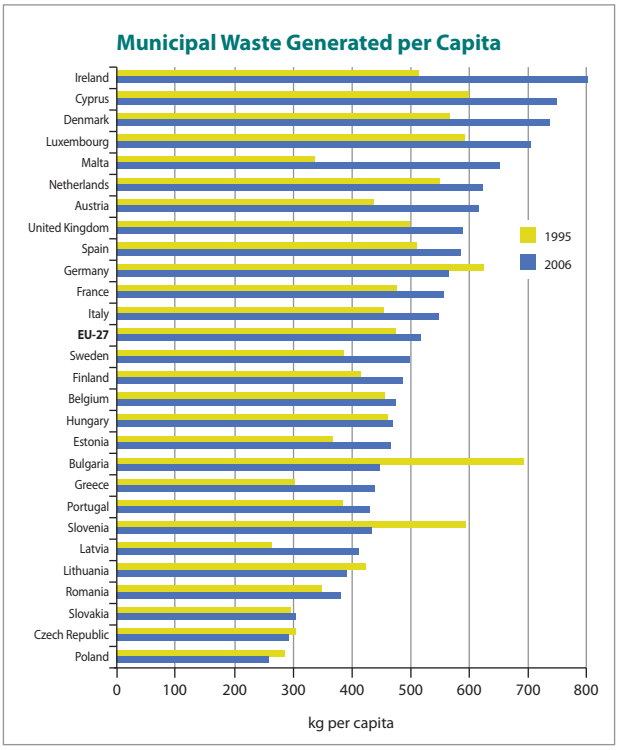
Carbon dioxide (CO_2) is by far the most important greenhouse gas, accounting for about 82.8% of the global warming potential due to all EU-27 anthropogenic GHG emissions covered by the Kyoto Protocol in 2006. The main source of CO_2 is the burning of fossil fuels. Agriculture is the dominant source of anthropogenic methane (CH_4) emissions; the other two important sources are waste management (e.g. landfills) and fugitive emissions from energy use (e.g. coal mining). The largest source of nitrous oxide (N_2O) emissions is agriculture (fertilisers and manure use) followed by the chemical industries (adipic and nitric acid production).

Municipal Waste Generated

(kg per person per year)

	1995	1997	1999	2001	2003	2006
EU-27	**474**	**499**	**511**	**522**	**519**	**517**
Belgium	453	467	465	467	451	475
Bulgaria	693	577	503	491	499	446
Czech Republic	302	318	327	273	280	296
Denmark	567	588	627	658	672	737
Germany	624	658	638	633	601	566
Estonia	368	422	413	372	418	466
Ireland	514	547	581	705	736	804
Greece	302	363	393	417	428	443
Spain	510	561	615	658	655	583
France	476	497	509	528	535	553
Italy	454	468	498	516	524	548
Cyprus	600	650	670	703	724	745
Latvia	263	254	244	302	298	411
Lithuania	424	421	350	377	383	390
Luxembourg	592	607	650	650	684	702
Hungary	460	487	482	451	463	468
Malta	332	354	467	542	581	652
Netherlands	549	590	599	615	610	625
Austria	438	532	563	578	609	617
Poland	285	315	319	290	260	259
Portugal	385	405	442	472	447	435
Romania	350	333	322	345	350	385
Slovenia	596	589	551	479	418	432
Slovakia	295	275	261	239	297	301
Finland	414	448	485	466	460	488
Sweden	386	416	428	442	471	497
United Kingdom	499	533	570	592	594	588
Iceland	427	445	457	469	485	534
Norway	626	619	596	635	696	793
Switzerland	598	606	640	659	662	715
Croatia	:	:	:	:	:	:
Turkey	445	503	463	457	445	434

Data Source: Eurostat



Note: Municipal waste generated consists of waste collected on behalf of municipal authorities and disposed of through the waste management system.
The bulk of this waste stream is from households, though "similar" wastes from sources such as commerce, offices and public institutions are included.
For areas not covered by a municipal waste scheme an estimation has been made of the amount of waste generated.

The total amount of municipal waste generated has been continuously growing between 1995 and 2002 in the European Union; from 2003 onwards a downward trend can be observed, though the generation of municipal waste per capita remains at high levels (EU-27, 517 kg per person in 2006).

The amount of municipal waste generated per person is generally higher in the old Member States (EU-15, 563 kg per person in 2006) than in the new Member States, although Cyprus and Malta also have a relatively high production of municipal waste. Ireland has the highest per capita generation of municipal waste in the European Union; the lowest values are reported by Poland. Germany alone generated 18.3% (46.6 million tonnes) of the total amount of municipal waste generated in EU-27 (255 million tonnes), followed by the United Kingdom (14%) and France (13%).

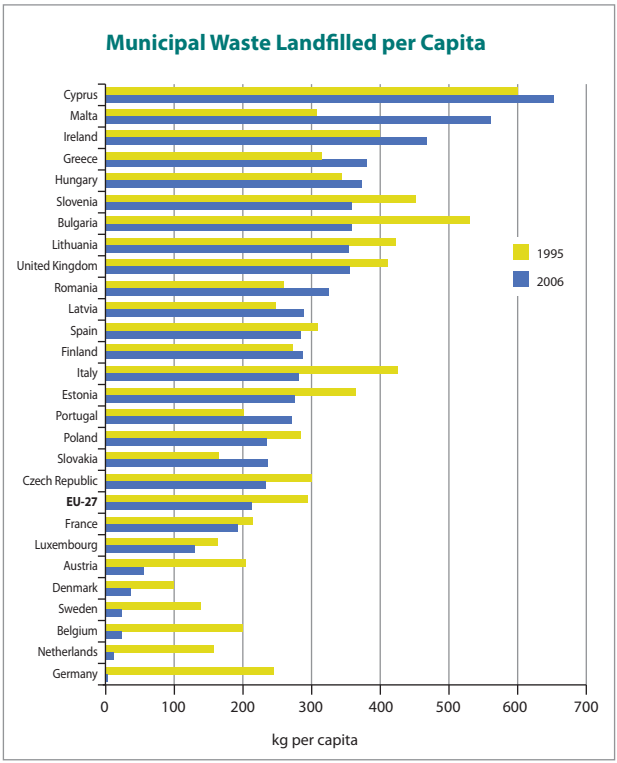
Municipal waste consists of waste generated by households and waste collected within the municipal waste collection scheme from businesses and institutions. The inclusion of businesses and institutions depends on individual countries' waste management procedures. Municipal waste accounts for around 9% of the total amount of waste generated in the European Union. In contrast to statistics of earlier years, the total amount of waste includes also mineral, construction and agricultural waste.

Municipal Waste Landfilled

(kg per person per year)

	1995	1997	1999	2001	2003	2006
EU-27	**296**	**293**	**287**	**279**	**256**	**213**
Belgium	198	123	91	54	44	24
Bulgaria	530	433	388	392	407	356
Czech Republic	302	318	277	214	201	234
Denmark	96	65	68	47	34	37
Germany	245	216	180	160	115	4
Estonia	365	421	412	295	274	278
Ireland	398	439	517	540	480	471
Greece	311	329	358	380	393	386
Spain	308	319	331	364	364	289
France	214	228	224	215	204	192
Italy	422	374	382	346	314	284
Cyprus	600	597	605	634	653	652
Latvia	247	238	227	285	248	292
Lithuania	424	421	350	335	328	356
Luxembourg	161	145	140	131	129	131
Hungary	346	391	404	375	390	376
Malta	305	328	432	494	543	562
Netherlands	158	70	40	50	17	12
Austria	205	189	195	192	183	59
Poland	280	306	312	278	251	236
Portugal	200	269	303	355	293	274
Romania	259	263	261	272	277	326
Slovenia	457	491	455	358	348	362
Slovakia	168	177	185	209	233	234
Finland	268	281	280	284	278	286
Sweden	136	130	108	99	64	25
United Kingdom	414	461	469	474	440	353
Iceland	322	333	345	353	364	370
Norway	456	383	328	274	253	245
Switzerland	77	68	66	40	8	1
Croatia	:	:	:	:	:	:
Turkey	326	362	354	360	363	364

Data Source: Eurostat



Note: Municipal Waste Landfilled presents the share of municipal waste collected by and on behalf of municipal authorities that are disposed of through landfill.
Landfill is defined as deposit of waste into or onto land, including especially engineered landfill, and temporary storage of over one year on permanent sites.
The definition covers both landfill in internal sites (i.e. where a generator of waste is carrying out its own waste disposal at the place of generation) and in external sites.

The amount of waste landfilled depends on the national policy on waste management; that is, it depends on the importance given to waste avoidance, recycling and incineration. For many countries landfill remains the major treatment method, e.g. for more than 80% in Lithuania, Poland, Cyprus, Greece, Malta, Romania, Slovenia and Hungary.

On the other hand, there has been a sharp decline in the amount of waste landfilled in some other Member States. In Germany there is almost no landfill of municipal waste anymore without prior treatment; the Netherlands send 2%, Denmark, Sweden and Belgium 5% of the municipal waste to landfill sites.

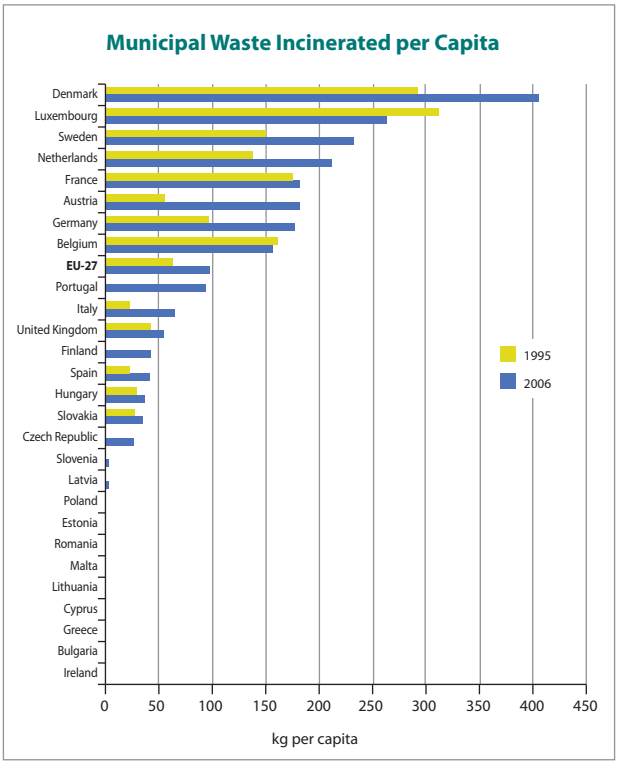
The result of these mixed developments among Member States is a steady decline in landfill for the EU as a total. Although landfill is still the most important way to dispose of municipal waste, nowadays less than half of the municipal waste generated is disposed of by deposit/land treatment.

Municipal Waste Incinerated

(kg per person per year)

	1995	1997	1999	2001	2003	2006
EU-27	**65**	**70**	**76**	**82**	**85**	**98**
Belgium	163	179	150	160	151	155
Bulgaria	0	0	0	0	0	0
Czech Republic	0	0	30	35	39	29
Denmark	294	315	315	374	363	405
Germany	97	111	125	135	137	179
Estonia	0	0	0	1	0	1
Ireland	0	0	0	0	0	0
Greece	0	0	0	0	0	0
Spain	24	35	36	37	42	41
France	178	170	169	175	182	183
Italy	24	31	37	45	53	65
Cyprus	0	0	0	0	0	0
Latvia	0	0	0	4	5	2
Lithuania	0	0	0	0	0	0
Luxembourg	312	300	311	275	266	266
Hungary	32	32	34	35	24	39
Malta	0	0	0	0	0	0
Netherlands	139	219	203	199	197	213
Austria	54	56	57	65	73	181
Poland	0	0	0	0	1	1
Portugal	0	0	62	104	96	95
Romania	0	0	0	0	0	0
Slovenia	0	0	0	0	3	3
Slovakia	28	30	32	25	30	36
Finland	0	22	38	41	49	42
Sweden	149	150	163	169	212	233
United Kingdom	45	30	40	43	45	55
Iceland	82	82	62	53	45	*47*
Norway	84	84	92	99	120	132
Switzerland	288	281	299	315	345	355
Croatia	:	:	:	:	:	:
Turkey	0	0	0	0	0	0

Data Source: Eurostat



Note: Municipal Waste Incinerated presents the share of municipal solid waste collected by or on behalf of municipal authorities that are incinerated.
Incineration means thermal treatment of waste in an incineration or a co-incineration plant.

The levels of municipal waste incinerated vary over Member States, depending on the number of suitable incinerators and on national waste management policies. Denmark and Luxembourg have a high level of waste incineration. Countries that drastically reduced landfilling, as Germany and Sweden, have strongly increased their incineration capacity. The other alternative to landfill is recycling, but countries have mixed strategies. Belgium is the only country having achieved a significant reduction of waste going to landfill without increasing incineration.

Although more and more countries use incineration in their waste management, its contribution is still small in some of them. The establishment of new waste incinerators takes a lot of time and resources. For eleven Member States the use of incineration for the treatment of municipal waste is insignificant.

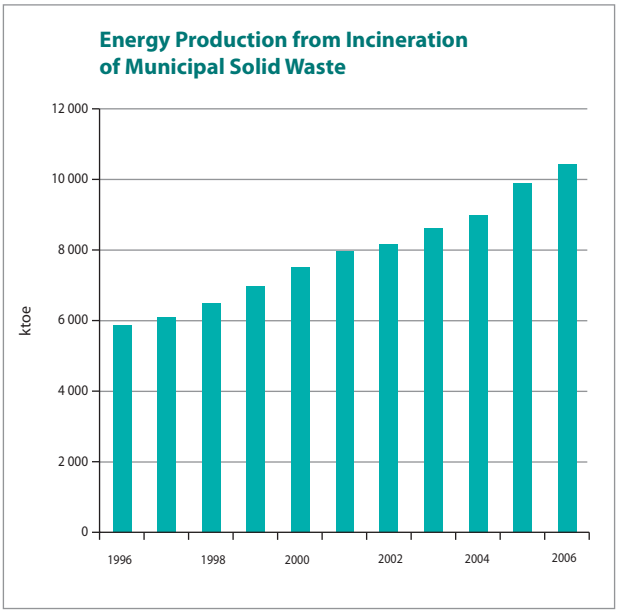
The data include both incinerators with and incinerators without energy recovery.

Energy Production from Incineration of Municipal Solid Waste

(ktoe)

	1996	2000	2004	2005	2006
EU-27	**5 837**	**7 482**	**8 964**	**9 858**	**10 399**
Belgium	325	323	454	490	589
Bulgaria	-	-	-	-	-
Czech Republic	:	88	106	97	95
Denmark	596	726	890	939	953
Germany	1 212	1 362	1 248	1 662	1 838
Estonia	-	-	-	-	-
Ireland	-	-	-	-	-
Greece	-	-	-	-	-
Spain	211	229	244	379	341
France	1 610	1 857	1 862	1 805	1 753
Italy	134	334	986	1 111	1 281
Cyprus	-	-	-	-	-
Latvia	-	-	-	-	-
Lithuania	-	-	-	-	-
Luxembourg	18	27	38	36	38
Hungary	57	58	33	66	94
Netherlands	889	1 189	1 325	1 355	1 324
Austria	114	149	181	171	264
Poland	0	2	1	16	39
Portugal	:	174	189	207	201
Romania	-	-	-	-	-
Slovenia	-	-	-	-	-
Slovakia	:	:	29	35	42
Finland	17	45	149	157	134
Sweden	392	498	635	736	765
United Kingdom	263	420	593	598	647
Iceland	1	2	2	2	2
Norway	112	128	183	191	195
Switzerland	353	435	782	839	-
Croatia	-	-	-	-	-
Turkey	-	-	-	-	-

Data Source: Eurostat



(ktoe)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
EU-27	5 837	6 076	6 465	6 953	7 482	7 947	8 120	8 588	8 964	9 858	10 399

Data Source: Eurostat

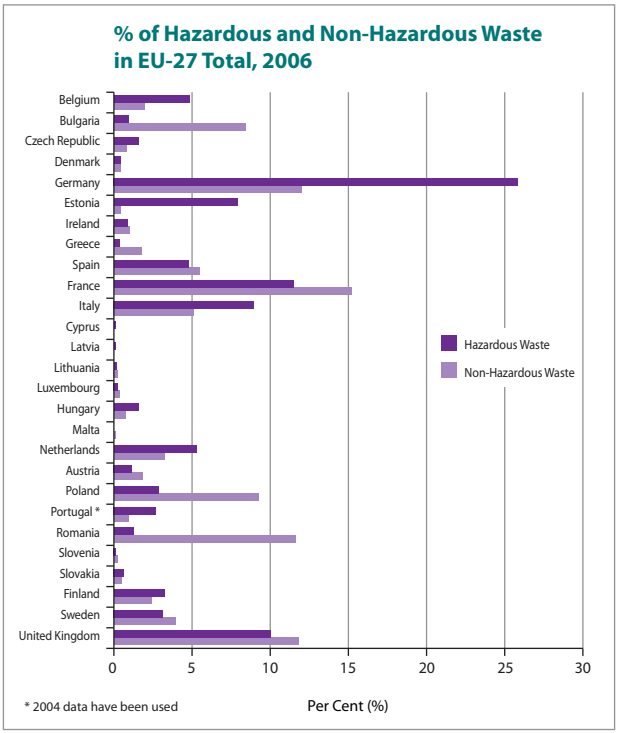
Incineration of municipal solid waste with energy recovery has developed significantly since 1995. From 1995 to 2006 the primary energy production from municipal waste incineration has almost doubled. The energy content was equivalent to 10 million tonnes of oil in 2006 and its share of the primary energy production from biomass and wastes was 12%. It can be noted that in 2006 practically half of the energy production from municipal waste incineration took place in Germany, France and the Netherlands. Noteworthy is also the increase of energy recovery from incineration of municipal solid waste in Italy, Sweden and Austria. In Italy particularly, the share was limited in 1995 and climbed to 12% of the EU-27 total in 2006. The data in the graph is shown in kilo-tonnes of oil equivalent (ktoe).

Total Waste Generated (Hazardous, Non-hazardous) for Year 2006

(thousand tonnes)

	Hazardous Waste	Non-Hazardous Waste	Total Waste
EU-27	**84 385**	**2 859 748**	**2 944 132**
Belgium	*4 039*	*55 313*	*59 352*
Bulgaria	785	241 704	242 489
Czech Republic	1 307	23 439	24 746
Denmark	372	12 449	12 821
Germany	21 705	342 081	363 786
Estonia	6 619	12 314	18 933
Ireland	*709*	*29 296*	*30 005*
Greece	274	50 857	51 131
Spain	4 028	156 918	160 947
France	9 679	435 074	444 753
Italy	7 465	147 560	155 025
Cyprus	80	1 790	1 870
Latvia	65	1 793	1 859
Lithuania	*127*	*7 538*	*7 665*
Luxembourg	234	9 353	9 586
Hungary	*1 300*	*20 987*	*22 287*
Malta	51	2 810	2 861
Netherlands	*4 436*	*92 949*	*97 385*
Austria	962	53 325	54 287
Poland	2 381	264 360	266 741
Portugal	:	:	:
Romania	1 041	330 822	331 863
Slovenia	116	5 919	6 036
Slovakia	533	13 969	14 502
Finland	2 711	69 495	72 205
Sweden	2 654	112 929	115 583
United Kingdom	8 448	337 695	346 144
Iceland	:	:	:
Norway	757	8 295	9 051
Croatia	:	:	:
Turkey	11	46 081	46 092

Data Source: Eurostat



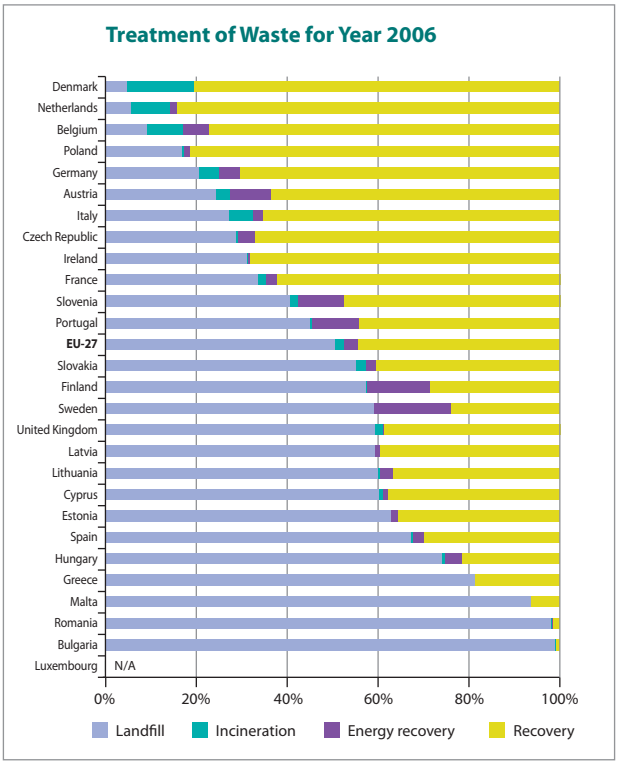
Around 2 900 million tonnes of waste were generated in EU-27 in 2006 according to reporting under the Waste Statistics Regulation. 25% of this amount comes from mining and quarrying activities and another 20% is construction waste; 55% are allocated to the remaining 17 economic activities and households. France, Germany, the United Kingdom and Romania reported the highest amounts of total waste generated, with more than 300 million tonnes in each country. The manufacturing industry produced the majority of hazardous waste. However, the ratio of hazardous waste to non hazardous waste is fairly scattered across the EU 27 Member States. The aggregated EU-27 share of hazardous waste is calculated as 2.9% of the total waste, however, in Estonia more than a third of the generated waste is classified as hazardous: Estonia is using oil shale for energy production, a process generating high volumes of hazardous waste.

Treatment of Waste for Year 2006

(thousand tonnes)

	Recovery	Energy Recovery	Incineration	Deposit onto or into land
EU-27	**1 147 073**	**78 083**	**50 695**	**1 304 671**
Belgium	23 141	1 740	2 373	2 771
Bulgaria	1 987	8	201	235 692
Czech Republic	11 354	650	69	4 893
Denmark	17 513	0	3 236	1 014
Germany	251 113	17 321	15 229	73 900
Estonia	6 208	257	0	10 972
Ireland	15 462	142	35	7 074
Greece	8 573	16	16	37 641
Spain	42 289	3 612	554	95 312
France	264 778	10 386	7 319	143 083
Italy	75 633	2 633	6 020	31 640
Cyprus	605	22	12	967
Latvia	456	11	1	683
Lithuania	2 119	170	18	3 487
Luxembourg	6 429	c	c	3 635
Hungary	3 217	572	70	11 120
Malta	152	0	0	2 304
Netherlands	*74 312*	*1 512*	*7 492*	5 057
Austria	29 879	4 378	1 399	11 473
Poland	136 879	2 382	681	28 600
Portugal	:	:	:	:
Romania	4 281	1 222	16	305 290
Slovenia	2 014	421	77	1 726
Slovakia	5 075	260	289	6 909
Finland	18 590	9 088	132	37 430
Sweden	25 938	18 613	105	64 372
United Kingdom	108 937	54	5 273	166 679
Iceland	:	:	:	:
Norway	3 233	1 314	339	2 777
Croatia	:	:	:	:
Turkey	1 464	0	29	39 192

Data Source: Eurostat



Countries exhibit a wide variety of policies for the treatment of waste. Data from the first reporting under the Waste Statistics Regulation shows that new EU Member States still rely very much on disposal of waste by deposit/land treatment. As also reported for the sub-category municipal waste, the lowest rates with less than 20% of total waste going to landfill are reported by Denmark, the Netherlands, Belgium and Poland.

Recovery, including energy recovery from incineration, has gained a more important role in a majority of Member States and accounts for increasing shares of the treatment of total waste.

Recycling Rate for Packaging Waste

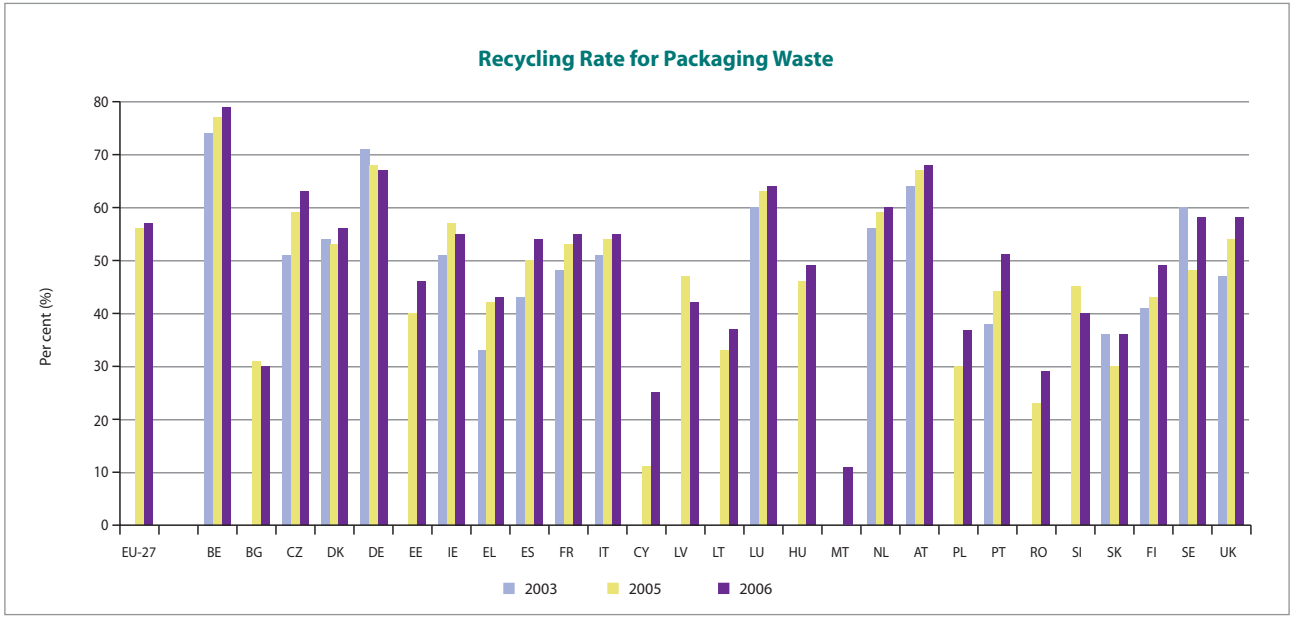
Per cent (%)

	2001	2002	2003	2004	2005	2006
EU-27	**:**	**:**	**:**	**:**	**56**	**57**
Belgium	71	70	74	76	77	79
Bulgaria	:	:	:	:	31	30
Czech Republic	:	29	51	58	59	63
Denmark	57	57	54	53	53	56
Germany	76	74	71	70	68	67
Estonia	:	:	:	36	40	46
Ireland	27	35	51	56	57	55
Greece	33	33	33	38	42	43
Spain	44	44	43	47	50	54
France	44	45	48	51	53	55
Italy	46	51	51	53	54	55
Cyprus	:	:	:	22	11	25
Latvia	:	:	:	46	47	42
Lithuania	:	:	:	33	33	37
Luxembourg	57	57	60	61	63	64
Hungary	:	37	:	43	46	49
Malta	:	:	:	:	:	11
Netherlands	56	57	56	59	59	60
Austria	64	66	64	66	67	68
Poland	:	:	:	28	30	37
Portugal	38	36	38	41	44	51
Romania	:	:	:	:	23	29
Slovenia	:	:	:	34	45	40
Slovakia	:	:	36	38	30	36
Finland	47	49	41	40	43	49
Sweden	63	65	60	50	48	58
United Kingdom	42	44	47	50	54	58

Data Source: European Commission, DG Environment - Reports on the implementation of Community waste legislation

The European Union has set targets for the recycling of packaging waste (Recycling does not include energy recovery by the use of waste as a fuel).

In 2001, 25% of all packaging put on the market had to be recycled, and all the then 15 EU Member States met the objective. For 2008 the recycling target for old Member States is set to 55%. For new Member States special transition periods apply. In 2006 twelve countries met the 2008 objective, and many others were coming closer. Highest recycling rates are reported by Belgium, followed by Austria and Germany. However, the figures also suggest that some countries with a high recycling rate have problems to further increase or maintain this high level.


Recycling Rate for Packaging Waste
Per cent (%)
80
70
60
50
40
30
20
10
0
EU-27
BE
BG
CZ
DK
DE
EE
IE
EL
ES
FR
IT
CY
LV
LT
LU
HU
MT
NL
AT
PL
PT
RO
SI
SK
FI
SE
UK
2003
2005
2006

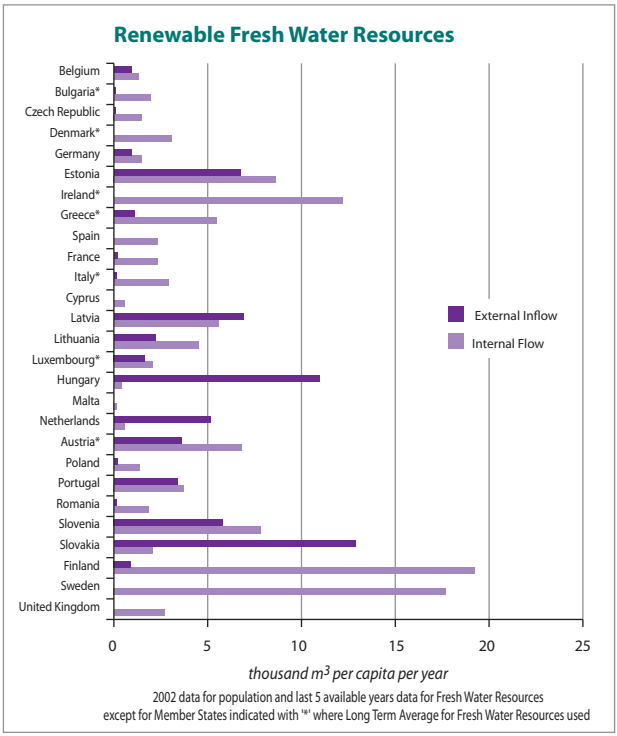
Renewable Fresh Water Resources

(10^9 m^3 per year)

	1990	1995	2000	2001	2002	2003	2004	2005	LTAA
Belgium	:	21.6	25.2	30.0	26.1	12.9	:	:	20.6
Bulgaria	:	:	:	:	:	:	:	:	15.8
Czech Republic	10.0	18.2	15.0	16.2	24.1	11.9	12.8	15.6	16.0
Denmark	:	:	:	:	:	:	:	:	16.3
Germany	165.0	227.0	204.0	245.0	270.0	102.0	174.0	:	188.0
Estonia	27.2	22.6	18.8	23.2	14.4	:	:	:	21.1
Ireland	:	:	:	:	:	:	:	:	47.5
Greece	:	:	:	:	:	:	:	:	72.0
Spain	112.6	73.5	64.4	136.8	71.5	125.1	91.1	57.9	111.1
France	:	:	:	:	:	:	:	:	186.3
Italy	172.0	:	:	:	:	:	:	:	175.0
Cyprus	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.5
Latvia	55.2	39.3	33.7	41.9	23.7	18.2	32.9	30.2	36.4
Lithuania	30.2	26.0	24.2	25.2	24.5	16.8	:	:	24.5
Luxembourg	1.8	1.7	:	:	:	:	:	:	*1.6*
Hungary	78.2	123.0	121.7	121.8	132.0	83.5	120.0	:	120.0
Malta	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	:
Netherlands	71.3	109.3	105.4	118.6	119.0	65.8	78.9	74.8	89.7
Austria	:	:	:	:	:	:	:	:	84.0
Poland	43.3	61.6	71.0	70.1	73.4	47.8	50.4	56.7	63.1
Portugal	:	:	:	:	:	:	:	:	73.6
Romania	22.6	37.3	35.5	38.3	39.9	30.2	40.0	63.8	42.3
Slovenia	30.4	31.5	32.0	27.7	26.6	18.4	34.1	29.3	32.1
Slovakia	71.7	87.5	91.1	*90.8*	97.6	59.5	71.3	82.2	80.3
Finland	90.5	109.0	121.0	102.0	81.7	88.2	142.2	120.8	110.0
Sweden	180.0	167.3	231.3	187.7	130.4	145.3	164.6	161.8	179.0
United Kingdom	184.8	164.0	224.9	160.7	203.0	116.0	173.9	157.1	175.3
Iceland	:	:	:	:	:	:	:	:	170.0
Norway	:	437.0	474.7	371.9	356.6	368.5	383.7	458.5	390.8
Switzerland	41.5	63.6	55.2	67.8	50.6	47.9	44.3	43.2	53.3
Turkey	:	:	:	:	:	:	:	:	234.3

LTAA: Long Term Annual Average (>20 Years)

Data Source: Eurostat



Renewable fresh water resources for any given country are made up of two components: "external inflow", which is the inflow of water from neighbouring territories, either at the surface (river flow) or subsurface (groundwater flow), and the "internal flow", which is the precipitation (all forms) minus the evaporation from surfaces and the evapotranspiration by plants.
The amounts available per capita are a combined effect of a country's climate, its hydrology, its geography and its population density.

The absolute values of this indicator vary among countries over more than one order of magnitude, with the relative share of both constituents being extremely different. The external inflow per capita is high for relatively small countries with large rivers passing through the territory, like for Slovakia and Hungary in the Danube basin, the Netherlands at the mouth of the river Rhine, Portugal with major river inflow from Spain, Latvia with the Daugava or Slovenia with alpine rivers flowing in. In contrast, large amounts of precipitation-fed resources (internal flow) are available in sparsely populated humid countries such as Finland, Sweden and Estonia or Alpine countries, such as Slovenia and Austria.

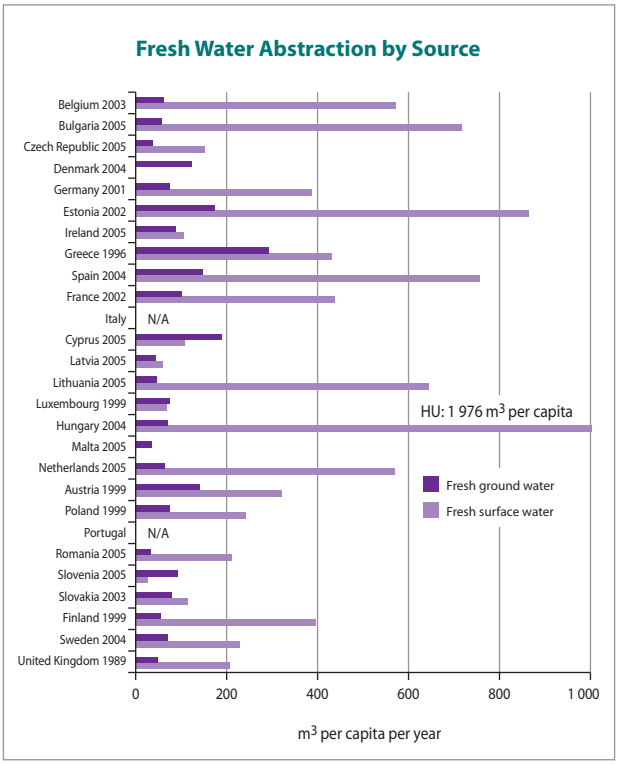
At the other end of the scale, some countries are relatively short in internal water resources due to their dense population (e.g. Belgium, Netherlands). The Southern European island states (Malta, Cyprus) face an especially difficult situation due to their semi-arid climate without any river inflow.

Total Fresh Water Abstraction

(million m³ per year)

	1970	1980	1990	2000	2003	2005
Belgium	:	:	:	7 538	6 654	:
Bulgaria	:	:	10 218	6 132	6 918	6 017
Czech Republic	:	3 622	3 623	1 918	2 116	1 949
Denmark	720	1 205	1 261	726	651	:
Germany	:	:	:	:	:	:
Estonia	:	3 129	3 215	1 471	:	:
Ireland	:	1 070	:	:	:	799
Greece	4 254	5 040	7 835	:	:	:
Spain	24 600	39 920	:	37 071	38 512	:
France	:	:	:	32 715	:	:
Italy	41 900	56 200	:	:	:	:
Cyprus	:	:	:	182	215	222
Latvia	:	:	:	283	254	238
Lithuania	:	:	4 311	3 578	3 327	2 365
Luxembourg	35	40	:	:	:	:
Hungary	2 980	4 805	:	18 878	18 629	:
Malta	16	20	:	19	15	14
Netherlands	*11 944*	*9 198*	*7 800*	:	10 443	10 326
Austria	:	3 342	3 807	:	:	:
Poland	10 113	15 131	15 164	:	:	:
Portugal	:	10 500	*7 288*	:	:	1 086
Romania	9 600	18 800	17 510	7 967	6 500	5 301
Slovenia	:	391	444	304	:	:
Slovakia	412	2 232	2 116	1 172	1 041	:
Finland	3 300	3 700	2 327	:	:	:
Sweden	*4 073*	4 106	2 968	2 688	2 676	:
United Kingdom	15 583	:	:	:	:	:
Iceland	:	108	:	163	165	165
Norway	:	:	:	:	:	:
Switzerland	:	2 589	2 665	2 564	2 588	2 507
Croatia	:	:	:	:	:	:
Turkey	:	:	*28 073*	43 650	:	:

Data Source: Eurostat



The per-capita-abstraction of fresh groundwater is relatively uniform throughout Europe, with the exception of a few Mediterranean countries (Cyprus, Greece) where abstraction is higher, mainly due to the climate-triggered demand.

The picture is completely different for surface water abstraction, which differs widely between countries, even neighbouring countries like Latvia and Lithuania. This is due to the use of surface water for cooling purposes in thermal power stations (generation of electricity, like in Belgium or in Germany) or for agriculture, as in Spain. Depending on the structure of a country's energy supply, water for cooling purposes can be the dominant driving force for surface water abstraction.

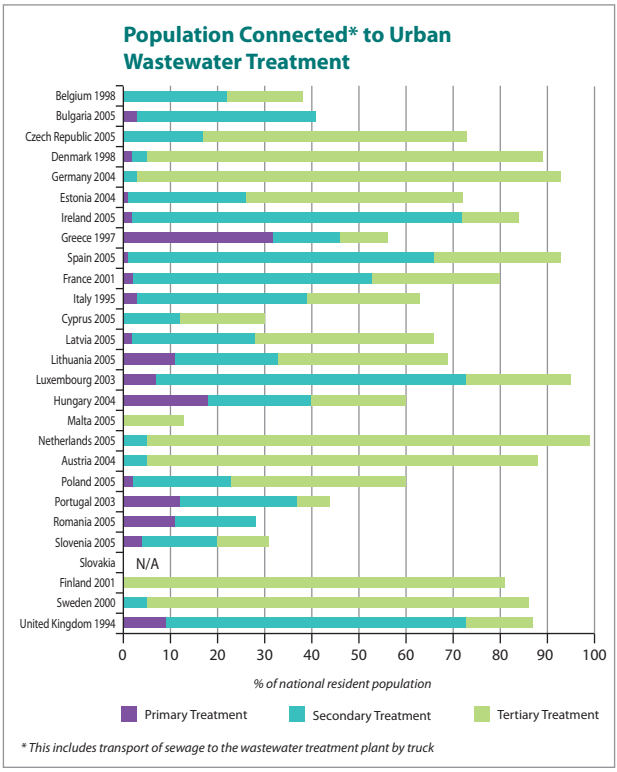
The table of total fresh water abstraction (page 154) shows that over the fifteen years covered by the table, there is a clear decrease in total abstraction in new Member States, where structural changes in economic sectors and in particular in manufacturing industries have led to reducing the production and using water in a more efficient way. In industrialized countries that experienced fewer structural changes (e.g. Sweden, Switzerland), total abstraction remained relatively stable.

Population Connected to Urban Wastewater Treatment with at least Secondary Treatment

% of national resident population

	1985	1990	1995	2000	2003	2005
Belgium	:	:	:	:	:	:
Bulgaria	:	:	35	36	38	38
Czech Republic	:	:	:	:	71	73
Denmark	62	71	85	:	:	:
Germany	:	:	84	:	:	:
Estonia	:	:	68	68	70	:
Ireland	:	21	34	:	:	82
Greece	9	:	22	:	:	:
Spain	16	:	37	80	:	92
France	:	:	:	:	:	:
Italy	:	:	60	:	:	:
Cyprus	:	:	8	15	23	30
Latvia	:	:	:	:	68	64
Lithuania	:	:	:	:	28	58
Luxembourg	:	:	68	:	88	:
Hungary	17	15	18	30	39	:
Malta	:	13	13	13	13	13
Netherlands	74	92	97	99	98	99
Austria	58	67	74	:	:	:
Poland	:	:	34	50	56	58
Portugal	:	11	:	:	32	:
Romania	:	:	:	:	:	17
Slovenia	:	:	:	12	18	27
Slovakia	:	:	:	:	:	:
Finland	:	76	77	80	:	:
Sweden	:	:	:	86	86	86
United Kingdom	:	:	:	:	:	:
Iceland	:	0	0	0	1	2
Norway	34	44	52	51	56	57
Switzerland	84	90	94	96	:	97
Turkey	:	:	3	17	19	:

Data Source: Eurostat



The level of treatment of the wastewater before discharge and the sensitivity of the receiving waters affects the impact it has on the aquatic system. According to the Urban Wastewater Treatment Directive, urban wastewater in sensitive areas should receive tertiary treatment, whereas urban wastewater in less sensitive areas should receive at least secondary treatment.

Although not the whole of EU-27 territories is covered by urban wastewater collection systems, an average of around 70% of the wastewater receives at least secondary treatment. Germany, Spain and the Netherlands (as well as Switzerland) apply at least secondary treatment to the wastewater for more than 90% of their population. Moreover, in Denmark, Germany, the Netherlands, Austria, Finland and Sweden tertiary treatment is provided for the wastewater of more than 80% of their population. On the other hand, most water treatment is of only primary level in Greece, as illustrated in the above graph.

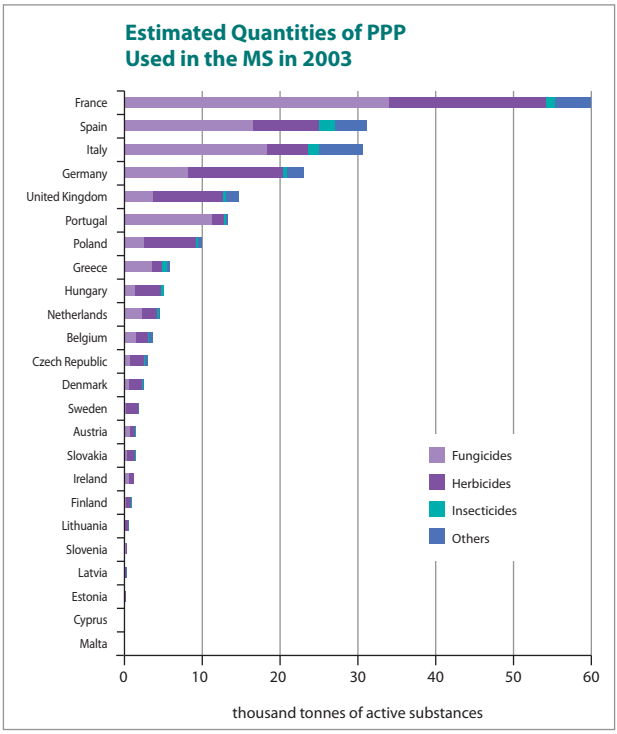
Estimated Used Quantities of Plant Protection Products

(tonnes of active substances)

Type	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Fungicides	133 584	148 335	136 501	149 774	150 974	154 919	146 690	140 395	130 380	130 487	128 699	107 401
Herbicides	51 996	48 924	51 081	57 034	57 864	64 405	69 962	64 202	90 539	88 515	90 068	80 381
Insecticides	6 039	5 773	6 422	6 277	5 741	5 888	6 118	6 603	9 610	8 759	8 782	7 784
Other PPPs	1 990	2 465	3 484	3 220	3 067	16 765	19 464	20 716	21 773	22 368	22 084	20 408
Total	193 609	205 497	197 487	216 304	217 647	241 976	242 234	231 917	252 302	250 129	249 634	215 974

EU-15 data 1992-1999, EU-25 data 2000-2003

Data Source: Eurostat



The statistics on pesticides collected by Eurostat relate to plant protection products (PPP), which are mainly used in agriculture. Sales statistics provided by the Member States on a voluntary basis give only a broad picture of PPP use in the Member States.

A proper assessment of the risk associated with PPP can only be done with reliable use data. Thanks to a grant to the European Crop Protection Association detailed estimates of PPP use by country, crop and category are now available for EU-15 from 1992 to 2003 and for EU-25 from 2000 to 2003. Sales and estimated use data show similar trends with a constant difference of nearly 30% between both sets of data. The huge impact of fungicides -and among them of sulphur used to protect vines- on the overall PPP consumption is evident. A detailed analysis confirms that beside the country size some crops have a clear influence on the total amount of PPP used: grapes for fungicides, cereals for herbicides and olives, citrus or fruit trees for insecticides.

To allow a more in-depth risk analysis, in the context of its Thematic Strategy on the Sustainable Use of Pesticides, the Commission is proposing to adopt a Regulation aiming at regular collection of comparable PPP use data.

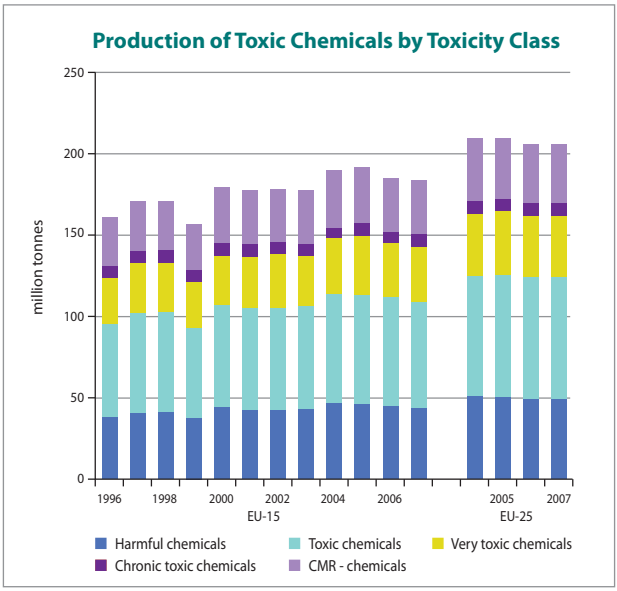
Production of Toxic Chemicals by Toxicity Class

(million tonnes)

	EU-15 Total												EU-25 Total			
Toxicity Class	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2004**	**2005**	**2006**	**2007**
CMR - chemicals *	30	30	30	28	34	33	32	33	35	34	33	33	37	37	36	36
Chronic toxic chemicals	7	8	8	7	8	7	8	7	7	8	7	8	8	8	8	8
Very toxic chemicals	29	30	30	29	30	32	33	31	34	36	33	34	38	39	38	39
Toxic chemicals	57	62	62	55	63	63	63	63	67	67	67	65	74	75	75	74
Harmful chemicals	38	40	41	37	44	42	42	43	47	46	45	44	51	50	49	49
Production volume of toxic industrial chemicals	160	171	171	154	181	177	178	177	189	189	186	183	208	209	207	206
Total volume of chemicals produced	259	274	275	248	301	284	267	270	310	314	316	317	345	350	351	354

* Confidential data have been excluded, but make no significant difference to the result.

Data Source: Eurostat 2008



Definition: This indicator presents the trend in **aggregated production volumes of toxic chemicals,** broken down into five toxicity classes. The toxicity classes, beginning with the most dangerous, are: Carcinogenic, mutagenic and reprotoxic (CMR-chemicals); Chronic toxic chemicals; Very toxic chemicals; Toxic chemicals and chemicals classified as harmful.

There are some 30 000 man-made chemicals currently in use in the EU, which are produced or imported in quantities over 1 tonne per year. Since June 2007 the new EU chemicals policy, known as REACH (**R**egistration, **E**valuation, **A**uthorisation and restriction of **CH**emicals) is in force: Basic information on toxicological properties of chemicals, their use patterns and quantities on the market will become available in the coming years. An important objective of REACH is to reduce risks by substitution of hazardous by less hazardous substances.

This indicator monitors progress in shifting production from the most toxic chemicals to less toxic classes (The indicator does not provide information on the risk from the use of chemicals: Production and consumption are not synonymous with exposure, as some chemicals are handled in closed systems, or as intermediates in controlled supply chains).

Between 1996 and 2007 the total production of chemicals has grown by 22% (EU-15).
The production of chemicals classified as toxic increased by 18% between 1996 and 2005 and decreased slightly (-3%) in 2006 / 07. Over the last 12 years statistics highlight the steady growth of total chemicals production volume.
The share of toxic chemicals in the total production is around 58% in EU-15 and EU-25 in 2007.
The absolute production volumes of CMR chemicals remained stable at around 33 million tonnes (EU-15) and 36 million tonnes (EU-25).

Statistics available from 2004 onwards show that the 10 new Member States produce only around 10% of all toxic chemicals in EU-25. However, an in-depth analysis shows a steady growth of toxic chemicals production in these countries: +18%, with a strong increase for CMR chemicals (+33%). The share of toxic chemicals in the total production increased from 55% to 61% between 2004 and 2007.

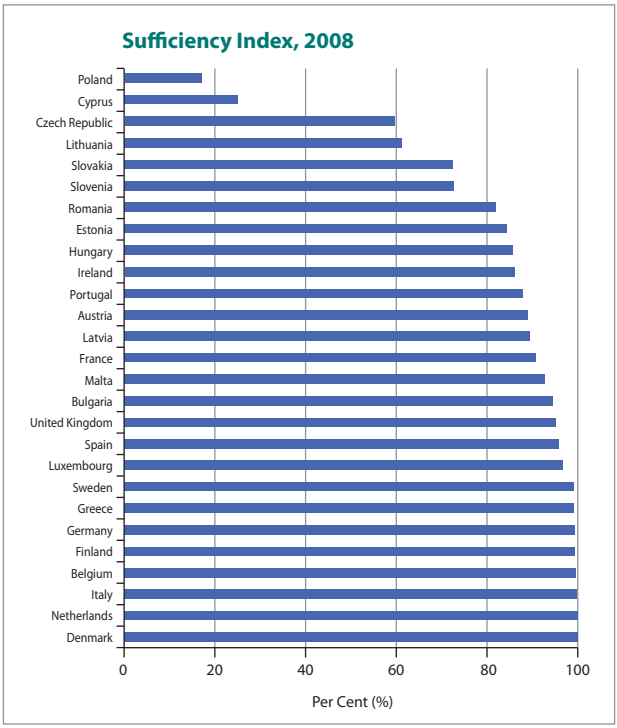
The coming years will show if the trend to a relative decoupling of toxic chemicals production from the growth of total output and Gross Domestic Product can be confirmed.

Sufficiency of Site Designation Under the Habitats Directive

Per cent (%)

	2004	2005	2006	2007	2008
EU-27	:	:	:	:	:
Belgium	100	100	100	100	100
Bulgaria	:	:	:	:	94
Czech Republic	:	:	59	59	59
Denmark	99	99	100	100	100
Germany	26	93	99	99	99
Estonia	:	:	84	84	84
Ireland	86	86	86	86	86
Greece	99	99	99	99	99
Spain	93	94	95	95	96
France	74	74	91	91	91
Italy	98	98	99	100	100
Cyprus	:	:	46	25	25
Latvia	:	88	89	89	89
Lithuania	:	:	61	61	61
Luxembourg	97	97	97	97	97
Hungary	:	:	86	86	86
Malta	:	:	:	93	93
Netherlands	100	100	100	100	100
Austria	87	87	88	88	89
Poland	:	:	17	17	17
Portugal	82	82	88	88	88
Romania	:	:	:	:	82
Slovenia	:	72	73	73	73
Slovakia	:	65	72	72	72
Finland	68	69	69	69	99
Sweden	91	92	92	92	99
United Kingdom	93	93	93	93	95

Data Source: European Environment Agency / European Topic Centre on Biodiversity



This indicator is based on sites the Member States plan to designate as protected natural and semi-natural habitats to preserve wild fauna and flora according to the Habitats Directive. The data cover the percentage of total national terrestrial area, marine areas excluded. The sites are to be designated as Sites of Community Interest (SCI); other sites designated under the Birds Directive are Special Protected Areas (SPA). However, there is considerable geographical overlap between areas covered by the two Directives in many Member States. Both types of sites are also part of the NATURA 2000 network.

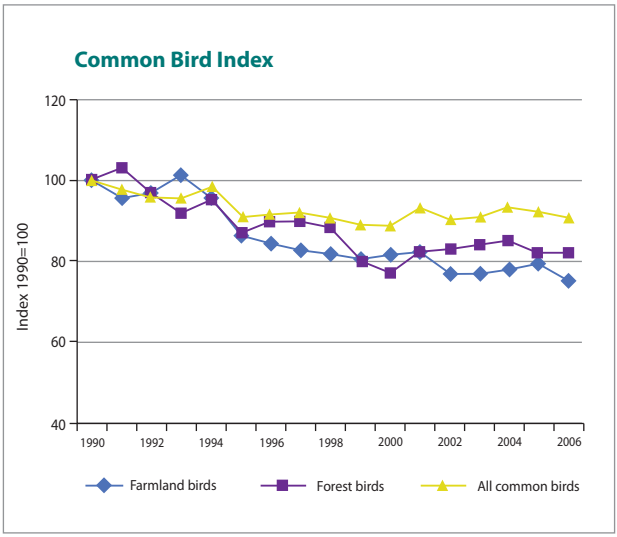
The site proposal phase is close to its finalisation now and will be concluded with the adoption of lists of SCIs for all six bio-geographical regions by the European Commission. Until then, updates of information are provided irregularly by the Member States and consolidated at least yearly by the European Environment Agency and its European Topic Centre for Biological Diversity. There has recently been significant progress in work on the establishment of NATURA 2000 with 823 areas covering a total surface area of approximately 97 000 km^2 added to the network protected under the Habitats Directive. Commission Decisions 13/11/2007, 25/1/2008 and 28/3/2008 updated and extended the lists of protected sites for the Atlantic, Continental, Boreal, Macaronesian and Mediterranean biogeographical regions and provided a first list for the Pannonian region, thus extending the network for the first time to the ten new Member States that joined the EU in 2004. By the end of 2008, there will be a second updating round of the lists of SCIs.

Common Birds

(Base Year 1990)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Farmland birds	100	96	97	101	96	86	84	82	81	80	81	82	77	76	78	79	75
Forest birds	100	103	97	92	95	87	90	90	88	80	77	82	83	84	85	82	82
All common birds	100	98	96	96	98	91	91	92	90	89	89	93	90	91	93	92	90

Data Source: EBCC/RSPB/BirdLife/Statistics Netherlands



This indicator is an aggregated index of population trend estimates of selected breeding bird species. The farmland birds depend on agricultural land for nesting or feeding; the indicator now covers 36 species. Likewise, the forest birds depend on forest ecosystems, with the indicator covering 29 species. The index of all common birds has recently been extended to cover 135 species.

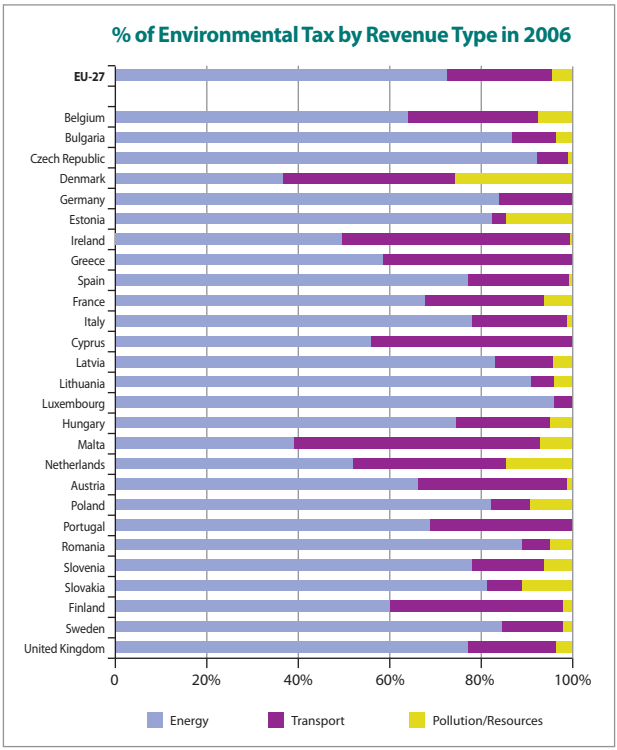
The past years have seen stabilizing trends. Both the farmland and the forest bird indices are fluctuating around 80% of the 1990 base year, while the common birds index stands at around 90% of its 1990 status.

Environmental Taxes by Revenue Type

(Millions of euro)

2006	Total environmental taxes	Energy taxes	Transport taxes	Taxes on Pollution/ Resources
EU-27	**297 247**	**215 805**	**67 940**	**13 503**
Belgium	6 857	4 390	1 944	523
Bulgaria	784	680	74	29
Czech Republic	2 939	2 713	198	28
Denmark	13 205	4 855	4 946	3 404
Germany	55 670	46 730	8 940	-
Estonia	293	241	9	43
Ireland	4 314	2 144	2 157	12
Greece	4 198	2 458	1 740	-
Spain	18 287	14 096	4 056	135
France	41 306	27 993	10 776	2 537
Italy	40 836	31 862	8 512	462
Cyprus	482	270	213	-
Latvia	385	320	49	16
Lithuania	433	394	23	17
Luxembourg	894	857	36	-
Hungary	2 575	1 918	532	126
Malta	172	67	93	12
Netherlands	21 887	11 363	7 349	3 175
Austria	6 391	4 221	2 098	72
Poland	7 501	6 168	636	697
Portugal	4 576	3 148	1 427	-
Romania	1 884	1 678	114	92
Slovenia	934	729	147	59
Slovakia	1 085	882	82	121
Finland	4 951	2 982	1 872	97
Sweden	8 532	7 209	1 158	165
United Kingdom	45 876	35 438	8 759	1 680
Norway	8 067	3 146	3 886	1 034

Data Source: Commission Services



Environmental taxes are a market-based instrument that aims to integrate the cost of adverse environmental impacts into prices. Through them, producers and consumers are given an incentive to assess the environmental consequences of their behaviour in their production and consumption decisions and thus encouraged to limit environmental pressures and use natural resources responsibly. However, environmental interests also have to be weighed against other concerns, such as competitiveness, regional policy and employment. Levels of environmental tax are therefore adjusted to reflect these other concerns. The concept of environmental taxes includes four categories; energy, transport, pollution and resource taxes. In 2006, energy taxes accounted for roughly 72% of total environmental taxes in EU 27. The second largest contributor to total environmental taxes in the EU comes from transport taxes. They include mainly taxes on the ownership of vehicles, such as tax on vehicle registration, road tax and tax on imports of vehicles. Only Malta, Ireland and Denmark had higher taxes on transport than on energy, but the share is also high in Cyprus and in Greece.

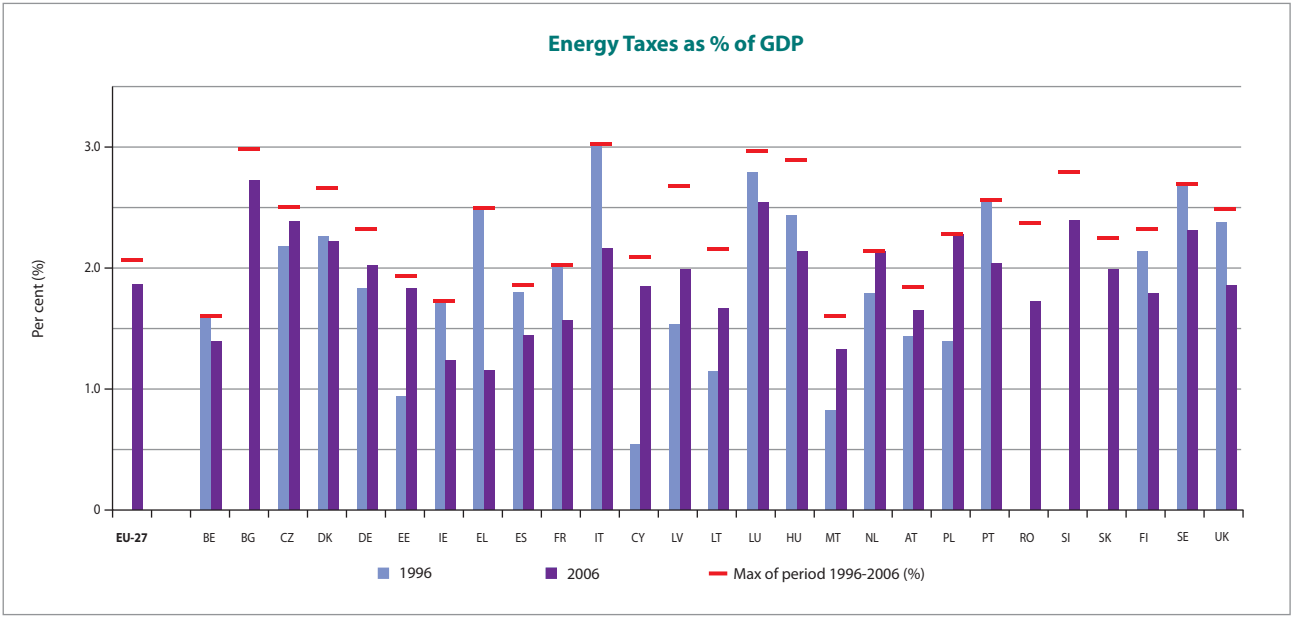
Energy Taxes as a % of GDP

Per Cent (%)

	1996	2000	2002	2004	2006	Max of period 1996-2006
EU-27	**:**	**:**	**2.0**	**2.0**	**1.9**	**2.1**
Belgium	1.6	1.4	1.4	1.5	1.4	1.6
Bulgaria	:	2.3	2.0	3.0	2.7	3.0
Czech Republic	2.2	2.2	2.2	2.4	2.4	2.5
Denmark	2.3	2.5	2.6	2.5	2.2	2.7
Germany	1.8	2.0	2.2	2.2	2.0	2.3
Estonia	0.9	1.3	1.5	1.8	1.8	1.9
Ireland	1.7	1.4	1.3	1.3	1.2	1.7
Greece	2.5	1.6	1.4	1.3	1.2	2.5
Spain	1.8	1.7	1.7	1.6	1.4	1.9
France	2.0	1.8	1.8	1.7	1.6	2.0
Italy	3.0	2.6	2.3	2.2	2.2	3.0
Cyprus	0.5	0.7	1.0	2.1	1.8	2.1
Latvia	1.5	1.8	1.8	2.1	2.0	2.7
Lithuania	1.1	1.8	2.0	1.8	1.7	2.2
Luxembourg	2.8	2.7	2.7	3.0	2.5	3.0
Hungary	2.4	2.4	2.2	2.1	2.1	2.9
Malta	0.8	1.4	1.4	1.3	1.3	1.6
Netherlands	1.8	2.0	1.9	2.0	2.1	2.1
Austria	1.4	1.6	1.7	1.8	1.6	1.8
Poland	1.4	1.8	2.0	2.1	2.3	2.3
Portugal	2.6	1.6	2.1	2.2	2.0	2.6
Romania	:	:	1.8	2.4	1.7	2.4
Slovenia	:	2.5	2.7	2.6	2.4	2.8
Slovakia	:	2.0	1.9	2.2	2.0	2.2
Finland	2.1	2.0	2.0	1.9	1.8	2.3
Sweden	2.7	2.4	2.5	2.4	2.3	2.7
United Kingdom	2.4	2.4	2.2	2.0	1.9	2.5
Norway	1.0	0.7	1.5	1.3	1.2	1.5

Data Source: Commission Services

In 2006 the members of EU-27 collected revenues from environmental taxes of 297 billion Euro. This is about 2.6% of GDP within EU-27. The percentage of energy taxes was 1.9% of GDP. Between 1996 and 2006, 10 countries have increased the revenues from energy taxes in relation to GDP. Taxes on energy consist of taxes on fuel, mineral products and production of electricity. With the exception of Malta and Cyprus the increase of energy taxes took place in countries located in the north of Europe such as in Estonia, Poland, Lithuania and Latvia. In 2006, Bulgaria had the highest share of energy tax in GDP with 2.7%, up from 2.3% in 2000, followed by Luxembourg, at 2.5% of GDP, and Czech Republic and Slovenia both at 2.4%.

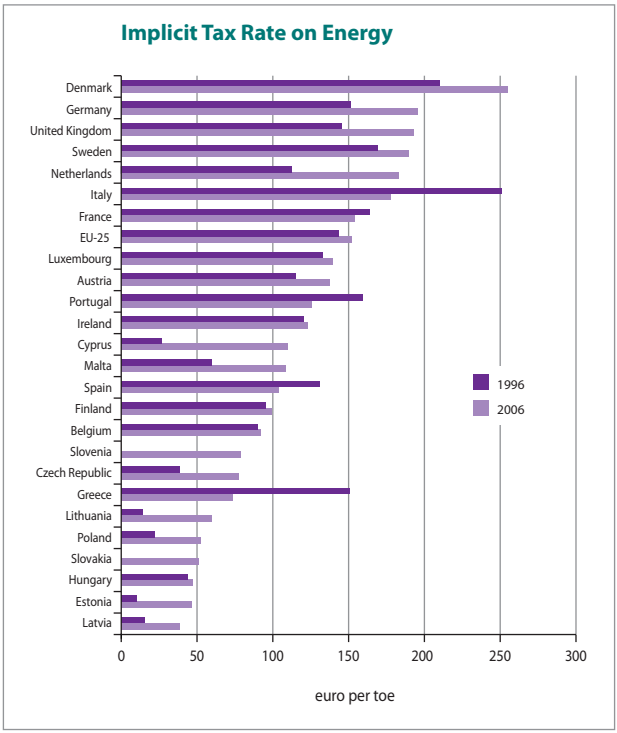

Energy Taxes as % of GDP
Per cent (%)
3.0
2.0
1.0
0
EU-27
BE
BG
CZ
DK
DE
EE
IE
EL
ES
FR
IT
CY
LV
LT
LU
HU
MT
NL
AT
PL
PT
RO
SI
SK
FI
SE
UK
1996
2006
Max of period 1996-2006 (%)

Implicit Tax Rate on Energy

(Euro per toe)

	1996	2000	2002	2004	2006
EU-25	**142.8**	**160.5**	**160.8**	**157.1**	**152.0**
Belgium	89.7	83.1	85.5	93.4	92.3
Czech Republic	38.8	43.2	57.7	61.3	77.5
Denmark	210.0	275.1	288.9	280.5	254.8
Germany	151.2	188.1	203.3	208.3	195.2
Estonia	9.9	21.0	28.2	37.6	46.3
Ireland	120.4	118.8	114.9	131.8	123.3
Greece	150.9	89.8	80.6	79.5	73.5
Spain	130.6	119.7	116.0	108.6	103.8
France	163.8	164.8	166.1	160.8	154.3
Italy	250.7	214.9	194.1	182.8	177.2
Cyprus	26.5	37.4	54.0	114.7	109.4
Latvia	15.8	35.7	33.8	37.9	38.9
Lithuania	14.4	46.3	61.8	63.8	60.0
Luxembourg	132.7	137.9	144.5	151.6	139.3
Hungary	43.8	42.1	45.3	46.1	47.0
Malta	59.5	121.8	115.3	101.9	108.8
Netherlands	112.3	148.3	150.2	159.3	183.1
Austria	115.4	135.9	141.7	150.0	137.7
Poland	22.3	34.9	43.2	39.6	52.3
Portugal	158.9	96.5	129.6	122.4	125.7
Slovenia	:	82.3	87.6	82.3	78.9
Slovakia	:	31.6	30.4	44.7	51.2
Finland	95.4	101.7	104.6	103.4	99.0
Sweden	168.9	173.7	178.2	189.7	189.8
United Kingdom	145.0	232.5	220.8	202.5	192.9

Data Source: Eurostat



The indicator 'Implicit Tax Rate (ITR) on Energy' measures the taxes levied on the use of energy which contributes to foster energy efficiency. ITR on energy is defined as the ratio between energy tax revenues and final energy consumption.

Energy tax revenues are based on the standard of the national accounts. This means that the taxes are reported based on the accrual principle.

It has to be noted that energy taxes represent about ¾ of all environmental tax revenues. The ITR on energy treats equally all kinds of energy consumption, regardless of their environmental impact.

At EU-25 level, an increase of the ratio can be noticed for the years 1995-2000, followed by a slight decrease of 5.3% until 2006. In 2006, Denmark displays the highest ratio by a wide margin, followed by Germany, UK, Sweden and the Netherlands.

The Eastern European Member States show lower levels of taxation; however one can also notice a general increase in their level.

EU-27 Greenhouse Gas Emissions by Economic Activity in 2004

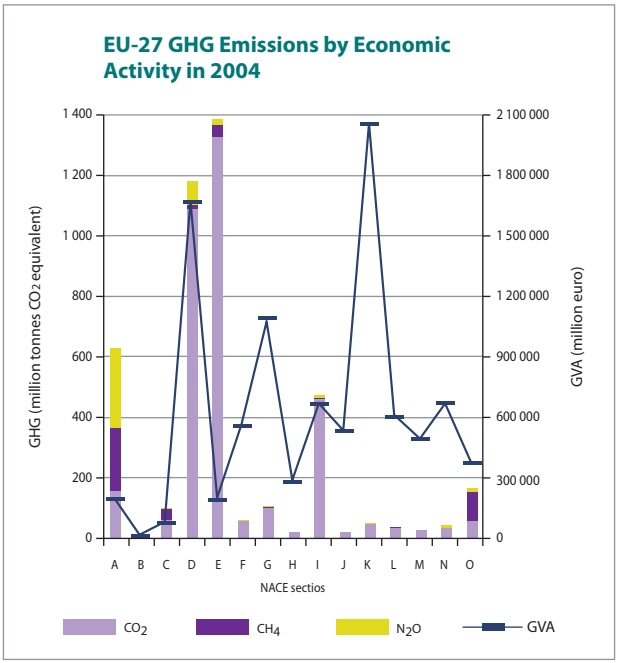
	GHG* (kilotonnes CO_2 equivalent)	GVA** (Million euro)	GHG*	CO_2	CH_4	N_2O
			(tonnes CO_2 equivalent/million euro)			
Total	**4 301 659**	**9 413 877**	**457**	**375**	**41**	**41**
NACE sections						
A	627 685	196 248	3 198	804	1 057	1 338
B	11 470	7 680	1 493	1 474	4	15
C	94 646	72 467	1 306	871	426	9
D	1 177 258	1 658 678	710	657	6	47
E	1 382 227	192 197	7 192	6 920	189	83
F	62 073	553 769	112	109	1	3
G	105 238	1 084 551	97	94	1	2
H	22 230	278 332	80	78	0	1
I	471 838	672 897	701	686	3	12
J	20 877	525 499	40	39	0	1
K	49 708	2 062 289	24	24	0	0
L	38 539	600 493	64	60	4	1
M	29 636	484 049	61	60	0	1
N	42 415	657 173	65	55	0	9
O	165 819	367 556	451	154	270	27

** GHG comprises CO_2, CH_4 and N_2O; no data for the other Kyoto GHG*

*** GVA at current prices, date of extraction: Aug 2008*

Data Source: Eurostat

Note: NACE: "**N**omenclature statistique des **A**ctivités économiques dans la **C**ommunauté **E**uropéenne". For definitions of the sections see Glossary.



Greenhouse gas [GHG, which for the purpose of this publication includes carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4)] emissions and environmental pressure can be analysed by economic activity given by NACE sections. NACE is the statistical classification of economic activities in the European Community. In 2004, section E (Electricity, gas and water supply) represented 32% of GHG emitted by economic activities. Together with section D (Manufacturing), these economic activities accounted for 59% of GHG emissions. The environmental pressure due to GHG emissions from economic activities can be measured by the ratio between the GHG emissions and the Gross Value Added (GVA). It was considerably higher for section E than for all other sections: 7 192 tonnes of CO_2 equivalent per million Euro of GVA, followed by sections A-B (Agriculture, hunting and forestry, and Fishing) with 4 692 tonnes, section C (Mining and quarrying) with 1 306 tonnes, section D (Manufacturing) with 710 tonnes, and section I (Transport, storage and communication) with 701 tonnes of CO_2 equivalent per million Euro of GVA. The environmental pressure due to methane (CH_4) is more important in sections A and C with total methane emissions being respectively 1 057 and 426 tonnes of CO_2 equivalent per million Euro of GVA; for nitrous oxide (N_2O), the environmental pressure concerns almost exclusively the Agriculture sector. On the other hand, the economic performance in relation to the environmental pressure due to GHG emissions is quite favourable in sections F to N (excluding section I). In all these NACE sections, the environmental pressure is relatively small and the GVA is relatively high. For further information about GVA and NACE including a description of the NACE sections, please consult the Glossary in page 180.

Increment and fellings in forests available for wood supply, 2005

	Forest & OWL*		Forest available for wood supply		Net Annual Increment		Fellings		Fellings as percent of net annual Increment
	1000 ha	% of land area	1000 ha	% of forest	1000 m^3 o.b.	m^3 o.b./ha	1000 m^3 o.b.	m^3 o.b./ha	%
EU-27 **	**177 015**	**42**	**129 175**	**73**	**764 007**	**6**	**460 792**	**4**	**60**
BE	698	23	667	96	5 289	8	4 475	7	85
BG	3 678	34	2 561	70	14 120	6	5 768	2	41
CZ	2 647	34	2 518	95	20 500	8	17 190	7	84
DK	636	15	385	61	5 176	13	1 837	5	35
DE ***	11 076	32	10 984	99	122 000	11	60 770	6	50
EE	2 358	56	2 090	89	11 015	5	5 730	3	52
IE	710	10	656	92	:	:	:	:	:
EL	6 532	51	3 456	53	3 813	1	1 842	1	48
ES	28 214	57	10 479	37	28 589	3	19 093	2	67
FR	17 262	31	14 743	85	102 456	7	56 623	4	55
IT	11 026	37	8 922	81	38 320	4	10 105	1	26
CY	388	42	43	11	40	1	6	0	16
LV	3 150	51	2 844	90	16 500	6	11 290	4	68
LT	2 198	35	1 835	83	9 888	5	7 238	4	73
LU	88	34	86	98	650	8	249	3	38
HU	1 948	22	1 684	86	12 899	8	7 167	4	56
MT	0	1	-	-	:	:	-	-	-
NL	365	11	295	81	2 230	8	1 552	5	70
AT	3 980	48	3 354	84	31 255	9	18 797	6	60
PL ***	9 200	30	8 417	91	67 595	8	37 156	4	55
PT	3 867	42	2 009	52	12 900	6	13 286	7	103
RO	6 649	29	4 628	70	34 600	7	15 900	3	46
SI	1 308	65	1 155	88	7 277	6	3 203	3	44
SK	1 932	40	1 751	91	11 980	7	8 962	5	75
FI	23 311	77	20 004	86	92 860	5	64 526	3	69
SE	30 929	75	21 235	69	91 355	4	78 127	4	86
UK	2 865	12	2 375	83	20 700	9	9 900	4	48
IS	149	1	42	28	67	2	0	0	1
NO	12 000	39	6 499	54	23 954	4	11 119	2	46
CH	1 286	32	1 186	92	8 981	8	7 204	6	80
HR	2 481	44	2 033	82	7 423	4	4 600	2	62
TR	20 864	27	8 665	42	36 609	4	14 107	2	39

** OWL - Other wooded land*

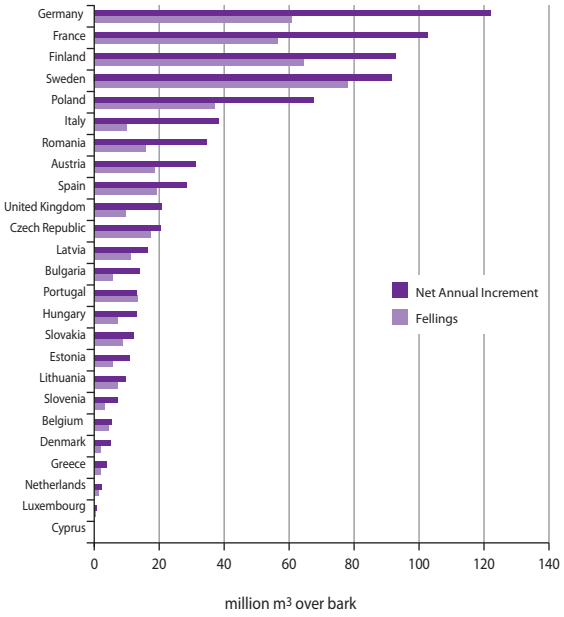
*** Totals exclude Ireland for net annual increment and fellings*

**** Data do not cover OWL*

o.b.: over bark, i.e. including the bark

Data Source: MCPFE/ECE/FAO State of Europe's Forests 2007; estimates use pre-2005 data

Increment and fellings in forests available for wood supply, 2005



The second most common type of land use in Europe is forestry. Forests and other wooded land cover 42% of the land area and are one of the most valuable multifunctional and renewable natural assets we have. The most densely forested Member States are Finland, Sweden and Slovenia, whereas the least forested are Malta, Ireland and the Netherlands.

We can make economic use of this asset without compromising its other functions; indeed, the area covered by forests continues to increase due to efforts on the part of forest services to maintain it, increase it by afforestation and harvest wood from forests available for wood supply in a sustainable manner. 60% of the annual increment in forests available for wood supply is currently harvested in the EU-27. This suggests that a certain increase in wood demand could be accommodated without negatively affecting the Community's forests. However, the amount of wood that could be sustainably mobilised depends on several factors, including age structure.

Forest Area Designated for Protective Functions, 2000 and 2005

	Protective forest area *				Total Forest Area			
	Soil, water and other ecosystem functions		Infrastructure and managed natural resources functions		Forests, not including other wooded land		Of which forests with a protective function	
	2000	2005	2000	2005	2000	2005	2000	2005
	(1000 ha)						(%)	
EU-27	***14 612***	***17 440***	***2 442***	***2 296***	**152 100**	**155 686**	***11***	***13***
BE	149	172	-	-	667	672	22	26
BG	328	424	232	146	3 375	3 651	17	16
CZ	148	154	241	241	2 637	2 647	15	15
DK	34	34	-	-	486	500	7	7
DE	2 981	3 775	:	:	11 076	11 076	*27*	*34*
EE	267	239	-	-	2 243	2 264	12	11
IE	-	-	:	:	609	669	:	:
EL	:	:	:	:	3 601	3 752	:	:
ES	2 518	2 350	-	-	16 436	17 915	15	13
FR	425	441	:	:	15 351	15 554	*3*	*3*
IT	437	499	61	:	9 447	9 979	5	5
CY	-	-	-	-	173	174	-	-
LV	114	130	-	-	2 977	3 035	4	4
LT	293	319	13	22	2 020	2 121	15	16
LU	1	1	-	-	87	87	1	1
HU	182	150	36	32	1 866	1 948	12	9
MT	-	:	:	:	:	:	:	:
NL	-	-	-	-	360	365	-	-
AT **	663	682	165	280	3 838	3 862	22	25
PL	1 757	1 938	1 666	1 326	9 059	9 200	38	35
PT	53	216	:	1	3 583	3 783	1	6
RO	:	1 601	:	225	6 366	6 391	:	29
SI	74	95	13	13	1 239	1 264	7	9
SK	303	334	14	10	1 921	1 932	16	18
FI	680	680	-	-	22 475	22 130	3	3
SE	3 200	3 200	-	-	27 415	27 871	12	11
UK	5	5	-	-	2 793	2 845	-	-
ID	4	5	-	-	36	43	10	12
NO	2 590	2 593	-	-	9 301	9 387	28	28
CH ***	1 199	1 220	700	700	1 199	1 220	100	100
HR	52	49	:	:	2 129	2 135	*2*	*2*
TR	1 194	1 119	:	:	10 052	10 175	*12*	*11*

* *According to MCPFE assessment guidelines*

** *Data for infrastructure and managed natural resources cover forests and other wooded land*

*** *The functions overlap*

Data source: MCPFE/ECE/FAO State of Europe's Forests 2007

Not all forests in the EU-27 are available for wood supply. Certain stands are protected, e.g. in national parks, where the trees themselves are protected, as well as all the habitats they provide for other plants and animals. Other stands have protective functions, e.g. for water resources or to prevent erosion (soil, water and other ecosystems functions) and to prevent landslides and avalanches in mountainous areas (infrastructure and managed natural resources functions). Forests growing on very steep slopes can thus protect other forests growing below them, settlements, roads and railways in ways that would be very expensive to replace by man-made structures.

On average, 13% of forest areas in the EU-27 have protective functions.

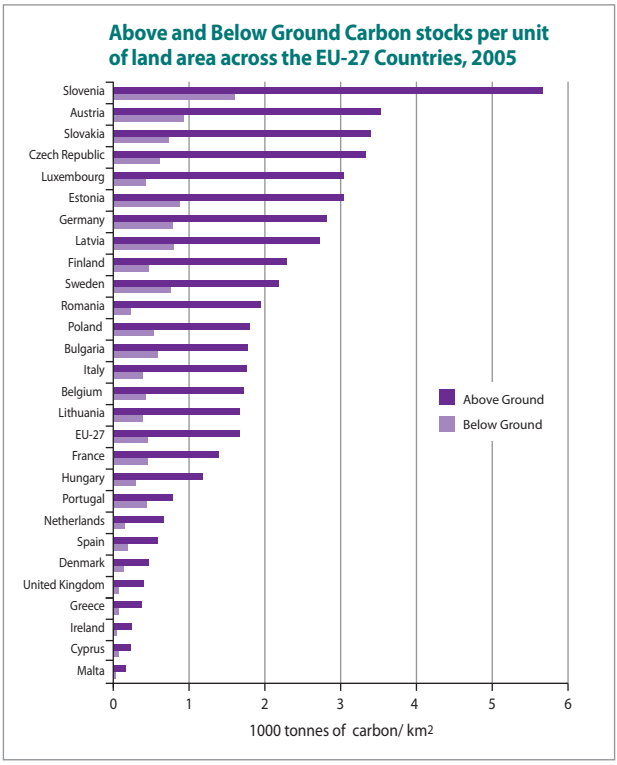
Carbon stock in woody forest biomass, 2005

(1 000 tonnes carbon)

	Carbon stock in woody biomass				
	Of forests				Of other wooded land
	Total	Above ground	Below ground	Deadwood	
EU-27	**:**	**7 186 764**	**1 947 594**	**:**	**:**
BE	66 691	52 248	13 062	1 381	:
BG	:	197 000	66 000	:	:
CZ	316 692	259 286	47 779	9 628	:
DK	:	20 032	5 939	:	:
DE	:	1 005 000	278 000	:	:
EE	179 182	131 664	38 274	9 245	1 947
IE	20 000	16 500	3 300	200	:
EL	:	49 000	9 700	:	:
ES	:	297 000	95 000	:	:
FR	:	879 218	286 293	:	:
IT	715 585	521 189	114 798	79 598	68 633
CY	2 760	2 090	670	0	:
LV	243 280	169 561	49 787	23 932	:
LT	139 400	104 800	24 100	10 500	900
LU	9 235	7 860	1 100	275	:
HU	169 026	109 593	27 398	32 035	:
MT	:	50	10	:	:
NL	27 780	22 150	4 450	1 180	:
AT*	375 500	293 500	77 500	4 500	:
PL	736 199	561 974	168 020	6 205	:
PT	:	72 800	41 000	:	:
RO	:	*448 000*	*50 000*	:	:
SI	171 210	114 570	32 490	24 150	1 270
SK	218 600	167 000	35 900	15 700	:
FE	855 857	696 342	144 515	15 000	4 455
SE	1 233 691	893 339	315 510	24 842	22 848
UK	115 100	95 000	17 000	3 100	600
IS	1 504	1 107	277	120	1 248
NO	380 557	285 499	74 977	20 081	16 646
CH	158 000	124 000	30 000	4 000	:
HR	219 400	152 200	40 200	27 000	:
TR	:	700 218	116 599	:	:

** Data cover forests and other wooded land*

Data source: MCPFE/ECE/FAO State of Europe's Forests 2007; estimates use pre-2005 data



The available data show that at least 9 134 million tonnes of carbon are stored in the EU-27's woody forest biomass. The amounts stored in similar biomass on other wooded land have only been estimated in certain Member States. Although it is known that further substantial amounts of carbon are stored in forest litter and in soils, information on these components is still very limited. As forest stands age, they grow less and less quickly and thus also store less carbon as the years go by. Harvesting more wood from forests allows young trees to fill the gaps and grow quickly, thereby increasing the amounts of carbon stored in a given stand.

Annex A: Glossary of Terms used in the Energy and Environment sections

Abstraction (of water):
Withdrawal of water from groundwater or surface water resources by technical means (e.g. pumping).

Acidifying substances:
The acidifying substances considered in this publication are sulphur dioxide (SO_2) and nitrogen oxide (NO_X) and ammonia (NH_3). Emissions of these gases are associated with the formation of acid rain.

Acid Equivalent:
In the concept of Acid Equivalents weighting factors are used to aggregate the emissions of acidifying substances and present a single figure for this in kilo tonnes acid equivalents. They represent an oversimplified approach to a very complex process of chemical interactivity. Acid equivalents are estimated as follows: sulphur dioxide * 1/32; nitrogen oxide * 1/46 and ammonia * 1/17.

Carcinogenic Substance:
A carcinogenic substance is a chemical which is capable of causing cancer. A cancer is a malignant tumour which can spread to other organs of the body. For the purpose of classification and labelling, and having regard to the current state of knowledge, such substances are divided into three categories:

Category 1: Substances known to be carcinogenic to man. There is sufficient evidence to establish a causal association between human exposure to a substance and the development of cancer.
Category 2: Substances which should be regarded as if they are carcinogenic to man. There is sufficient evidence to provide a strong presumption that human exposure to a substance may result in the development of cancer, generally on the basis of:
- appropriate long-term animal studies,
- other relevant information.

Category 3: Substances which cause concern for man owing to possible carcinogenic effects but in respect of which the available information is not adequate for making a satisfactory assessment. There is some evidence from appropriate animal studies, but this is insufficient to place the substance in Category 2.

For more details, see: Dangerous Substances Directive (67/548/EEC, as last amended in 2001), http://ec.europa.eu/environment/chemicals/

CHP:
See "Combined Heat and Power"

CO_2 Equivalent:
Emissions of some substances resulting from burning of fossil fuels and other activities like industrial processes or agriculture significantly change the composition of the atmosphere and cause the anthropogenic greenhouse effect: carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) and hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6). These substances have individual global warming potentials (GWP) ranging from 1 (CO_2) to 23 900 (SF_6). In order to aggregate the emissions of the different substances and present a single figure for the climate change issue they are expressed in CO_2 equivalents.

Cogeneration:
See "Combined Heat and Power"

Combined Heat and Power:
A combined heat and power (also referred to as a cogeneration or a CHP) unit is an installation in which heat energy released from fuel is transmitted to electrical generator sets which are designed and operated in such a way that energy is partly used for generating electrical energy and partly for supplying heat for various purposes. The thermal efficiency of a combined heat and power unit is significantly higher than that of a unit producing electricity only.

CMR Chemicals:
Carcinogenic substances (C), Mutagenic substances (M) and substances that can harm Reproduction (R) are called CMR-substances. Some substances in this group can cause several of these effects. Substances assigned CMR are jointly decided upon in the EU. In the work to reach a non-toxic environment CMR-substances are given priority. The long-term goal is that they must not be used at all.

Constant Price:
The constant price of a commodity is its price considered in constant terms, taking account of inflation.

CORINAIR – CORe INventory of AIR emissions:
This is a project performed since 1995 by the European Topic Centre on Air Emissions under contract to the European Environment Agency. The aim is to collect, maintain, manage and publish information on emissions into the air, by means of a European air emission inventory and database system. Before 1995 the CORINAIR project was developed under the CORINE programme of the EU (CO-oRdination d'INformation Environnementale, a programme established by Council Decision 85/338/EEC).

CRF – Common reporting format for source and sink categories:
The CRF is used by countries for reporting of greenhouse gas inventories since 2000 under the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and EU GHG Monitoring Mechanism (Decision 280/2004/EC). It is in line with the 1996 IPCC Guidelines (IPCC 19971), and is described in the Reporting guidelines (http://www.unfccc.int/resource/docs/cop5/07.pdf). The sources categories in the highest aggregated levels are the following:
CRF 1 Energy
CRF 2 Industrial Processes
CRF 3 Solvent and Other Product Use
CRF 4 Agriculture
CRF 5 Land-Use Change & Forestry
CRF 6 Waste
CRF 7 Other
Please note that the fuel combustion for energy use in the industry and in the agriculture as well as the waste incineration with energy use – all these emissions count to the CRF source and sink categories "Energy".

Current Price:
The current (or nominal) price of a commodity is its price considered in current terms, without taking account of inflation.

Energy Dependency:
Energy dependency shows the extent to which a country relies upon imports in order to meet its energy needs. It is calculated using the following formula: net imports / (gross inland consumption + bunkers).

Energy Intensity:
Energy intensity gives an indication of the effectiveness with which energy is being used to produce added value. It is defined as the ratio of Gross Inland Consumption of energy to Gross Domestic Product.

Environmental Protection Investments
Capital expenditures for new or adaptation of existing methods, technologies, processes, equipment (or parts thereof) designed to prevent or reduce the amount of pollution created at the source (e.g. air emissions, effluents or solid waste), thereby reducing the environmental impacts associated with the release of pollutants and/or with polluting activities.

Environmental taxes
An environmental tax is defined as a tax on an environmentally harmful tax base. The concept consists of the revenues from four types of taxes: energy-, transport-, pollution- and resource taxes. Carbon dioxide taxes are included under energy as they are often an integral part of general energy taxes. Excluded are general Value Added Tax (VAT) on environmentally harmful tax bases as well as royalty payments and other special taxes related to oil and gas extraction.

Final Energy Consumption:
Final energy consumption is the energy finally consumed in the transport, industrial, commercial, agricultural, public and household sectors. It excludes deliveries to the energy transformation sector and to the energy industries themselves.

Fluorinated gases (F-gases):
Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6) are greenhouse gases with a very high global warming potential. The main uses of HFCs are as refrigerants, cleaning solvents and foam blowing agents. PFCs are used in semi-conductor manufacture and as cleaning solvents, and SF_6 is used in high-voltage switch gear and magnesium production.

GCV:
See "Gross Calorific Value"

GDP:
See "Gross Domestic Product"

Global Warming Potential (GWP):
The global warming potential is the estimated potential of a greenhouse gas contributing to global warming in the atmosphere. It is based on its effect over a 100-year time horizon. These substances have individual GWP ranging from 1 (carbon dioxide), 21 (methane), 310 (nitrous oxide) to 23 900 (sulphur hexafluoride). Hydrofuorocarbons and perfluorocarbons comprise a large number of different gases that have different GWPs (IPCC, 1996).

Greenhouse Gases (GHG):
These emissions are reported under 1992 United Nations Framework Convention on Climate Change and for the EU member states under the Decision 280/2004/EC. According to the Kyoto Protocol anthropogenic emissions of the six greenhouse gases (the 'Kyoto basket') are aggregated using the global warming potential: carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O) and hydrofuorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6).

Gross Calorific Value:
The gross calorific value (GCV) is the total amount of heat released by a unit quantity of fuel, when it is burned completely with oxygen, and when the products of combustion are returned to ambient temperature. This quantity includes the heat of condensation of any water vapour contained in the fuel and of the water vapour formed by the combustion of any hydrogen contained in the fuel.

Gross Domestic Product:
The gross domestic product (GDP) is the value of the output of all goods and services produced within the borders of a country.

Gross Inland Consumption:
Gross inland consumption is the quantity of energy consumed within the borders of a country. It is calculated using the following formula: primary production + recovered products + imports + stock changes – exports – bunkers (i.e. quantities supplied to sea-going ships).

Gross Value Added (GVA):
It is the net result of output valued at basic prices less intermediate consumption valued at purchasers' prices. GVA is calculated before consumption of fixed capital. Intermediate consumption consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods and services may be either transformed or used up by the production process.

Hard Coal and Derived Products:
Hard coal and derived products include hard coal, patent fuels, hard coke, gasworks coke and coal semi-coke.

IPCC – Intergovernmental Panel on Climate Change

Kyoto base year:
In general, the base year it is 1990 for carbon dioxide, methane, nitrous oxide, and 1995 for the fluorinated gases (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride). Some countries have selected different base years: Bulgaria (1988), Hungary (average 1985–87), Poland (1988), Romania (1989) and Slovenia (1986).

Kyoto reduction targets:
In the first quantified emission limitation and reduction commitment period, from 2008 to 2012, the EU-15 has agreed to an 8% reduction in its greenhouse gas emissions compared to 1990. Individual targets for each of the EU-15 countries have been agreed under the EU burden sharing agreement (Council Decision 2002/358/EC4) which allows five countries (Greece, Ireland, Portugal, Spain and Sweden) to increase emissions, provided these are off set by reductions in the other Member States. The new EU Member States and candidate countries have differing targets under the Kyoto Protocol which became binding to its Parties worldwide in February 2005. No targets exist for Cyprus, Malta and Turkey.

Lignite and Derived Products:
Lignite and derived products include lignite, peat, brown coal briquettes and peat briquettes.

Mutagenic Substance:
A mutagenic substance is a chemical capable of producing a mutation or a chemical which gives rise to an enhanced occurrence of mutations. A mutation is a permanent change in the genetic material of cells. Effects on whole chromosomes may involve structural or numerical changes. A mutation in the germ cells in sexually reproducing organisms may be transmitted to the offspring. For more details, see: Dangerous Substances Directive (67/548/EEC, as last amended in 2001), http://ec.europa.eu/environment/chemicals/

NACE:
Nomenclature statistique des Activités économiques dans la Communauté Européenne; in English: Statistical classification of economic activities in the European Community. NACE is organised in sections and sub-sections.

Sections

A	Agriculture, hunting and forestry
B	Fishing
C	Mining and quarrying
D	Manufacturing
E	Electricity, gas and water supply
F	Construction
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods
H	Hotels and restaurants
I	Transport, storage and communication
J	Financial intermediation
K	Real estate, renting and business activities
L	Public administration and defence; compulsory social security
M	Education
N	Health and social work
O	Other community, social and personal service activities
P	Activities of households
Q	Extra-territorial organizations and bodies

Sub-sections

DA	Manufacture of food products, beverages and tobacco
DB	Manufacture of textiles and textile products
DC	Manufacture of leather and leather products
DD	Manufacture of wood and wood products
DE	Manufacture of pulp, paper and paper products; publishing and printing
DF	Manufacture of coke, refined petroleum products and nuclear fuel
DG	Manufacture of chemicals, chemical products and man-made fibres
DH	Manufacture of rubber and plastic products
DI	Manufacture of other non-metallic mineral products
DJ	Manufacture of basic metals and fabricated metal products
DK	Manufacture of machinery and equipment n.e.c.
DL	Manufacture of electrical and optical equipment
DM	Manufacture of transport equipment
DN	Manufacturing n.e.c

NAMEA – National Accounts Matrix including Environmental Accounts:

Data in page 168 are extracted from the New Cronos database, sub-theme Environmental Accounts in Eurostat. The central framework of NAMEA is the national accounts. The national accounts present the development of an economy over time. It shows not only economic activities but also the levels of an economy's productive assets and the wealth of its inhabitants at particular points in time. If environmental aspects were directly included in national accounts these would be overburdened with information. A satellite approach is therefore applied, where some conceptual freedoms exist for compiling the accounts. The satellite accounts, in this case the environmental accounts, can therefore be linked directly with relevant economic and environmental statistics and classifications and provide harmonised comparable accounts across any country applying this methodology. The NAMEA Air methodology follows the national accounts principle that all air emissions from the production processes (both mobile and stationary sources) should be allocated to the producer who creates value added with his products. NAMEA Air therefore follow the residential principle of the national accounts while the UNFCCC reporting presented in previous pages follows the territorial principle.

Natural Gas:
Natural gas occurs in natural underground deposits, and may or may not be associated with oil deposits. It contains essentially methane, but also small proportions of other gases. It also covers methane recovered in coal mines.

NCV:
See "Net Calorific Value"

Net Calorific Value:
The net calorific value (NCV) is the amount of heat released by a unit quantity of fuel, when it is burned completely with oxygen, and when the products of combustion are returned to ambient temperature. This quantity does not include the heat of condensation of any water vapour contained in the fuel nor of the water vapour formed by the combustion of any hydrogen contained in the fuel.

Nitrogen oxides (NO_X):
Nitrogen oxides (NO_X) mean nitric oxide and nitrogen dioxide, expressed as nitrogen dioxide.

NMVOC – Volatile organic compounds without methane:
Non-methane volatile organic compounds (NMVOC) are to be understood as all hydrocarbons which are volatile under ambient air conditions, excluding carbon monoxide, carbon dioxide, methane, halogenated carbons. It is a collective term comprising a large variety of compounds with widely diverging characteristics. Often is named also VOC (Volatile organic compounds).

NMVOC equivalent:
The emissions of ozone precursors can be aggregated using their ozone forming potential in NMVOC equivalent. This represents an oversimplified approach to a very complex process of chemical interactivity. The following weighting factors are applied to estimate the emissions in NMVOC equivalents: nitrogen oxides=1.22, volatile organic compounds without methane=1, carbon monoxide=0.11, methane=0.014 (de Leeuw 2002).

NFR – Nomenclature For Reporting:
The NFR is used by countries for reporting of air emissions under the United Nations Convention on Long-Range Transboundary Air Pollution (CLRTAP), the 1999 Gothenburg Protocol, and the EU national emission ceilings directive (NEC Directive 2001/81/EC). This nomenclature is based on SNAP (selected nomenclature for air pollution). In 1995, the European Topic Centre on Air Emissions (ETC/AE) developed the CORINAIR nomenclature further resulting in SNAP94 and in 1998 ETC/AE developed the nomenclature still further, resulting in SNAP97. The new NFR and the CRF are now widely compatible.

PM10 – the medium fraction particulate matter:
Particles which passes through a size-selective inlet with a 50% efficiency cut-off at 10 _m aerodynamic diameter (diameter of a spherical particle having a density of 1 gm/cm^3 that has the same inertial properties in the gas as the particle of interest).

PM10 equivalent:
To obtain the total particulate formation potential of air emissions, the sum of primary (direct emissions) and secondary (formation by photo-chemical reactions in the atmosphere) aerosols is calculated. The emissions are aggregated in the PM10 equivalent. The following weighting factors are used for aggregation: PM10=1, sulphur oxides=0.54, nitrogen oxides =0.88, ammonia=0.64 (de Leeuw, 2002).

Power Station Efficiency:
The efficiency of a thermal or nuclear power station is defined as the ratio between the output, i.e. the gross electricity generated, and the fuel input. In the case of a combined heat and power installation the output is the gross electricity generated plus the heat produced.

Primary Energy Production:

Primary energy production is the extraction of energy from a natural source. The precise definition depends on the fuel involved:

Hard coal, lignite: Quantities of fuels extracted or produced, calculated after any operation for removal of inert matter. In general, production includes the quantities consumed by the producer during the production process (e.g. for heating or operation of equipment and auxiliaries) as well as any quantities supplied to other on-site producers of energy for transformation or other uses.

Crude oil: Quantities of fuels extracted or produced within national boundaries, including off-shore production. Production includes only marketable production, and excludes any quantities returned to formation. Production includes all crude oil, natural gas liquids (NGL), condensates and oil from shale and tar sands, etc.

Natural gas: Quantities of dry gas, measured after purification and extraction of natural gas liquids and sulphur. The production includes only marketable production, and excludes any quantities re-injected, vented and flared, and any extraction losses. The production includes all quantities used within the natural gas industry, in gas extraction, pipeline systems and processing plants.

Nuclear heat: Quantities of heat produced in a reactor. Production is the actual heat produced or the heat calculated on the basis of the gross electricity generated and the thermal efficiency of the nuclear plant.

Hydropower, Wind energy, Solar photovoltaic energy: Quantities of electricity generated. Production is calculated on the basis of the gross electricity generated and a conversion factor of 3 600 kJ/kWh.

Geothermal energy: Quantities of heat extracted from geothermal fluids. Production is calculated on the basis of the difference between the enthalpy of the fluid produced in the production borehole and that of the fluid disposed of via the re-injection borehole.

Biomass / Wastes: In the case of municipal solid wastes (MSW), wood, wood wastes and other solid wastes, production is the heat produced after combustion and corresponds to the heat content (NCV) of the fuel.

In the case of anaerobic digestion of wet wastes, production is the heat content (NCV) of the biogases produced. The production includes all quantities of gas consumed in the installation for the fermentation processes, and excludes all quantities of flared gases.

In the case of biofuels, the production is the heat content (NCV) of the fuel.

Reprotoxic Substance:
This category of chemicals includes substances that cause reproductive impairment in adults and developmental impairment or death in the unborn child. Reproductive impairment can include infertility, impotence, menstrual irregularities, spontaneous abortion and damage to offspring. Individuals may vary widely in their exposure and susceptibility to reproductive hazards.

For more details, see: Dangerous Substances Directive (67/548/EEC, as last amended in 2001), http://ec.europa.eu/environment/chemicals/

RES:
See "Renewable Energy"

Renewable Energy:
Renewable energy includes hydroelectricity, biomass, wind, solar, tidal and geothermal energies.

SNAP – Selected Nomenclature for sources of Air Pollution:
This nomenclature was designed by the ETC/AE (European Topic Centre on Air Emissions) to estimate not only emissions of greenhouse gases but all kind of air pollutants.

Sulphur oxides (SO_X):
Sulphur oxides (Sulphur dioxide-SO_2 and sulphur trioxide-SO_3 are reported as SO_X) are estimated and reported under the Geneva Convention on Long-range Transboundary Air Pollution (CLRTAP), the Gothenburg Protocol and National Emission Ceilings Directive (NEC Directive 2001/81/EC).

Tropospheric Ozone Forming Potential (TOFP):
The emissions of ozone precursors can be aggregated using the ozone forming potential of four gases (nitrogen oxides, volatile organic compounds without methane (NMVOC), carbon monoxide, methane) and presented in a single figure in kilotonnes NMVOC equivalents.

Tropospheric Ozone Precursors (TOP):
The ozone precursors considered in this publication are nitrogen oxides (NO_X), volatile organic compounds without methane (NMVOC), carbon monoxide (CO), and methane (CH_4). Emissions of these four gases are associated with the formation of tropospheric ozone (or ground-level ozone) which means ozone in the lowermost part of the troposphere.

VOC – see NMVOC

Annex B: Terms and Methodology used in the Transport Section

The main terms used in the field of transport statistics are defined in the "Eurostat concepts and definitions database (CODED)" accessible under the Eurostat web site at
"http://forum.europa.eu.int/irc/dsis/coded/info/data/coded/en/Theme7.htm"

The indicators presented in the transport section of this pocket book represent a small part of the very detailed data collected by Eurostat in the framework of legal acts and voluntary data agreements.

According to a commonly agreed breakdown, the indicators are presented on the one hand by domains of interest (infrastructure, equipment, quantity and performance for the transport of freight and passengers, safety) and on the other hand, by modes of transport (rail, road, inland waterways, pipelines, maritime and aviation).

To facilitate the comparisons between smaller and bigger countries, most of the indicators combine basic transport figures with surface, population or Gross Domestic Product (GDP).

Eurostat's on-line database has been used as the main source for the indicators, while figures from the DG for Energy and Transport have been used as an additional source. For some missing data, figures from miscellaneous international or national bodies have been used and some estimates (put in italics) have been made.

Two main channels are used by Eurostat to collect statistical data:

1. Legal acts on transport statistics which cover detailed data collections for all the main modes of transport:
   - Rail freight: Council Directive 80/1177/EEC of 4 December 1980 (O.J. L 350 of 23.12.1980) replaced by Regulation (EC) No 91/2003 of the European Parliament and of the Council of 16 December 2002 (rail freight, passengers, traffic and accidents) **(O.J. L 14 of 21.1.2003)**
   - Road freight: Council Regulation (EC) 1172/98 of 25 May 1998 **(O.J. L 163 of 6.6.1998)**
   - Inland waterways: Council Directive 80/1119/EEC of 17 November 1980 **(O.J. L 339 of 15.12.1980)**
   - Maritime freight, passengers and traffic: Council Directive 95/64/EC of 8 December 1995 **(O.J. L 320 of 30.12.1995)**
   - Aviation passengers, freight and traffic: Regulation (EC) No 437/2003 of the European Parliament and of the Council of 27 February 2003 **(O.J. L 66 of 11.3.2003)**
   - Road accidents: Council Decision 93/704/EC of 30 November 1993 **(O.J. L 329 of 30.12.1993)**

2. The "Common Questionnaire" of Eurostat, UNECE and ECMT, which is used to collect, on a voluntary basis, annual aggregated data covering many aspects of inland modes of transport (rail, road, inland waterways and pipelines). Other voluntary agreements cover the collection of other types of data such as regional transport indicators.

The main dissemination channel used for Eurostat data is the on-line database which covers, from the early eighties, millions of transport figures from EU countries plus, to a lesser extent, statistics from EFTA, Mediterranean and Candidate countries. Some miscellaneous publications in paper and electronic formats are also available, such as the "Panorama of transport" and several "Statistics in Focus".

Annex C: Calorific Values and Conversion Factors

Calorific Values

		kJ (NCV)	kgoe (NCV)
Hard coal	1 kg	17 200 - 30 700	0.411 - 0.733
Recovered hard coal	1 kg	13 800 - 28 300	0.330 - 0.676
Patent fuels	1 kg	26 800 - 31 400	0.640 - 0.750
Hard coke	1 kg	28 500	0.681
Brown coal	1 kg	5 600 - 10 500	0.134 - 0.251
Black lignite	1 kg	10 500 - 21 000	0.251 - 0.502
Peat	1 kg	7 800 - 13 800	0.186 - 0.330
Brown coal briquettes	1 kg	20 000	0.478
Tar	1 kg	37 700	0.900
Benzol	1 kg	39 500	0.943
Oil equivalent*	1 kg	41 868	1
Crude oil	1 kg	41 600 - 42 800	0.994 - 1.022
Feedstocks	1 kg	42 500	1.015
Refinery gas	1 kg	50 000	1.194
LPG	1 kg	46 000	1.099
Motor spirit	1 kg	44 000	1.051
Kerosenes, jet fuels	1 kg	43 000	1.027
Naphtha	1 kg	44 000	1.051
Gas diesel oil	1 kg	42 300	1.010
Residual fuel oil	1 kg	40 000	0.955
White spirit, industrial spirit	1 kg	44 000	1.051
Lubricants	1 kg	42 300	1.010
Bitumen	1 kg	37 700	0.900
Petroleum cokes	1 kg	31 400	0.750
Others petroleum products (paraffins, waxes, etc.)	1 kg	30 000	0.717
Natural gas	1 MJ (GCV)	900	0.0215
Coke-oven gas	1 MJ (GCV)	900	0.0215
Blast-furnace gas	1 MJ (GCV)	1 000	0.0239
Works gas	1 MJ (GCV)	900	0.0215
Nuclear energy	1 MJ (GCV)	1 000	0.0239
Biomass	1 MJ (GCV)	1 000	0.024
Solar energy	1 MJ (GCV)	1 000	0.024
Geothermal energy	1 MJ (GCV)	1 000	0.024
Hydro energy	1 kWh	3 600	0.086
Wind energy	1 kWh	3 600	0.086
Derived heat	1 MJ (GCV)	1 000	0.024
Electrical energy	1 kWh	3 600	0.086

* The tonne of oil equivalent is a conventional standardised unit defined on the basis of a tonne of oil with a net calorific value of 41 868 kilojoules/kg. The conversion coefficients from the specific units to kgoe (kilogramme of oil equivalent) are thus computed by dividing the conversion co-efficients to the kilojoules by 41 868.

The following prefixes are used for multiples of toe, joules, watts and watt hours:

kilo (k)	=	1 000	or	10^3
mega (M)	=	1 000 000	or	10^6
giga (G)	=	1 000 000 000	or	10^9
tera (T)	=	1 000 000 000 000	or	10^{12}
peta (P)	=	1 000 000 000 000 000	or	10^{15}

Conversion Factors

Energy	*To*	***TJ***	***Gcal***	***Mtoe***	***MBtu***	***GWh***
From						
TJ		1	238.8	2.388×10^{-5}	947.8	0.2778
Gcal		4.1868×10^{-3}	1	1×10^{-7}	3.968	1.163×10^{-3}
Mtoe		4.1868×10^{4}	1×10^{7}	1	3.968×10^{-7}	11 630
Mbtu		1.0551×10^{-3}	0.252	2.52×10^{-8}	1	2.931×10^{-4}
GWh		3.6	860	8.6×10^{-5}	3 412	1

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