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Energy, transport and environment indicators



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Introduction

Energy, Transport and Environment Indicators

Since its first edition, this publication presents facts and figures from the Energy, Transport and Environment sectors, all in a single volume. Where available, data for EU-27 are included this year for the first time.

The pocketbook contains three chapters of selected indicators for Energy, Transport and Environment issues. Energy indicators include energy supply, final energy consumption, renewable energy sources, and the structure of the energy industry, energy dependency, energy efficiency, and energy prices. 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, municipal waste, water use, biodiversity, toxic chemicals and pesticides, environmental protection expenditure and environmental accounts. In the majority of cases the indicators contain national data for the 27 EU Member States, the EFTA and candidate countries. Where aggregated data for EU-27 (or EU-25) are available, they are presented, in general, for the period from 1995 to 2005 (Transport, mainly from 2000 to 2005 and Energy prices from 1995 to 2007). 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 have 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/ECMT Common Questionnaire.

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	<i>Estimates are printed in italic</i>

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)
billion	1 thousand millions
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 ₂ O	Nitrous oxide
NO _x	Nitrogen oxides
PFC	Perfluorocarbons
SF ₆	Sulphur hexafluoride
SO ₂	Sulphur dioxide

Other abbreviations

EEA	European Environment Agency
ECMT	European Conference of Ministers of Transport
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
EU-25	The twenty five Member States of the EU (before the enlargement of the EU on 1st January 2007)
EU-15	The fifteen Member States of the EU (before the enlargement of the EU on 1st May 2004)
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

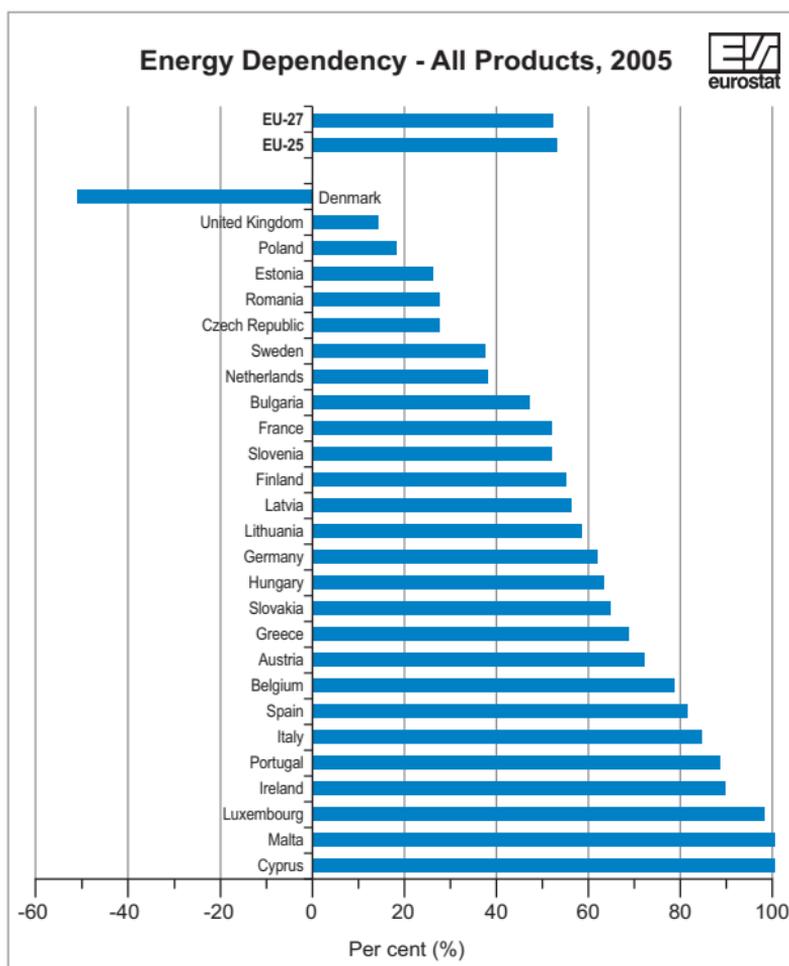
ENERGY INDICATORS

ENERGY, TRANSPORT AND ENVIRONMENT INDICATORS

Energy Dependency - All Products

	1995	2000	2005
			<i>Per cent (%)</i>
EU-27	43.3	46.7	52.3
EU-25	43.5	47.2	52.9
Belgium	80.5	77.8	78.3
Bulgaria	57.2	46.5	47.1
Czech Republic	20.6	23.1	27.4
Denmark	34.5	-33.7	-51.6
Germany	57.3	59.8	61.6
Estonia	35.7	30.8	25.8
Ireland	69.4	84.5	89.5
Greece	65.7	69.3	68.5
Spain	71.6	76.5	81.2
France	47.9	50.9	51.6
Italy	82.3	87.3	84.4
Cyprus	99.1	98.8	100.7
Latvia	68.4	57.0	56.0
Lithuania	64.0	60.5	58.4
Luxembourg	97.7	99.8	98.0
Hungary	48.8	56.0	62.9
Malta	104.5	100.8	100.0
Netherlands	19.3	38.6	37.8
Austria	66.5	65.6	71.8
Poland	-0.2	11.1	18.0
Portugal	89.0	87.2	88.2
Romania	30.9	21.8	27.4
Slovenia	50.1	52.5	52.2
Slovakia	70.6	66.5	64.6
Finland	53.1	55.8	54.7
Sweden	37.5	39.0	37.2
United Kingdom	-16.3	-16.7	13.9
Iceland	33.8	31.2	28.8
Norway	-642.9	-735.8	-609.1
Croatia	41.0	53.3	58.6
Turkey	59.1	65.4	71.9

Data Source: Eurostat



	Per cent (%)										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	43.3	43.9	44.9	46.0	45.0	46.7	47.3	47.4	48.8	50.1	52.3
EU-25	43.5	44.1	45.1	46.4	45.5	47.2	47.8	47.9	49.3	50.5	52.9

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.

Currently, approximately 50% of the EU energy consumption is imported. The EU is highly dependent on oil (82%) and natural gas (58%) and the forecasts show the same trend for the next decades. Furthermore, there is an accelerating decline in the resources of fossil fuels which are concentrated in few producing countries

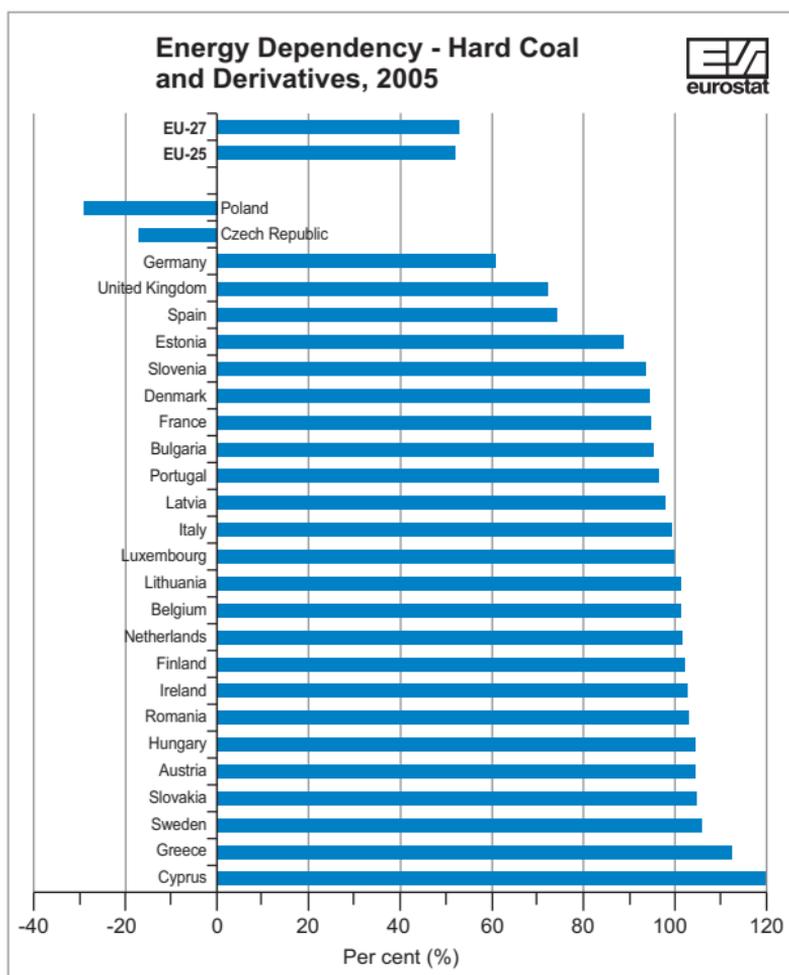
In the last decade (1995-2005) total energy dependency rate of the 27 EU Member States increased by 9 percentage points. Eleven countries were in 2005 less dependent than in 1995, and other eleven countries increased their dependency by 0.4% to 9.6%. Hungary, Poland, Netherlands and Ireland experienced bigger increase of energy dependency by 14%-20%. As for the United Kingdom (which had in 1995 energy dependency rate of -16%), the situation was almost reversed in 2005.

Among the EU-27, only Denmark had in 2005 a negative energy dependency of -51.6% while sixteen countries had higher energy dependency ratio than the EU-27 average. Norway, a very significant oil and gas supplier to Europe had six times more energy exports than their own consumption.

Energy Dependency - Hard Coal and Derivatives

	<i>Per cent (%)</i>		
	1995	2000	2005
EU-27	28.2	40.3	53.0
EU-25	26.9	39.2	51.9
Belgium	109.3	92.2	101.2
Bulgaria	73.0	101.0	95.2
Czech Republic	-24.7	-21.7	-17.0
Denmark	118.0	94.9	94.3
Germany	20.4	44.4	60.7
Estonia	105.0	123.6	88.7
Ireland	106.5	93.2	102.4
Greece	95.2	105.8	112.3
Spain	51.5	64.9	73.9
France	61.4	87.3	94.7
Italy	106.2	104.2	99.3
Cyprus	130.0	102.0	121.2
Latvia	93.3	84.8	97.7
Lithuania	69.1	101.6	101.1
Luxembourg	100.0	100.0	100.0
Hungary	79.9	96.0	104.1
Malta	-	-	-
Netherlands	98.0	102.3	101.5
Austria	86.3	92.0	104.3
Poland	-36.6	-36.9	-29.4
Portugal	108.7	102.9	96.3
Romania	79.8	94.2	102.8
Slovenia	41.0	100.6	93.6
Slovakia	92.6	104.2	104.6
Finland	90.7	97.3	102.0
Sweden	103.3	105.8	105.9
United Kingdom	22.9	39.6	71.9
Iceland	100.0	100.0	100.0
Norway	84.0	55.8	-52.8
Croatia	81.2	111.1	90.9
Turkey	75.2	88.5	89.0

Data Source: Eurostat



	<i>Per cent (%)</i>										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	28.2	29.9	32.5	34.5	36.3	40.3	44.9	44.8	47.0	51.2	53.0
EU-25	26.9	28.8	31.0	33.4	35.4	39.2	43.8	43.5	45.9	49.8	51.9

Data Source: Eurostat

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

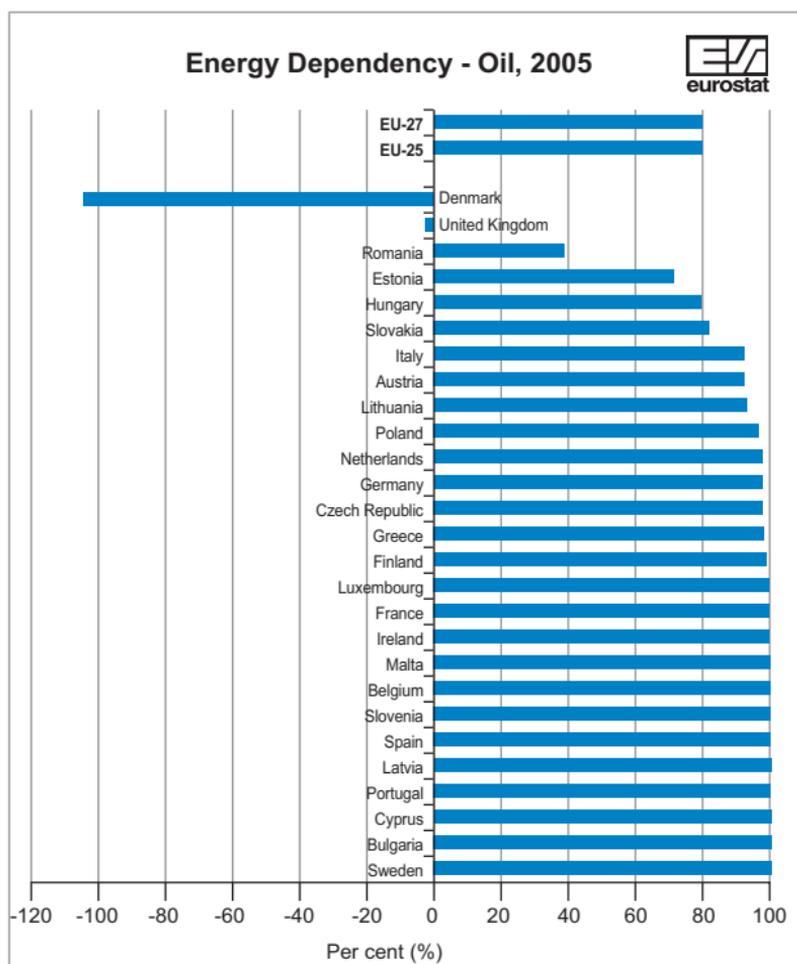
EU-27 energy dependency of hard coal and derived products was 28.2% in 1995 and almost double (53%) in 2005. Among the 27 Member States, only the Czech Republic and Poland are exporting countries, supplying mainly other EU countries.

It must be noted that although 20 MS have a dependency ratio above 90%, the effect to the EU average is not significant. This is attributed to the exporting activity of Czech Republic and Poland and also to the high share of hard coal and derived products in the energy balances of both countries. The share of hard coal and derived products in the energy balances of Czech Republic and Poland amounts to 45% while the average share for the remaining countries is 11%.

Energy Dependency - Oil

	<i>Per cent (%)</i>		
	1995	2000	2005
EU-27	74.4	75.8	82.2
EU-25	74.7	76.3	82.7
Belgium	99.5	100.1	100.9
Bulgaria	100.0	96.1	102.6
Czech Republic	98.3	95.4	97.4
Denmark	13.4	-78.1	-104.8
Germany	96.4	95.4	97.1
Estonia	105.2	101.9	71.8
Ireland	100.2	98.8	99.7
Greece	98.4	100.2	97.7
Spain	101.1	101.0	101.2
France	96.9	98.6	99.6
Italy	93.7	96.5	91.8
Cyprus	101.0	100.5	102.3
Latvia	102.6	94.3	101.8
Lithuania	114.6	100.8	92.7
Luxembourg	98.2	102.1	99.4
Hungary	71.5	77.5	79.2
Malta	104.5	100.8	100.0
Netherlands	85.4	99.7	97.1
Austria	89.4	90.1	92.2
Poland	95.6	96.9	96.0
Portugal	100.6	98.8	102.2
Romania	49.3	34.9	38.1
Slovenia	97.8	101.6	101.1
Slovakia	106.2	92.7	81.9
Finland	94.6	106.9	98.8
Sweden	95.4	99.5	103.8
United Kingdom	-57.3	-54.6	-2.6
Iceland	100.1	104.3	102.0
Norway	-1 485.5	-1 471.5	-854.3
Croatia	56.2	61.5	79.6
Turkey	91.7	93.3	90.9

Data Source: Eurostat



	Per cent (%)										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	74.4	75.5	75.8	77.0	72.9	75.8	77.2	75.9	78.3	79.7	82.2
EU-25	74.7	75.9	76.1	77.4	73.3	76.3	77.6	76.4	78.9	80.1	82.7

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 is highly dependent on imported oil. In 2007 the energy dependence rate for oil raised to 82.2% compared with 74.4% in 1995. At EU-27 level, primary production of crude oil decreased by 23% (39 Mtoe), while the imports increased by 12% over the period under consideration.

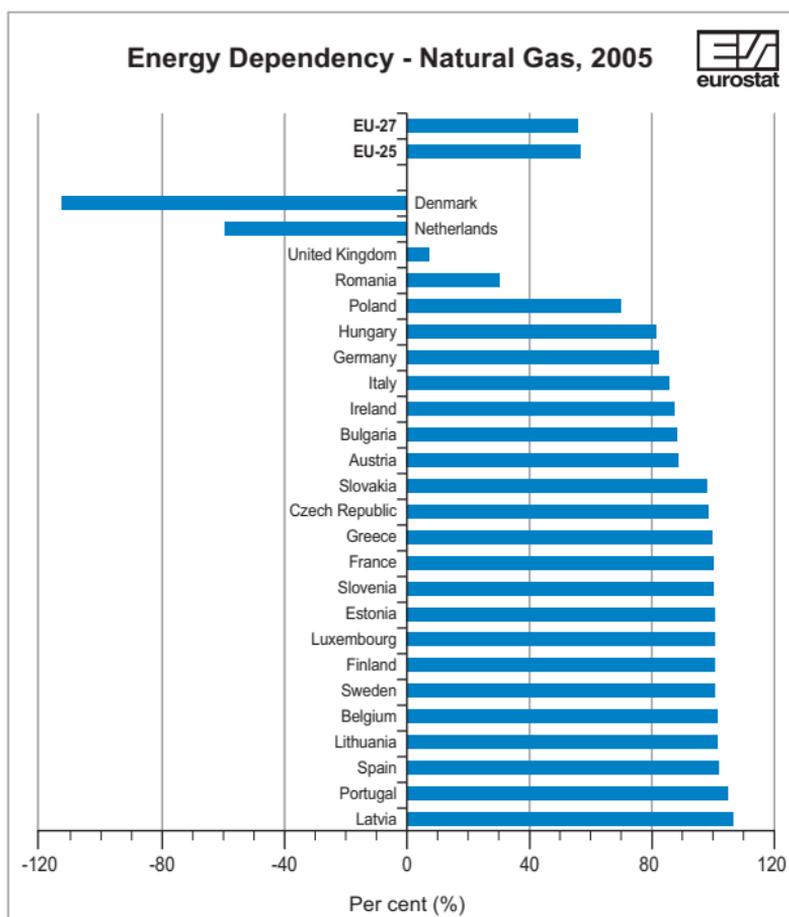
In 1995, only the United Kingdom was net oil exporter and became simply oil independent with only 2 Mtoe net exports in 2005. On the other hand, Denmark which was net oil import country in 1995 developed to net oil exporter with more oil exports in recent years than the gross inland consumption.

All Member States (except for: Romania, Estonia, Hungary, Slovakia and the two net exporting countries mentioned above) have an oil dependency rate greater than 90%.

Energy Dependency - Natural Gas

	1995	2000	2005
			<i>Per cent (%)</i>
EU-27	43.6	48.9	57.7
EU-25	43.9	49.6	58.4
Belgium	98.2	99.3	100.6
Bulgaria	99.5	93.5	87.7
Czech Republic	98.0	99.8	97.8
Denmark	-47.2	-64.8	-113.9
Germany	78.6	79.1	81.3
Estonia	100.0	100.0	100.0
Ireland	3.6	72.1	86.7
Greece	-	99.1	99.1
Spain	97.4	101.6	101.4
France	93.0	100.0	99.3
Italy	63.9	81.1	84.7
Cyprus	-	-	-
Latvia	99.0	101.9	105.6
Lithuania	100.0	100.0	100.6
Luxembourg	100.0	100.0	100.0
Hungary	60.3	75.4	81.1
Malta	-	-	-
Netherlands	-77.4	-49.5	-59.3
Austria	84.8	80.6	88.2
Poland	64.6	66.3	69.7
Portugal	-	100.3	103.8
Romania	24.9	19.8	30.1
Slovenia	100.6	99.3	99.6
Slovakia	86.8	98.8	97.2
Finland	100.0	100.0	100.0
Sweden	100.0	100.0	100.0
United Kingdom	1.0	-10.7	7.0
Iceland			
Norway	-716.4	-1 161.4	-1 378.3
Croatia	11.6	41.0	23.6
Turkey	97.9	95.4	97.1

Data Source: Eurostat



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	43.6	43.5	45.2	45.7	47.9	48.9	47.3	51.1	52.5	54.0	57.7
EU-25	43.9	43.5	45.5	46.0	48.6	49.6	48.0	51.8	53.1	54.6	58.4

Data Source: Eurostat

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

In 2005, the EU-27 energy dependency rate for natural gas was 57.7%, an increase of 14.1 points compared with 1995. While the primary production of EU-27 natural gas remained stable, the Gross Inland Consumption increased by one third compared to 1995. This increase is compensated by the 77% increase of imports. The top 3 import countries (Germany, Italy and France) increased their imports by 53% compared with 1995. In addition, Spanish market with 8.3 Mtoe net natural gas imports in 1995 grew intensely by 15% average annual rate to 34 Mtoe holding a 12% share of EU total imports in 2005.

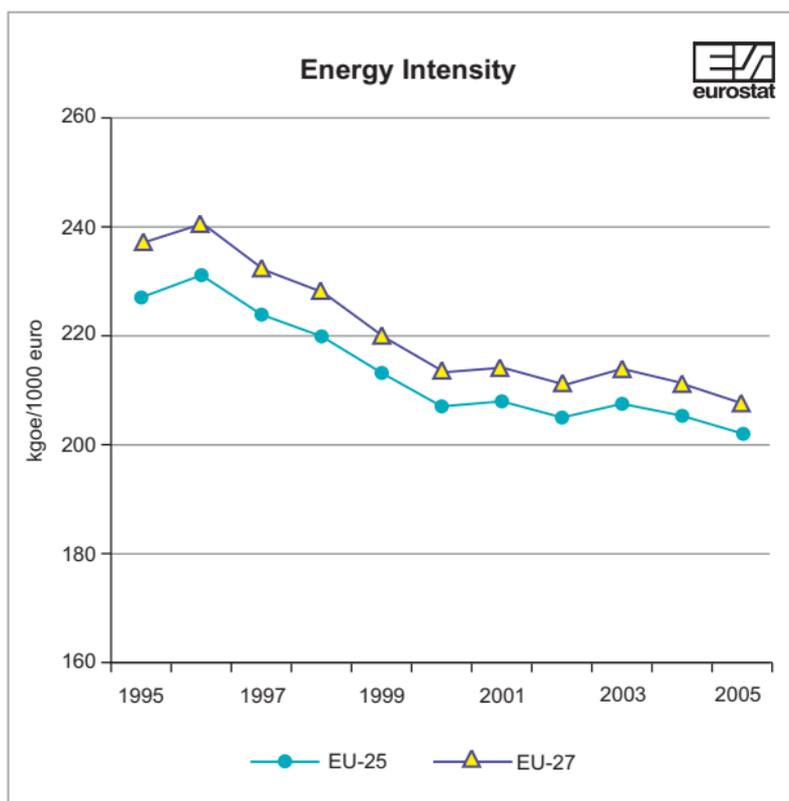
The Netherlands and Denmark are the only EU-27 natural gas exporting countries, with energy dependency ratio of 59% and 114% respectively. The net exports of these countries amounted to 29 Mtoe, 23 for the Netherlands and 6 for Denmark.

Apart from the two net exporters mentioned above, the UK, Romania and Poland, the remaining Member States have an energy dependency rate for natural gas bigger than 80%.

Energy Intensity

	<i>(kgoe/1000 euro '95)</i>			<i>Index (1995=100)</i>		
	1995	2000	2005	1997	2000	2005
EU-27	236	213	208	98	90	88
EU-25	227	207	202	99	91	89
Belgium	232	230	206	104	99	89
Bulgaria	2 326	1 936	1 582	102	83	68
Czech Republic	965	886	823	101	92	85
Denmark	225	185	148	99	82	66
Germany	175	160	157	100	91	90
Estonia	1 907	1 198	967	90	63	51
Ireland	211	176	144	92	83	68
Greece	269	264	237	100	98	88
Spain	224	220	219	97	98	98
France	200	188	184	99	94	92
Italy	187	182	191	99	97	102
Cyprus	278	279	247	101	100	89
Latvia	1 256	800	645	86	64	51
Lithuania	1 751	1 134	949	90	65	54
Luxembourg	211	170	190	93	81	90
Hungary	758	602	544	94	79	72
Malta	325	222	264	106	68	81
Netherlands	229	194	196	95	85	85
Austria	146	136	149	102	93	102
Poland	940	656	585	90	70	62
Portugal	225	227	242	98	101	107
Romania	1 738	1 457	1 165	99	84	67
Slovenia	393	333	320	98	85	82
Slovakia	1 174	979	869	89	83	74
Finland	290	258	241	103	89	83
Sweden	263	213	204	96	81	78
United Kingdom	251	228	202	97	91	81
Iceland	432	474	431	99	110	100
Norway	208	191	212	93	92	102
Croatia	492	459	417	97	93	85
Turkey	479	492	438	99	103	92

Data Source: Eurostat



	(kgoe/1000 euro)										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	236	240	232	228	219	213	214	211	214	211	208
EU-25	227	232	224	221	213	207	208	205	207	205	202

	Index (1995=100)										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	100	102	98	96	93	90	91	89	90	89	88
EU-25	100	102	99	97	94	91	92	90	91	90	89

Data Source: Eurostat

EU-27 energy intensity dropped from 236 kgoe per thousand euro in 1995 to 208 in 2005.

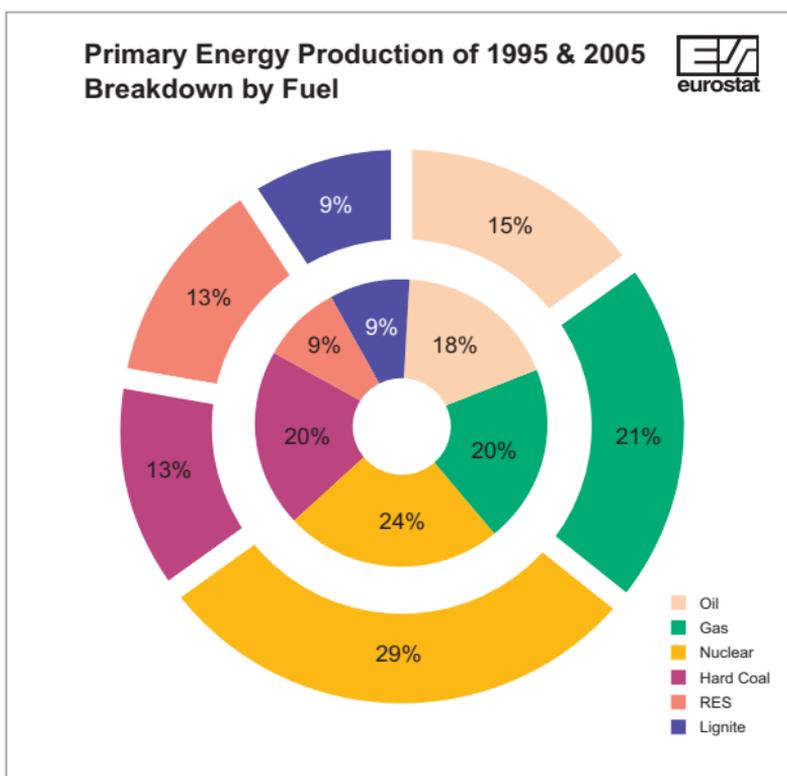
Among the EU Member States, eleven countries had in 2005 less energy intensity than the EU-27 average. In 2005, nine new Member States had much higher values than the EU-27 average of that year (3 to 8 times more).

Primary Energy Production

	<i>(ktoe)</i>			<i>Year 2005, share of each fuel to total (%)</i>					
	1995	2000	2005	Hard Coal	Lignite	Oil	Gas	Nuclear	RES
EU-27	939 808	931 166	890 026	13	9	15	21	29	13
EU-25	897 473	892 702	852 022	13	8	15	21	29	13
BE	10 939	13 065	13 913	-	-	-	-	88	12
BG	10 191	9 834	10 553	0	40	0	4	46	11
CZ	31 373	29 443	32 368	72	0	1	0	20	6
DK	15 544	27 607	31 168	-	-	61	30	-	9
DE	140 786	132 013	134 858	13	29	4	11	31	12
EE	3 483	3 249	4 219	-	75	8	-	-	17
IE	4 020	2 175	1 650	-	48	-	28	-	24
EL	9 702	9 946	10 290	-	83	1	0	-	16
ES	31 207	31 189	30 126	17	4	1	-	49	29
FR	126 024	131 086	135 232	-	-	1	1	86	12
IT	29 219	26 780	27 597	0	-	22	36	-	42
CY	42	43	50	-	-	-	-	-	100
LV	1 561	1 560	2 290	-	0	-	-	-	100
LT	3 709	3 173	3 682	-	1	6	-	72	21
LU	47	57	74	-	-	-	-	-	100
HU	13 456	11 207	10 321	-	17	14	23	35	11
MT	-	-	-	-	-	-	-	-	-
NL	65 909	56 912	61 834	-	-	4	91	2	4
AT	8 493	9 584	9 447	-	0	10	15	-	75
PL	97 931	78 440	77 721	72	16	1	5	-	6
PT	2 602	3 109	3 578	-	-	-	-	-	100
RO	32 143	28 630	27 451	0	21	20	35	5	18
SI	3 020	3 085	3 479	-	34	-	0	44	22
SK	4 808	5 970	6 547	-	10	5	2	70	13
FI	13 151	14 758	16 203	-	13	-	-	37	50
SE	31 512	30 052	34 337	-	1	-	-	54	45
UK	248 934	268 199	201 037	6	-	43	39	10	2
IS	1 565	2 306	2 636	-	-	-	-	-	100
NO	181 635	224 491	233 565	0	-	61	33	-	6
HR	4 146	3 562	3 779	-	-	27	49	-	24
TR	26 524	26 715	23 612	7	38	10	3	-	43

	<i>(Mtoe)</i>										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	940	969	960	938	940	931	932	933	925	921	890
EU-25	897	926	919	899	904	893	894	894	886	882	852

Data Source: Eurostat



	<i>(Mtoe)</i>		
	1995	2005	Change 95-05
Total	941	890	-5%
Oil	169	130	-23%
Gas	189	188	0%
Nuclear	223	257	15%
Hard Coal	187	114	-39%
RES	85	119	40%
Lignite	88	81	-8%

Data Source: Eurostat

Primary energy commodities may be divided between fuels of fossil origin, nuclear energy and renewable energy commodities. Fossil fuels are taken from natural resources, which were formed from biomass in the geological past. The definition of renewable energy sources (RES) includes energy generated from solar, wind, biomass (wood, municipal wastes, biofuels and biogas), geothermal, hydropower, and ocean resources.

EU-27 primary energy production registered a steadily decreasing trend from 1995 to 2005, resulting to a 5.3% decrease over the whole period.

Year by year, the fuel mixture of primary energy production changed in favour of nuclear energy and renewable energy sources. While the share into the total remained almost stable for Lignite, Natural Gas and Oil, the Hard Coal share decreased by 7%. In 2005, CO₂ "free" sources (renewable energy sources and nuclear energy) had a share of 42% while the fossil fuels represented the remaining 58% of total primary production of energy.

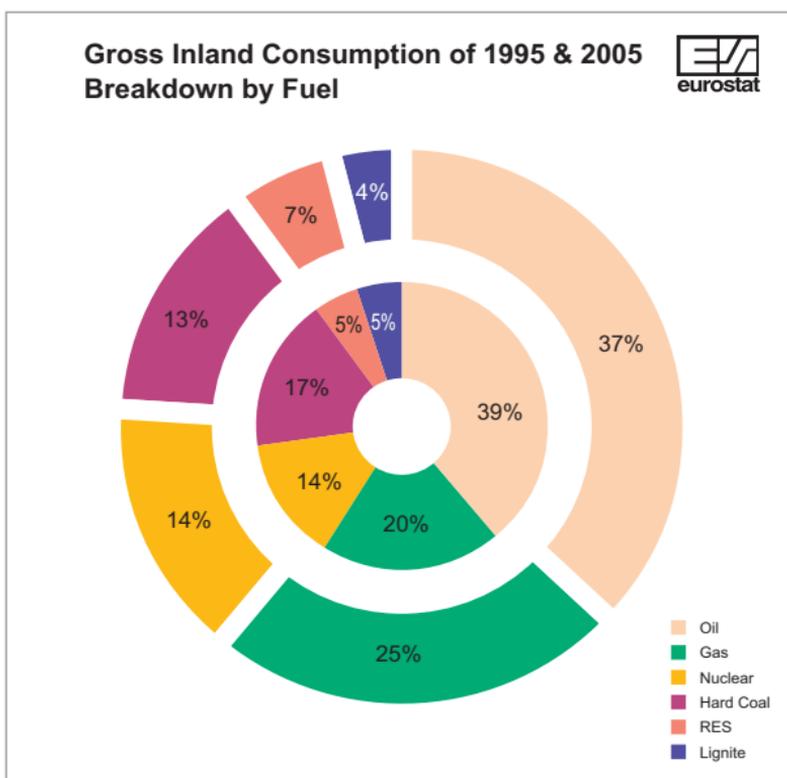
Gross Inland Consumption

	(ktoe)			Year 2005, share of each fuel to total (%)					
	1995	2000	2005	Hard Coal	Lignite	Oil	Gas	Nuclear	RES
EU-27	1 650 394	1 711 983	1 811 317	13	4	37	25	14	7
EU-25	1 579 981	1 656 306	1 752 287	13	4	37	24	14	7
BE	50 459	57 168	54 952	10	0	37	26	22	4
BG	23 304	18 610	19 884	13	21	24	14	24	6
CZ	40 800	40 304	44 795	45	0	22	17	14	4
DK	20 248	19 662	19 538	19	-	42	23	-	16
DE	338 250	340 143	345 451	13	11	36	23	12	5
EE	5 481	4 635	5 563	0	57	20	14	-	11
IE	10 844	14 319	15 121	13	5	55	23	-	3
EL	24 174	28 140	31 240	1	28	57	8	-	5
ES	102 207	122 698	143 486	14	1	48	21	10	6
FR	239 896	258 985	275 438	5	0	33	15	42	6
IT	161 262	172 537	186 766	9	0	45	38	-	6
CY	1 970	2 381	2 461	1	0	96	-	-	2
LV	4 763	3 947	4 718	2	0	29	29	-	36
LT	8 686	7 069	8 592	2	0	32	29	31	9
LU	3 335	3 628	4 698	2	0	66	25	-	2
HU	25 864	25 000	27 920	5	6	27	43	13	4
MT	808	769	953	-	-	100	-	-	-
NL	73 374	75 712	80 963	10	0	40	44	1	3
AT	26 721	28 726	33 980	11	1	42	24	-	21
PL	100 019	90 777	93 935	45	14	24	13	-	5
PT	19 611	24 108	26 677	13	-	58	14	-	13
RO	47 108	37 067	39 146	7	15	26	36	4	13
SI	6 103	6 415	7 305	5	16	35	13	21	11
SK	17 692	17 483	19 407	18	5	21	31	24	4
FI	28 959	32 483	34 515	10	5	30	10	17	23
SE	50 446	47 849	51 555	5	1	28	2	36	30
UK	218 011	231 368	232 259	16	-	36	37	9	2
IS	2 317	3 230	3 610	3	-	24	-	-	73
NO	23 688	26 071	32 190	2	-	44	16	-	40
HR	7 087	7 819	8 914	7	0	51	27	-	10
TR	62 027	77 374	85 159	15	11	35	27	-	12

(Mtoe)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	1 650	1 708	1 693	1 710	1 698	1 712	1 752	1 745	1 787	1 808	1 811
EU-25	1 580	1 637	1 627	1 649	1 643	1 656	1 696	1 688	1 728	1 750	1 752

Data Source: Eurostat



	<i>(Mtoe)</i>		
	1995	2005	Change 95-05
Total	1 652	1 811	10%
Oil	642	666	4%
Gas	333	445	33%
Nuclear	223	257	15%
Hard Coal	275	239	-13%
RES	85	121	41%
Lignite	89	81	-9%

Data Source: Eurostat

EU-27 gross inland consumption grew by 9.8% (161 Mtoe) over the 1995-2005 period. Natural gas recorded the highest absolute increase from 333Mtoe in 1995 to 445Mtoe in 2005, while nuclear energy grew by 15% to 257Mtoe. The increase of renewables was 41% over the 1995-2005 period yet, the share of renewables into the total remains still small (7% in 2005).

On the other hand, gross inland consumption of solid fuels dropped by 12% and at the same time gross inland consumption of oil grew by only 4%, despite the fact that oil is strongly linked with the transport sector where significant growth is observed.

Even with increasing energy efficiency and development of renewable energy, oil and gas will remain the most important fuels for the energy and transport sectors. As a consequence, the external dependence and the security of supply for these fuels will continue to be of great importance for the economic activities.

Imports of Energy Products, by Country of Origin

Imports of Natural Gas, by Country of Origin

	2000	2001	2002	2003	2004	2005
	<i>(PJ)</i>					
Russia	4 540	4 422	4 555	4 895	4 951	4 953
Norway	1 985	2 136	2 602	2 699	2 802	2 643
Algeria	2 203	1 957	2 132	2 159	2 042	2 257
Nigeria	172	216	218	336	410	436
Lybia	33	33	26	30	48	209
Other Countries	224	303	353	494	865	1 327
Total	9 157	9 067	9 885	10 614	11 118	11 825

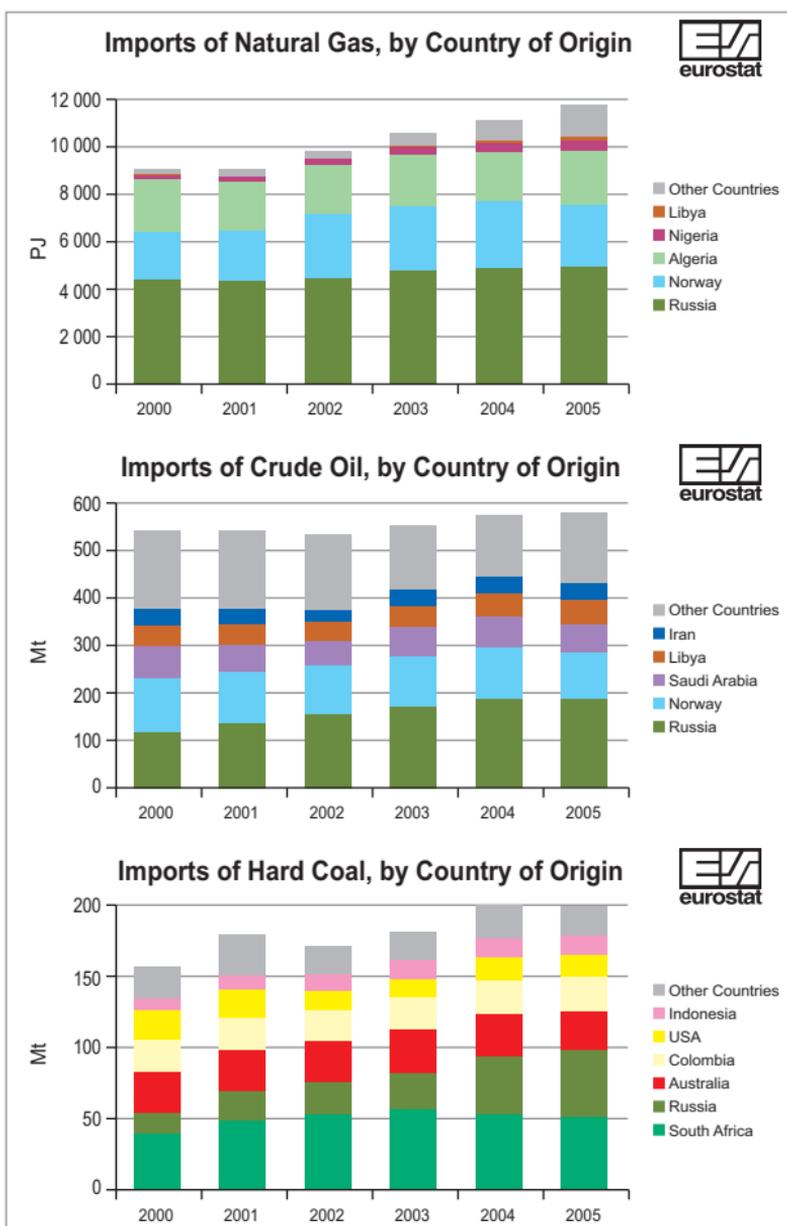
Imports of Crude Oil, by Country of Origin

	2000	2001	2002	2003	2004	2005
	<i>(Mt)</i>					
Russia	118	137	155	171	189	188
Norway	115	108	103	106	109	97
Saudi Arabia	65	57	53	62	64	61
Lybia	46	44	39	46	50	51
Iran	35	31	26	35	36	35
Other Countries	163	164	158	134	127	148
Total	542	542	534	554	575	580

Imports of Hard Coal, by Country of Origin

	2000	2001	2002	2003	2004	2005
	<i>(Mt)</i>					
South Africa	40	49	54	57	54	52
Russia	15	21	23	26	40	48
Australia	29	29	29	31	31	27
Colombia	23	23	21	23	24	24
USA	20	20	14	13	15	16
Indonesia	9	10	11	13	14	14
Other Countries	22	29	20	20	24	21
Total	158	181	173	183	203	201

Data Source: Eurostat



EU-27 imports of natural gas rose by 29% from 2000 to 2005. However imports from Russia rose by 9%, from Norway by 33% and from Algeria by 2.4% forming altogether 83% of total imports. Due to diversification efforts, imports from other countries increased more than four times, representing 17% of total imports in 2005.

On the contrary, consolidation has been exhibited in crude oil imports, which grew by 7% over the last five years. In 2005, 32% of the imported crude oil came from Russia, up from 22% in 2000, and 17% from Norway, down from 21%. Saudi Arabia and Libya contributed significantly with 10% and 9% respectively while Iran maintained its spot as a Top-5 country of origin, with a 6% share.

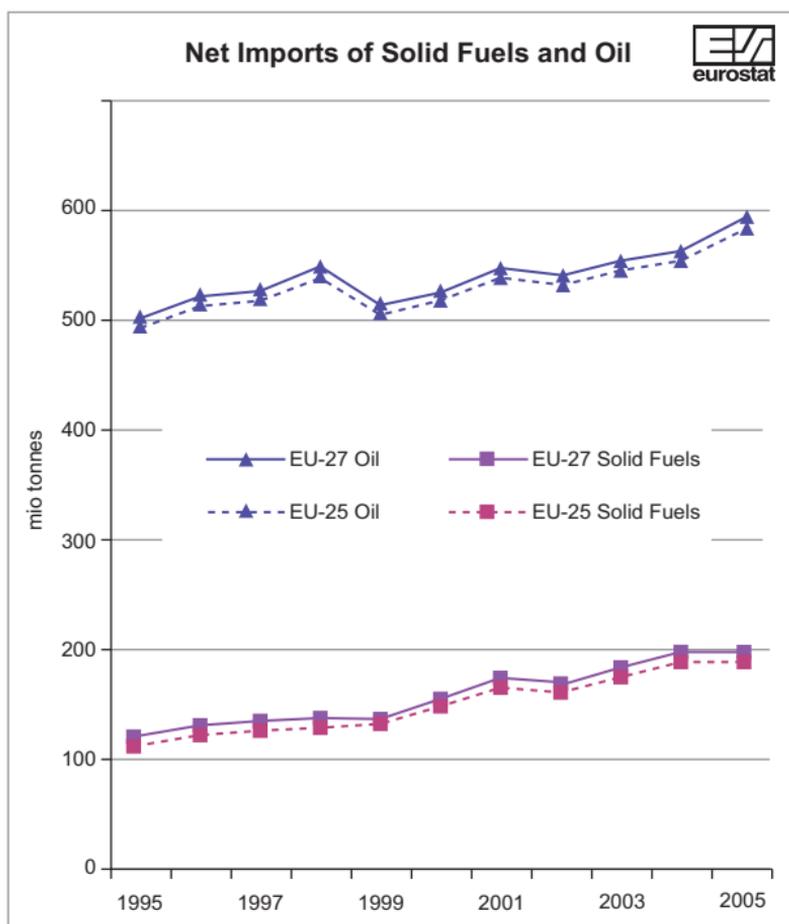
Hard Coal imports confirm Russia as a first-rate energy supplier to the EU. Although South Africa, with a share of 26% of the total hard coal supplied to the EU-27 in 2005, remains the main supplier, Russia has tripled its exports to EU over the period 2000 to 2005, reaching a 24% share, up from 9% in 2000.

Net Imports of Solid Fuels and Oil

(1000 tonnes)

	Solid Fuels			Oil		
	1995	2000	2005	1995	2000	2005
EU-27	120 823	154 805	196 560	504 431	526 781	590 543
EU-25	112 770	148 312	187 616	491 011	519 105	581 369
BE	14 186	10 959	7 926	24 441	28 776	30 340
BG	3 562	3 451	4 181	6 512	4 066	5 182
CZ	-12 318	-8 025	-5 760	7 961	7 470	9 658
DK	13 031	6 340	5 911	1 493	-7 806	-9 106
DE	17 239	34 917	39 855	129 187	124 037	120 271
EE	1 492	1 275	147	1 184	615	842
IE	2 888	2 756	2 968	5 706	7 946	8 457
EL	1 421	1 165	583	17 274	19 694	20 421
ES	14 654	21 042	24 282	58 820	70 972	79 518
FR	13 514	19 748	20 830	84 852	89 953	93 983
IT	19 114	19 408	24 777	89 726	88 789	79 543
CY	26	60	64	2 052	2 572	2 828
LV	250	88	120	2 106	1 102	1 642
LT	266	134	320	3 710	2 278	2 651
LU	753	183	119	1 720	2 278	3 009
HU	2 167	1 720	1 944	5 475	5 283	5 828
MT	-	-	-	901	832	975
NL	13 942	13 201	13 152	32 426	41 602	47 625
AT	3 910	4 527	5 884	10 117	10 810	13 107
PL	-34 023	-25 477	-20 512	15 422	20 079	21 673
PT	5 963	6 287	5 278	14 083	15 827	16 812
RO	4 491	3 042	4 763	6 908	3 610	3 992
SI	415	519	629	2 199	2 369	2 570
SK	8 467	5 750	6 123	3 699	2 778	3 246
FI	6 030	5 520	5 188	8 221	10 405	10 799
SE	3 924	3 392	3 563	15 801	15 440	17 106
UK	15 459	22 823	44 225	-47 565	-44 996	-2 429
IS	83	148	150	752	949	983
NO	1 272	889	-617	-129 203	-150 750	-124 280
HR	322	805	1 064	2 217	2 425	3 646
TR	6 133	13 723	17 774	26 418	28 942	27 889

Data Source: Eurostat



(mio tonnes)

Solid Fuels

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	121	129	134	136	135	155	172	167	182	197	197
EU-25	113	121	125	129	130	148	164	159	174	188	188

Oil

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	504	524	527	548	513	527	550	537	557	571	591
EU-25	491	511	515	538	505	519	541	529	549	562	581

Data Source: Eurostat

The decreasing trend in gross inland consumption of solid fuels, where a drop of 12% between 1995 and 2005 is observed, is not reflected in net imports of solid fuels. Actually, net imports of solid fuels have greatly increased, by over 60% during the same period. Net imports of solid fuels to the EU-27 in 2005 amounted to 196 thousand tonnes or 127 Mtoe.

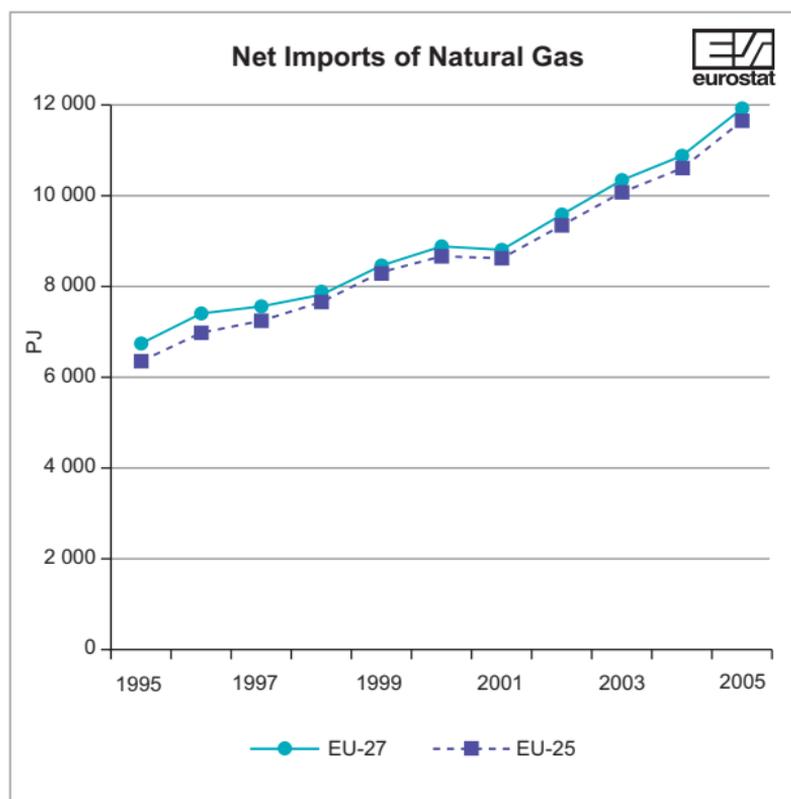
EU-27 total oil imports amounted to 591 thousand tonnes in 2005, 17% more than in 1995. It must be noted that finished products are only a small proportion of total oil imports which fluctuated between 2 to 5%. However, although only Denmark and UK are net oil exporters, many countries are net oil products' exporters.

Germany, Italy, France and Spain, the Top Four net oil importers in 1995 that formed 72% of total net imports, decreased their imports by 3.0%, dropping their contribution to total imports to 63%.

Net Imports of Natural Gas

	1995	2000	(PJ) 2005
EU-27	6 759	8 957	11 948
EU-25	6 324	8 703	11 638
Belgium	485	618	660
Bulgaria	212	128	114
Czech Republic	299	348	351
Denmark	-70	-134	-233
Germany	2 461	2 645	3 058
Estonia	27	31	37
Ireland	4	115	140
Greece	-	79	108
Spain	350	720	1 407
France	1 279	1 664	1 894
Italy	1 327	2 187	2 784
Cyprus	-	-	-
Latvia	46	52	67
Lithuania	94	96	116
Luxembourg	26	31	55
Hungary	257	339	456
Malta	-	-	-
Netherlands	-1 227	-800	-974
Austria	251	244	339
Poland	270	307	397
Portugal	0	95	181
Romania	223	126	195
Slovenia	35	38	43
Slovakia	211	265	268
Finland	132	159	167
Sweden	35	36	39
United kingdom	30	-433	278
Iceland	-	-	-
Norway	-1 154	-1 962	-3 309
Croatia	10	42	26
Turkey	264	561	1 030

Data Source: Eurostat



(PJ)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	6759	7416	7559	7874	8521	8957	8895	9640	10398	10946	11948
EU-25	6324	6932	7192	7550	8274	8703	8660	9378	10911	10644	11638

Data Source: Eurostat

Natural gas net imports continue to exhibit a quite steady average annual increase of 6 %, having risen by 77% since 1995.

Of the three traditional North Sea producers, (DK, NL, UK), the United Kingdom has recently become a net importer and the Netherlands have reduced their annual exports while Denmark on the other hand has expanded their net exports more than 3 times between 1995 and 2005. Germany, France and Italy remain the largest importers of EU-27; nevertheless, their total net imports share dropped from 75 to 65% within the period 1995-2005 despite substantial growth in net imports, as in the same period, other countries have expanded their consumption.

Net Imports of Electricity

	1995	2000	(GWh) 2005
EU-27	17 543	19 614	11 316
EU-25	17 404	24 930	21 800
Belgium	4 072	4 326	6 304
Bulgaria	-160	-4 620	-7 581
Czech Republic	418	-10 017	-12 634
Denmark	-794	665	1 369
Germany	4 824	3 057	-4 566
Estonia	-760	-929	-1 608
Ireland	-15	98	2 044
Greece	797	-11	3 780
Spain	4 486	4 441	-1 343
France	-69 841	-69 479	-60 296
Italy	37 427	44 347	49 155
Cyprus	-	-	-
Latvia	2 256	1 786	2 148
Lithuania	-2 678	-1 336	-2 966
Luxembourg	5 003	5 722	3 261
Hungary	2 405	3 440	6 227
Malta	-	-	-
Netherlands	11 393	18 915	18 293
Austria	-2 470	-1 368	2 665
Poland	-2 801	-6 373	-11 186
Portugal	914	931	6 824
Romania	299	-696	-2 903
Slovenia	-1 652	-1 321	-324
Slovak Republic	1 383	-2 696	-3 265
Finland	8 405	11 880	16 989
Sweden	-1 681	4 678	-7 392
United Kingdom	16 313	14 174	8 321
Iceland	-	-	-
Norway	-6 666	-19 055	-12 043
Croatia	3 496	4 000	5 112
Turkey	-696	3 354	-1 162

Data Source: Eurostat



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	17.5	-3.0	2.9	-0.9	11.2	19.6	4.8	12.5	-1.7	-7.3	11.3
EU-25	17.4	-3.4	6.3	2.3	14.0	24.9	13.1	21.6	4.3	-0.2	21.8
EU-15	18.8	-1.6	7.8	13.1	23.7	42.4	34.3	45.9	32.6	26.9	45.4
Top 5 Exporters	-75.1	-77.5	-75.8	-73.2	-76.0	-91.8	-95.5	-108.3	-104.2	-99.9	-94.7
Top 5 Importers	63.7	58.0	64.5	64.0	73.5	82.9	87.9	90.7	86.2	82.0	97.0

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, Lithuania and Bulgaria.
Top 5 Importing countries are Italy, Netherlands, Finland, Hungary and Belgium.

The net electricity imports of the European Union vary during the period under consideration and there are considerable differences between Member States. This volatility must be seen in the context of trade in electricity rather than availability of local resources.

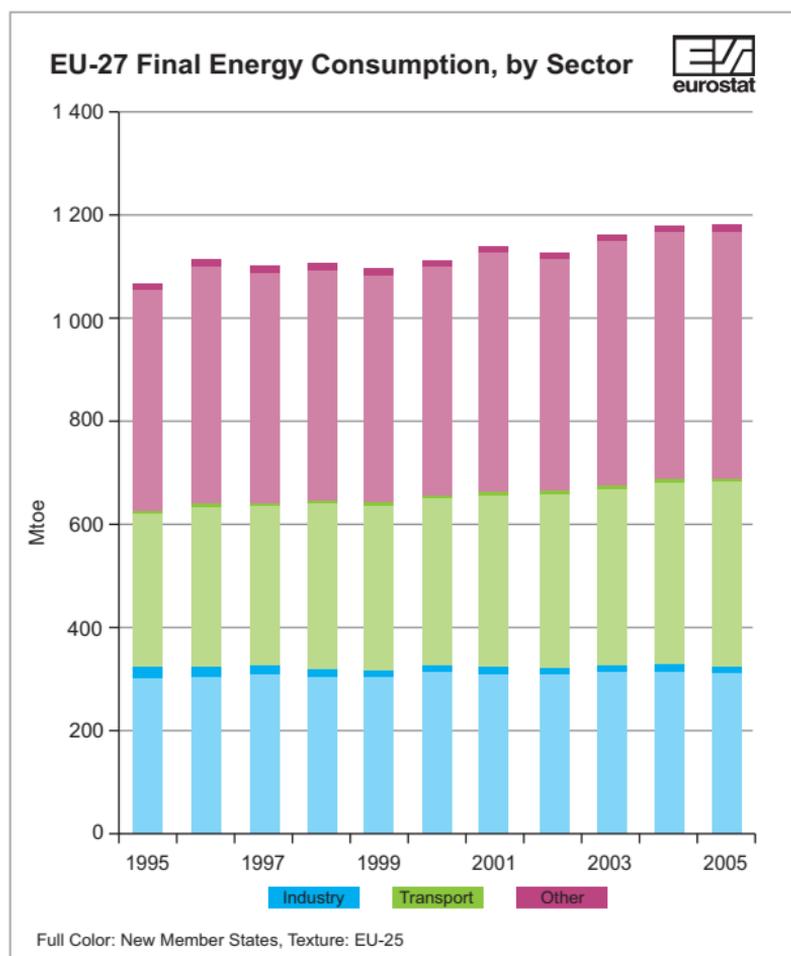
France exported about 11% of its production and the Czech Republic 18%. As a consequence, France is the largest net exporter of electricity in the EU-27. France has kept its historical top spot, followed by the Czech Republic, which became an important net electricity exporter. On the other hand the largest net importer is historically Italy that has maintained its status, followed by the Netherlands.

Final Energy Consumption, by Sector

(Mtoe)

	Total			Industry			Transport			Other	
	1995	2000	2005	1995	2000	2005	1995	2000	2005	1995	2005
EU-27	1 066	1 108	1 169	326	323	326	300	339	362	439	480
EU-25	1 027	1 077	1 135	305	310	313	295	334	355	427	467
BE	34.5	36.9	36.4	12.1	13.6	11.6	8.5	9.7	9.9	14	15
BG	11.4	8.6	9.5	6.0	3.6	3.7	2.0	1.8	2.6	3	3
CZ	24.1	22.4	25.8	11.1	8.5	9.4	2.8	4.7	6.6	10	10
DK	14.7	14.6	15.3	3.0	2.9	2.8	4.4	4.7	5.3	7	7
DE	222.4	218.2	217.9	62.0	57.7	56.1	62.9	66.0	62.0	97	100
EE	2.5	2.4	2.8	0.8	0.5	0.7	0.5	0.6	0.7	1	1
IE	7.9	10.7	12.3	1.9	2.3	2.5	2.3	4.0	5.0	4	5
EL	15.8	18.5	20.7	4.1	4.4	4.1	6.4	7.2	8.1	5	9
ES	63.5	79.4	97.2	20.5	25.5	31.0	26.1	32.9	39.4	17	27
FR	141.2	152.1	158.2	37.0	36.6	37.4	44.1	51.6	49.8	60	71
IT	113.7	123.3	134.1	36.4	39.5	40.7	37.6	41.3	43.6	40	50
CY	1.4	1.6	1.8	0.4	0.4	0.3	0.8	0.9	1.0	0	1
LV	3.8	3.3	4.0	0.7	0.6	0.8	0.7	0.7	1.0	2	2
LT	4.6	3.7	4.5	1.0	0.8	1.0	1.0	1.0	1.4	3	2
LU	3.2	3.5	4.4	1.2	1.0	0.9	1.3	1.9	2.7	1	1
HU	15.7	15.8	18.1	3.8	3.5	3.4	2.7	3.3	4.2	9	10
MT	0.5	0.4	0.5	0.0	0.0	0.0	0.3	0.2	0.3	0	0
NL	47.7	50.1	51.6	12.7	13.8	14.6	12.4	13.8	15.1	23	22
AT	20.9	23.1	27.3	6.5	7.6	8.8	5.2	6.0	8.0	9	10
PL	63.5	55.1	57.2	22.7	18.9	16.4	8.3	9.2	12.1	33	29
PT	13.0	16.9	18.7	4.2	5.5	5.7	4.9	6.5	7.0	4	6
RO	26.7	22.5	24.5	14.9	9.1	9.8	3.1	3.4	4.2	9	11
SI	3.9	4.4	4.9	1.2	1.4	1.7	1.3	1.3	1.5	1	2
SK	10.9	10.5	10.6	4.4	4.0	4.5	1.5	1.5	1.8	5	4
FI	22.0	24.2	25.2	10.0	12.1	12.1	4.2	4.4	4.8	8	8
SE	33.7	34.4	33.7	12.6	13.1	12.6	7.7	8.1	8.6	13	12
UK	142.4	151.7	151.6	35.1	35.9	33.9	46.9	52.3	55.2	60	62
IS	1.7	2.1	2.2	0.4	0.7	0.8	0.3	0.3	0.4	1	1
NO	16.9	18.1	18.6	6.2	7.0	6.6	4.2	4.5	4.9	6	7
HR	4.5	5.3	6.3	1.3	1.4	1.6	1.2	1.5	1.9	2	3
TR	44.7	54.8	62.3	13.2	20.4	21.6	11.9	12.2	13.3	20	27

Data Source: Eurostat



	(Mtoe)										
EU-27	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Industry	326	328	328	321	312	323	326	323	328	333	326
Transport	300	310	317	329	337	339	343	346	351	359	362
Other	439	473	455	457	453	446	466	454	476	480	480
EU-25											
Industry	305	308	311	306	299	310	313	309	314	318	313
Transport	295	305	311	323	332	334	337	339	344	352	355
Other	427	458	440	442	440	433	454	443	463	466	467

Data Source: Eurostat

EU-27 final energy consumption increased by 9.7% over the period 1995-2005, a bit slower than EU-25, which increased by 10.4%, since total consumption of the two new Member States (Romania and Bulgaria) decreased during the same period. EU-27 industrial consumption reversed to 1995 level after a slight dip around 1999. The greater part of the 27 MS's increase was due to the transport sector which grew by 21% from 1995 to 2005.

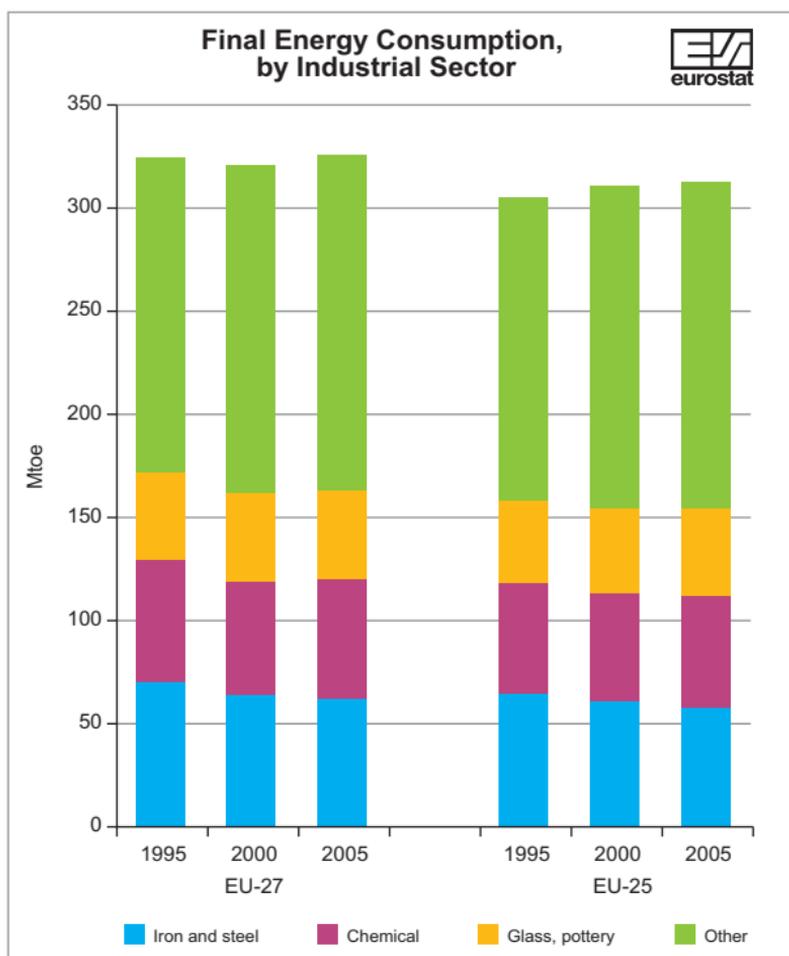
Observing the shares in final energy consumption, industrial consumption was higher in 1995 than the consumption of transport but as the years passed, the situation has reversed and in 2005 industrial consumption was 28% of total consumption, while transport sector consumption was 31%. The consumption of the other sectors remains the highest with a 41% share into EU-27 final energy consumption.

Final Energy Consumption, by Industrial Sector

(ktoe)

	Total industry		Iron and steel		Chemical		Glass, pottery	
	1995	2005	1995	2005	1995	2005	1995	2005
EU-27	326 431	326 377	70 440	61 983	60 333	58 115	42 091	43 464
EU-25	305 485	312 953	64 637	57 737	53 542	54 665	39 992	42 037
BE	12 110	11 605	4 158	3 391	2 874	3 391	1 293	1 017
BG	6 032	3 672	1 396	857	2 053	958	978	617
CZ	11 126	9 439	1 973	2 735	1 196	1 968	1 417	1 136
DK	3 026	2 831	99	57	225	258	650	617
DE	61 981	56 064	14 539	13 934	13 571	10 617	8 125	5 900
EE	790	651	4	1	204	53	192	109
IE	1 851	2 484	48	1	277	366	249	459
EL	4 107	4 132	137	219	208	268	1 366	1 113
ES	20 475	31 035	3 601	4 590	3 496	4 675	4 166	7 484
FR	36 982	37 421	7 701	6 186	5 401	7 679	3 536	4 154
IT	36 430	40 732	7 563	7 434	7 014	5 599	6 933	8 895
CY	388	316	-	-	4	2	213	193
LV	701	827	76	131	117	18	103	118
LT	1 021	996	4	5	153	221	279	193
LU	1 196	937	694	357	83	54	124	62
HU	3 808	3 427	1 087	661	755	638	590	631
MT	42	46	-	-	-	-	-	-
NL	12 713	14 597	2 315	2 452	4 447	5 392	801	764
AT	6 474	8 825	1 573	2 042	533	1 116	676	875
PL	22 720	16 373	5 911	3 098	4 172	3 602	3 365	2 588
PT	4 247	5 656	263	190	534	564	1 408	1 805
RO	14 914	9 752	4 407	3 389	4 737	2 491	1 120	810
SI	1 179	1 655	179	154	102	170	82	238
SK	4 373	4 459	1 659	1 922	592	501	464	446
FI	9 988	12 082	1 414	1 620	1 005	746	656	339
SE	12 622	12 588	1 762	2 029	701	920	510	442
UK	35 132	33 889	7 874	4 527	5 879	5 850	2 793	2 573
IS	435	764	106	176	12	2	9	13
NO	6 179	6 606	1 235	992	861	1 018	350	388
HR	1 256	1 572	89	37	261	236	295	515
TR	13 233	21 643	3 311	3 766	1 083	2 411	807	1 194

Data Source: Eurostat



	EU-27			EU-25		
	1995	2000	2005	1995	2000	2005
Total	326	323	326	305	310	313
Iron and steel	70	64	62	65	61	58
Chemical	60	55	58	54	52	55
Glass, pottery	42	43	43	40	42	42
Other	154	160	163	147	156	159

(Mtoe)

Data Source: Eurostat

As mentioned before, the EU-27 final energy consumption in industry had in 2005 the same level as in 1995. The three big industrial sectors presented into the table, have kept almost the same share into total industrial consumption (53% in 1995 and 50% in 2005).

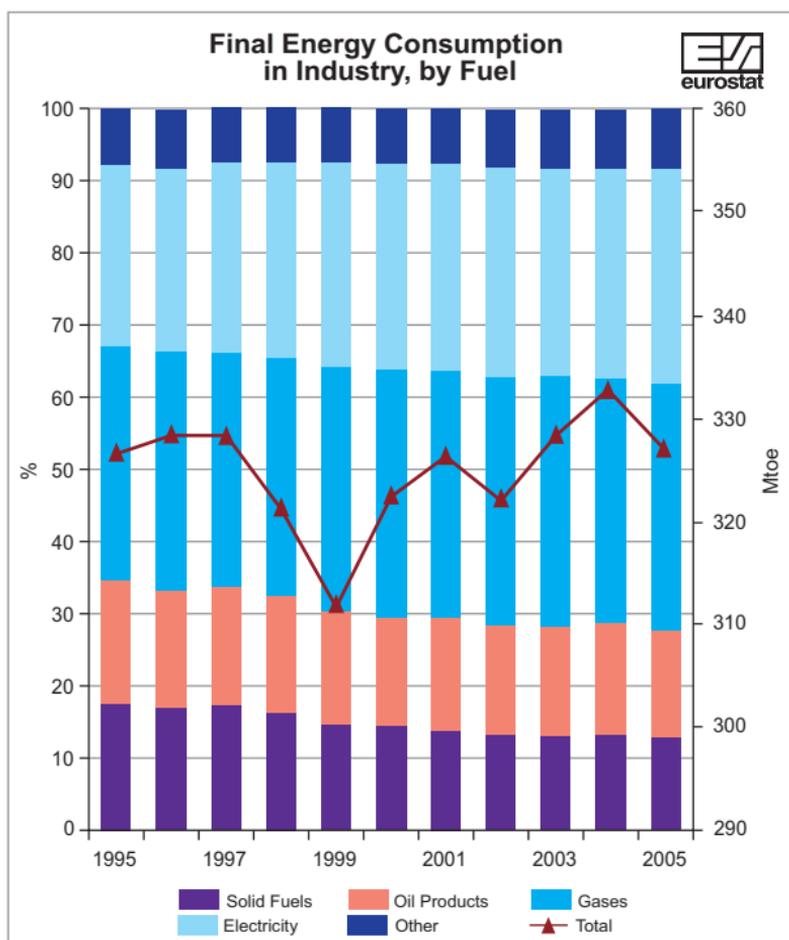
The final energy consumption of 2005 compared with 1995 varies a lot among Member States, from 39% decrease in Bulgaria to 52% increase in Spain. Germany, the top energy consumer in the industrial sector, has reduced its consumption by 9.5%. Italy, Slovenia, Austria and Ireland are examples of significant increase (in relative terms) over the period under observation.

Final Energy Consumption in Industry, by Fuel

(ktoe)

	All products		Solid Fuels		Oil products		Gases		Electricity	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
EU-27	326 431	326 377	57 608	42 487	55 338	48 349	105 776	111 829	82 234	96 940
EU-25	305 485	312 953	55 351	40 410	53 085	46 554	96 008	106 303	79 181	94 057
BE	12 110	11 605	2 962	1 933	1 806	1 070	4 034	4 494	2 975	3 390
BG	6 032	3 672	742	671	513	748	1 767	924	1 046	846
CZ	11 126	9 439	2 180	2 943	1 404	475	3 457	2 844	1 583	1 990
DK	3 026	2 831	352	197	864	762	785	716	811	882
DE	61 981	56 064	11 215	8 753	8 716	4 469	22 300	21 906	17 603	19 957
EE	790	651	149	67	240	93	151	109	151	186
IE	1 851	2 484	74	164	852	1 061	368	427	496	660
EL	4 107	4 132	1 026	435	1 843	1 787	6	426	1 037	1 240
ES	20 475	31 035	2 008	1 593	6 368	5 471	5 533	13 570	5 211	9 031
FR	36 982	37 421	5 885	4 326	7 391	6 658	11 506	13 404	10 628	11 513
IT	36 430	40 732	3 895	4 213	6 427	6 947	15 584	16 865	10 277	12 447
CY	388	316	13	36	341	229	-	-	34	47
LV	701	827	9	26	253	85	206	295	123	146
LT	1 021	996	26	94	352	94	218	290	233	244
LU	1 196	937	367	81	143	73	402	421	272	342
HU	3 808	3 427	501	440	400	273	2 083	1 436	721	797
MT	42	46	-	-	-	-	-	-	42	46
NL	12 713	14 597	1 426	1 482	1 060	1 498	6 637	6 242	3 167	3 576
AT	6 474	8 825	1 088	1 304	1 178	1 481	2 022	2 837	1 640	2 082
PL	22 720	16 373	11 420	4 681	1 123	1 756	3 553	3 467	3 647	3 553
PT	4 247	5 656	546	16	1 954	1 553	40	956	1 137	1 477
RO	14 914	9 752	1 515	1 406	1 740	1 047	8 001	4 602	2 007	2 036
SI	1 179	1 655	72	80	179	230	413	541	425	617
SK	4 373	4 459	1 664	1 435	435	312	1 457	1 387	786	949
FI	9 988	12 082	1 252	936	1 056	1 660	1 464	1 081	3 119	3 720
SE	12 622	12 588	1 188	1 345	2 023	1 821	464	542	4 472	4 949
UK	35 132	33 889	6 030	3 831	6 676	6 813	13 324	12 047	8 591	10 218
IS	435	764	56	101	91	121	-	-	245	506
NO	6 179	6 606	960	714	646	748	22	206	4 099	4 511
HR	1 256	1 572	104	136	355	499	469	530	236	301
TR	13 233	21 643	4 481	8 812	4 126	4 062	1 515	3 431	3 074	5 217

Data Source: Eurostat



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	95-05
Total	326	328	328	321	312	323	326	323	328	333	326	0%
Solid Fuels	58	57	57	52	46	47	45	44	44	44	42	-26%
Oil Products	55	53	53	52	49	48	51	48	49	52	48	-13%
Gases	106	109	107	106	106	112	111	111	114	112	112	6%
Electricity	82	83	86	87	88	92	94	94	95	97	97	18%
Other	25	26	25	24	24	25	25	26	27	27	27	5%

Data Source: Eurostat

A clear trend observed in EU-27 industry is the significant reduction in the use of solid fuels, where a decrease of 26% during the period 1995-2005 is observed. However, a total of ten countries have increased the consumption of solid fuels, most notably being the Czech Republic and Italy.

The picture is similar in the case of oil products. Increased consumption in nine countries has not been enough to counter the pan-European trend of oil replacement; hence EU-27 industrial consumption has decreased by 13% over the same period.

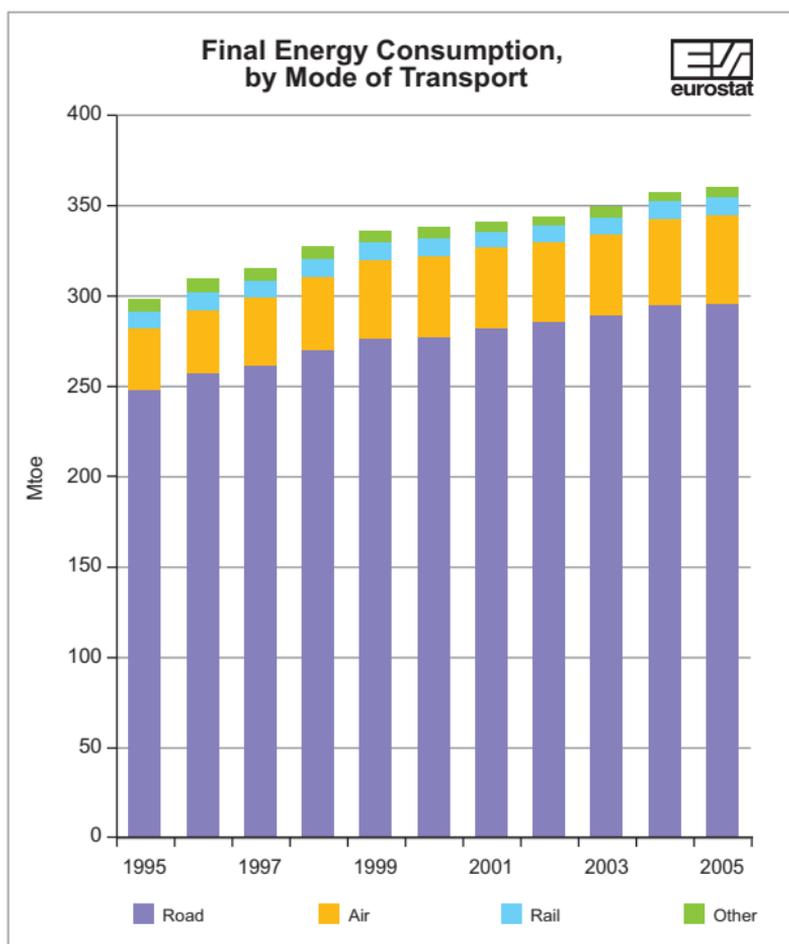
An opposite trend is observed in the case of Natural Gas and Electricity where the majority of EU Member States increased their industrial consumption.

Final Energy Consumption, by Mode of Transport

(ktoe)

	Total transport		Road		Air		Rail	
	1995	2005	1995	2005	1995	2005	1995	2005
EU-27	299 756	361 707	249 353	296 906	34 127	49 896	9 425	9 596
EU-25	294 722	354 942	245 506	290 759	33 662	49 573	8 811	9 353
BE	8 480	9 880	7 084	8 194	947	1 283	202	185
BG	1 976	2 560	1 548	2 323	278	201	144	36
CZ	2 839	6 569	2 450	5 945	189	348	200	271
DK	4 447	5 254	3 471	4 066	678	946	117	106
DE	62 907	61 958	54 239	51 462	5 988	8 320	2 126	1 858
EE	490	725	423	617	18	48	44	48
IE	2 343	4 981	1 873	4 078	391	840	50	44
EL	6 431	8 068	4 584	6 186	1 246	1 181	57	58
ES	26 069	39 428	20 466	31 394	3 105	5 334	626	1 166
FR	44 125	49 755	37 456	41 872	4 716	6 314	1 220	1 264
IT	37 636	43 604	33 945	38 571	2 424	3 877	819	907
CY	750	970	480	668	267	299	3	3
LV	712	999	596	847	26	59	90	93
LT	1 037	1 397	909	1 272	41	47	86	79
LU	1 307	2 708	1 109	2 268	189	431	9	9
HU	2 653	4 175	2 281	3 785	182	230	190	159
MT	304	328	230	237	74	90	-	-
NL	12 404	15 068	8 949	11 020	2 595	3 673	162	172
AT	5 160	7 994	4 401	7 000	461	675	292	310
PL	8 256	12 087	7 183	11 260	377	323	667	502
PT	4 853	7 026	4 104	6 076	622	884	80	66
RO	3 058	4 204	2 298	3 824	186	121	471	208
SI	1 326	1 469	1 276	1 417	21	24	29	29
SK	1 509	1 805	1 390	1 717	:	39	119	49
FI	4 151	4 816	3 505	3 955	411	568	102	97
SE	7 666	8 643	6 434	7 319	856	850	273	332
UK	46 867	55 236	36 667	39 534	7 838	12 890	1 246	1 545
IS	272	360	185	213	76	141	-	-
NO	4 202	4 924	2 825	3 314	561	637	176	147
HR	1 189	1 902	1 017	1 718	88	97	52	55
TR	11 889	13 349	10 248	10 666	1 150	2 010	276	269

Data Source: Eurostat



	(Mtoe)											
EU-27	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	95-05
Total	300	310	317	329	337	339	343	346	351	359	362	21%
Road	249	258	263	271	278	278	284	288	291	297	297	19%
Air	34	36	37	41	43	46	44	44	45	48	50	46%
Rail	9	10	10	10	10	10	9	9	10	10	10	2%
Other	7	7	7	7	6	6	5	5	6	5	5	-23%

Data Source: Eurostat

The ten years between 1995 and 2005 have marked a 21% increase in consumption in transport, which is mainly driven by consumption for road transport, which has a predominant share (82%) of total transport consumption. The consumption for air transport exhibited the most important relative growth, increasing by 46% to a share of 14% of total transport consumption in 2005.

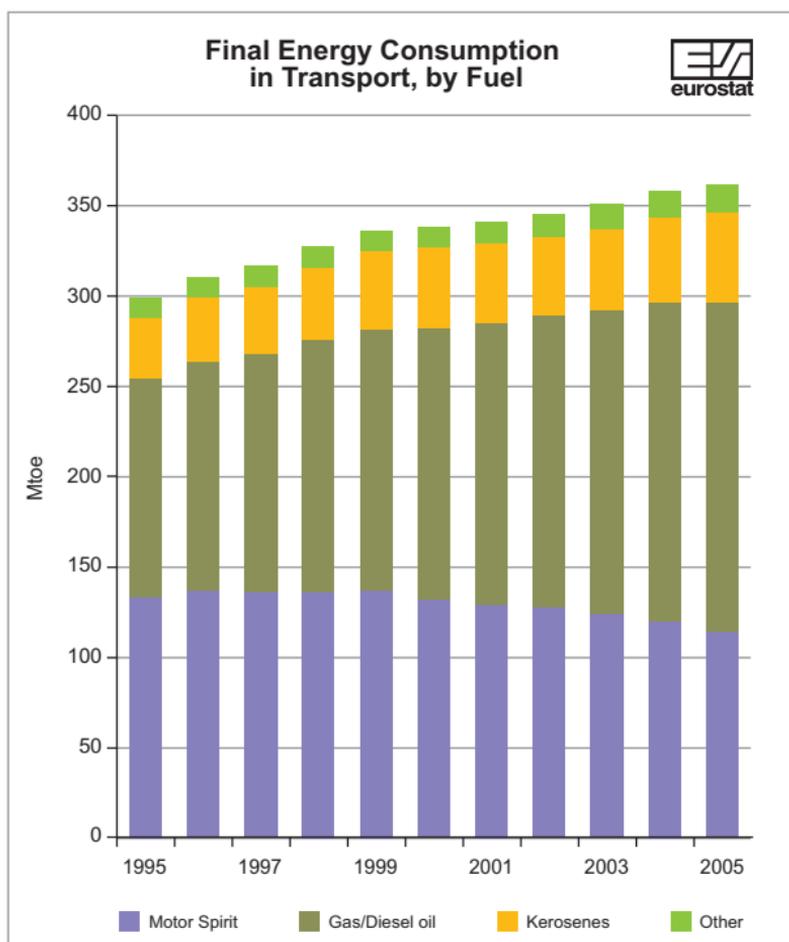
The two new Member States, Bulgaria and Romania, exhibit substantial growth of road transport consumption between 1995 and 2005, well above the EU-27 average. However, the highest increase in energy consumption for transport was registered in the Czech Republic, Ireland and Luxembourg.

Final Energy Consumption in Transport, by Fuel

(ktoe)

	Total		Motor Spirit		Kerosenes		Gas/Diesel oil	
	1995	2005	1995	2005	1995	2005	1995	2005
EU-27	299 756	361 707	133 845	114 302	34 014	49 744	121 475	182 049
EU-25	294 722	354 942	131 643	112 102	33 546	49 430	119 432	178 390
BE	8 480	9 880	2 979	1 854	945	1 281	4 252	6 450
BG	1 976	2 560	1 140	573	276	200	483	1 394
CZ	2 839	6 569	1 725	2 162	185	346	706	3 745
DK	4 447	5 254	1 957	1 933	675	944	1 755	2 300
DE	62 907	61 958	31 444	24 131	5 975	8 304	23 992	26 101
EE	490	725	259	309	18	42	201	365
IE	2 343	4 981	1 091	1 801	390	836	831	2 315
EL	6 431	8 068	2 883	4 086	1 226	1 181	2 009	2 448
ES	26 069	39 428	8 969	7 640	3 105	5 323	13 186	25 614
FR	44 125	49 755	14 857	11 274	4 690	6 291	23 537	30 508
IT	37 636	43 604	17 938	14 153	2 418	3 863	14 788	23 105
CY	750	970	192	318	267	299	288	350
LV	712	999	430	352	26	59	240	548
LT	1 037	1 397	619	352	41	46	345	765
LU	1 307	2 708	541	510	189	431	567	1 756
HU	2 653	4 175	1 500	1 552	182	230	883	2 259
MT	304	328	126	71	74	90	104	166
NL	12 404	15 068	4 276	4 309	2 589	3 670	4 581	6 558
AT	5 160	7 994	2 345	2 102	461	675	2 098	4 893
PL	8 256	12 087	4 525	4 147	371	319	2 757	5 576
PT	4 853	7 026	1 988	1 903	620	881	2 219	4 167
RO	3 058	4 204	1 062	1 628	192	113	1 560	2 265
SI	1 326	1 469	864	685	20	23	427	745
SK	1 509	1 805	530	688	:	39	861	1 008
FI	4 151	4 816	2 034	1 966	408	565	1 627	2 183
SE	7 666	8 643	4 474	4 063	849	846	2 070	3 110
UK	46 867	55 236	23 099	19 739	7 822	12 847	15 107	21 358
IS	272	360	144	158	75	140	50	63
NO	4 202	4 924	1 738	1 642	560	635	1 748	2 448
HR	1 189	1 902	586	730	88	96	473	1 029
TR	11 889	13 349	4 550	2 779	1 150	2 010	6 020	6 904

Data Source: Eurostat



	(Mtoe)											
EU-27	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	95-05
Total	300	310	317	329	337	339	343	346	351	359	362	21%
Motor Spirit	134	137	136	137	138	132	129	128	124	121	114	-15%
Gas/Diesel oil	121	128	132	139	145	150	157	162	169	177	182	50%
Kerosenes	34	35	37	41	43	45	44	44	45	48	50	46%
Other	10	11	11	12	11	12	12	13	13	14	16	50%

Data Source: Eurostat

Reacting to energy market and technological changes, the fuel mix of the transport sector has adapted. Despite a 19% increase in energy consumption by road transport between 1995 and 2005, gasoline consumption has dropped by 15% to a share of 32% in the fuel mix used in transport. On the other hand, diesel oil has for the first time exceeded the 50% share of total transport consumption, following a 50% increase between 1995 and 2005.

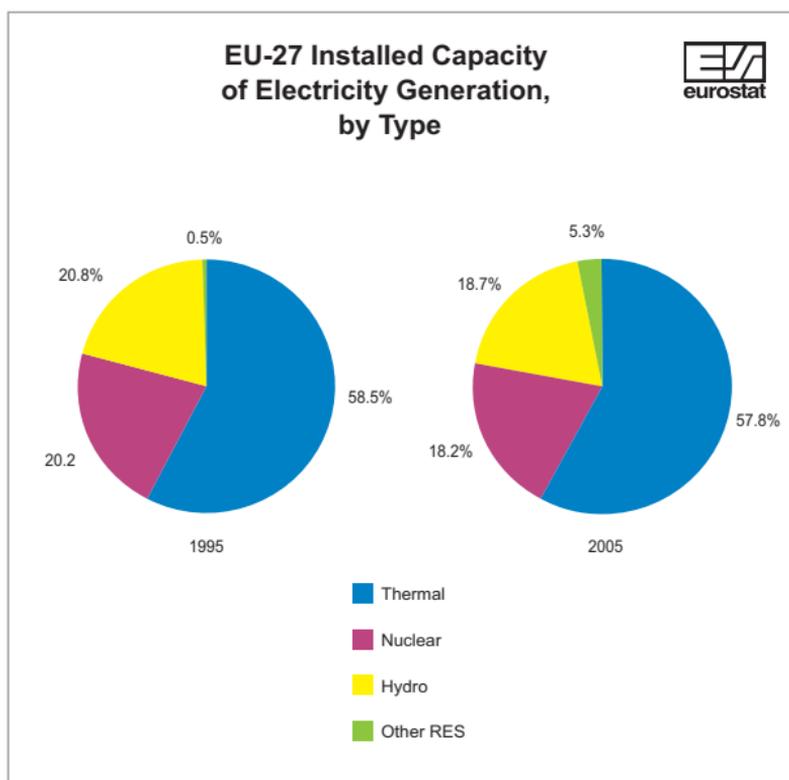
It can be noted that high increase of energy consumption for the Czech Republic, Luxembourg and Ireland is mainly due to the very high increase of diesel oil consumption. Furthermore, all of the five largest transport fuels consumers (Germany, UK, France, Italy and Spain) exhibit important decrease in gasoline consumption in most cases in favour of diesel oil.

Installed Capacity of Electricity Generation, by Type

(MW)

	Total		Thermal		Nuclear		Hydro		Others	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
EU-27	635 159	743 718	371 871	430 006	128 314	135 097	132 022	139 069	2 952	39 546
EU-25	610 524	712 499	355 593	411 370	128 314	131 668	123 665	129 916	2 952	39 545
BE	14 917	16 094	7 877	8 713	5 632	5 802	1 403	1 412	5	167
BG	2 359	12 269	:	6 682	-	2 722	2 359	2 864	0	1
CZ	13 803	17 412	10 644	11 456	1 760	3 760	1 399	2 167	0	29
DK	10 775	13 345	10 149	10 205	-	-	10	11	616	3 129
DE	115 342	123 522	82 616	76 375	22 713	20 378	8 876	8 341	1 137	18 428
EE	2 692	2 285	2 692	2 254	-	-	-	-	0	31
IE	4 060	6 150	3 537	5 132	-	-	517	526	6	492
EL	8 942	13 304	6 390	9 708	-	-	2 523	3 105	29	491
ES	45 849	69 590	21 882	35 477	7 068	7 577	16 784	18 219	115	8 317
FR	107 375	116 723	23 869	27 350	58 515	63 363	24 987	25 287	4	723
IT	65 907	85 231	45 571	61 932	-	-	19 844	20 993	492	2 306
CY	699	1 124	699	1 124	-	-	-	-	0	0
LV	2 067	2 165	560	603	-	-	1 506	1 536	1	26
LT	5 856	4 530	2 461	2 470	2 730	1 183	665	877	0	0
LU	1 257	1 274	117	101	-	-	1 140	1 138	0	35
HU	7 404	8 586	5 516	6 654	1 840	1 866	48	49	0	17
MT	422	921	422	921	-	-	-	-	0	0
NL	18 994	21 677	18 195	19 967	505	449	37	37	257	1 224
AT	17 439	18 892	6 134	6 254	-	-	11 304	11 811	1	827
PL	29 465	32 257	27 418	29 815	-	-	2 047	2 321	0	121
PT	9 318	13 389	4 893	7 277	-	-	4 409	5 034	16	1 078
RO	22 276	18 950	16 278	11 954	-	707	5 998	6 289	0	0
SI	2 518	2 992	1 097	1 357	664	656	757	979	0	0
SK	7 238	8 247	3 218	3 090	1 760	2 640	2 260	2 512	0	5
FI	14 433	16 464	9 340	10 676	2 310	2 671	2 777	3 035	6	82
SE	33 623	33 692	7 349	7 424	10 055	9 471	16 152	16 345	67	452
UK	70 129	82 633	52 947	65 035	12 762	11 852	4 220	4 181	200	1 565
IS	1 081	1 538	146	143	-	-	884	1 163	51	232
NO	28 055	28 924	-	301	-	-	28 052	28 358	3	265
HR	3 633	3 860	1 561	1 800	-	-	2 072	2 060	0	0
TR	20 955	38 842	11 074	25 901	-	-	9 863	12 905	18	36

Data Source: Eurostat



	EU-27		EU-25	
	1995	2005	1995	2005
Total	635	744	611	712
Thermal	372	430	356	411
Nuclear	128	135	128	132
Hydro	132	139	124	130
Other RES	3	40	3	40

(GW)

Data Source: Eurostat

The 27 Member States' installed capacity of electricity generation plants rose by 17% the last decade. Thermal power plants continue to provide the majority of capacity, with a share of 58% in 2005. In addition, their growth rate was similar to that of total installed capacity. In 2005, on EU-27 level, solid fuels input to thermal power plants was 54% of total input followed by input of natural gas with a 29% share.

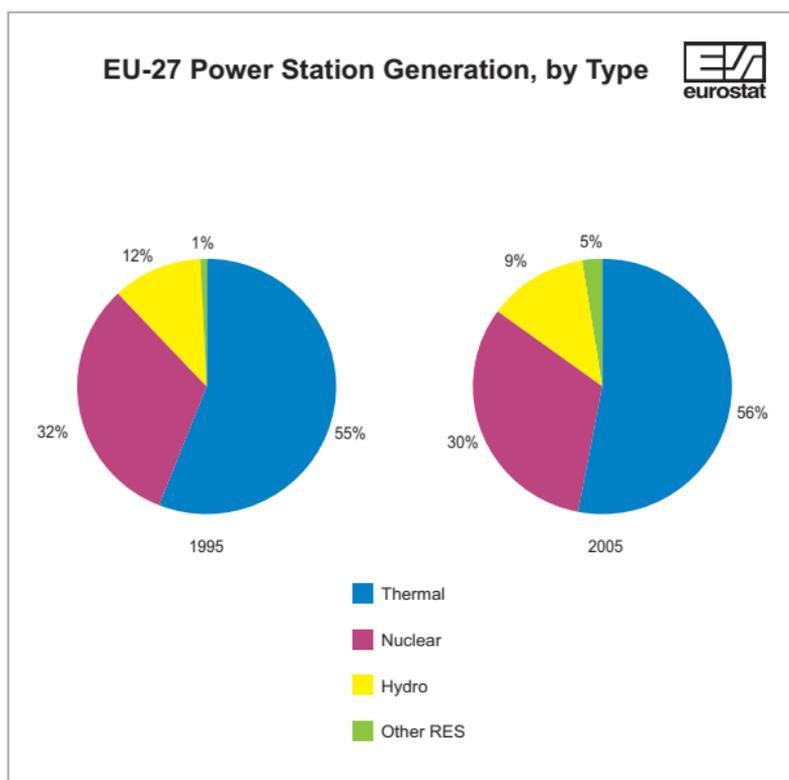
Nuclear and Hydro capacity, on the other hand, both grew by only 5% and so their shares were in 2005 almost 2 percentage units less than in 1995, at approximately 18.5%. However, it is important to note that in Germany, Lithuania, UK, Bulgaria and Sweden more than 7GW of nuclear capacity has been decommissioned since 1995 i.e. more than 5% of the 2005 nuclear capacity.

Power Station Generation, by Type

(GWh)

	Total		Thermal		Nuclear		Hydro		Other RES	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
EU-27	2 716 174	3 281 361	1 476 284	1 819 095	881 821	997 699	326 270	306 957	31 799	157 610
EU-25	2 615 682	3 177 975	1 411 500	1 764 469	864 560	973 491	307 826	282 413	31 796	157 602
BE	73 537	85 709	31 233	35 484	41 356	47 595	338	288	610	2 342
BG	41 226	43 973	22 214	20 981	17 261	18 653	1 751	4 337	0	2
CZ	60 575	81 931	45 938	54 062	12 230	24 728	2 002	2 380	405	761
DK	36 655	36 276	34 564	25 657	-	-	30	23	2 061	10 596
DE	533 807	613 164	352 433	385 447	154 091	163 055	21 780	19 581	5 503	45 081
EE	8 693	10 205	8 685	10 108	-	-	2	22	6	75
IE	17 625	25 013	16 896	23 140	-	-	713	631	16	1 242
EL	41 298	59 427	37 734	53 021	-	-	3 529	5 017	35	1 389
ES	165 615	290 607	85 570	189 104	55 455	57 539	23 112	19 553	1 478	24 411
FR	490 936	570 645	38 075	60 828	377 231	451 529	73 529	52 233	2 101	6 055
IT	240 791	302 163	199 163	252 412	-	-	37 782	36 067	3 846	13 684
CY	2 473	4 378	2 473	4 377	-	-	-	-	0	1
LV	3 979	4 905	1 042	1 491	-	-	2 937	3 325	0	89
LT	13 520	14 413	1 325	3 618	11 822	10 337	373	451	0	7
LU	498	3 345	361	3 106	-	-	84	93	53	146
HU	34 017	35 755	19 828	19 992	14 026	13 834	163	203	0	1 726
MT	1 632	2 240	1 632	2 240	-	-	-	-	0	0
NL	81 069	100 220	75 096	87 305	4 018	3 997	88	88	1 867	8 830
AT	55 179	62 980	16 955	23 402	-	-	37 067	35 874	1 157	3 704
PL	137 042	155 359	134 806	151 193	-	-	1 887	2 201	349	1 965
PT	33 196	46 259	23 807	37 704	-	-	8 343	4 731	1 046	3 824
RO	59 266	59 413	42 570	33 645	-	5 555	16 693	20 207	3	6
SI	12 654	15 117	4 634	5 658	4 779	5 884	3 241	3 461	0	114
SK	26 041	31 352	9 643	8 980	11 437	17 727	4 961	4 638	0	7
FI	64 064	70 549	25 274	23 714	19 216	23 271	12 925	13 784	6 649	9 780
SE	148 291	158 369	7 705	3 947	69 935	72 377	68 102	72 808	2 549	9 237
UK	332 495	397 594	236 628	298 479	88 964	81 618	4 838	4 961	2 065	12 536
IS	5 271	10 344	299	1 663	-	-	4 682	7 019	290	1 662
NO	122 055	137 332	389	651	-	-	121 343	135 796	323	885
HR	8 863	12 344	3 593	5 997	-	-	5 265	6 333	5	14
TR	86 333	162 050	50 484	122 302	-	-	35 541	39 561	308	187

Data Source: Eurostat



	EU-27		EU-25	
	1995	2005	1995	2005
Total	2 716	3 281	2 616	3 178
Thermal	1 476	1 819	1 412	1 764
Nuclear	882	998	865	973
Hydro	326	307	308	282
Other RES	32	158	32	158

(TWh)

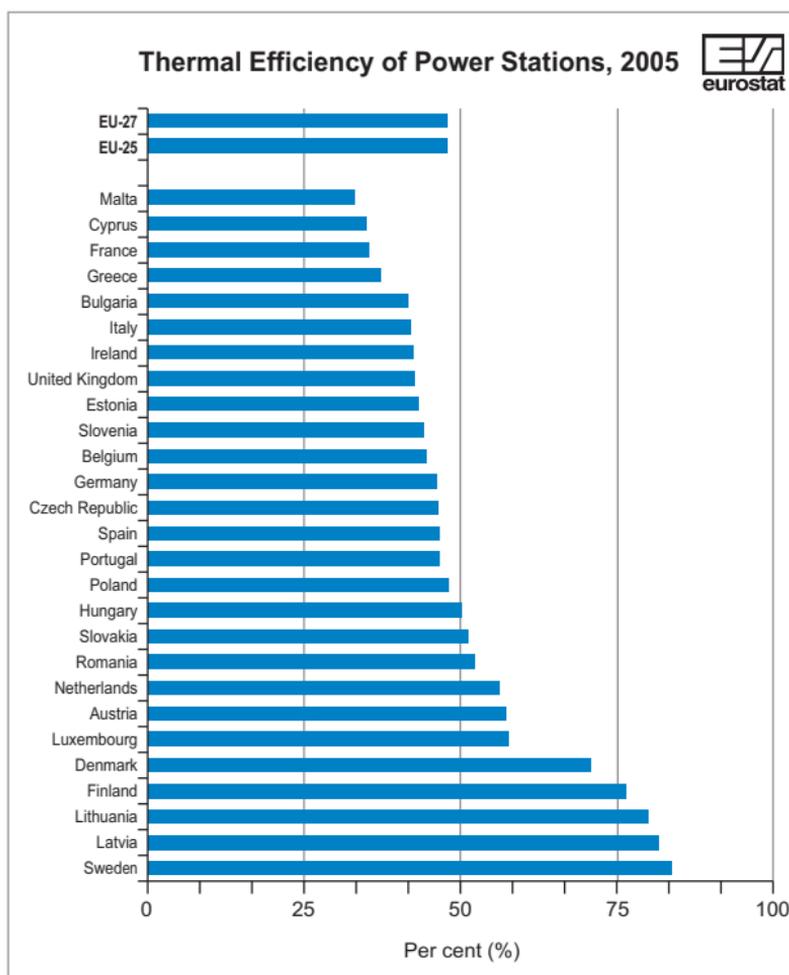
Data Source: Eurostat

EU-27 total electricity generation increased by 565 TWh or 21% over the period under consideration. Electricity generation of Thermal and Nuclear plants registered higher increase than the one of their capacity. This is especially true for nuclear electricity generation, which increased by 13%, while the nuclear capacity increased by 5%. Hydro electricity generation in 2005 was by 6% down compared with the 1995 figure. Electricity generation of the other renewable energy technologies was in 2005 almost 5 times more than in 1995 but still their share to the total electricity generation was low (~5%).

Thermal Efficiency of Power Stations

	1995	2000	2005
			<i>Per cent (%)</i>
EU-27	45.2	46.0	46.9
EU-25	44.9	45.8	46.8
Belgium	41.4	46.3	44.5
Bulgaria	41.1	41.4	41.7
Czech Republic	48.1	46.8	46.5
Denmark	61.1	64.6	71.0
Germany	47.3	45.8	46.1
Estonia	38.6	40.3	43.3
Ireland	39.2	40.6	42.2
Greece	32.7	36.7	37.2
Spain	40.3	41.4	46.7
France	40.7	35.1	35.5
Italy	39.4	40.5	42.0
Cyprus	33.2	32.8	35.0
Latvia	71.0	71.1	81.6
Lithuania	75.5	76.7	80.1
Luxembourg	37.4	68.5	57.7
Hungary	42.0	50.1	50.3
Malta	30.3	33.4	33.2
Netherlands	48.7	55.5	56.2
Austria	49.3	57.9	57.2
Poland	46.1	46.8	48.3
Portugal	39.5	44.2	46.7
Romania	54.9	54.4	52.3
Slovenia	35.9	43.7	44.2
Slovakia	43.5	44.2	51.2
Finland	67.2	73.3	76.6
Sweden	77.5	83.2	83.8
United Kingdom	41.0	43.9	42.7
Iceland	32.7	25.3	23.7
Norway	86.8	86.2	100.0
Croatia	53.5	49.9	50.8
Turkey	34.7	39.7	44.6

Data Source: Eurostat



	Per cent (%)										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	45.2	45.7	46.3	46.3	46.4	46.0	46.2	45.7	46.1	46.4	46.9
EU-25	44.9	45.5	45.9	46.0	46.2	45.8	46.1	45.6	46.0	46.4	46.8

Data Source: Eurostat

The efficiency of thermal power stations is calculated as the ratio between the output of electricity and heat from electricity and CHP power plants and the input of fuels to these plants.

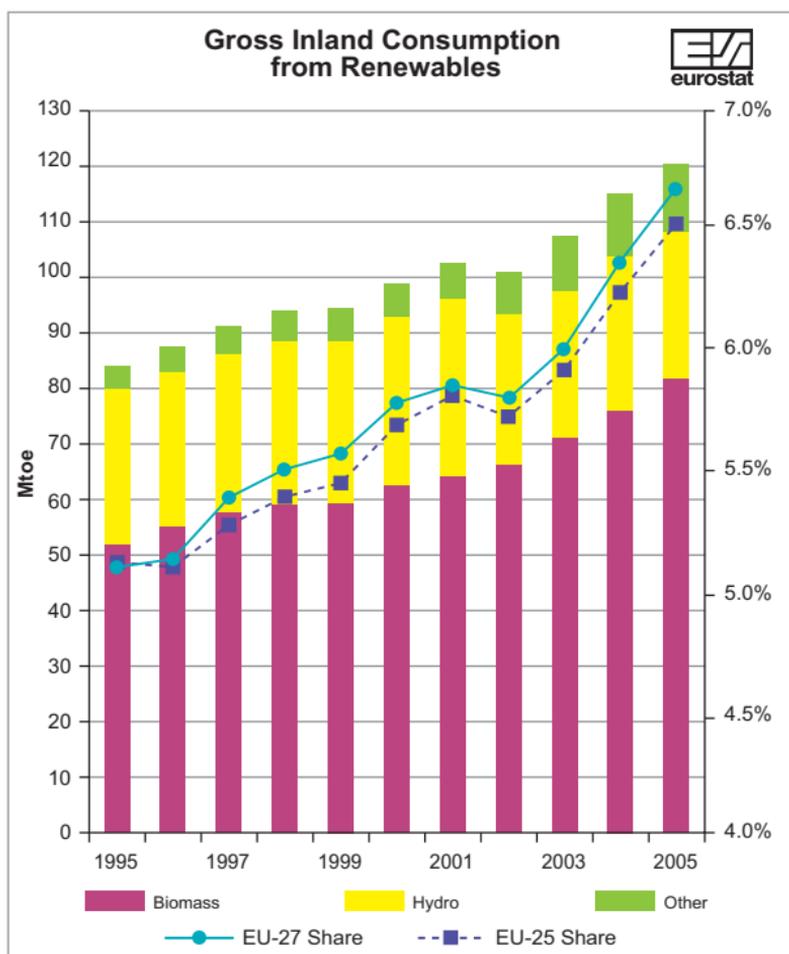
The EU-27 average efficiency of thermal power stations has increased to 46.9% in 2005 up from 45.2% in 1995. Between 1995 and 2005, decrease in efficiency is observed in France, Romania, Czech Republic and Germany while Luxembourg, Latvia, Denmark, Finland and Hungary demonstrated a significant increase during the same period. In any case, it must be noted that average thermal efficiency at country level exhibit significant fluctuations, part of which due to the operation schedule of thermal power stations.

The efficiency increase observed in the previous years continued in 2005 due to technological advances (cogeneration and combined cycle power plants) and investment, following the decommissioning of outdated power plants.

Gross Inland Consumption from Renewables and Share on Total Gross Inland Consumption

	Total		Hydro		Biomass		(ktoe) Other		Per cent (%) Share	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
	EU-27	84 113	120 571	28 054	26 394	51 991	81 906	4 068	12 271	5.1
EU-25	80 953	114 443	26 468	24 283	50 417	78 004	4 068	12 156	5.1	6.5
BE	684	1 935	29	25	652	1 887	3	24	1.4	3.5
BG	363	1 123	151	373	212	717	0	33	1.6	5.6
CZ	598	1 825	172	205	426	1 616	0	4	1.5	4.1
DK	1 540	3 168	3	2	1 429	2 584	108	582	7.6	16.2
DE	6 516	16 713	1 873	1 684	4 447	12 186	197	2 844	1.9	4.8
EE	481	621	0	2	481	614	0	5	8.8	11.2
IE	165	401	61	54	102	250	2	96	1.5	2.6
EL	1 289	1 634	303	431	898	990	88	212	5.3	5.2
ES	5 602	8 710	1 987	1 681	3 563	5 129	52	1 900	5.5	6.1
FR	17 903	16 640	6 322	4 491	11 434	11 912	147	236	7.5	6.0
IT	7 771	12 125	3 249	3 101	1 346	4 008	3 177	5 016	4.8	6.5
CY	42	50	-	-	11	9	31	41	2.2	2.0
LV	1 309	1 714	253	286	1 057	1 424	0	4	27.5	36.3
LT	493	758	32	39	461	716	0	3	5.7	8.8
LU	47	74	7	8	39	59	0	6	1.4	1.6
HU	626	1 180	14	17	526	1 073	86	89	2.4	4.2
MT	-	-	-	-	-	-	-	-	-	-
NL	1 154	2 823	8	8	1 116	2 616	31	199	1.6	3.5
AT	5 889	6 981	3 187	3 085	2 663	3 655	39	241	22.0	20.5
PL	3 924	4 501	162	189	3 762	4 291	0	21	3.9	4.8
PT	2 602	3 578	717	407	1 831	2 931	54	241	13.3	13.4
RO	2 797	5 004	1 435	1 737	1 362	3 185	0	82	5.9	12.8
SI	571	774	279	298	292	476	0	0	9.3	10.6
SK	504	825	427	399	78	418	0	9	2.8	4.3
FI	6 146	7 994	1 111	1 185	5 033	6 793	1	15	21.2	23.2
SE	13 146	15 365	5 856	6 260	7 277	9 018	13	86	26.1	29.8
UK	1 950	4 055	416	427	1 494	3 348	40	281	0.9	1.7
IS	1 565	2 636	403	604	1	3	1 162	2 030	67.6	73.0
NO	11 575	13 015	10 434	11 676	1 140	1 295	1	44	48.9	40.4
HR	719	900	453	545	267	355	0	0	10.2	10.1
TR	10 776	10 131	3 056	3 402	7 067	5 332	654	1 397	17.4	11.9

Data Source: Eurostat



	(Mtoe)										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27											
Total	84	87	91	94	95	99	103	101	107	115	121
Biomass	52	55	58	59	59	63	64	66	71	76	82
Hydro	28	28	29	30	29	30	32	27	26	28	26
Others	4	4	5	5	6	6	6	8	10	11	12
Share	5.1%	5.1%	5.4%	5.5%	5.6%	5.8%	5.9%	5.8%	6.0%	6.4%	6.7%
EU-25											
Share	5.1%	5.1%	5.3%	5.4%	5.4%	5.7%	5.8%	5.7%	5.9%	6.3%	6.5%

Data Source: Eurostat

The contribution of renewables to total gross inland consumption rose from 5.1% in 1995 to 6.7% in 2005 with a relative growth of 31%. Total increase of RES was 36.5 Mtoe with a relative growth of 43% when during the same period gross inland consumption of all fuels almost reached 10%.

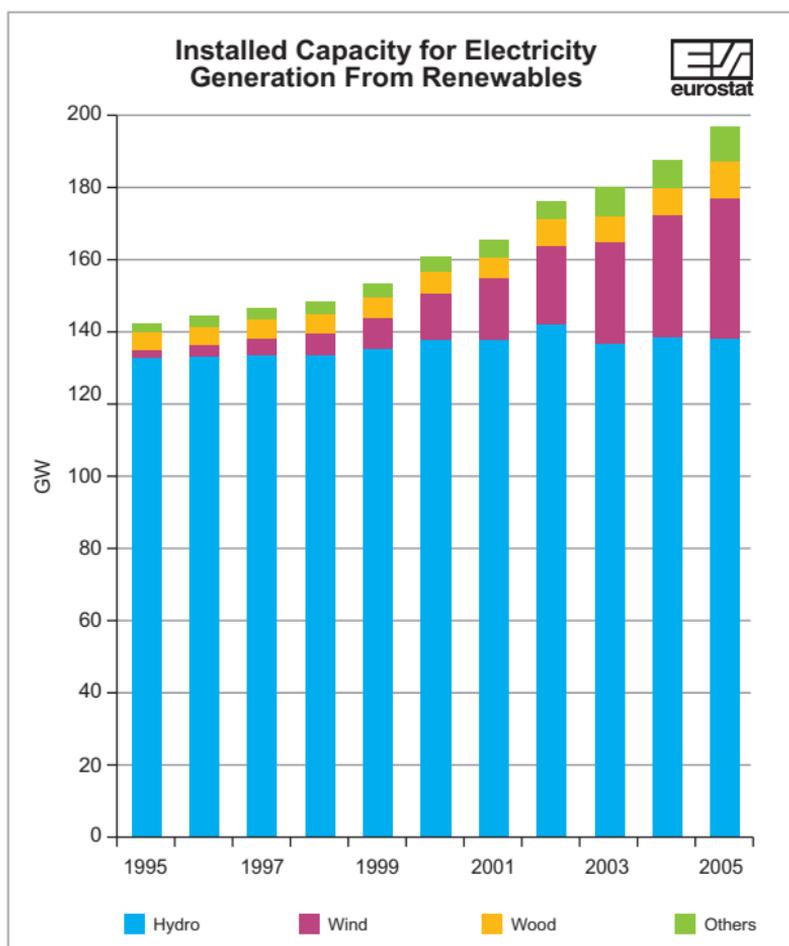
In 2005, biomass retained its predominant share with 68%, having risen by 58% over the ten years period. Hydro average annual production during the last decade was 28.5 Mtoe within the range of 26-32 Mtoe per year.

“Other” renewable sources, (solar, geothermal and wind) have tripled their value within the period 1995-2005 with wind energy being responsible for the greatest part of this increase; having risen from 350 ktoe in 1995 to more than 6 000 ktoe in 2005.

Installed Capacity for Electricity Generation From Renewables

	(MW)									
	Total		Hydro		Wind		Wood		Others	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
EU-27	141 848	197 222	132 022	138 999	2 472	38 861	4 837	9 581	2 517	9 781
EU-25	133 187	188 068	123 665	129 846	2 472	38 860	4 533	9 581	2 517	9 781
BE	1 569	2 069	1 403	1 412	5	167	161	293	-	197
BG	2 359	2 865	2 359	2 864	-	1	-	-	-	-
CZ	1 399	2 196	1 399	2 167	-	29	-	-	-	-
DK	836	4 095	10	11	616	3 129	40	584	170	371
DE	11 342	31 615	8 876	8 341	1 137	18 428	573	1 008	756	3 838
EE	-	31	-	-	-	31	-	-	-	-
IE	523	1 036	517	526	6	492	-	-	-	18
EL	2 600	3 621	2 523	3 105	27	491	48	-	2	25
ES	17 101	27 247	16 784	18 219	115	8 317	126	344	76	367
FR	25 611	26 460	24 987	25 109	4	723	365	340	255	288
IT	20 520	25 262	19 844	20 993	22	1 635	68	510	586	2 124
CY	-	-	-	-	-	-	-	-	-	-
LV	1 507	1 572	1 506	1 536	1	26	-	3	-	7
LT	665	882	665	877	-	-	-	2	-	3
LU	1 146	1 212	1 140	1 138	-	35	-	-	6	39
HU	77	427	48	49	-	17	5	337	24	24
MT	-	-	-	-	-	-	-	-	-	-
NL	579	2 084	37	37	257	1 224	6	343	279	480
AT	11 856	13 790	11 304	11 811	1	827	544	766	7	386
PL	2 047	2 472	2 047	2 321	-	121	-	-	-	30
PT	4 630	6 472	4 409	5 034	8	1 064	205	273	8	101
RO	6 302	6 289	5 998	6 289	-	-	304	-	-	-
SI	757	997	757	979	-	-	-	13	-	5
SK	2 260	2 569	2 260	2 512	-	5	-	44	-	8
FI	3 930	4 841	2 777	3 035	6	82	1 146	1 720	1	4
SE	17 497	19 656	16 152	16 345	67	452	1 200	2 526	78	333
UK	4 735	7 462	4 220	4 289	200	1 565	46	475	269	1 133
IS	935	1 395	884	1 163	-	-	-	-	51	232
NO	28 183	28 623	28 052	28 358	3	265	123	-	5	-
HR	2 072	2 060	2 072	2 060	-	-	-	-	-	-
TR	9 895	13 022	9 863	12 905	-	21	14	72	18	24

Data Source: Eurostat



	(GW)										
EU-27	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total	142	145	147	149	154	161	166	176	179	188	197
Hydro	132	133	134	134	136	137	139	142	137	138	139
Wind	2	3	5	6	9	13	17	23	29	34	39
Wood	5	5	5	5	6	6	6	6	7	8	10
Others	3	3	3	3	4	4	5	5	7	7	10

Data Source: Eurostat

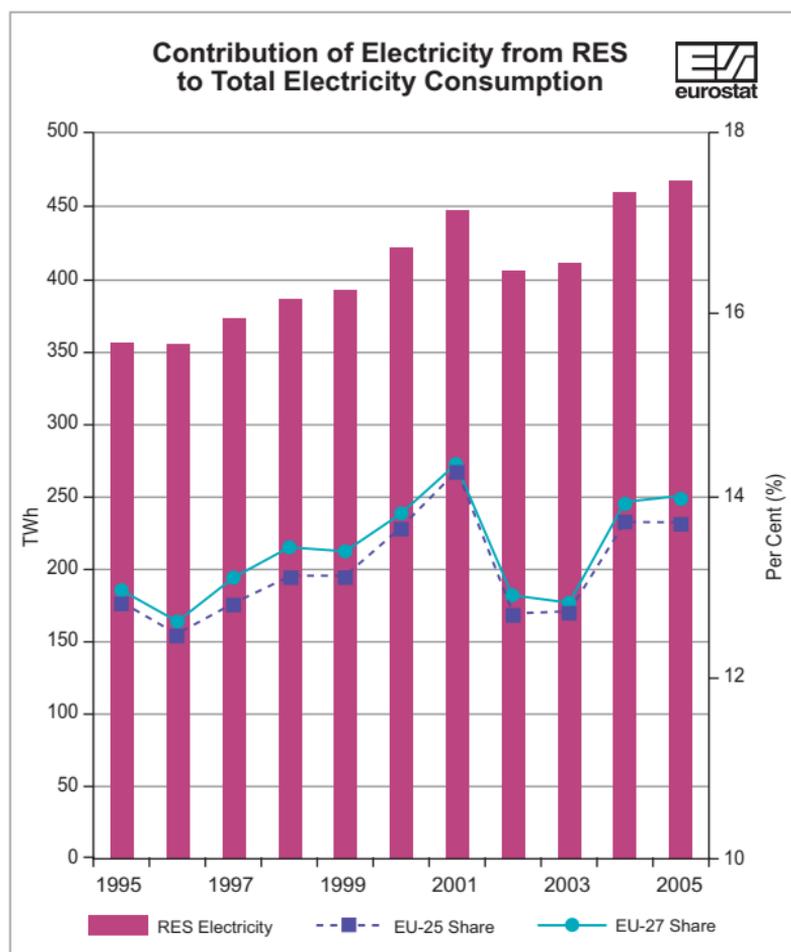
EU-27 total RES capacity increased by almost 40% during the last decade mainly due to the development of Wind and Biomass technologies. Out of the 55MW total growth, 36MW is attributed to wind energy capacity while the combined capacity growth of wood, biogas and MSW was 10MW. However, Hydro power remains the largest sector, with a 70% share in 2005 followed by wind energy with a 20% share.

In 2005, Germany further increased its lead in photovoltaic capacity, reaching 1 508MW and 89% of EU-27 total photovoltaic capacity. Germany and Spain lead the wind sector, with 69% of the total EU-27 wind capacity. Finland and Sweden, on the other hand, have 44% of the wood burning power plants. Italy with a 98% share of geothermal capacity is almost the sole player in the sector, which is represented also by Portugal.

Contribution of Electricity from RES to Total Electricity Consumption

	RES electricity (GWh)			Share (%)		
	1995	2000	2005	1995	2000	2005
EU-27	358 069	420 860	464 567	13.0	13.8	14.0
EU-25	339 622	403 394	440 015	12.8	13.7	13.6
BE	948	1 334	2 630	1.2	1.5	2.8
BG	1 751	2 688	4 339	4.2	7.4	11.8
CZ	2 407	2 280	3 141	3.9	3.6	4.5
DK	2 091	6 026	10 619	5.8	16.4	28.2
DE	27 283	37 319	64 662	5.0	6.5	10.5
EE	8	19	97	0.1	0.3	1.1
IE	729	1 186	1 873	4.1	4.9	6.8
EL	3 564	4 144	6 406	8.4	7.7	10.0
ES	24 590	36 036	43 964	14.3	15.7	15.0
FR	75 630	71 527	58 288	17.8	15.2	11.3
IT	41 628	51 213	49 751	14.9	16.0	14.1
CY	-	-	1	-	-	0.0
LV	2 937	2 823	3 414	47.1	47.7	48.4
LT	373	339	458	3.3	3.4	3.9
LU	137	199	239	2.2	2.9	3.2
HU	163	178	1 929	0.4	0.5	4.6
MT	-	-	-	-	-	-
NL	1 955	4 230	8 918	2.1	3.9	7.5
AT	38 224	43 528	39 578	70.6	72.0	57.9
PL	2 236	2 331	4 166	1.6	1.7	2.9
PT	9 389	13 125	8 555	27.5	29.4	16.0
RO	16 696	14 778	20 213	28.0	28.8	35.8
SI	3 241	3 904	3 575	29.5	31.7	24.2
SK	4 961	4 726	4 645	17.9	16.9	16.5
FI	19 574	23 297	23 564	27.0	28.5	26.9
SE	70 651	83 247	82 045	48.2	55.4	54.3
UK	6 903	10 383	17 497	2.0	2.7	4.3
IS	4 972	7 679	8 681	99.8	99.9	99.9
NO	121 666	139 120	136 681	104.6	112.2	108.4
HR	5 270	5 875	6 347	42.6	40.0	36.1
TR	35 849	31 154	39 748	41.9	24.3	24.7

Data Source: Eurostat



	(TWh)										
EU-27	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
RES Electricity	358	358	373	391	395	421	447	405	414	458	465
% Share	13.0	12.7	13.1	13.4	13.4	13.8	14.4	12.9	12.9	13.9	14.0
EU-25											
% Share	12.8	12.5	12.8	13.1	13.1	13.7	14.2	12.7	12.7	13.7	13.6

Data Source: Eurostat

In 2005, EU-27 electricity generation from renewable energy sources was 465TWh and the contribution of renewables to total electricity consumption was 14.0%.

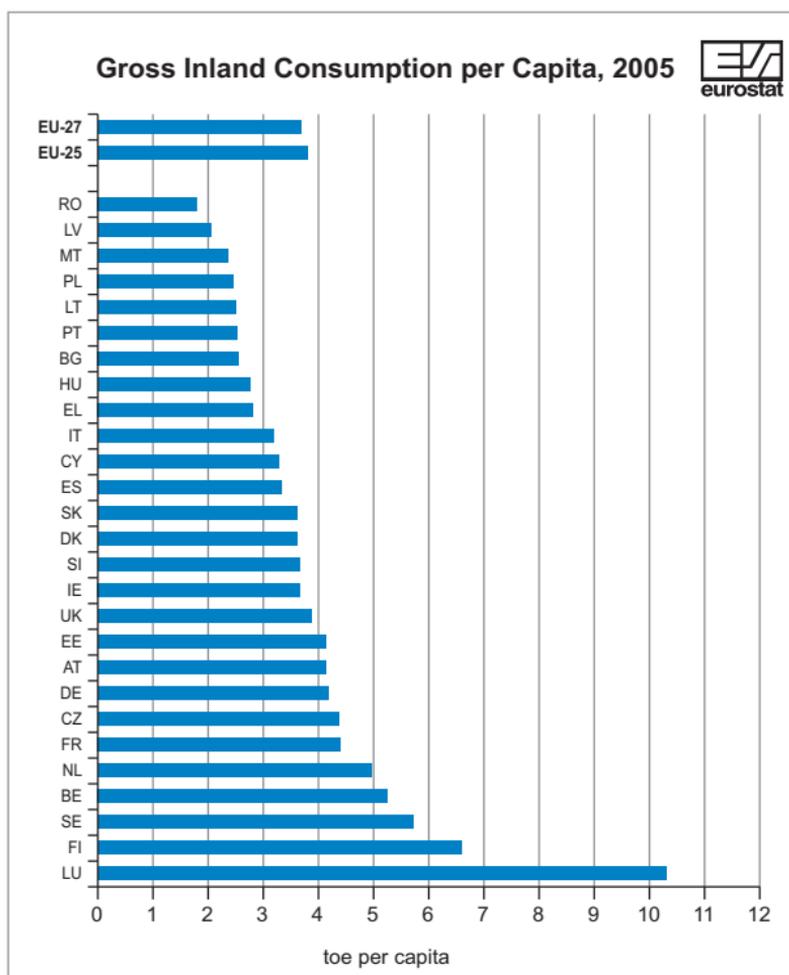
During the period 1995-2005 total RES electricity increase was 106 TWh with 30% increase during the period, particularly exhibited since 2000 mostly due to the wind electricity increase (56TWh).

It should be noted that hydroelectricity generation covers around 70% of the total RES generation. Hence, due to the large share of hydroelectric power together with the annual variation in precipitation and also the role of hydro plants in covering peak demands, electricity production from renewables and consequently their share in total electricity consumption fluctuate from year to year.

Gross Inland Consumption per Capita

	<i>(toe per capita)</i>			<i>Index (1990=100)</i>		
	1995	2000	2005	1995	2000	2005
EU-27	3.45	3.55	3.69	98.5	101.3	105.3
EU-25	3.53	3.66	3.80	99.4	103.2	106.9
BE	4.98	5.58	5.26	94.4	105.8	99.7
BG	2.77	2.27	2.56	104.8	86.1	97.1
CZ	3.95	3.92	4.38	86.0	85.4	95.4
DK	3.88	3.69	3.61	111.6	106.1	103.8
DE	4.15	4.14	4.19	92.5	92.3	93.4
EE	3.79	3.38	4.13	58.0	51.7	63.2
IE	3.01	3.79	3.68	103.5	130.1	126.4
EL	2.28	2.58	2.82	112.9	127.7	139.5
ES	2.60	3.06	3.33	103.7	122.3	133.1
FR	4.04	4.28	4.41	102.8	108.8	112.0
IT	2.84	3.03	3.19	104.3	111.4	117.4
CY	3.05	3.45	3.29	110.6	124.9	119.0
LV	1.90	1.66	2.05	65.0	56.6	69.8
LT	2.38	2.01	2.51	54.8	46.3	57.7
LU	8.22	8.37	10.33	87.5	89.1	109.9
HU	2.50	2.45	2.76	90.7	88.6	100.2
MT	2.19	2.02	2.37	132.7	122.7	143.7
NL	4.77	4.79	4.97	105.7	105.9	109.9
AT	3.36	3.59	4.14	103.0	109.9	126.8
PL	2.59	2.35	2.46	98.6	89.3	93.6
PT	1.96	2.36	2.53	115.0	139.0	148.9
RO	2.12	1.69	1.81	86.7	69.1	73.8
SI	3.07	3.23	3.66	110.5	116.2	131.7
SK	3.30	3.24	3.60	83.3	81.7	90.9
FI	5.68	6.28	6.59	98.0	108.4	113.7
SE	5.72	5.40	5.72	103.4	97.6	103.4
UK	3.76	3.94	3.87	101.4	106.1	104.3
IS	8.68	11.58	12.29	78.3	104.4	110.9
NO	5.45	5.82	6.99	108.2	115.6	138.8
HR	1.52	1.76	2.01	106.9	124.0	141.3
TR	1.01	1.16	1.19	87.2	99.5	102.3

Data Source: Eurostat, national sources



(toe per capita)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	3.45	3.57	3.53	3.56	3.53	3.55	3.63	3.60	3.67	3.70	3.69
EU-25	3.53	3.65	3.62	3.66	3.64	3.66	3.74	3.71	3.78	3.81	3.80

Data Source: Eurostat

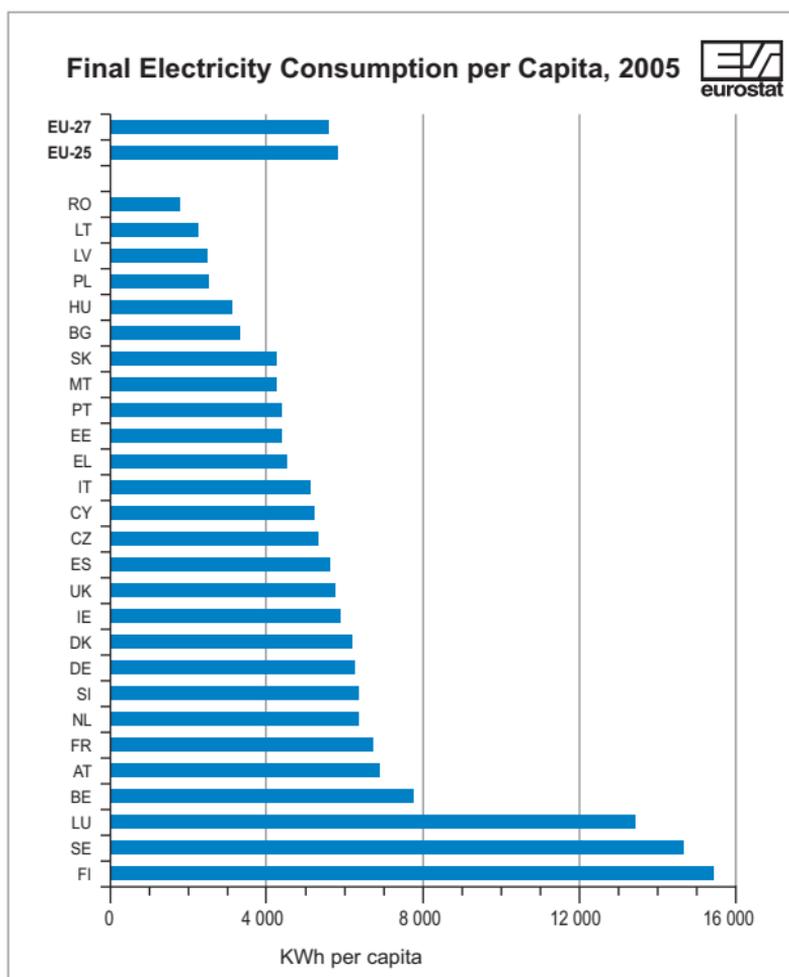
Over the period 1995-2005, the EU-27 gross inland consumption per capita increased by 6.9%, a bit slower than that of the EU-25, which increased by 7.5%. The EU-27 average was 3.69 toe per capita in 2005 and fourteen Member States had figures within the range of $\pm 25\%$ of that average. Outside this range, variation can be quite wide, extending from Luxembourg and Finland (2.8 and 1.8 times the EU 27 average) to Latvia and Romania, with the latter having GIC per capita half of the EU 27 average.

Noteworthy is that the per capita consumption of Households is a very limited share of GIC per capita. In the case of EU-27, Households consumption per capita is only 0.63 toe out of total gross consumption of 3.69 toe per capita. However it must be noted that Households consumption doesn't include consumption of transport fuel by Households.

Final Electricity Consumption per Capita

	<i>(kWh per capita)</i>			<i>Index (1990=100)</i>		
	1995	2000	2005	1995	2000	2005
EU-27	4 704	5 218	5 614	103.6	114.9	123.7
EU-25	4 881	5 437	5 832	104.5	116.4	124.9
BE	6 756	7 573	7 676	84.6	94.9	96.1
BG	3 404	2 946	3 309	115.9	100.3	112.6
CZ	4 648	4 802	5 405	100.0	103.3	116.3
DK	5 921	6 089	6 193	105.1	108.1	109.9
DE	5 550	5 874	6 273	98.3	104.1	111.1
EE	3 096	3 621	4 470	71.5	83.6	103.2
IE	4 128	5 370	5 926	114.4	148.8	164.2
EL	3 217	3 957	4 593	110.6	136.1	158.0
ES	3 582	4 706	5 628	111.2	146.0	174.7
FR	5 776	6 361	6 758	121.9	134.2	142.6
IT	4 182	4 788	5 138	109.9	125.9	135.1
CY	3 444	4 339	5 286	112.6	141.8	172.8
LV	1 772	1 864	2 472	57.2	60.1	79.8
LT	1 742	1 757	2 315	53.6	54.0	71.2
LU	12 318	13 183	13 534	113.0	120.9	124.2
HU	2 684	2 880	3 202	88.1	94.6	105.2
MT	3 407	4 122	4 271	132.0	159.6	165.4
NL	5 386	6 174	6 409	109.1	125.1	129.8
AT	5 788	6 503	6 921	103.7	116.5	124.0
PL	2 322	2 502	2 589	92.2	99.4	102.9
PT	2 875	3 764	4 399	121.2	158.7	185.4
RO	1 638	1 548	1 803	74.0	70.0	81.5
SI	4 717	5 293	6 379	96.7	108.5	130.7
SK	4 057	4 077	4 243	91.6	92.1	95.8
FI	12 791	14 589	15 456	108.1	123.3	130.6
SE	14 130	14 526	14 690	100.1	102.9	104.1
UK	5 073	5 604	5 748	105.2	116.2	119.2
IS	15 951	24 771	26 563	103.6	160.9	172.6
NO	23 863	24 458	24 296	104.4	107.0	106.2
HR	2 119	2 656	3 230	73.5	92.1	112.0
TR	1 064	1 433	1 795	132.1	177.9	222.8

Data Source: Eurostat



(kWh per capita)

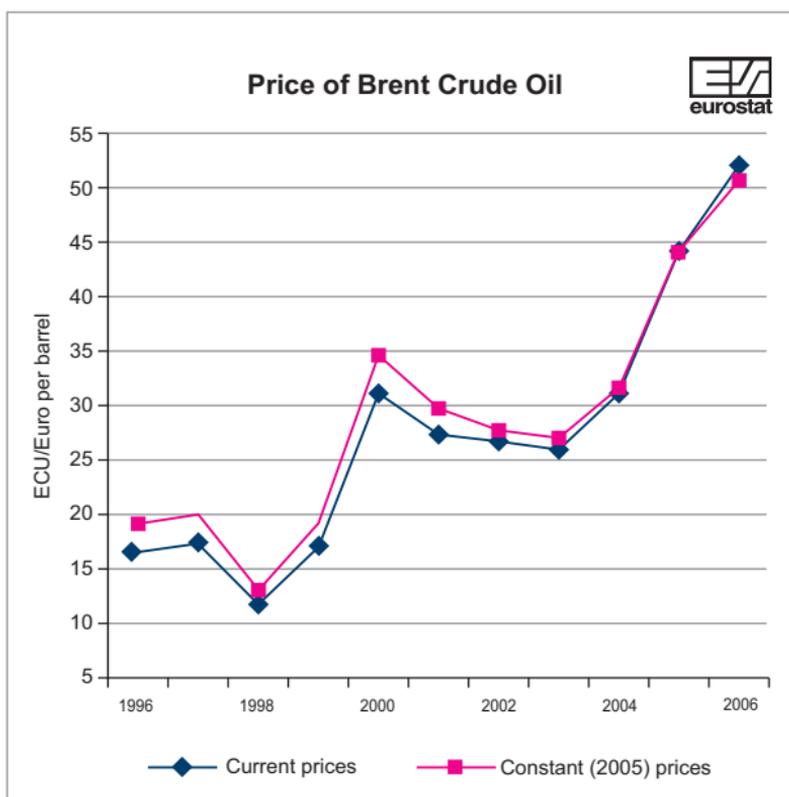
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	4 704	4 833	4 902	4 993	5 067	5 218	5 365	5 365	5 480	5 561	5 614
EU-25	4 881	5 007	5 089	5 191	5 278	5 437	5 584	5 584	5 698	5 780	5 832

Data Source: Eurostat

Households and services are responsible for more than half of final electricity consumption during the period 1995-2005 starting with a 51.6% share in 1995 and reaching 54.4% in 2005.

On average, EU-27 final electricity consumption per capita was 5 614 kWh in 2005 almost 24% higher than in 1995. Spain, Portugal and Cyprus experienced more than 50% total period increase reaching or even surpassing the EU 27 average. However, Sweden, Finland and Luxembourg have the highest values more than double the EU-27 average.

Price of Brent Crude Oil



(ECU/Euro per barrel)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Current prices	16.3	16.8	11.3	16.8	30.9	27.3	26.5	25.5	30.8	43.8	51.9
Constant (2005) prices	19.2	19.5	13.0	19.0	34.2	29.6	28.1	26.5	31.4	43.8	50.8

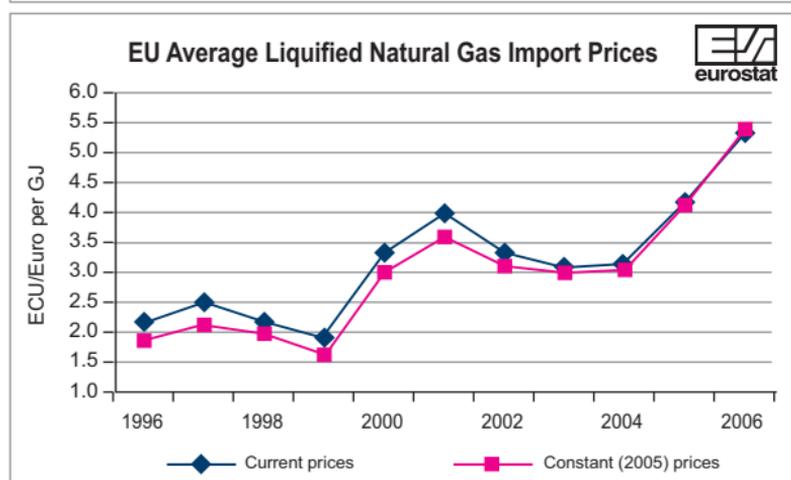
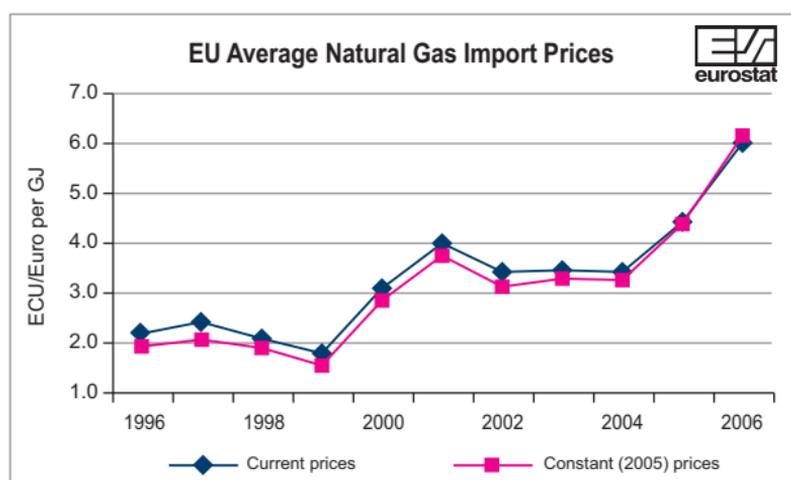
Data Source: Platt's European Marketscan, BP Statistical Review

Crude oil prices behave much as any other commodity with wide price swings in times of shortage or oversupply. The crude oil price cycle may extend over several years responding to changes in demand as well as in supply.

For almost 10 years, between 1987 and 1996 crude oil prices were within the range 15-20 USD per barrel, only in 1990, when Iraq invaded to Kuwait, price of crude oil spiked at almost 35USD per barrel, soon however returned at 15 \$/bbl. In 1996 price of Brent was 20.6 \$/bbl with a decreasing trend which ended by the end of 1998. Afterwards, price of Brent started its increasing trend reaching 65 \$/bbl on average in 2006.

At 2005 constant and exchange rate adjusted prices, price of Brent recorded a huge increase of more than 160% during the last decade, starting from 19 €/bbl in 1996 to reach the average 2006 price of 51 €/bbl.

Average Gas Import Prices



	(ECU/Euro per GJ)										
Natural gas	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Current prices	2.22	2.40	2.09	1.76	3.01	3.91	3.35	3.46	3.40	4.41	5.98
Constant (2005) prices	1.88	2.07	1.83	1.56	2.72	3.61	3.16	3.32	3.33	4.41	6.11

Liquefied natural gas (LNG)

Current prices	2.19	2.51	2.14	1.88	3.34	3.95	3.31	3.20	3.13	4.11	5.28
Constant (2005) prices	1.87	2.17	1.87	1.67	3.02	3.64	3.12	3.07	3.06	4.11	5.40

Data Source: OECD/IEA

Unlike the global crude oil market, which is highly sensitive to geopolitics, natural gas is a continental market and prices are affected primarily by supply and demand fundamentals thus, natural gas prices fluctuate less than oil prices on daily or even monthly level. However, the trend of annual average natural gas prices is similar to that of oil prices the last decade.

After having been rather stable in the 90s, average import prices for natural gas and LNG recorded high increase since 1999 which led prices of 2006 to almost three times higher than the average level of the previous decade.

At 2005 constant prices, natural gas prices rose by 225% from 1996 to 2006 while the rise of LNG prices in the same period was quite lower, 190%. Noteworthy is that LNG import prices were higher than natural gas prices until 2002 when the situation changed so that in 2006 LNG import prices appear with a discount of 12%.

Vat-free Industrial Fuel Prices

ELECTRICITY			<i>(ECU/Euro per 100kWh) (GCV)</i>		
	1995	2000	2005	2006	2007
EU-27	:	:	7.56	8.42	9.20
EU-25	:	:	7.59	8.47	9.26
Belgium	7.76	7.34	7.75	9.69	9.69
Bulgaria	:	:	4.29	4.60	4.70
Czech Republic	:	4.67	6.01	7.31	7.83
Denmark	4.99	5.71	7.15	8.01	7.06
Germany	10.03	6.88	9.03	9.94	10.69
Estonia	:	:	4.72	5.11	5.34
Ireland	6.29	6.62	9.30	10.11	11.25
Greece	5.67	5.71	6.45	6.68	6.98
Spain	7.31	6.68	7.21	7.57	8.51
France	6.50	5.67	5.78	5.78	5.87
Italy	8.62	9.44	10.93	12.08	13.87
Cyprus	:	8.78	8.10	11.36	10.70
Latvia	:	:	4.09	4.09	4.43
Lithuania	:	:	4.98	4.98	5.48
Luxembourg	:	:	:	:	:
Hungary	2.91	5.10	7.09	7.61	8.20
Malta	5.88	6.75	7.06	7.11	8.97
Netherlands	5.97	6.95	8.99	9.57	10.30
Austria	8.07	:	8.27	8.63	9.53
Poland	:	:	5.55	5.96	5.93
Portugal	7.99	6.43	7.13	8.17	8.60
Romania	:	:	7.69	7.73	8.42
Slovenia	5.48	6.04	6.11	6.51	7.50
Slovakia	:	:	7.03	7.73	9.32
Finland	4.49	4.20	5.73	5.63	5.65
Sweden	:	3.75	4.68	5.93	6.31
United Kingdom	6.06	6.64	5.93	8.22	9.74
Croatia	:	:	5.56	5.96	5.97
Norway	3.49	3.56	6.49	6.46	8.47

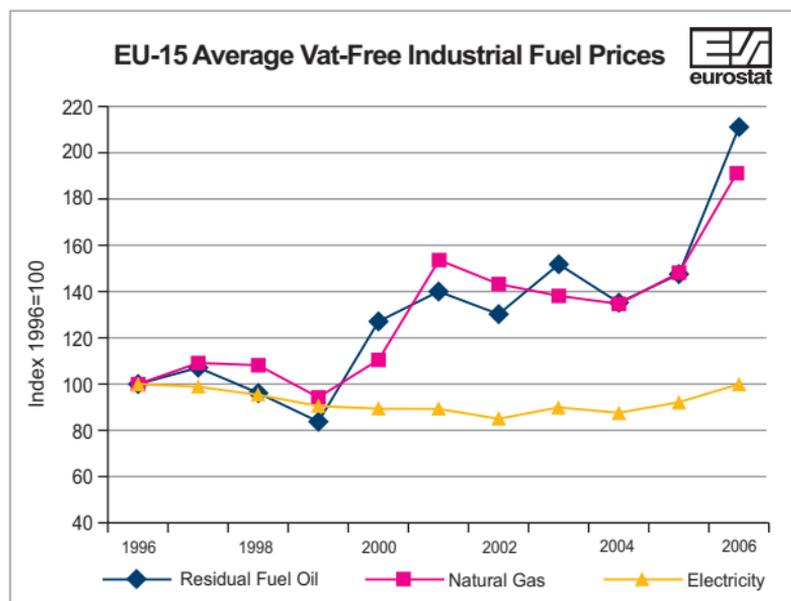
NATURAL GAS			<i>(ECU/Euro per GJ) (GCV)</i>		
	1995	2000	2005	2006	2007
EU-27	:	:	6.50	8.62	9.40
EU-25	:	:	6.64	8.76	9.52
Belgium	:	:	5.32	7.11	7.03
Bulgaria	:	:	3.78	4.50	5.22
Czech Republic	:	3.01	5.11	7.34	6.56
Denmark	3.62	5.13	6.79	6.97	6.52
Germany	5.18	5.38	8.87	11.58	13.27
Estonia	:	:	2.75	2.84	3.69
Ireland	3.19	3.59	:	:	:
Greece	:	:	:	:	:
Spain	3.17	4.05	4.68	7.24	7.07
France	3.51	4.49	6.42	8.25	7.83
Italy	3.67	4.63	6.64	7.64	8.98
Cyprus	:	:	:	:	:
Latvia	:	:	3.48	4.05	5.29
Lithuania	:	:	3.61	4.45	6.02
Luxembourg	4.40	4.94	6.95	9.01	9.85
Hungary	2.75	2.74	6.03	8.18	9.70
Malta	:	:	:	:	:
Netherlands	3.69	4.71	7.47	9.37	9.74
Austria	:	4.62	8.19	10.82	11.06
Poland	:	:	5.30	6.77	7.54
Portugal	:	:	6.03	7.63	7.76
Romania	:	:	3.68	6.23	7.32
Slovenia	3.91	5.30	5.89	7.96	8.13
Slovakia	:	:	5.08	7.66	8.00
Finland	3.86	4.99	6.91	7.79	8.09
Sweden	:	6.13	9.20	12.26	12.21
United Kingdom	3.32	3.53	6.10	9.21	10.85
Croatia	:	:	6.73	6.88	6.89

Data Source: Eurostat DG for Energy and Transport

ENERGY, TRANSPORT AND ENVIRONMENT INDICATORS

RESIDUAL FUEL OIL	(ECU/Euro per ton)				
	1995	2000	2005	2006	2007
EU-27	:	:	:	:	:
EU-25	:	:	:	:	:
Belgium	114.50	142.17	166.18	264.44	216.19
Bulgaria	:	:	:	:	:
Czech Republic	:	:	163.97	261.99	240.66
Denmark	130.83	194.66	530.48	652.84	575.00
Germany	122.55	155.02	169.90	286.00	238.25
Estonia	:	:	113.25	:	:
Ireland	133.74	:	259.23	404.22	348.10
Greece	155.72	209.39	201.76	336.77	257.56
Spain	143.73	194.30	213.36	349.88	285.97
France	141.44	165.07	193.36	302.81	239.69
Italy	144.57	188.27	245.89	361.72	275.78
Cyprus	:	:	:	:	:
Latvia	:	:	:	:	:
Lithuania	:	:	224.17	:	:
Luxembourg	123.10	157.64	170.59	:	:
Hungary	:	:	212.95	316.49	303.39
Malta	:	:	:	:	:
Netherlands	164.02	200.12	223.00	338.00	300.51
Austria	117.37	164.97	216.70	337.70	294.70
Poland	:	:	168.90	263.34	308.54
Portugal	148.11	204.86	235.27	379.91	329.02
Romania	:	:	:	:	:
Slovenia	:	:	253.09	362.68	325.97
Slovakia	:	:	194.44	245.39	270.50
Finland	:	207.48	307.85	433.92	361.17
Sweden	327.05	418.91	623.92	750.82	674.05
United Kingdom	121.41	:	227.78	400.24	341.96

Data Source: Eurostat DG for Energy and Transport



	constant 2005 prices										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Residual fuel oil (€ per ton)	174	185	166	143	217	247	229	268	235	254	371
Natural gas (€ per GJ GCV)	4.57	5.01	4.94	4.28	5.06	7.00	6.54	6.28	6.11	6.78	8.73
Electricity (€ per 100 kWh GCV)	8.48	8.32	8.03	7.72	7.44	7.53	7.18	7.64	7.36	7.75	8.47

Data Source: Eurostat DG for Energy and Transport

Tax-inclusive Household Fuel Prices

ELECTRICITY			<i>(ECU/Euro per 100kWh) (GCV)</i>		
	1995	2000	2005	2006	2007
EU-27	:	:	13.36	13.97	15.28
EU-25	:	:	13.51	14.11	15.44
Belgium	15.00	14.33	14.81	14.42	15.81
Bulgaria	:	:	6.44	6.60	6.60
Czech Republic	:	5.78	8.68	9.85	10.67
Denmark	14.78	19.66	22.78	23.62	25.79
Germany	15.87	15.26	17.85	18.32	19.49
Estonia	:	:	6.78	7.31	7.50
Ireland	8.25	8.94	14.36	14.90	16.62
Greece	7.64	6.09	6.88	7.01	7.20
Spain	12.25	10.91	10.97	11.47	12.25
France	12.96	11.79	11.94	11.94	12.11
Italy	19.82	20.00	19.70	21.08	23.29
Cyprus	:	9.14	10.74	14.31	13.76
Latvia	:	:	8.28	8.29	6.88
Lithuania	:	:	7.18	7.18	7.76
Luxembourg	11.31	11.19	14.78	16.03	16.84
Hungary	5.10	6.97	10.64	10.75	12.22
Malta	4.84	6.09	7.64	9.49	9.87
Netherlands	9.93	14.40	19.55	20.87	21.80
Austria	:	12.26	14.13	13.40	15.45
Poland	:	:	10.64	11.90	11.84
Portugal	13.22	12.56	13.81	14.10	15.00
Romania	:	:	7.79	9.43	10.17
Slovenia	7.38	9.88	10.33	10.49	10.64
Slovakia	:	:	13.38	14.48	15.37
Finland	8.57	8.73	10.57	10.78	11.60
Sweden	:	10.20	13.97	14.35	17.14
United Kingdom	10.21	11.08	8.77	10.20	13.16
Croatia	:	:	8.48	9.22	9.23
Norway	8.91	10.16	15.71	15.33	18.56

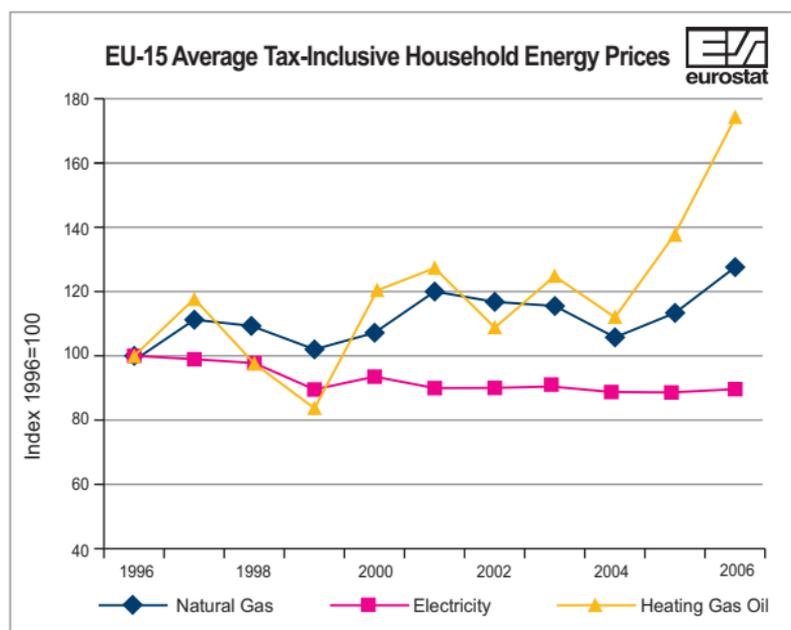
NATURAL GAS			<i>(ECU/Euro per GJ) (GCV)</i>		
	1995	2000	2005	2006	2007
EU-27	:	:	11.21	12.92	14.95
EU-25	:	:	11.34	13.02	15.07
Belgium	8.75	9.41	11.16	13.50	12.89
Bulgaria	:	:	6.73	7.70	8.83
Czech Republic	:	4.36	7.49	10.03	9.45
Denmark	:	18.14	28.44	29.82	30.84
Germany	8.87	9.16	13.56	15.98	18.45
Estonia	:	:	4.63	4.63	5.89
Ireland	8.03	8.19	9.98	12.51	16.73
Greece	:	:	:	:	:
Spain	10.04	10.62	11.90	13.63	14.23
France	8.42	8.26	10.57	12.72	13.46
Italy	13.58	15.98	15.34	16.50	18.34
Cyprus	:	:	:	:	:
Latvia	:	:	4.54	5.34	7.50
Lithuania	:	:	5.41	6.24	7.04
Luxembourg	5.45	6.02	8.14	10.33	11.52
Hungary	2.95	3.32	5.10	5.28	7.16
Malta	:	:	:	:	:
Netherlands	7.39	9.04	15.17	16.92	18.42
Austria	:	10.67	13.36	15.65	15.99
Poland	:	:	7.55	9.46	10.69
Portugal	:	:	12.34	14.52	13.88
Romania	9.05	:	:	4.79	7.66
Slovenia	5.66	7.19	10.33	12.99	13.86
Slovakia	:	:	8.14	10.88	11.48
Finland	6.57	:	:	:	:
Sweden	:	12.99	22.18	25.95	26.58
United Kingdom	6.42	6.97	7.26	8.24	11.76
Croatia	:	:	7.99	8.18	8.18

Data Source: Eurostat

ENERGY, TRANSPORT AND ENVIRONMENT INDICATORS

HEATING GAS OIL	(ECU/Euro per 1000l)				
	1995	2000	2005	2006	2007
EU-27	:	:	:	:	:
EU-25	:	:	493.67	650.13	597.33
Belgium	177.54	278.38	372.40	549.40	494.20
Bulgaria	:	:	:	:	:
Czech Republic	:	:	492.01	610.65	554.35
Denmark	528.68	682.98	837.85	1 002.37	913.35
Germany	213.97	327.43	430.90	587.73	537.01
Estonia	:	:	431.40	541.14	506.50
Ireland	219.81	405.17	525.70	685.10	630.25
Greece	315.29	278.19	415.00	589.00	544.00
Spain	252.70	359.54	446.20	584.75	551.59
France	308.07	410.97	477.62	632.44	572.36
Italy	615.80	799.48	952.42	1 102.09	1 045.66
Cyprus	:	:	622.78	720.32	743.32
Latvia	:	:	473.50	600.57	588.76
Lithuania	:	:	376.51	521.32	469.76
Luxembourg	196.62	280.12	377.00	504.00	457.00
Hungary	:	:	937.02	1 019.61	970.17
Malta	:	:	370.20	556.72	559.05
Netherlands	292.78	490.54	700.00	854.00	820.00
Austria	313.98	395.26	492.74	644.83	581.98
Poland	:	:	430.95	600.77	527.90
Portugal	:	334.19	500.00	649.00	622.00
Romania	:	:	:	:	:
Slovenia	:	:	487.13	583.75	563.00
Slovakia	:	:	428.12	583.46	559.67
Finland	:	347.31	449.00	621.00	543.98
Sweden	472.06	547.65	853.38	992.47	976.49
United Kingdom	176.71	293.69	372.82	538.69	499.24

Data Source: Eurostat DG for Energy and Transport



	constant 2005 prices										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Natural gas (€ per GJ GCV)	10.40	11.22	11.27	10.59	11.09	12.63	12.14	11.97	11.16	11.81	13.22
Electricity (€ per 100 kWh GCV)	15.77	15.50	15.20	14.63	14.64	14.27	14.18	14.11	13.87	13.82	14.09
Heating gasoil (€ per 1000l)	365	424	353	309	439	468	394	460	415	494	637

Data Source: Eurostat DG for Energy and Transport

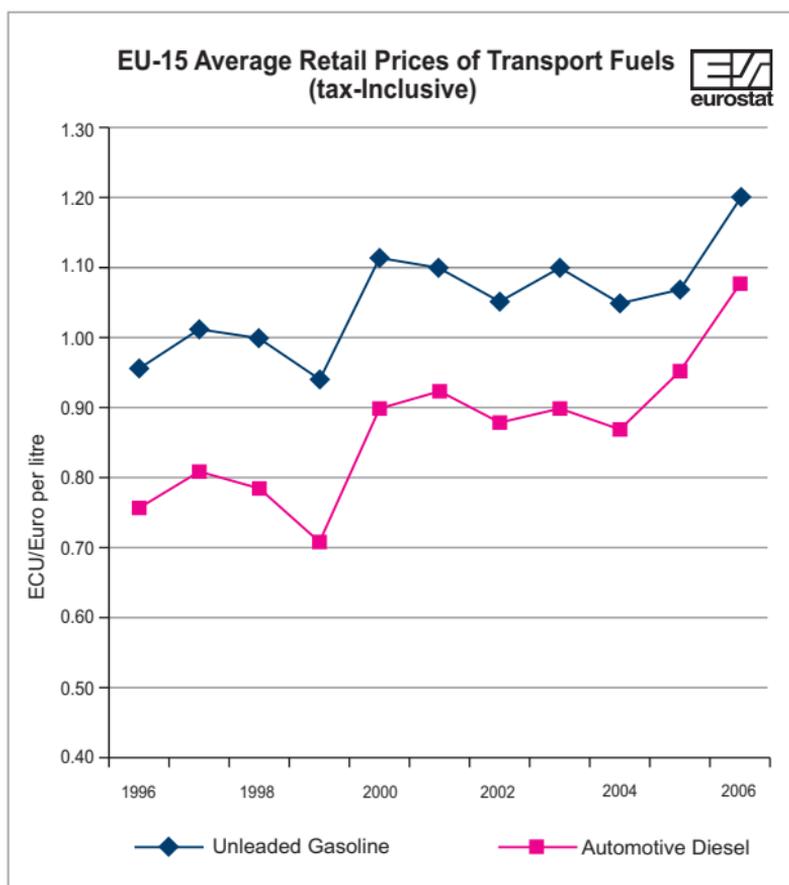
Retail Prices of Transport Fuels (tax-inclusive)

(ECU/Euro per litre)

	EU-25	BE	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	SI	SK	FI	SE	UK				
1995	1.04	0.78	0.75	0.81	0.69	0.64	0.64	0.85	0.79	0.63	0.87	0.76	0.79	0.82	0.68	0.82	0.68	0.82	0.68	0.82	0.68	0.82	0.68	0.82	0.68	0.82	0.68			
2000	1.20	0.96	1.00	0.96	0.82	0.67	0.75	1.04	1.00	0.74	1.06	0.87	0.80	1.00	1.22	1.06	1.00	1.22	1.06	0.87	0.80	1.06	1.00	1.22	1.06	1.00	1.22			
2005	1.04	1.07	0.81	1.10	1.11	0.67	0.94	0.77	0.84	1.04	1.09	0.76	0.72	0.71	0.90	0.96	0.87	1.25	0.91	0.88	1.00	0.82	0.86	1.14	1.10	1.13	1.10	1.13		
2006	1.20	1.30	0.98	1.27	1.26	0.84	1.08	0.94	1.00	1.22	1.26	0.89	0.85	0.89	1.07	1.05	1.09	1.41	1.05	0.97	1.20	0.92	1.04	1.23	1.21	1.30	1.21	1.30		
2007	1.16	1.20	0.98	1.17	1.20	0.78	1.03	0.91	0.95	1.17	1.21	0.86	0.84	0.80	1.01	1.00	0.99	1.34	0.99	0.94	1.24	0.97	1.02	1.17	1.14	1.31	1.14	1.31		
1995	0.62	0.62	0.59	0.62	0.59	0.66	0.47	0.51	0.59	0.63	0.51	0.61	0.62	0.54	0.78	0.69	0.61	0.62	0.54	0.62	0.54	0.62	0.54	0.78	0.69	0.61	0.62	0.54		
2000	0.73	0.73	0.82	0.76	0.77	0.62	0.62	0.81	0.84	0.63	0.78	0.73	0.55	0.77	0.81	1.26	0.78	0.73	0.55	0.77	0.81	1.26	0.77	0.81	1.26	0.77	0.81	1.26		
2005	0.94	0.85	0.82	0.91	0.97	0.70	0.95	0.77	0.81	0.91	1.00	0.72	0.70	0.72	0.94	0.83	0.91	0.84	0.83	0.82	0.83	0.82	0.87	0.88	0.98	1.20	0.87	0.88	1.20	
2006	1.08	1.03	0.97	1.07	1.09	0.86	1.08	0.92	0.93	1.05	1.16	0.87	0.85	0.88	1.02	0.94	1.04	1.05	0.97	1.20	0.91	1.04	1.00	1.13	1.36	1.04	1.00	1.13	1.36	
2007	1.04	0.93	0.98	0.99	1.05	0.81	1.03	0.92	0.89	1.01	1.10	0.83	0.86	0.81	0.85	0.97	0.91	1.01	0.94	0.92	1.02	0.92	1.03	0.96	1.06	1.38	1.03	0.96	1.06	1.38

Current prices

Data Source: DG for Energy and Transport



(ECU/Euro per litre) (Constant 2005 prices)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Unleaded Gasoline	0.95	1.01	0.99	0.94	1.12	1.11	1.04	1.09	1.04	1.06	1.20
Automotive Diesel	0.76	0.82	0.77	0.72	0.90	0.93	0.86	0.90	0.86	0.95	1.06

Data Source: DG for Energy and Transport

In 2006, like crude oil, both unleaded gasoline and automotive diesel recorded all time high prices at 1.20 €/lt and 1.06 €/lt respectively. At 2005 constant prices and on EU-15 average, the retail (tax inclusive) price of diesel increased by 41% during the period 1996-2006 while average price of unleaded gasoline rose by 26%. However, retail prices of both unleaded gasoline and automotive diesel exhibit significant lower increase than crude oil prices mainly due to the fact that excise tax and other taxes on gasoline and diesel increased by less than 25% in most Member States.

Of all the Member States, unleaded gasoline costs more in the Netherlands, followed closely by UK, while the lowest price can be found in Estonia and Lithuania where diesel is also the least expensive within the EU-25 countries. Diesel is most expensive in the United Kingdom while in the Netherlands and Belgium there is a discount of almost 25% compared to unleaded gasoline.

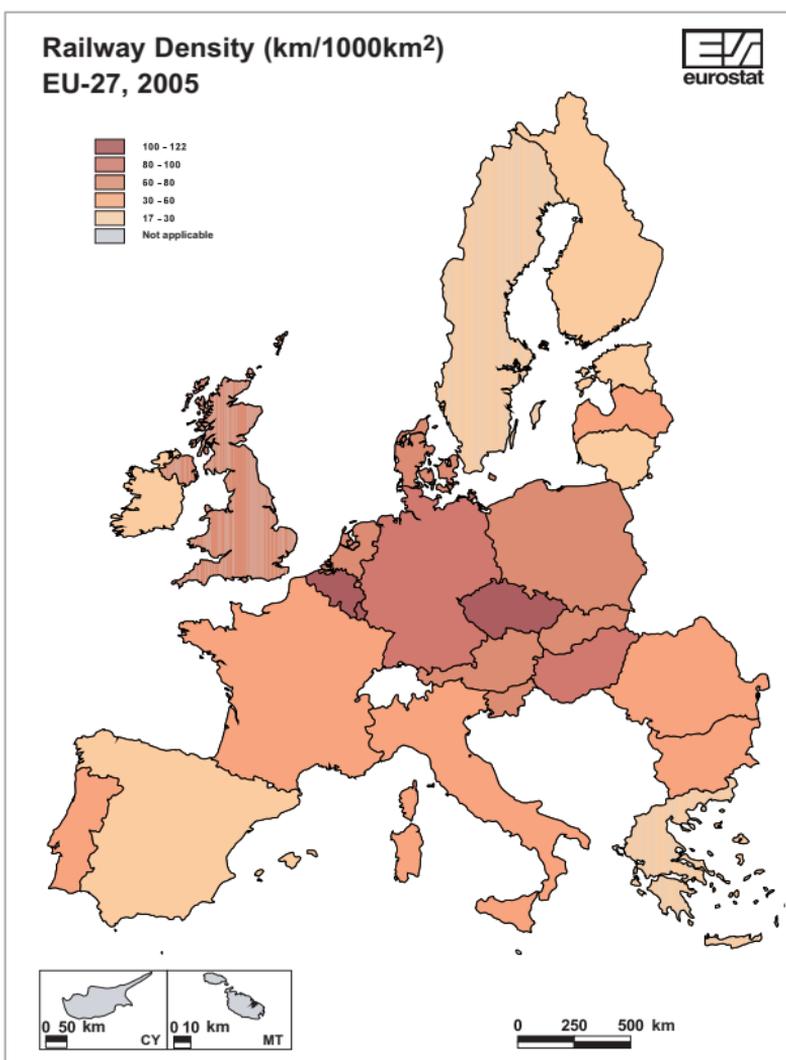
TRANSPORT INDICATORS

Railway Density

	<i>Length(km)/surface (1000km²)</i>					
	1999	2000	2001	2002	2003	2004
EU-27	:	:	:	:	:	:
EU-25	52	51	51	51	51	50
Belgium	114	114	113	115	115	116
Bulgaria	39	39	39	39	39	38
Czech Republic	120	120	121	122	122	122
Denmark	64	64	64	64	65	65
Germany	105	102	101	100	101	97
Estonia	21	21	21	21	21	21
Ireland	27	27	27	27	27	27
Greece	17	18	18	18	18	19
Spain	28	28	28	27	29	29
France	58	57	57	57	56	53
Italy	53	53	53	53	54	54
Cyprus	-	-	-	-	-	-
Latvia	38	36	36	35	35	35
Lithuania	29	29	26	27	27	27
Luxembourg	106	106	106	106	106	106
Hungary	82	82	83	83	83	85
Malta	-	-	-	-	-	-
Netherlands	68	67	68	68	68	68
Austria	67	66	71	67	68	68
Poland	73	72	68	67	66	65
Portugal	31	31	31	31	32	32
Romania	46	46	46	46	46	45
Slovenia	59	59	61	61	61	61
Slovakia	75	75	75	75	75	75
Finland	17	17	17	17	17	17
Sweden	25	25	24	25	25	25
United Kingdom	69	69	69	70	69	67
Iceland	-	-	-	-	-	-
Liechtenstein *	119	119	119	119	119	119
Norway	12	13	13	13	13	13
Switzerland	123	123	122	122	122	122
Croatia	31	31	31	31	31	31
Turkey	11	11	11	11	11	11

* The 19km of railways in Liechtenstein are operated by the Austrian railways

Data Source: Eurostat, DG for Energy and Transport



Between 1999 and 2004, the total length of the railway network decreased by 3.9% on EU-27 level as is reflected on the network density but since this decrease is not reflected in the transport performance one can draw the conclusion that the utilisation rate is increasing. The network density and the utilisation rate depend, among other things, on the topographic characteristics of the individual countries and their population densities. In general, rail network density seems to be low in the periphery of the European Union and high in the centre. In 2004, the railway network of Germany (>35 000 km) was the longest one among the EU-27 countries, followed by the network of France (30 880 km) and Poland (20 250 km). In 2004, the Czech Republic had the highest density (122) with total railway network length of 9 602 km, followed closely by Belgium with a density of (116km/km² surface).

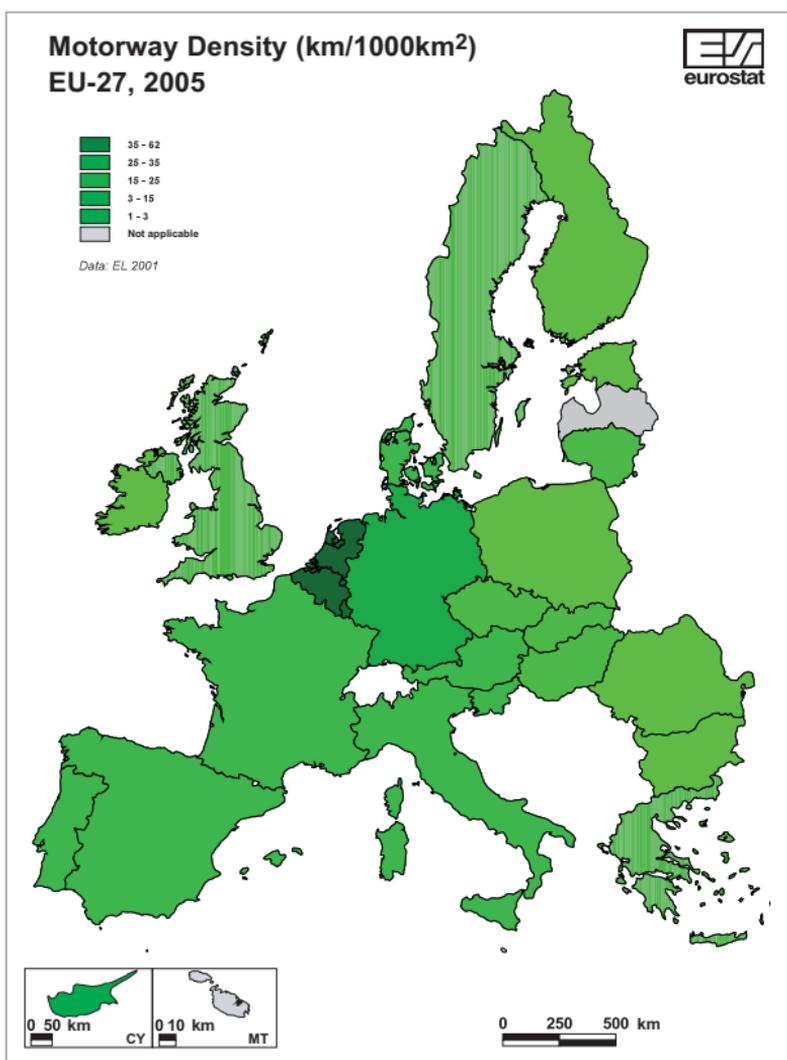
Motorway Density

	Length(km)/surface (1000km ²)					
	1999	2000	2001	2002	2003	2004
EU-27	:	:	:	:	:	:
EU-25	13	14	14	:	:	:
Belgium	55	56	57	57	57	57
Bulgaria	3	3	3	3	3	3
Czech Republic	6	6	7	7	7	7
Denmark	21	22	23	23	24	24
Germany	32	33	33	34	34	34
Estonia	2	2	2	2	2	2
Ireland	1	1	2	2	3	3
Greece	3	5	6	:	:	:
Spain	18	18	19	19	20	21
France	18	18	18	19	19	19
Italy	21	21	21	21	21	22
Cyprus	23	26	28	29	29	29
Latvia	-	-	-	-	-	-
Lithuania	6	6	6	6	6	6
Luxembourg	44	44	49	57	57	57
Hungary	5	5	5	6	6	6
Malta	-	-	-	-	-	-
Netherlands *	55	55	60	61	61	56
Austria	19	19	20	20	20	20
Poland	1	1	1	1	1	2
Portugal	16	17	19	21	22	23
Romania	0	0	0	0	1	1
Slovenia	20	21	21	23	24	24
Slovakia	6	6	6	6	6	6
Finland	2	2	2	2	2	2
Sweden	3	3	3	3	4	4
United Kingdom	15	15	15	15	15	15
Iceland	-	-	-	-	-	-
Liechtenstein	-	-	-	-	-	-
Norway	0	0	0	1	1	1
Switzerland **	31	31	32	33	33	32
Croatia	:	5	5	5	6	8
Turkey	2	2	2	2	2	2

* break in 2001. Data on roads with separated lanes are reported since 2001-2002.

** only state motorways

Data Source: Eurostat, DG for Energy and Transport



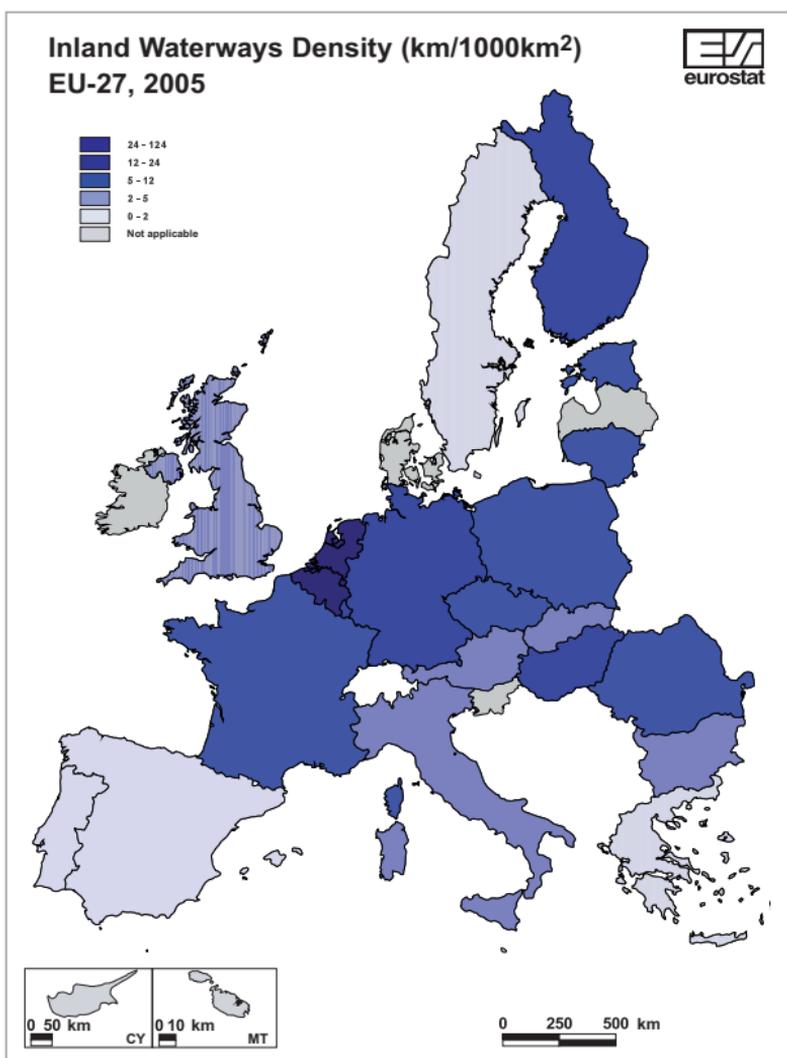
The density of the motorway network in the EU-25 is about 14 km per 1 000 km². The highest density is to be found in the Netherlands, Belgium, Luxembourg, and, at quite a distance, in Germany.

It is important to realise that a length-per-area indicator cannot be used per se to compare the level of infrastructure development between different countries or regions. Population density and other factors must also be considered in such a comparison.

Inland Waterways Density

	<i>Length(km)/surface (1000km²)</i>					
	1999	2000	2001	2002	2003	2004
EU-27	9	9	9	9	9	9
EU-25	9	9	9	9	9	9
Belgium	50	50	50	50	50	50
Bulgaria	4	4	4	4	4	4
Czech Republic	8	8	8	8	8	8
Denmark	-	-	-	-	-	-
Germany	19	19	19	19	19	19
Estonia	7	7	7	7	7	7
Ireland	-	-	-	-	-	-
Greece	0	0	0	0	0	0
Spain	0	0	0	0	0	0
France	10	11	10	10	10	10
Italy	5	5	5	5	5	5
Cyprus	-	-	-	-	-	-
Latvia	-	-	-	-	-	-
Lithuania	6	6	7	7	7	7
Luxembourg	14	14	14	14	14	14
Hungary	15	15	16	15	15	15
Malta	-	-	-	-	-	-
Netherlands	122	122	122	122	122	122
Austria	4	4	4	4	4	4
Poland	12	12	12	12	12	12
Portugal	1	1	1	1	1	1
Romania	7	7	7	7	7	7
Slovenia	-	-	-	-	-	-
Slovakia	4	4	4	4	4	4
Finland	23	23	23	23	23	24
Sweden	1	1	1	1	1	1
United Kingdom	5	5	5	4	4	4
Iceland	-	-	-	-	-	-
Liechtenstein	-	-	-	-	-	-
Norway	-	-	-	-	-	-
Switzerland	30	30	30	30	30	30
Croatia	8	8	8	8	8	9
Turkey	-	-	-	-	-	-

Data Source: Eurostat, DG for Energy and Transport

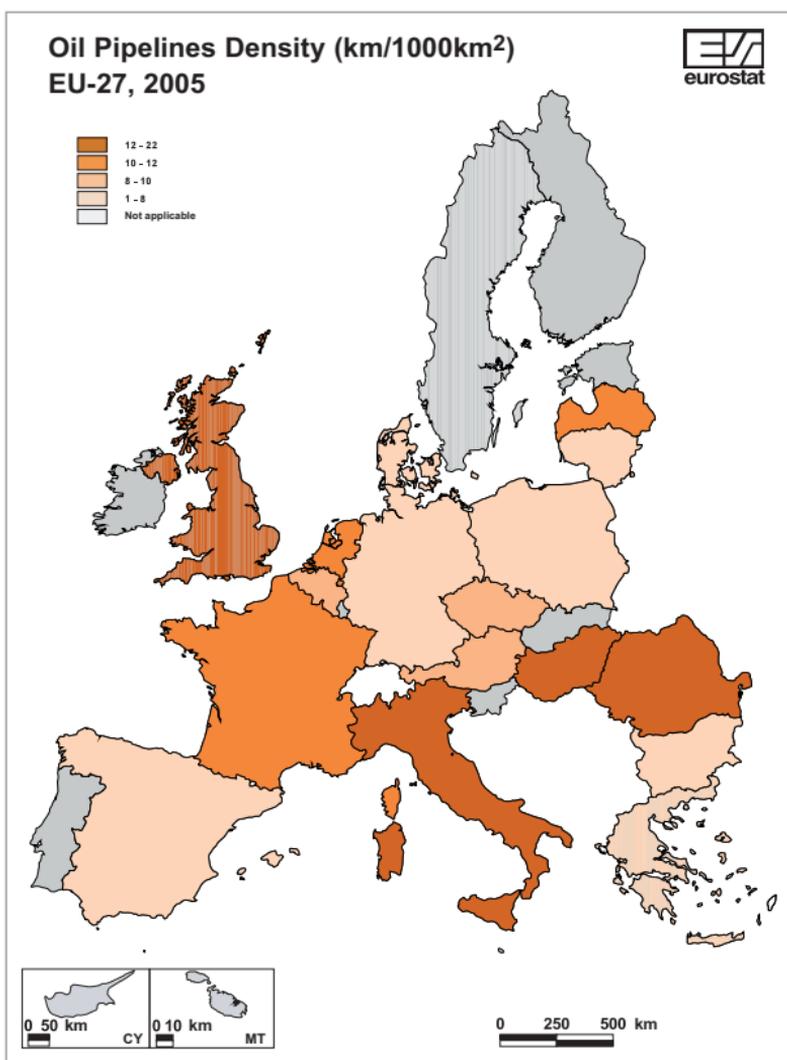


Inland waterways density in the EU-27 was practically constant over the period 1999-2004 but the network is very unbalanced across the EU-27 with some countries completely lacking inland waterways and, on the other hand, countries such as the Netherlands and Belgium with a very extensive waterway system. This leads to the exceptionally high density of 122 km/1000km² for the Netherlands, compared to the average within the EU-27 of 9 km/1000km². In terms of inland waterways' length, Finland was in first place with a network of 7 884 km in 2004 consisting of mainly lakes, followed by Germany with 6 636 km; France was third with a network of 5 372 km.

Oil Pipelines Density

	<i>Length(km)/surface (1000km²)</i>					
	1999	2000	2001	2002	2003	2004
EU-27	8	8	8	8	8	8
EU-25	7	7	7	7	7	7
Belgium	10	10	10	10	10	10
Bulgaria	5	5	5	5	5	5
Czech Republic	9	9	9	9	9	9
Denmark	8	8	8	8	8	8
Germany	7	7	7	7	7	7
Estonia	-	-	-	-	-	-
Ireland	-	-	-	-	-	-
Greece	-	-	-	1	1	1
Spain	7	7	7	8	8	8
France	10	10	10	10	10	10
Italy	14	14	14	15	15	15
Cyprus	-	-	-	-	-	-
Latvia	12	12	12	12	12	12
Lithuania	8	8	8	8	8	8
Luxembourg	-	-	-	-	-	-
Hungary	22	22	22	22	22	22
Malta	-	-	-	-	-	-
Netherlands	10	10	10	10	10	10
Austria	9	9	9	9	9	9
Poland	7	7	7	7	7	7
Portugal	-	-	-	-	-	-
Romania	19	19	19	18	20	20
Slovenia	-	-	-	-	-	-
Slovakia	-	-	-	-	-	-
Finland	-	-	-	-	-	-
Sweden	-	-	-	-	-	-
United Kingdom	16	16	18	18	18	18
Iceland	-	-	-	-	-	-
Liechtenstein	-	-	-	-	-	-
Norway	2	2	2	3	3	3
Switzerland	3	3	3	3	3	3
Croatia	7	7	7	7	7	7
Turkey	3	3	3	3	3	3

Data Source: Eurostat, DG for Energy and Transport



The average density of oil pipelines in the EU-27 was constant at 8 km/1000km² throughout the reported period. In 2004, Hungary had the highest density among the EU-27 countries (22 km/1000km²) while Romania, not yet a member state at the time, was a close second at 20 km/1000km².

The total length of pipelines for the EU-27 in 2004 was approximately 34 300 km, with France (5 746 km) in first place, followed by Romania (about 4 800 km) and United Kingdom (4 405 km).

Please note that data on oil pipelines only are collected and that oil pipelines between land and drilling platforms at sea are included.

Number of Main Sea Ports

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

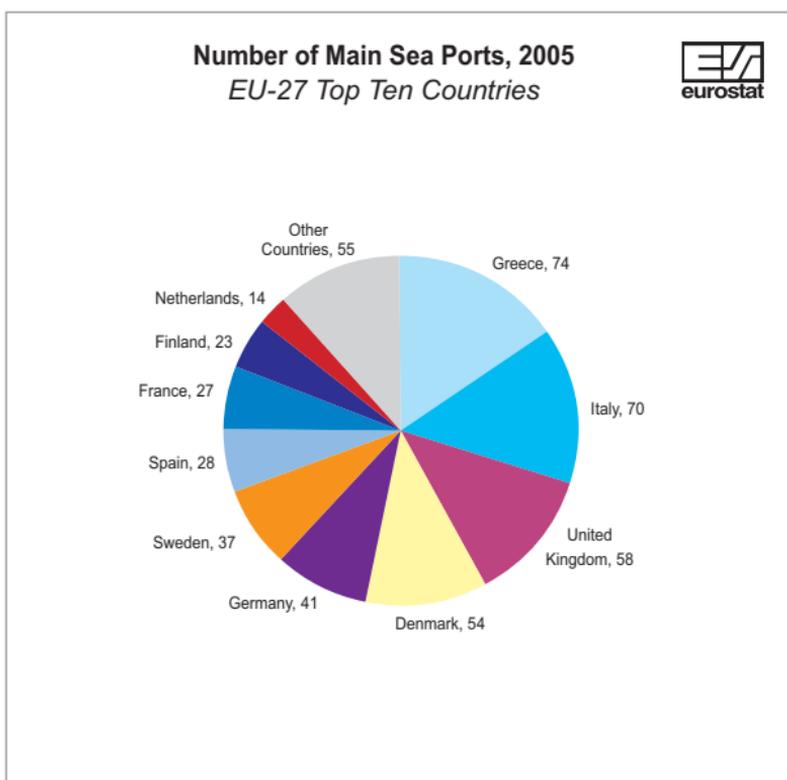
	2001	2002	2003	2004	2005
EU-27	421	441	447	452	481
EU-25	:	:	442	447	471
Belgium	4	4	4	4	4
Bulgaria	2	2	2	2	2
Czech Republic	-	-	-	-	-
Denmark	48	50	52	53	54
Germany	39	39	39	39	41
Estonia	5	5	5	5	5
Ireland	9	8	8	8	8
Greece *	53	69	70	75	74
Spain **	27	27	27	28	28
France	28	28	27	27	27
Italy	67	66	67	68	70
Cyprus	:	3	3	3	6
Latvia	3	4	3	4	3
Lithuania	1	1	1	1	2
Luxembourg	-	-	-	-	-
Hungary	-	-	-	-	-
Malta	:	:	2	2	2
Netherlands	10	10	10	10	14
Austria	-	-	-	-	-
Poland	6	6	5	5	5
Portugal	8	7	7	7	9
Romania	2	3	3	3	8
Slovenia	1	1	1	1	1
Slovakia	-	-	-	-	-
Finland ***	24	23	24	24	23
Sweden	32	33	34	33	37
United Kingdom	52	52	53	50	58
Iceland	1	1	1	1	1
Liechtenstein	-	-	-	-	-
Norway	:	20	22	22	26
Switzerland	-	-	-	-	-
Croatia	23	24	24	25	24
Turkey	16	17	:	:	:

* the statistical coverage of data has considerably improved between 2001 and 2002

** the statistical coverage has significantly improved in 2001

*** national maritime traffic is included only since 2001

Data Source: Eurostat



In 2005 at the EU-27 level, there were 481 ports, each handling more than 1 million tonnes of freight or more than 200 000 passengers per year. This threshold on handling is the reason the number of main sea ports changes from year to year and not a real rapid change in infrastructure.

The largest number of ports is to be found in Greece, Italy, Denmark and in the United Kingdom.

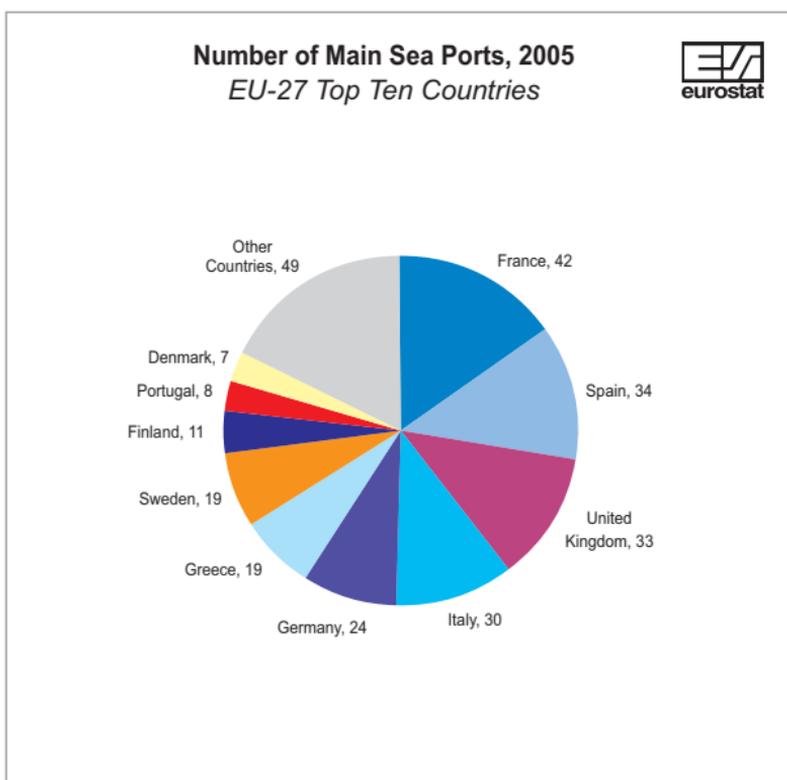
Number of Main Commercial Airports

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

	2003	2004	2005
EU-27	258	269	276
EU-25	253	262	269
Belgium	4	5	5
Bulgaria	3	3	3
Czech Republic	3	3	3
Denmark	6	6	7
Germany	25	25	24
Estonia	1	1	1
Ireland	5	6	6
Greece	18	18	19
Spain	33	33	34
France	36	39	42
Italy	29	30	30
Cyprus	2	2	2
Latvia	1	1	1
Lithuania	1	1	1
Luxembourg	1	1	1
Hungary	1	1	1
Malta	1	1	1
Netherlands	4	5	5
Austria	6	6	6
Poland	6	6	6
Portugal	8	8	8
Romania	2	4	4
Slovenia	1	1	1
Slovakia	1	1	2
Finland	10	11	11
Sweden	20	19	19
United Kingdom	30	32	33
Iceland	3	3	3
Liechtenstein	-	-	-
Norway	16	16	16
Switzerland	5	3	4
Croatia	:	3	4
Turkey	12	14	14

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

Data Source: Eurostat



In 2005, at the EU-27 level there were 276 commercial airports, each handling more than 150 000 passenger movements per year.

The largest number of main commercial airports is to be found in France, Spain, the United Kingdom and Italy.

Motorization Rate of Passenger Cars

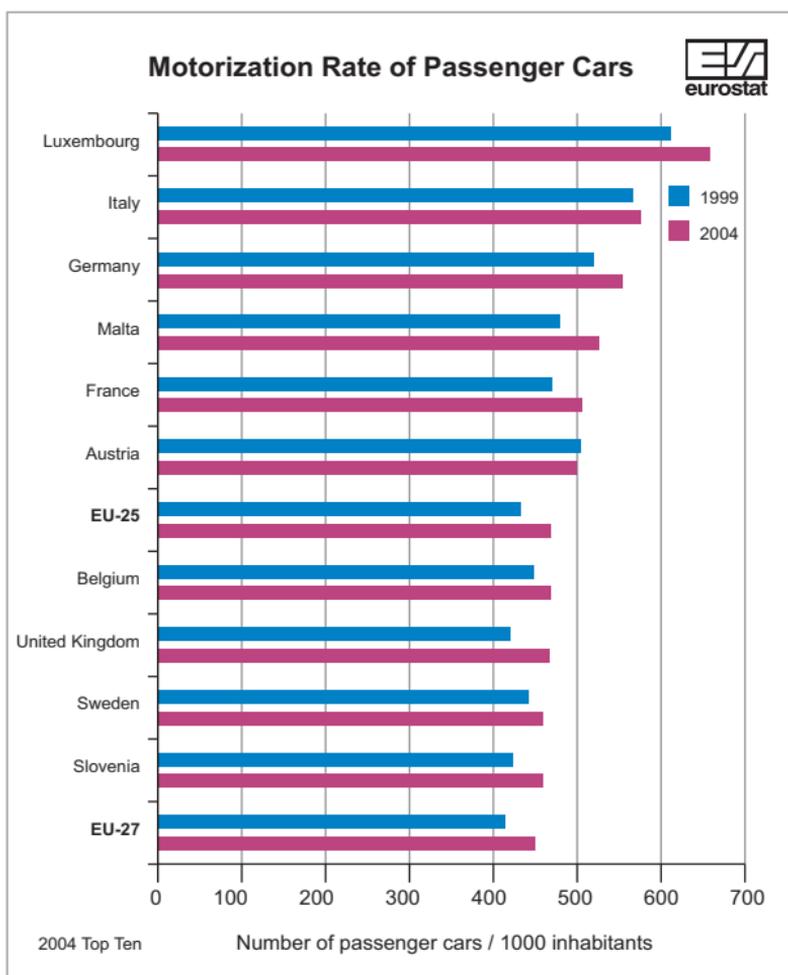
Number of passenger cars/1000 inhabitants

	1999	2000	2001	2002	2003	2004
EU-27	412	423	432	439	444	449
EU-25	428	440	449	456	461	466
Belgium	448	456	461	463	465	465
Bulgaria	232	244	260	276	295	315
Czech Republic	334	335	345	357	363	373
Denmark	346	347	350	351	352	354
Germany	516	532	539	541	546	550
Estonia	333	339	299	295	321	350
Ireland	338	347	363	374	383	381
Greece	269	293	313	332	348	367
Spain	422	433	446	453	445	450
France	468	475	483	487	491	502
Italy	563	572	583	590	596	580
Cyprus	374	386	399	405	419	443
Latvia	220	235	249	265	279	298
Lithuania	309	335	326	340	364	385
Luxembourg	611	626	636	643	651	656
Hungary	220	232	244	259	274	280
Malta	480	490	497	510	524	524
Netherlands	401	411	418	424	426	428
Austria	502	511	520	493	499	499
Poland	240	260	275	288	294	314
Portugal	329	337	349	375	380	389
Romania	136	143	148	136	142	149
Slovenia	428	437	444	459	446	455
Slovakia *	229	236	240	247	252	222
Finland	403	412	417	422	436	447
Sweden	439	451	452	453	455	456
United Kingdom	420	426	436	446	452	462
Iceland	544	565	561	563	604	591
Liechtenstein	656	667	682	683	704	691
Norway	407	412	415	418	424	428
Switzerland	485	493	502	508	518	512
Croatia	236	253	269	280	291	301
Turkey	61	66	66	66	67	:

* Slovakia - Break of series 2003-2004

Due to different definitions, comparisons between countries should be done with caution

Data Source: Eurostat, DG for Energy and Transport



Note: There are still some problems of definitions applied differently, mainly on the distinction between a lorry and a passenger car (i.e. vans, pick-ups, etc.). Therefore one should be cautious when interpreting the figures.

The number of passenger cars per 1000 inhabitants has almost continuously increased from 1999 to 2004 in every EU-27 country. Therefore, a total increase of 9% is observed over these years, from 412 in 1999 to 449 in 2004 for a total of 221 million cars in the EU-27 by 2004. The most significant increase in the order of 30% to 36% was recorded in countries with low motorization rates in the past, namely Bulgaria, Greece, Latvia and Poland.

Renewal Rate of Passenger Cars

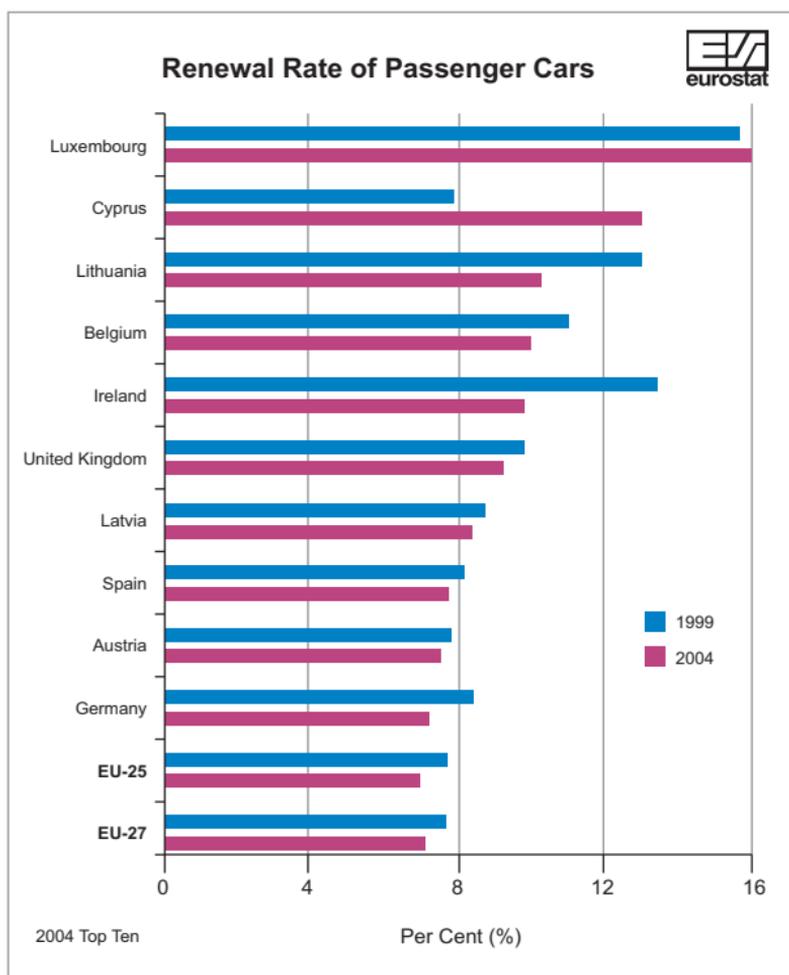
Passenger cars first registration/ total passenger cars (%)

	1999	2000	2001	2002	2003	2004
EU-27 *	8.4	7.9	7.7	7.3	7.0	7.0
EU-25 *	8.5	8.0	7.8	7.5	7.1	7.0
Belgium	11.0	11.4	10.5	9.9	9.6	9.9
Bulgaria	5.4	4.9	5.6	5.6	6.2	:
Czech Republic	5.8	6.0	5.9	6.0	3.9	3.8
Denmark	7.8	6.1	5.1	5.9	5.1	6.3
Germany	9.0	7.7	7.5	7.3	7.2	7.2
Estonia	1.5	2.2	3.1	3.7	3.6	3.5
Ireland	13.4	17.1	11.5	10.2	9.3	9.7
Greece	9.2	9.5	8.5	7.6	7.1	7.1
Spain	8.9	8.4	8.3	7.5	7.4	7.8
France	7.8	7.6	7.9	7.4	6.8	6.6
Italy	7.2	7.2	7.2	6.6	6.5	6.7
Cyprus	7.8	7.1	8.8	9.8	9.9	13.1
Latvia	8.7	6.4	6.5	6.5	7.7	8.4
Lithuania	13.0	9.9	6.3	7.9	9.4	10.2
Luxembourg	15.6	15.5	15.4	15.2	14.9	16.1
Hungary	6.2	6.3	7.7	9.1	6.8	6.7
Malta	7.3	6.9	5.3	5.1	5.1	:
Netherlands	9.6	9.1	7.9	7.5	7.1	6.9
Austria	7.8	7.6	7.0	7.0	7.4	7.6
Poland	6.5	5.2	4.3	3.8	2.4	2.7
Portugal	10.5	9.9	8.4	6.9	4.8	4.8
Romania	5.3	4.8	3.0	:	:	4.6
Slovenia	9.6	7.5	6.3	5.7	6.2	6.5
Slovakia	4.7	4.3	5.2	5.1	5.3	6.0
Finland	6.6	6.3	5.1	5.4	6.5	6.1
Sweden	8.6	8.9	7.2	7.3	7.5	6.4
United Kingdom	9.8	9.7	10.3	10.4	10.1	9.2
Iceland	11.3	9.3	4.8	4.6	6.2	6.8
Liechtenstein	10.0	9.8	9.1	9.0	7.4	7.5
Norway	6.8	6.9	6.5	6.4	6.3	7.4
Switzerland	9.1	8.9	8.7	7.9	7.1	3.0
Croatia	:	8.2	9.1	7.6	8.1	7.5
Turkey	5.8	7.9	2.6	1.5	3.7	:

* Based on estimates for MT and BG

Due to different definitions, comparisons between countries should be done with caution

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



Note: There are still some problems of definitions applied differently, mainly on the distinction between a lorry and a passenger car (i.e. vans, pick-ups etc.). Another problematic area is if the countries include only brand new vehicles in the first registrations or if they also include imported used vehicles. Therefore one should be cautious when interpreting the figures.

In 2004 the average renewal rate in the EU-27 was approximately 7%, while the highest rate of 16.1% was reported by Luxembourg. It is notable that the renewal rate has been decreasing in recent years in most of the Member States and in the EU-27 as a whole. More specifically, the renewal rate dropped by 16% from 1999 to 2004 at the EU-27 level.

Motorization Rate of Lorries and Road Tractors

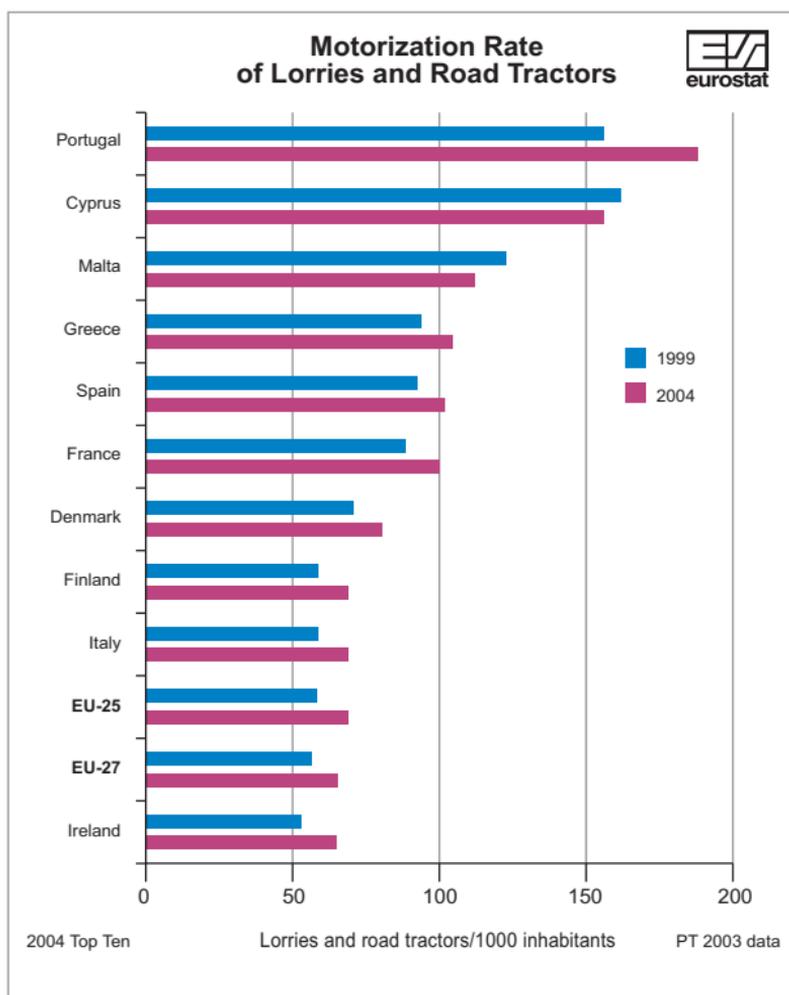
Lorries and road tractors/1000 inhabitants

	1999	2000	2001	2002	2003	2004
EU-27 *	56	59	61	62	63	65
EU-25 *	58	61	63	65	65	68
Belgium	51	53	56	57	58	60
Bulgaria	36	37	39	41	38	41
Czech Republic	28	29	31	34	36	39
Denmark	70	72	73	75	77	80
Germany	32	34	34	34	34	33
Estonia	62	63	62	63	62	64
Ireland	52	56	59	59	63	64
Greece	94	97	99	101	102	104
Spain	94	97	101	103	100	102
France	90	91	93	93	93	100
Italy	58	61	64	68	68	69
Cyprus	162	165	168	166	166	155
Latvia	38	41	42	44	45	47
Lithuania	27	28	29	30	32	34
Luxembourg	68	69	59	61	62	62
Hungary	34	36	37	39	39	41
Malta	122	118	117	114	112	110
Netherlands	53	56	59	61	62	63
Austria	42	43	43	42	43	43
Poland	44	49	52	57	61	63
Portugal	156	167	176	182	187	:
Romania	20	20	21	20	21	22
Slovenia	26	27	28	30	27	33
Slovakia	30	28	30	32	34	28
Finland	58	60	61	63	64	69
Sweden	41	43	45	47	48	49
United Kingdom	50	51	52	51	53	55
Iceland	64	69	70	71	80	78
Liechtenstein	79	70	73	79	75	75
Norway	36	36	36	95	96	97
Switzerland	38	39	39	40	40	40
Croatia	:	27	29	31	31	33
Turkey	17	18	19	19	20	26

* Based on estimates for PT

Due to different definitions, comparisons between countries should be done with caution

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



Note: There are still some problems of definitions applied differently, mainly on the distinction between a lorry and a passenger car (i.e. vans, pick-ups etc.). Therefore one should be cautious when interpreting the figures.

Like passenger cars, an increase is monitored in the motorization rate of lorries and road tractors from 1999 to 2004 and the countries having high increase in passenger car motorization do not necessarily have also high increases in the motorization of these vehicles.

Portugal most likely still had in 2004 the highest number of lorries and road tractors (185 per 1000 inhabitants in 2003) among the EU-27 countries, with Cyprus coming second (155 per 1000 inhabitants) and Malta third at a distance (110 per 1000 inhabitants). These high figures are partly explained by the fact that there is little or no rail network in these countries or even waterways networks, so most of the inland transport of goods is done by road.

Renewal Rate of Lorries and Road Tractors

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

	1998	1999	2000	2001	2002	2003
EU-27	:	:	:	:	:	:
EU-25	8.4	8.8	8.8	8.3	7.9	:
Belgium	12.2	13.2	12.0	12.2	9.9	10.1
Bulgaria	3.6	3.6	3.4	4.3	4.6	:
Czech Republic	8.9	8.6	8.5	9.6	8.5	6.3
Denmark	9.6	10.0	9.4	9.1	8.8	8.8
Germany	10.4	10.9	9.9	9.0	8.3	8.2
Estonia	6.4	4.8	5.6	6.7	7.1	:
Ireland	13.9	15.8	16.2	13.9	16.1	13.5
Greece	4.3	4.5	4.4	4.3	4.2	4.3
Spain	8.1	9.0	8.3	7.5	6.8	7.9
France	7.6	8.1	8.8	8.9	8.2	7.6
Italy	6.2	6.2	7.0	6.8	7.8	6.1
Cyprus	6.8	6.1	6.0	6.8	6.2	4.2
Latvia	6.9	7.4	5.6	5.0	4.9	5.6
Lithuania	13.4	8.0	8.0	6.8	7.3	8.5
Luxembourg	10.9	12.3	12.6	13.4	12.6	16.6
Hungary	8.9	9.5	9.3	9.0	10.5	:
Malta	6.3	5.3	4.7	4.1	3.3	4.1
Netherlands	14.9	13.8	12.6	10.6	9.6	8.9
Austria	10.1	10.2	10.4	9.1	8.6	9.7
Poland	7.3	8.8	7.9	5.7	7.5	8.2
Portugal	7.4	7.1	7.6	5.7	4.5	3.7
Romania	6.5	7.2	1.4	9.4	:	:
Slovenia	7.8	8.9	8.3	7.7	7.8	8.8
Slovakia	6.4	4.8	5.6	8.5	7.4	8.8
Finland	6.9	6.6	6.0	5.7	5.6	5.7
Sweden	9.3	10.0	10.5	9.2	8.8	8.6
United Kingdom	10.4	10.8	11.6	11.9	10.2	11.1
Iceland	9.3	10.4	11.2	6.2	4.9	7.2
Liechtenstein	:	:	:	:	:	:
Norway	4.4	3.4	3.7	3.5	:	:
Switzerland	8.1	8.5	9.6	10.0	8.3	7.2
Croatia	:	:	5.8	7.9	9.5	10.4
Turkey	11.6	7.0	9.8	3.6	3.8	8.1

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

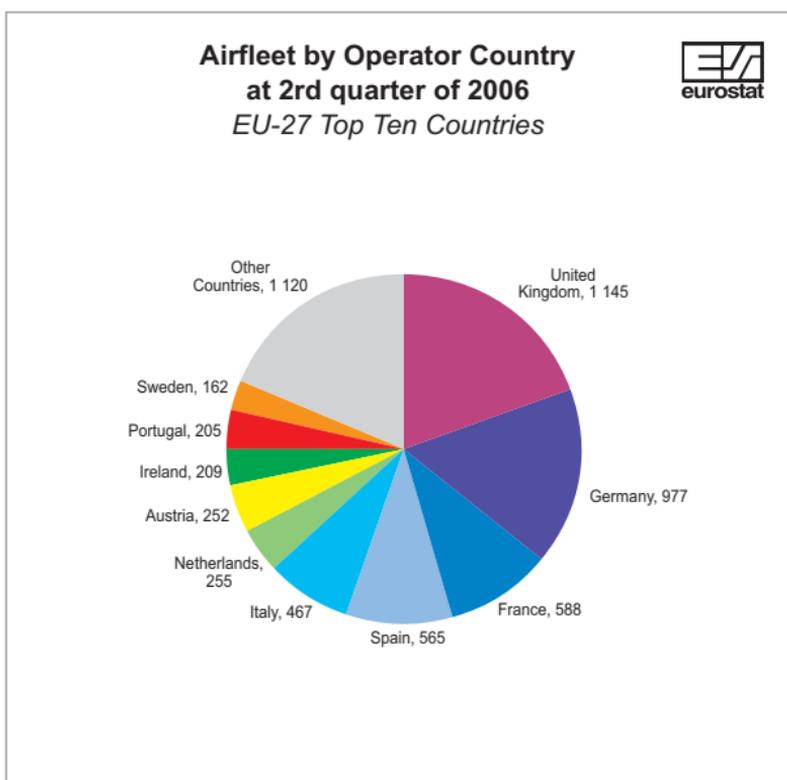
Airfleet by Operator Country

	2nd quarter 2006
EU-27	5 945
EU-25	5 822
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



Note: All military aircrafts excluded

At the end of the second quarter of 2006, there were 5 945 commercial aircrafts in EU-27. Countries having the major share of air fleet in the total of EU-27 are: United Kingdom with 1 145 aircrafts and a share of 19.2%, Germany with 977 aircraft and a share of 16.4%, followed by France with 588 aircrafts and 9.9% -a sharp decrease compared to 2005's share of 11%.

The comparison between the air fleet of a country and its population shows a different picture: Luxembourg comes first with 175 aircrafts per million of inhabitants, followed by Malta and Ireland with 62 and 50 aircrafts per million of inhabitants respectively. The average for EU-27 is 12 aircrafts per million of inhabitants while the United Kingdom, Germany and France have ratios of 19, 12 and 10 aircrafts per million of inhabitants respectively.

Index of Inland Freight Transport Volume Relative to GDP

*Inland Freight Transport Volume measured in tonne-km / GDP
(in constant 1995 Euro), 2000=100*

	2000	2001	2002	2003	2004	2005
EU-27*	100.0	99.1	98.6	99.0	104.0	104.8
EU-25*	100.0	98.9	98.0	98.3	102.9	103.0
Belgium	100.0	100.8	99.6	95.0	90.0	83.6
Bulgaria	100.0	101.5	101.3	109.3	120.8	132.1
Czech Republic	100.0	94.3	86.3	93.7	71.7	83.5
Denmark	100.0	91.4	91.4	91.8	91.5	88.1
Germany	100.0	100.3	97.8	97.3	103.1	104.6
Estonia	100.0	97.0	99.2	99.6	96.0	86.9
Ireland	100.0	95.2	103.8	110.4	118.3	119.9
Greece	100.0	:	:	83.5	:	94.7
Spain	100.0	103.3	111.8	111.4	122.0	123.0
France	100.0	96.9	93.6	90.9	91.3	86.2
Italy	100.0	97.8	96.6	85.8	93.5	97.6
Cyprus	100.0	93.4	103.1	97.8	107.7	110.2
Latvia	100.0	97.3	96.9	106.1	115.2	126.2
Lithuania	100.0	107.1	100.4	107.3	109.8	111.9
Luxembourg	100.0	111.8	113.2	112.6	111.3	96.7
Hungary	100.0	93.9	100.6	109.5	104.9	117.5
Malta	:	:	:	:	:	:
Netherlands	100.0	94.4	89.5	88.5	97.6	95.7
Austria	100.0	103.6	104.2	103.1	102.3	98.6
Poland	100.0	88.0	92.1	111.8	124.3	111.8
Portugal	100.0	106.7	102.1	91.6	130.6	133.5
Romania	100.0	107.3	122.9	132.0	146.4	152.2
Slovenia	100.0	100.9	95.4	99.4	115.9	134.2
Slovakia	100.0	92.4	85.8	84.6	80.8	86.4
Finland	100.0	93.0	94.8	93.6	96.3	94.2
Sweden	100.0	103.5	104.9	104.1	105.8	111.0
United Kingdom	100.0	99.3	97.1	105.1	103.0	101.2
Iceland	100.0	121.4	116.6	119.8	127.7	123.5
Liechtenstein	:	:	:	:	:	:
Norway	100.0	98.2	93.1	100.7	110.3	100.8
Switzerland	:	:	:	:	:	:
Croatia	:	:	:	:	:	:
Turkey	100.0	112.3	96.5	86.9	81.5	:

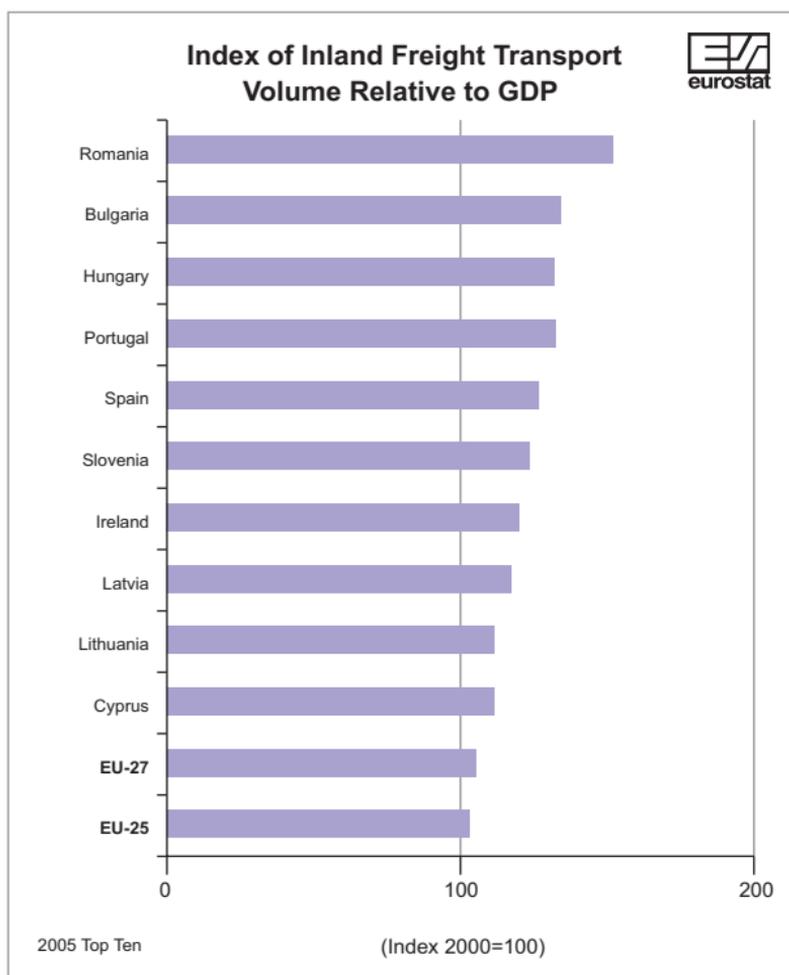
* EU totals include estimates for Malta and Greece

** EL: road transport data for 1999 instead of 2000

Break in series appearing in 2004 for IT, PL, PT, RO and EU totals due to changes in the surveys methodology.

When interpreting the index, please, consider the breaks in series.

Data Source: Eurostat



The index of EU-27 freight transport volume measured in tkm/GDP shows an increase of 4.8% in 2005 compared to 2000. It is notable that the absolute values of the *Inland Freight Transport Volume Relative to GDP* indicator for Latvia, Lithuania, and Estonia are 10 times higher than the EU-27 average while values of transport volume relative to GDP for the Czech Republic and Slovakia are 5 times higher than that average.

Index of Transport Growth

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

	2000	2001	2002	2003	2004	2005
EU-27 *	100	101	103	104	112	115
EU-25 *	100	101	103	103	111	113
Belgium	100	103	104	100	97	92
Bulgaria	100	109	113	124	144	163
Czech Republic	100	103	108	114	91	113
Denmark	100	94	96	98	100	99
Germany	100	101	100	101	108	111
Estonia	100	102	108	114	112	107
Ireland	100	101	115	126	137	143
Greece **	100	:	:	91	:	110
Spain	100	108	122	126	144	151
France	100	99	98	97	99	95
Italy	100	101	103	94	106	113
Cyprus	100	96	108	106	121	127
Latvia	100	99	98	101	113	130
Lithuania	100	110	107	114	119	129
Luxembourg	100	112	116	121	122	110
Hungary	100	103	126	139	140	163
Malta	100	:	:	:	:	:
Netherlands	100	99	98	99	110	110
Austria	100	105	108	108	109	107
Poland	100	99	101	108	122	126
Portugal	100	111	110	102	149	156
Romania	100	113	133	147	174	227
Slovenia	100	104	102	109	128	150
Slovakia	100	96	94	100	105	119
Finland	100	96	99	97	101	99
Sweden	100	96	100	102	104	108
United Kingdom	100	100	99	101	103	103
Iceland	100	110	113	116	126	140
Liechtenstein	:	:	:	:	:	:
Norway	100	101	101	105.1	116	120.1
Switzerland	:	:	:	:	:	:
Croatia	:	:	:	:	:	:
Turkey	100	91	86	81	79	:

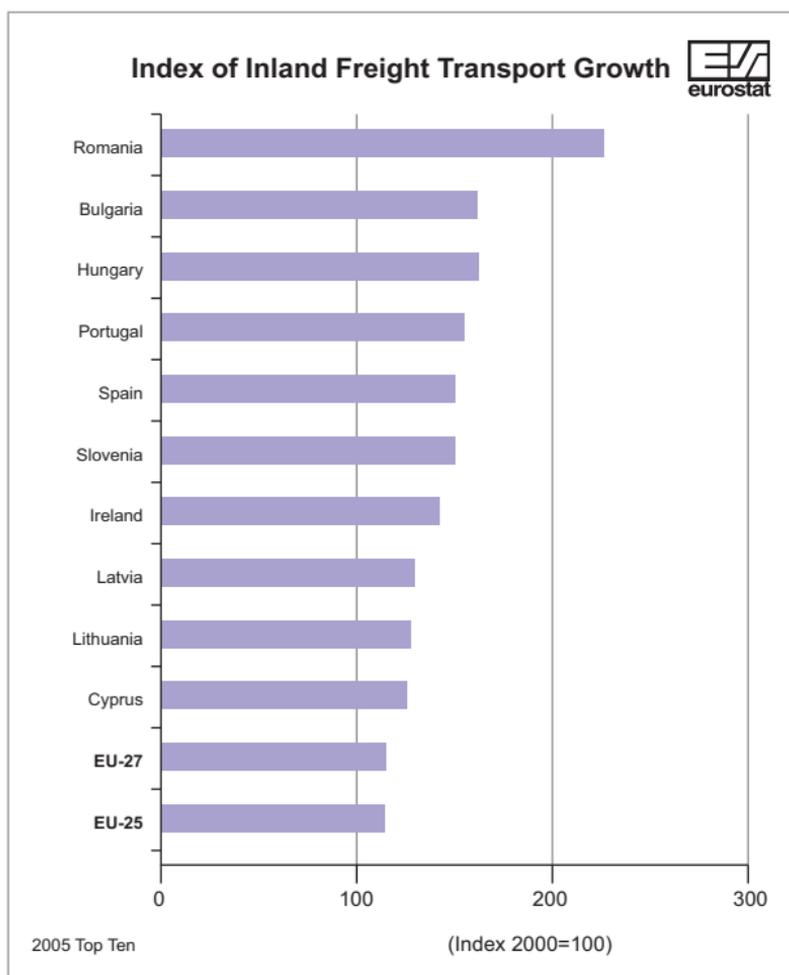
* EU totals include estimates for Malta and Greece

** EL: road transport data for 1999 instead of 2000

Break in series appearing in 2004 for IT, PL, PT, RO and EU totals due to changes in the surveys methodology.

When interpreting the index, please, consider the breaks in series.

Data Source: Eurostat



The average EU-27 freight transport, in terms of tonne-kilometres, grew by 15% in the period 2000-2005. The increase between 2003 and 2004 is 8%, partially attributed to the change in the methodology of road and rail freight transport surveys. It must be noted that due to the change in the methodology of freight transport surveys many breaks in series resulted in the table on the left hand page.

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

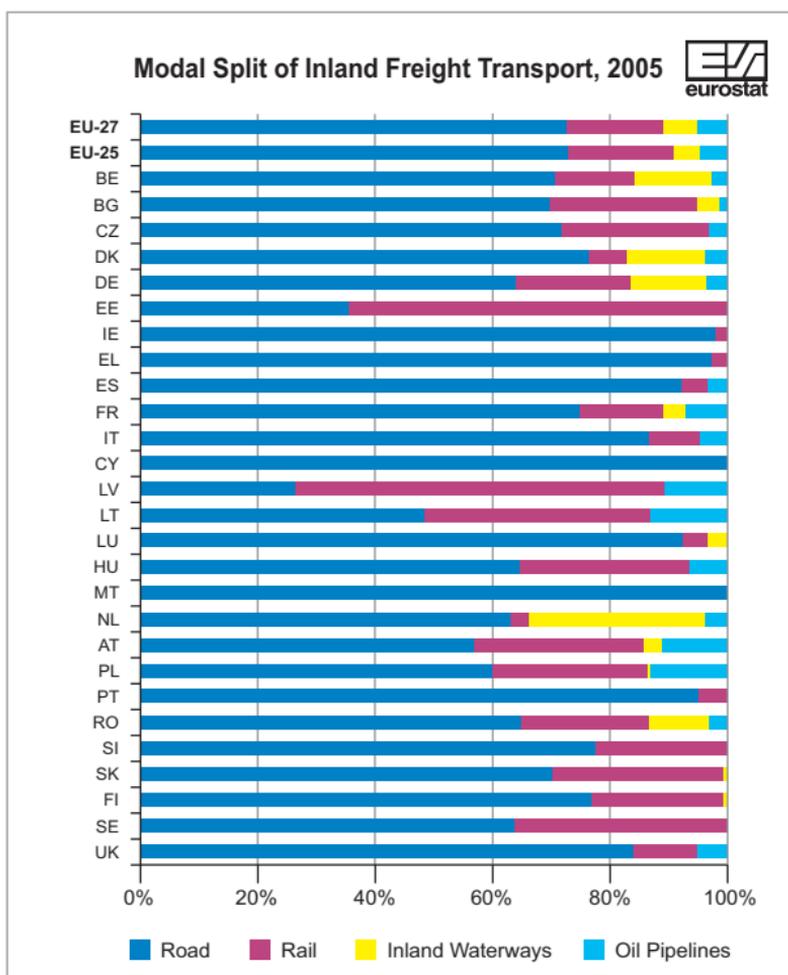
(% of total tonne-kilometres)

	2000					2005				
	Rail	Road	IWW	Oil	Total	Rail	Road	IWW	Oil	Total
EU-27	18	70	6	6	100	17	73	6	5	100
EU-25	18	70	6	6	100	17	73	5	5	100
BE	11	76	11	2	100	13	70	14	3	100
BG	44	51	3	3	100	25	70	4	2	100
CZ	31	66	0	3	100	25	72	0	4	100
DK	7	78	-	15	100	7	77	-	17	100
DE	18	64	15	3	100	20	64	13	3	100
EE	63	37	0	-	100	65	35	0	-	100
IE	4	96	-	-	100	2	98	-	-	100
EL*	2	98	-	-	100	3	97	-	:	100
ES	7	89	:	4	100	5	92	:	3	100
FR	19	70	3	8	100	15	75	3	7	100
IT	10	85	0	5	100	9	86	0	4	100
CY	-	100	-	-	100	-	100	-	-	100
LV	54	20	-	26	100	63	27	-	11	100
LT	44	39	0	17	100	38	49	0	13	100
LU	8	88	4	-	100	4	92	4	-	100
HU	27	64	3	6	100	23	65	5	7	100
MT	-	100	-	-	100	-	100	-	-	100
NL	4	61	31	5	100	4	63	29	4	100
AT	27	57	4	12	100	29	57	3	12	100
PL	36	49	1	14	100	27	60	0	14	100
PT	8	93	:	-	100	5	95	:	:	100
RO	47	41	8	4	100	21	65	11	3	100
SI	30	70	-	-	100	23	77	-	-	100
SK	42	53	5	-	100	30	70	0	-	100
FI	24	76	0	-	100	23	77	0	-	100
SE	36	64	0	-	100	36	64	0	-	100
UK	9	85	0	6	100	11	83	0	5	100
IS	-	100	-	-	100	-	100	-	-	100
LI	:	:	-	-	:	:	:	-	-	:
NO	14	70	-	16	100	12	70	-	18	100
CH	:	:	:	:	:	:	:	:	:	:
HR	:	:	:	:	:	21	68	1	11	100
TR	5	76	-	19	100	:	:	-	:	:

* EL: 1999 data instead of 2000.

IWW: Inland Waterways

Data Source: Eurostat

**Note:**

EL, SK: oil pipelines not included in the calculation

ES: inland waterways not included in the calculation

PT: oil pipelines and inland waterways not included in the calculation

Break in series appearing between 2000 and 2005 in some countries (i.e. PL, PT, RO) have an effect on the calculated transport modes shares for these countries and for EU totals.

In 2005, 73% of the EU-27 freight inland transport (in tonne-km) was done by road. In most of the countries, road transport was the dominant mode with the exception of Estonia and Latvia where rail transport performance was double or more the road transport performance. For most of the countries, there was an increase in the share of road freight transport in 2005 when compared to 2000, with some exceptions, most notably Belgium, followed by the United Kingdom, Denmark, Estonia and Greece.

Rail freight transport had a share of 18% at the EU-27 level in 2000 which dropped to 17% in 2005. There was also a full percentage point decrease in the combined shares of inland waterways and pipelines: from 11.8% in 2000 to 10.8% in 2005.

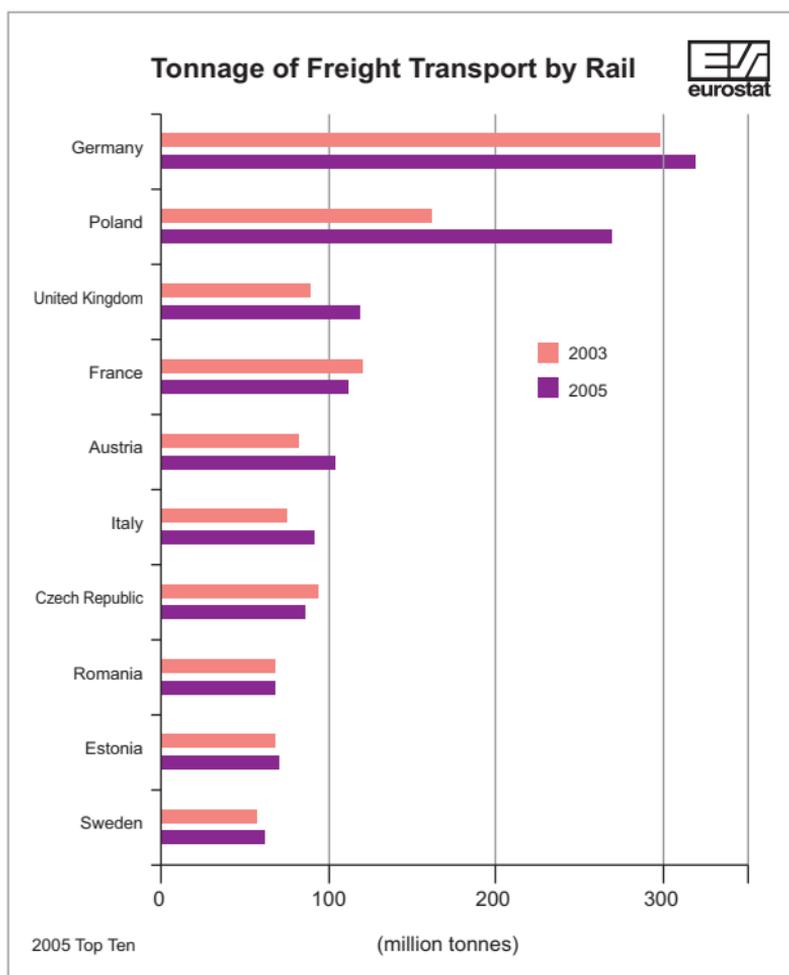
Tonnage of Freight Transport by Rail

	<i>(million tonnes)</i>		
	2003	2004	2005
EU-27 *	:	:	:
EU-25 *	1 525	1 729	:
Belgium	56	58	:
Bulgaria	20	20	:
Czech Republic	93	89	86
Denmark	8	8	8
Germany	297	310	317
Estonia	66	66	68
Ireland	2	2	2
Greece	3	3	3
Spain	26	29	30
France	121	117	108
Italy	74	84	90
Cyprus	-	-	-
Latvia	48	51	55
Lithuania	43	46	49
Luxembourg	15	17	11
Hungary	43	52	51
Malta	-	-	-
Netherlands	30	30	29
Austria	82	93	102
Poland	162	283	270
Portugal	9	10	10
Romania	69	73	69
Slovenia	17	16	16
Slovakia	51	50	49
Finland	44	43	41
Sweden	58	60	63
United Kingdom	89	119	121
Iceland	-	-	-
Liechtenstein	:	2	2
Norway	21	23	25
Switzerland	:	:	:
Croatia	12	12	14
Turkey	16	18	19

Since 2004, small rail companies are included for some countries (break in series).

* The values of this table include national, international incoming, international outgoing and transit rail transport of each country. In consequence, some volumes are calculated twice or even three times. The estimated double counting is in order of the magnitude of 30%.

Data Source: Eurostat, UIC, national statistics



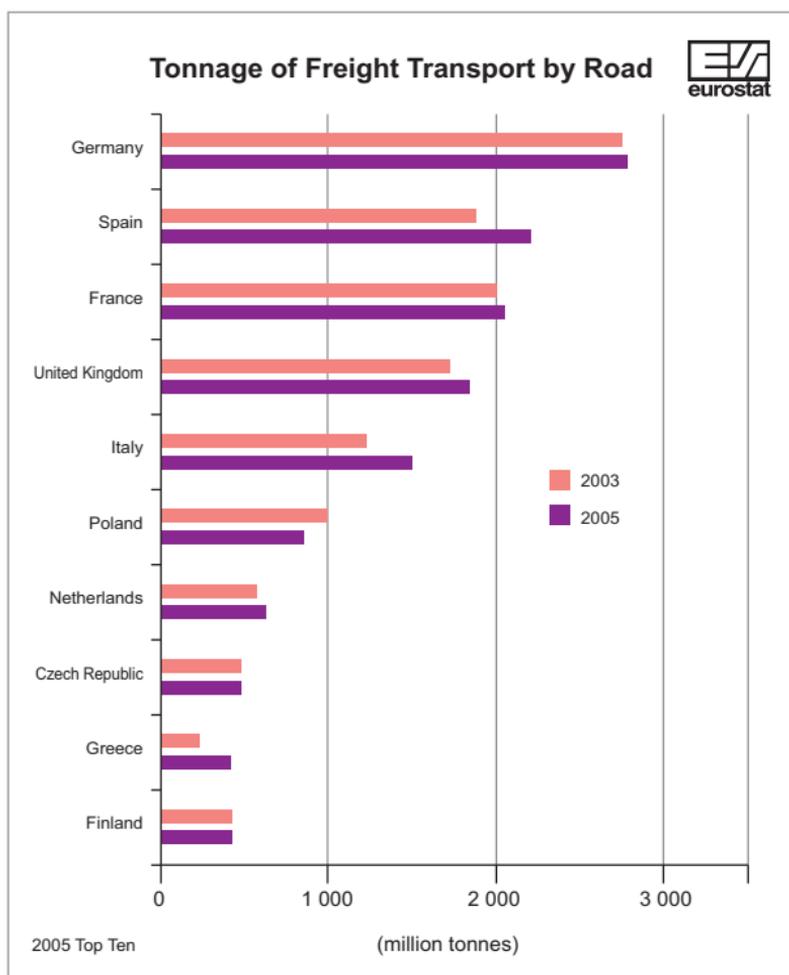
The tonnage of goods transported by rail in the 27 Member States in 2004 was close to 1 700 million tonnes, an increase of 13% over 2003, while in 2005 the same practically tonnage was transported. The growth from 2003 to 2004 and 2005 is mainly attributed to the significant increase in some countries such as Poland that recorded an impressive 75%, the United Kingdom with 33% and to a lesser extent, Germany and Austria.

Tonnage of Freight Transport by Road

(million tonnes)

	2003	2004	2005
EU-27	:	:	:
EU-25	:	15 202	15 711
Belgium	378	347	338
Bulgaria	155	145	:
Czech Republic	448	466	461
Denmark	206	192	206
Germany	2 744	2 768	2 765
Estonia	28	26	30
Ireland	252	278	297
Greece	225	444	433
Spain	1 850	2 013	2 210
France	1 982	2 077	2 060
Italy	1 243	1 424	1 509
Cyprus	55	43	54
Latvia	44	46	52
Lithuania	52	51	55
Luxembourg	52	53	50
Hungary	214	213	229
Malta	:	:	:
Netherlands	571	614	613
Austria	297	283	288
Poland	982	732	863
Portugal	266	326	333
Romania	:	:	:
Slovenia	69	74	83
Slovakia	174	178	195
Finland	400	400	400
Sweden	312	325	355
United Kingdom	1 724	1 829	1 830
Iceland	:	:	:
Liechtenstein	:	0	1
Norway	230	244	245
Switzerland			
Croatia	52	55	:
Turkey	:	:	:

Data Source: Eurostat



Road freight transport in the EU-25 accounted for approximately 15.7 billion tonnes in 2005, with a growth of 16% in the last two years since 2003. European road transport in 2005 was dominated by Germany, France, Spain, the United Kingdom and Italy where, with the exception of Germany, the trend in recent years was increasing. In these countries, a 3% increase was recorded between 2004 and 2005, on top of a 6% increase between 2003 and 2004.

Tonnage of Freight Transport by Inland Waterways

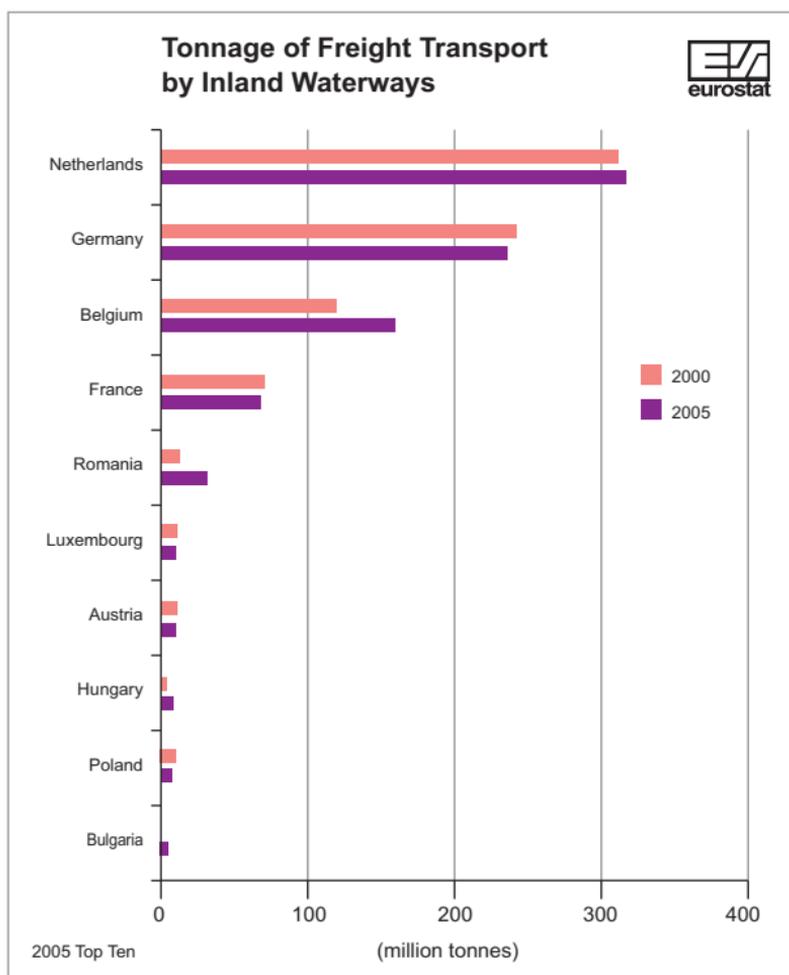
(million tonnes)

	2000	2001	2002	2003	2004	2005
EU-27 *	:	826	813	:	846	:
EU-25 *	792	808	792	756	811	:
Belgium	120	128	134	137	147	160
Bulgaria	:	6	6	7	4	5
Czech Republic	2	2	2	1	1	2
Denmark	-	-	-	-	-	-
Germany	242	236	232	220	236	237
Estonia	:	-	-	-	-	-
Ireland	-	-	-	-	-	-
Greece	-	-	-	-	-	-
Spain	-	-	-	-	-	-
France	71	68	67	64	67	68
Italy	:	:	:	:	:	:
Cyprus	-	-	-	-	-	-
Latvia	-	-	-	-	-	-
Lithuania **	0	0	-	-	-	-
Luxembourg	12	11	11	10	11	10
Hungary	4	6	7	6	7	8
Malta	-	-	-	-	-	-
Netherlands	314	329	312	293	319	318
Austria	11	12	12	11	9	9
Poland **	10	10	7	8	7	7
Portugal	-	-	-	-	-	-
Romania **	13	11	14	:	30	33
Slovenia	-	-	-	-	-	-
Slovakia **	2	2	3	3	3	2
Finland	1	0	0	0	0	:
Sweden	-	-	-	-	-	-
United Kingdom	4	4	4	3	3	:
Iceland	-	-	-	-	-	-
Liechtenstein	-	-	-	-	-	-
Norway	-	-	-	-	-	-
Switzerland	:	:	:	:	:	:
Croatia **	1	2	1	1	2	:
Turkey	-	-	-	-	-	-

* EU totals exclude Italy and Estonia

** Inland waterways operators data are reported for: LT, PL (up to 2003), SK (up to 2002), RO (up to 2003) and HR

Data Source: Eurostat



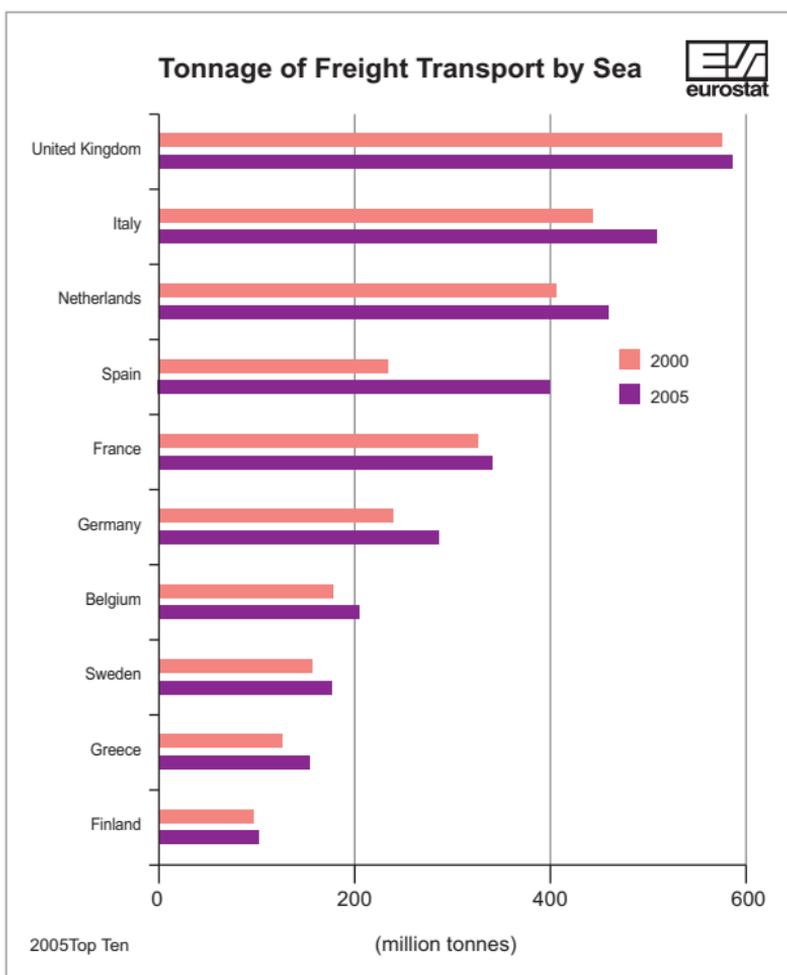
In 2005, the total volume of inland waterways transport in the EU-27 was about 860 million tonnes, increased substantially with the admission of Bulgaria and Romania. The Netherlands and Germany continue to dominate this mode of transport, constituting 65% of the total tonnage transported by the EU-27 inland waterways network. Belgium, with 19% of the total inland waterways transport, has recorded the most significant increase (34%) in the period 2000-2005.

Tonnage of Freight Transport by Sea

(million tonnes)

	2000	2001	2002	2003	2004	2005
EU-27	:	:	:	3 451	3 568	3 718
EU-25	:	:	:	3 393	3 505	3 645
Belgium	179	174	174	181	188	207
Bulgaria	:	20	20	21	23	25
Czech Republic	-	-	-	-	-	-
Denmark	97	94	94	104	100	100
Germany	243	246	246	255	272	285
Estonia	:	40	45	47	45	47
Ireland	45	46	45	46	48	52
Greece	128	122	148	163	158	151
Spain	235	315	326	344	373	400
France	326	318	319	330	334	341
Italy	447	445	458	477	485	509
Cyprus	:	:	7	7	7	7
Latvia	:	57	52	55	55	60
Lithuania	:	21	24	30	26	26
Luxembourg	-	-	-	-	-	-
Hungary	-	-	-	-	-	-
Malta	:	:	:	3	3	4
Netherlands	406	406	413	410	441	461
Austria	-	-	-	-	-	-
Poland	:	46	48	51	52	55
Portugal	56	56	56	57	59	65
Romania	:	28	33	36	41	48
Slovenia	:	9	9	11	12	13
Slovakia	-	-	-	-	-	-
Finland	81	96	99	104	107	100
Sweden	159	153	155	161	167	178
United Kingdom	573	566	558	556	573	586
Iceland	5	5	5	5	5	6
Liechtenstein	-	-	-	-	-	-
Norway	:	:	190	187	198	202
Switzerland	-	-	-	-	-	-
Croatia	:	:	:	:	:	26
Turkey	:	:	:	:	:	:

Data Source: Eurostat



Note: Caution must be observed when considering the total figures (inwards + outwards), as the national transport includes some double-counting (goods loaded and unloaded).

In 2005, 3.7 billion tonnes of goods were handled at EU-27 seaports. The total tonnage handled in 2005 rose by 4.2% compared to the previous year, accelerating even further compared to the growth recorded between 2002 and 2003. Most of the Member States recorded an increase in 2005.

Italy, the Netherlands and the United Kingdom, the top three nations by tonnage transported, traditionally handle higher quantities of seaborne goods and reached a total share of 42% in 2005.

Passenger Transport by Rail

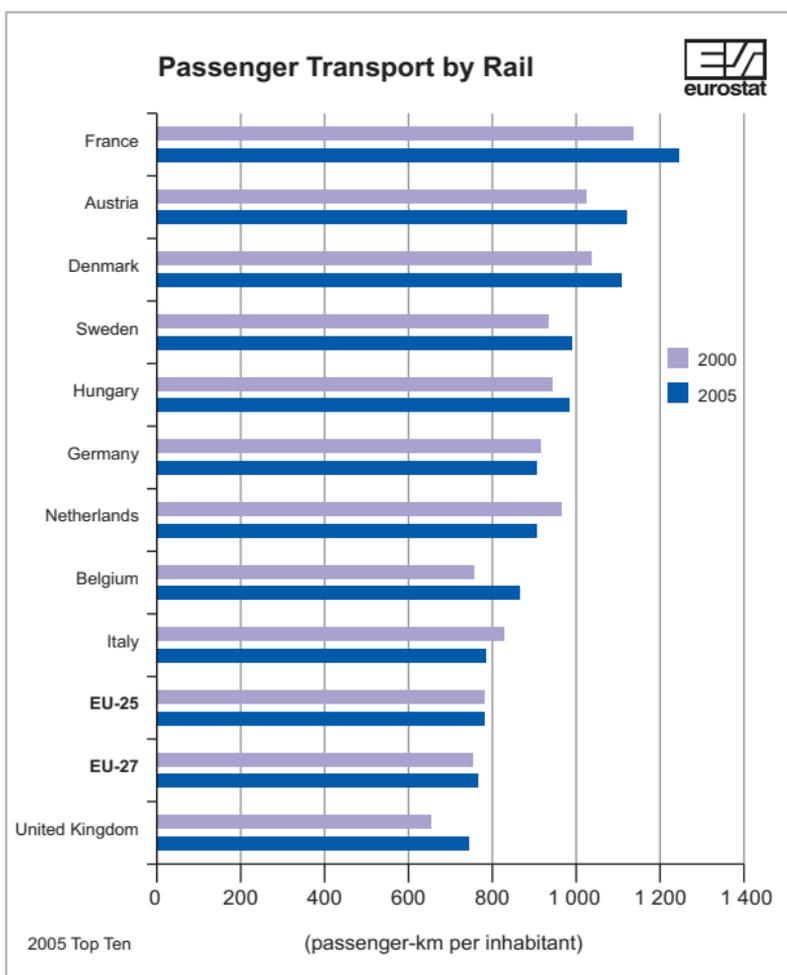
(passenger-km per inhabitant)

	2000	2001	2002	2003	2004	2005
EU-27	760	761	745	731	742	758
EU-25	778	781	769	754	766	784
Belgium	756	781	799	796	832	870
Bulgaria	431	378	330	322	309	309
Czech Republic	707	713	647	635	645	651
Denmark	1 037	1 068	1 069	1 081	1 096	1 099
Germany	917	920	865	864	883	909
Estonia	192	133	130	134	143	184
Ireland	365	392	416	401	389	428
Greece	173	159	167	143	154	167
Spain	465	477	472	460	476	487
France	1 146	1 165	1 190	1 162	1 191	1 257
Italy	828	820	804	786	783	787
Cyprus	-	-	-	-	-	-
Latvia	301	300	318	328	351	389
Lithuania	175	153	144	125	82	82
Luxembourg	761	783	800	582	558	595
Hungary	949	982	1 037	1 015	1 006	977
Malta	-	-	-	-	-	-
Netherlands **	967	966	960	853	866	903
Austria	1 024	1 026	1 027	1 016	1 061	1 121
Poland	630	587	543	514	483	469
Portugal	375	379	379	343	352	361
Romania	518	489	390	392	398	368
Slovenia	410	359	375	390	382	387
Slovakia	531	521	499	431	414	405
Finland	658	633	638	640	641	661
Sweden	936	989	1 020	1 010	963	988
United Kingdom	655	665	673	691	723	742
Iceland	-	-	-	-	-	-
Liechtenstein *	:	:	:	:	:	:
Norway	636	612	549	530	572	586
Switzerland	1 787	1 867	1 661	:	:	:
Croatia	221	279	269	262	273	285
Turkey	87	81	75	84	74	70

* Rail transport data are included in Austrian data

** Up to 2002, rail data are based on the movements of the Dutch inhabitants on Dutch territory

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



Note: Rail passenger data are not harmonised at EU level. Transit transport is included for some countries.

Rail passenger transport reached a total of 373 billion passenger-kilometres at the EU-27 level in 2005. Passenger transport by rail, expressed in terms of passenger-kilometres per inhabitant, exhibited a slight drop in EU-27 between 2000 and 2005. In relative terms, it is France that in 2005 recorded the largest number of passenger-kilometres per inhabitant (1 257 p-km per inhabitant). In absolute terms, it is also France that recorded in 2005 the highest number of 76 billion passenger-kilometres, followed closely by Germany (75 billion) and, at a distance, Italy (46 billion).

Passenger Transport by Buses and Coaches

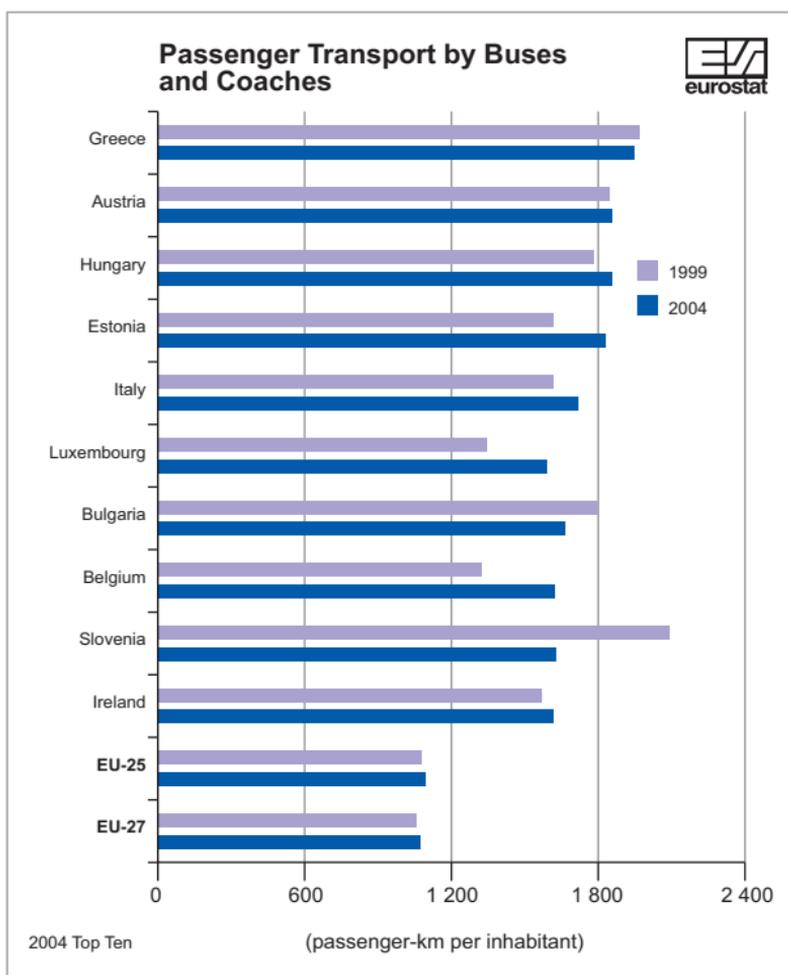
(passenger-km per inhabitant)

	1999	2000	2001	2002	2003	2004
EU-27*	1 052	1 065	1 063	1 053	1 058	1 068
EU-25*	1 072	1 087	1 086	1 073	1 074	1 088
Belgium	1 320	1 294	1 309	1 407	1 559	1 629
Bulgaria	1 795	1 810	1 892	2 158	1 841	1 674
Czech Republic	1 502	1 582	1 718	1 621	1 500	1 382
Denmark	1 390	1 389	1 368	1 357	1 349	1 351
Germany	828	839	834	818	818	821
Estonia	1 616	1 920	1 804	1 715	1 697	1 830
Ireland	1 571	1 607	1 620	1 621	1 627	1 610
Greece	1 976	1 988	1 989	2 002	1 991	1 953
Spain	1 262	1 260	1 284	1 211	1 172	1 252
France	690	708	676	686	688	705
Italy	1 619	1 643	1 678	1 700	1 707	1 716
Cyprus	:	:	:	:	:	:
Latvia	991	989	979	1 010	1 097	1 201
Lithuania	756	787	814	869	897	1 103
Luxembourg	1 347	1 421	1 494	1 614	1 644	1 700
Hungary	1 767	1 835	1 827	1 840	1 866	1 851
Malta	:	:	:	:	:	:
Netherlands	474	471	474	446	462	461
Austria	1 843	1 852	1 843	1 828	1 830	1 853
Poland	860	830	810	766	785	789
Portugal	1 128	1 156	1 084	959	1 006	1 029
Romania	371	343	316	242	434	433
Slovenia	2 084	1 760	1 703	1 673	1 727	1 611
Slovakia	1 452	1 562	1 534	1 531	1 442	1 464
Finland	1 471	1 488	1 484	1 481	1 471	1 455
Sweden	1 050	1 071	1 034	1 042	1 016	990
United Kingdom**	773	801	795	792	789	802
Iceland	1 687	1 750	1 748	1 750	1 907	1 897
Liechtenstein	:	:	:	:	:	:
Norway	940	922	909	909	877	921
Switzerland	435	441	452	457	463	458
Croatia	734	740	783	800	837	763
Turkey	1 376	1 297	1 123	:	1 136	1 100

* EU totals include estimates for Cyprus and Malta

** buses and coaches data refer to Great Britain

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



Note: Buses and coaches data are asked to be based on movements on national territory, regardless of the nationality of the vehicle. However, data collection methodology is not harmonised at the EU level.

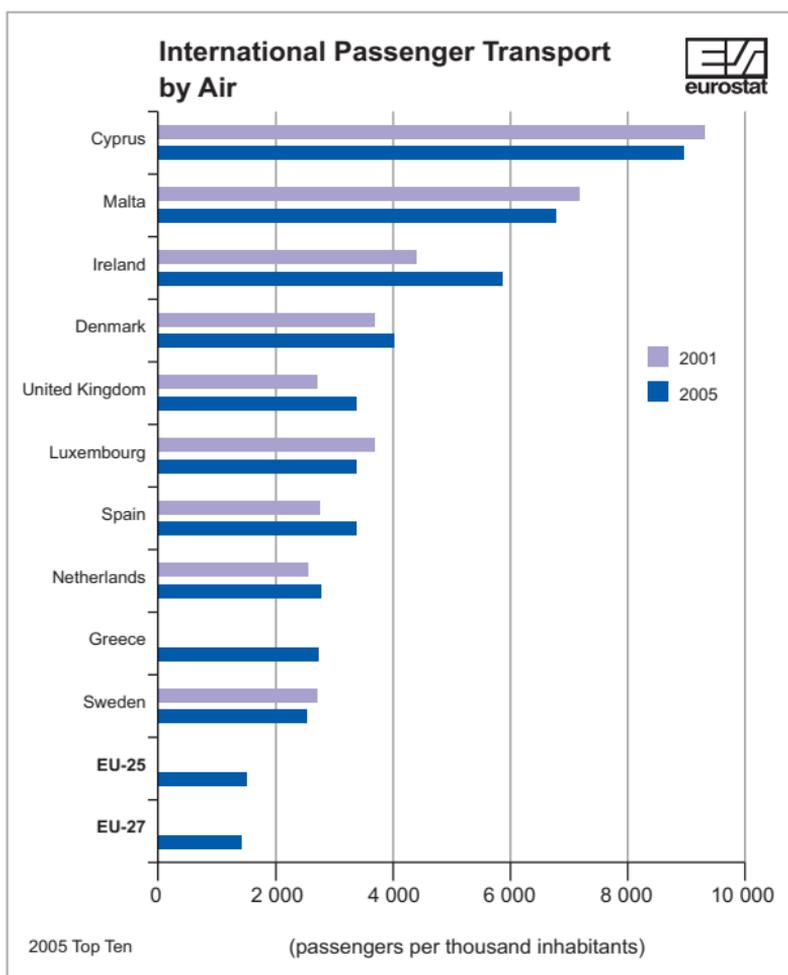
In terms of passenger-kilometres per capita, Greece, Austria and Hungary are the countries that led the ranking in 2004 in the EU-27. On the other hand, in terms of passenger-kilometres, Italy is in first place with over 100 billion passenger-kilometres, followed by Germany (68 billion pkm) and Spain (54 billion pkm).

International Passenger Transport by Air

(passengers per thousand inhabitants)

	2000	2001	2002	2003	2004	2005
EU-27	:	:	:	:	1 340	1 458
EU-25	:	:	:	:	1 410	1 532
Belgium	2 107	1 924	1 312	1 455	1 676	1 700
Bulgaria	:	:	392	457	544	649
Czech Republic	:	:	645	760	974	1 101
Denmark	:	3 694	3 708	3 631	3 887	4 091
Germany	1 468	1 435	1 387	1 468	1 646	1 770
Estonia	:	418	444	525	734	1 035
Ireland	4 389	4 483	4 655	4 970	5 125	5 832
Greece	2 813	:	:	2 555	2 668	2 774
Spain	2 754	2 805	2 717	2 863	3 040	3 311
France	1 587	1 544	1 569	1 555	1 650	1 773
Italy	1 181	1 059	1 141	1 283	1 396	1 500
Cyprus	:	9 322	:	8 408	8 677	8 950
Latvia	:	265	271	306	457	814
Lithuania	:	:	:	209	289	420
Luxembourg	3 795	3 664	3 373	3 221	3 331	3 364
Hungary	:	450	440	495	638	798
Malta	:	7 217	6 666	6 642	6 953	6 834
Netherlands	2 551	2 535	2 593	2 537	2 733	2 845
Austria	958	951	1 849	1 945	2 239	2 390
Poland	:	:	:	:	160	186
Portugal	1 586	1 580	1 677	1 699	1 754	1 922
Romania	:	105	111	125	147	161
Slovenia	:	:	:	:	524	608
Slovakia	:	77	92	116	201	282
Finland	2 071	2 075	1 980	2 017	2 254	2 354
Sweden	2 742	2 710	2 469	2 282	2 219	2 536
United Kingdom	2 768	2 758	2 844	2 986	3 211	3 388
Iceland	:	:	:	5 385	6 468	7 114
Liechtenstein	:	:	:	:	:	:
Norway	4 469	4 430	4 106	4 124	4 273	4 019
Switzerland	4 579	4 271	3 659	3 499	3 595	3 883
Croatia	:	:	:	:	:	881
Turkey	:	:	479	479	624	743

Data Source: Eurostat



Note: In principle, data on air passengers used for this indicator, are based on On Flight Origin/Destination information rather than Flight Stage. Flight Stage information is used when no On Flight Origin/Destination data were available and in these cases direct transit passengers are included. Air passenger figures exclude double counting of national passenger transport, i.e. counting the same passengers twice, once reported by the origin airport as departures and once by the partner airport as arrivals. Similarly, the aggregated figures for the EU exclude the double counting effect on intra-EU traffic. For example, a person flying from Paris to London will be counted in France as a 'departure passenger' and in the United Kingdom as an 'arrival passenger' but only once at EU level.

The picture of the EU-27 Member States is diverse: the indicator for international passengers per thousand inhabitants varies considerably for 2005. Figures below 500 appear for Romania, Poland, Slovakia and Lithuania while, on the other hand, Ireland, Malta and Cyprus have values higher than 5 000. The United Kingdom with 204 million passengers led the international air transport in 2005 followed by Germany (146 million) and Spain (144 million).

Passenger Transport by Sea

(passengers per thousand inhabitants)

	2000	2001	2002	2003	2004	2005
EU-27	:	:	:	:	:	:
EU-25	:	:	:	892	879	834
Belgium	145	131	107	71	75	88
Bulgaria	:	0	1	0	1	2
Czech Republic	-	-	-	-	-	-
Denmark	9 564	8 832	8 890	8 977	8 959	8 843
Germany	380	386	403	390	362	358
Estonia	:	4 264	3 816	3 842	4 793	5 115
Ireland	1 014	936	936	901	854	629
Greece *	2 510	4 516	9 115	9 254	8 713	7 751
Spain	336	429	437	462	500	516
France	458	455	478	450	445	424
Italy	1 474	1 482	1 411	1 409	1 422	1 344
Cyprus	:	:	447	379	326	257
Latvia	:	11	10	51	56	62
Lithuania	:	30	31	40	43	49
Luxembourg	-	-	-	-	-	-
Hungary	-	-	-	-	-	-
Malta	:	:	:	411	558	441
Netherlands **	123	125	135	123	123	130
Austria	-	-	-	-	-	-
Poland	:	116	87	84	53	43
Portugal **	51	51	48	58	62	63
Romania	:	:	:	:	:	:
Slovenia	:	17	21	23	21	18
Slovakia	-	-	-	-	-	-
Finland	3 043	3 189	3 160	3 115	3 204	3 262
Sweden	4 050	3 583	3 556	3 627	3 690	3 612
United Kingdom	562	573	591	560	545	502
Iceland	1 071	1 213	1 325	1 372	1 361	1 422
Liechtenstein	-	-	-	-	-	-
Norway	:	:	1 315	1 007	1 252	1 441
Switzerland	-	-	-	-	-	-
Croatia	:	:	:	:	:	4 992
Turkey	:	:	:	:	:	:

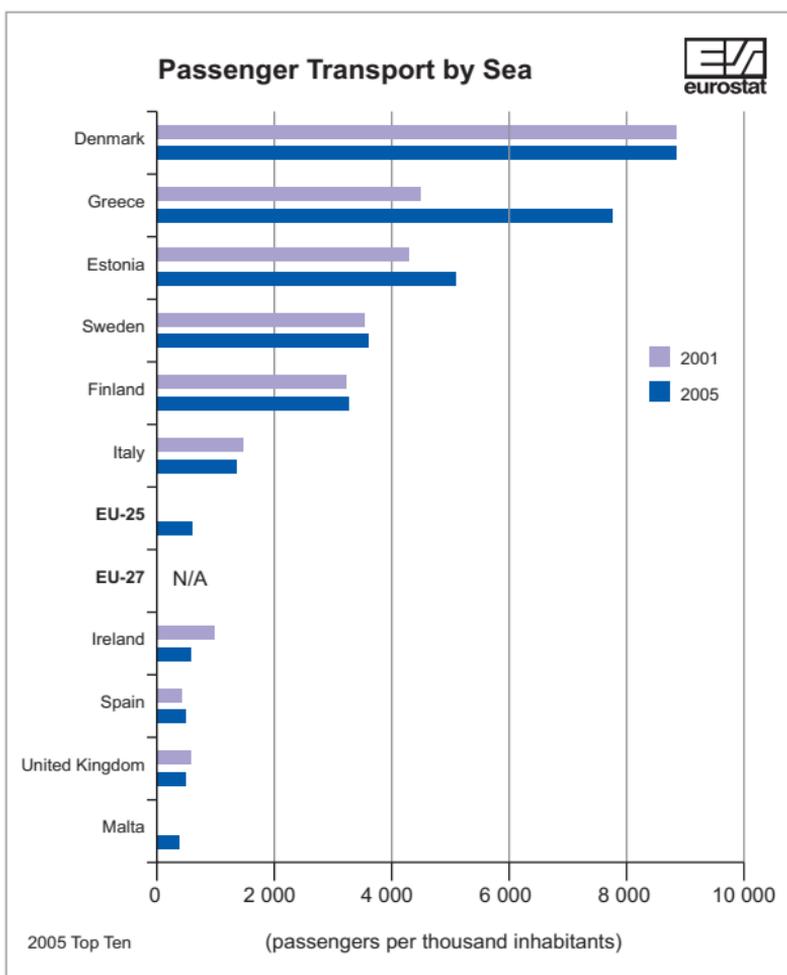
Data include ferry and cruise passengers starting and finishing a voyage

* 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

** NL and PT: Data excluding cruise passengers

Data Source: Eurostat



Note: Caution should be observed when interpreting the figures since they take into account passengers having made national, international intra-EU and extra-EU journeys. Thus passengers in national and international intra-EU traffic are double counted, once at embarkation and once at disembarkation.

Sea transport of passengers per thousand inhabitants was reduced by an approximate 5% in the EU-27 in the last reporting year, with Greece responsible for the greatest part of this reduction. Denmark is in the first position with 8.8 passengers per capita followed closely by Greece with 7.8 passengers per capita. Italy ranks several places below, although approximately 80 million passengers were embarked and disembarked at Italian ports. It is notable that in Greece and Italy, two of the three countries with large passenger movement figures, important ferry connections are included, which cover short national journeys as well.

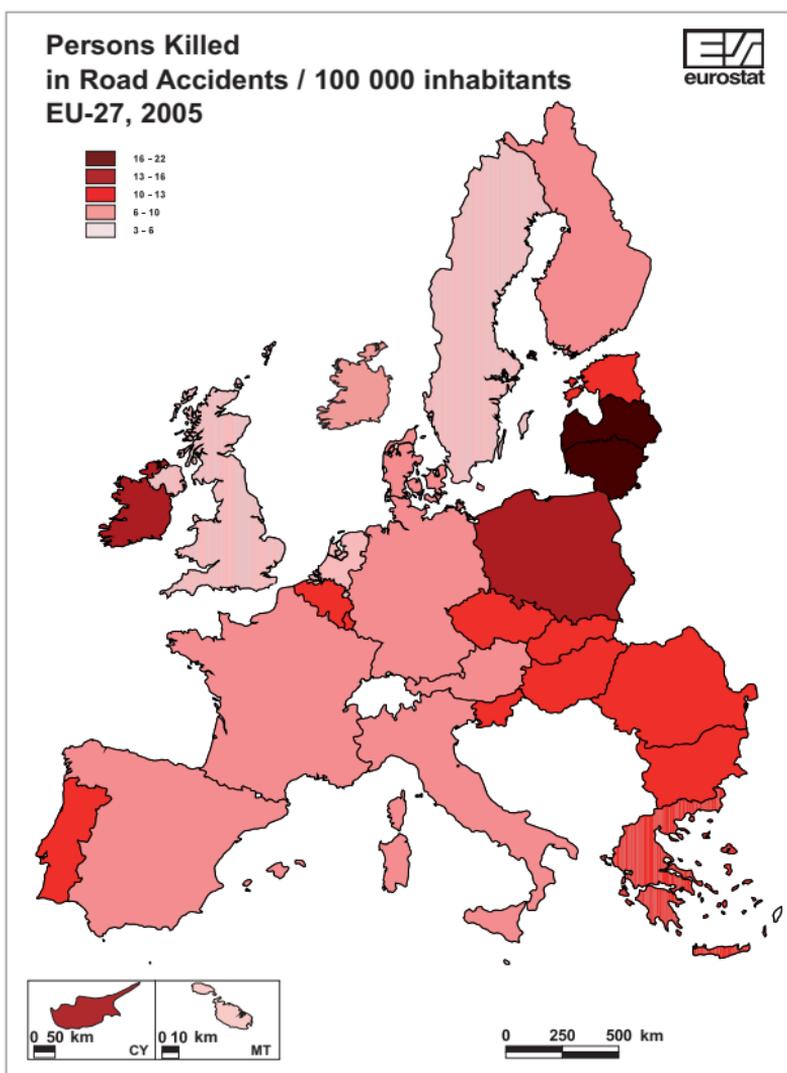
Persons Killed in Road Accidents

Persons killed in road accidents / 100 000 inhabitants

	2000	2001	2002	2003	2004	2005
EU-27	12	11	11	10	10	9
EU-25	12	11	11	10	9	9
Belgium	14	14	13	12	11	10
Bulgaria	13	13	12	12	12	12
Czech Republic	14	13	14	14	14	13
Denmark	9	8	9	8	7	6
Germany	9	8	8	8	7	7
Estonia	15	15	16	12	13	12
Greece	19	17	15	15	15	15
Spain	14	14	13	13	11	10
France	13	13	12	10	9	9
Ireland	11	11	10	8	9	10
Italy	11	12	12	10	10	9
Cyprus	16	14	13	13	16	13
Latvia	25	22	22	21	22	19
Lithuania	18	20	20	21	22	22
Luxembourg	17	16	14	12	11	10
Hungary	12	12	14	13	13	13
Malta	4	4	4	4	3	4
Netherlands	7	7	6	6	5	5
Austria	12	12	12	11	11	9
Poland	16	14	15	15	15	14
Portugal	18	16	16	15	12	12
Romania	11	11	11	10	11	12
Slovenia	16	14	13	12	14	13
Slovakia	12	12	12	12	11	10
Finland	8	8	8	7	7	7
Sweden	7	7	6	6	5	5
United Kingdom	6	6	6	6	6	6
Iceland	11	8	10	8	8	6
Liechtenstein	9	6	0	:	:	:
Norway	8	6	7	6	6	5
Switzerland	8	8	7	7	7	5
Croatia	15	15	14	16	14	13
Turkey	8	6	6	6	6	6

Persons killed are all persons deceased within 30 days of the accident.
For the countries not following it, corrective factors were applied.

Data Source: Eurostat, DG for Energy and Transport (CARE Community Road Accident Database)



In 2004 and 2005 the slightly decreasing trend in the number of persons killed in road accidents per inhabitants has continued. Only in Bulgaria, Latvia, Lithuania and Romania, there was no decrease in 2005 although these countries have relatively low motorization rates. Cyprus has rebounded from the peak observed in 2004. In addition to these countries, Greece, Latvia, Lithuania and Poland had in 2005 a high (more than 130) number of deaths per million inhabitants. In 2005, there were about 47 thousand deaths in road accidents for EU-27, 2 thousand less than 2004.

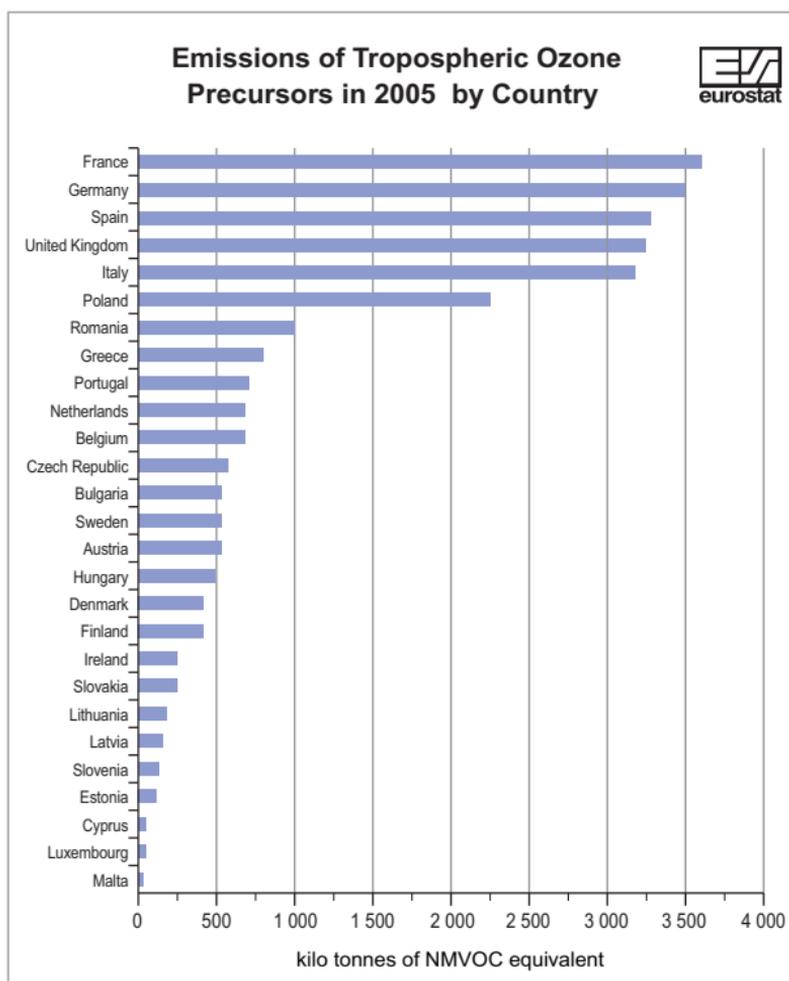
ENVIRONMENT INDICATORS

Emissions of Tropospheric Ozone Precursors by Country

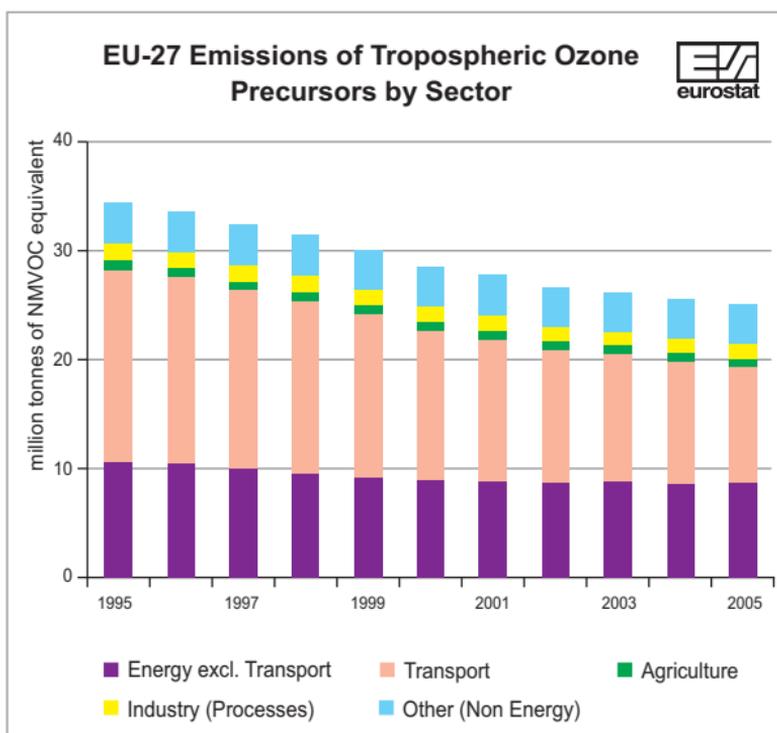
(Tropospheric ozone forming potential in kilo tonnes of NMVOC equivalent)

	1995	2000	2003	2004	2005
EU-27	37 728	31 212	28 625	28 112	27 474
EU-15	30 844	25 533	22 973	22 374	21 760
Belgium	889	776	697	674	661
Bulgaria	601	599	460	483	520
Czech Republic	860	698	670	673	584
Denmark	563	449	445	426	416
Germany	5 392	4 300	3 778	3 719	3 489
Estonia	117	105	109	106	94
Ireland	297	284	250	244	241
Greece	847	847	844	794	794
Spain	3 099	3 258	3 235	3 278	3 278
France	5 486	4 485	3 838	3 747	3 574
Italy	5 028	3 779	3 328	3 183	3 183
Cyprus	48	53	51	40	38
Latvia	145	140	145	149	152
Lithuania	190	152	165	157	178
Luxembourg	54	41	39	33	33
Hungary	471	474	446	453	495
Malta	23	23	23	20	20
Netherlands	1 014	807	722	692	673
Austria	569	513	531	517	513
Poland	2 664	2 029	2 192	2 272	2 267
Portugal	748	734	714	713	717
Romania	1 257	1 024	1 029	1 019	1 009
Slovenia	137	135	125	127	124
Slovakia	372	249	238	239	234
Finland	555	511	477	454	408
Sweden	714	583	542	528	519
United Kingdom	5 590	4 165	3 532	3 372	3 261
Iceland	0	0	0	0	0
Liechtenstein	1	1	1	1	1
Norway	711	703	600	564	514
Switzerland	393	310	268	255	246
Croatia	195	215	211	212	212
Turkey	2 121	2 334	2 333	2 332	2 334

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



Ozone is a colourless gas with an acrid odour, and a powerful oxidant. Up in the stratosphere (at a height of 20 to 30 km) it absorbs the bulk of harmful ultra-violet radiation from the sun (at wavelengths between 240 and 320 nm) which can cause skin cancer and damage vegetation. Down in the troposphere (below a height of 10 km) however, ozone is a health and environmental hazard and a greenhouse gas. Tropospheric ozone is produced by photochemical reactions in the troposphere via its precursors: NO_x, NMVOC, CO, CH₄. Emissions of these pollutants are covered by the 1999 Gothenburg Protocol under the United Nations Convention on Long-Range Transboundary Air Pollution, and by the EU national emission ceilings directive (NEC Directive 2001/81/EC). For the new Member States the targets are specified in the 2003 Treaty of Accession. Total ozone precursor emissions decreased in the EU-27 by 27.2% between 1995 and 2005. The highest contribution still comes from the transport sector.

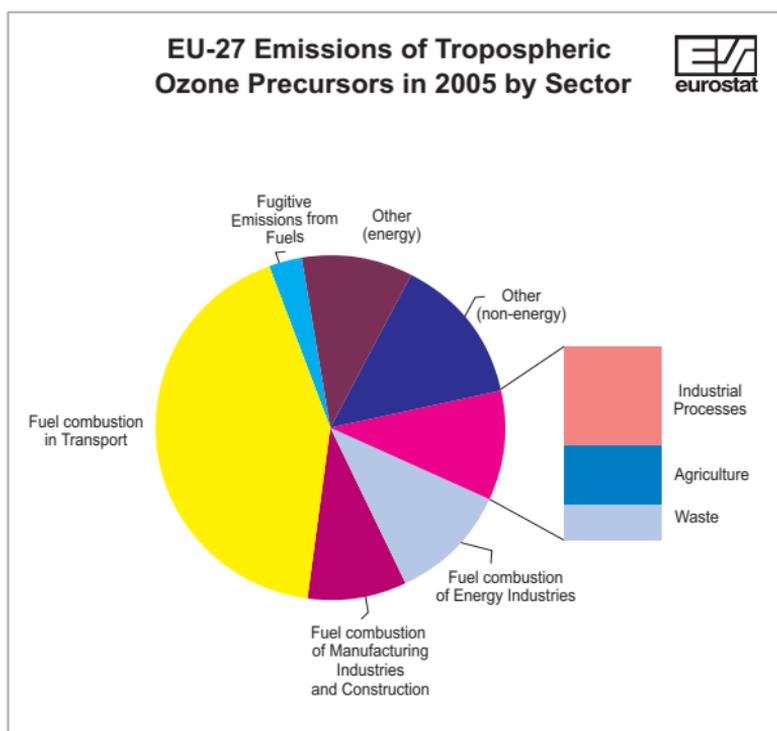


(Tropospheric ozone forming potential in million tonnes of NMVOC equivalent)

	1995	1997	1999	2000	2001	2002	2003	2004	2005
Total	37.7	35.3	32.8	31.2	30.2	29.3	28.6	28.1	27.5
Energy excl. Transport	11.4	10.8	9.9	9.6	9.5	9.3	9.5	9.3	9.4
Transport	19.0	17.6	16.1	14.8	14.1	13.2	12.7	12.1	11.5
Agriculture	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
Industry (Processes)	1.7	1.6	1.5	1.5	1.4	1.4	1.4	1.5	1.4
Other (Non Energy)	4.0	4.0	3.9	3.8	4.0	3.9	3.8	3.9	3.9

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

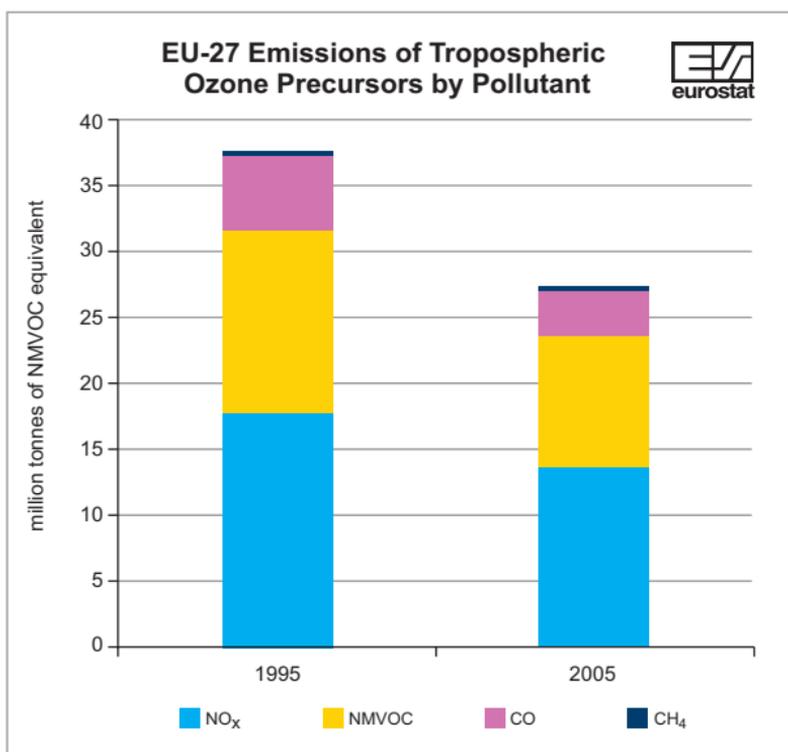
In 2005 in the EU-27, 75.8% of the photochemical ozone is connected with energy use and only 24.2% with non-energy use. Motor vehicles and combustion sources are the major contributor of nitrogen oxides and non-methane volatile organic compounds (NMVOC). The sector "Solvent and other product use" is another major source for NMVOC emissions. On a European scale roughly a quarter of the total anthropogenic NMVOC emission are from road transport and more than one third from solvents. Most solvents are part of a final product, e.g. paint, and sooner or later evaporate. A small fraction of the solvents ends up in waste or as emission to water and may finally also contribute to air pollution by evaporation from these compartments.



Sector	% of total
Fuel combustion of Energy Industries	11.3
Fuel combustion of Manufacturing Industries and Construction	9.2
Fuel combustion in Transport	41.7
Fugitive Emissions from Fuels	3.2
Other (energy)	10.3
Industrial Processes	5.2
Agriculture	3.1
Waste	1.8
Other (non-energy)	14.1

(On the basis of their tropospheric ozone forming potential in NMVOC equivalent)

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



(Tropospheric ozone forming potential in million tonnes of NMVOC equivalent)

	1995	2005
Nitrogen Oxides	17.8	13.8
NMVOC	13.9	9.9
Carbon Monoxide	5.6	3.5
Methane	0.4	0.3
Total	37.7	27.5

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

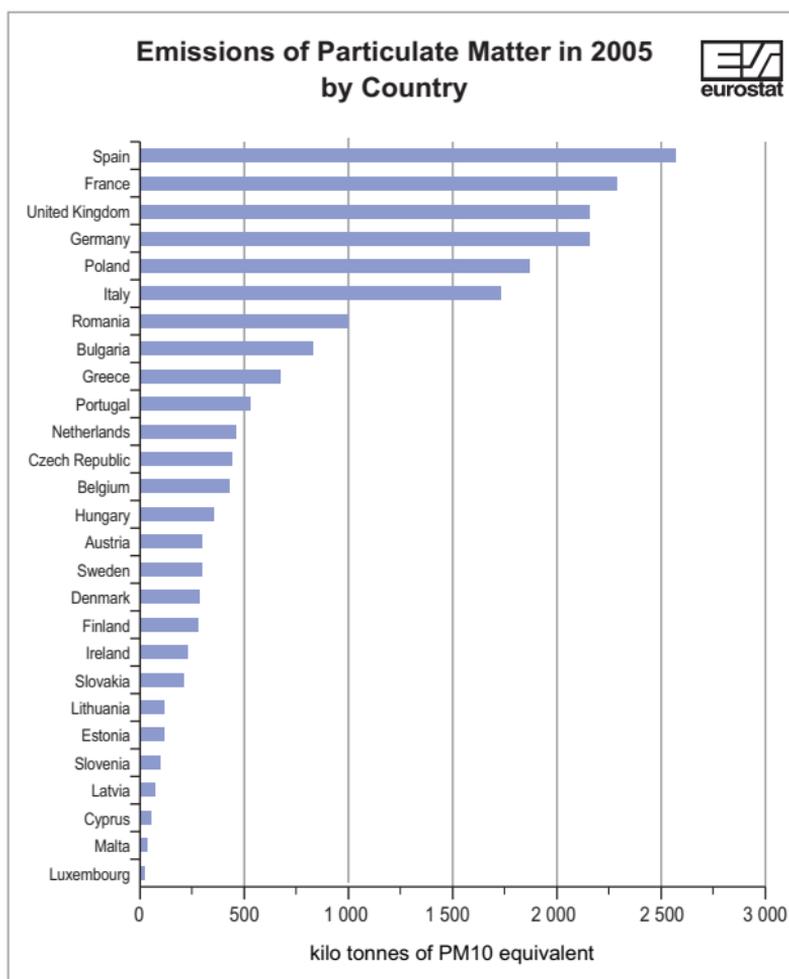
In 2005, emissions of nitrogen oxides (NO_x) and non-methane volatile organic compounds (NMVOC) together were responsible for about 86.2% of the tropospheric ozone emissions in the EU-27. Between 1995 and 2005, the reduction for NO_x is 22.7% and is mainly due to the expansion in the use of low NO_x combustion technology and catalysts for cars. The 28.9% reduction of NMVOCs is also attributed to the use of catalysts for cars and a reduction in fugitive emissions from fuel handling processes (e.g. recovering fuel gases in tanking operations). However, substantial reductions of both NMVOCs and NO_x are still required to achieve 2010 targets of the EU national emissions ceilings directive (NEC Directive 2001/81/EC). Carbon monoxide (CO) and methane (CH₄) are of minor importance for the formation of ground-level ozone.

Emissions of Particulate Matter by Country

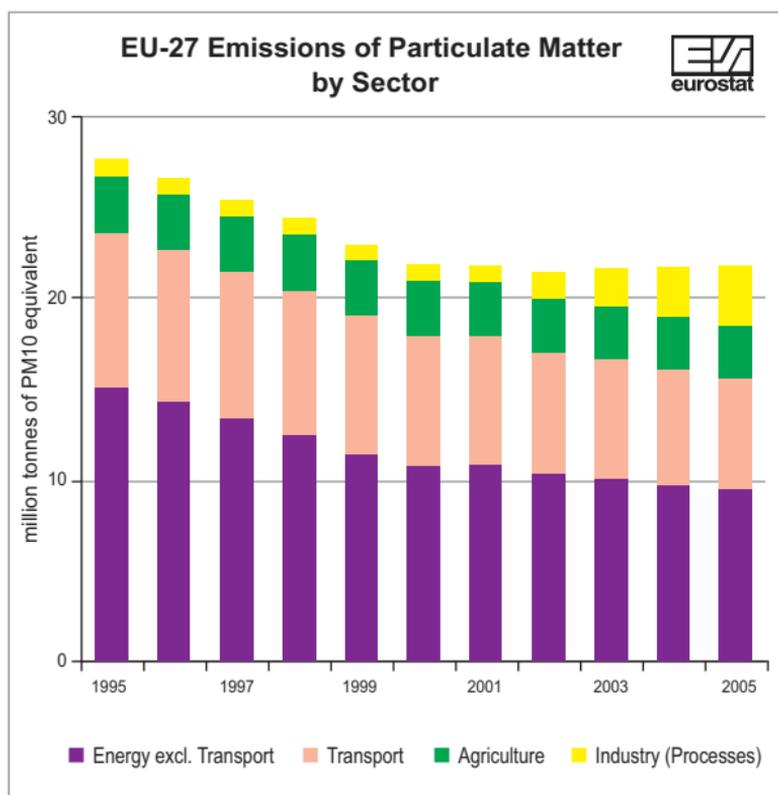
(Particulate Matter in kilo tonnes of PM10 equivalent, primary and secondary sources)

	1995	2000	2003	2004	2005
EU-27	27 788	21 979	20 558	20 019	19 523
EU-15	20 080	16 397	15 149	14 788	14 407
Belgium	601	504	457	441	428
Bulgaria	1 199	825	838	825	828
Czech Republic	1 010	516	515	503	441
Denmark	416	302	305	285	274
Germany	3 480	2 557	2 364	2 305	2 162
Estonia	138	125	125	116	102
Ireland	284	283	232	228	227
Greece	693	667	706	674	674
Spain	2 568	2 552	2 498	2 577	2 577
France	3 133	2 662	2 397	2 354	2 292
Italy	2 812	2 088	1 827	1 739	1 739
Cyprus	43	51	48	45	43
Latvia	84	60	61	62	63
Lithuania	133	82	98	103	110
Luxembourg	34	25	23	21	21
Hungary	657	518	436	392	351
Malta	31	31	30	22	22
Netherlands	662	529	489	472	463
Austria	286	285	307	300	299
Poland	2 794	2 041	1 926	1 860	1 871
Portugal	572	583	512	523	529
Romania	1 113	982	1 029	1 012	994
Slovenia	149	127	105	100	94
Slovakia	356	224	195	192	197
Finland	331	317	322	303	268
Sweden	383	315	300	293	288
United Kingdom	3 826	2 729	2 411	2 273	2 166
Iceland	0	0	0	0	0
Liechtenstein	1	1	0	0	0
Norway	288	281	265	263	257
Switzerland	186	159	146	143	140
Croatia	129	135	138	130	130
Turkey	1 720	1 997	1 962	1 950	1 938

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



Particulate Matter with diameters less than 10 micrometers PM10 can be carried deep into the lungs where it causes inflammation and other problems. It is estimated that only its finer fraction PM2.5 shortens the statistical life expectancy in EU by more than 8 months and even over 2 years in the most polluted areas [source Clean Air for Europe programme]. Primary PM10 refers to particulate matter emitted directly into the atmosphere. PM10 precursors considered in this publication are sulphur dioxide (SO₂), nitrogen oxides (NO_x) and ammonia (NH₃) that are partly transformed into particles by chemical reactions in the atmosphere (secondary PM10). There are no specific EU emission targets for primary PM10. However, emissions of the precursors NO_x, SO_x and NH₃ are covered by the EU National Emission Ceilings Directive (NEC Directive 2001/81/EC) and the Gothenburg Protocol under the United Nations Convention on Long-Range Transboundary Air Pollution. The total PM10 emissions in the EU-27 have decreased by 29.7% since 1995. The enlarged Union has managed to reduce its overall emissions of air pollutants and looks on track to meet the overall targets for 2010, as set in the NEC Directive, although the situation varies across individual Member States.

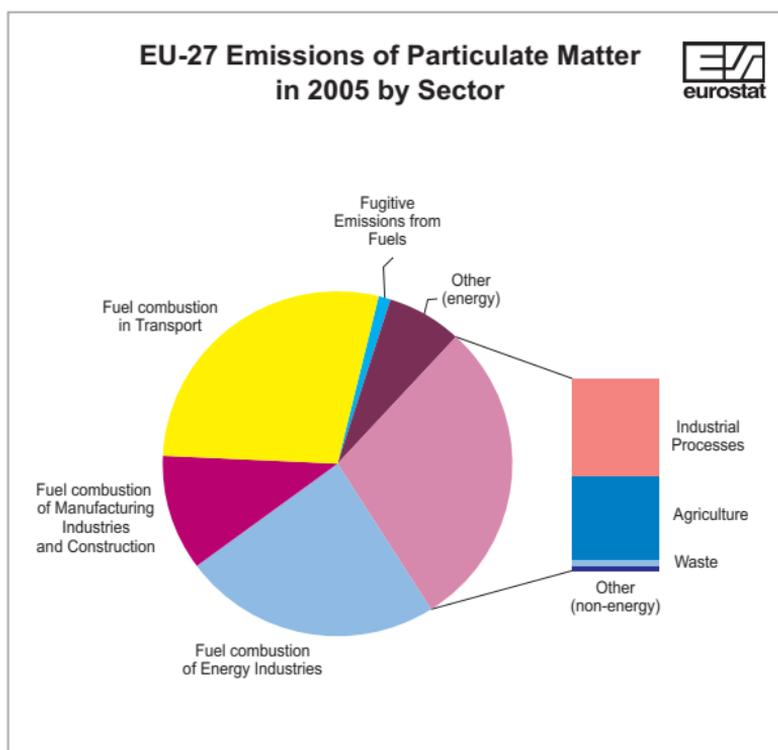


(Particulate Matter in million tonnes of PM10 equivalent)

	1995	1997	1999	2000	2001	2002	2003	2004	2005
Total	27.8	25.5	23.0	22.0	21.7	21.0	20.6	20.0	19.5
Energy excl. Transport	15.0	13.4	11.4	10.7	10.8	10.3	10.1	9.7	9.5
Transport	8.5	8.0	7.6	7.2	7.1	6.8	6.6	6.3	6.1
Agriculture	3.1	3.1	3.0	3.0	3.0	2.9	2.9	2.9	2.9
Industry (Processes)	1.0	0.9	0.8	0.9	0.9	1.5	2.1	2.7	3.3
Waste	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other (Non Energy)	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Unallocated	-0.2	-0.2	-0.2	-0.2	-0.4	-0.7	-1.3	-2.0	-2.6

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

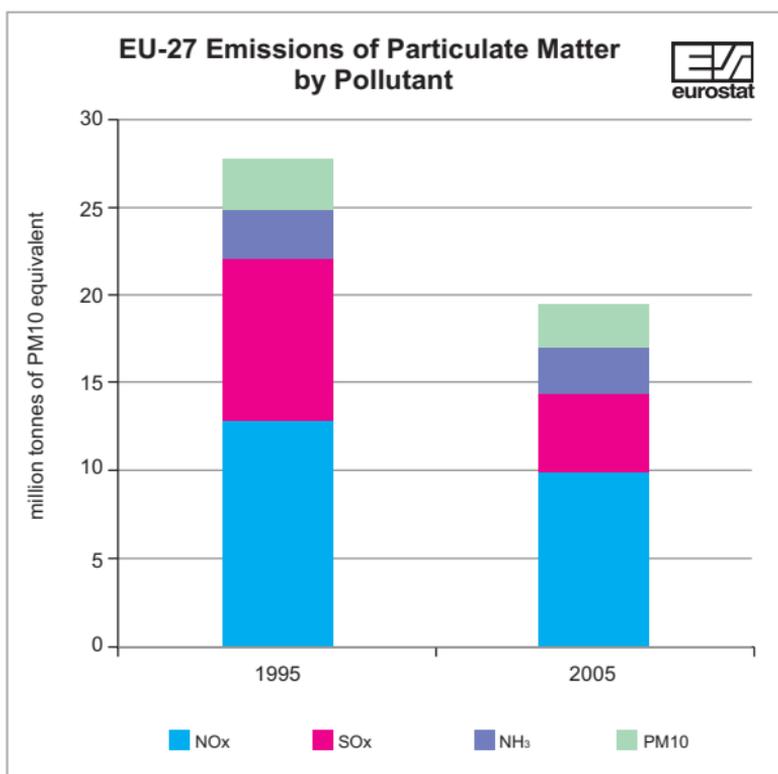
Energy use is the major source of total PM10 emissions, accounting for 79.8% of the total in 2005. Agriculture was an important sector too with almost 15% of the total PM10 emissions in 2005. Ammonia emissions from animal husbandry and use of nitrogen fertilisers are important PM10 precursors.



Sector	% of total
Fuel combustion of Energy Industries	26.9
Fuel combustion of Manufacturing Industries and Construction	12.3
Fuel combustion in Transport	31.2
Fugitive Emissions from Fuels	1.0
Other (energy)	8.4
Industrial Processes	17.1
Agriculture	14.7
Waste	1.2
Other (non-energy)	0.4
Unallocated	-13.3

(On the basis of PM10 equivalent, primary and secondary sources)

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



(Particulate Matter in million tonnes of PM10 equivalent, primary and secondary sources)

	1995	2005
Oxides of nitrogen	12.9	9.9
Sulphur oxides	9.3	4.5
Ammonia	2.8	2.6
Particulate Matter	2.8	2.5
Total	27.8	19.5

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

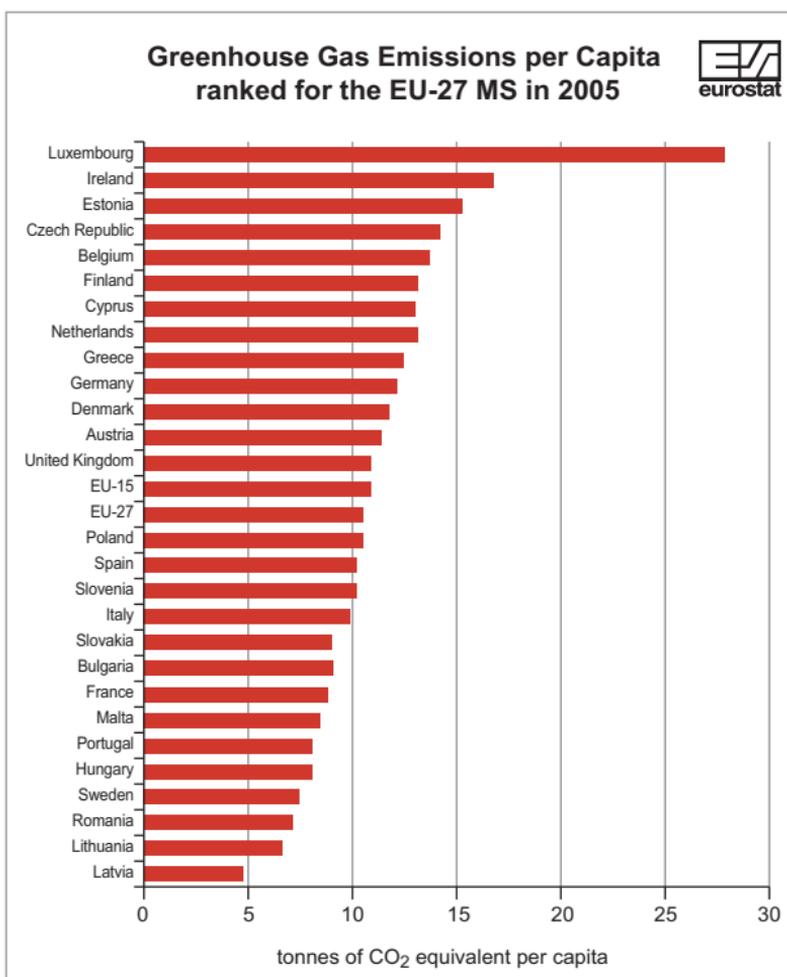
The substantial decrease in PM10 emissions is mainly due to reduction of sulphur dioxide (SO₂) emissions following a switch from high sulphur fuels to natural gas, use of low sulphur coal and introduction of flue gas desulphurisation in power plants. Additionally, there have been significant reductions in emissions of nitrogen oxides (NOx) from road transport and energy industries. This is to a large extent due to the introduction of catalysts on new cars and the introduction of combined cycle gas turbine power generation. In 2005, 92.6% of the ammonia (NH₃) emissions are from agriculture; emissions from road transport were only 1.9% of the EU-27 ammonia emission total in 2005 but there is a strong positive trend in connection with vehicles fitted with three-way catalysts. Reducing emissions of the pollutants causing PM10 emissions will also reduce the acidification of the soil.

Greenhouse Gas Emissions per Capita

(Global Warming Potential in tonnes of CO₂ equivalent per capita)

	1990	1995	2000	2003	2004	2005
EU-27	11.9	11.0	10.6	10.7	10.6	10.5
EU-15	11.7	11.1	10.9	11.0	10.9	10.8
Belgium	14.6	15.0	14.4	14.3	14.2	13.7
Bulgaria	13.3	10.3	8.3	8.9	8.9	9.0
Czech Republic	19.0	15.0	14.5	14.5	14.4	14.2
Denmark	13.4	14.6	12.8	13.8	12.6	11.8
Germany	15.5	13.4	12.4	12.5	12.4	12.1
Estonia	27.8	16.1	14.4	15.9	15.7	15.3
Ireland	15.8	16.4	18.2	17.2	16.9	16.8
Greece	10.7	10.6	12.1	12.5	12.4	12.5
Spain	7.4	8.1	9.5	9.7	10.0	10.2
France	9.9	9.4	9.2	9.0	8.9	8.8
Italy	9.2	9.4	9.7	10.0	10.0	9.9
Cyprus	10.4	11.1	12.6	13.2	13.3	13.0
Latvia	9.9	5.0	4.2	4.6	4.6	4.7
Lithuania	13.0	6.0	5.3	5.8	6.1	6.6
Luxembourg	33.2	23.9	21.9	25.0	28.2	27.6
Hungary	9.5	7.9	7.7	8.1	7.9	8.0
Malta	6.3	7.3	7.4	7.8	8.1	8.5
Netherlands	14.2	14.6	13.5	13.4	13.4	13.0
Austria	10.3	10.1	10.1	11.4	11.2	11.3
Poland	12.8	11.7	10.5	10.5	10.4	10.5
Portugal	6.0	7.1	8.0	7.9	8.1	8.1
Romania	10.7	8.4	6.3	7.2	7.4	7.1
Slovenia	9.2	9.3	9.4	9.8	10.0	10.1
Slovakia	13.8	9.9	9.0	9.3	9.2	9.0
Finland	14.3	14.0	13.5	16.4	15.5	13.2
Sweden	8.4	8.4	7.7	7.9	7.7	7.4
United Kingdom	13.5	12.2	11.4	11.1	11.0	10.9
Iceland	13.2	11.7	13.1	12.5	12.6	12.5
Norway	11.7	11.4	11.9	11.9	12.0	11.7
Switzerland	7.9	7.3	7.2	7.2	7.2	7.2
Croatia	6.5	4.8	5.7	6.5	6.6	6.7

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



There is scientific evidence that emission 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 2005, 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-15 and EU-27 have fallen since 1990, they have risen in nine countries; in Spain, Malta, Portugal, Cyprus, Greece, Austria, and Ireland, they have increased by more than one tonne between 1990 and 2005. For the same period, the largest reductions, of 4 or more tonnes, were in Estonia, Lithuania, Luxembourg, Latvia, Czech Republic, Slovakia, and Bulgaria.

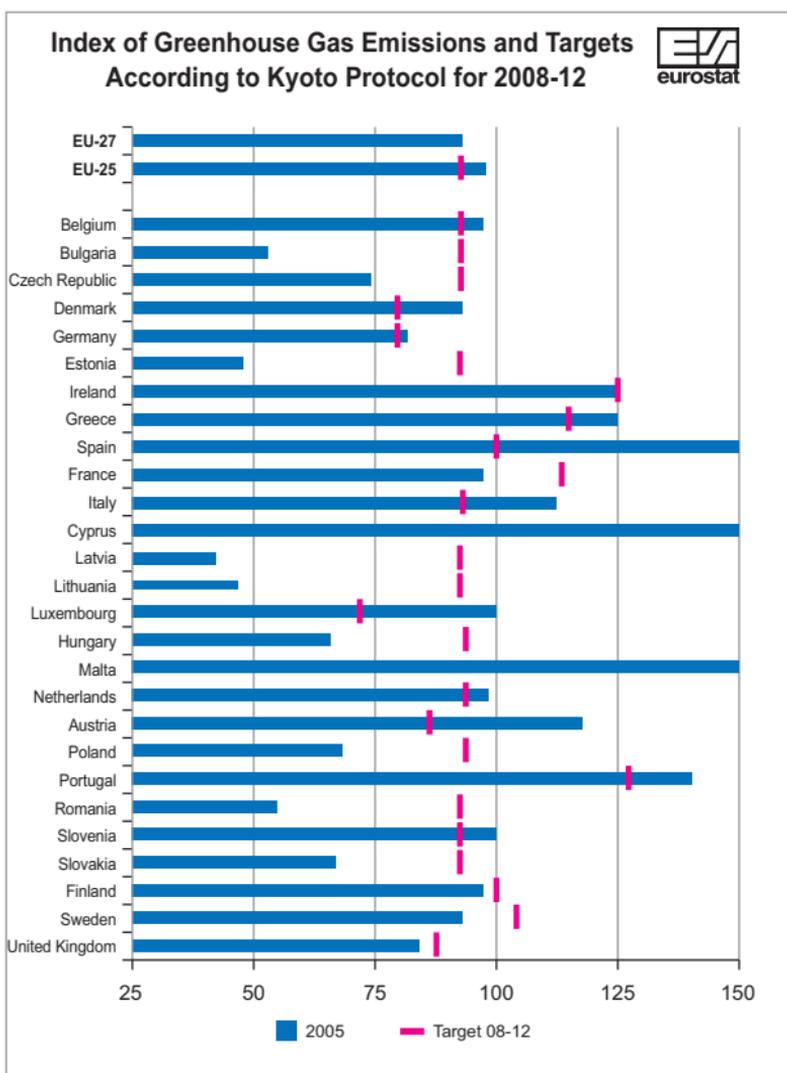
ENERGY, TRANSPORT AND ENVIRONMENT INDICATORS

Greenhouse Gas Emissions and Targets according to Kyoto Protocol for 2008-2012

Kyoto Base Year emissions: index = 100

	1990	1995	2000	2003	2004	2005	Target 08-12
EU-27	100.0	93.4	90.7	92.8	92.8	92.1	:
EU-15	99.5	96.9	96.6	98.7	98.8	98.0	92.0
Belgium	99.2	103.6	100.4	100.8	100.5	97.9	92.5
Bulgaria	87.9	65.6	50.7	52.7	52.2	52.8	92.0
Czech Republic	100.0	78.7	75.9	75.2	75.0	74.2	92.0
Denmark	99.6	110.0	98.4	107.0	98.4	92.2	79.0
Germany	99.6	88.9	82.7	83.6	83.2	81.3	79.0
Estonia	101.3	53.8	45.9	50.1	49.2	48.0	92.0
Ireland	99.3	106.4	123.9	123.4	123.1	125.4	113.0
Greece	97.9	101.9	118.6	123.6	123.9	125.4	125.0
Spain	99.3	110.0	132.8	141.5	146.9	152.3	115.0
France	100.0	99.1	99.3	98.6	98.6	98.1	100.0
Italy	100.0	102.5	106.6	110.8	111.7	112.1	93.5
Cyprus	100.0	119.5	144.7	158.4	163.4	163.7	:
Latvia	102.1	48.2	38.8	41.7	41.4	42.0	92.0
Lithuania	99.9	45.3	38.9	41.7	43.8	46.9	92.0
Luxembourg	100.0	77.0	75.2	88.6	100.8	100.4	72.0
Hungary	80.2	65.9	64.3	66.8	64.7	65.5	94.0
Malta	100.0	122.4	129.0	140.0	145.9	154.8	:
Netherlands	99.2	104.9	99.9	101.1	101.8	98.9	94.0
Austria	100.1	101.7	102.7	117.7	115.5	118.1	87.0
Poland	82.8	77.2	69.0	68.4	67.6	68.0	94.0
Portugal	98.3	116.7	135.0	136.1	138.9	140.4	127.0
Romania	88.1	66.2	49.1	55.8	56.7	54.4	92.0
Slovenia	91.1	91.4	92.6	96.8	98.4	100.4	92.0
Slovakia	99.5	72.3	65.8	68.0	67.5	66.4	92.0
Finland	100.1	100.6	98.5	119.9	114.1	97.4	100.0
Sweden	99.9	102.0	94.5	97.9	96.4	92.6	104.0
United Kingdom	98.9	91.1	86.4	85.0	84.7	84.3	87.5
Iceland	100.0	93.6	109.9	107.9	109.7	110.5	110.0
Norway	100.0	100.2	107.6	109.0	110.3	108.8	101.0
Switzerland	100.0	96.8	98.0	99.7	100.5	101.7	92.0
Croatia	100.0	70.4	81.1	93.3	94.0	95.5	95.0
Turkey	100.0	129.8	164.0	167.0	172.7	184.0	:

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



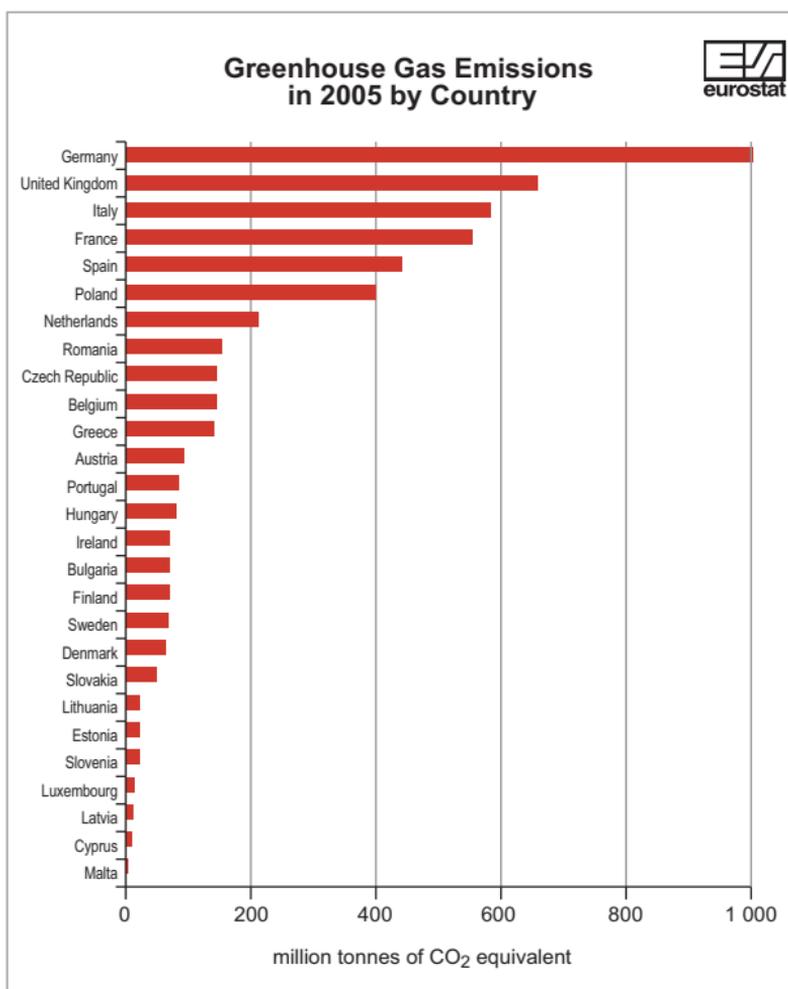
The greenhouse gas emissions are reported under Kyoto Protocol and the EU Decision 280/2004/EC. In the first quantified emission limitation and reduction commitment period, from 2008 to 2012, the EU has agreed to an 8% reduction in its greenhouse gas emissions compared to 1990. Individual targets for each of the EU-15 countries have been agreed under the EU burden sharing agreement (Council Decision 2002/358/EC). The new EU Member States and candidate countries have differing targets under the Kyoto Protocol. Overall, since the Kyoto base year, emissions in EU-15 have shown a decrease of 2.0% in 2005, determined largely by considerable emission cuts by the EU's two greatest emitters which account for about 40% of total EU-15 GHG emissions: Germany (-18.7%), which is now close to its burden-sharing target and the United Kingdom (-15.7%) which has exceeded its target. Italy and France, the third and fourth largest emitters, increased (12.1%) and decreased (-1.9%) their emissions between 1990 and 2005. Emissions in Cyprus, Malta, Spain, Portugal, Greece, and Ireland have increased by more than 20% since 1990.

Greenhouse Gas Emissions by Country

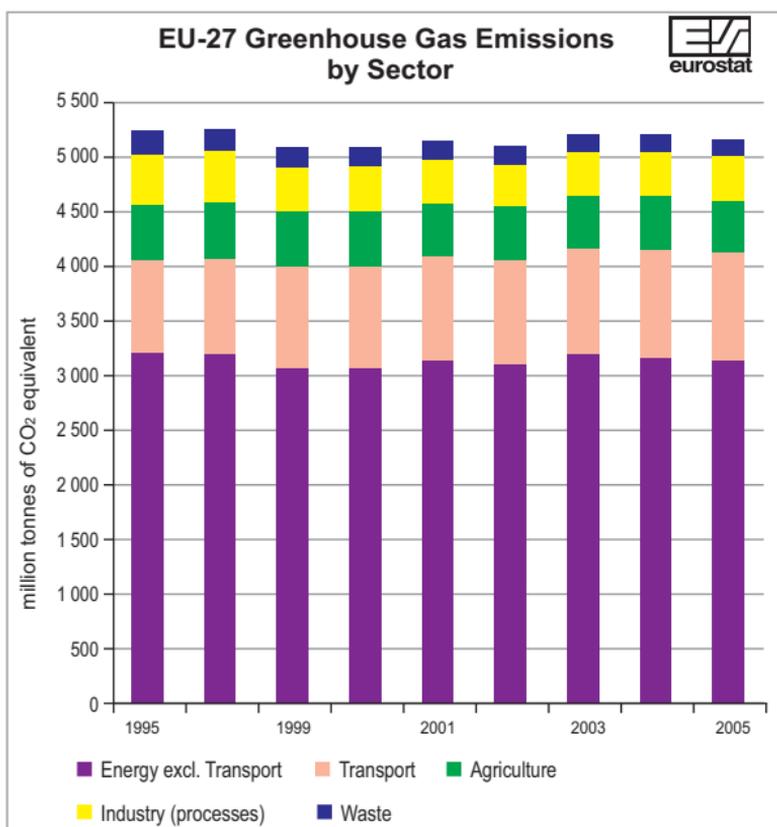
(Global Warming Potential in million tonnes of CO₂ equivalent)

	Base year	1995	2000	2003	2004	2005
EU-27	5 621	5 249	5 100	5 215	5 215	5 177
EU-15	4 279	4 148	4 134	4 222	4 227	4 192
Belgium	147	152	148	148	148	144
Bulgaria	132	87	67	70	69	70
Czech Republic	196	154	149	148	147	146
Denmark	69	76	68	74	68	64
Germany	1 233	1 096	1 020	1 031	1 025	1 001
Estonia	43	23	20	22	21	21
Ireland	56	59	69	69	69	70
Greece	111	113	132	137	138	139
Spain	289	318	384	409	425	441
France	564	559	560	556	556	553
Italy	519	533	554	575	580	582
Cyprus	6	7	9	10	10	10
Latvia	26	12	10	11	11	11
Lithuania	48	22	19	20	21	23
Luxembourg	13	10	10	11	13	13
Hungary	123	81	79	82	80	81
Malta	2	3	3	3	3	3
Netherlands	215	225	214	217	218	212
Austria	79	80	81	93	91	93
Poland	587	453	405	402	397	399
Portugal	61	71	82	83	85	86
Romania	282	187	139	158	160	154
Slovenia	20	18	19	20	20	20
Slovakia	73	53	48	50	49	49
Finland	71	72	70	85	81	69
Sweden	72	74	68	71	70	67
United Kingdom	780	710	674	663	660	657
Iceland	3	3	4	4	4	4
Liechtenstein	0	0	0	0	0	0
Norway	50	50	54	54	55	54
Switzerland	53	51	52	53	53	54
Croatia	31	22	25	29	29	30
Turkey	170	221	279	284	294	313

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 9.3% 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 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 2005, 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.

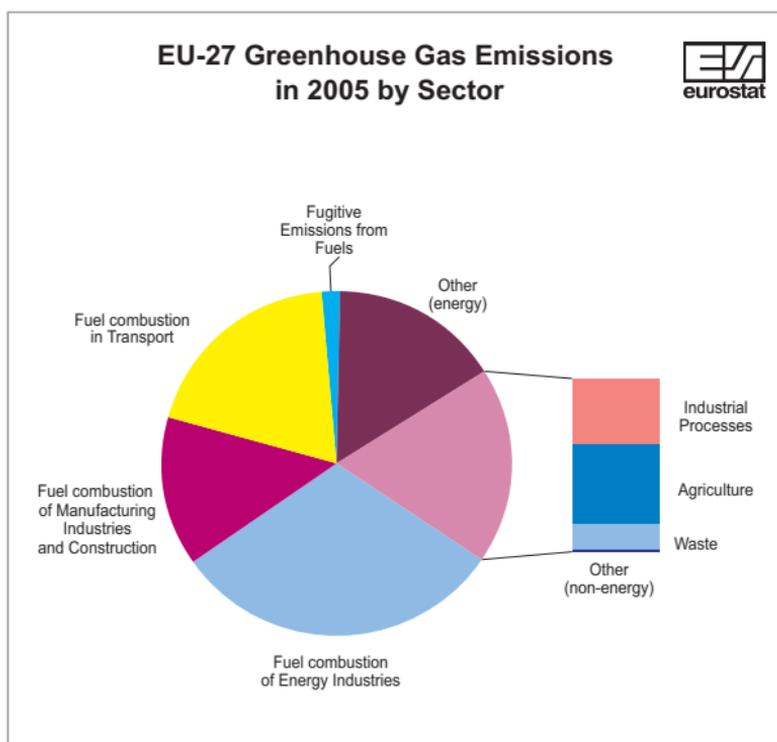


(Global warming potential in million tonnes of CO₂ equivalent)

	1995	1997	1999	2000	2001	2002	2003	2004	2005
Total	5249	5262	5098	5100	5155	5111	5215	5215	5177
Energy excl. Transport	3216	3198	3072	3076	3146	3104	3199	3174	3142
Transport	844	879	927	928	943	956	966	989	990
Agriculture	515	517	510	502	494	487	482	481	476
Industry (processes)	454	459	393	404	392	389	399	409	412
Waste	211	198	185	179	170	165	158	153	149
Other (Non Energy)	11	11	11	11	10	10	10	10	10

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

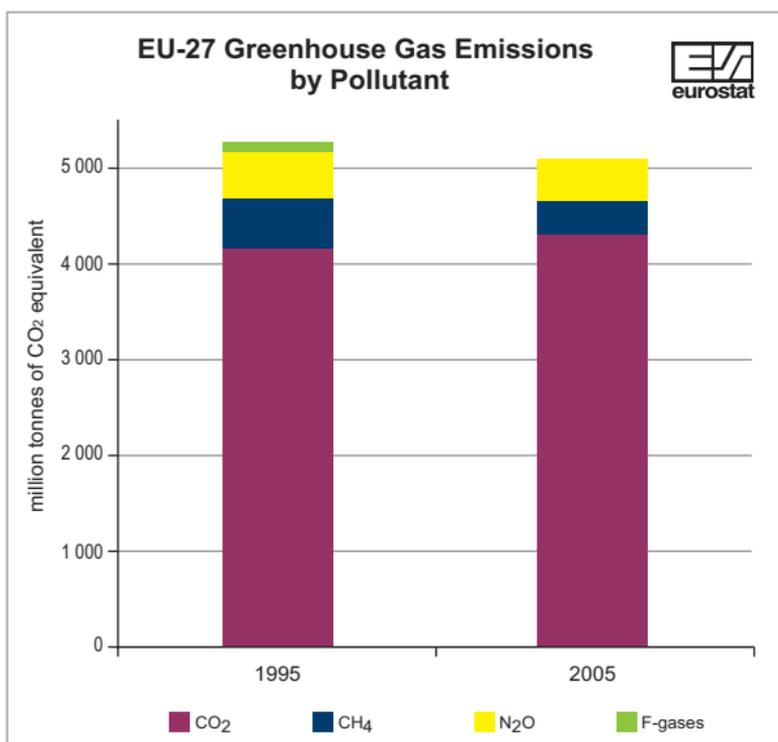
Energy use in 2005 accounted for about 79.8% of total greenhouse gas (GHG) emissions. Energy efficiency increased during the 1990s and therefore GHG emissions decreased over the decade. Emissions from the sector 'Other (energy)', accounting for about 15% of the total GHG emissions, are dominated by fuel combustion from households which is more or less stable depending on weather conditions. In 2005, agriculture accounted for about 9% of EU-27 GHG emissions, with a reduction of about 8% between 1995 and 2005. This is mainly due to declining numbers of cattle and lower emissions from agricultural soils. Emissions from the transport sector increased continuously between 1995 and 2005 (+17.3%), due 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.



Sector	(%) of total
Fuel combustion of Energy Industries	30.5
Fuel combustion of Manufacturing Industries and Construction	13.3
Fuel combustion in Transport	19.1
Fugitive Emissions from Fuels	1.8
Other (energy)	15.1
Industrial Processes	8.0
Agriculture	9.2
Waste	2.9
Other (non-energy)	0.2

On the basis of their global warming potential in CO₂ equivalent

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



(Global warming potential in million tonnes of CO₂ equivalent)

	1995	2005
CO ₂	4 165	4 269
CH ₄	540	419
N ₂ O	473	417
F-gases	71	72
Total	5 249	5 177

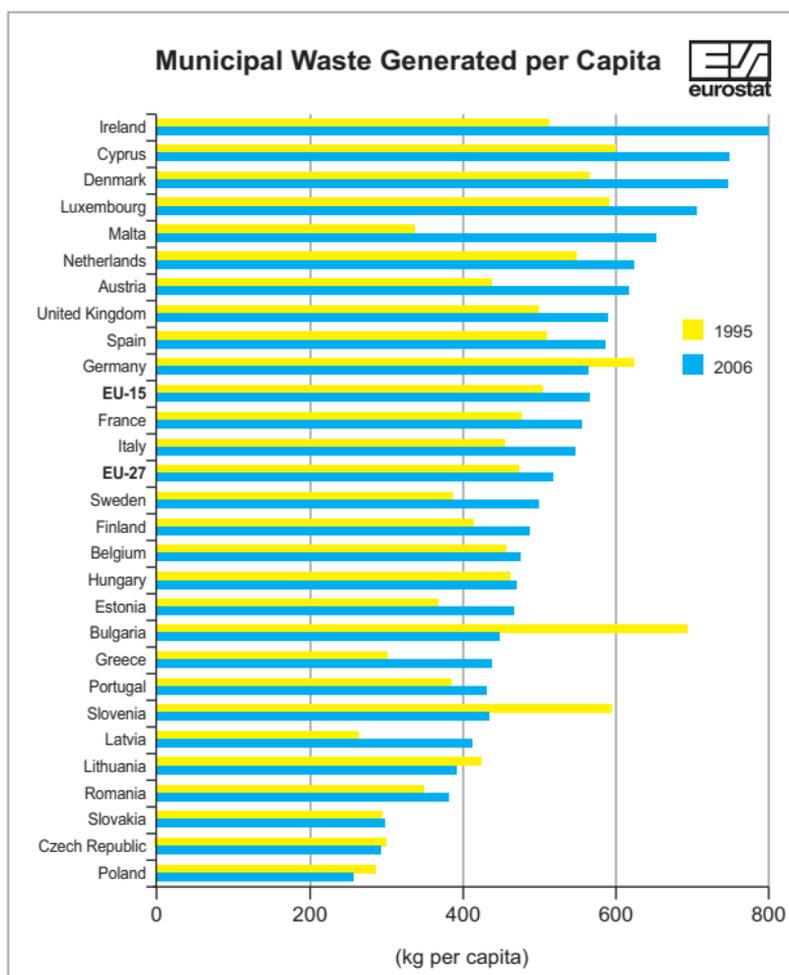
Data Sources: European Environment Agency / European Topic Centre on Air and Climate Change

Carbon dioxide (CO₂) is by far the most important greenhouse gas, accounting for about 82.5% of the global warming potential due to all EU-27 anthropogenic GHG emissions covered by the Kyoto Protocol in 2005. The main source of CO₂ is the burning of fossil fuels. Agriculture is the dominant source of anthropogenic methane (CH₄) emissions; the other two important sources are waste management (e.g. landfills) and fugitive emissions by the energy use (e.g. coal mining). The largest source of nitrous oxide (N₂O) emissions is agriculture (fertilisers and manure use) followed by the chemical industries (adipic and nitric acid production). For both CH₄ and N₂O, emissions have decreased between 1995 and 2005 (-22.5% and -12% respectively). Fluorinated gases [F-gases: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆)] increased by 2.7% between 1995 and 2005. The production of PFCs has halved during this period and the SF₆ emission has also decreased significantly. However, HFC-emissions have increased dramatically by 38.9% between 1995 and 2005, mainly as the result of the expanding use of HFCs as a substitute for ozone-depleting substances that were gradually phased out in the 1990s.

Municipal Waste Generated

	(kg/capita)					
	1995	1998	2001	2004	2005	2006
EU-27	474	497	522	516	512	517
EU-15	505	540	572	567	560	563
Belgium	453	460	467	474	476	475
Bulgaria	693	495	491	471	475	446
Czech Republic	302	293	273	278	289	296
Denmark	567	593	658	696	737	737
Germany	624	647	633	587	564	566
Estonia	368	400	372	449	436	466
Ireland	514	557	705	745	742	804
Greece	302	378	417	433	438	443
Spain	510	566	658	608	597	583
France	476	508	528	543	542	553
Italy	454	472	516	538	542	548
Cyprus	600	664	703	739	739	745
Latvia	263	247	302	311	310	411
Lithuania	424	443	377	366	376	390
Luxembourg	592	629	650	688	705	702
Hungary	460	484	451	454	460	468
Malta	332	378	542	642	615	652
Netherlands	549	593	615	625	624	625
Austria	438	532	578	620	619	617
Poland	285	306	290	256	245	259
Portugal	385	423	472	436	446	435
Romania	350	284	345	345	377	385
Slovenia	596	584	479	417	423	432
Slovakia	295	259	239	274	289	301
Finland	414	466	466	465	474	488
Sweden	386	431	442	464	482	497
United Kingdom	499	543	592	605	584	588
Iceland	427	452	469	506	521	534
Liechtenstein	:	:	:	:	:	:
Norway	626	647	635	724	759	793
Switzerland	598	616	659	668	666	715
Croatia	:	:	:	:	:	:
Turkey	445	510	457	421	438	434

Data Source: Eurostat



The total amount of municipal waste generated is growing. The upward trend has slowed down slightly since 2000 and indeed shows signs of stabilising, though at high levels. Over the period 1995 to 2005 both the Gross Domestic Product (GDP) and the generation of municipal waste grew by about 20 %; there is no evidence of decoupling of these trends. For 2003 some countries reported smaller amounts of (garden) waste due to the warm and dry summer.

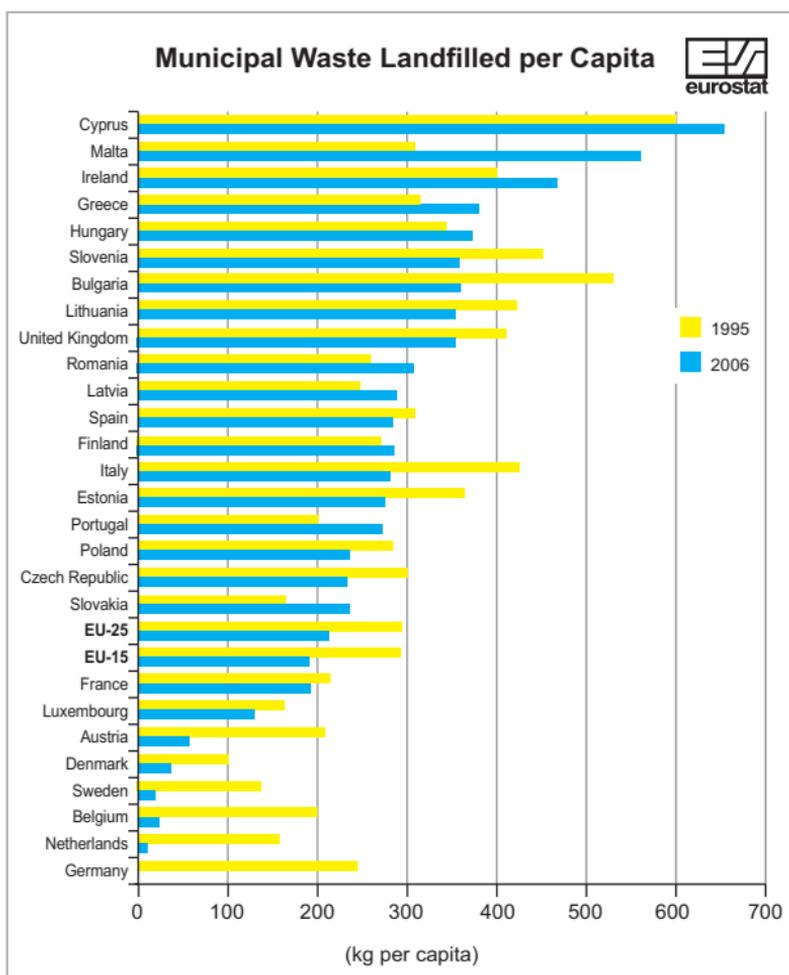
The amount of municipal waste generated per person is generally higher in the old Member States (EU-15) than in the new Member States although Cyprus and Malta do have a relatively high production of waste. Ireland has the highest generation of municipal waste in the European Union.

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 Landfilled

	(kg/capita)					
	1995	1998	2001	2004	2005	2006
EU-25	296	285	279	243	223	213
EU-15	292	280	275	233	209	193
Belgium	198	101	54	40	37	24
Bulgaria	530	382	392	396	405	356
Czech Republic	302	272	214	222	209	234
Denmark	96	67	47	31	38	37
Germany	245	199	160	104	48	4
Estonia	365	399	295	283	274	278
Ireland	398	478	540	451	444	471
Greece	311	344	380	389	387	386
Spain	308	317	364	309	292	289
France	214	230	215	203	195	192
Italy	422	365	346	306	295	284
Cyprus	600	601	634	659	653	652
Latvia	247	230	285	259	243	292
Lithuania	424	443	335	334	343	356
Luxembourg	161	146	131	133	134	131
Hungary	346	396	375	381	382	376
Malta	305	338	494	588	546	562
Netherlands	158	54	50	11	11	12
Austria	205	186	192	126	80	59
Poland	280	300	278	241	226	236
Portugal	200	310	355	291	278	274
Romania	259	230	272	273	296	326
Slovenia	457	512	358	313	330	362
Slovakia	168	181	209	222	228	234
Finland	268	294	284	273	282	286
Sweden	136	121	99	42	23	25
United Kingdom	414	456	474	419	376	353
Iceland	322	338	353	365	368	370
Liechtenstein	:	:	:	:	:	:
Norway	456	417	274	243	233	245
Switzerland	77	66	40	3	1	1
Croatia	:	:	:	:	:	:
Turkey	326	371	360	345	362	364

Data Source: Eurostat



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, Malta, Cyprus, Bulgaria, Greece and Romania. In such countries the amount of municipal waste going to landfill will be in parallel with the rise in municipal waste generated.

On the other hand there has been a sharp decline in the amount of waste landfilled in some other Member States. In the Netherlands, Denmark and Belgium less than 10 % of municipal waste go to landfill. In recent years landfilling was also significantly reduced in Sweden, Germany, Italy, Austria and Estonia.

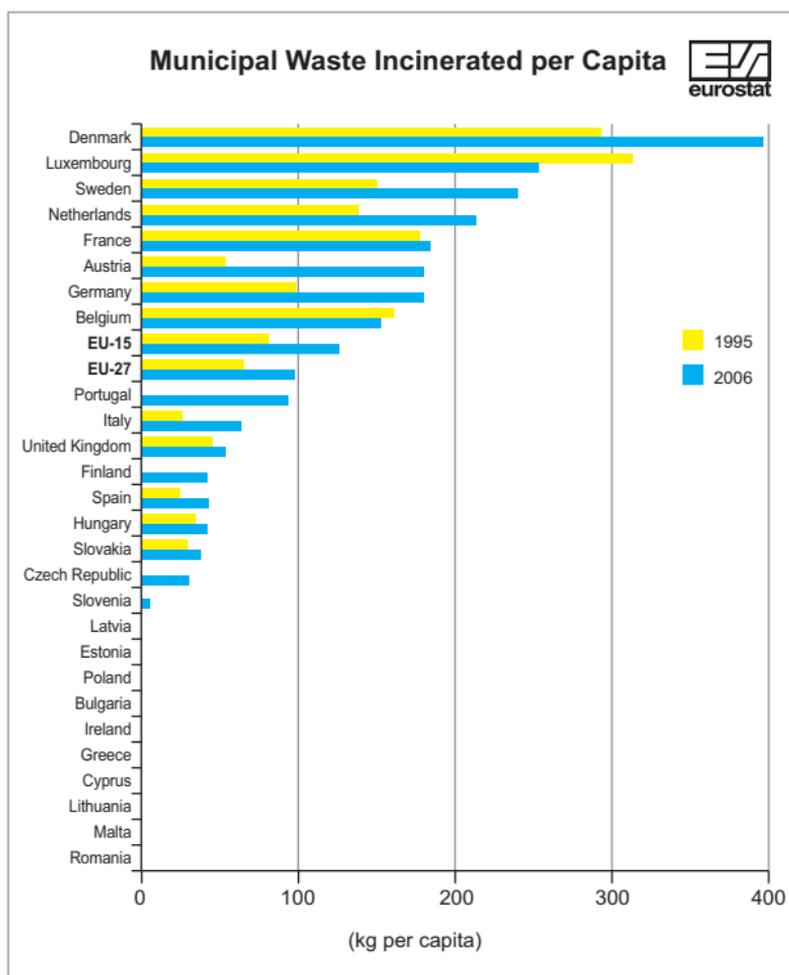
The result of these mixed developments among the Member States is a steady decline in landfill for the EU as a total. Although landfill is still the most important way to dispose of municipal waste, nowadays less than half of the municipal waste generated is disposed of by deposit/land treatment.

Municipal Waste Incinerated

(kg/capita)

	1995	1998	2001	2004	2005	2006
EU-27	65	71	82	89	94	98
EU-15	82	89	102	111	117	122
Belgium	163	164	160	153	160	155
Bulgaria	0	0	0	0	0	0
Czech Republic	0	17	35	39	37	29
Denmark	294	312	374	379	397	405
Germany	97	112	135	144	160	179
Estonia	0	0	1	0	0	1
Ireland	0	0	0	0	0	0
Greece	0	0	0	0	0	0
Spain	24	38	37	41	44	41
France	178	167	175	183	183	183
Italy	24	34	45	61	65	65
Cyprus	0	0	0	0	0	0
Latvia	0	0	4	6	3	2
Lithuania	0	0	0	0	0	0
Luxembourg	312	288	275	271	272	266
Hungary	32	35	35	15	30	39
Malta	0	0	0	0	0	0
Netherlands	139	198	199	202	202	213
Austria	54	55	65	136	169	181
Poland	0	0	0	1	1	1
Portugal	0	0	104	95	98	95
Romania	0	0	0	0	0	0
Slovenia	0	0	0	8	1	3
Slovakia	28	34	25	34	34	36
Finland	0	28	41	55	43	42
Sweden	149	165	169	217	242	233
United Kingdom	45	37	43	49	49	55
Iceland	82	70	53	45	37	47
Liechtenstein	:	:	:	:	:	:
Norway	84	85	99	118	133	132
Switzerland	288	280	315	341	329	355
Croatia	:	:	:	:	:	:
Turkey	0	0	0	0	0	0

Data Source: Eurostat



The levels of municipal waste incinerated vary over the Member States, depending on the number and location 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 increased their incineration capacity. The other alternative to landfill is recycling; both Denmark and the Netherlands have banned landfilling, but while Denmark mainly uses incineration, the Netherlands has a more mixed strategy. Belgium is the only country having achieved a significant reduction of waste going to landfill without increasing incineration.

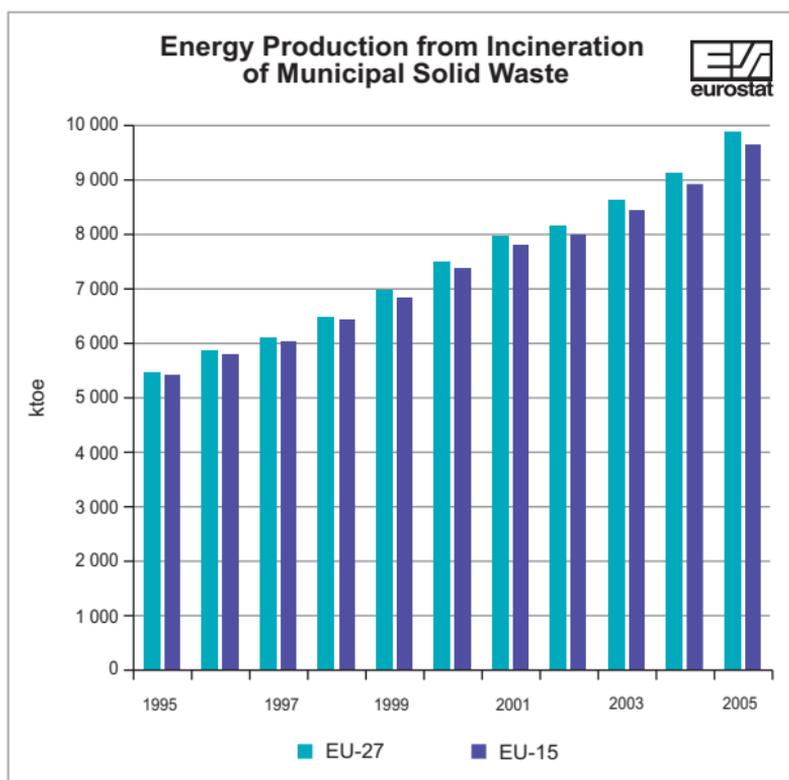
Although more and more countries use incineration in their waste management its contribution is still small in some of them. The establishment of new waste incinerators takes a lot of time and resources. For Eight Member States the use of incineration for the treatment of municipal waste is insignificant.

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

Energy Production from Incineration of Municipal Solid Waste

	1995	2000	2003	2004	2005
	<i>(ktoe)</i>				
EU-27	5 454	7 482	8 590	9 090	9 828
EU-15	5 403	7 334	8 425	8 921	9 613
Belgium	323	323	467	454	490
Bulgaria	-	-	-	-	-
Czech Republic	-	88	100	106	97
Denmark	547	726	874	883	883
Germany	1 124	1 362	1 258	1 248	1 662
Estonia	-	-	-	-	-
Ireland	-	-	-	-	-
Greece	-	-	-	-	-
Spain	187	229	227	377	377
France	1 640	1 857	1 944	1 862	1 840
Italy	124	334	692	986	1 111
Cyprus	-	-	2	1	0
Latvia	-	-	-	-	-
Lithuania	-	-	-	-	-
Luxembourg	23	27	31	38	36
Hungary	52	58	36	33	66
Malta	-	-	-	-	-
Netherlands	684	1 189	1 273	1 325	1 355
Austria	88	149	138	181	171
Poland	-	2	1	1	16
Portugal	-	174	189	189	207
Romania	-	-	-	-	-
Slovenia	-	-	-	-	-
Slovakia	-	-	26	29	35
Finland	12	45	118	149	157
Sweden	395	498	602	635	736
United kingdom	254	420	612	593	590
Iceland	1	2	2	2	2
Norway	115	124	182	182	186
Croatia	-	-	-	-	-
Turkey	-	-	-	-	-

Data Source: Eurostat



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
EU-27	5 454	5 837	6 076	6 465	6 953	7 482	7 947	8 120	8 590	9 090	9 828
EU-15	5 403	5 780	6 018	6 405	6 819	7 334	7 755	7 960	8 425	8 921	9 613

(ktOE)

Data Source: Eurostat

Incineration of municipal solid waste with energy recovery has been developed significantly since 1995. In 2005, the share of municipal solid waste to the primary production of biomass and wastes was over 14% from about 10% in 1995. It can be noted that in 2005 practically half of the energy production from waste incineration took place in France, the Netherlands and Germany. Noteworthy is also the increase of energy recovery from incineration of municipal solid waste in Italy and Finland, while UK and Spain have reduced their growth rates. In Italy particularly, the share was limited in 1995 and climbed to 11% in 2005.

Total Waste Generated (Hazardous, Non-hazardous) for Year 2004

(thousand tonnes)

	Hazardous Waste	Non- Hazardous Waste	Total Waste
EU-27	74 056	2 693 230	2 767 290
EU-15	58 841	1 855 488	1 914 332
Belgium	5 197	47 612	52 809
Bulgaria	528	251 530	252 058
Czech Republic	1 446	27 830	29 276
Denmark	322	12 492	12 814
Germany	20 000	344 022	364 022
Estonia	7 333	13 527	20 861
Ireland	724	23 789	24 513
Greece	278	28 518	28 796
Spain	3 116	157 552	160 668
France	7 553	399 170	406 723
Italy	6 134	133 672	139 806
Cyprus	77	1 450	1 527
Latvia	17	1 240	1 257
Lithuania	87	5 174	5 261
Luxembourg	124	8 188	8 313
Hungary	1 365	23 296	24 661
Malta	2	2 480	2 482
Netherlands	1 876	85 869	87 744
Austria	1 014	52 007	53 021
Poland	1 593	136 214	137 807
Portugal	773	37 515	38 288
Romania	2 238	359 091	361 329
Slovenia	108	5 663	5 771
Slovakia	422	10 246	10 668
Finland	2 508	71 854	74 361
Sweden	1 249	103 659	104 910
United Kingdom	7 973	349 571	357 544
Iceland	8	493	501
Norway	670	6 784	7 454
Croatia	113	7 095	7 209
Turkey	998	57 823	58 820

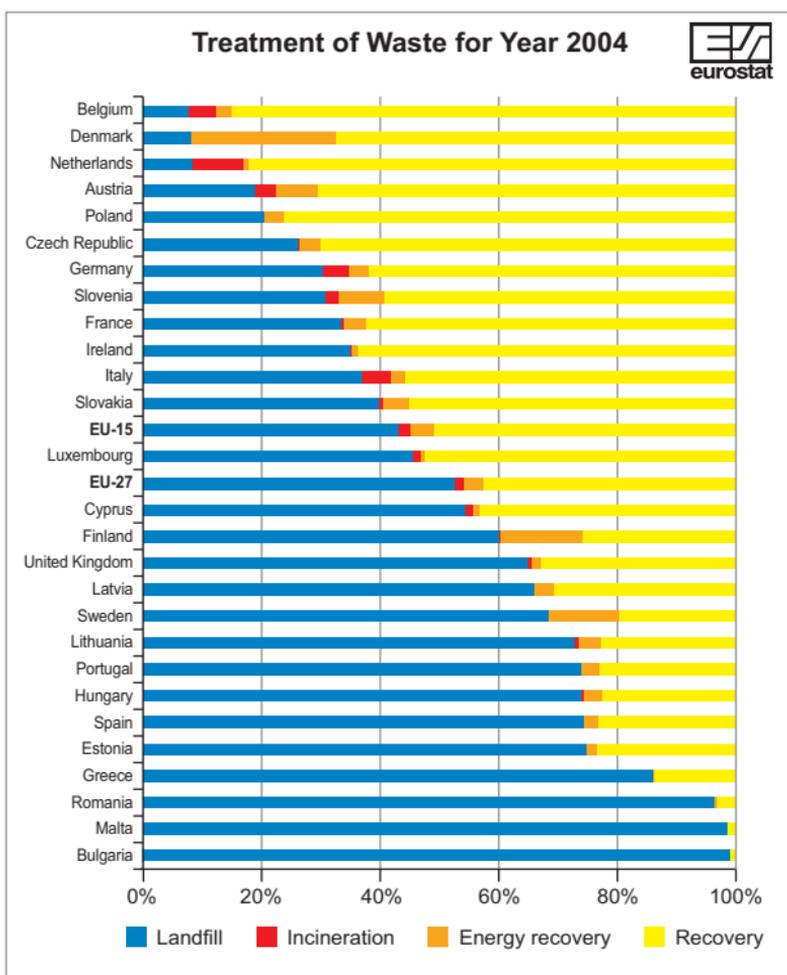
Data Source: Eurostat

Around 2 700 million tonnes of waste were generated in EU-27 in 2004 according to the first reporting under the Waste Statistics Regulation. Germany, France, Romania and the United Kingdom reported the highest amounts of waste generated with more than 300 million tonnes in each country. 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 2.7% of the total waste, however, in Estonia more than a third of the generated waste is classified as hazardous, with Belgium following with 9.8%. The lowest share of hazardous waste is reported by Latvia (1.7%). After the first analysis of the data received in 2006 the classification criteria for the hazardousness of waste and the allocation of waste streams to statistical waste categories are being further clarified in order to prepare for the second reporting in 2008.

Treatment of Waste for Year 2004

	<i>(thousand tonnes)</i>			
	Recovery Waste	Energy Waste	Incineration	Deposit onto or into land
EU-27	1 000 531	74 485	34 274	1 236 582
EU-15	861 257	67 118	33 545	730 716
Belgium	47 409	1 451	2 565	4 270
Bulgaria	2 122	48	145	243 685
Czech Republic	15 735	788	41	5 863
Denmark	8 762	3 168	-	1 065
Germany	213 717	11 392	14 530	105 470
Estonia	3 604	268	2	11 533
Ireland	11 618	169	37	6 404
Greece	3 394	46	4	21 404
Spain	30 916	3 174	173	99 165
France	253 929	15 469	889	137 038
Italy	57 167	2 641	4 846	37 940
Cyprus	692	16	21	868
Latvia	304	31	0	653
Lithuania	1 031	162	29	3 290
Luxembourg	5 363	54	134	4 667
Hungary	2 212	285	60	7 269
Malta	35	-	-	2 460
Netherlands	64 014	600	6 812	6 522
Austria	36 390	3 630	1 859	9 749
Poland	97 561	3 979	256	26 104
Portugal	7 648	993	3	24 530
Romania	6 545	889	9	198 186
Slovenia	2 951	392	106	1 542
Slovakia	6 565	526	76	4 755
Finland	17 276	9 324	156	40 253
Sweden	17 836	10 767	72	62 066
United Kingdom	85 735	4 224	1 449	169 832
Iceland	83	17	17	342
Norway	2 683	1 169	222	2 393
Croatia	422	164	20	3 260
Turkey	9 649	-	209	42 133

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 Belgium, Denmark, the Netherlands and Austria.

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 Package Waste

	Per cent (%)				
	2001	2002	2003	2004	2005
EU-27	:	:	:	:	55
EU-15	53	54	54	:	:
Belgium	71	70	74	76	77
Bulgaria	:	:	:	:	31
Czech Republic	:	29	51	58	59
Denmark	57	57	54	53	53
Germany	76	74	71	70	68
Estonia	:	:	:	36	40
Ireland	27	35	51	56	57
Greece	33	33	33	38	42
Spain	44	44	43	47	50
France	44	45	48	51	53
Italy	46	51	51	53	54
Cyprus	:	:	:	22	11
Latvia	:	:	:	46	47
Lithuania	:	:	:	33	33
Luxembourg	57	57	60	61	63
Hungary	:	37	:	43	46
Malta	:	:	:	:	:
Netherlands	56	57	56	59	59
Austria	64	66	64	66	67
Poland	:	:	:	28	30
Portugal	38	36	38	41	44
Romania	:	:	:	:	23
Slovenia	:	:	:	34	45
Slovakia	:	:	36	38	38
Finland	47	49	41	40	43
Sweden	63	65	60	50	48
United Kingdom	42	44	47	50	54

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 2005 seven countries under the 2008 target already met the objective, and many others are coming closer. Highest recycling rates are reported by Belgium, followed by Germany and Austria. 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 Package Waste



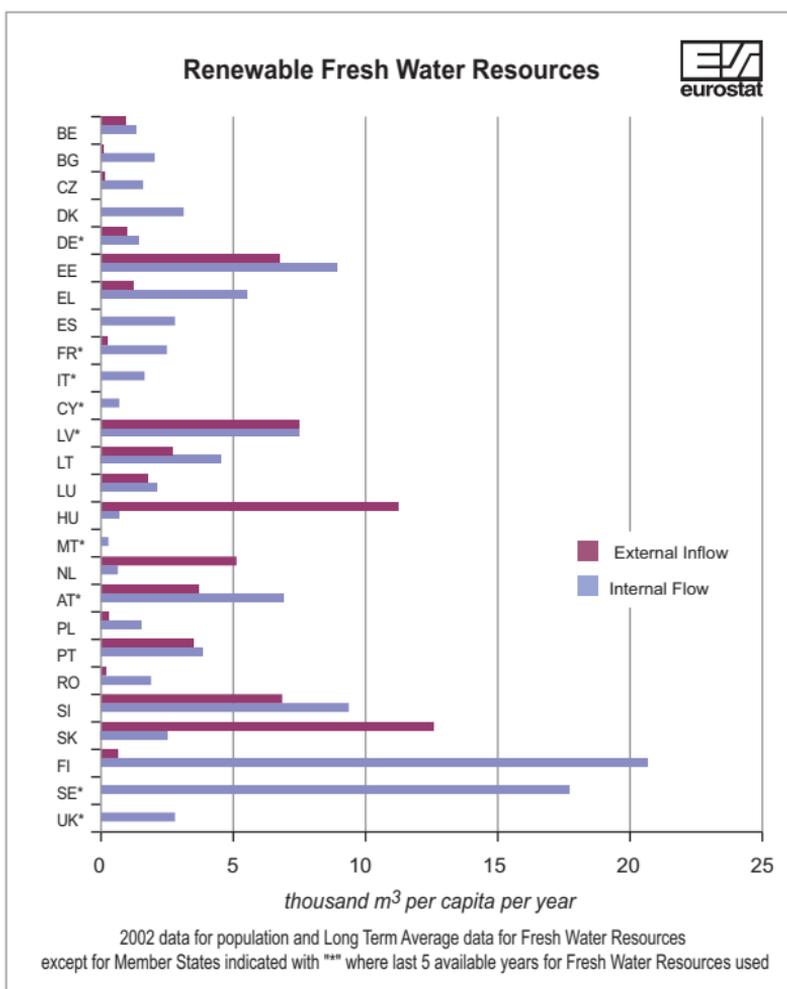
Renewable Fresh Water Resources

(billion (10⁹) m³ per year)

	2000	2001	2002	2003	2004	2005	LTAAs
BE	24.1	28.4	26.1	:	:	:	20.7
BG	:	:	:	:	:	:	15.8
CZ	15.0	16.2	24.1	:	12.8	15.6	16.0
DK	:	:	:	:	:	:	16.3
DE	:	:	:	:	174.0	:	188.0
EE	18.8	23.2	14.4	:	:	:	21.1
GR	:	:	:	:	:	:	72.0
ES	64.4	136.8	71.5	125.1	91.1	57.9	111.1
FR	:	:	:	:	:	:	:
IT	:	:	:	:	:	:	:
CY	0.4	0.4	0.4	0.4	0.4	0.3	:
LV	:	:	:	:	32.9	30.2	:
LT	24.2	25.2	24.5	16.8	0.0	0.0	24.5
LU	:	:	:	:	:	:	1.6
HU	121.7	121.8	:	:	:	:	120.0
MT	0.1	0.0	0.1	0.1	0.1	0.1	:
NL	105.4	118.6	119.0	:	78.9	74.8	89.7
AT	:	:	:	:	:	:	84.0
PL	71.0	70.1	73.4	:	50.4	56.7	63.1
PT	:	:	:	:	:	:	73.6
RO	35.5	38.3	39.9	30.2	40.0	63.8	42.3
SI	32.0	27.7	26.6	:	:	:	32.1
SK	91.1	90.8	97.6	59.5	71.3	82.2	80.3
FI	121.0	102.0	:	:	:	:	110.0
SE	:	:	:	:	:	:	179.0
UK	224.9	160.7	203.0	116.0	173.9	157.1	:
IS	:	:	:	:	:	:	170.0
NO	474.7	371.9	356.6	368.5	383.7	458.5	:
CH	:	:	:	:	44.3	43.2	53.3
TR	:	:	:	:	:	:	234.3

LTAAs: Long Term Annual Average (>20 Years)

Data Source: Eurostat



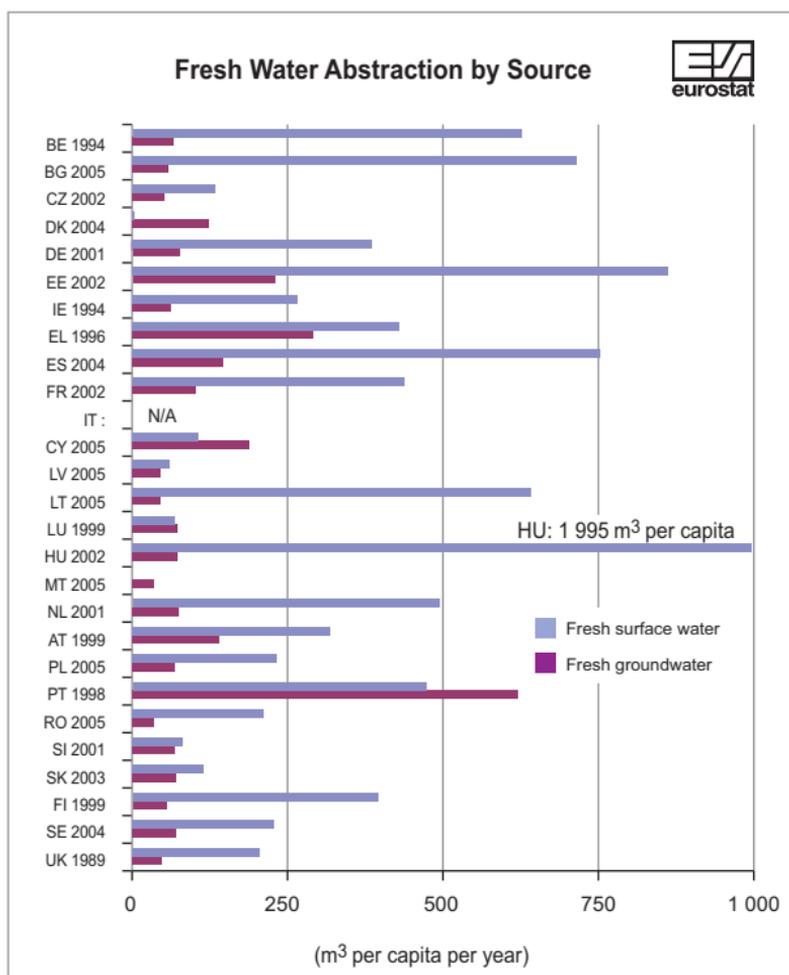
Renewable fresh water resources for any given country are made up of two components: "external inflow", which is the inflow of water from neighbouring territories, be it at the surface (river flow) or subsurface (groundwater flow), and the "internal flow", which is the precipitation (all forms) minus 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 Austria, Slovakia and Hungary in the Danube basin, the Netherlands at 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)

	1990	1995	2000	2003	2004	2005
Belgium	:	:	:	:	:	:
Bulgaria	10 218	6 326	6 132	6 918	6 282	6 017
Czech Republic	3 623	2 743	1 918	:	:	:
Denmark	1 261	887	726	:	680	:
Germany	:	43 374	:	:	:	:
Estonia	3 215	1 780	1 471	:	:	:
Ireland	:	:	:	:	:	:
Greece	7 835	7 733	:	:	:	:
Spain	:	33 288	37 071	38 512	38 158	:
France	:	:	32 715	:	:	:
Italy	:	:	:	:	:	:
Cyprus	:	:	182	215	226	222
Latvia	:	418	283	254	230	238
Lithuania	4 311	4 582	3 578	3 325	3 278	2 365
Luxembourg	:	57	:	:	:	:
Hungary	:	6 054	18 878	:	:	:
Malta	:	20	19	15	15	14
Netherlands	7 800	:	:	:	:	:
Austria	3 807	3 449	:	:	:	:
Poland	15 164	12 924	11 994	11 548	11 477	11 522
Portugal	7 288	:	:	:	:	:
Romania	17 510	10 300	7 967	6 500	5 850	5 301
Slovenia	444	387	304	:	:	:
Slovakia	2 116	1 386	1 172	1 041	:	:
Finland	2 327	2 535	:	:	:	:
Sweden	2 968	2 725	2 688	2 676	2 676	:
United Kingdom	:	:	:	:	:	:
Iceland	:	165	163	165	165	165
Norway	:	:	:	:	:	:
Switzerland	2 665	2 571	2 564	:	2 532	2 507
Croatia	:	:	:	:	:	:
Turkey	28 073	:	:	:	:	:

Data Source: Eurostat



The per-capita-abstraction of fresh groundwater is relatively uniform throughout Europe, with the exception of a few Mediterranean countries (Portugal, Greece, and Cyprus) 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 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 164) shows that over the fifteen years covered by the table, there is a clear decrease in total abstraction in new Member States and in Association countries 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.

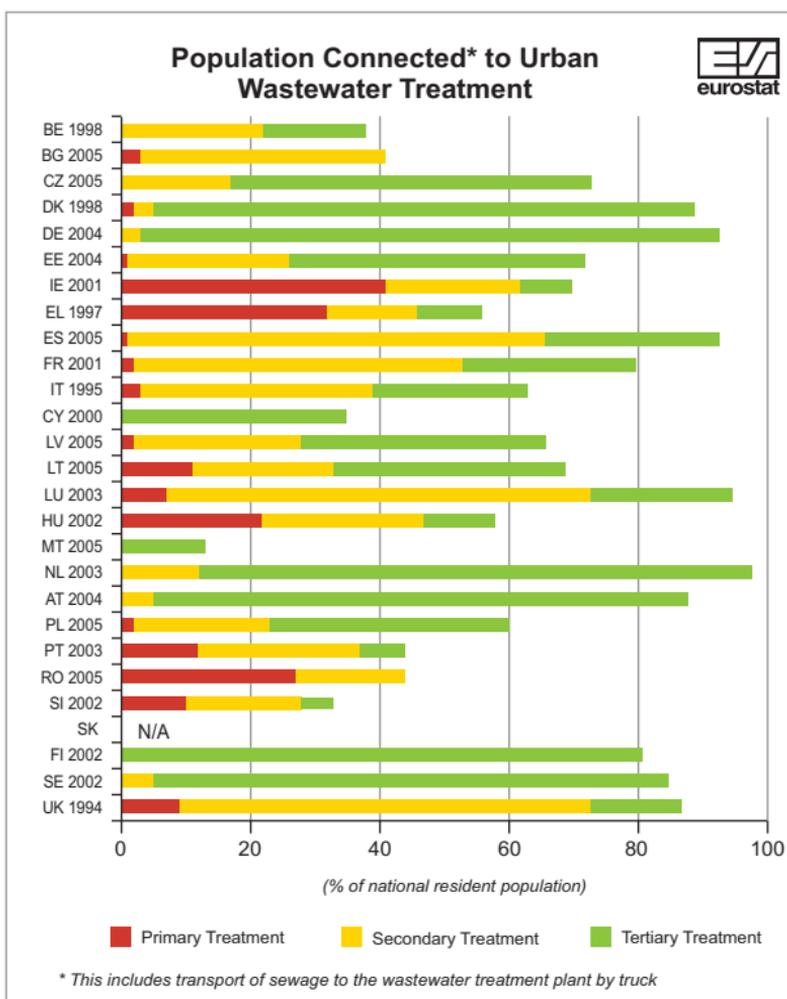
Population connected to urban wastewater treatment with at least secondary treatment

(% of national resident population)

	1985	1990	1995	2000	L.Av Year
Belgium	:	:	:	:	38
Bulgaria	:	:	35	36	38
Czech Republic	:	:	:	:	73
Denmark	62	71	85	:	87
Germany	:	80	84	93	93
Estonia	:	:	68	68	71
Ireland	:	21	34	29	29
Greece	9	:	22	:	24
Spain	16	42	37	80	92
France	:	:	:	:	78
Italy	:	:	60	:	60
Cyprus	:	:	:	35	35
Latvia	:	:	:	:	64
Lithuania	:	:	:	:	58
Luxembourg	74	87	68	:	88
Hungary	17	15	18	30	36
Malta	:	:	:	:	13
Netherlands	74	92	97	99	98
Austria	58	67	74	:	88
Poland	:	:	34	:	58
Portugal	:	11	17	:	32
Romania	:	:	:	:	17
Slovenia	:	:	:	10	23
Slovakia	:	:	:	:	:
Finland	72	76	77	80	81
Sweden	93	94	93	86	85
United Kingdom	:	68	78	:	78
Iceland	:	0	0	0	2
Norway	34	44	52	51	57
Switzerland	84	90	94	96	97
Turkey	:	:	3	:	24

* L.Av. Year: Latest Available Year

Data Source: Eurostat



The treatment level of the wastewater before discharge and the sensitivity of the receiving waters affect 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 waste water 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 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 Ireland, Greece and Romania, as illustrated in the above graph.

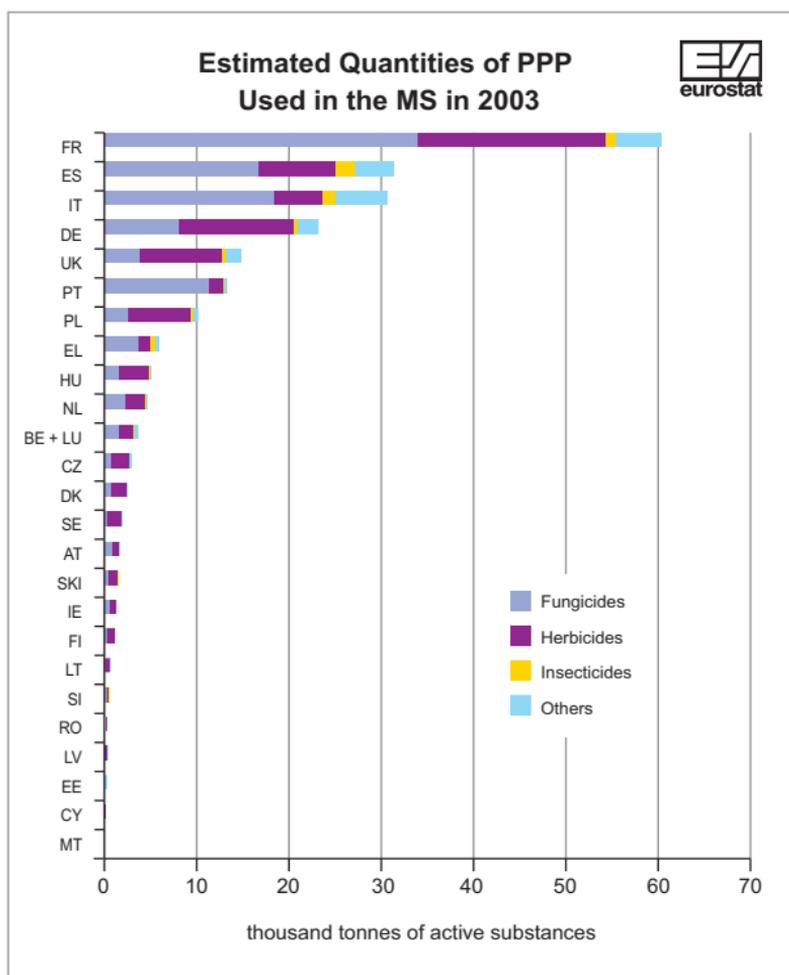
Estimated Used Quantities of Plant Protection Products

(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	146 694	140 395	130 548	130 700	128 887	107 600
Herbicides	51 996	48 924	51 081	57 034	57 864	64 405	70 022	64 202	90 585	88 670	90 259	80 566
Insecticides	6 039	5 773	6 422	6 277	5 741	5 888	6 118	6 603	9 621	8 781	8 808	7 801
Other PPP	1 990	2 465	3 484	3 219	3 067	16 765	19 464	20 716	21 778	22 371	22 089	20 414
Total	193 609	205 497	197 487	216 304	217 647	241 976	242 299	231 917	252 531	250 523	250 043	216 381

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.

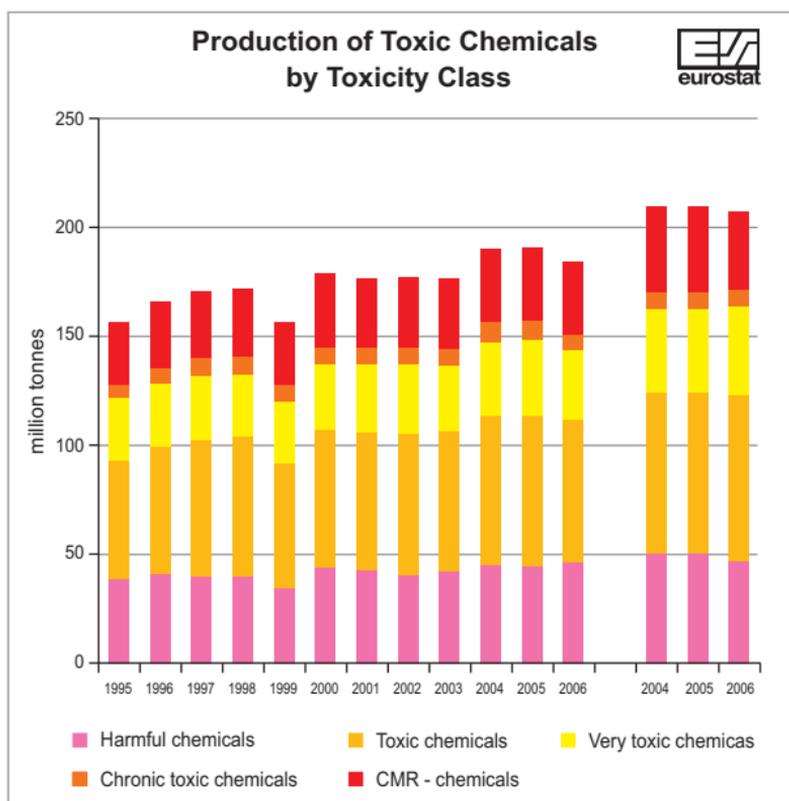
Production of Toxic Chemicals by Toxicity Class

(million tonnes)

Toxicity Class	EU-15 Total										EU-25 Total				
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2004	2005	2006
CMR - chemicals	28	30	30	30	28	34	33	32	33	35	34	33	37	37	36
Chronic toxic chemicals	6	7	8	8	7	8	7	8	7	7	8	7	8	8	8
Very toxic chemicals	28	29	30	30	29	30	32	33	31	34	36	33	38	39	38
Toxic chemicals	54	57	62	62	55	63	63	63	63	67	67	67	74	75	75
Harmful chemicals	39	38	40	41	37	44	42	42	43	47	46	45	51	50	49
Production volume of toxic industrial chemicals	156	160	171	171	154	181	177	178	177	189	189	186	208	209	207
Total volume of chemicals produced	248	259	274	275	248	301	284	267	270	310	314	316	345	350	351

Derived from production statistics. Confidential data have been excluded, but make no significant difference to the result

Data Source: Eurostat 2007



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 **C**hemicals) 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.

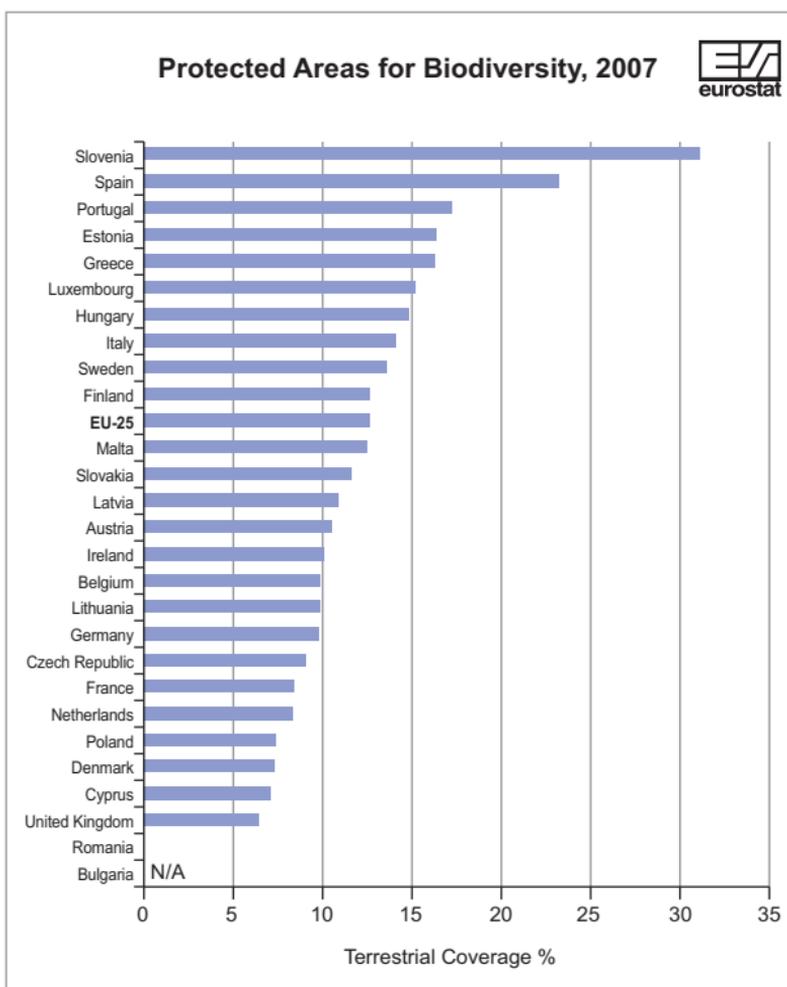
This indicator monitors progress in shifting production from the most toxic chemicals to less toxic classes. (The indicator does not provide information on the risk from the use of chemicals: Production and consumption are not synonymous with exposure, as some chemicals are handled in closed systems,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

Between 1995 and 2005 the total production of chemicals has grown by 31% (EU-15). The production of chemicals classified as toxic increased by 23%, with a 25% growth for CMR chemicals. Over the 10 years statistics highlight the steady growth of chemicals production volume, and no decoupling from the growth of GDP can be observed. The coming years will show if the lower figures for 2006 will be the initiation of a downward trend. The high share of the most toxic categories of chemicals, the CMR chemicals, represents a worrying trend if continued.

Protected Areas for Biodiversity

	<i>Terrestrial Coverage (%)</i>				
	2003	2004	2005	2006	2007
EU-25	:	10.08	12.07	12.24	12.70
Belgium	9.88	9.96	9.96	9.96	9.96
Bulgaria	:	:	:	:	:
Czech Republic	-	-	9.19	9.19	9.19
Denmark	7.37	7.37	7.37	7.37	7.37
Germany	6.99	6.99	9.83	9.86	9.86
Estonia	-	-	15.86	15.86	16.53
Ireland	10.74	10.21	10.21	10.21	10.21
Greece	16.40	16.40	16.40	16.40	16.40
Spain	22.61	22.57	22.57	22.57	23.41
France	6.77	6.79	6.90	7.89	8.48
Italy	14.66	13.86	13.86	14.18	14.21
Cyprus	-	-	4.96	7.15	7.15
Latvia	-	-	10.98	10.98	10.99
Lithuania	-	-	9.96	9.96	9.96
Luxembourg	14.76	14.75	14.75	14.75	15.35
Hungary	-	-	14.97	14.97	14.97
Malta	-	-	12.45	12.57	12.57
Netherlands	9.52	9.52	9.52	8.39	8.39
Austria	10.58	10.59	10.59	10.60	10.60
Poland	-	-	4.20	4.20	7.44
Portugal	17.41	17.41	17.41	17.41	17.41
Romania	:	:	:	:	:
Slovenia	-	-	31.37	31.37	31.37
Slovakia	-	-	11.75	11.75	11.75
Finland	12.65	12.65	12.65	12.74	12.74
Sweden	13.94	13.62	13.62	13.67	13.72
United Kingdom	6.53	6.52	6.53	6.53	6.53

Data Source: Eurostat



The EU policy on nature conservation is mainly based on the two Directives 92/43/EEC on the conservation of natural habitats and of wild fauna and flora and 79/409/EEC on the conservation of wild birds, which include the setting up of a coherent European ecological network of sites under the title Natura 2000. This indicator is based on territories that countries propose should be designated for the protection of natural and semi-natural habitats, wild fauna and flora according to the Habitat Directive.

The assumption for this indicator is that the establishment of this network will enable the hosted natural habitats and species of Community importance to be maintained or restored at a favourable conservation status in their natural range and therefore contribute to halting the loss of biodiversity in the European Community by 2010. The indicator shows the progress in designating sites under the Habitats Directive; it does not show the conservation status of habitats and species within the sites yet and only focus on the nationally designated areas proposed under the Habitat Directive.

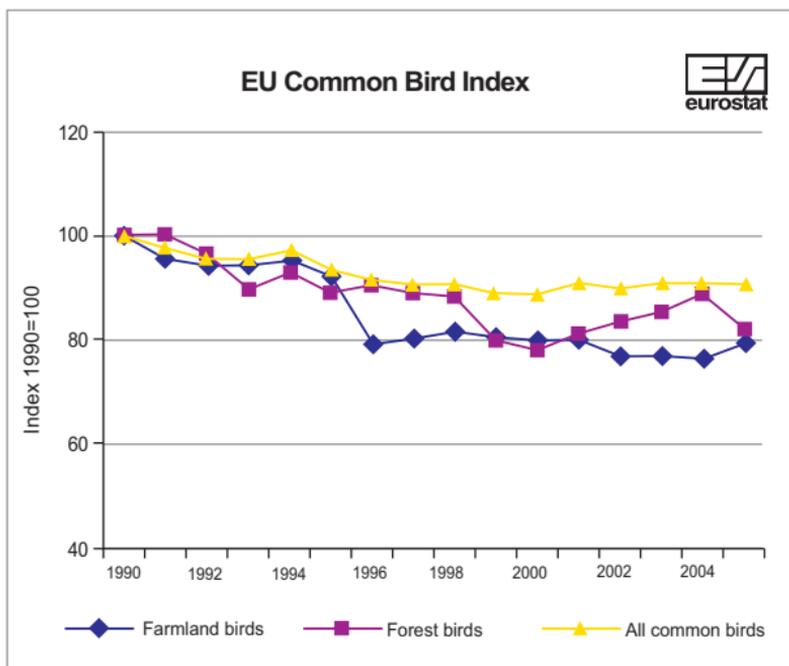
The site proposal phase, now close to finalisation, will be concluded with the adoption of lists of sites of community interest for all bio-geographical regions. Until then, updates of information are provided regularly by Member States and consolidated twice a year by the European Environment Agency (European Topic Centre for Biological Diversity) and published by DG Environment as Natura 2000 Barometer (see http://ec.europa.eu/environment/nature/natura2000/barometer/index_en.htm).

EU Common Bird Index

(Base Year 1990)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Farmland birds	100.00	94.79	93.72	94.18	94.60	91.27	79.25	79.99	80.86	80.51	80.01	79.45	76.66	76.56	75.86	78.76
Forest birds	100.00	100.74	95.77	88.49	91.42	87.41	89.22	87.57	86.58	80.09	77.13	80.98	83.37	85.04	87.40	82.46
All common birds	100.00	97.08	95.09	95.38	96.98	92.48	90.17	91.04	89.73	88.08	87.43	90.06	89.02	90.49	90.65	89.50

Data Source: EBCC/RSPB/BirdLife/Statistics Netherlands



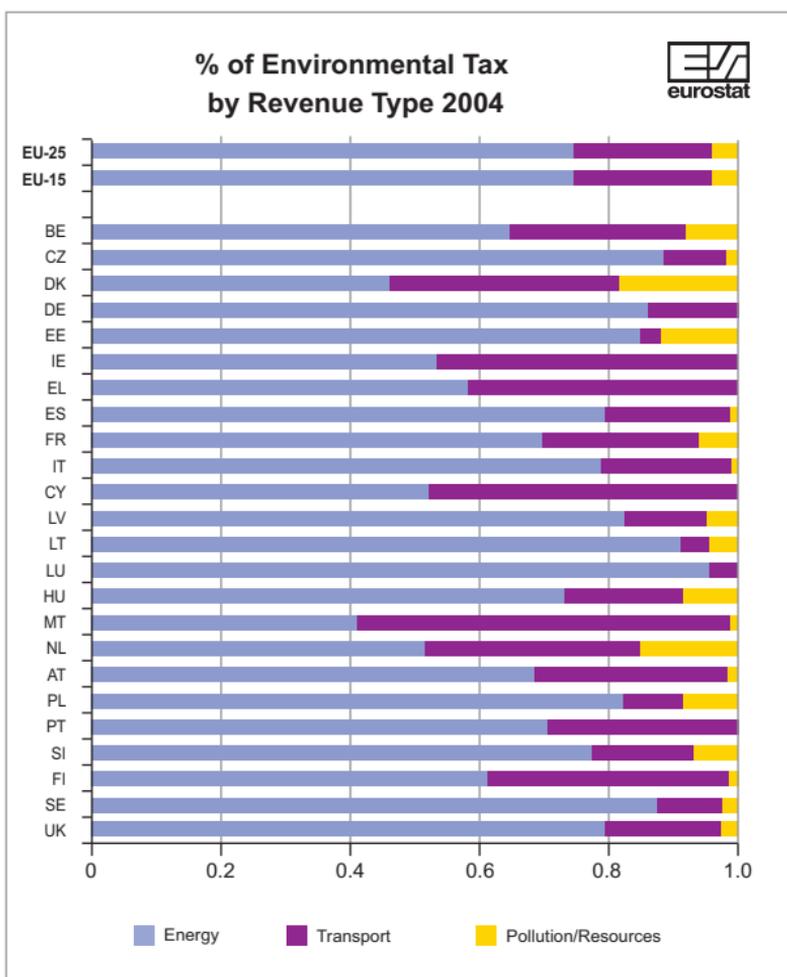
Following a strong reduction in the populations of common birds during the '90s, the past years have seen a stabilizing trend. Although at first declining, Farmland Species Population is rebounding to levels close to the 2000 ones, while at the same time, Forest Species Population inched towards early '90s levels when declining trends reappeared. The combined population has varied within 5% during the past ten years.

Environmental Taxes by Revenue Type by Country

(Millions of euro)

	Total environmental taxes	Energy taxes	Transport taxes	Taxes on Pollution/ Resources
EU-25	279 736	208 839	60 521	10 376
EU-15	266 393	198 140	58 548	9 706
BE	6 896	4 450	1 898	548
CZ	2 414	2 131	254	29
DK	10 804	4 958	3 951	1 895
DE	56 011	48 271	7 740	-
EE	198	168	7	23
IE	3 661	1 963	1 693	5
EL	3 992	2 343	1 649	-
ES	16 831	13 344	3 379	108
FR	40 455	28 344	9 524	2 587
IT	39 294	30 882	7 975	437
CY	507	264	242	-
LV	291	238	40	13
LT	354	321	16	16
LU	839	808	31	-
HU	2 369	1 734	437	198
MT	138	56	81	1
NL	18 974	9 736	6 372	2 866
AT	6 339	4 330	1 952	57
PL	5 285	4 328	696	262
PT	4 478	3 133	1 344	-
SI	900	699	140	62
SK	887	758	62	67
FI	4 884	2 952	1 877	55
SE	8 054	7 014	884	157
UK	44 881	35 611	8 280	990

Data Source: Commission Services



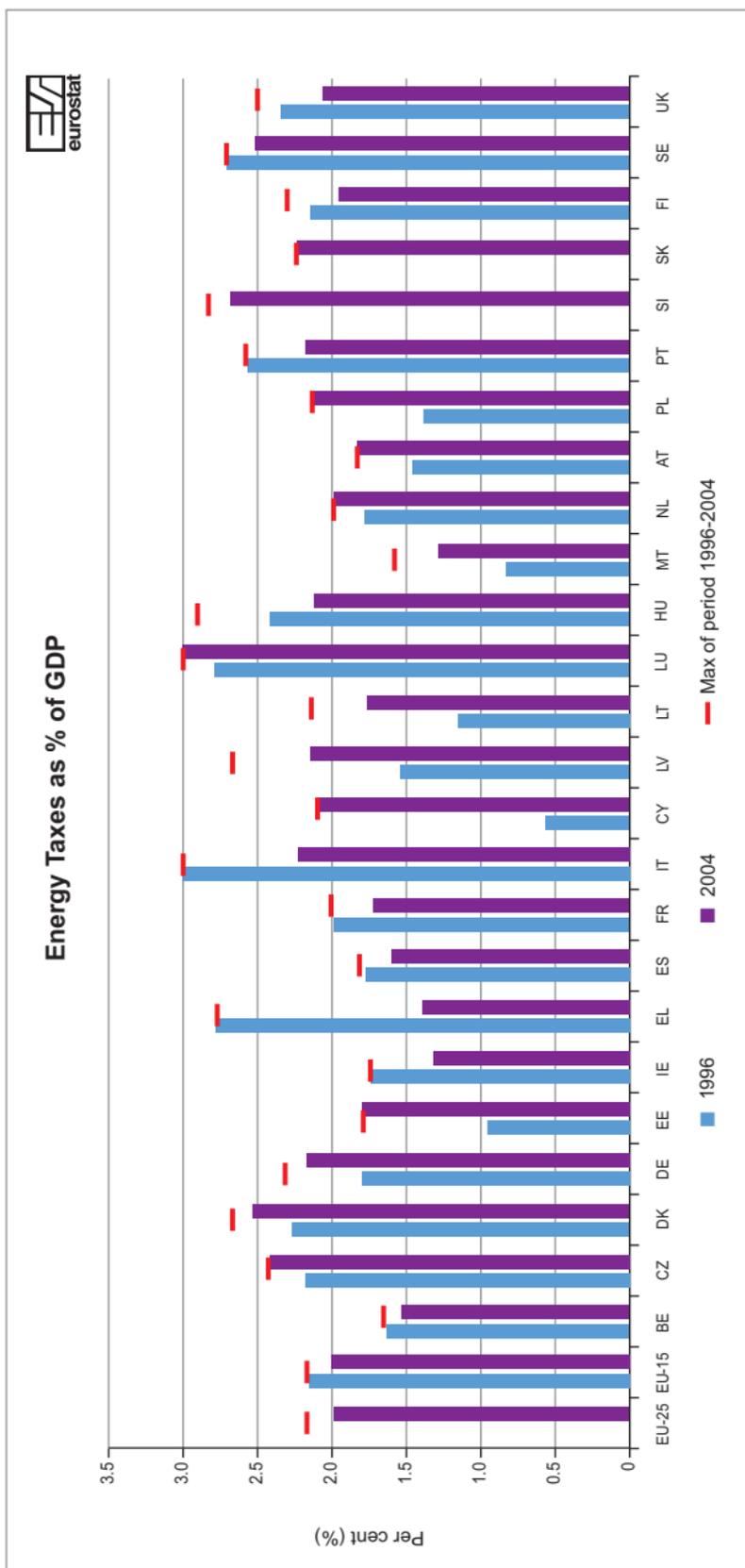
Environmental taxes are a market-based instrument that aims to integrate the cost of adverse environmental impacts into prices. Through them, producers and consumers are given an incentive to assess the environmental consequences of their behaviour in their production and consumption decisions and thus 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 2004, energy taxes accounted for roughly 75% of total environmental taxes in both EU-15 and EU-25. 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 has higher tax on transport than on energy, but the share is also high in Cyprus and in Ireland.

Energy Taxes as a % of GDP

	1996	1998	2000	2002	2004	Max of period 1996-2004 (%)
EU-25	:	:	2.1	2.0	2.0	2.2
EU-15	2.1	2.1	2.1	2.0	2.0	2.2
BE	1.6	1.6	1.5	1.4	1.5	1.6
CZ	2.2	2.0	2.2	2.2	2.4	2.4
DK	2.3	2.4	2.5	2.6	2.5	2.7
DE	1.8	1.7	2.0	2.2	2.2	2.3
EE	0.9	1.6	1.2	1.5	1.8	1.8
IE	1.7	1.7	1.4	1.3	1.3	1.7
EL	2.8	2.3	1.7	1.5	1.4	2.8
ES	1.8	1.9	1.7	1.7	1.6	1.9
FR	2.0	2.0	1.8	1.8	1.7	2.0
IT	3.0	2.8	2.6	2.3	2.2	3.0
CY	0.5	0.5	0.7	1.0	2.1	2.1
LV	1.5	2.7	1.8	1.8	2.1	2.7
LT	1.1	1.7	1.8	1.9	1.8	2.2
LU	2.8	2.8	2.7	2.6	3.0	3.0
HU	2.4	2.9	2.4	2.2	2.1	2.9
MT	0.8	1.6	1.4	1.4	1.3	1.6
NL	1.8	1.9	2.0	1.9	2.0	2.0
AT	1.4	1.6	1.6	1.7	1.8	1.8
PL	1.4	1.5	1.8	2.0	2.1	2.1
PT	2.6	2.4	1.6	2.1	2.2	2.6
SI	0.0	0.0	2.5	2.8	2.7	2.8
SK	0.0	1.8	1.7	1.9	2.2	2.2
FI	2.1	2.2	2.0	2.0	1.9	2.3
SE	2.7	2.7	2.4	2.5	2.5	2.7
UK	2.4	2.5	2.4	2.2	2.0	2.5
NO	1.0	1.0	0.7	0.6	0.5	1.0

Data Source: Commission Services

In 2004 the members of EU-25 collected revenues from environmental taxes of 280 billion Euro (266 billion Euro in EU-15 Member States). This is about 2.7% of GDP within both EU-25 and EU-15. The percentage of energy taxes was 2.0% of GDP. Between 1996 and 2004 14 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, Denmark, and in Germany. In 2004, Luxembourg had the highest share of energy tax in GDP with 3.0%, up from 2.8% in 1996, followed by Slovenia, at 2.7% of GDP, and Denmark at 2.5%.



EU-15 Greenhouse Gas Emissions by Economic Activity in 2003

	GHG* (kilotonnes CO ₂ equivalent)	GVA** (Million euro)	GHG* (tonnes CO ₂ equivalent/million euro)	CO ₂	CH ₄	N ₂ O
Total	3 432 272	8 491 839	404	333	35	36
NACE sections						
A	508 062	163 866	3 100	792	1 010	1 299
B	9 332	7 834	1 191	1 177	3	12
C	73 539	61 666	1 193	837	347	9
D	958 969	1 504 288	637	591	5	41
E	1 065 406	159 576	6 676	6 479	134	64
F	52 809	491 880	107	104	0	2
G	87 744	972 956	90	88	0	2
H	18 426	252 319	73	72	0	1
I	383 703	595 138	645	633	2	10
J	19 060	472 050	40	40	0	1
K	40 055	1 891 705	21	21	0	0
L	30 854	540 217	57	52	4	1
M	23 247	445 550	52	52	0	0
N	33 530	602 084	56	47	0	8
O	127 534	330 711	386	136	224	25

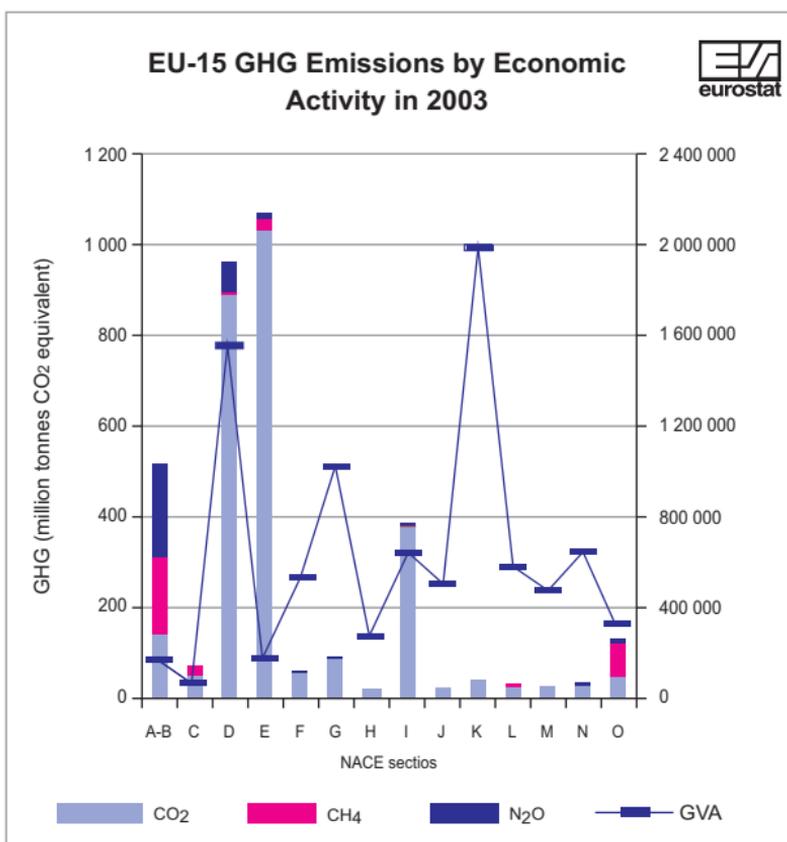
* GHG comprises CO₂, CH₄ and N₂O; no data for the other Kyoto GHG

** GVA at current prices, date of extraction: Nov 2007

Data Source: Eurostat

NACE: "Nomenclature statistique des Activités économiques dans la Communauté Européenne". For definitions of the sections see Glossary.

Greenhouse gas [GHG, which includes carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄)] 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 2003, section E (Electricity, gas and water supply) represented 31% 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: 6 676 tonnes of CO₂ equivalent per million Euro of GVA, followed by sections A-B (Agriculture, hunting and forestry, and Fishing) with 3 013 tonnes, section C (Mining and quarrying) with 1 193 tonnes, section I (Transport, storage and communication) with 645 tonnes and section D with 637 tonnes of CO₂ equivalent per million Euro of GVA.



Note: : NACE: "Nomenclature statistique des Activités économiques dans la Communauté Européenne". For definitions of the sections see Glossary.

The environmental pressure due to methane (CH₄) is more important in sections A and C with total methane emissions being respectively 1 010 and 347 tonnes of CO₂ equivalent per million Euro of GVA; for nitrous oxide (N₂O), 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 182.

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 (SO₂) and nitrogen oxide (NO_x) and ammonia (NH₃). 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"

CO₂ 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 (CO₂), methane (CH₄) and nitrous oxide (N₂O) and hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆). These substances have individual global warming potentials (GWP) ranging from 1 (CO₂) to 23 900 (SF₆). In order to aggregate

the emissions of the different substances and present a single figure for the climate change issue they are expressed in CO₂ 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 1997), 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 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 (SF₆) 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 SF₆ 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). Hydrofluorocarbons 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 (CO₂), methane (CH₄) and nitrous oxide (N₂O) and hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

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) (ESA 1995, 9.23):

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 (ESA 1995, 3.69). Data extraction: Gross value added at current prices; Million euro; New Cronos 28.02.2006.

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 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:

See "Net Calorific Value"

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 μ m aerodynamic diameter (diameter of a spherical particle having a density of 1 gm/cm³ 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-SO₂ and sulphur trioxide-SO₃ 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 (CH₄). 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"](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: Methodology for the calculation of EU-wide average fuel prices

Electricity

Electricity prices are collected by Eurostat from the Member States of EU based on the principles of Directive 90/377/EEC for Price Transparency. The prices are as of 1 January in the year shown. Prices are collected at national level in each country and for a number of different standard consumers. For *domestic* prices, the standard consumer used is Dc - one with an annual consumption of 3 500 kWh which corresponds to a standard dwelling of 90 m² with 4 rooms plus a kitchen. For industrial prices, the standard consumer used is Ie - one with an annual consumption of 2 GWh and a maximum demand of 500 kW. More detailed information on the collection of electricity prices can be found in Eurostat's Electricity Prices publication.

The average EU price is calculated by taking a weighted average of the prices in individual countries. *Domestic* prices are weighted by the final energy consumption of electricity in households recorded annually by Eurostat. *Industrial* prices are weighted by the final energy consumption of electricity in industry recorded by the same survey. Since price data are available for 2006 and 2007 but consumption data is not, the prices for 2006 and 2007 have been weighted by 2005 consumption; this should have only a small effect on the EU average.

The survey collects prices all taxes included, prices without VAT and prices all taxes excluded. The *domestic* prices shown here are prices all taxes included while *industrial* prices are shown without VAT (i.e. what industry will actually pay for the energy).

Natural gas

Natural gas prices are collected by Eurostat on a similar basis to electricity prices following the same regulation. Again, the prices are as of 1 January in the year shown. The EU averages are also calculated in the same way albeit using different standard consumers and different consumption measures to weight the country prices. For *domestic* consumers, the standard consumer used is D3 (annual consumption of 83.70 GJ i.e. 23 260 kWh) while for *industrial* consumers it is I3-1 (annual consumption of 41 860 GJ i.e. 11.63 GWh). More detailed information on the collection of natural gas prices can be found in Eurostat's Gas Prices publication.

The average EU price is calculated by taking a weighted average of the prices in individual countries. *Domestic* natural gas prices are weighted

by final energy consumption of gas in households while *industrial* prices are weighted by final consumption in industry. Since price data are available for 2006 and 2007 but consumption data is not, the prices for 2006 and 2007 have been weighted by 2005 consumption; this should have only a small effect on the EU average.

The survey collects prices all taxes included, prices without VAT and prices all taxes excluded. The *domestic* prices shown here are prices all taxes included while *industrial* prices are shown without VAT (i.e. what industry will actually pay for the energy).

Petroleum products

The heating gas oil, residual fuel oil, unleaded gasoline and automotive diesel prices are supplied to DG TREN of the Commission by the Member States as those being the most representative price levels actually charged to consumers for the specific categories of sale listed below. This data collection is based on Council Decision 1999/280/EC and Commission Decision 1999/566/EC. The prices given are as of the first Monday after the 15 January of each year.

The heating gas oil prices given are for deliveries of between 2 000 and 5 000 litres while those for residual fuel oil are for monthly deliveries of less than 2 000 tonnes or annual deliveries of less than 24 000 tonnes. Average pump prices are given for unleaded gasoline and automotive diesel fuel.

The EU average prices are calculated by weighing the prices from each country by the national final energy consumption of each product.

Price data for all petroleum product prices are available until 2007. The 2006 and 2007 data are weighted with 2005 consumption figures.

Annex D: 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 co-efficients 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
<i>From</i>						
TJ		1	238.8	2.388 x 10 ⁻⁵	947.8	0.2778
Gcal		4.1868 x 10 ⁻³	1	1 x 10 ⁻⁷	3.968	1.163 x 10 ⁻³
Mtoe		4.1868 x 10 ⁴	1 x 10 ⁷	1	3.968 x 10 ⁷	11 630
Mbtu		1.0551 x 10 ⁻³	0.252	2.52 x 10 ⁻⁸	1	2.931 x 10 ⁻⁴
GWh		3.6	860	8.6 x 10 ⁻⁵	3 412	1

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