ISSN 1725-4566

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Energy, transport and environment indicators

2009 edition

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Luxembourg: Publications Office of the European Union, 2009

ISBN 978-92-79-13438-8
ISSN 1725-4566
DOI 10.2785/33652
Cat. No. KS-DK-09-001-EN-C

Theme: Environment and energy
Collection: Pocketbooks

EUROSTAT
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Introduction

Energy, transport and environment indicators

The 2009 edition presents facts and figures from the energy, transport and environment sectors, all in a single volume. With a view of the growing global political importance of issues such as climate change and energy security, the three sectors have become increasingly interconnected. This creates the need for a comprehensive approach, comprising reliable and comparable statistical data, necessary for the better understanding of the complexity of the issues, for sound policy-making and the setting of effective measures.

The indicators contain national data for the 27 EU Member States, the EFTA and candidate countries. Where aggregated data for EU-27 are available, they are presented, in general, for the period from 1997 to 2007 (transport mainly from 2001 to 2007). The main data source for indicators is the harmonised EU Energy Statistics database although other official Eurostat data sources such as the OECD/Eurostat Joint Questionnaire on the State of the Environment have also been used. The bulk of data on emissions has been provided by the European Environment Agency while the most important data sources for transport indicators are the EU legal acts on transport statistics and the Eurostat/UNECE/ITF Common Questionnaire.

Energy indicators include supply, final consumption, renewable sources, and the structure of the industry; energy dependency, energy efficiency, and energy prices. The new Directive on renewable energy sources[1], integral part of the Energy Package, defines the share of these sources in gross final energy consumption. This publication presents data on certain indicators, for example biofuels, relevant for the policy on the promotion of renewable energy. Energy prices are presented in accordance with the new methodology.

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

The *Environment* chapter includes indicators on climate change and greenhouse gas emissions, waste generation and treatment, as well as data on forestry and on environmental tax revenues.

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

[1] *Directive of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (2009/28/EC).*

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Original language:

English

Translations:

European Commission Translation Service

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Symbols and abbreviations

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

Units of measurement

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

Chemical and related symbols

CH_4	Methane
CO_2	Carbon dioxide
HFC	Hydrofluorocarbons
N_2O	Nitrous oxide
PFC	Perfluorocarbons
SF_6	Sulphur hexafluoride

Other abbreviations

EEA	European Environment Agency
ECE	United Nations Economic Commission for Europe
FAO	Food and Agriculture Organisation of the United Nations
GDP	Gross Domestic Product
GDP in PPS	Gross Domestic Product in Purchasing Power Standard
IEA	International Energy Agency
ITF	International Transport Forum
MCPFE	Ministerial Conference on the Protection of Forests in Europe
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

Others related to forestry

FAWS	forests available for wood supply
FOWL	forests and other wooded land
OWL	other wooded land
NAI	net annual increment
o.b.	over bark (i.e. including the bark)
u.b.	under bark (i.e. without the bark)

Abbreviations of countries

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

1

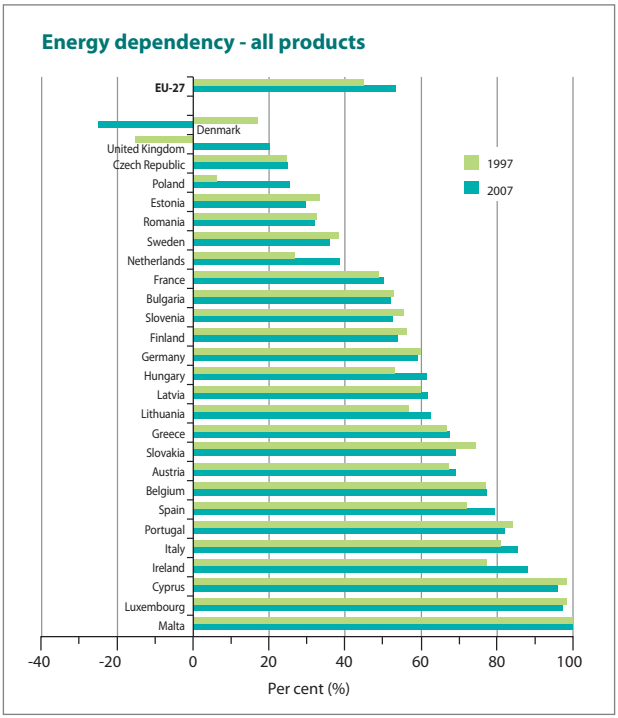
Energy indicators

Energy dependency - all products

Per cent (%)

	1997	2000	2004	2005	2006	2007
EU-27	**45.0**	**46.8**	**50.3**	**52.6**	**53.8**	**53.1**
Belgium	76.9	76.1	78.0	78.2	77.9	77.2
Bulgaria	52.7	46.6	48.4	47.4	46.2	51.9
Czech Republic	24.7	23.4	25.6	28.4	27.9	25.1
Denmark	17.0	-34.8	-47.4	-50.8	-36.7	-25.4
Germany	59.9	59.7	61.1	61.6	61.3	58.9
Estonia	33.3	34.9	31.9	29.4	33.1	29.7
Ireland	77.2	84.5	86.7	89.7	90.9	88.3
Greece	66.9	69.4	72.7	68.6	71.9	67.3
Spain	72.0	76.7	77.6	81.3	81.5	79.5
France	48.9	51.1	50.7	51.6	51.2	50.4
Italy	81.0	87.3	84.8	84.4	86.8	85.3
Cyprus	98.3	98.8	96.4	100.7	102.5	95.9
Latvia	60.0	59.8	68.9	63.1	65.8	61.5
Lithuania	56.7	60.6	47.9	58.5	64.0	62.3
Luxembourg	98.4	99.8	98.1	98.0	98.9	97.5
Hungary	52.8	56.1	60.6	62.5	62.4	61.4
Malta	100.0	100.4	100.0	100.0	100.0	100.0
Netherlands	26.8	39.2	31.9	38.7	38.0	38.6
Austria	67.3	65.6	69.7	71.9	72.0	69.1
Poland	6.4	11.2	14.4	17.7	19.8	25.5
Portugal	84.1	85.0	83.7	88.4	83.1	82.0
Romania	32.6	21.9	30.3	27.6	29.2	32.0
Slovenia	55.3	52.6	52.2	52.3	52.1	52.5
Slovakia	74.3	66.0	69.0	65.5	64.0	69.0
Finland	56.1	56.0	55.2	54.9	54.6	53.8
Sweden	38.4	39.2	37.3	37.6	37.8	36.1
United Kingdom	-15.4	-16.8	4.7	13.7	21.3	20.1
Iceland	34.0	31.4	30.1	28.9	25.1	:
Norway	-736.9	-736.0	-728.2	-608.8	-773.6	-664.9
Switzerland	57.5	54.4	56.4	60.4	57.3	52.5
Croatia	47.5	53.3	57.5	58.6	54.3	56.9
Turkey	60.1	65.4	70.4	71.9	72.5	74.4

Data source: Eurostat



Per cent (%)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	45.0	46.1	45.1	46.8	47.5	47.6	49.0	50.3	52.6	53.8	53.1

Data source: Eurostat

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

Over the last decade (1997-2007) EU-27 energy dependency continued to grow, reaching 53.1 % in 2007. Denmark, who became a net exporter in 1999, was the only EU-27 Member State with a negative energy dependency in 2007 (-25.4 %). The United Kingdom, which was the only EU-27 net exporter in 1997, has now become dependent on imported energy with an energy dependency of 20.1 %. Poland experienced the highest overall increase with its dependency rising from 6.4 % in 1997 to 25.5 % in 2007.

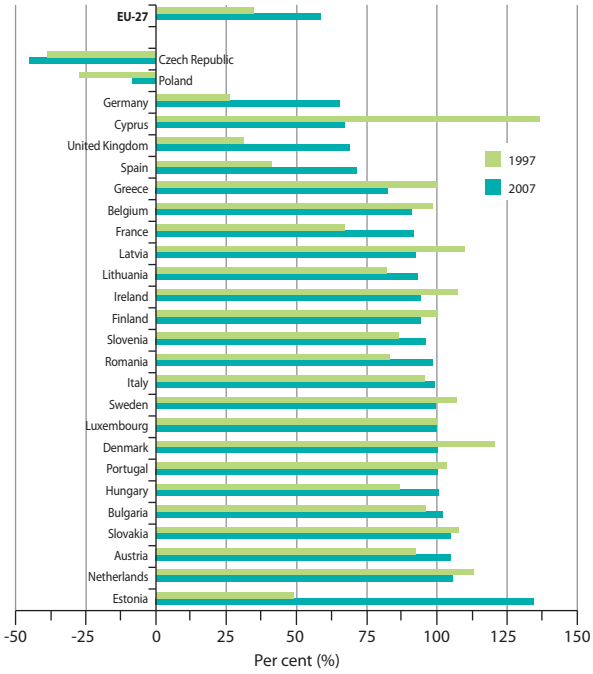
Energy dependency - hard coal and derivatives

Per cent (%)

	1997	2000	2004	2005	2006	2007
EU-27	**34.8**	**42.7**	**53.8**	**55.9**	**58.6**	**58.5**
Belgium	98.5	91.7	101.2	100.7	97.3	91.2
Bulgaria	96.0	101.2	106.9	95.3	92.2	102.1
Czech Republic	-38.5	-56.1	-41.3	-49.7	-45.2	-45.1
Denmark	120.7	94.8	101.5	94.3	93.5	100.4
Germany	26.4	39.3	57.7	58.4	64.0	65.4
Estonia	49.0	115.0	75.9	96.4	135.1	134.8
Ireland	107.6	91.8	100.8	102.4	99.8	94.4
Greece	100.0	105.8	102.1	112.4	80.6	82.8
Spain	41.2	65.8	72.5	73.9	82.4	71.4
France	67.6	87.5	94.5	92.9	105.9	91.9
Italy	95.8	105.2	101.5	99.6	99.4	99.4
Cyprus	136.8	102.0	68.4	121.2	116.7	67.3
Latvia	110.1	82.5	96.9	96.7	123.1	92.6
Lithuania	82.4	100.0	100.4	102.5	98.7	93.4
Luxembourg	100.0	100.0	100.0	100.0	100.0	100.0
Hungary	87.0	99.2	100.0	103.6	94.5	100.8
Malta	-	-	-	-	-	-
Netherlands	113.2	101.9	98.4	100.3	102.8	105.6
Austria	92.7	91.6	102.2	106.8	97.1	105.1
Poland	-27.2	-29.9	-24.9	-21.0	-16.1	-8.5
Portugal	103.7	103.4	95.2	96.3	105.7	100.6
Romania	83.4	95.8	100.8	101.6	98.2	98.4
Slovenia	86.4	100.7	98.0	93.6	100.5	96.2
Slovakia	107.9	104.6	100.7	105.1	91.2	105.0
Finland	100.5	97.6	102.5	102.6	88.0	94.5
Sweden	107.3	108.3	96.0	104.3	94.2	99.6
United Kingdom	31.4	39.7	58.5	71.4	75.5	69.0
Iceland	100.0	100.0	100.0	100.0	100.0	:
Norway	68.0	33.3	-216.1	-125.7	-272.8	-407.2
Switzerland	59.3	137.4	92.7	50.8	90.4	129.5
Croatia	43.9	112.1	110.0	90.6	109.7	101.8
Turkey	83.0	87.0	86.9	88.9	88.4	91.5

Data source: Eurostat

Energy dependency - hard coal and derivatives



Per cent (%)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	34.8	36.3	38.4	42.7	47.2	47.3	49.0	53.8	55.9	58.6	58.5

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 dependency on imported hard coal exhibited a 68 % increase during the period 1997-2007, reaching 58.5 % in 2007.

Among the EU-27 Member States, the highest increases in hard coal dependency were experienced by Estonia (from 49 % in 1997 to 134.8 % in 2007), Germany (from 26.4 % in 1997 to 65.4 % in 2007) and the United Kingdom (from 31.4 % in 1997 to 69 % in 2007). The Czech Republic and Poland were the only net exporters of hard coal. Both countries presented fluctuations in their exporting activity between 1997 and 2007. Poland registered a steady decreasing trend in hard coal exports since 2004. By 2007 the negative dependency of Poland reached - 8.5 %, a threefold decrease compared to 2004.

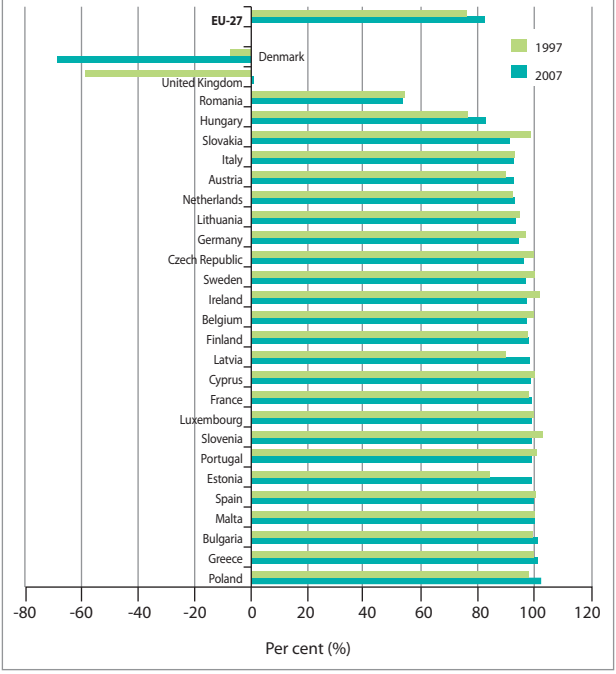
Energy dependency - oil

Per cent (%)

	1997	2000	2004	2005	2006	2007
EU-27	**75.8**	**75.9**	**80.0**	**82.5**	**83.7**	**82.6**
Belgium	99.6	100.2	99.8	100.8	100.8	97.4
Bulgaria	99.4	96.2	98.4	102.5	99.1	100.8
Czech Republic	99.6	94.5	93.3	97.5	96.6	96.2
Denmark	-7.1	-80.9	-116.3	-104.4	-88.5	-67.9
Germany	96.6	94.5	95.0	97.2	95.5	94.3
Estonia	84.3	90.0	88.9	87.7	94.9	99.0
Ireland	101.6	98.8	93.4	99.7	101.5	97.0
Greece	99.6	100.2	104.8	97.7	101.3	100.9
Spain	100.2	101.0	99.4	101.2	100.8	99.7
France	98.0	98.9	98.3	99.6	98.7	98.7
Italy	92.7	96.6	93.3	91.8	92.5	92.5
Cyprus	100.0	100.5	98.8	102.3	104.2	98.6
Latvia	89.5	94.4	100.3	102.2	102.4	98.1
Lithuania	94.7	100.8	94.3	92.8	97.7	93.3
Luxembourg	99.6	102.2	99.6	99.4	101.0	98.8
Hungary	76.5	77.5	75.1	77.9	78.0	82.7
Malta	100.0	100.4	100.0	100.0	100.0	100.0
Netherlands	92.4	99.7	95.5	97.1	95.7	92.8
Austria	89.5	89.5	93.6	92.7	95.5	92.6
Poland	97.9	96.9	94.0	96.1	98.1	102.2
Portugal	100.5	99.1	97.8	102.3	98.1	98.9
Romania	54.3	34.9	46.8	38.5	44.0	53.7
Slovenia	102.9	101.5	101.5	101.1	97.8	98.9
Slovakia	98.6	89.4	95.1	88.3	94.6	91.3
Finland	97.5	106.9	96.0	98.8	100.4	97.8
Sweden	100.1	99.6	98.4	103.8	99.4	96.7
United Kingdom	-58.3	-54.5	-16.8	-2.8	8.9	0.9
Iceland	98.4	104.3	103.3	102.0	97.4	:
Norway	-1 598.2	-1 468.9	-1 294.7	-851.9	-1 473.0	-1 056.7
Switzerland	98.7	96.3	100.2	101.6	100.4	97.4
Croatia	57.3	61.5	77.8	79.6	76.9	81.9
Turkey	88.5	93.3	93.1	90.8	94.0	96.4

Data source: Eurostat

Energy dependency - oil



Per cent (%)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	75.8	77.0	73.0	75.9	77.4	76.1	78.5	80.0	82.5	83.7	82.6

Data source: Eurostat

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

In 2007, EU-27 dependency on oil imports reached 82.6 %, a 9 % increase compared to 1997. Twenty three of the EU-27 Member States were over 90 % dependent on imported oil. Denmark remained a net oil exporter over the past decade with a ninefold increase in oil exports in 2007 compared to 1997. On the contrary, the United Kingdom experienced a drop in oil exports to become an oil importer in 2006, with 0.9 % dependency in 2007.

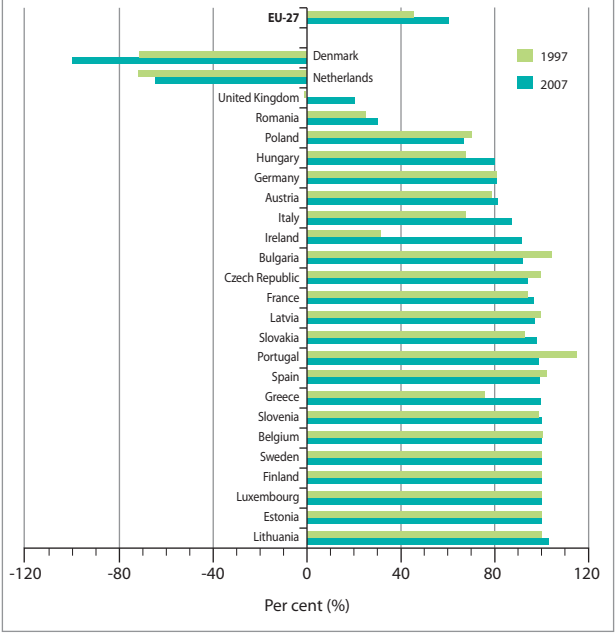
Energy dependency - natural gas

Per cent (%)

	1997	2000	2004	2005	2006	2007
EU-27	**45.2**	**48.9**	**54.0**	**57.7**	**60.8**	**60.3**
Belgium	100.1	99.3	99.9	100.5	100.2	99.8
Bulgaria	104.1	93.5	95.8	87.7	89.9	91.5
Czech Republic	99.2	99.8	91.1	97.8	104.5	93.7
Denmark	-71.0	-64.8	-79.7	-113.9	-103.3	-99.7
Germany	80.8	79.1	83.7	81.3	83.6	80.6
Estonia	100.0	100.0	100.0	100.0	100.0	100.0
Ireland	31.2	72.1	81.2	86.7	89.8	91.4
Greece	75.6	99.1	97.5	99.1	99.1	99.6
Spain	102.1	101.6	97.8	101.4	101.3	98.9
France	93.7	100.0	96.3	99.1	99.6	96.5
Italy	67.3	81.1	83.8	84.7	91.2	87.0
Cyprus	-	-	-	-	-	-
Latvia	99.4	101.9	130.5	105.6	108.8	96.8
Lithuania	100.0	100.0	99.8	100.6	101.0	102.9
Luxembourg	100.0	100.0	100.0	100.0	100.0	100.0
Hungary	67.5	75.4	79.2	81.1	82.2	79.9
Malta	-	-	-	-	-	-
Netherlands	-71.5	-49.5	-67.7	-59.3	-61.6	-64.3
Austria	78.4	80.6	78.4	88.1	87.7	81.0
Poland	69.9	66.3	68.3	69.7	71.9	66.7
Portugal	114.5	100.3	100.0	103.8	100.6	98.7
Romania	25.3	19.8	29.5	30.1	33.2	29.8
Slovenia	98.7	99.3	99.5	99.6	99.6	99.7
Slovakia	92.5	98.8	102.9	97.2	96.6	97.9
Finland	100.0	100.0	100.0	100.0	100.0	100.0
Sweden	100.0	100.0	100.0	100.0	100.0	100.0
United Kingdom	-0.8	-10.7	1.7	7.0	11.8	20.3
Iceland	-	-	-	-	-	-
Norway	-945.9	-1 161.4	-1 287.2	-1 378.3	-1 554.5	-1 520.7
Switzerland	100.0	100.0	100.0	100.0	100.0	100.0
Croatia	38.0	41.0	23.5	23.6	8.0	9.2
Turkey	98.0	95.4	96.9	97.1	96.9	97.8

Data source: Eurostat

Energy dependency - natural gas



Per cent (%)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	45.2	45.7	47.9	48.9	47.3	51.2	52.5	54.0	57.7	60.8	60.3

Data source: Eurostat

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

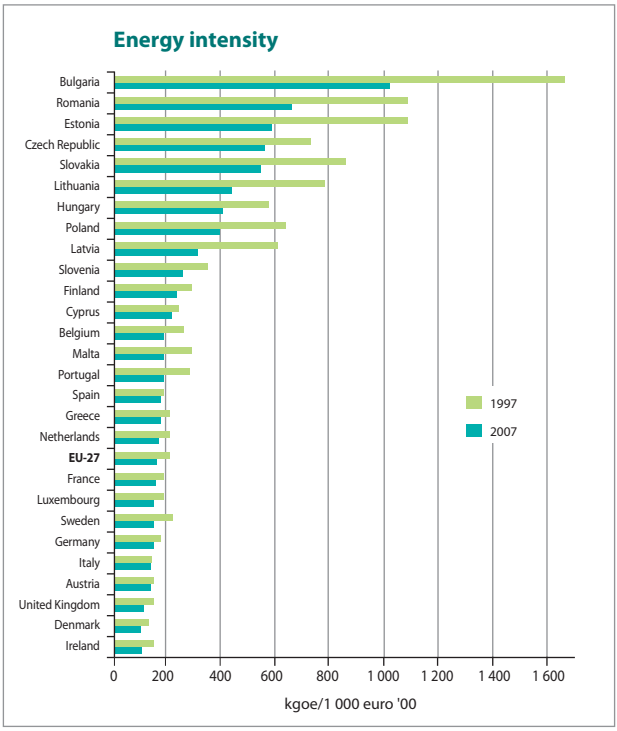
EU-27 natural gas dependency rate showed a 33 % increase between 1997 and 2007, reaching 60.3 % in 2007. Denmark and the Netherlands were the only net exporters with negative dependency rates -99.7 % and -64.3 % respectively. Romania and the United Kingdom were the only Member States with dependency rates under 30 %. From 1997 to 2003, the United Kingdom was a net exporter of natural gas, a trend that changed since 2004. Over the last ten years Ireland recorded the highest increase in natural gas dependency growing from 31.2 % in 1997 to 91.4 % in 2007.

Energy intensity

	(kgoe/1 000 euro '00)			Index (2000=100)		
	1997	**2002**	**2007**	**1997**	**2002**	**2007**
EU-27	***204***	**185**	**169**	***109.0***	**98.7**	**90.4**
Belgium	256	227	199	104.8	92.9	81.4
Bulgaria	1 663	1 275	1 016	122.2	93.7	74.7
Czech Republic	725	655	553	110.0	99.3	83.9
Denmark	133	113	106	118.1	100.2	94.0
Germany	181	166	151	109.1	99.7	91.3
Estonia	1 084	701	581	132.4	85.6	70.9
Ireland	152	130	103	110.8	94.6	75.3
Greece	208	201	182	101.7	98.2	88.9
Spain	194	195	184	99.1	99.4	93.9
France	191	180	165	106.3	100.1	91.9
Italy	147	143	143	101.2	98.5	98.3
Cyprus	238	228	212	100.4	96.1	89.5
Latvia	604	411	307	136.9	93.3	69.5
Lithuania	792	612	432	138.6	107.1	75.7
Luxembourg	191	170	159	115.6	102.8	95.9
Hungary	569	460	401	118.4	95.6	83.3
Malta	*286*	195	198	*149.3*	101.7	103.6
Netherlands	207	187	177	112.0	101.4	96.1
Austria	154	148	141	109.7	105.7	100.3
Poland	632	469	400	129.2	95.9	81.8
Portugal	201	209	197	97.9	101.9	96.0
Romania	*1 083*	858	656	*117.6*	93.3	71.2
Slovenia	346	299	253	115.4	99.6	84.5
Slovakia	854	810	539	107.3	101.7	67.7
Finland	286	255	229	116.1	103.7	93.2
Sweden	214	185	156	119.1	103.0	87.1
United Kingdom	155	135	115	107.2	93.5	79.8
Iceland	309	346	:	90.0	100.6	:
Norway	145	129	129	101.4	89.9	90.1
Switzerland	102	96	87	107.3	100.8	91.4
Croatia	409	375	336	104.2	95.7	85.5
Turkey	261	260	251	97.6	97.1	93.7

GDP: chain-linked volumes, reference year 2000 (at 2000 exchange rates).

Data source: Eurostat



(kgoe/1 000 euro '00)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	*204*	*200*	*193*	187	188	185	187	185	182	176	169

Index (2000=100)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	*109*	*107*	*103*	100	100	99	100	99	97	94	90

Data source: Eurostat

From 1997 to 2007, EU-27 energy intensity fell by 17 percentage points with decreases in all Member States. The most significant decreases were observed among the new Member States.

Bulgaria had the most energy intensive economy in 2007 (1 016 kgoe/1 000 euro), followed by Romania (656 kgoe/1 000 euro). Both countries decreased their intensities by 39 % since 1997. Over the same period (1997-2007), seven other countries (Latvia, Estonia, Lithuania, Slovakia, Poland, Ireland and Malta) experienced a decrease in energy intensity of over 30 %.

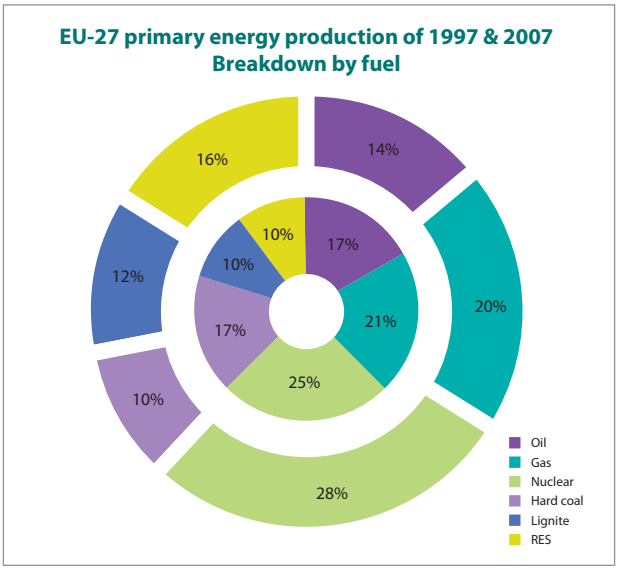
Primary energy production, by fuel

	(ktoe)			Year 2007, share of each fuel to total (%)					
	1997	2002	2007	Hard coal	Lignite	Oil	Gas	Nuclear	RES
EU-27	**962 384**	**932 067**	**849 592**	**10**	**12**	**14**	**20**	**28**	**16**
BE	12 590	12 984	13 713	-	-	-	-	91	9
BG	9 798	10 530	9 805	0	49	0	2	39	10
CZ	32 252	30 396	33 348	25	46	1	0	20	7
DK	20 203	28 505	26 987	-	-	58	31	-	12
DE	138 484	132 450	135 263	12	29	3	10	27	21
EE	3 795	3 505	4 464	-	82	2	-	-	17
IE	2 772	1 545	1 408	-	42	-	26	-	32
EL	9 925	10 539	12 172	-	85	1	0	-	14
ES	30 656	31 567	30 180	15	3	0	0	47	34
FR	127 857	133 475	134 021	-	-	1	1	85	14
IT	30 284	26 329	25 899	0	-	23	31	-	46
CY	42	45	65	-	-	-	-	-	100
LV	1 624	1 609	1 797	-	0	-	-	-	100
LT	3 879	4 812	3 521	-	0	4	-	72	23
LU	46	56	82	-	-	-	-	-	100
HU	12 782	11 132	10 174	-	17	12	20	37	14
MT	-	-	-	-	-	-	-	-	-
NL	65 744	60 425	60 992	-	-	4	90	2	4
AT	8 514	9 940	10 431	-	0	10	15	-	75
PL	99 083	79 056	71 632	70	17	1	5	-	7
PT	3 750	3 643	4 610	-	-	-	-	-	100
RO	31 629	28 008	27 619	0	25	17	33	7	17
SI	2 962	3 322	3 437	-	36	-	0	43	21
SK	4 572	6 485	5 622	-	10	0	2	70	17
FI	14 806	15 579	15 719	-	7	-	-	38	55
SE	32 005	31 225	33 068	-	0	-	-	52	47
UK	262 331	254 905	173 564	6	-	45	37	9	3
IS	1 682	2 462	:	:	:	:	:	:	:
NO	212 674	233 630	216 006	1	-	57	36	-	6
CH	10 501	11 213	12 243	-	-	-	-	59	41
HR	4 082	3 693	4 035	-	-	23	59	-	18
TR	28 020	24 648	27 279	5	49	8	3	-	35

(Mtoe)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	962	941	943	933	932	932	926	922	890	870	850

Data source: Eurostat



EU-27	1997	(Mtoe) 2007	Change 1997-2007
Total	**962**	**850**	**-12%**
Oil	168	115	-31%
Gas	201	167	-17%
Nuclear	236	241	2%
Hard coal	164	89	-46%
Lignite	101	98	-2%
RES	92	139	50%

Data source: Eurostat

Primary energy commodities can be divided into fossil fuels, nuclear energy and renewable energy sources (RES). RES include energy generated from solar, wind, biomass, geothermal, hydro and ocean resources.

Between 1997 and 2007, EU-27 primary energy production recorded a 12 % reduction. This was due to a decrease in the primary production of all fuels except for nuclear energy and RES. The primary production of solid fuels showed a substantial decrease in absolute terms (-29 % with -46 % for hard coal and -2 % for lignite), and in terms of share of the total (-5.5 %). On the contrary, the production of RES showed a significant increase (50 %) and in 2007 accounted for 16 % of the total EU-27 primary production. As in 1997, in 2007 nuclear heat was the most important primary energy resource (28 % share of the total EU-27 primary production), followed by natural gas (20 %).

The main energy producing Member State in 2007 was the United Kingdom with 174 Mtoe, in spite of a 34 % drop in its production. On a breakdown of primary energy production by fuel, in Poland, Greece, Estonia and the Czech Republic solid fuels represented over 70 % of primary energy production. In Belgium, France, Lithuania, Slovakia and Sweden nuclear was the most important energy source with a share of the total that exceeded 50 %.

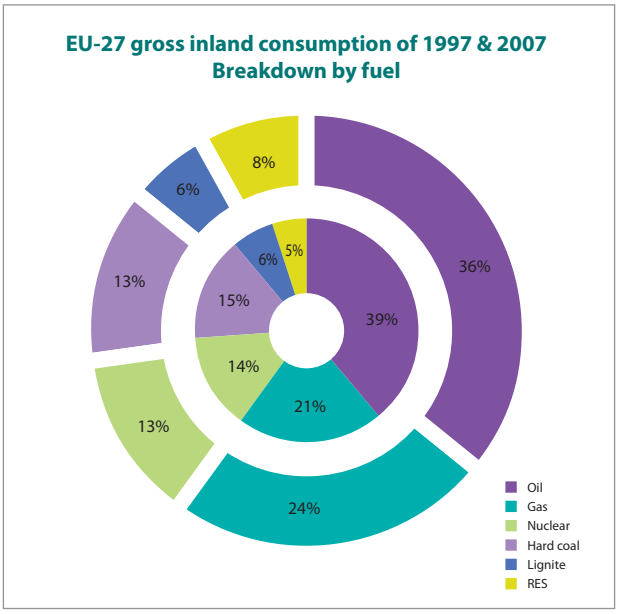
Gross inland consumption, by fuel

	(ktoe)			Year 2007, share of each fuel to total (%)					
	1997	2002	2007	Hard coal	Lignite	Oil	Gas	Nuclear	RES
EU-27	**1 704 473**	**1 757 803**	**1 806 378**	**13**	**6**	**36**	**24**	**13**	**8**
BE	59 027	58 441	57 377	8	0	39	26	22	3
BG	20 320	18 999	20 341	15	24	25	15	19	5
CZ	42 755	42 020	46 241	14	32	22	15	15	5
DK	21 264	19 785	20 516	23	-	41	20	-	17
DE	347 635	345 590	339 568	14	11	33	23	11	8
EE	5 742	4 970	6 071	1	60	19	13	-	10
IE	12 136	15 303	15 883	10	4	55	27	-	3
EL	25 688	29 856	33 488	1	31	51	10	-	5
ES	106 613	130 808	146 812	13	1	48	22	10	7
FR	248 294	267 344	270 272	5	0	34	14	42	7
IT	164 069	174 227	183 452	9	0	44	38	-	7
CY	2 073	2 437	2 726	1	0	96	-	-	2
LV	4 435	4 021	4 764	2	0	34	29	-	30
LT	8 877	8 639	9 151	3	0	30	32	28	9
LU	3 358	3 990	4 655	2	0	63	26	-	3
HU	25 777	25 929	27 020	5	6	28	40	14	5
MT	941	829	946	-	-	100	-	-	-
NL	76 335	79 719	84 542	10	0	44	40	1	4
AT	28 791	31 462	33 809	11	0	41	21	-	24
PL	102 540	89 418	97 982	44	12	26	13	-	5
PT	21 688	26 264	25 975	11	-	54	15	-	18
RO	45 447	38 494	40 083	9	17	26	32	5	12
SI	6 509	6 842	7 346	4	17	35	12	20	10
SK	17 789	19 324	18 074	18	4	21	28	22	5
FI	32 917	35 205	37 630	13	6	29	10	16	23
SE	50 315	51 055	50 564	5	1	28	2	34	31
UK	223 138	226 832	221 092	18	-	36	37	7	2
IS	2 521	3 388	:	:	:	:	:	:	:
NO	24 482	24 301	27 690	3	-	36	17	-	47
CH	25 766	26 484	26 901	0	0	44	10	27	19
HR	7 804	8 260	9 351	7	0	50	29	-	7
TR	71 199	75 465	101 510	16	13	32	30	-	9

(Mtoe)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	1 704	1 723	1 711	1 724	1 763	1 758	1 803	1 824	1 826	1 826	1 806

Data source: Eurostat



		(Mtoe)	Change
EU-27	**1997**	**2007**	**1997-2007**
Total	**1 704**	**1 806**	**6%**
Oil	663	657	-1%
Gas	359	432	20%
Nuclear	236	241	2%
Hard coal	248	232	-7%
Lignite	101	99	-1%
RES	93	141	52%

Data source: Eurostat

In 2007, EU-27 gross inland consumption amounted to 1 806 Mtoe, a 6 % increase compared to 1997. Oil was the fuel with the highest contribution to total gross inland consumption (36 % share in 2007 compared to 39 % in 1997). From 1997 to 2007, oil consumption dropped by 1 %. Likewise, the consumption of solid fuels dropped both in absolute terms (-5 %) and in terms of share in the total (18.3 % in 2007 from 20.5 % in 1997). On the contrary, the share of natural gas increased from 21 % in 1997 to 24 % in 2007 with a 20 % growth in its consumption. RES recorded the highest increase (52 %), but their share of the total remained the lowest (8 %).

Over the last ten years, twenty-one Member States presented an increase in gross inland consumption. In eighteen Member States oil and natural gas accounted for over 50 % of gross inland consumption.

Imports of energy products, by country of origin

Imports of natural gas, by country of origin

(PJ)

	2000	2001	2002	2003	2004	2005	2006	2007
Russia	4 540	4 425	4 555	4 895	4 951	4 953	4 938	4 685
Norway	1 985	2 136	2 602	2 699	2 802	2 672	2 844	3 062
Algeria	2 203	1 957	2 132	2 159	2 042	2 257	2 132	1 944
Nigeria	172	216	218	336	410	436	564	588
Libya	33	33	26	30	48	209	321	384
Other countries	224	299	353	494	865	1 322	1 397	1 241
Total	9 157	9 067	9 885	10 614	11 118	11 849	12 196	11 904

Imports of crude oil, by country of origin

(Mt)

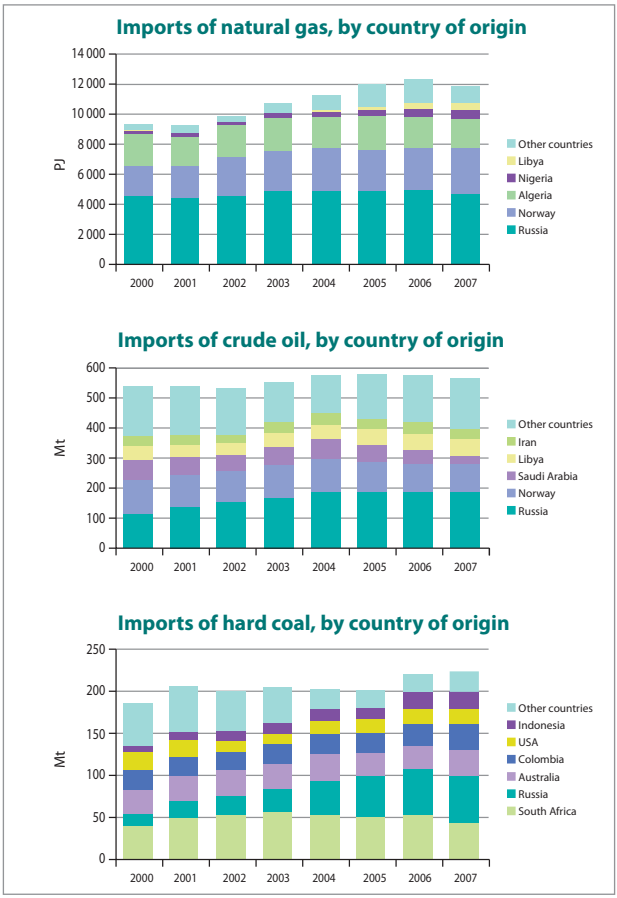
	2000	2001	2002	2003	2004	2005	2006	2007
Russia	112	137	155	171	189	188	190	185
Norway	116	108	103	106	109	97	89	84
Saudi Arabia	65	57	53	62	64	61	51	39
Libya	46	44	39	46	50	51	53	56
Iran	35	31	26	35	36	35	36	34
Other countries	168	164	158	134	127	148	154	167
Total	542	542	534	554	575	580	574	566

Imports of hard coal, by country of origin

(Mt)

	2000	2001	2002	2003	2004	2005	2006	2007
South Africa	40	49	54	57	54	52	53	46
Russia	15	21	23	27	40	48	56	56
Australia	29	29	29	31	31	27	27	29
Colombia	23	23	21	23	24	24	26	29
USA	20	20	14	13	15	16	17	21
Indonesia	9	10	12	13	14	15	21	18
Other countries	49	55	46	45	23	19	18	24
Total	186	208	199	208	203	201	218	223

Data source: Eurostat



EU-27 imports of natural gas grew by 30 % from 2000 to 2007. In 2007, 39 % of the imported natural gas came from Russia, 26 % from Norway and 16 % from Algeria.

Crude oil imports to the EU-27 increased by 4 % since 2000. In 2007, Russia and Norway were the main crude oil suppliers of the EU-27 and covered 33 % and 15 % of the total crude oil imports respectively. During the period 2000-2007, there was a significant decrease in crude oil imports from Saudi Arabia (-39 %) and Norway (-27 %), while the imports from Russia increased by 65 % and from Libya by 22 %.

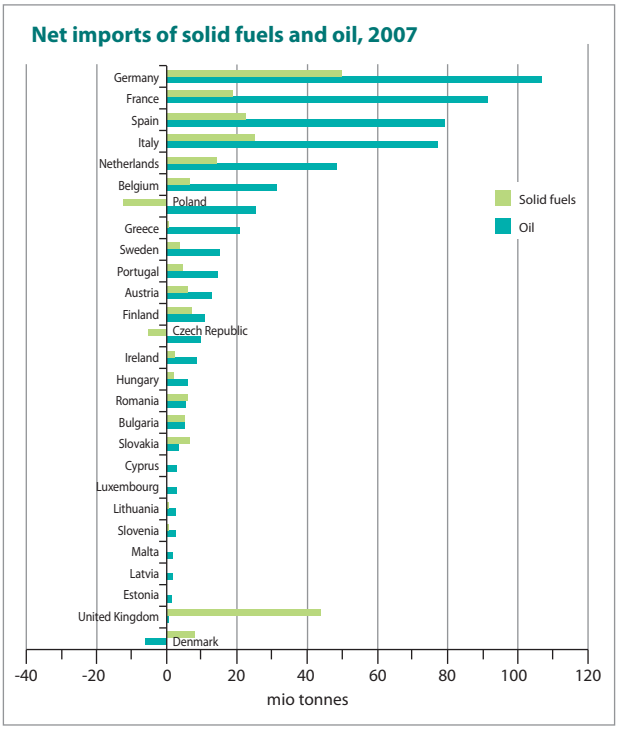
EU-27 imports of hard coal rose by 20 % between 2000 and 2007. In 2007, 25 % of imported hard coal came from Russia, an almost fourfold increase compared to 2000.

Net imports of solid fuels and oil

(thousand tonnes)

	Solid fuels			Oil		
	1997	2002	2007	1997	2002	2007
EU-27	**134 584**	**167 466**	**216 396**	**528 004**	**538 163**	**581 564**
Belgium	11 731	8 238	6 390	29 560	29 771	31 435
Bulgaria	3 868	3 969	5 113	4 607	4 471	5 158
Czech Republic	-10 079	-6 755	-5 372	7 949	7 908	9 505
Denmark	13 419	6 134	7 974	-612	-8 945	-6 135
Germany	24 274	38 501	49 766	133 597	121 329	106 683
Estonia	1 478	563	-26	1 118	991	1 371
Ireland	3 044	2 900	2 243	6 674	8 810	8 489
Greece	1 173	945	595	18 220	20 695	20 733
Spain	11 344	24 090	22 650	62 516	74 413	78 927
France	14 488	19 103	18 916	87 846	92 959	91 232
Italy	15 656	19 763	25 168	88 279	86 586	77 116
Cyprus	34	78	34	2 156	2 603	2 909
Latvia	230	112	143	1 592	1 330	1 733
Lithuania	222	237	385	3 233	1 972	2 636
Luxembourg	457	135	116	1 869	2 443	2 812
Hungary	2 231	1 430	1 968	5 460	4 706	6 145
Malta	-	-	-	1 030	1 604	1 832
Netherlands	16 281	13 131	14 197	36 286	40 119	48 272
Austria	4 698	5 202	6 067	11 081	12 335	12 629
Poland	-29 483	-24 117	-12 489	18 119	19 323	25 396
Portugal	5 692	5 686	4 770	14 573	16 204	14 510
Romania	5 292	4 238	6 020	7 374	3 630	5 536
Slovenia	395	628	690	2 672	2 369	2 571
Slovakia	7 554	5 349	6 456	3 579	3 273	3 443
Finland	7 437	6 232	7 186	10 306	10 084	11 015
Sweden	3 996	3 656	3 795	16 359	15 900	15 166
United Kingdom	19 152	28 018	43 641	-47 439	-38 720	445
Iceland	85	146	:	822	891	:
Norway	1 180	-1 026	-2 319	-147 317	-148 033	-109 480
Switzerland	113	158	334	12 676	12 482	11 137
Croatia	291	996	1 195	2 372	3 483	3 906
Turkey	10 651	12 387	23 387	26 605	28 167	31 215

Data source: Eurostat



(mio tonnes)

EU-27	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Solid fuels	135	137	135	155	172	167	183	198	197	212	216
Oil	528	548	514	528	551	538	559	574	594	602	582

Data source: Eurostat

EU-27 net imports of solid fuels grew by 61 % between 1997 and 2007. Germany and the United Kingdom, which were the top importers in 2007, were also the Member States with the highest - twofold - increase in net imports from 1997 to 2007. On the contrary, Estonia, Luxembourg, Greece, Belgium and Denmark imported significantly less in 2007 compared to 1997. In 2007, Poland, the Czech Republic and Estonia were the only EU-27 net exporters of solid fuels. Poland and the Czech Republic registered a significant decreasing trend in their exporting activity over the last ten years.

In 2007, the net imports of oil to the EU-27 were 582 million tonnes, a 10 % increase since 1997. The top five net importers (Germany, France, Spain, Italy and Netherlands) accounted for 69 % of EU-27 net oil imports. Denmark was the only EU-27 net exporter with a tenfold increase in its oil exports compared to 1997.

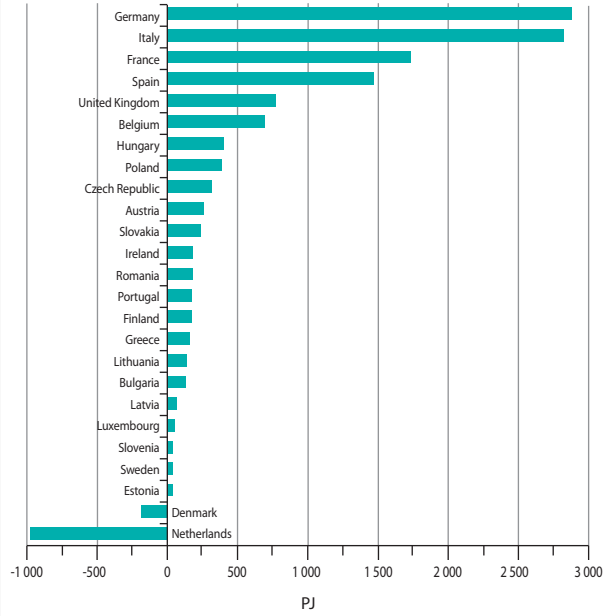
Net imports of natural gas

(PJ)

	1997	2000	2004	2005	2006	2007
EU-27	**7 559**	**8 957**	**10 946**	**11 973**	**12 396**	**12 120**
Belgium	525	618	677	689	699	693
Bulgaria	179	128	111	114	121	128
Czech Republic	354	348	330	351	368	312
Denmark	-130	-134	-172	-233	-218	-188
Germany	2 706	2 645	3 065	3 058	3 091	2 873
Estonia	29	31	36	37	38	37
Ireland	40	115	138	140	168	182
Greece	6	79	101	108	127	155
Spain	537	720	1 145	1 407	1 472	1 466
France	1 365	1 664	1 799	1 894	1 836	1 727
Italy	1 488	2 187	2 572	2 784	2 935	2 815
Cyprus	-	-	-	-	-	-
Latvia	49	52	81	67	71	61
Lithuania	93	96	109	116	115	138
Luxembourg	29	31	56	55	57	56
Hungary	305	339	432	456	438	398
Malta	-	-	-	-	-	-
Netherlands	-1 174	-800	-1 156	-974	-983	-998
Austria	239	244	272	335	304	263
Poland	306	307	378	397	414	384
Portugal	5	95	154	181	170	175
Romania	188	126	191	195	223	180
Slovenia	36	38	42	43	42	42
Slovakia	240	265	293	268	242	232
Finland	135	159	184	167	180	173
Sweden	37	36	41	39	41	42
United Kingdom	-27	-433	68	278	444	774
Iceland	-	-	-	-	-	-
Norway	-1 726	-1 962	-3 040	-3 309	-3 427	-3 408
Switzerland	107	113	126	129	126	123
Croatia	40	42	27	26	9	12
Turkey	380	561	843	1 030	1 171	1 385

Data source: Eurostat

Net imports of natural gas, 2007



(PJ)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	7559	7874	8521	8957	8895	9661	10398	10946	11973	12396	12120

Data source: Eurostat

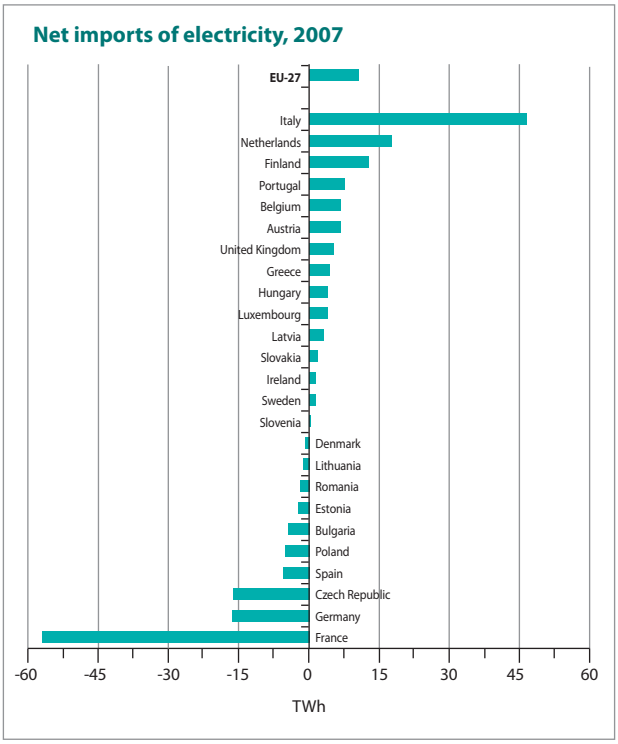
Over the past decade, EU-27 net imports of natural gas increased by 60 %. Germany, Italy, France, Spain and the United Kingdom accounted for 80 % of total EU-27 natural gas imports in 2007. From 1997 to 2007, Italy registered an almost twofold increase in its natural gas imports and Spain an almost threefold increase. The most significant increases over this period were observed in Portugal and Greece, as they were rather new in the market. The Netherlands and Denmark were the only net exporters of natural gas in 2007. The United Kingdom, a net exporter from 1997 to 2003, became a natural gas importer in 2004.

Net imports of electricity

(GWh)

	1997	2000	2004	2005	2006	2007
EU-27	**2 939**	**19 614**	**-7 349**	**11 310**	**3 478**	**10 489**
Belgium	3 270	4 326	7 777	6 304	10 157	6 779
Bulgaria	-3 550	-4 620	-5 879	-7 581	-7 743	-4 475
Czech Republic	-1 188	-10 017	-15 717	-12 634	-12 631	-16 153
Denmark	-7 252	665	-2 872	1 369	-6 935	-950
Germany	-2 349	3 057	-2 621	-4 566	-16 977	-16 555
Estonia	-974	-929	-1 794	-1 608	-750	-2 420
Ireland	-12	98	1 574	2 044	1 778	1 330
Greece	2 294	-11	2 820	3 780	4 202	4 355
Spain	-3 073	4 441	-3 028	-1 343	-3 280	-5 751
France	-65 396	-69 479	-61 906	-60 328	-63 341	-56 813
Italy	38 832	44 347	45 635	49 155	44 985	46 283
Cyprus	-	-	-	-	-	-
Latvia	1 823	1 786	2 097	2 148	2 508	3 000
Lithuania	-3 525	-1 336	-7 195	-2 966	-428	-1 372
Luxembourg	5 186	5 722	3 374	3 261	3 557	3 960
Hungary	2 149	3 440	7 468	6 227	7 207	3 986
Malta	-	-	-	-	-	-
Netherlands	12 632	18 915	16 217	18 293	21 459	17 574
Austria	-768	-1 368	3 081	2 665	6 850	6 619
Poland	-2 185	-6 373	-9 293	-11 186	-10 986	-5 348
Portugal	2 899	931	6 481	6 824	5 441	7 488
Romania	221	-696	-1 182	-2 903	-4 273	-2 090
Slovenia	-1 696	-1 321	-780	-324	51	229
Slovakia	4 082	-2 696	-1 862	-3 265	-2 331	1 725
Finland	7 653	11 880	4 870	17 015	11 401	12 557
Sweden	-2 708	4 678	-2 104	-7 392	6 040	1 316
United Kingdom	16 574	14 174	7 490	8 321	7 517	5 215
Iceland	-	-	-	-	-	-
Norway	3 818	-19 055	11 455	-12 042	854	-10 035
Switzerland	-6 754	-7 070	-703	6 350	2 703	-2 062
Croatia	3 948	4 000	3 665	5 112	5 622	6 361
Turkey	2 221	3 354	-681	-1 162	-1 663	-1 558

Data source: Eurostat



(TWh)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	**2.9**	**-0.9**	**11.2**	**19.6**	**4.8**	**12.5**	**-1.7**	**-7.3**	**11.3**	**3.5**	**10.5**
Top-5 exporters	-74.7	-67.8	-72.3	-87.4	-87.9	-91.8	-100.0	-95.4	-96.3	-111.7	-99.3
Top-5 importers	79.0	75.7	86.7	93.6	95.1	94.9	81.4	82.0	99.1	95.5	88.4

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, Germany, Poland and Bulgaria. Top 5 Importing countries are Italy, Netherlands, Finland, Belgium and the United Kingdom.

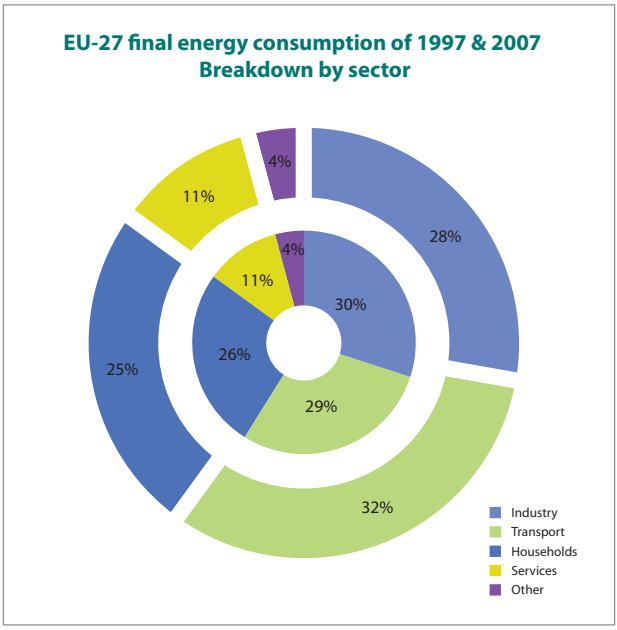
In the last ten years EU-27 net imports of electricity presented significant fluctuations and large differences can be noted amongst the Member States. In 2007 net imports of electricity in the EU-27 amounted to 10.5 TWh, an almost fourfold increase since 1997. Among EU-27 Member States, France has traditionally been the largest net electricity exporter, while Italy was the largest net importer.

Final energy consumption, by sector

(Mtoe)

	Total		Industry		Transport		Households		Services	
	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007
EU-27	**1 104**	**1 158**	**330**	**323**	**318**	**377**	**292**	**285**	**118**	**130**
BE	38.36	34.87	14.43	12.34	9.23	9.59	9.89	8.12	3.75	3.92
BG	9.28	9.78	4.54	3.86	1.67	2.69	2.18	2.07	0.14	0.90
CZ	25.45	25.76	12.19	9.55	3.84	6.63	6.07	5.91	2.33	2.94
DK	15.04	15.71	3.06	2.91	4.63	5.56	4.39	4.46	1.96	1.93
DE	225.26	210.29	58.27	57.37	63.94	62.39	67.50	60.32	25.16	21.70
EE	2.85	3.03	0.76	0.72	0.56	0.86	1.20	0.96	0.25	0.40
IE	8.59	13.21	1.95	2.57	2.85	5.74	2.21	2.91	1.29	1.69
EL	17.31	21.96	4.36	4.59	6.74	8.81	4.06	5.33	1.09	2.13
ES	68.17	98.70	21.73	26.70	28.11	42.10	10.74	15.94	5.25	9.20
FR	147.58	154.04	37.29	33.71	47.30	51.49	38.58	41.48	21.00	21.12
IT	115.65	132.06	36.90	41.48	38.78	44.56	26.58	27.91	9.77	14.48
CY	1.47	1.90	0.40	0.34	0.77	0.95	0.19	0.30	0.09	0.18
LV	3.70	4.36	0.73	0.72	0.70	1.33	1.54	1.47	0.58	0.68
LT	4.52	4.96	1.00	1.06	1.26	1.79	1.50	1.35	0.59	0.64
LU	3.24	4.38	1.03	0.96	1.47	2.62	0.61	0.66	0.09	0.11
HU	15.59	16.95	3.68	3.38	2.79	4.67	5.49	5.55	2.81	2.79
MT	0.56	0.43	0.04	0.05	0.40	0.24	0.07	0.08	0.04	0.06
NL	49.53	51.33	13.19	14.57	13.53	15.78	10.75	9.24	7.60	7.60
AT	22.34	26.54	6.79	8.52	6.08	8.83	6.23	6.12	2.67	2.45
PL	65.46	61.24	23.97	17.96	9.66	14.80	22.09	18.19	4.48	6.79
PT	15.29	18.81	5.61	5.89	5.28	7.21	2.67	3.22	1.07	2.23
RO	28.74	24.02	12.93	9.13	4.15	4.66	9.65	7.51	0.47	2.02
SI	4.50	4.87	1.23	1.60	1.57	1.75	1.07	1.05	0.63	0.13
SK	10.69	10.50	4.16	4.39	1.48	2.02	2.35	2.08	2.39	1.87
FI	23.55	26.58	11.08	12.93	4.30	5.15	5.22	5.01	1.45	1.81
SE	34.03	33.45	12.96	12.83	7.71	8.80	7.92	6.73	4.56	4.33
UK	147.53	147.93	36.10	32.74	49.63	56.21	41.43	40.58	16.89	15.89
IS	1.79	:	0.51	:	0.29	:	0.55	:	0.08	:
NO	17.50	18.84	6.05	6.33	4.60	5.43	3.89	3.88	2.22	2.11
CH	19.62	21.14	3.58	4.09	6.59	7.28	5.56	5.62	3.32	3.68
HR	5.14	6.46	1.45	1.65	1.40	2.17	1.63	1.72	0.46	0.66
TR	50.30	72.83	17.19	24.86	11.91	16.95	16.90	20.73	1.52	6.42

Data source: Eurostat



(Mtoe)

EU-27	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total	**1 104**	**1 111**	**1 109**	**1 114**	**1 140**	**1 127**	**1 160**	**1 173**	**1 172**	**1 176**	**1 158**
Industry	330	323	317	328	330	326	332	332	326	320	323
Transport	318	330	338	340	344	347	352	361	363	371	377
Households	292	292	289	287	300	293	305	306	307	305	285
Services	118	121	122	117	124	121	129	131	132	136	130
Other	45	44	43	42	42	41	42	42	44	44	43

Data source: Eurostat

From 1997 to 2007, final energy consumption in the EU-27 increased by 5 %. Over the same period, final energy consumption in transport and in services rose by 18 % and by 10 % respectively. The amount of energy consumed by industry, households and other sectors was comparable to 1997 figures.

On a breakdown of EU-27 final energy consumption by sector, in 2007 transport accounted for 32 %, followed by industry (28 %) and households (25 %). The situation was reversed compared to 1997, when the share of industry was higher (30 %) than the share of transport (29 %).

On a Member State level, the highest decreases in final energy consumption of industry were observed amongst the new Member States. On the contrary, all new Member States increased final energy consumption by the transport sector.

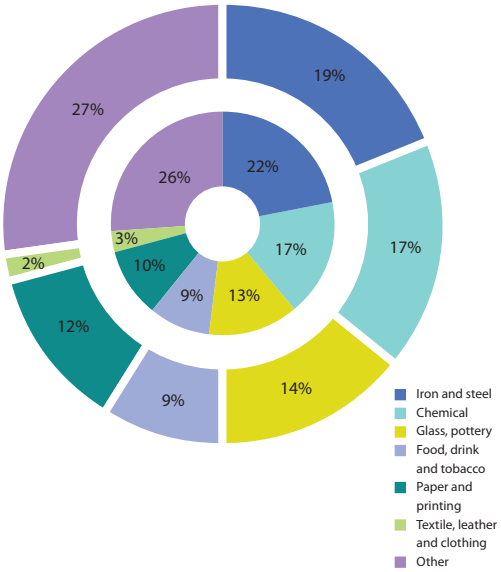
Final energy consumption, by industrial sector

(Mtoe)

	Total industry		Iron and steel		Chemical		Glass, pottery		Food, drink and tobacco		Paper and printing	
	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007
EU-27	**330**	**323**	**72**	**62**	**58**	**55**	**42**	**44**	**30**	**30**	**32**	**38**
BE	14.43	12.34	4.61	3.02	4.30	3.60	1.30	1.25	0.79	1.04	0.46	0.84
BG	4.54	3.86	1.21	0.88	1.43	0.97	0.81	0.78	0.19	0.28	0.07	0.17
CZ	12.19	9.55	3.47	2.85	0.87	1.49	1.30	1.26	0.75	0.70	0.39	0.67
DK	3.06	2.91	0.11	0.07	0.25	0.24	0.70	0.66	0.78	0.76	0.13	0.15
DE	58.27	57.37	14.80	14.68	11.40	8.61	7.56	5.82	4.43	4.50	4.36	4.73
EE	0.76	0.72	0.00	0.00	0.19	0.06	0.12	0.21	0.15	0.08	0.05	0.05
IE	1.95	2.57	0.05	0.00	0.33	0.35	0.27	0.54	0.47	0.53	0.03	0.06
EL	4.36	4.59	0.11	0.25	0.32	0.22	1.36	1.48	0.59	0.64	0.15	0.15
ES	21.73	26.70	3.75	3.87	3.30	4.65	5.00	7.06	1.97	2.34	1.52	2.25
FR	37.29	33.71	7.81	6.56	5.76	6.67	3.38	3.88	4.40	4.59	3.53	2.67
IT	36.90	41.48	7.27	6.86	6.72	6.45	6.99	8.34	2.84	3.46	2.57	3.85
CY	0.40	0.34	-	0.00	0.00	0.00	0.21	0.21	0.01	0.02	0.00	0.00
LV	0.73	0.72	0.13	0.14	0.09	0.02	0.08	0.13	0.19	0.12	0.01	0.01
LT	1.00	1.06	0.01	0.01	0.20	0.28	0.25	0.23	0.19	0.19	0.04	0.03
LU	1.03	0.96	0.51	0.21	0.05	0.06	0.13	0.05	0.01	0.02	-	-
HU	3.68	3.38	0.69	0.65	0.98	0.67	0.59	0.64	0.51	0.42	0.17	0.16
MT	0.04	0.05	-	-	-	-	-	-	-	-	-	-
NL	13.19	14.57	2.40	2.47	4.21	4.81	0.87	0.77	1.85	2.11	0.70	0.93
AT	6.79	8.52	1.85	2.00	0.68	0.90	0.84	0.95	0.44	0.52	1.39	1.52
PL	23.97	17.96	5.89	3.80	4.15	3.91	3.38	2.93	3.01	1.95	1.33	1.49
PT	5.61	5.89	0.26	0.21	0.67	0.68	1.61	1.84	0.50	0.55	1.22	1.19
RO	12.93	9.13	4.19	3.29	2.84	2.14	1.16	0.66	1.14	0.69	0.35	0.25
SI	1.23	1.60	0.15	0.14	0.15	0.20	0.21	0.26	0.09	0.08	0.11	0.21
SK	4.16	4.39	1.68	1.86	0.68	0.44	0.51	0.50	0.25	0.18	0.22	0.57
FI	11.08	12.93	1.67	1.63	1.17	1.05	0.40	0.42	0.41	0.36	4.88	7.52
SE	12.96	12.83	1.76	1.97	0.80	0.81	0.45	0.46	0.52	0.40	5.79	6.18
UK	36.10	32.74	7.80	4.74	6.26	5.25	2.60	2.39	3.73	3.39	2.19	2.18
IS	0.51	:	0.10	:	0.01	:	0.01	:	0.10	:	0.00	:
NO	6.05	6.33	1.16	0.84	0.83	1.00	0.36	0.36	0.38	0.37	1.09	0.94
CH	3.58	4.09	-	0.24	0.58	0.74	0.40	0.48	0.16	0.44	0.40	0.54
HR	1.45	1.65	0.08	0.04	0.26	0.28	0.35	0.53	0.25	0.25	0.08	0.09
TR	17.19	24.86	3.31	4.17	1.23	1.70	1.01	1.36	1.12	1.20	0.27	0.38

Data source: Eurostat

EU-27 final energy consumption of 1997 & 2007
Breakdown by industrial sector



(Mtoe)

EU-27	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total	**330**	**323**	**317**	**328**	**330**	**326**	**332**	**332**	**326**	**320**	**323**
Iron and steel	72	68	63	66	64	62	63	65	63	63	62
Chemical	58	55	56	57	60	58	60	60	59	55	55
Glass, pottery	42	42	42	44	44	42	44	44	44	43	44
Food, drink and tobacco	30	30	30	30	31	32	32	31	30	29	30
Paper and printing	32	32	32	35	34	35	36	35	35	36	38
Textile, leather and clothing	10	10	10	11	11	11	11	10	8	8	7
Other	86	87	83	84	87	86	86	87	88	86	88

Data source: Eurostat

Energy consumption of EU-27 industry fell by 2 % between 1997 and 2007. The textile industry showed a 30 % decrease in energy consumption, followed by iron and steel (-14 %) and the chemical industry (-6 %). On the contrary, energy consumption by the paper and printing industry increased by 19 %.

Over the last ten years, three sectors (iron and steel, chemical and glass, pottery) accounted for nearly half of the total EU-27 industrial energy consumption. The share of each sector of the total was relatively stable over this period.

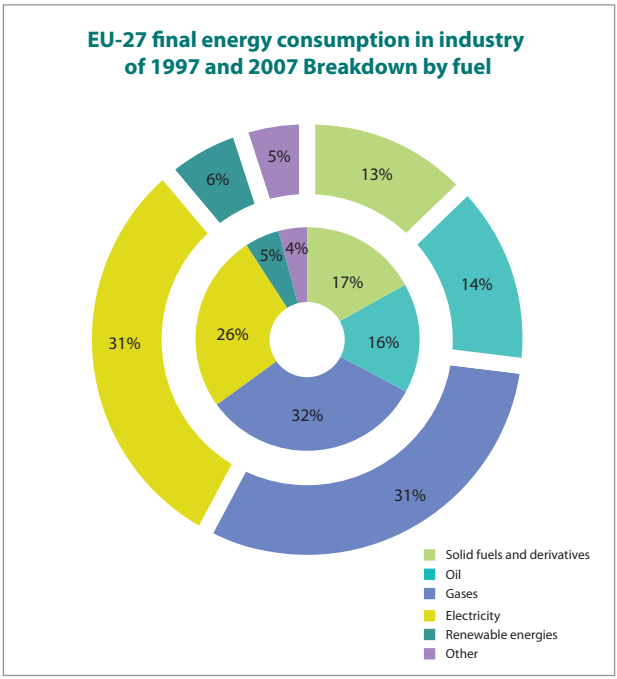
Member States recorded varying trends in their total industrial energy consumption, ranging from a 32 % increase in Ireland to a 29 % decrease in Romania.

Final energy consumption in industry, by fuel

(Mtoe)

	All products		Solid fuels		Oil products		Gases		Electricity		Renewable energies	
	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007
EU-27	**330**	**323**	**57**	**43**	**53**	**46**	**107**	**102**	**86**	**99**	**15**	**19**
BE	14.43	12.34	3.38	1.75	1.74	1.00	4.06	5.28	3.13	3.45	0.17	0.44
BG	4.54	3.86	0.78	0.74	0.44	0.82	1.92	0.99	1.01	0.88	0.03	0.05
CZ	12.19	9.55	3.37	2.77	1.05	0.47	3.75	3.00	1.59	2.08	0.31	0.41
DK	3.06	2.91	0.35	0.22	0.82	0.80	0.80	0.75	0.85	0.88	0.10	0.13
DE	58.27	57.37	10.63	8.95	7.27	4.16	20.83	20.90	17.74	20.87	0.33	1.44
EE	0.76	0.72	0.08	0.15	0.20	0.08	0.17	0.13	0.19	0.20	0.06	0.09
IE	1.95	2.57	0.09	0.14	0.84	0.90	0.38	0.65	0.57	0.73	0.07	0.15
EL	4.36	4.59	0.91	0.53	2.10	2.09	0.07	0.41	1.07	1.32	0.21	0.24
ES	21.73	26.70	1.80	1.60	6.13	5.56	6.46	9.45	5.92	8.50	1.27	1.59
FR	37.29	33.71	5.92	4.70	6.54	6.04	12.25	9.85	10.98	11.40	1.60	1.72
IT	36.90	41.48	3.77	3.66	6.53	6.49	15.74	15.70	10.62	12.57	0.15	0.17
CY	0.40	0.34	0.01	0.03	0.36	0.25	-	-	0.03	0.05	-	0.00
LV	0.73	0.72	0.01	0.05	0.27	0.10	0.21	0.28	0.13	0.16	0.06	0.12
LT	1.00	1.06	0.02	0.14	0.29	0.07	0.23	0.30	0.24	0.26	0.03	0.09
LU	1.03	0.96	0.24	0.08	0.10	0.08	0.42	0.40	0.27	0.38	-	-
HU	3.68	3.38	0.37	0.45	0.33	0.24	1.82	1.40	0.76	0.81	0.00	0.11
MT	0.04	0.05	-	-	-	-	-	-	0.04	0.05	-	-
NL	13.19	14.57	1.54	1.43	1.05	2.17	6.37	5.89	3.33	3.64	0.07	0.13
AT	6.79	8.52	1.23	1.27	0.96	0.72	2.29	2.64	1.59	2.38	0.50	0.92
PL	23.97	17.96	11.54	5.02	1.65	1.50	3.84	4.01	4.20	3.94	0.59	1.10
PT	5.61	5.89	0.49	0.17	2.54	1.41	0.07	1.03	1.20	1.55	1.24	1.40
RO	12.93	9.13	1.68	1.47	1.81	1.14	5.98	3.86	2.16	1.96	0.30	0.35
SI	1.23	1.60	0.07	0.08	0.15	0.18	0.50	0.55	0.42	0.64	0.06	0.08
SK	4.16	4.39	1.56	1.26	0.24	0.25	1.46	1.44	0.86	1.05	0.00	0.32
FI	11.08	12.93	1.02	0.90	1.05	1.52	1.69	1.17	3.39	4.02	3.19	3.33
SE	12.96	12.83	1.13	1.30	2.04	1.52	0.48	0.56	4.60	4.99	4.43	4.08
UK	36.10	32.74	5.11	4.05	6.43	6.50	15.03	11.22	9.01	10.12	0.52	0.17
IS	0.51	:	0.06	:	0.13	:	-	:	0.29	:	0.04	:
NO	6.05	6.33	0.94	0.68	0.67	0.70	0.03	0.23	3.94	4.27	0.45	0.43
CH	3.58	4.09	0.11	0.16	0.79	0.76	0.90	0.89	1.40	1.63	0.11	0.26
HR	1.45	1.65	0.08	0.15	0.42	0.51	0.53	0.56	0.26	0.34	0.08	0.06
TR	17.19	24.86	7.08	11.71	4.35	1.42	2.15	4.43	3.55	6.14	0.06	0.13

Data source: Eurostat



(Mtoe)

EU-27	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Change 1997-2007
Total	**330**	**323**	**317**	**328**	**330**	**326**	**332**	**332**	**326**	**320**	**323**	**-2%**
Solid fuels and derivatives	57	52	48	49	46	44	44	45	44	43	43	-25%
Oil	53	52	49	48	52	49	50	52	48	47	46	-13%
Gases	107	106	106	112	111	111	114	109	106	101	102	-5%
Electricity	86	87	88	92	94	94	95	97	98	97	99	15%
Renewable energies	15	16	15	16	15	16	16	17	17	18	19	22%
Other	12	12	11	12	12	12	13	13	13	14	15	18%

Data source: Eurostat

In 2007 gas accounted for nearly 1/3 of the total energy consumed by EU-27 industry. Electricity was next with a share that increased from 26 % in 1997 to 31 % in 2007.

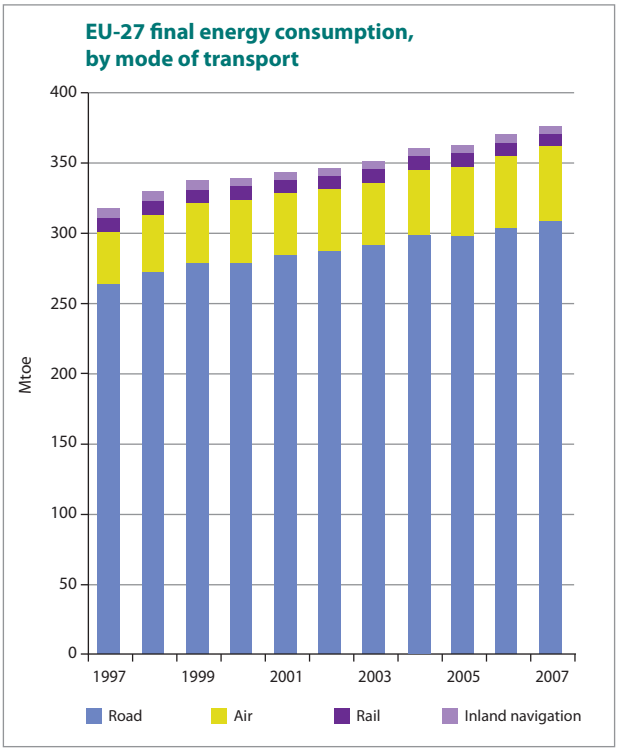
Over the last decade electricity consumption in EU-27 industry grew by 15 %. All but three Member States experienced an increase. Likewise, renewable energy consumption in EU-27 industry rose by 22 % from 1997 to 2007. On the contrary, the industrial consumption of solid fuels fell by 25 % over the same period. The situation was similar for oil products, which presented a 13 % decrease and for gas, which registered a 5 % decrease.

Final energy consumption, by mode of transport

(ktoe)

	Total transport		Road		Air		Rail		Inland navigation	
	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007
EU-27	**318 418**	**377 249**	**264 247**	**309 094**	**37 538**	**53 414**	**9 631**	**9 356**	**7 003**	**5 385**
Belgium	9 229	9 586	7 317	8 196	1 342	1 016	169	178	401	195
Bulgaria	1 671	2 690	1 353	2 409	206	223	103	58	9	-
Czech Republic	3 843	6 631	3 349	5 952	164	380	316	293	14	5
Denmark	4 625	5 562	3 614	4 390	730	961	119	104	162	107
Germany	63 944	62 385	54 980	51 344	6 423	9 061	2 137	1 811	405	170
Estonia	556	862	483	750	23	50	44	44	6	17
Ireland	2 846	5 742	2 296	4 645	434	1 022	82	48	33	27
Greece	6 740	8 810	4 930	6 779	1 187	1 312	58	59	565	660
Spain	28 112	42 096	22 034	33 680	3 649	5 870	717	1 091	1 711	1 455
France	47 297	51 492	40 045	42 655	5 154	7 266	1 355	1 265	742	306
Italy	38 777	44 559	34 748	39 141	2 720	4 228	859	959	450	231
Cyprus	772	952	520	658	252	295	-	-	-	-
Latvia	704	1 333	578	1 163	33	80	93	89	-	1
Lithuania	1 256	1 793	1 133	1 638	32	72	86	78	5	5
Luxembourg	1 471	2 619	1 209	2 175	251	434	12	10	-	-
Hungary	2 791	4 673	2 420	4 257	184	249	187	166	-	1
Malta	400	244	246	155	154	89	-	-	-	-
Netherlands	13 526	15 778	9 663	11 646	3 003	3 728	168	166	692	238
Austria	6 078	8 834	5 231	7 759	531	746	310	314	6	16
Poland	9 662	14 803	8 773	13 901	267	448	603	453	18	2
Portugal	5 285	7 213	4 553	6 115	604	1 002	83	67	45	28
Romania	4 147	4 664	3 207	4 075	126	203	478	304	335	83
Slovenia	1 566	1 754	1 520	1 692	20	33	26	29	-	-
Slovakia	1 484	2 021	1 361	1 922	36	49	87	50	-	-
Finland	4 302	5 145	3 614	4 137	463	686	98	98	128	224
Sweden	7 711	8 796	6 447	7 491	874	939	290	256	100	110
United Kingdom	49 625	56 210	38 625	40 371	8 674	12 972	1 151	1 365	1 175	1 502
Iceland	291	:	179	:	103	:	-	:	10	:
Norway	4 603	5 430	3 093	3 713	641	700	180	145	689	872
Switzerland	6 586	7 281	4 960	5 633	1 404	1 362	216	277	5	9
Croatia	1 399	2 173	1 230	1 976	84	104	48	59	37	35
Turkey	11 913	16 947	9 972	14 068	1 483	2 176	243	202	215	501

Data source: Eurostat



											(Mtoe)	Change
EU-27	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**1997-2007**
Total	**318**	**330**	**338**	**340**	**344**	**347**	**352**	**361**	**363**	**371**	**377**	**18%**
Road	264	273	279	279	285	289	292	299	299	304	309	17%
Air	38	41	43	46	44	44	45	47	50	52	53	42%
Rail	10	10	9	10	9	9	9	9	9	9	9	-3%
Inland navigation	7	7	6	6	5	5	6	5	5	6	5	-23%

Data source: Eurostat

EU-27 energy consumption in transport marked an 18 % increase over the past decade. This increase was mainly due to road transport and aviation. Between 1997 and 2007, the consumption of road transport grew by 17 %, reaching an 82 % share of total transport consumption in 2007, only 1 % lower than it was back in 1997. Energy consumption by aviation increased by 42 % and reached a share of 14 % in 2007. On the other hand, energy consumption by rail and inland navigation exhibited a relative decline of 3 % and 23 % respectively.

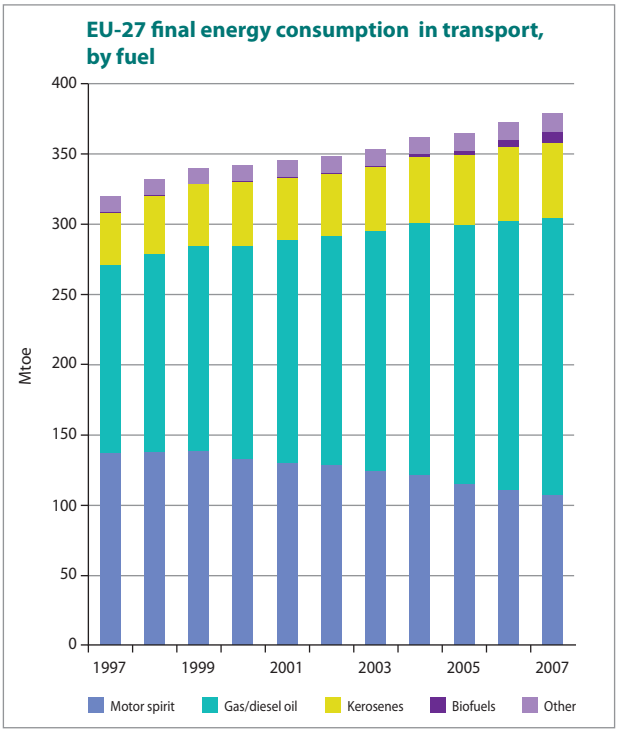
Between 1997 and 2007, all EU-27 Member States, except for Malta and Germany, recorded an increase in final energy consumption in transport. Ireland and Latvia exhibited the highest growths.

Final energy consumption in transport, by fuel

(ktoe)

	Total		Motor spirit		Kerosenes		Gas/diesel oil		Biofuels	
	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007
EU-27	**318 418**	**377 249**	**136 532**	**106 533**	**37 421**	**53 277**	**133 005**	**196 598**	**383**	**7 878**
Belgium	9 229	9 586	2 666	1 468	1 341	1 019	4 778	6 800	-	87
Bulgaria	1 671	2 690	641	627	205	223	686	1 386	-	2
Czech Republic	3 843	6 631	1 937	2 208	162	378	1 441	3 721	25	30
Denmark	4 625	5 562	2 030	1 881	727	959	1 816	2 647	-	6
Germany	63 944	62 385	31 557	21 671	6 404	9 046	24 387	26 036	80	3 994
Estonia	556	862	319	338	21	50	205	467	-	-
Ireland	2 846	5 742	1 236	1 915	433	1 019	1 146	2 756	-	21
Greece	6 740	8 810	3 137	4 317	1 187	1 312	2 045	2 713	-	85
Spain	28 112	42 096	9 437	7 020	3 639	5 858	14 347	28 150	-	386
France	47 297	51 492	15 373	9 783	5 130	7 243	25 468	31 731	272	1 473
Italy	38 777	44 559	18 235	12 412	2 710	4 212	15 209	25 423	-	141
Cyprus	772	952	201	370	252	295	319	287	-	1
Latvia	704	1 333	387	427	33	80	270	787	-	2
Lithuania	1 256	1 793	678	437	32	72	509	997	-	52
Luxembourg	1 471	2 619	566	453	251	434	646	1 684	-	36
Hungary	2 791	4 673	1 422	1 611	184	249	1 095	2 645	-	29
Malta	400	244	85	67	154	89	161	88	-	-
Netherlands	13 526	15 778	4 356	4 387	2 997	3 725	5 228	6 840	-	311
Austria	6 078	8 834	2 212	2 035	531	746	3 048	5 557	6	218
Poland	9 662	14 803	5 106	4 249	262	444	3 527	7 810	-	96
Portugal	5 285	7 213	2 050	1 638	602	1 000	2 594	4 363	-	133
Romania	4 147	4 664	1 506	1 549	131	182	2 089	2 736	-	40
Slovenia	1 566	1 754	961	648	18	32	573	1 044	-	13
Slovakia	1 484	2 021	651	644	36	49	710	1 169	-	89
Finland	4 302	5 145	2 019	1 958	460	676	1 737	2 392	-	1
Sweden	7 711	8 796	4 341	3 897	869	936	2 210	3 360	-	285
United Kingdom	49 625	56 210	23 422	18 521	8 650	12 950	16 763	23 009	-	346
Iceland	291	:	143	:	102	:	43	:	:	:
Norway	4 603	5 430	1 734	1 495	639	698	2 056	2 868	-	31
Switzerland	6 586	7 281	3 984	3 631	1 398	1 357	991	2 012	-	12
Croatia	1 399	2 173	695	745	84	103	580	1 241	-	3
Turkey	11 913	16 947	4 813	2 559	1 483	2 176	5 010	9 812	-	12

Data source: Eurostat



											(Mtoe)	Change
EU-27	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**1997-2007**
Total	**318**	**330**	**338**	**340**	**344**	**347**	**352**	**361**	**363**	**371**	**377**	**18%**
Motor spirit	137	137	138	132	129	128	124	121	114	110	107	-22%
Gas/diesel oil	133	141	146	152	158	163	170	179	184	191	197	48%
Kerosenes	37	41	43	45	44	44	45	47	50	52	53	42%
Biofuels	0	0	0	1	1	1	1	2	3	5	8	1957%
Other	11	11	11	11	11	12	12	12	12	13	13	17%

Data source: Eurostat

In 1997, the shares of motor spirit and gas/diesel oil in EU-27 transport consumption were comparable (43 % and 42 % respectively). However, over the last ten years there was a considerable change in the trend. Motor spirit consumption in transport decreased by 22 %, while gas/diesel oil consumption grew by 48 %, kerosenes consumption by 42 % and biofuel consumption showed a continuous increase with an average annual rate of about 41 %. As a result, in 2007 the consumption of gas/diesel oil rose to a 52 % share of the total, whereas the share of motor spirit fell to 28 %.

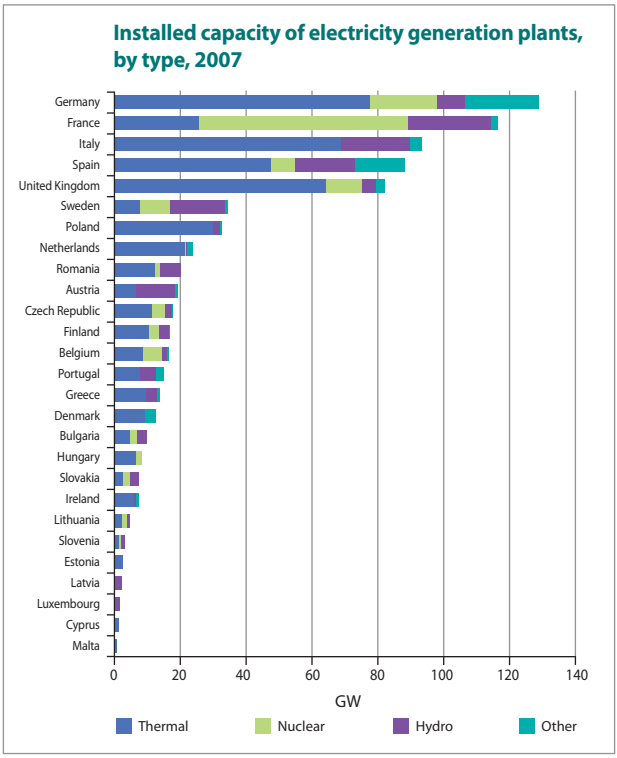
Eighteen Member States, including the five major fuel consumers in transport (Germany, the United Kingdom, France, Italy and Spain), exhibited a decrease in motor spirit consumption. Regarding gas/diesel oil, all Member States, except for Malta and Cyprus, increased their consumption over the past ten years.

Installed capacity of electricity generation plants, by type

(MW)

	Total		Thermal		Nuclear		Hydro		Other	
	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007
EU-27	***658 441***	**779 192**	**386 135**	**449 129**	**133 278**	**132 829**	**133 878**	**140 266**	***5 150***	**56 968**
Belgium	14 693	16 360	7 572	8 842	5 713	5 825	1 403	1 417	5	276
Bulgaria	2 359	9 700	-	4 902	-	1 892	2 359	2 876	-	30
Czech Republic	15 103	17 558	11 293	11 508	1 760	3 760	2 050	2 176	-	114
Denmark	11 815	12 608	10 675	9 475	-	-	10	9	1 130	3 124
Germany	113 983	128 780	80 862	77 738	22 314	20 208	8 841	8 587	1 966	22 247
Estonia	2 722	2 760	2 721	2 697	-	-	1	5	-	58
Ireland	4 297	7 287	3 720	5 905	-	-	525	527	52	855
Greece	9 574	13 677	6 818	9 681	-	-	2 727	3 150	29	846
Spain	48 587	88 246	24 191	47 412	7 250	7 365	16 691	18 372	455	15 097
France	113 907	116 284	25 931	25 672	62 875	63 260	25 089	25 132	12	2 220
Italy	70 252	93 198	49 657	68 708	-	-	19 946	21 117	649	3 373
Cyprus	699	1 139	699	1 139	-	-	-	-	-	-
Latvia	2 096	2 131	575	569	-	-	1 520	1 536	1	26
Lithuania	5 496	4 588	2 461	2 483	2 367	1 183	668	875	-	47
Luxembourg	1 277	1 638	135	463	-	-	1 139	1 140	3	35
Hungary	7 534	8 542	5 646	6 607	1 840	1 825	48	49	-	61
Malta	480	571	480	571	-	-	-	-	-	-
Netherlands	20 091	23 677	19 272	21 382	449	510	37	37	333	1 748
Austria	*17 861*	19 429	6 307	6 441	-	-	11 533	12 009	*21*	979
Poland	29 933	32 497	27 886	29 863	-	-	2 047	2 328	-	306
Portugal	9 468	14 970	4 993	7 692	-	-	4 438	5 052	37	2 226
Romania	22 843	20 203	16 062	12 458	707	1 411	6 074	6 331	-	3
Slovenia	2 495	3 035	1 097	1 351	664	666	734	1 018	-	-
Slovakia	7 863	7 324	3 704	2 609	1 760	2 200	2 399	2 515	-	-
Finland	15 697	16 698	10 274	10 815	2 550	2 671	2 861	3 102	12	110
Sweden	34 537	34 294	7 869	7 873	10 083	9 074	16 462	16 637	123	710
United Kingdom	72 779	81 998	55 235	64 273	12 946	10 979	4 276	4 269	322	2 477
Iceland	1 150	:	147	:	-	:	923	:	80	:
Norway	28 269	:	266	:	-	:	27 999	:	4	:
Switzerland	17 337	19 184	727	851	3 080	3 220	13 528	15 101	2	12
Croatia	3 582	3 906	1 503	1 814	-	-	2 079	2 075	-	17
Turkey	21 892	40 835	11 772	27 271	-	-	10 102	13 395	18	169

Data source: Eurostat



(GW)

EU-27	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total	***658***	***671***	***683***	**695**	**704**	**716**	**728**	**737**	**747**	**762**	**779**
Thermal	386	393	400	407	410	412	424	427	432	440	449
Nuclear	133	136	138	137	137	138	137	136	135	134	133
Hydro	134	134	136	137	139	142	137	138	139	140	140
Other	*5*	*7*	*10*	13	18	24	29	35	41	48	57

Data source: Eurostat

Between 1997 and 2007, EU-27 installed capacity of electricity generation plants increased by 18 %. The installed capacity of thermal power plants grew by 16 %, installed hydro capacity rose by 5 % and, with an elevenfold growth, the installed capacity of RES increased in all Member States.

In 2007, the majority of EU-27 total installed capacity was provided by thermal power plants (58 %), followed by hydro plants (18 %) and nuclear plants (17 %), while the capacity of RES reached a 7 % share in 2007 compared to 1 % in 1997.

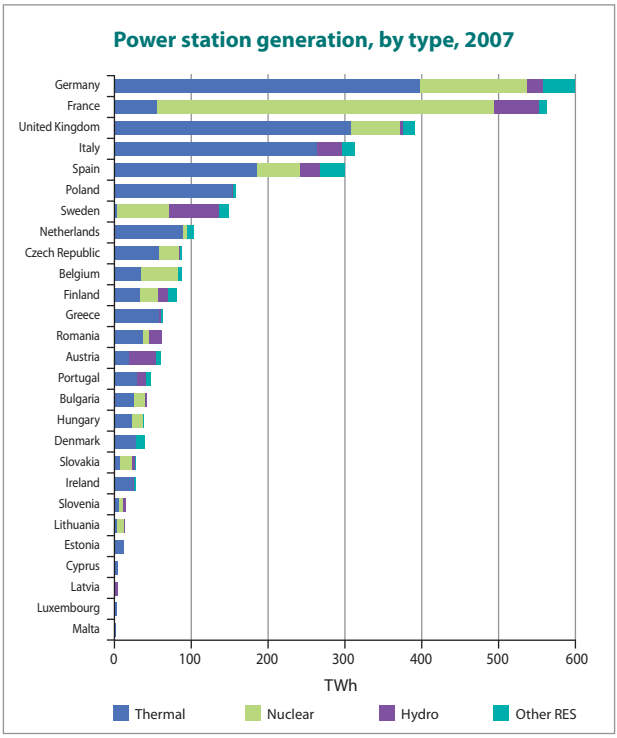
Amongst the Member States with the highest installed capacity (Germany, France, Italy, Spain and the United Kingdom), Spain presented a significant increase over the last ten years (82 %).

Power station generation, by type

(GWh)

	Total		Thermal		Nuclear		Hydro		Other RES	
	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007
EU-27	**2 823 162**	**3 337 433**	**1 512 923**	**1 876 578**	**937 346**	**935 277**	**332 400**	**309 972**	**40 493**	**215 606**
Belgium	77 920	87 532	29 650	35 312	47 408	48 227	305	389	557	3 604
Bulgaria	42 632	42 937	22 116	25 373	17 751	14 643	2 765	2 874	-	47
Czech Republic	64 217	87 766	49 530	58 175	12 494	26 172	1 699	2 089	494	1 330
Denmark	44 310	39 156	40 998	28 093	-	-	19	28	3 293	11 035
Germany	548 027	632 621	353 900	398 317	170 328	140 534	17 357	20 904	6 442	72 866
Estonia	9 218	12 190	9 207	12 042	-	-	3	21	8	127
Ireland	19 689	27 877	18 934	25 120	-	-	678	667	77	2 090
Greece	43 293	62 715	39 374	58 121	-	-	3 882	2 591	37	2 003
Spain	189 006	300 757	96 839	186 238	55 298	55 103	34 758	27 763	2 111	31 653
France	500 834	564 382	38 490	56 363	395 483	439 730	64 404	58 706	2 457	9 583
Italy	250 418	313 828	203 957	264 600	-	-	41 603	32 816	4 858	16 412
Cyprus	2 711	4 871	2 711	4 869	-	-	-	-	-	2
Latvia	4 505	4 771	1 551	1 942	-	-	2 953	2 733	1	96
Lithuania	14 387	13 470	2 068	3 056	12 024	9 833	295	421	-	160
Luxembourg	406	3 211	277	2 916	-	-	80	107	49	188
Hungary	35 396	39 959	21 127	23 259	13 968	14 677	216	210	85	1 813
Malta	1 686	2 296	1 686	2 296	-	-	-	-	-	-
Netherlands	86 659	103 277	80 773	89 931	2 408	4 200	92	107	3 386	9 039
Austria	55 687	60 958	17 793	19 093	-	-	36 105	35 993	1 789	5 872
Poland	140 935	158 761	138 374	153 331	-	-	1 961	2 352	600	3 078
Portugal	34 187	47 121	19 958	30 620	-	-	13 105	10 092	1 124	6 409
Romania	57 148	61 673	34 228	37 959	5 400	7 709	17 509	15 966	11	39
Slovenia	13 176	15 043	5 065	5 971	5 019	5 695	3 092	3 266	-	111
Slovakia	24 326	27 892	9 392	7 602	10 797	15 334	4 137	4 451	-	505
Finland	69 176	81 253	28 879	33 401	20 894	23 423	12 242	14 177	7 161	10 252
Sweden	149 321	148 821	7 342	3 684	69 928	66 969	69 013	66 160	3 038	12 008
United Kingdom	343 892	392 295	238 704	308 894	98 146	63 028	4 127	5 089	2 915	15 284
Iceland	5 961	:	379	:	-	:	5 207	:	375	:
Norway	110 493	136 353	442	1 087	-	-	109 775	133 934	276	1 332
Switzerland	62 005	66 490	1 381	1 193	25 409	27 925	34 043	35 250	1 172	2 122
Croatia	9 673	12 081	4 384	7 803	-	-	5 287	4 236	2	42
Turkey	103 379	191 714	63 186	155 257	-	-	39 816	35 851	377	606

Data source: Eurostat



(TWh)

EU-27 Total	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	2 823	2 889	2 916	2 997	3 083	3 089	3 189	3 260	3 280	3 326	3 337
Thermal	1 513	1 565	1 576	1 631	1 657	1 694	1 779	1 794	1 818	1 847	1 877
Nuclear	937	934	943	945	979	990	996	1 008	998	990	935
Hydro	332	343	341	353	373	315	306	324	307	309	310
Other RES	40	47	55	68	74	89	108	134	157	180	216

Data source: Eurostat

EU-27 total electricity generation registered an 18 % increase between 1997 and 2007. Within this period, electricity generation from thermal power plants grew by 24 %. In 2007, thermal power plants provided 1 877 TWh out of the total 3 337 TWh of generated electricity, a 56 % share. Electricity generation from nuclear plants accounted for a 28 % share of the total in 2007, while the contribution of RES was 6 %. RES recorded the highest – a fivefold – increase compared to 1997. On the other hand, for the same period, electricity generation from hydro power stations dropped by 7 %. As a result, the share of hydro of the total reached 9 % in 2007.

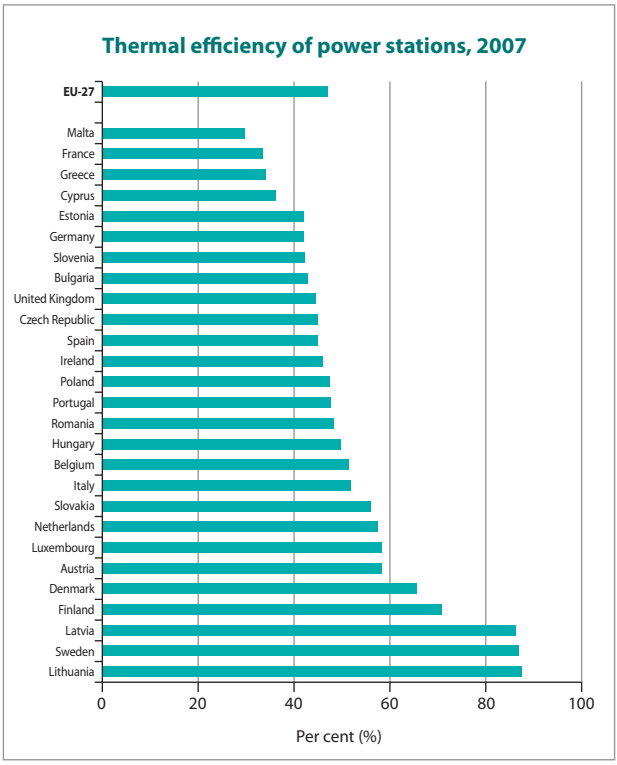
From 1997 to 2007, all Member States increased their electricity generation from RES with Germany generating 34 % of the EU-27 total RES electricity in 2007 and Spain following with 15 %. In the same year, France and Germany generated 62 % of EU-27 total nuclear electricity.

Thermal efficiency of power stations

Per cent (%)

	1997	2000	2004	2005	2006	2007
EU-27	**45.5**	**45.6**	**46.8**	**47.6**	**47.6**	**47.0**
Belgium	42.5	45.9	47.8	48.6	50.4	51.5
Bulgaria	39.6	41.5	42.1	41.7	42.1	43.0
Czech Republic	48.3	47.1	47.1	46.0	45.6	44.9
Denmark	59.5	64.6	68.3	71.2	64.9	65.7
Germany	45.5	44.1	42.4	44.1	43.8	42.1
Estonia	41.1	40.4	37.8	42.3	43.5	42.1
Ireland	38.6	40.6	43.6	42.1	42.7	46.0
Greece	33.5	36.5	37.9	37.2	38.2	34.0
Spain	39.7	41.3	44.3	46.7	45.3	44.9
France	39.1	34.8	35.5	34.4	33.6	33.5
Italy	40.1	40.5	48.9	49.1	50.5	51.8
Cyprus	32.6	32.8	36.1	35.0	36.4	36.2
Latvia	82.8	77.6	83.4	83.8	85.9	86.2
Lithuania	80.8	76.7	81.9	79.9	83.4	87.5
Luxembourg	41.0	68.5	58.6	58.8	59.2	58.4
Hungary	44.0	49.1	48.9	50.3	51.2	49.8
Malta	29.2	33.3	32.7	30.0	31.8	29.8
Netherlands	52.4	55.4	54.5	60.1	57.9	57.5
Austria	53.5	57.2	57.1	57.2	58.3	58.4
Poland	46.0	46.8	48.0	48.3	47.8	47.4
Portugal	40.6	44.2	46.0	46.7	47.2	47.7
Romania	57.8	54.4	49.9	51.8	50.2	48.3
Slovenia	40.7	43.7	43.4	44.2	43.9	42.3
Slovakia	42.8	46.0	55.0	54.2	53.8	55.9
Finland	68.8	73.3	68.0	76.6	68.8	70.9
Sweden	91.2	83.1	85.1	83.9	84.4	86.9
United Kingdom	41.5	44.0	43.3	43.1	43.5	44.5
Iceland	29.6	25.3	27.3	23.7	21.5	:
Norway	85.2	86.2	100.1	106.1	103.2	94.7
Switzerland	70.9	71.9	74.0	75.4	75.2	73.5
Croatia	50.8	49.9	50.6	50.8	50.2	47.8
Turkey	35.2	42.0	45.8	48.2	47.7	46.8

Data source: Eurostat



Per cent (%)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	45.5	45.8	45.7	45.6	45.7	45.3	45.3	46.8	47.6	47.6	47.0

Data source: Eurostat

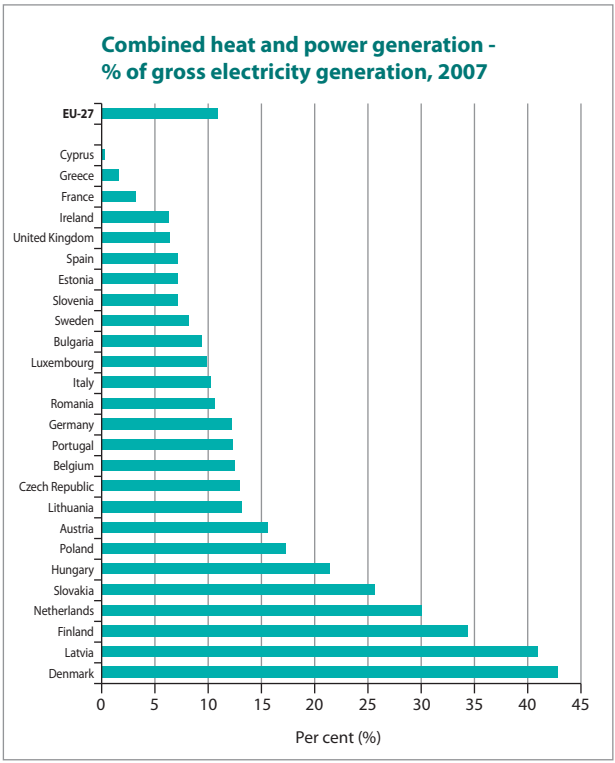
Thermal efficiency of power stations is the ratio between the output of electricity and heat and the fuel input. In 2007, EU-27 thermal efficiency of power plants amounted to 47 %, while in 1997 it was 45.5 %, an increase of 3.3 percentage points. Over the past decade, most Member States presented fluctuations in thermal efficiency, partly as a result of the diversification in the operation of thermal power stations. In 2007, Lithuania showed the highest thermal efficiency (87.5 %), followed by Sweden (86.9 %) and Latvia (86.2 %).

Combined heat and power generation -% of gross electricity generation

Per cent (%)

	2004	2005	2006	2007
EU-27	**10.5**	**11.1**	**10.9**	**10.9**
Belgium	8.4	8.5	8.7	12.5
Bulgaria	7.3	6.1	6.0	9.4
Czech Republic	16.4	16.8	15.1	13.0
Denmark	50.0	52.1	40.7	42.8
Germany	9.3	12.6	12.5	12.2
Estonia	9.9	10.2	10.7	7.1
Ireland	2.6	2.4	5.6	6.3
Greece	1.5	1.7	1.7	1.6
Spain	7.9	7.8	7.2	7.1
France	4.1	4.0	3.2	3.2
Italy	8.1	9.0	9.8	10.3
Cyprus	-	0.3	0.3	0.3
Latvia	32.0	30.7	42.6	40.9
Lithuania	11.6	15.5	14.3	13.2
Luxembourg	10.6	10.1	10.9	9.9
Hungary	18.2	19.1	22.4	21.4
Malta	-	-	-	-
Netherlands	29.5	29.4	29.9	30.1
Austria	15.2	15.4	16.1	15.6
Poland	17.0	16.8	16.0	17.3
Portugal	11.0	11.6	11.6	12.3
Romania	26.4	26.2	18.0	10.7
Slovenia	6.4	7.3	7.4	7.2
Slovakia	15.3	15.3	27.6	25.6
Finland	34.0	38.9	34.9	34.4
Sweden	8.1	6.7	8.0	8.2
United Kingdom	6.7	6.8	6.3	6.4
Iceland	:	:	14.4	14.4
Norway	:	:	0.1	0.1
Switzerland	:	:	:	:
Croatia	:	:	:	:
Turkey	4.0	4.4	4.4	4.6

Data source: Eurostat



Note: Combined heat and power (CHP) or cogeneration is a technology used to improve energy efficiency through the generation of heat and power in the same plant, generally using a gas turbine with heat recovery. Heat delivered from CHP plants may be used for process or space-heating purposes in any sector of economic activity including the residential sector. CHP thus reduces the need for additional fuel combustion for the generation of heat and avoids the associated environmental impacts, such as CO_2 emissions.

This indicator measures the penetration of combined heat and power (CHP) in electricity markets. In order to promote CHP generation and overcome obstructions, Community Directive 2004/8/EC was enacted. The Directive did not include targets but encouraged Member States to explore the potential for high efficiency cogeneration.

In 2007, 10.9 % of EU-27 gross electricity was generated by CHP plants. Large differences, however, were observed amongst Member States. The share of CHP generation ranged from 42.8 % and 40.9 % in Denmark and Latvia to 0.3 %, 1.6 % and 3.2 % in Cyprus, Greece and France respectively. Between 2004 and 2007, Ireland registered the largest increase in the share of CHP generation with 6.3 % in 2007 compared to 2.6 % in 1997. On the contrary, Romania presented the highest decrease in its share of CHP as it fell to 10.7 % in 2007 from 26.4 % in 1997.

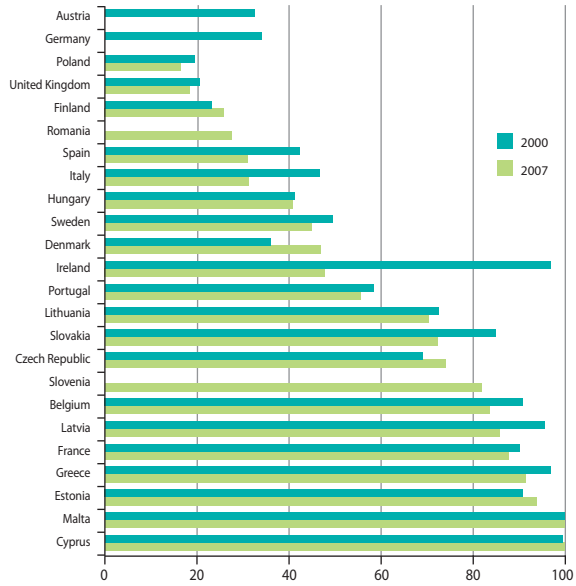
Market share of the largest generator in the electricity market

Per cent (%)

	2000	2004	2005	2006	2007
EU-27	**:**	**:**	**:**	**:**	**:**
Belgium	91.1	87.7	85.0	82.3	83.9
Bulgaria	:	:	:	:	:
Czech Republic	69.2	73.1	72.0	73.5	74.2
Denmark	36.0	36.0	33.0	54.0	47.0
Germany	34.0	28.4	:	*31.0*	:
Estonia	91.0	93.0	92.0	91.0	94.0
Ireland	97.0	83.0	71.0	51.1	48.0
Greece	97.0	97.0	97.0	94.6	91.6
Spain	42.4	36.0	35.0	31.0	31.0
France	90.2	90.2	89.1	88.7	88.0
Italy	46.7	43.4	38.6	34.6	31.3
Cyprus	99.6	100.0	100.0	100.0	100.0
Latvia	95.8	91.1	92.7	95.0	86.0
Lithuania	72.8	78.6	70.3	69.7	70.5
Luxembourg	:	80.9	:	:	:
Hungary	41.3	35.4	38.7	41.7	40.9
Malta	100.0	100.0	100.0	100.0	100.0
Netherlands	:	:	:	:	:
Austria	32.6	:	:	:	:
Poland	19.5	18.5	18.5	17.3	16.5
Portugal	58.5	55.8	53.9	54.5	55.6
Romania	:	31.7	36.4	31.1	27.5
Slovenia	:	53.0	50.1	51.4	82.0
Slovakia	85.1	83.7	83.6	70.0	72.4
Finland	23.3	26.0	23.0	26.0	26.0
Sweden	49.5	47.0	47.0	45.0	45.0
United Kingdom	20.6	20.1	20.5	22.2	18.5
Iceland	:	:	:	:	:
Norway	30.6	31.2	30.0	32.5	:
Switzerland	:	:	:	:	:
Croatia	:	86.0	87.0	83.0	84.0
Turkey	75.0	39.0	38.0	:	:

Data source: Eurostat

Market share of the largest generator in the electricity market



Note: The indicator shows the market share of the largest electricity generator in each country. To calculate this indicator, the total net electricity production during each reference year is taken into account. It means that the electricity used by generators for their own consumption is not taken into account. Then, the net production of each generator during the same year is considered in order to calculate the corresponding market shares. Only the largest market share is reported under this indicator.

In eleven Member States the market share of the largest electricity generator was over 70 % in 2007. In Cyprus and Malta one generator was responsible for all electricity production, while in Estonia and Greece the share of the largest generator was 94 % and 91.6 % respectively. The lowest shares were observed in Poland and the United Kingdom, where the largest generator accounted for 16.5 % and 18.5 % correspondingly.

Between 2002 and 2007, the most significant changes in the market share of the largest electricity generator were observed in Slovenia, where it grew from 53 % in 1997 to 82 % in 2007, while in Ireland it presented a steady decline from year to year and fell from 97 % in 1997 to 48 % in 2007.

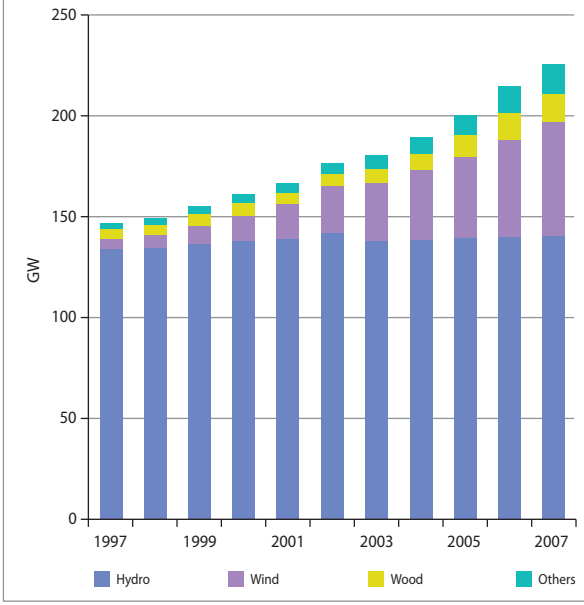
Installed capacity for electricity generation from renewables

(MW)

	Total		Hydro		Wind		Wood		Others	
	1997	2007	1997	2007	1997	2007	1997	2007	1997	2007
EU-27	***146 581***	**225 240**	**133 878**	**140 266**	**4 609**	**56 270**	**5 071**	**14 081**	***3 023***	**14 623**
Belgium	1 539	2 287	1 403	1 417	5	276	131	329	-	265
Bulgaria	2 359	2 906	2 359	2 876	-	30	-	-	-	-
Czech Republic	2 050	4 047	2 050	2 176	-	114	-	1 700	-	57
Denmark	1 412	3 761	10	9	1 130	3 124	71	333	201	295
Germany	12 252	39 011	8 841	8 587	1 966	22 247	647	1 400	798	6 777
Estonia	1	75	1	5	-	58	-	10	-	2
Ireland	589	1 409	525	527	52	855	-	-	12	27
Greece	2 804	4 044	2 727	3 150	27	846	48	-	2	48
Spain	17 374	34 857	16 691	18 372	455	15 097	127	396	101	992
France	25 713	28 503	25 089	25 132	12	2 220	340	297	272	854
Italy	20 886	27 933	19 946	21 117	120	2 702	90	1 936	730	2 178
Cyprus	-	-	-	-	-	-	-	-	-	-
Latvia	1 521	1 572	1 520	1 536	1	26	-	3	-	7
Lithuania	668	952	668	875	-	47	-	28	-	2
Luxembourg	1 152	1 215	1 139	1 140	3	35	-	-	10	40
Hungary	77	477	48	49	-	61	5	306	24	61
Malta	-	-	-	-	-	-	-	-	-	-
Netherlands	781	2 668	37	37	333	1 748	13	324	398	559
Austria	*12 177*	15 246	11 533	12 009	19	977	609	1 699	*16*	561
Poland	2 047	2 707	2 047	2 328	-	306	-	33	-	40
Portugal	4 687	7 700	4 438	5 052	29	2 201	210	290	10	157
Romania	6 377	6 335	6 074	6 331	-	3	303	-	-	1
Slovenia	734	1 031	734	1 018	-	-	-	6	-	7
Slovakia	2 399	2 658	2 399	2 515	-	-	-	134	-	9
Finland	3 975	4 974	2 861	3 102	12	110	1 100	1 757	2	5
Sweden	17 991	20 356	16 462	16 637	123	710	1 331	2 570	75	439
United Kingdom	5 016	8 516	4 276	4 269	322	2 477	46	530	372	1 240
Iceland	1 003	:	923	:	-	-	-	-	80	:
Norway	28 136	:	27 999	:	4	-	128	:	5	:
Switzerland	13 774	15 150	13 528	15 101	2	12	-	-	244	37
Croatia	2 079	2 092	2 079	2 075	-	17	-	-	-	-
Turkey	10 134	13 652	10 102	13 395	-	146	14	72	18	39

Data source: Eurostat

EU-27 installed capacity for electricity generation from renewables



											(GW)	Change
EU-27	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**1997-2007**
Total	***147***	***149***	***155***	**161**	**166**	**176**	**180**	**189**	**201**	**214**	**225**	**54%**
Hydro	134	134	136	137	139	142	137	138	139	140	140	5%
Wind	5	6	9	13	17	23	29	34	41	48	56	1121%
Wood	5	5	6	6	6	6	7	8	11	13	14	178%
Others	*3*	*3*	*4*	4	5	5	7	8	10	13	15	384%

Data source: Eurostat

EU–27 installed capacity for electricity generation from renewables increased by 54 % from 1997 to 2007. This increase was mainly due to wind capacity, which recorded a twelvefold increase over this period. Wood capacity and the capacity of other renewables – geothermal, photovoltaics, municipal solid waste and biogas – exhibited an almost threefold and a fivefold increase respectively.

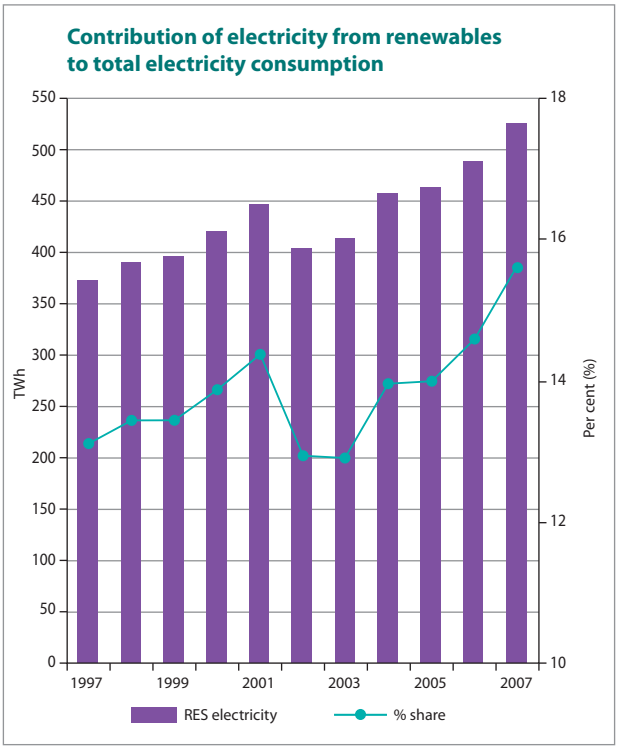
The capacity of hydro maintained the largest share of the total over the last ten years. However, its share fell from 91 % in 1997 to 62 % in 2007 in favour of wind capacity, which grew from a 3 % share in 1997 to a 25 % share in 2007.

In 2007, 58 % of the total EU-27 renewable capacity was concentrated in four countries (Germany, Spain, France and Italy). All Member States exhibited increases in their renewable capacity between 1997 and 2007. The only exception was Romania, which showed a slight (1 %) decrease. Regarding wind capacity, Germany and Spain had 66 % of the total wind capacity of the EU-27, while Germany and Italy had 61 % of the total EU-27 capacity of other renewables.

Contribution of electricity from renewables to total electricity consumption

	RES electricity *(GWh)*			Share (%)		
	1997	**2002**	**2007**	**1997**	**2002**	**2007**
EU-27	**372 893**	**404 658**	**525 570**	**13.1**	**12.9**	**15.6**
Belgium	862	1 584	3 993	1.0	1.8	4.2
Bulgaria	2 765	2 194	2 921	7.0	6.0	7.5
Czech Republic	2 193	2 992	3 419	3.5	4.6	4.7
Denmark	3 312	7 412	11 063	8.9	19.9	29.0
Germany	23 799	46 856	93 770	4.3	8.1	15.1
Estonia	11	37	148	0.1	0.5	1.5
Ireland	755	1 382	2 757	3.8	5.4	9.3
Greece	3 919	3 577	4 594	8.6	6.2	6.8
Spain	36 869	34 742	59 408	19.7	13.8	20.0
France	66 861	65 990	68 289	15.2	13.7	13.3
Italy	46 461	47 977	49 228	16.0	14.3	13.7
Cyprus	-	-	2	-	-	0.0
Latvia	2 954	2 484	2 829	46.7	39.3	36.4
Lithuania	295	358	581	2.6	3.2	4.6
Luxembourg	129	202	295	2.0	2.8	3.7
Hungary	301	268	2 023	0.8	0.7	4.6
Malta	-	-	-	-	-	-
Netherlands	3 478	4 037	9 146	3.5	3.6	7.6
Austria	37 894	41 711	41 865	67.5	66.1	59.8
Poland	2 561	2 767	5 430	1.8	2.0	3.5
Portugal	14 229	9 994	16 501	38.3	20.8	30.1
Romania	17 520	16 049	16 005	30.5	30.8	26.9
Slovenia	3 092	3 415	3 377	26.9	25.4	22.1
Slovakia	4 137	5 420	4 956	14.5	19.2	16.6
Finland	19 403	20 582	24 429	25.3	23.7	26.0
Sweden	72 051	71 295	78 168	49.1	46.9	52.1
United Kingdom	7 042	11 333	20 373	1.9	2.9	5.1
Iceland	5 582	8 410	:	99.9	99.9	:
Norway	110 051	129 772	135 266	95.3	107.3	106.1
Switzerland	35 215	36 855	37 372	62.5	58.8	56.7
Croatia	5 289	5 365	4 278	38.8	33.9	23.0
Turkey	40 193	33 966	36 457	38.1	25.6	19.2

Data source: Eurostat



(TWh)

EU-27	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
RES electricity	373	391	396	421	447	405	414	458	464	489	526
% share	13.1	13.4	13.4	13.8	14.4	12.9	12.9	13.9	14.0	14.6	15.6

Data source: Eurostat

In 2007, EU-27 electricity generation from renewables was 526 TWh, a 41 % increase compared to 1997. However, the contribution of electricity from renewables to total electricity consumption for the EU-27 increased only by 19 % over this period, reaching 15.6 % in 2007.

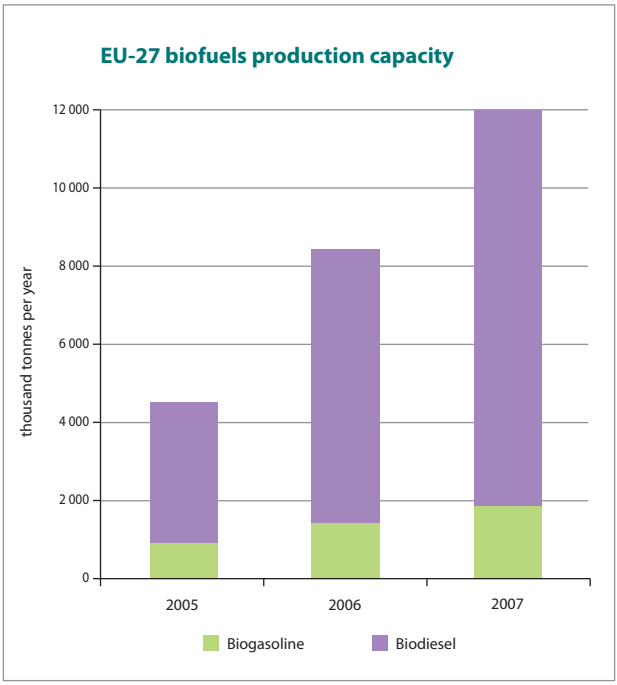
Austria and Sweden were the Member States with the highest contribution of electricity from renewables in total electricity consumption in 2007 with a 59.8 % and a 52.1 % share respectively. Germany and Sweden showed the highest electricity generation from renewables with 94 TWh and 78 TWh respectively.

Biofuels production capacity

(thousand tonnes per year)

	Total			Biogasoline			Biodiesel		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
EU-27	**4 470**	**11 492**	**11 988**	**872**	**1 400**	**1 813**	**3 598**	**6 992**	**10 131**
Belgium	-	-	-	-	-	-	-	-	-
Bulgaria	-	100	45	-	-	-	-	-	-
Czech Republic	195	197	346	-	2	-	195	195	346
Denmark	-	-	-	-	-	-	-	-	-
Germany	3 084	6 984	4 966	484	484	576	2 600	3 500	4 390
Estonia	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Greece	-	395	575	-	-	-	-	395	575
Spain	347	824	1 367	181	422	422	166	402	945
France	625	1 156	2 132	207	479	785	418	677	1 348
Italy	-	1 500	1 917	-	-	-	-	1 500	1 917
Cyprus	-	-	-	-	-	-	-	-	-
Latvia	11	27	27	-	13	13	11	14	14
Lithuania	-	-	164	-	-	17	-	-	147
Luxembourg	-	-	-	-	-	-	-	-	-
Hungary	-	14	11	-	-	-	-	14	11
Malta	-	-	-	-	-	-	-	-	-
Netherlands	-	70	189	-	-	-	-	70	189
Austria	28	28	28	-	-	-	28	28	28
Poland	-	-	-	-	-	-	-	-	-
Portugal	120	120	120	-	-	-	120	120	120
Romania	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Slovakia	60	77	101	-	-	-	60	77	101
Finland	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
Iceland	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Croatia	:	:	:	:	:	:	-	-	29
Turkey	-	166	1 071	-	-	-	-	166	1 071

Data source: Eurostat



(thousand tonnes per year)

EU-27	2005	2006	2007
Total	**4 470**	**11 492**	**11 988**
Biogasoline	872	1 400	1 813
Biodiesel	3 598	6 992	10 131

Data source: Eurostat

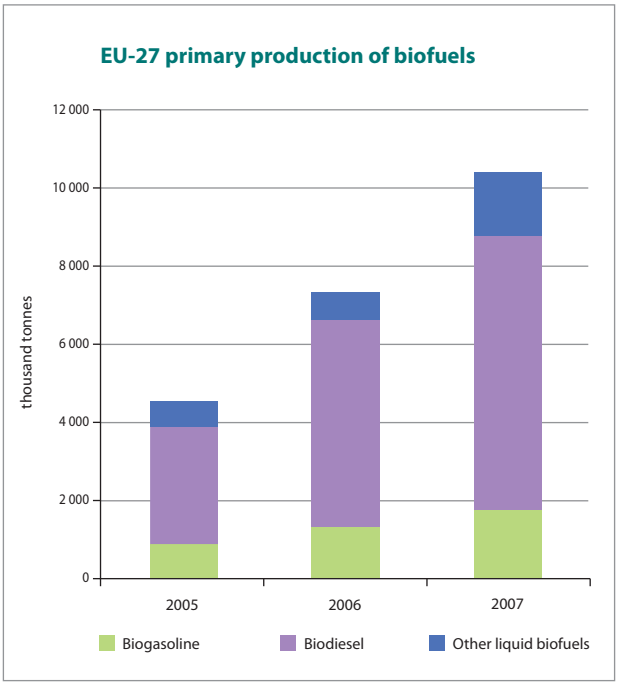
In 2007, the total EU-27 biofuel capacity was 11 988 thousand tonnes, an almost threefold increase since 2005. Biodiesel, with an almost threefold increase over the last two years (2005-2007), accounted for 85 % of the total EU-27 biofuel capacity in 2007. The capacity of biogasoline, which recorded a twofold increase between 2005 and 2007, provided 15 % of the total EU-27 biofuel capacity.

In 2007, Germany had a 41 % share of the total EU-27 biofuel capacity, followed by France (18 %), Italy (16 %) and Spain (11 %). Spain and France presented an almost fourfold and threefold increase respectively since 2005.

Primary production of biofuels

	(thousand tonnes) Total			Year 2007, share of biogasoline and biodiesel to total biofuels (%)	
	2005	2006	2007	Biogasoline	Biodiesel
EU-27	**4 519**	**7 313**	**10 377**	**16.7**	**67.6**
Belgium	19	33	103	-	63.1
Bulgaria	-	9	4	-	-
Czech Republic	127	112	109	24.8	75.2
Denmark	71	98	98	-	100.0
Germany	2 569	4 469	5 979	7.7	69.8
Estonia	-	-	-	-	-
Ireland	1	4	18	11.1	77.8
Greece	-	48	92	-	100.0
Spain	339	242	522	65.5	34.5
France	546	824	1 410	30.9	69.1
Italy	200	223	202	-	100.0
Cyprus	-	-	-	-	-
Latvia	2	12	21	57.1	42.9
Lithuania	14	20	40	37.5	62.5
Luxembourg	1	1	1	-	100.0
Hungary	8	17	23	60.9	39.1
Malta	-	-	-	-	-
Netherlands	60	110	96	-	88.5
Austria	61	102	245	4.1	62.0
Poland	145	208	141	66.0	31.9
Portugal	-	79	191	-	98.4
Romania	-	-	22	-	100.0
Slovenia	-	6	5	-	100.0
Slovakia	35	43	70	34.3	65.7
Finland	-	-	-	-	-
Sweden	311	397	544	52.2	21.0
United Kingdom	9	256	441	3.2	96.8
Iceland	-	-	-	-	-
Norway	-	-	-	-	-
Switzerland	8	9	14	21.4	78.6
Croatia	-	-	4	-	100.0
Turkey	-	21	14	-	100.0

Data source: Eurostat



			(thousand tonnes)	**Change**
EU-27	**2005**	**2006**	**2007**	**2005-2007**
Total	**4 519**	**7 313**	**10 377**	**130%**
Biogasoline	849	1 291	1 731	104%
Biodiesel	3 116	5 313	7 011	125%
Other liquid biofuels	553	709	1 635	196%

Data source: Eurostat

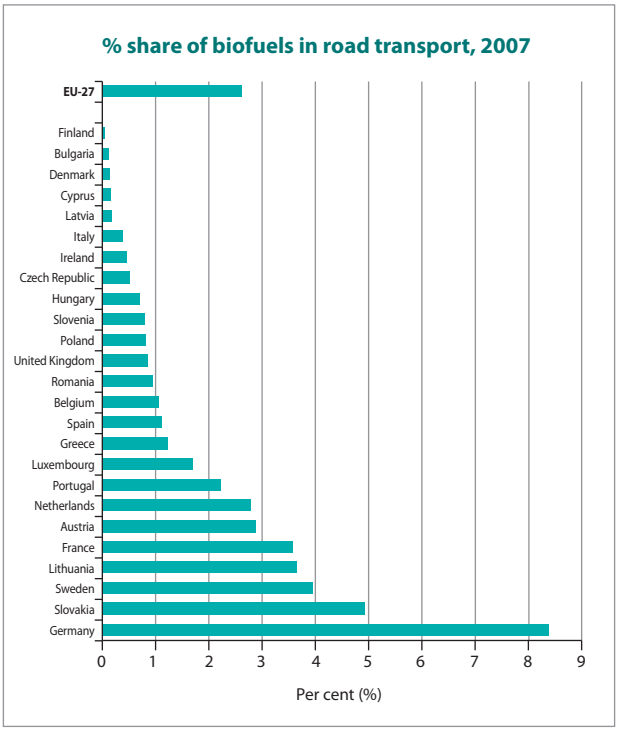
EU-27 total primary biofuel production recorded a twofold increase between 2005 and 2007, growing from 4 519 thousand tonnes in 2005 to 10 377 thousand tonnes in 2007. In 2007 biodiesel accounted for 67.6 % of the total EU-27 primary biofuel production, biogasoline for 16.7 % and other liquid biofuels for 15.8 %. In 2007, Germany produced 58 % of EU-27 total.

% share of biofuels in fuel consumption of transport

Per cent (%)

	1997	2000	2004	2005	2006	2007
EU-27	**0.14**	**0.24**	**0.66**	**1.06**	**1.78**	**2.60**
Belgium	-	-	-	-	-	1.05
Bulgaria	-	-	-	-	0.24	0.10
Czech Republic	0.74	1.59	0.60	0.05	0.34	0.51
Denmark	-	-	-	-	0.09	0.13
Germany	0.14	0.39	1.84	3.86	6.99	8.37
Estonia	:	:	:	:	:	:
Ireland	-	-	-	0.02	0.04	0.45
Greece	-	-	-	-	0.68	1.21
Spain	-	0.18	0.54	0.77	0.50	1.10
France	0.67	0.76	0.81	0.97	1.72	3.55
Italy	-	-	0.67	0.48	0.43	0.37
Cyprus	-	-	-	-	-	0.15
Latvia	-	-	-	0.21	0.28	0.16
Lithuania	-	-	0.09	0.27	1.58	3.63
Luxembourg	-	-	0.05	0.04	0.05	1.68
Hungary	-	-	-	0.13	0.26	0.68
Malta	:	:	:	:	:	:
Netherlands	-	-	-	-	0.36	2.77
Austria	0.11	0.15	0.14	0.72	1.70	2.87
Poland	-	-	0.18	0.49	0.83	0.80
Portugal	-	-	-	-	1.15	2.22
Romania	-	-	-	-	-	0.93
Slovenia	-	-	-	-	0.13	0.77
Slovakia	-	-	0.07	0.65	2.66	4.91
Finland	-	-	0.12	-	0.02	0.02
Sweden	-	-	2.00	2.11	2.67	3.93
United Kingdom	-	-	0.04	0.17	0.43	0.83
Iceland	:	:	:	:	:	:
Norway	-	-	-	-	0.12	0.71
Switzerland	-	-	0.06	0.13	0.14	0.21
Croatia	-	-	-	-	-	0.15
Turkey	-	-	-	-	0.18	0.10

Data source: Eurostat



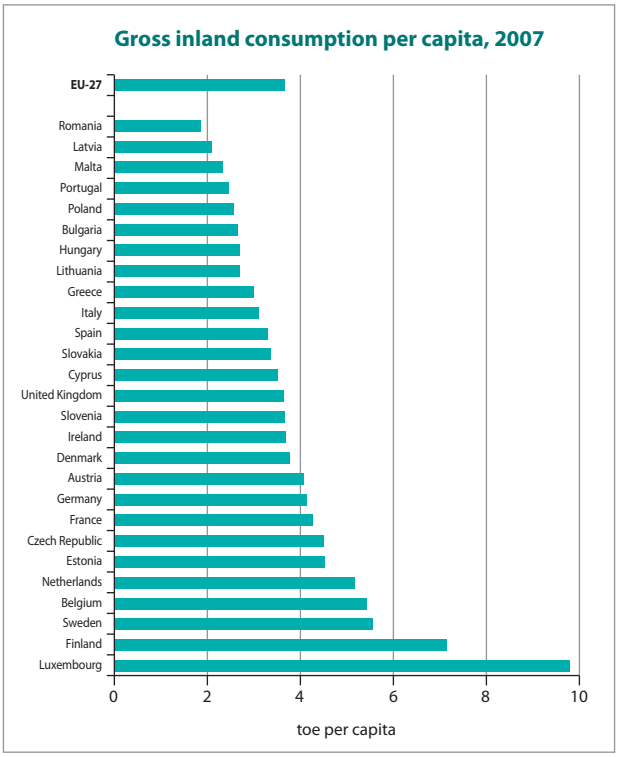
Note: This indicator is defined as the percentage of biofuels, calculated on the basis of energy content, in the petrol and diesel consumption of transport.

The Renewable Energy Directive set a 10 % minimum target of renewable energy (primarily biofuels) in the transport sector, for all Member States individually, by 2020. The share of biofuels in EU-27 fuel consumption for transport grew from 0.14 % in 1997 to 2.6 % in 2007. Most Member States increased their share of biofuel consumption in transport. However, in 2007 only twelve Member States had a share above 1 % and only eight Member States a share above 2 %. Germany had the highest share of biofuel consumption in transport with 8.37 %. Slovakia followed with a 4.91 % share.

Gross inland consumption per capita

	(toe per capita)			Index (2000=100)		
	1997	**2002**	**2007**	**1997**	**2002**	**2007**
EU-27	**3.55**	**3.63**	**3.65**	**99.4**	**101.6**	**102.1**
Belgium	5.80	5.67	5.42	96.7	94.4	90.3
Bulgaria	2.44	2.41	2.65	107.0	105.8	116.4
Czech Republic	4.15	4.12	4.50	105.2	104.4	114.0
Denmark	4.03	3.69	3.77	110.0	100.6	102.8
Germany	4.24	4.19	4.13	101.7	100.6	99.0
Estonia	4.08	3.65	4.52	112.1	100.2	124.1
Ireland	3.32	3.92	3.68	87.3	103.2	96.8
Greece	2.39	2.72	3.00	92.4	105.2	115.8
Spain	2.70	3.19	3.30	87.4	103.4	106.9
France	4.16	4.35	4.26	97.0	101.6	99.5
Italy	2.88	3.06	3.10	94.9	100.6	102.1
Cyprus	3.11	3.45	3.50	89.9	99.8	101.2
Latvia	1.81	1.71	2.09	115.3	109.0	132.8
Lithuania	2.47	2.49	2.70	122.9	123.5	134.3
Luxembourg	8.06	8.99	9.77	96.0	107.1	116.5
Hungary	2.50	2.55	2.68	102.2	104.1	109.7
Malta	2.52	2.10	2.32	118.4	98.9	109.2
Netherlands	4.90	4.95	5.17	101.0	101.9	106.4
Austria	3.61	3.90	4.07	99.3	107.2	112.0
Poland	2.65	2.34	2.57	113.0	99.5	109.4
Portugal	2.15	2.54	2.45	87.5	103.4	99.6
Romania	2.01	1.76	1.86	121.7	106.6	112.4
Slovenia	3.28	3.43	3.65	101.3	106.2	113.0
Slovakia	3.31	3.59	3.35	101.8	110.5	103.1
Finland	6.41	6.78	7.13	101.9	107.7	113.3
Sweden	5.69	5.73	5.55	105.3	106.0	102.7
United Kingdom	3.83	3.83	3.63	97.1	97.1	92.1
Iceland	9.34	11.82	:	80.6	101.9	:
Norway	5.57	5.37	5.92	95.6	92.1	101.4
Switzerland	3.64	3.65	3.58	100.8	101.1	99.2
Croatia	1.72	1.86	2.11	98.7	106.6	120.8
Turkey	1.12	1.10	1.38	96.6	94.5	119.1

Data source: Eurostat



(toe per capita)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	3.55	3.58	3.55	3.57	3.64	3.63	3.71	3.73	3.72	3.70	3.65

Index (2000=100)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	99	100	99	100	102	102	104	104	104	104	102

Data source: Eurostat

Note: The population used was that on the 1st January of each year.

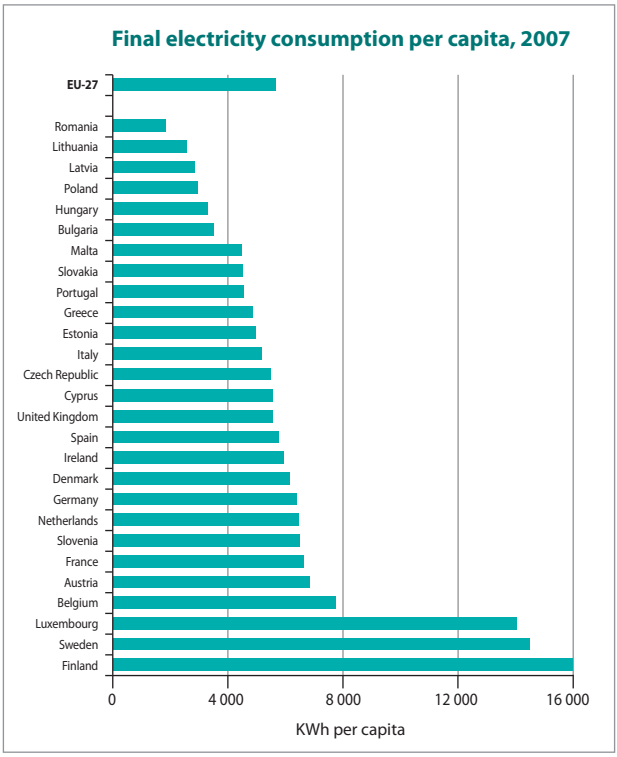
EU-27 gross inland consumption (GIC) per capita showed slight fluctuations over the last decade, but has been dropping since 2004. In 2007, EU-27 GIC per capita amounted to 3.65 toe per capita, a 3 % increase since 1997. Between 1997 and 2007, nineteen Member States experienced an increase in GIC per capita. The increase in Greece, Spain and Luxembourg was over 20 %.

In 2007, Luxembourg was the country with the highest GIC per capita (9.77 toe per capita). Finland, Sweden, Belgium and the Netherlands presented high levels of GIC per capita over the last decade. Their GIC per capita in 2007 was at least 40 % higher than the EU-27 average.

Final electricity consumption per capita

	(kWh per capita)			Index (2000=100)		
	1997	**2002**	**2007**	**1997**	**2002**	**2007**
EU-27	**4 900**	**5 365**	**5 742**	**94.0**	**102.9**	**110.1**
Belgium	7 062	7 609	7 830	93.2	100.5	103.4
Bulgaria	3 192	3 047	3 541	108.3	103.4	120.2
Czech Republic	4 811	4 976	5 560	100.2	103.6	115.8
Denmark	6 043	6 057	6 189	99.2	99.5	101.6
Germany	5 630	6 051	6 444	95.9	103.0	109.7
Estonia	3 660	3 873	5 048	101.1	106.9	139.4
Ireland	4 573	5 582	5 994	85.2	103.9	111.6
Greece	3 464	4 245	4 940	87.5	107.3	124.8
Spain	4 023	5 042	5 848	85.5	107.1	124.3
France	5 947	6 409	6 718	93.5	100.8	105.7
Italy	4 357	4 953	5 223	91.0	103.5	109.1
Cyprus	3 575	4 798	5 618	82.4	110.6	129.5
Latvia	1 699	2 067	2 885	91.2	110.9	154.8
Lithuania	1 873	1 926	2 613	106.6	109.6	148.7
Luxembourg	12 315	12 777	14 091	93.4	96.9	106.9
Hungary	2 799	3 094	3 352	97.2	107.4	116.4
Malta	3 636	4 199	4 539	88.2	101.9	110.1
Netherlands	5 750	6 193	6 531	93.1	100.3	105.8
Austria	6 036	6 526	6 924	93.9	101.5	107.7
Poland	2 496	2 542	2 993	98.1	99.9	117.7
Portugal	3 171	4 015	4 628	84.2	106.7	122.9
Romania	1 699	1 629	1 898	112.5	107.9	125.7
Slovenia	4 957	5 862	6 564	93.7	110.8	124.0
Slovakia	4 246	4 231	4 556	104.2	103.8	111.8
Finland	13 709	15 338	16 313	94.0	105.1	111.8
Sweden	14 174	14 735	14 579	97.6	101.4	100.4
United Kingdom	5 310	5 630	5 619	94.8	100.5	100.3
Iceland	17 458	26 235	:	70.5	105.9	:
Norway	23 652	24 118	23 635	96.7	98.6	96.6
Switzerland	6 892	7 416	7 649	94.3	101.4	104.6
Croatia	2 431	2 847	3 450	92.5	108.4	131.3
Turkey	1 255	1 475	2 079	87.6	102.9	145.0

Data source: Eurostat



(kWh per capita)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	4 900	4 992	5 069	5 213	5 358	5 365	5 483	5 569	5 626	5 733	5 742

Index (2000=100)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU-27	94	96	97	100	103	103	105	107	108	110	110

Data source: Eurostat

Note: The population used was that on the 1st January of each year.

EU-27 final electricity consumption per capita has been steadily increasing between 1997 and 2007. In 2007 it reached 5 742 kWh per capita, a 17 % increase compared to 1997. All Member States increased their final electricity consumption per capita over this period. In 2007, Finland, Sweden and Luxembourg had the highest final electricity consumptions per capita, at least double the EU-27 average.

Electricity prices in households and industry 2nd semester 2008

Households

(Euro/100KWh)

	Real price	Taxes	
	All taxes included	VAT	Other taxes
EU-27	**16.7**	**2.2**	**2.0**
Belgium	20.8	3.6	1.4
Bulgaria	8.2	1.4	-
Czech Republic	13.0	2.1	0.1
Denmark	27.9	5.6	9.1
Germany	22.0	3.5	5.0
Estonia	8.5	1.3	0.5
Ireland	20.3	2.4	-
Greece	11.0	0.9	-
Spain	15.6	2.2	0.7
France	12.3	1.8	1.3
Italy	22.0	2.0	:
Cyprus	20.4	2.6	0.2
Latvia	10.0	0.5	-
Lithuania	8.7	1.3	-
Luxembourg	15.6	0.9	1.0
Hungary	15.5	2.6	0.1
Malta	15.4	0.7	-
Netherlands	17.8	2.8	1.8
Austria	17.7	3.0	2.1
Poland	13.0	2.3	0.6
Portugal	15.3	0.7	3.9
Romania	11.0	1.8	-
Slovenia	11.6	1.9	0.5
Slovakia	15.3	2.4	-
Finland	12.7	2.3	0.9
Sweden	17.5	3.5	2.6
United Kingdom	16.0	0.7	-
Norway	17.0	3.4	1.2
Croatia	11.8	2.1	0.1

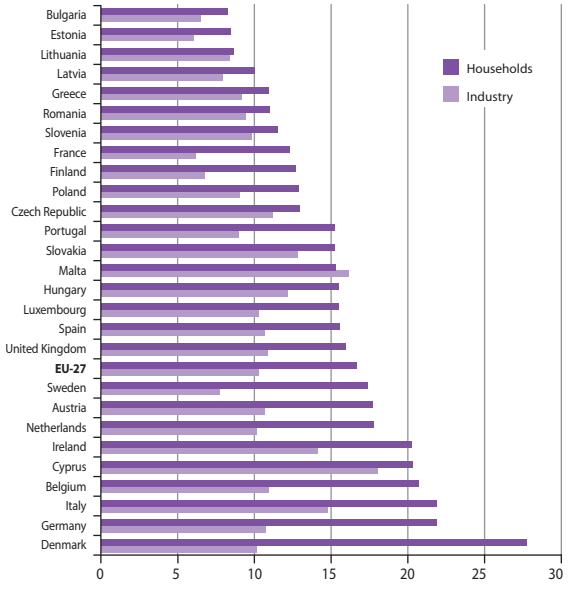
Industry

(Euro/100KWh)

	Price excluding all recoverable taxes	Non recoverable taxes
EU-27	**10.3**	**1.0**
Belgium	11.0	:
Bulgaria	6.5	0.1
Czech Republic	11.2	0.1
Denmark	10.2	1.3
Germany	10.8	1.3
Estonia	6.0	0.5
Ireland	14.2	-
Greece	9.2	-
Spain	10.7	0.5
France	6.2	0.5
Italy	14.8	:
Cyprus	18.1	0.2
Latvia	8.0	-
Lithuania	8.4	-
Luxembourg	10.3	0.4
Hungary	12.2	0.2
Malta	16.2	-
Netherlands	10.2	1.3
Austria	10.7	1.7
Poland	9.1	0.6
Portugal	9.0	1.2
Romania	9.5	-
Slovenia	9.9	0.3
Slovakia	12.9	0.1
Finland	6.7	0.3
Sweden	7.7	0.0
United Kingdom	10.9	0.4
Norway	8.7	1.2
Croatia	9.5	0.1

Data source: Eurostat

Electricity prices in households and industry 2nd semester 2008



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

The legal basis for the collection of industrial gas and electricity prices is defined by Council Directive 90/377/EEC. The collection of prices for household consumers is done on a voluntary agreement with the Member States. Due to the liberalisation of the electricity market, the methodology that defines the collection of the electricity prices became outdated.

In June 2007, the Commission adopted a proposal from Directorate-General Transport and Energy and Eurostat to change the methodology for these price collections. The main changes that were introduced for the collection of price information for the second semester of 2007 include:

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

The following consumption bands apply for Households and Industry:

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

Natural gas prices in households and industry 2nd semester 2008

Households

(Euro/GJ)

	Real price	Taxes	
	All taxes included	VAT	Other taxes
EU-27	**17.4**	**2.4**	**1.2**
Belgium	17.3	3.0	0.4
Bulgaria	10.9	1.8	-
Czech Republic	14.7	2.3	-
Denmark	26.6	5.3	8.1
Germany	21.2	3.4	1.7
Estonia	10.3	1.6	0.4
Ireland	18.1	2.2	-
Spain	18.1	2.5	-
France	16.1	2.3	-
Italy	20.0	3.3	3.1
Latvia	13.9	0.7	0.0
Lithuania	10.6	1.6	-
Luxembourg	:	:	:
Hungary	12.9	2.2	-
Netherlands	21.0	3.4	4.3
Austria	17.7	2.9	1.8
Poland	14.3	2.6	-
Portugal	17.5	0.8	-
Romania	9.3	1.5	1.7
Slovenia	19.8	3.3	0.8
Slovakia	12.9	2.1	-
Finland	:	:	:
Sweden	28.8	5.7	6.2
United Kingdom	13.3	0.6	-
Croatia	7.7	1.4	-

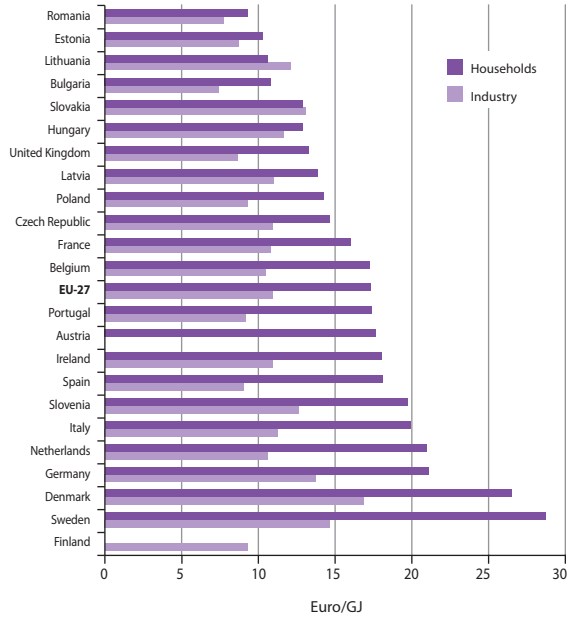
Industry

(Euro/GJ)

	Price excluding all recoverable taxes	Non recoverable taxes
EU-27	**11.0**	**0.6**
Belgium	10.5	0.1
Bulgaria	7.4	-
Czech Republic	10.9	0.3
Denmark	16.9	8.1
Germany	13.8	1.1
Estonia	8.8	0.2
Ireland	11.0	-
Spain	9.0	-
France	10.9	0.2
Italy	11.3	0.5
Latvia	11.0	0.0
Lithuania	12.1	-
Luxembourg	:	:
Hungary	11.7	0.3
Netherlands	10.6	1.5
Austria	:	:
Poland	9.3	-
Portugal	9.2	-
Romania	7.8	1.4
Slovenia	12.7	0.8
Slovakia	13.1	0.2
Finland	9.3	0.5
Sweden	14.7	1.8
United Kingdom	8.7	0.5
Croatia	6.4	-

Data source: Eurostat

Natural gas prices in households and industry 2nd semester 2008



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

The legal basis for the collection of industrial gas and electricity prices is defined by Council Directive 90/377/EEC. The collection of prices for household consumers is done on a voluntary agreement with the Member States. Due to the liberalisation of the gas market, the methodology that defines the collection of the gas prices became outdated.

In June 2007, the Commission adopted a proposal from Directorate-General Transport and Energy and Eurostat to change the methodology for these price collections. The main changes that were introduced for the collection of price information for the second semester of 2007 include:

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

The following consumption bands apply for Households and Industry:

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

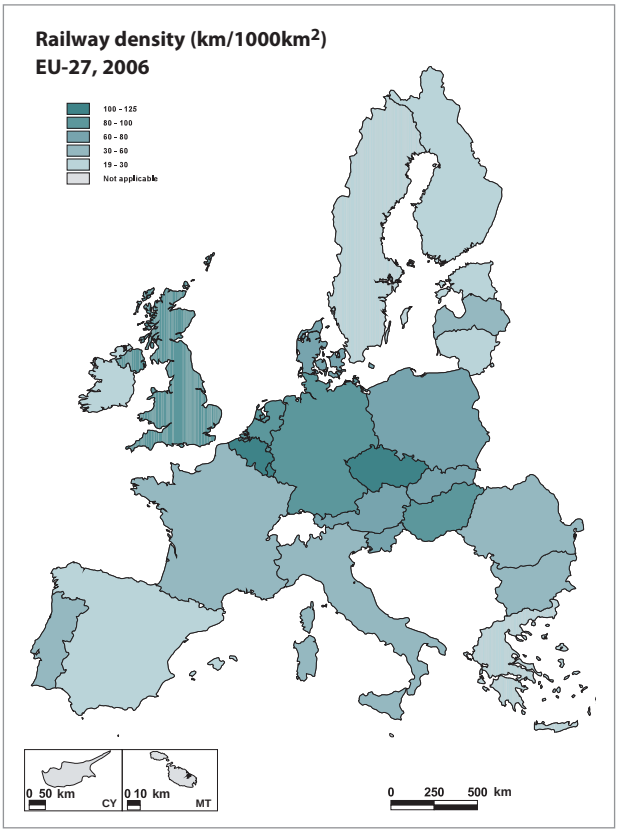
2 Transport indicators

Railway density

Length(km)/Surface (1 000km²)

	2001	2002	2003	2004	2005	2006
EU-27	**50**	**50**	**50**	**50**	**50**	**50**
Belgium	114	116	116	117	117	117
Bulgaria	39	39	39	38	37	37
Czech Republic	123	124	124	124	124	124
Denmark	64	64	65	65	61	61
Germany	101	100	101	97	96	96
Estonia	22	22	22	22	22	22
Ireland	28	28	28	28	28	28
Greece	18	18	18	19	20	19
Spain	27	27	28	28	29	29
France	47	46	46	46	46	47
Italy	55	55	55	55	56	56
Cyprus	-	-	-	-	-	-
Latvia	37	36	36	36	36	36
Lithuania	27	28	28	28	28	28
Luxembourg	106	106	106	106	106	106
Hungary	83	85	85	85	85	86
Malta	-	-	-	-	-	-
Netherlands	83	83	83	83	83	82
Austria	69	70	70	69	69	70
Poland	64	65	66	65	62	62
Portugal	31	31	31	31	31	31
Romania	48	48	48	48	48	47
Slovenia	61	61	61	61	61	61
Slovakia	75	75	75	75	74	74
Finland	19	19	19	19	19	19
Sweden	27	27	27	27	27	27
United Kingdom	70	70	70	68	82	82
Iceland	-	-	-	-	-	-
Liechtenstein	59	59	59	59	59	59
Norway	14	13	13	13	13	13
Switzerland	81	81	81	85	85	89
Croatia	48	48	48	48	48	48
Turkey	11	11	11	11	11	11

Data source: Eurostat, Union Internationale des Chemins de Fer, national statistics



In 2006, the density of railways in the EU-27 was 50 km of railways for every 1 000 km^2. The Czech Republic had the highest railway density (124), followed by Belgium (117). Greece and Finland had the lowest densities (19). In Finland this was primarily due to the large size of the country coupled with a low population density. In Greece, the low figure was attributable to the mountainous terrain of the country. Between 2001 and 2006 the highest decrease in the density of railways was observed in Germany (-5.2 %). The United Kingdom appeared to have the highest increase (17.7 %); however this related to changes in the methodology of measurement rather than an actual increase.

In 2006, Germany was the country with the longest railway network (34 122 km). France and the United Kingdom also had significant railway networks with 29 463 km and 19 956 km respectively. Poland, which followed with 19 429 km, also experienced the highest decrease in its network over the period 2001-2006 (-13.9 %). In 2006, these four countries made up 48 % of the EU-27 total.

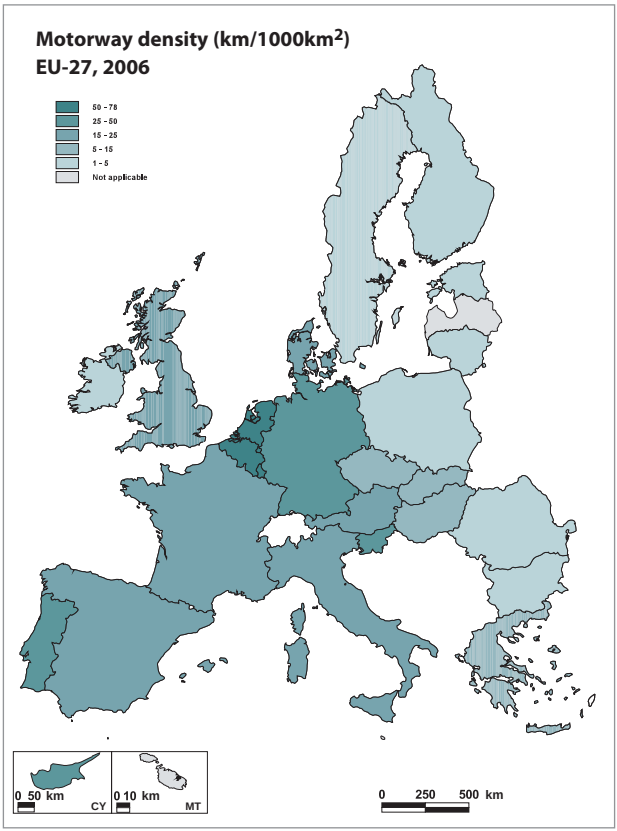
Motorway density

Length(km)/Surface (1 000km²)

	2001	2002	2003	2004	2005	2006
EU-27	**13**	**13**	**14**	**14**	**14**	**15**
Belgium	57	57	57	58	58	58
Bulgaria	3	3	3	3	3	4
Czech Republic	7	7	7	7	7	8
Denmark	23	23	23	24	24	24
Germany	33	34	34	34	35	35
Estonia	2	2	2	2	2	2
Ireland	2	2	3	3	4	4
Greece	6	*7*	*7*	*8*	*8*	*8*
Spain*	19	19	20	21	23	24
France	16	16	16	16	17	17
Italy	22	22	22	22	22	22
Cyprus**	28	29	29	29	30	28
Latvia	-	-	-	-	-	-
Lithuania	7	7	7	7	7	5
Luxembourg	49	57	57	57	57	57
Hungary	5	6	6	6	7	8
Malta	-	-	-	-	-	-
Netherlands***	74	74	75	77	77	77
Austria	20	20	20	20	20	20
Poland	1	1	2	2	2	2
Portugal	18	20	22	23	25	28
Romania	0	0	0	1	1	1
Slovenia	22	23	24	24	28	29
Slovakia	6	6	6	6	7	7
Finland	2	2	2	2	2	2
Sweden	4	4	4	4	4	4
United Kingdom	15	15	15	15	15	15
Iceland	-	-	-	-	0	0
Liechtenstein	-	-	-	-	-	-
Norway	0	1	1	1	1	1
Switzerland	33	33	34	34	34	34
Croatia	8	8	10	13	14	15
Turkey	2	2	2	2	2	3

* 'Autopistas de peaje' and 'autovías y autopistas libres'.
** From 2006 without urban Motorways.
*** All national roads ('Rijkswegen') with dual carriageways.

Data source: Eurostat, International Road Federation, United Nations Economic Commission for Europe, national statistics, estimates



The motorway density of the EU-27 was 15 km/1 000 km^2 in 2006. Between 2001 and 2006 all EU-27 countries except for Lithuania presented increases in their motorway densities. In 2006, the Netherlands showed the highest motorway density (77 km/1 000 km^2), followed by Belgium (58) and Luxembourg (57). Romania had the lowest motorway density (1). Comparisons between countries and different years should be made with caution, since Member States adopt different definitions of different road types.

In 2006, the longest motorways network belonged to Germany (12 531 km). Spain (12 073 km) and France (10 842 km) followed. These three countries represented 56 % of the total length of motorways in the EU-27.

Inland waterways density

Length(km)/Surface (1 000km²)

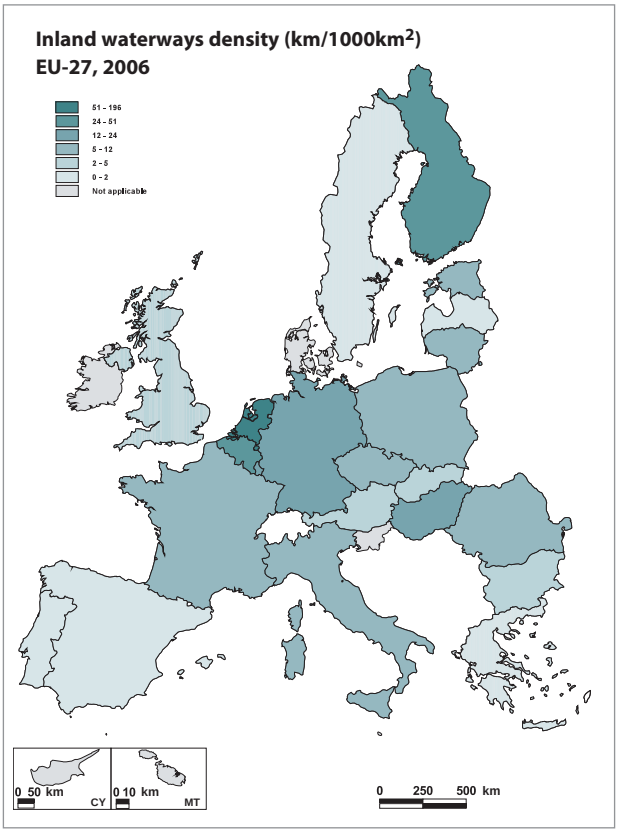
	2001	2002	2003	2004	2005	2006
EU-27	**10**	**10**	**10**	**10**	**10**	**10**
Belgium	51	51	51	51	51	51
Bulgaria	4	4	4	4	4	4
Czech Republic	9	9	9	9	9	9
Denmark	-	-	-	-	-	-
Germany	20	20	20	20	20	20
Estonia	7	7	7	7	7	7
Ireland	-	-	-	-	-	-
Greece*	0	0	0	0	0	0
Spain*	0	0	0	0	0	0
France	8	9	9	8	*8*	*8*
Italy	5	5	5	5	5	5
Cyprus	-	-	-	-	-	-
Latvia	0	0	0	0	0	0
Lithuania	7	8	7	7	7	7
Luxembourg	14	14	14	14	14	14
Hungary	16	15	15	15	*15*	*15*
Malta	-	-	-	-	-	-
Netherlands	149	149	149	195	*195*	*195*
Austria	4	4	4	4	4	4
Poland	12	12	12	12	12	12
Portugal*	1	1	1	1	1	1
Romania	8	8	8	8	*8*	*8*
Slovenia	-	-	-	-	-	-
Slovakia	4	4	4	4	4	4
Finland**	30	30	30	31	31	32
Sweden	1	1	1	1	1	1
United Kingdom	5	4	4	4	*4*	*4*
Iceland	-	-	-	-	-	-
Liechtenstein	-	-	-	-	-	-
Norway	-	-	-	-	-	-
Switzerland***	31	31	31	31	31	31
Croatia	14	14	14	14	14	14
Turkey	-	-	-	-	-	-

* The inland waterways of Greece (Korinthos Canal), Spain (Guadalquivir) and Portugal (Douro, Guadiana, Tejo) are used by seagoing ships only.

** Includes all public waterways and inland boat routes.

*** Lakes and rivers mainly used for public transport of passengers.

Data source: Eurostat, national statistics, estimates



Inland waterways are "rivers, lakes and canals, over which vessels of a carrying capacity of not less than 50 tonnes can navigate when normally loaded". In 2006, the inland waterway density of the EU-27 was 10 km/1 000 km^2 surface. It included mainly the transport of goods and, to a lesser extent, the transport of passengers. The country with the highest inland waterway density in 2006 was the Netherlands (195). This density was almost four times that of Belgium, which came second (51). Finland also presented significant inland waterways density (32).

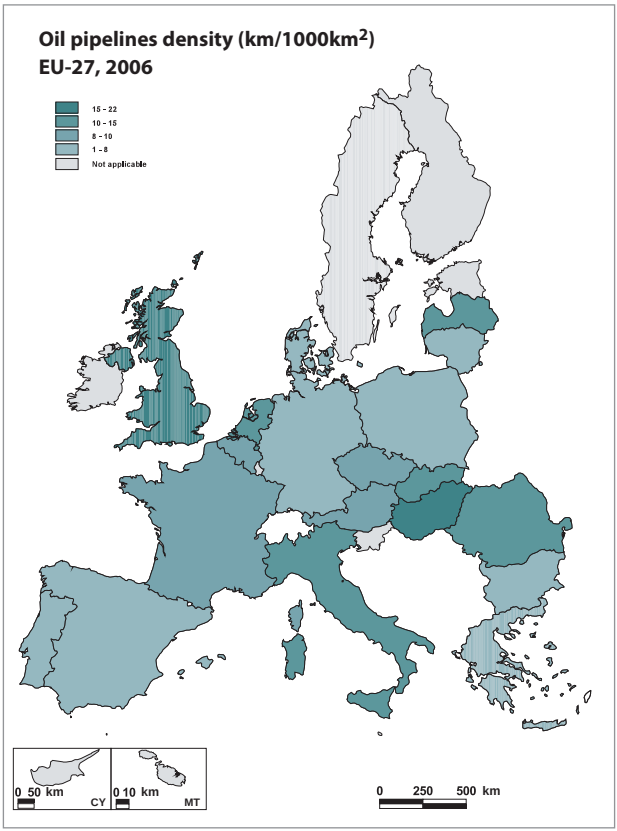
The total length of the EU-27 inland waterways reached 43 011 km in 2006. The Member States with the greatest lengths were Finland (9 678 km), Germany (7 309 km), the Netherlands (6 595 km) and France (5 372 km). These countries represented about 67 % of the EU total.

Oil pipelines density

Length(km)/Surface (1 000km²)

	2001	2002	2003	2004	2005	2006
EU-27	**8**	**8**	**8**	**8**	**8**	**8**
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	1	1
Spain	7	7	7	8	8	8
France	9	9	9	9	*9*	*9*
Italy	15	15	15	15	15	15
Cyprus	-	-	-	-	-	-
Latvia	12	12	12	12	14	14
Lithuania	8	8	8	8	8	8
Luxembourg	-	-	-	-	-	-
Hungary	22	22	22	22	*22*	*22*
Malta	-	-	-	-	-	-
Netherlands	12	12	12	12	12	12
Austria	9	9	9	9	9	9
Poland	7	7	7	7	7	7
Portugal	2	2	2	2	2	2
Romania	15	15	15	15	*15*	*15*
Slovenia	-	-	-	-	-	-
Slovakia	11	11	11	11	11	11
Finland	-	-	-	-	-	-
Sweden	-	-	-	-	-	-
United Kingdom	18	18	18	18	18	18
Iceland	-	-	-	-	-	-
Liechtenstein	-	-	-	-	-	-
Norway	3	3	4	4	4	4
Switzerland	3	3	3	3	3	3
Croatia	11	11	11	11	11	11
Turkey	:	4	4	4	4	4

Data source: Eurostat, national statistics, estimates



Note: Including oil pipelines under the sea.

The oil pipelines network refers to the transport of liquid oil products through pipelines. In 2006, the oil pipelines density of the EU-27 was 8 km/1 000 km^2. The total length of the EU-27 oil pipelines reached 33 589 km. Compared to other transport infrastructure, oil pipelines had half the length of motorways in 2006. Also, their length was almost 80 % the length of inland waterways. This indicates the significance of oil pipelines in the volumes of oil that are being transported. France was the country with the longest oil pipelines (5 746 km) in 2006, followed by the United Kingdom (4 405 km) and Italy (4 336 km).

In 2006, Hungary and the United Kingdom had the highest densities in oil pipelines with 22 and 18 km/1 000 km^2 respectively.

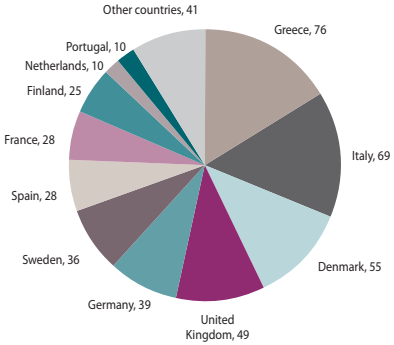
Number of main sea ports

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

	2002	2003	2004	2005	2006	2007
EU-27	**440**	**447**	**451**	**454**	**460**	**466**
Belgium	4	4	4	4	4	5
Bulgaria	2	2	2	2	2	2
Czech Republic	-	-	-	-	-	-
Denmark	50	52	53	50	54	55
Germany	38	38	38	39	38	39
Estonia	5	5	5	5	5	4
Ireland	8	8	8	9	8	8
Greece	68	69	74	74	74	76
Spain	27	27	28	28	28	28
France	28	27	27	27	28	28
Italy	65	67	68	69	69	69
Cyprus	3	3	3	3	3	3
Latvia	3	3	3	3	3	3
Lithuania	1	1	1	2	2	2
Luxembourg	-	-	-	-	-	-
Hungary	-	-	-	-	-	-
Malta	3	4	4	4	4	4
Netherlands	10	10	10	10	11	10
Austria	-	-	-	-	-	-
Poland	6	5	5	5	5	6
Portugal	7	7	7	8	10	10
Romania	3	3	3	3	3	3
Slovenia	1	1	1	1	1	1
Slovakia	-	-	-	-	-	-
Finland	23	24	24	23	25	25
Sweden	33	34	33	37	34	36
United Kingdom	52	53	50	48	49	49
Iceland	1	1	1	1	2	:
Liechtenstein	-	-	-	-	-	-
Norway	19	21	21	23	23	21
Switzerland	-	-	-	-	-	-
Croatia	22	21	26	27	28	29
Turkey	:	:	:	:	:	:

Data source: Eurostat

Number of main sea ports, 2007
EU-27 top ten countries



The number of main sea ports showed a 6 % increase between 2002 and 2007 with the ports handling more than 1 million tonnes per year or more than 200 000 passengers per year reaching 466. However, this increase was not determined by a real change in infrastructure. It rather depended on the definition of the unit ("main port") used, as there is a specific threshold relating to total annual activity which fluctuates from year to year.

Taking this into account, the countries where the highest numbers of main ports could be found in 2007 were Greece (76) and Italy (69). Denmark (55) and the UK (49) were next. More information on the structure of European ports by size can be found in the publication Statistics in focus 62/2008: "Maritime transport of goods and passengers 1997-2006", available on Eurostat web site.

Number of main commercial airports

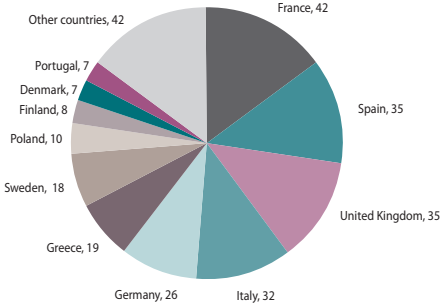
Commercial airports with more than 150 000 passenger units movements per year*

	2003	2004	2005	2006	2007	2008
EU-27	**258**	**269**	**276**	**279**	**281**	**:**
Belgium	4	5	5	5	4	4
Bulgaria	3	3	3	3	3	3
Czech Republic	3	3	3	3	3	3
Denmark	6	6	7	7	7	6
Germany	25	25	24	25	26	27
Estonia	1	1	1	1	1	1
Ireland	5	6	6	6	5	6
Greece	18	18	19	19	19	:
Spain	33	33	34	34	35	34
France	36	39	42	42	42	43
Italy	29	30	30	32	32	:
Cyprus	2	2	2	2	2	2
Latvia	1	1	1	1	1	1
Lithuania	1	1	1	2	2	2
Luxembourg	1	1	1	1	1	1
Hungary	1	1	1	1	1	1
Malta	1	1	1	1	1	1
Netherlands	4	5	5	5	5	5
Austria	6	6	6	6	6	6
Poland	6	6	6	8	10	10
Portugal	8	8	8	8	7	7
Romania	2	4	4	4	4	4
Slovenia	1	1	1	1	1	1
Slovakia	1	1	2	2	2	2
Finland	10	11	11	9	8	8
Sweden	20	19	19	18	18	18
United Kingdom	30	32	33	33	35	35
Iceland	3	3	3	4	4	3
Liechtenstein	-	-	-	-	-	-
Norway	16	16	16	17	17	17
Switzerland	5	3	4	4	4	4
Croatia	:	3	4	5	5	4
Turkey	12	14	14	19	19	22

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

Data source: Eurostat

Number of main commercial airports, 2007
EU-27 top ten countries



In 2007, there were 281 main commercial airports in the EU-27, each was handling more than 150 000 passenger unit movements per year. A passenger unit is equivalent to either one passenger or 100 kg of freight and mail.

On a country level, France had the highest number of main commercial airports (42) in 2007. Spain and the United Kingdom followed with 35 commercial airports. On the fourth and fifth place were Italy with 32 and Germany with 26.

Motorisation rate of passenger cars

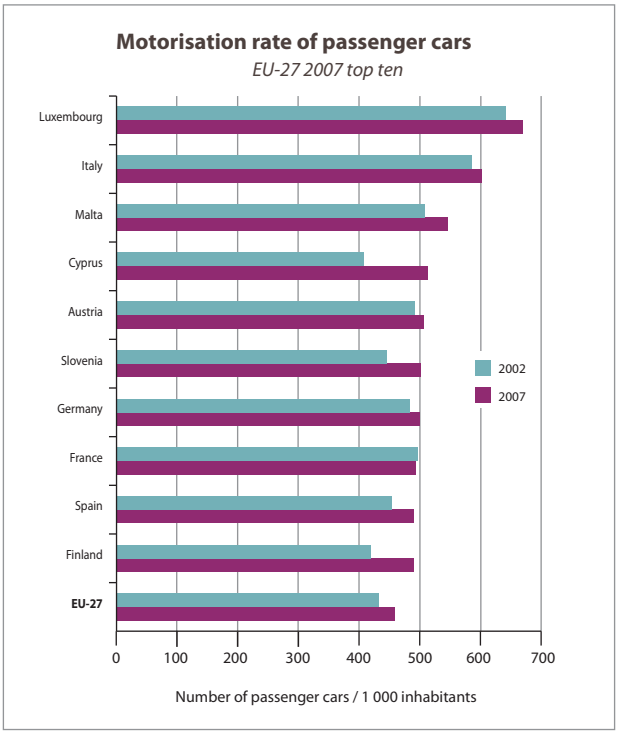
Number of passenger cars/1 000 inhabitants

	2002	2003	2004	2005	2006	2007
EU-27	**433**	**437**	**442**	**448**	**456**	**464**
Belgium	464	466	469	471	473	477
Bulgaria	276	294	313	327	229	271
Czech Republic	357	363	374	387	401	416
Denmark	352	352	355	363	372	380
Germany*	482	485	487	493	498	500
Estonia**	294	320	349	366	412	390
Ireland	376	385	398	410	428	443
Greece	332	349	369	388	408	430
Spain	457	449	461	471	478	489
France	498	495	491	487	492	496
Italy	591	599	587	593	601	603
Cyprus	408	423	460	474	487	528
Latvia	264	278	296	322	358	397
Lithuania	340	363	382	425	468	469
Luxembourg	647	654	659	666	671	675
Hungary	258	274	280	286	293	299
Malta	512	526	529	528	539	551
Netherlands	426	427	430	435	443	452
Austria	494	500	505	507	509	512
Poland	288	294	314	323	351	383
Portugal	376	381	391	399	406	413
Romania**	136	142	149	155	167	164
Slovenia	449	456	468	481	489	504
Slovakia	247	252	222	242	247	266
Finland	422	437	450	464	477	487
Sweden	454	456	458	461	464	467
United Kingdom	447	454	466	472	475	478
Iceland	564	578	604	638	658	681
Liechtenstein	694	695	698	705	696	693
Norway	420	425	432	440	449	460
Switzerland	510	513	518	521	523	527
Croatia	280	291	301	312	323	336
Turkey	67	67	76	81	85	88

* Series have been revised from 1997.

** A cleaned up database has been used in 2007.

Data source: Eurostat, United Nations Economic Commission for Europe, national statistics



Note: The numbers that have been used represent the stock at the end of the year, except for Belgium: 1 August, Switzerland: 30 September and Liechtenstein: 1 July. In the case of Bulgaria, new more reliable data from 2006, because vehicles had to get new number plates until end-2006. Those which hadn't done so have been removed from the database. The population used was that on the 1st January of each year.

In 2007, there were 464 passenger cars/1 000 inhabitants in the EU-27. This was nearly one car per two inhabitants. Between 2002 and 2007 the motorisation rate in the EU-27 grew steadily. The overall increase was 7 %. Luxembourg, Italy and Malta presented the highest motorisation rates. In 2007, their rates were 675, 603 and 551 respectively. In the case of Luxembourg this rate was almost 50 % higher than the EU-27 average.

All Member States, except for Bulgaria and France, increased their motorisation rates between 2002 and 2007. In 2007, Bulgaria had the third lowest motorisation rate (271), only before Slovakia (266) and Romania (164). Romania's rate was almost 3 times lower than the EU-27 average in spite of a 21 % increase between 2002 and 2007.

Passenger cars

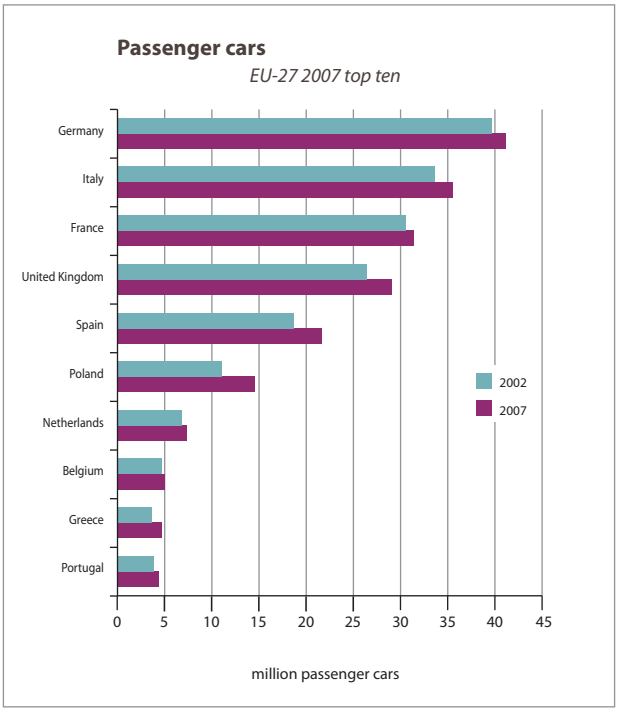
(thousand passenger cars)

	2002	2003	2004	2005	2006	2007
EU-27	**209 647**	**212 487**	**215 901**	**220 223**	**224 676**	**229 764**
Belgium	4 787	4 821	4 874	4 919	4 976	5 049
Bulgaria	2 174	2 309	2 438	2 538	1 768	2 082
Czech Republic	3 647	3 706	3 816	3 959	4 109	4 280
Denmark	1 888	1 895	1 916	1 965	2 020	2 068
Germany*	39 721	40 017	40 179	40 660	41 020	41 184
Estonia**	401	434	471	494	554	524
Ireland	1 466	1 527	1 604	1 684	1 802	1 910
Greece	3 646	3 840	4 074	4 303	4 543	4 799
Spain	18 733	18 688	19 542	20 250	20 909	21 760
France	30 591	30 583	30 537	30 497	31 002	31 443
Italy	33 706	34 310	33 973	34 667	35 297	35 680
Cyprus	288	303	336	355	373	411
Latvia	619	649	686	742	822	905
Lithuania	1 181	1 257	1 316	1 455	1 592	1 588
Luxembourg	287	293	300	307	315	322
Hungary	2 630	2 777	2 828	2 889	2 954	3 012
Malta	202	209	211	213	218	225
Netherlands	6 855	6 908	6 992	7 092	7 230	7 392
Austria	3 987	4 054	4 109	4 157	4 205	4 246
Poland	11 029	11 244	11 975	12 339	13 384	14 589
Portugal	3 885	3 966	4 100	4 200	4 290	4 379
Romania**	2 973	3 088	3 225	3 364	3 603	3 541
Slovenia	895	910	934	960	980	1 014
Slovakia	1 327	1 356	1 197	1 304	1 334	1 434
Finland	2 195	2 275	2 347	2 430	2 506	2 570
Sweden	4 043	4 075	4 113	4 154	4 202	4 258
United Kingdom	26 493	26 992	27 806	28 326	28 667	29 101
Iceland	162	167	175	187	197	209
Liechtenstein	23	24	24	24	24	24
Norway	1 900	1 934	1 978	2 029	2 084	2 155
Switzerland	3 701	3 754	3 811	3 861	3 900	3 956
Croatia	1 244	1 293	1 338	1 385	1 436	1 491
Turkey	4 600	4 700	5 400	5 773	6 141	6 472

* Series have been revised from 1997.

** A cleaned up database has been used in 2007.

Data source: Eurostat, United Nations Economic Commission for Europe, national statistics



Note: The numbers that have been used represent the stock at the end of the year, except for Belgium: 1 August, Switzerland: 30 September and Liechtenstein: 1 July. In the case of Bulgaria, new more reliable data from 2006, because vehicles had to get new number plates until end-2006. Those which hadn't done so have been removed from the database.

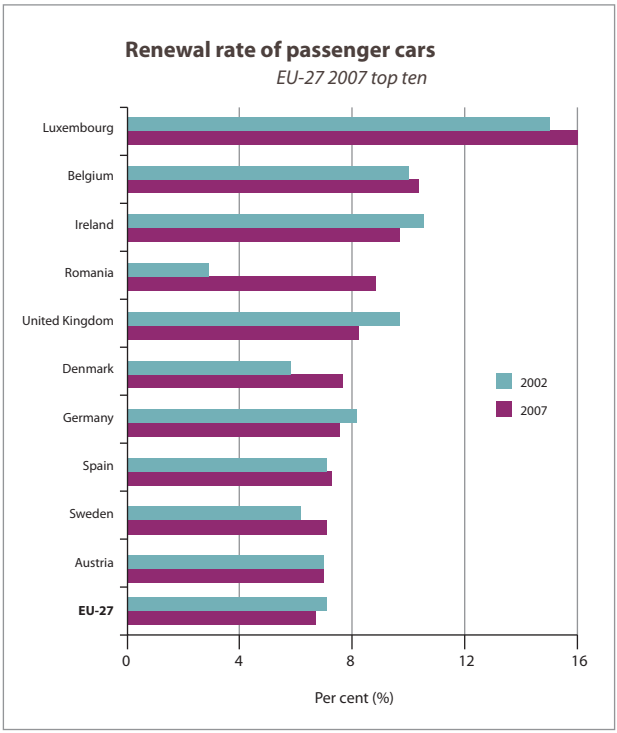
There were almost 230 million passenger cars in the EU-27 in 2007. This was a 10 % increase compared to 2002. Germany was the top country with 41 184 thousand cars in 2007. This was almost 20 % higher than the second Italy (35 680 thousand). Passenger cars in Germany and Italy made up almost 33 % of the EU total. France, the UK, Spain and Poland followed with 31 443 thousand, 29 101 thousand, 21 760 thousand and 14 589 thousand correspondingly. These six countries were the largest EU Member States in terms of population and made up 76 % of the EU total stock of cars in 2007.

Renewal rate of passenger cars

Passenger cars first registration/Total passenger cars (%)

	2002	2003	2004	2005	2006	2007
EU-27	**:**	**7.0**	**7.0**	**6.9**	**6.9**	**6.8**
Belgium	9.8	9.5	9.9	9.8	10.6	10.4
Bulgaria	0.6	0.7	1.0	1.3	1.8	2.0
Czech Republic	:	4.1	3.8	3.8	3.8	4.1
Denmark	5.9	5.1	6.3	7.5	7.6	7.7
Germany	8.2	8.1	8.1	8.2	8.5	7.6
Estonia	:	3.6	3.5	4.0	4.6	5.9
Ireland	10.6	9.5	9.6	10.2	9.9	9.8
Greece	7.4	6.7	7.1	6.3	5.9	5.8
Spain	7.1	7.4	7.8	7.5	7.8	7.4
France	7.0	6.6	6.6	6.8	6.5	6.6
Italy	6.8	6.5	6.7	6.5	6.6	7.0
Cyprus	3.2	3.0	5.9	5.4	5.5	6.1
Latvia	:	1.3	1.6	2.2	3.1	3.6
Lithuania	:	0.6	0.7	0.7	0.9	1.4
Luxembourg	15.1	14.9	16.1	15.8	16.2	16.0
Hungary	:	7.5	7.3	6.9	6.4	5.7
Malta	:	3.5	2.9	3.1	3.1	2.7
Netherlands	7.5	7.1	6.9	6.6	6.7	6.8
Austria	7.0	7.4	7.6	7.4	7.3	7.0
Poland	:	3.2	2.7	1.9	1.8	2.0
Portugal	5.8	4.8	4.8	4.9	4.5	4.6
Romania	3.0	3.5	4.5	5.1	7.1	8.9
Slovenia	:	6.5	6.6	6.2	6.1	6.8
Slovakia	:	4.4	4.8	4.4	4.4	4.2
Finland	5.3	6.5	6.1	6.1	5.8	4.9
Sweden	6.3	6.4	6.4	6.6	6.7	7.2
United Kingdom	9.7	9.6	9.2	8.6	8.2	8.3
Iceland	4.3	5.9	6.8	9.6	8.7	7.6
Liechtenstein	8.6	8.5	8.4	8.2	8.2	8.2
Norway	4.7	4.7	5.8	5.4	5.2	6.0
Switzerland	8.0	7.2	7.1	6.9	6.9	7.2
Croatia	7.7	8.1	7.5	7.4	8.0	7.1
Turkey	1.5	3.7	8.0	7.0	6.5	5.5

Data source: Eurostat, Association des Constructeurs Européens d'Automobiles, United Nations Economic Commission for Europe, national statistics



The EU-27 renewal rate of passenger cars equaled 6.8 % in 2007, a decrease of three percentage points from 2003. Luxembourg had the highest renewal rate (16 %). This was significantly higher compared to the countries that followed, Belgium (10.4 %) and Ireland (9.8 %). Thirteen countries presented decreases in their renewal rates since 2002 (or 2003 where data for 2002 is not available).

On the contrary, four countries (Bulgaria, Romania, Latvia and Lithuania) more than doubled their 2002/2003 renewal rates. Among these four countries only Romania was in the top ten (8.9 %). Lithuania and Bulgaria were the countries with the lowest renewal rates among the EU-27 and Latvia presented the fifth lowest renewal rate.

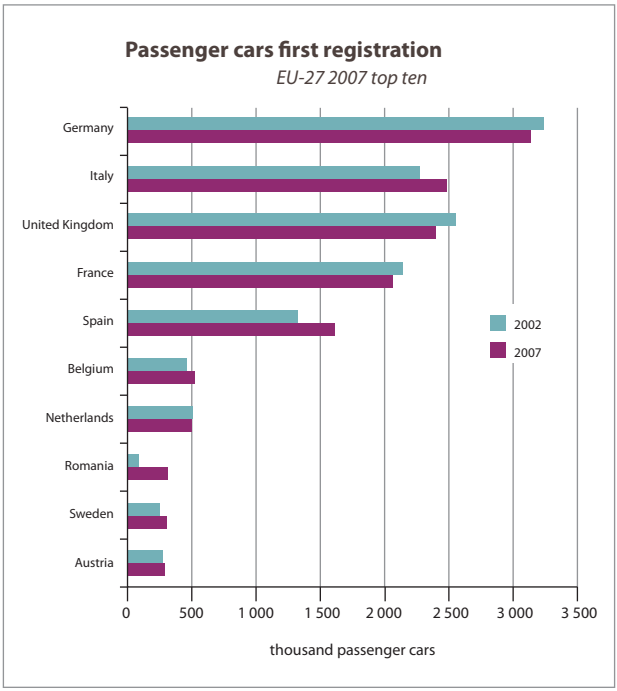
From the top ten countries, all but three (Ireland, UK and Germany) showed increases in their renewal rates.

Passenger cars first registration

(thousand passenger cars)

	2002	2003	2004	2005	2006	2007
EU-27	**:**	**14 853**	**15 149**	**15 092**	**15 450**	**15 605**
Belgium	468	459	485	480	526	525
Bulgaria	14	17	25	33	32	41
Czech Republic	:	153	144	152	157	174
Denmark	112	96	121	147	154	159
Germany	3 253	3 237	3 267	3 319	3 468	3 148
Estonia	:	16	16	20	25	31
Ireland	156	145	154	172	178	186
Greece	268	257	290	270	268	280
Spain	1 332	1 382	1 517	1 529	1 635	1 615
France	2 145	2 009	2 014	2 068	2 001	2 065
Italy	2 280	2 247	2 265	2 237	2 326	2 493
Cyprus	9	9	20	19	20	25
Latvia	:	9	11	17	26	33
Lithuania	:	8	9	10	14	22
Luxembourg	43	44	48	49	51	51
Hungary	:	208	207	199	188	172
Malta	:	7	6	7	7	6
Netherlands	511	489	484	465	484	506
Austria	279	300	311	308	309	298
Poland	:	358	318	236	239	293
Portugal	226	190	198	206	195	202
Romania	89	107	145	173	256	316
Slovenia	:	60	62	59	60	69
Slovakia	:	60	57	57	59	60
Finland	117	147	142	148	146	125
Sweden	255	261	264	274	283	307
United Kingdom	2 564	2 579	2 567	2 440	2 345	2 404
Iceland	7	10	12	18	17	16
Liechtenstein	2	2	2	2	2	2
Norway	89	90	116	110	109	129
Switzerland	295	270	269	265	269	285
Croatia	95	105	100	102	114	106
Turkey	70	176	433	407	397	353

Data source: Eurostat, Association des Constructeurs Européens d'Automobiles, national sources



15 605 thousand passenger cars were first registered in the EU-27 in 2007. This was a 5 % increase compared to 2002. In 2007, Germany was the country where most first registrations took place (3 148 thousand). This value was 9 % lower than the previous year's value. Compared to 2002, Germany showed a 3 % decrease. Italy, the United Kingdom, France and Spain also presented high numbers of first registrations in 2007. These five countries, which constituted the largest Member States in terms of population and economy size, made up 75 % of the EU total first registrations of passenger cars. Poland, the sixth largest country in terms of population and passenger cars, showed a much lower number of first registrations (293 thousand in 2007).

Motorisation rate of lorries and road tractors

Lorries and road tractors/1 000 inhabitants

	2002	2003	2004	2005	2006	2007
EU-27	**60**	**61**	**62**	**63**	**65**	**67**
Belgium	57	58	60	62	64	65
Bulgaria	35	37	41	43	29	34
Czech Republic	34	36	39	43	48	54
Denmark	75	77	81	87	94	99
Germany*	29	29	29	29	30	30
Estonia**	59	62	63	64	69	60
Ireland	60	63	67	70	76	80
Greece	101	103	105	107	110	112
Spain	104	105	109	113	116	120
France	86	86	85	85	85	86
Italy	66	69	69	71	74	75
Cyprus	167	167	161	158	151	151
Latvia	44	45	46	49	53	57
Lithuania	30	32	34	36	40	44
Luxembourg	61	62	62	64	66	68
Hungary	39	40	41	42	44	46
Malta	111	112	111	110	112	115
Netherlands	61	62	64	62	61	62
Austria	42	43	43	44	44	45
Poland	57	61	63	60	63	66
Portugal	133	121	124	124	125	126
Romania**	20	21	22	23	25	23
Slovenia	29	30	32	33	35	39
Slovakia	26	28	28	32	35	40
Finland	62	63	68	69	72	75
Sweden	46	47	49	51	53	55
United Kingdom	53	54	57	59	61	63
Iceland	71	74	79	87	94	101
Liechtenstein	79	76	76	75	72	73
Norway	95	96	98	101	105	110
Switzerland	40	40	40	41	42	43
Croatia	31	33	35	37	38	40
Turkey	21	22	27	30	33	36

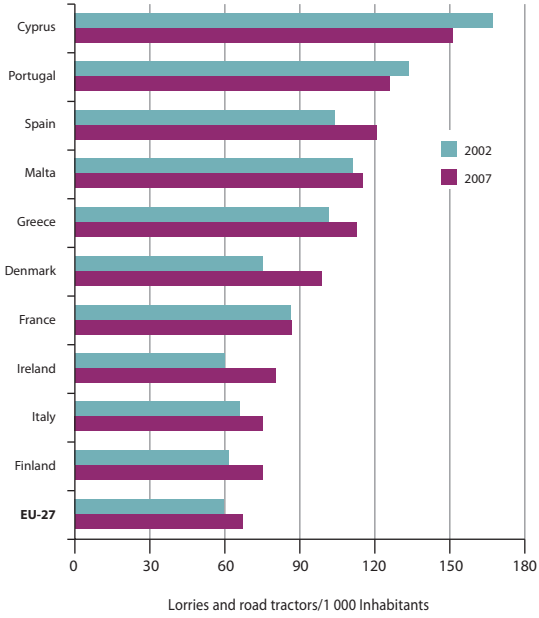
* Revised series have been used from 1997 for lorries and from 2007 for both lorries and road tractors.

** A cleaned up database has been used in 2007.

Data source: Eurostat, United Nations Economic Commission for Europe, national statistics

Motorisation rate of lorries and road tractors

EU-27 2007 top ten



Note: The stock at the end of the year has been used except for Belgium: 1 August, Switzerland: 30 September and Liechtenstein: 1 July. As a rule, data include heavy and light goods vehicles, lorries and road tractors. Due to varying concepts of such vehicles, data are not fully comparable between countries. In the case of Bulgaria, new more reliable data from 2006, because vehicles had to get new number plates until end-2006. Those which hadn't done so have been removed from the database. The population used was that on 1st January of each year.

There were 67 lorries and road tractors per thousand inhabitants in 2007 (motorisation rate). Compared to 2002, this was a 13 % increase. Cyprus had the highest motorisation rate with 151 lorries and road tractors per 1 000 inhabitants in 2007, followed by Portugal (126). Spain, Malta and Greece have also maintained high motorisation rates over the past six years. In 2007, these five countries had rates more than 60 % above the EU-27 average.

As in 2002, in 2007 Romania was still the country with the lowest motorisation rate (23). The greatest increases over the period where observed in the Czech Republic and Slovakia (more than 50 % above 2002). Their motorisation rates remained at low levels.

Lorries and road tractors

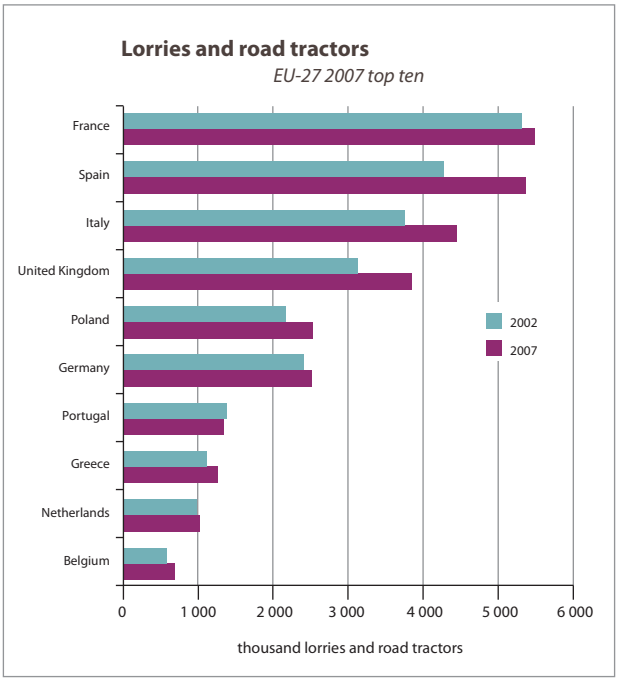
(thousand lorries and road tractors)

	2002	2003	2004	2005	2006	2007
EU-27	**28 876**	**29 521**	**30 430**	**31 177**	**32 084**	**33 194**
Belgium	587	603	626	652	670	691
Bulgaria	280	293	318	334	226	261
Czech Republic	349	366	396	439	491	555
Denmark	402	413	436	470	509	537
Germany*	2 398	2 385	2 385	2 405	2 471	2 503
Estonia**	80	83	86	86	93	80
Ireland	233	251	268	287	319	346
Greece	1 109	1 131	1 159	1 186	1 220	1 256
Spain	4 259	4 363	4 603	4 850	5 087	5 353
France	5 293	5 298	5 315	5 347	5 345	5 476
Italy	3 752	3 934	4 016	4 180	4 332	4 438
Cyprus	118	120	118	118	116	117
Latvia	103	105	108	113	121	130
Lithuania	106	111	116	122	136	148
Luxembourg	27	28	28	30	31	33
Hungary	396	407	410	428	444	459
Malta	44	45	45	44	46	47
Netherlands	980	1 010	1 036	1 005	996	1 010
Austria	339	346	353	358	364	373
Poland	2 163	2 313	2 392	2 305	2 393	2 521
Portugal	1 377	1 257	1 300	1 308	1 320	1 333
Romania**	447	463	482	494	545	502
Slovenia	58	60	63	66	70	78
Slovakia	137	151	152	174	189	216
Finland	320	327	355	364	376	395
Sweden	409	422	440	461	480	504
United Kingdom	3 112	3 237	3 425	3 552	3 695	3 834
Iceland	20	21	23	26	28	31
Liechtenstein	3	3	3	3	3	3
Norway	431	438	450	465	489	514
Switzerland	290	292	298	307	314	324
Croatia	139	148	155	163	170	177
Turkey	1 443	1 552	1 907	2 152	2 405	2 620

* Revised series have been used from 1997 for lorries and from 2007 for both lorries and road tractors.

** A cleaned up database has been used in 2007.

Data source: Eurostat, United Nations Economic Commission for Europe, national statistics



Note: The stock at the end of the year has been used except for Belgium: 1 August, Switzerland: 30 September and Liechtenstein: 1 July. As a rule, data include heavy and light goods vehicles, lorries and road tractors.

In 2007, there were 33 194 thousand lorries and road tractors in the EU-27, a 15 % increase compared to 2002 (28 876 thousand). Since countries use different definitions of lorries and road tractors, data can not be considered fully comparable.

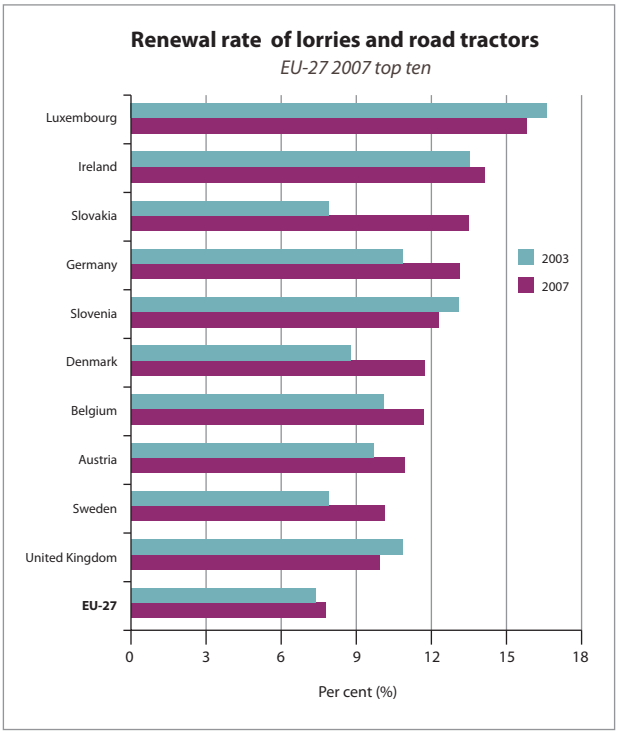
Renewal rate of lorries and road tractors

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

	2003	2004	2005	2006	2007
EU-27	**:**	**:**	**:**	**7.6**	**7.8**
Belgium	10.1	11.0	11.5	10.6	11.7
Bulgaria	:	:	:	4.4	4.1
Czech Republic	4.0	6.0	5.5	5.3	5.7
Denmark	8.8	11.3	13.7	13.5	11.7
Germany	10.9	11.7	12.3	12.1	13.1
Estonia	3.7	3.5	4.5	5.6	7.9
Ireland	13.5	12.5	14.6	14.5	14.1
Greece	1.8	2.1	2.2	2.1	2.1
Spain	7.6	8.1	8.9	6.2	6.0
France	8.0	8.6	9.0	9.2	9.4
Italy	6.1	6.2	5.9	6.2	6.3
Cyprus*	4.2	3.0	2.7	3.2	3.9
Latvia	1.7	2.1	2.7	3.8	5.2
Lithuania	2.8	3.2	4.6	5.3	6.3
Luxembourg	16.6	13.0	15.6	14.7	15.8
Hungary	8.8	8.5	9.7	4.9	4.8
Malta	1.0	1.0	1.7	1.4	2.0
Netherlands	8.9	9.7	8.0	8.4	9.5
Austria	9.7	10.9	10.5	10.4	10.9
Poland	1.4	2.0	2.0	2.3	3.0
Portugal	5.8	5.8	5.5	5.3	5.6
Romania	:	:	:	7.0	9.6
Slovenia	13.1	13.4	12.8	11.6	12.3
Slovakia	7.9	8.6	10.4	12.6	13.5
Finland	5.6	6.1	5.5	5.5	5.5
Sweden	7.9	8.2	9.1	9.6	10.1
United Kingdom	10.8	11.0	10.9	10.2	9.9
Iceland	6.5	8.4	11.0	10.7	10.7
Liechtenstein	5.8	8.1	6.9	8.5	6.6
Norway	7.0	8.3	9.2	9.9	10.1
Switzerland	7.7	8.1	8.7	8.9	9.2
Croatia	10.0	8.4	7.9	8.3	7.8
Turkey	:	:	:	:	:

* The data include new and used vehicles.

Data source: Eurostat, DG for Energy and Transport, Association des Constructeurs Européens d'Automobiles, United Nations Economic Commission for Europe, national statistics



The EU-27 renewal rate of lorries and road tractors was 7.8 % in 2007. Luxembourg had the highest renewal rate with 15.8 % in 2007 . Ireland had the second highest renewal rate (14.1 %). The lowest renewal rates in 2007 were observed in Malta (2 %), Greece (2.1 %), Poland (3 %) and Cyprus (3.9 %).

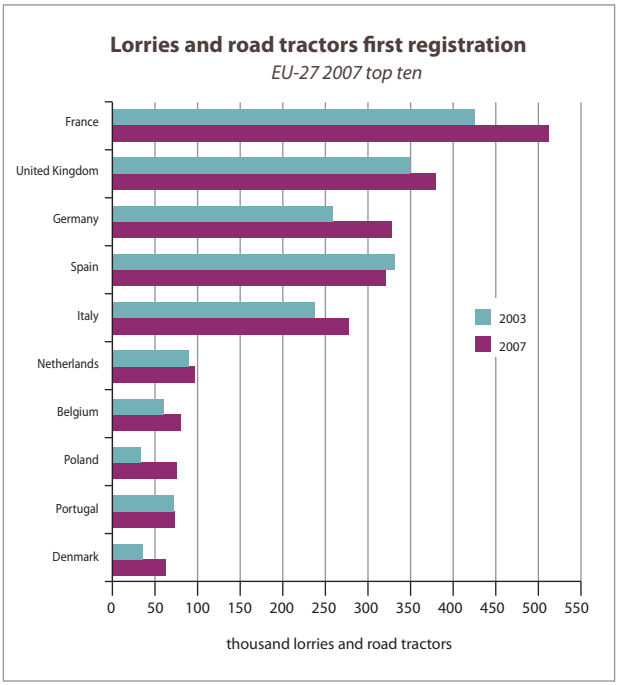
Lorries and road tractors first registration

(number of lorries and road tractors)

	2003	2004	2005	2006	2007
EU-27	**:**	**:**	**:**	**2 426 773**	**2 584 294**
Belgium	60 839	68 917	75 083	70 935	80 569
Bulgaria	:	:	:	9 959	10 697
Czech Republic	14 566	23 688	24 224	25 979	31 613
Denmark	36 133	49 452	64 292	68 782	62 958
Germany	259 076	278 004	295 627	298 723	328 645
Estonia	3 072	3 003	3 871	5 230	6 328
Ireland	33 924	33 587	41 965	46 291	48 865
Greece	19 798	24 775	25 538	25 917	26 504
Spain	331 387	370 697	430 611	314 894	320 660
France	426 462	454 992	480 122	492 547	513 321
Italy	238 014	250 202	248 167	267 184	278 446
Cyprus*	5 014	3 479	3 233	3 697	4 578
Latvia	1 741	2 290	3 037	4 655	6 719
Lithuania	3 117	3 722	5 668	7 231	9 257
Luxembourg	4 637	3 708	4 605	4 507	5 139
Hungary	35 790	34 787	41 671	21 604	21 920
Malta	460	459	755	625	940
Netherlands	90 073	100 513	80 769	83 917	96 114
Austria	33 441	38 578	37 678	37 966	40 739
Poland	33 432	47 049	47 064	54 514	76 621
Portugal	72 401	75 577	71 982	69 753	74 063
Romania	:	:	:	38 290	48 208
Slovenia	7 810	8 472	8 532	8 110	9 530
Slovakia	11 908	13 053	18 182	23 915	29 061
Finland	18 356	21 587	19 955	20 503	21 681
Sweden	33 199	36 238	41 807	45 846	50 932
United Kingdom	350 185	377 454	388 410	375 199	380 186
Iceland	1 370	1 927	2 810	3 013	3 317
Liechtenstein	148	210	178	215	169
Norway	30 503	37 471	42 681	48 400	51 870
Switzerland	22 495	24 231	26 702	27 856	29 782
Croatia	14 775	13 021	12 946	14 020	13 790
Turkey	:	:	:	:	:

* The data include new and used vehicles.

Data source: Eurostat, DG for Energy and Transport, Association des Constructeurs Européens d'Automobiles, national statistics



In 2007, there were 2 584 294 lorries and road tractors first registered in the EU-27. France with 513 321 lorries and road tractors made up 20 % of the EU-27 total. The United Kingdom followed with 380 186 and a 15 % share and Germany was next with 328 645 (13 %). Among the top countries were also Spain (320 660, 12 % share) and Italy (278 446, 11 % share). The contribution of the other Member States to the total was 29 %.

With the exceptions of Hungary, Cyprus and Spain, the rest of the EU-27 countries showed increases in their number of lorry and tractor first registrations between 2003 and 2007. The highest increases - that exceeded 100 % - were observed in Latvia (286 %), Lithuania (197 %), Slovakia (144 %), Poland (129 %), the Czech Republic (117 %), Estonia (106 %) and Malta (104 %). These increases however did not correspond to a significant increase in the countries' shares over the EU-27 total.

Airfleet by operator country

(number of commercial aircrafts)

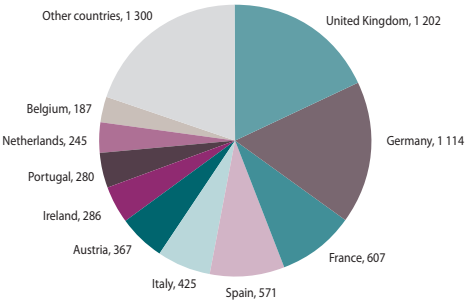
	2nd quarter 2008
EU-27	**6 584**
Belgium	187
Bulgaria	62
Czech Republic	84
Denmark *	171
Germany	1 114
Estonia	23
Ireland	286
Greece	118
Spain	571
France	607
Italy	425
Cyprus	20
Latvia	55
Lithuania	36
Luxembourg	99
Hungary	73
Malta	28
Netherlands	245
Austria	367
Poland	94
Portugal	280
Romania	67
Slovenia	33
Slovakia	37
Finland	116
Sweden *	184
United Kingdom	1 202
Iceland	44
Liechtenstein	6
Norway **	120
Switzerland	316
Croatia	24
Turkey	273

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

** Excludes SAS passenger aircraft.

Data source: Airclaims

Airfleet by operator country at 2nd quarter 2008
EU-27 top ten countries



Note: All military aircrafts excluded.

In the second quarter of 2008, the airfleet of EU-27 amounted to 6 584. In terms of shares over the EU-27 total, the UK made up 18 %, Germany 17 %, while the percentages for France and Spain were about 9 % each.

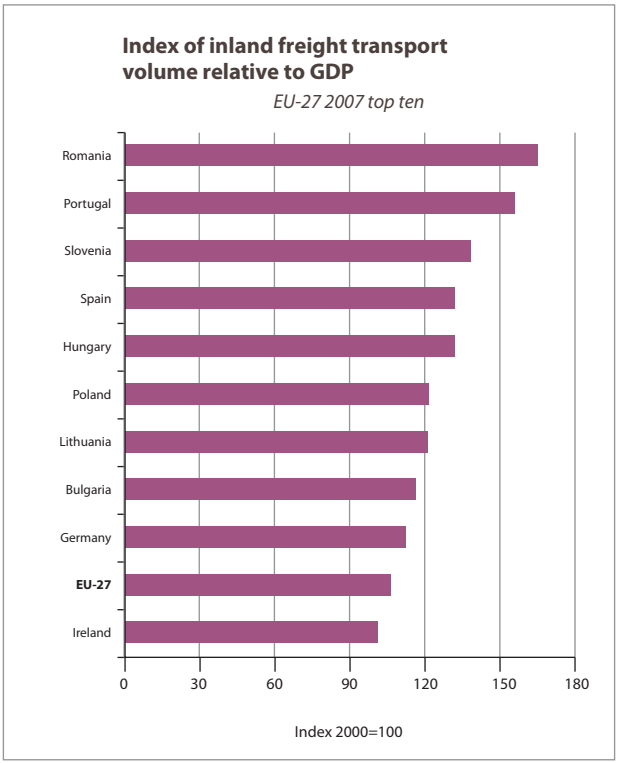
Index of inland freight transport volume relative to GDP

Inland freight transport volume measured in tonne-km/GDP (millions of euro, chain-linked volumes at 2000 exchange rates), 2000=100

	1998	2002	2004	2005	2006	2007
EU-27*	***101.1***	***100.0***	***105.5***	***105.4***	***106.3***	***106.8***
Belgium	89.0	101.2	91.2	84.7	82.3	78.3
Bulgaria	63.6	105.0	119.7	128.0	118.3	116.6
Czech Republic	100.9	103.9	98.6	88.5	94.0	86.4
Denmark	*95.6*	92.7	93.2	91.0	80.7	78.0
Germany	97.0	98.9	104.5	106.0	109.9	111.9
Estonia	76.4	92.7	90.2	87.3	76.7	67.1
Ireland	82.0	102.3	111.5	108.9	99.8	102.1
Greece	:	:	:	:	:	:
Spain*	*93.6*	114.9	128.1	130.1	129.6	133.1
France	100.3	95.0	92.8	87.4	87.8	*88.5*
Italy	*105.1*	100.4	101.2	107.0	*96.4*	*95.2*
Cyprus	*104.8*	101.2	80.7	96.6	77.6	76.7
Latvia	104.3	101.9	107.2	105.0	91.6	95.2
Lithuania	85.5	107.6	106.2	116.8	118.5	121.5
Luxembourg	*80.9*	109.4	106.9	92.3	87.5	89.3
Hungary	110.7	89.7	93.9	105.0	118.1	132.2
Malta	:	:	:	:	:	:
Netherlands	106.7	95.5	105.6	98.7	95.2	88.7
Austria	93.4	105.7	104.3	98.1	101.9	97.9
Poland*	112.0	98.4	108.2	108.9	115.2	121.7
Portugal*	101.6	107.0	143.5	148.6	153.8	155.8
Romania*	:	119.6	145.1	174.2	171.4	165.8
Slovenia	*106.2*	95.5	114.5	128.9	132.0	138.5
Slovakia	116.3	86.9	88.0	93.7	86.9	92.1
Finland	98.6	94.8	91.5	87.2	81.5	77.3
Sweden	*102.9*	96.9	94.4	95.3	94.4	94.4
United Kingdom	110.8	95.1	93.8	91.6	93.6	90.1
Iceland	102.1	*108.3*	*109.7*	*113.2*	*119.2*	:
Liechtenstein	:	:	:	:	:	:
Norway	102.6	96.6	102.8	105.3	109.4	107.0
Switzerland**	:	:	:	101.1	103.3	105.9
Croatia***	:	100.0	108.2	110.9	117.3	116.0
Turkey****	96.7	92.2	84.2	82.2	81.7	80.0

* Break in series between 2003 and 2004.
** Road transport data cover only haulage by CH vehicles on CH territory; Data taken from DG for Energy and Transport.
*** 2002=100.
**** In the case of road transport only national transport data have been used.

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



Note: This indicator includes transport by road, rail and inland waterways. Rail and inland waterways transport are based on movements on national territory, regardless of the nationality of the vehicle or vessel. Road transport is based on all movements of vehicles registered in the reporting country and covers only the haulage of heavy goods vehicles (usually>3.5 tonnes load capacity).

The index of Inland freight transport volume relative to GDP refers to the fraction of the tonne-kilometres of inland modes of transport and GDP. The inland modes include road, rail and inland waterways transport, while the GDP is in chain-linked volumes at 2000 exchange rates. The indicator was indexed for 2000.

In 2007, the index of inland freight transport relative to GDP for the EU-27 was 106.8. This was a 6 % increase compared to 1998. Romania had the highest index, which was almost 55 % higher than the EU-27 average in 2007. Portugal, Slovenia, Spain and Hungary followed with an index at least 23 % above the EU-27 average. The countries with the lowest index were Estonia, Cyprus and Finland. Eleven countries presented growths in their index compared to 1998. The most significant increase took place in Bulgaria (83 %), while the greatest declines took place in Cyprus (-27 %) and Finland (-22 %).

Index of inland freight transport growth

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

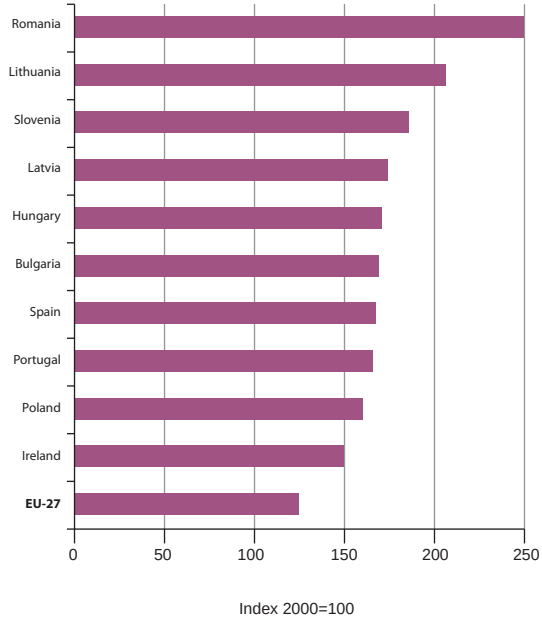
	1998	2002	2004	2005	2006	2007
EU-27*	***94***	***103***	***113***	***115***	***120***	***124***
Belgium	83	104	97	92	92	90
Bulgaria	59	114	146	166	163	170
Czech Republic	96	109	111	106	121	117
Denmark	*90*	94	97	97	89	87
Germany	92	100	107	109	117	122
Estonia	70	108	121	127	124	115
Ireland	68	115	137	143	138	150
Greece	:	:	:	:	:	:
Spain*	*85*	122	145	153	158	168
France	93	98	99	95	97	*100*
Italy	*100*	103	106	113	*104*	*105*
Cyprus	*95*	107	91	113	95	98
Latvia	94	117	144	156	152	174
Lithuania	83	123	143	170	186	208
Luxembourg	*69*	117	121	110	111	119
Hungary	101	97	111	129	151	171
Malta	:	:	:	:	:	:
Netherlands	98	97	111	105	105	101
Austria	87	108	110	107	114	113
Poland*	103	101	122	127	142	161
Portugal*	94	110	149	155	163	168
Romania*	110	133	184	230	244	251
Slovenia	*97*	102	131	154	167	187
Slovakia	115	94	105	119	120	140
Finland	90	99	101	99	97	96
Sweden	*94*	100	104	108	112	115
United Kingdom	103	99	104	103	109	108
Iceland	94	*113*	*126*	*140*	*153*	:
Liechtenstein	:	:	:	:	:	:
Norway	97	100	112	117	125	126
Switzerland**	:	:	:	108	114	121
Croatia***	:	100	118	126	140	146
Turkey****	94	92	97	103	109	112

* Break in series between 2003 and 2004.
** Road transport data cover only haulage by CH vehicles on CH territory; Data taken from DG for Energy and Transport.
*** 2002=100.
**** In the case of road transport only national transport data have been used.

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

Index of inland freight transport growth

EU-27 2007 top ten



Note: This indicator includes transport by road, rail and inland waterways. Rail and inland waterways transport are based on movements on national territory, regardless of the nationality of the vehicle or vessel. Road transport is based on all movements of vehicles registered in the reporting country and covers only the haulage of heavy goods vehicles (usually>3.5 tonnes load capacity).

In 2007, the EU-27 index of inland freight transport growth was 124 (index 2000=100). This corresponded to a 31 % growth between 1998 and 2007. Romania had the highest index among the EU-27 Member States. In 2007, the index for Romania was 251, which was more than twice the EU-27 average. The indices for Lithuania (208) and Slovenia (187), which followed, were 70 % and 50 % above the EU average respectively.

Between 1998 and 2007 all the EU-27 Member States but Denmark increased their indices. In 2007, Denmark and Belgium had the lowest indices of inland freight transport growth with 87 and 90 respectively.

Modal split of inland freight transport - shares of road, IWW and rail in total inland transport

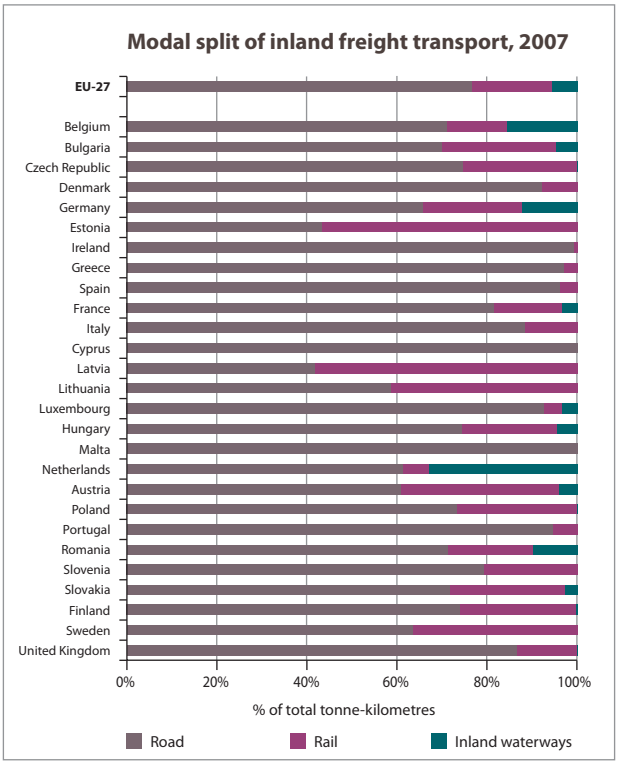
(% of total tonne-kilometres)

	2002				2007			
	Rail	Road	IWW	Total	Rail	Road	IWW	Total
EU-27	***18***	***75***	***6***	**100**	***18***	***77***	***6***	**100**
Belgium	11	78	12	100	13	71	16	100
Bulgaria	33	63	4	100	25	70	5	100
Czech Republic	27	73	0	100	25	75	0	100
Denmark	8	92	-	100	8	92	-	100
Germany	19	66	15	100	22	66	12	100
Estonia	70	30	-	100	57	43	-	100
Ireland	3	97	-	100	1	99	-	100
Greece	:	:	:	100	3	97	-	100
Spain	6	94	-	100	4	96	-	100
France	19	78	3	100	*15*	*81*	*3*	100
Italy	*10*	*90*	*0*	100	*12*	*88*	*0*	100
Cyprus	-	100	-	100	-	100	-	100
Latvia	71	29	-	100	58	42	-	100
Lithuania	48	52	0	100	42	59	0	100
Luxembourg	6	91	4	100	4	93	3	100
Hungary	28	66	6	100	21	74	5	100
Malta	-	100	-	100	-	100	-	100
Netherlands	3	63	33	100	6	61	33	100
Austria	29	66	5	100	35	61	4	100
Poland	37	62	1	100	26	74	0	100
Portugal	7	93	-	100	5	95	-	100
Romania	34	57	8	100	19	71	10	100
Slovenia	30	70	-	100	21	79	-	100
Slovakia	41	59	0	100	26	72	3	100
Finland	23	77	0	100	26	74	0	100
Sweden	34	66	-	100	36	64	-	100
United Kingdom	10	90	0	100	13	87	0	100
Iceland	-	100	-	100	-	100	-	100
Liechtenstein	:	:	:	100	:	:	:	100
Norway	15	85	-	100	15	85	-	100
Switzerland*	:	:	:	100	54	45	1	100
Croatia	23	76	1	100	25	74	1	100
Turkey**	5	95	-	100	5	95	-	100

* Road transport data cover only haulage by CH vehicles on CH territory; Data taken from DG for Energy and Transport.

** In the case of road transport only national transport data have been used.

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



Note: This indicator includes transport by road, rail and inland waterways. Rail and inland waterways transport are based on movements on national territory, regardless of the nationality of the vehicle or vessel. Road transport is based on all movements of vehicles registered in the reporting country and covers only the haulage of heavy goods vehicles (usually>3.5 tonnes load capacity).

This indicator refers to the share of each transport mode (road, rail and inland waterways) to total inland freight transport, based on their transport performance in tonne-km. Between 2002 and 2007 only slight changes were observed in the modal split of freight transport for the majority of the Member States. In almost all countries freight transport by road was the dominant mode, with an average of 77 % in 2007. The only exceptions were Estonia and Latvia, where the shares of freight transport by rail were 57 % and 58 % respectively. However, compared to their shares in 2002, there appeared to be a declining trend for this mode.

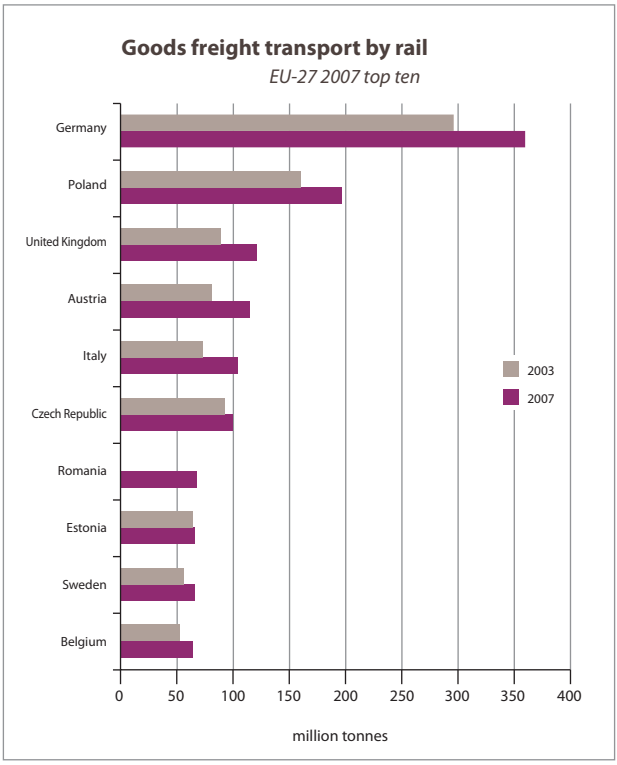
In Cyprus and Malta road transport made up 100 % of inland freight transport in 2007, while in six more countries (Ireland, Greece, Spain, Portugal, Luxembourg and Denmark) road transport held a share that exceeded 90 %. The largest inland waterways shares in 2007 were found in the Netherlands (33 %) and in Belgium (16 %).

Goods freight transport by rail

(million tonnes)

	2003	2004	2005	2006	2007
EU-27	**:**	**:**	**:**	**c**	**:**
Belgium	56	c	c	c	66
Bulgaria	:	:	:	22	22
Czech Republic	93	89	86	97	100
Denmark	8	8	8	7	7
Germany	297	310	317	346	361
Estonia	66	66	68	61	69
Ireland	c	2	2	1	1
Greece	:	3	3	4	5
Spain	26	29	30	30	29
France	121	117	108	109	c
Italy	74	84	90	102	105
Cyprus	-	-	-	-	-
Latvia	48	51	55	49	52
Lithuania	43	46	49	50	54
Luxembourg	15	16	11	12	12
Hungary	43	52	51	55	52
Malta	-	-	-	-	-
Netherlands	30	34	35	37	41
Austria	82	93	102	111	116
Poland	162	283	270	291	245
Portugal	9	10	10	10	11
Romania	:	73	69	68	69
Slovenia	16	16	16	17	18
Slovakia	51	50	49	52	52
Finland	44	43	41	44	40
Sweden	58	60	63	65	68
United Kingdom	89	119	121	127	123
Iceland	-	-	-	-	-
Liechtenstein	:	2	2	2	2
Norway	21	23	25	25	25
Switzerland	:	:	:	:	:
Croatia	:	12	14	15	16
Turkey	16	18	19	20	21

Data source: Eurostat



Between 2003 and 2007, goods freight transport by rail increased in 16 EU-27 countries. This increase that was observed in spite of the overall decrease in the railway network indicates a higher efficiency of the railway industry. The highest railways goods transport was observed in Germany with 361 million tonnes in 2007. This was more than 60 % higher than in Poland (216 million tonnes). The United Kingdom followed with 123 million tonnes, with France at also high levels even though 2007 data is confidential. These four countries held the largest railway networks among the EU-27 as well.

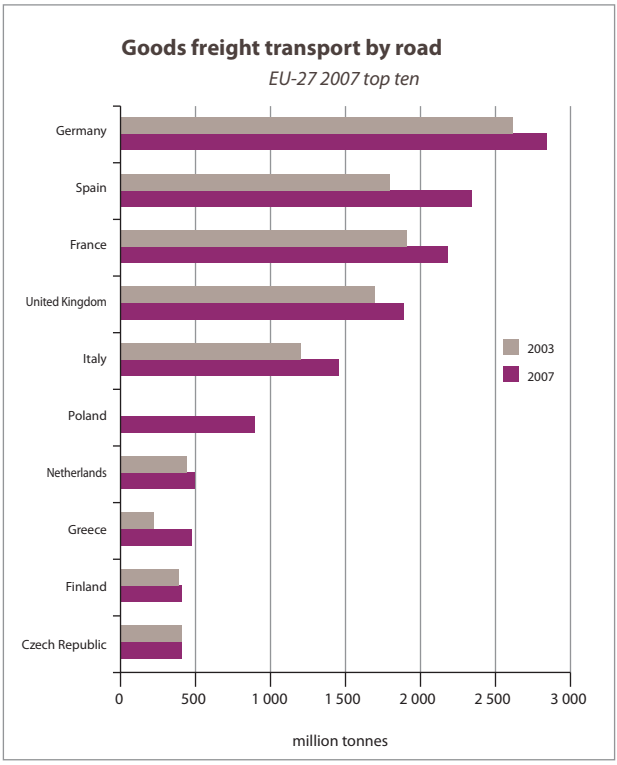
Eight EU-27 countries experienced decreases in the amount of goods transported by rail over the past years. Ireland presented the largest decrease (-63 %). The goods transported by rail in Ireland were almost 1 million tonnes in 2007, which was the lowest amount among the EU-27.

Goods freight transport by road

(million tonnes)

	2003	2004	2005	2006	2007
EU-27	**:**	**:**	**:**	**:**	**:**
Belgium	293	267	265	274	279
Bulgaria	:	:	:	144	128
Czech Republic	411	428	424	398	408
Denmark	190	174	190	178	184
Germany	2 619	2 625	2 613	2 759	2 848
Estonia	25	23	26	30	35
Ireland	237	263	285	294	298
Greece	222	440	430	501	480
Spain	1 801	1 952	2 148	2 326	2 345
France	1 913	2 007	1 997	2 114	2 191
Italy	1 207	1 378	1 460	1 446	1 461
Cyprus	55	43	54	44	40
Latvia	41	43	47	48	54
Lithuania	46	45	46	45	49
Luxembourg	26	26	23	24	27
Hungary	208	204	216	233	218
Malta	:	:	:	:	:
Netherlands	443	469	472	475	499
Austria	256	242	248	316	314
Poland	:	690	811	823	895
Portugal	254	300	306	291	290
Romania	:	:	:	317	339
Slovenia	61	64	70	72	72
Slovakia	161	163	175	161	152
Finland	393	392	392	390	414
Sweden	304	319	349	334	353
United Kingdom	1 703	1 803	1 805	1 874	1 893
Iceland	:	:	:	:	:
Liechtenstein	:	:	:	:	:
Norway	226	240	241	245	262
Switzerland	:	:	:	:	:
Croatia	:	:	:	:	:
Turkey	:	:	:	:	:

Data source: Eurostat



In 2007, the highest goods transport by road took place in Germany (2 848 million tonnes) with a 9 % increase since 2003. Spain was second (2 345 million tonnes) with a 30 % increase between 2003 and 2007. France followed with 2 191 million tonnes in 2007 and a 15 % increase, while the UK was fourth with 1 893 million tonnes in 2007 and an 11 % increase over the same period.

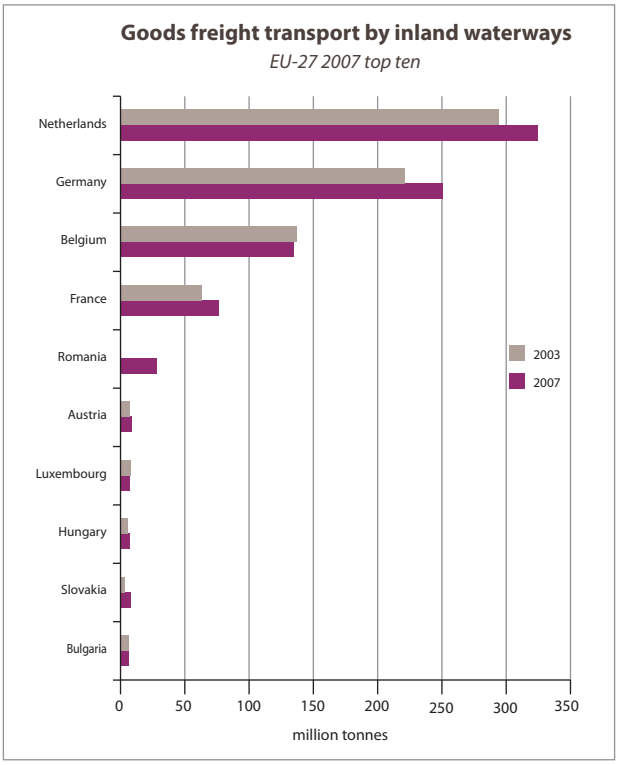
In 2007, the amount of goods transported by road for the rest of the Member States was less than half the amount of goods transported by road in Germany. In the past five years the greatest increase was observed in Greece (116 %). Still the overall amount of goods transported by road remained about 6 times less than that of Germany.

Goods freight transport by inland waterways

(million tonnes)

	2003	2004	2005	2006	2007
EU-27	:	:	:	:	:
Belgium	137	147	160	166	135
Bulgaria	7	4	5	6	7
Czech Republic	1	1	2	1	1
Denmark	-	-	-	-	-
Germany	220	236	237	243	249
Estonia	-	-	-	-	-
Ireland	-	-	-	-	-
Greece	-	-	-	-	-
Spain	-	-	-	-	-
France	64	67	68	71	76
Italy	:	:	:	:	:
Cyprus	-	-	-	-	-
Latvia	-	-	-	-	-
Lithuania	-	-	-	-	-
Luxembourg	10	11	10	11	10
Hungary	:	7	8	7	8
Malta	-	-	-	-	-
Netherlands	293	319	318	318	324
Austria	11	9	9	9	12
Poland	:	:	7	7	6
Portugal	-	-	-	-	-
Romania	:	:	33	29	29
Slovenia	-	-	-	-	-
Slovakia	:	:	2	2	8
Finland	:	:	:	:	:
Sweden	-	-	-	-	-
United Kingdom	:	:	:	:	:
Iceland	-	-	-	-	-
Liechtenstein	-	-	-	-	-
Norway	-	-	-	-	-
Switzerland	:	:	:	:	:
Croatia	:	:	:	:	1
Turkey	-	-	-	-	-

Data source: Eurostat



In 2007, the Netherlands showed the highest goods transport by inland waterways with 324 million tonnes. This was a 10 % increase since 2003. In 2007, 249 million tonnes were transported in Germany (13 % increase compared to 2003) and 135 million tonnes in Belgium (2 % decrease for the same period). France transported 76 million tones, a 19 % increase from 2003. All four countries had the longest inland waterways lengths among the EU-27.

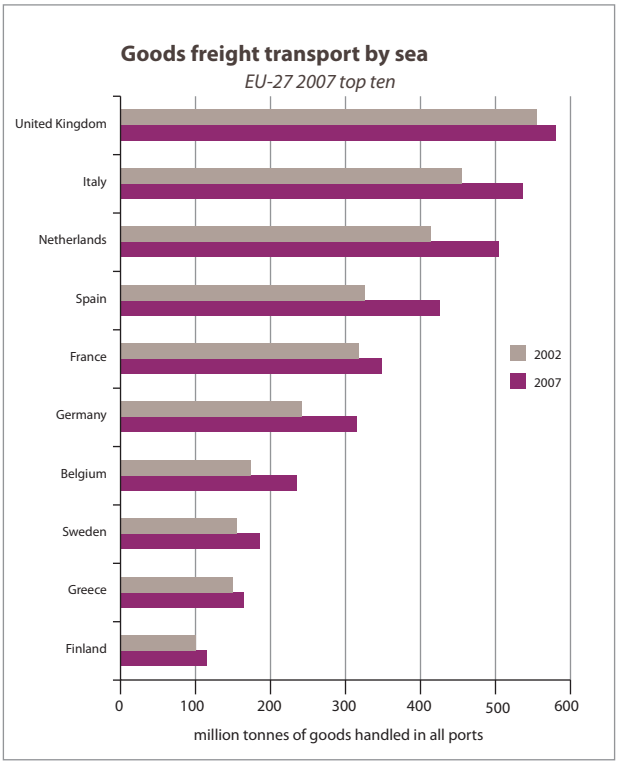
Among the other Member States, where goods freight transport was done by inland waterways, Romania, Poland, Bulgaria and the Czech Republic presented decreases. On the contrary, Slovakia, Hungary, Austria and Luxembourg showed increases.

Gross freight transport by sea

(Gross weight of seaborne goods handled in all ports in million tonnes)

	2002	2003	2004	2005	2006	2007
EU-27	**3 335**	**3 452**	**3 570**	**3 719**	**3 836**	**3 940**
Belgium	174	181	188	207	219	236
Bulgaria	20	21	23	25	28	25
Czech Republic	-	-	-	-	-	-
Denmark	94	104	100	100	108	110
Germany	246	255	272	285	303	315
Estonia	45	47	45	47	50	45
Ireland	45	46	48	52	53	54
Greece	148	163	158	151	159	164
Spain	326	344	373	400	414	427
France	319	330	334	341	350	349
Italy	458	477	485	509	520	537
Cyprus	7	7	7	7	8	7
Latvia	52	55	55	60	57	61
Lithuania	24	30	26	26	27	29
Luxembourg	-	-	-	-	-	-
Hungary	-	-	-	-	-	-
Malta	5	5	5	5	5	5
Netherlands	413	410	441	461	477	507
Austria	-	-	-	-	-	-
Poland	48	51	52	55	53	52
Portugal	56	57	59	65	67	68
Romania	33	36	41	48	47	49
Slovenia	9	11	12	13	15	16
Slovakia	-	-	-	-	-	-
Finland	99	104	107	100	111	115
Sweden	155	161	167	178	180	185
United Kingdom	558	556	573	585	584	582
Iceland	5	5	5	6	6	:
Liechtenstein	-	-	-	-	-	-
Norway	190	187	198	202	197	199
Switzerland	-	-	-	-	-	-
Croatia	19	20	25	26	26	30
Turkey	:	:	:	:	:	:

Data source: Eurostat



The amount of goods handled by EU-27 countries' seaports has kept rising since 2002 with a rather steady annual rate of about 3 % and reached almost 4 billion tonnes in 2007 and an overall 18 % increase since 2002. The UK, Italy and the Netherlands were the countries whose ports handled the highest amounts of goods, followed by Spain.

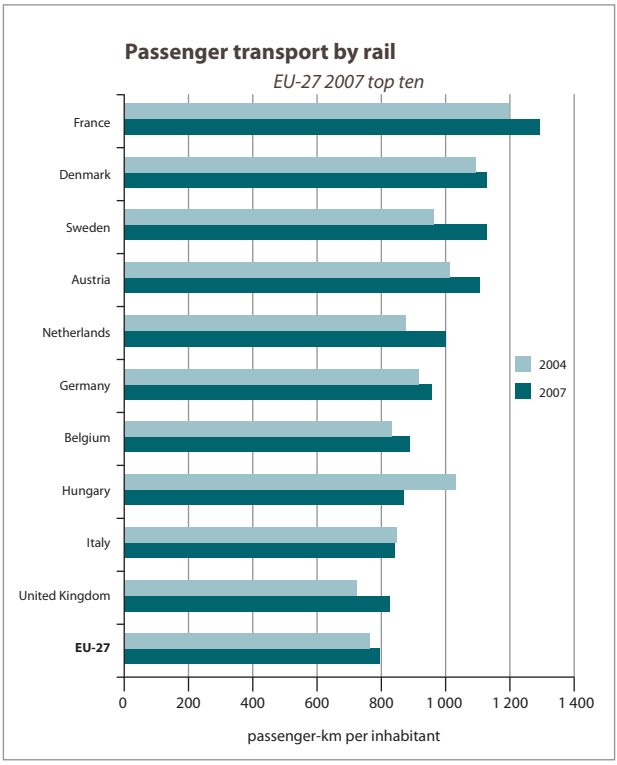
More information can be found in the publication Statistics in focus 6/2009: "Maritime transport of goods and passengers 1997-2007", available on Eurostat web site.

Passenger transport by rail

(1 000 million passenger-km)

	2004	2005	2006	2007
EU-27	**:**	**:**	**389**	**396**
Belgium	9	9	9	9
Bulgaria	:	:	2	2
Czech Republic	7	7	7	7
Denmark	6	6	6	6
Germany	76	75	79	79
Estonia	0	0	0	0
Ireland	2	2	2	2
Greece	2	2	2	2
Spain	20	21	22	22
France	74	77	80	82
Italy	49	50	50	50
Cyprus	-	-	-	-
Latvia	1	1	1	1
Lithuania	0	0	0	0
Luxembourg	0	0	0	0
Hungary	10	10	10	9
Malta	-	-	-	-
Netherlands	15	15	16	16
Austria	8	9	9	9
Poland	18	18	18	20
Portugal	4	4	4	4
Romania	9	8	8	7
Slovenia	1	1	1	1
Slovakia	2	2	2	2
Finland	3	3	4	4
Sweden	9	9	10	10
United Kingdom	43	44	47	50
Iceland	-	-	-	-
Liechtenstein	0	0	0	0
Norway	3	3	3	3
Switzerland	:	:	:	:
Croatia	1	1	1	2
Turkey	5	5	5	6

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



In 2007, the EU-27 passenger transport by rail amounted to 395 836 million passenger-km. The top countries were France (81 990 million passenger-km), Germany (79 116 million passenger-km) and the United Kingdom (50 171 million passenger-km). Italy also saw significant passenger transport by rail with 49 780 million passenger-km in 2007. These four countries were responsible for 66 % of the EU-27 total.

With the exceptions of Hungary, Romania, Lithuania, Slovakia and Bulgaria, all Member States experienced increases between 2004 and 2007. Estonia had the greatest increase in its passenger transport by rail (42 %).

In terms of passenger-km per inhabitant in 2007 the average for the EU-27 was 799. France had the highest number with 1 293 passenger-km per inhabitant, followed by Denmark (1 131).

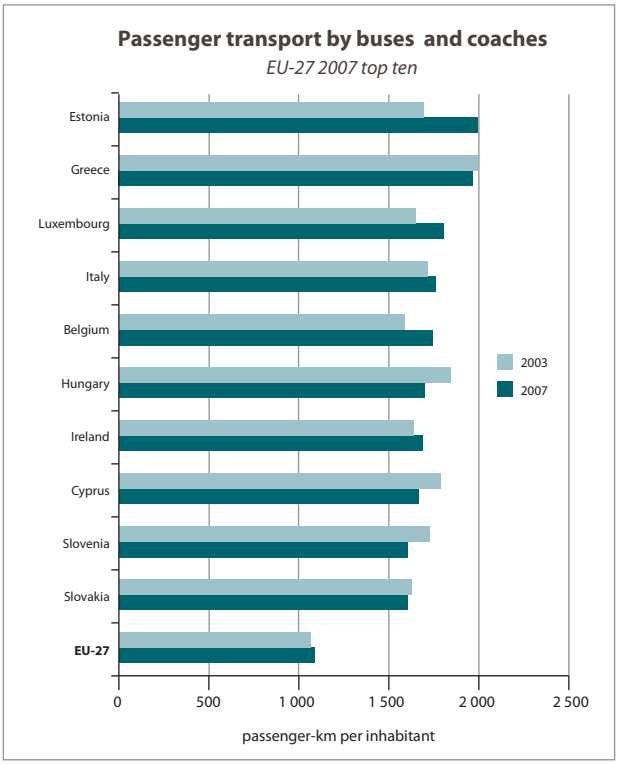
Passenger transport by buses and coaches

(1 000 million passenger-km)

	2003	2004	2005	2006	2007
EU-27	**519**	**525**	**526**	**526**	**539**
Belgium	16	17	18	18	18
Bulgaria	13	11	11	11	11
Czech Republic	16	15	16	16	16
Denmark	7	7	7	7	7
Germany	68	68	67	66	65
Estonia	2	2	3	3	3
Ireland	*7*	*7*	*7*	*7*	*7*
Greece	*22*	*22*	*22*	*22*	*22*
Spain	49	53	53	49	59
France	43	44	44	45	47
Italy	98	100	101	*103*	*104*
Cyprus	*1*	*1*	*1*	*1*	*1*
Latvia	3	3	3	3	3
Lithuania	3	4	4	4	4
Luxembourg	*1*	*1*	*1*	*1*	*1*
Hungary	19	18	18	18	17
Malta	*0*	*1*	*0*	*1*	*1*
Netherlands	*11*	*12*	*12*	*12*	*12*
Austria	9	10	9	9	10
Poland	30	30	29	28	27
Portugal	*11*	*11*	*11*	*11*	*11*
Romania*	12	12	12	12	12
Slovenia	3	3	3	3	3
Slovakia	9	9	9	9	9
Finland	8	8	8	8	8
Sweden	9	9	9	9	9
United Kingdom**	49	50	50	52	52
Iceland	1	1	1	1	1
Liechtenstein	0	0	0	0	0
Norway	4	4	4	4	4
Switzerland	5	5	6	*6*	6
Croatia	4	3	3	4	4
Turkey	*81*	*85*	*90*	*95*	*100*

* Data include only regular interurban transport.
** Data include 1.5 billion passenger-km throughout to account for Northern Ireland.

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



Note: Data are not harmonised and therefore not fully comparable. The population used was that on the 1st January of each year.

In 2007, passenger transport by buses and coaches in the EU-27 reached 538 952 million passenger-km, a 4 % increase since 2003. In 2007, most of passenger transport by buses and coaches took place in Italy (104 122 million passenger-km). The value for Italy was 59 % higher than the value of Germany (65 371 million passenger-km). These two countries made up 19 % and 12 % of the EU-27 total. They were followed by Spain (11 %) and the United Kingdom (10 %).

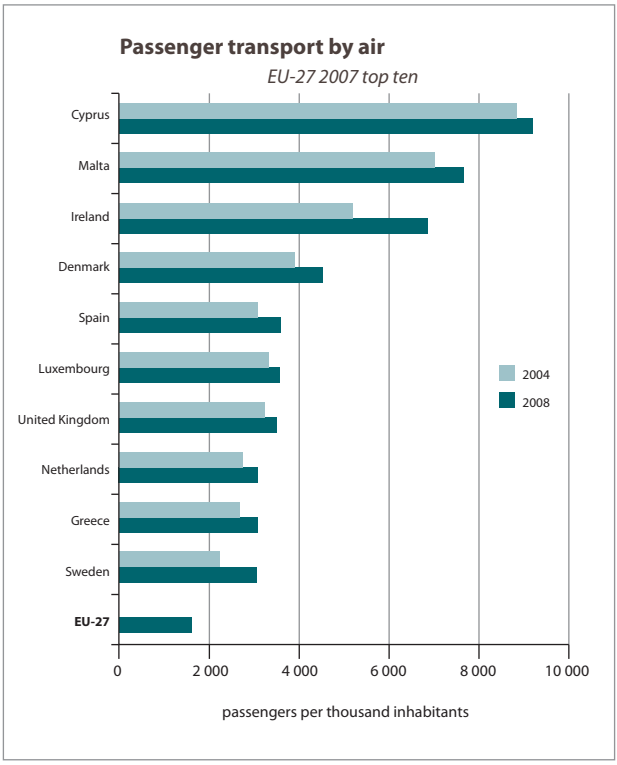
As far as passenger-km per inhabitant are concerned, in 2007 the average for the EU-27 was 1 089. The highest number of passenger-km by buses and coaches was observed in Estonia with 1 994 passenger-km per inhabitant. Also, Greece showed a significant value (1 969). The greatest increase was observed in Lithuania (24 %).

Passenger transport by air

(100 000 passengers)

	2004	2005	2006	2007	2008
EU-27	**:**	**:**	**:**	**7 927**	**7 979**
Belgium	175	178	192	208	220
Bulgaria	:	:	:	61	64
Czech Republic	100	113	122	131	134
Denmark	210	222	230	240	246
Germany	1 359	1 460	1 541	1 638	1 658
Estonia	10	14	15	17	18
Ireland	209	243	276	298	300
Greece	295	308	328	348	344
Spain	1 298	1 437	1 506	1 635	1 614
France	1 030	1 080	1 132	1 200	1 227
Italy	812	879	959	1 063	1 052
Cyprus	64	68	67	70	72
Latvia	11	19	25	32	37
Lithuania	10	14	18	22	26
Luxembourg	15	15	16	16	17
Hungary	64	79	82	86	84
Malta	28	28	27	30	31
Netherlands	445	464	486	505	504
Austria	183	197	208	229	239
Poland	61	71	137	171	187
Portugal	184	203	220	243	250
Romania	32	35	49	69	80
Slovenia	10	12	13	15	16
Slovakia	11	15	21	22	26
Finland	118	123	134	145	149
Sweden	200	210	257	270	278
United Kingdom	1 923	2 040	2 112	2 173	2 139
Iceland	19	21	23	25	22
Liechtenstein	:	:	:	:	:
Norway	196	186	241	264	277
Switzerland	266	289	318	345	366
Croatia	:	:	:	:	45
Turkey	:	:	:	:	:

Data source: Eurostat



In 2008, 798 million passengers moved by air in the EU-27. The greatest passenger traffic was observed in the United Kingdom (214 million). Germany (166 million), Spain (161 million), France (123 million) and Italy (105 million) followed. All countries presented increases in their passenger transport by air compared to 2004 levels.

Regarding passengers per thousand inhabitants, the number for the EU-27 was 1 603 passengers per thousand inhabitants in 2008. Cyprus had the highest number (9 145). Malta and Ireland followed with 7 616 and 6 820 respectively.

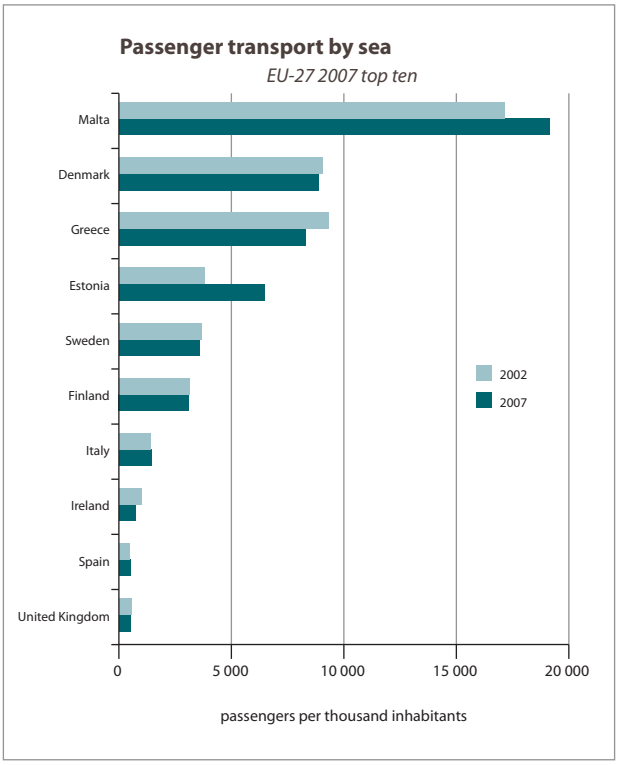
Passenger transport by sea

Number of seaborne passengers embarked and disembarked in all ports (1 000 passengers)

	2002	2003	2004	2005	2006	2007
EU-27	**421 147**	**419 387**	**413 458**	**395 293**	**406 561**	**414 232**
Belgium*	1 125	739	787	922	891	909
Bulgaria	6	4	6	13	15	10
Czech Republic	-	-	-	-	-	-
Denmark	48 178	48 653	48 555	47 924	48 145	48 409
Germany	33 222	32 146	29 815	29 490	29 256	30 200
Estonia**	5 136	5 172	6 452	8 639	8 546	8 665
Ireland	3 893	3 747	3 550	3 275	3 207	3 225
Greece***	101 210	102 760	96 744	86 068	90 402	92 423
Spain	18 947	20 041	21 694	22 410	22 167	23 134
France	29 110	27 405	27 068	25 804	26 402	27 048
Italy	82 700	82 576	83 316	78 753	85 984	86 970
Cyprus	339	287	247	194	228	174
Latvia	23	118	130	144	217	362
Lithuania	107	135	146	166	190	212
Luxembourg	-	-	-	-	-	-
Hungary	-	-	-	-	-	-
Malta	6 789	6 942	7 250	7 103	7 328	7 802
Netherlands****	2 202	2 015	2 012	2 116	2 127	1 871
Austria	-	-	-	-	-	-
Poland	3 304	3 188	2 031	1 640	1 737	2 456
Portugal****	502	616	650	662	686	735
Romania	:	:	:	:	:	:
Slovenia	42	47	42	35	30	51
Slovakia	-	-	-	-	-	-
Finland	16 577	16 341	16 806	17 112	16 739	16 450
Sweden	32 112	32 748	33 318	32 617	32 334	32 662
United Kingdom	35 623	33 708	32 837	30 207	29 930	30 465
Iceland	393	407	404	422	433	:
Liechtenstein	-	-	-	-	-	-
Norway	6 077	4 656	5 787	6 663	6 280	6 447
Switzerland	-	-	-	-	-	-
Croatia	18 410	19 483	21 519	22 182	23 061	24 611
Turkey	:	:	:	:	:	:

* The increase registered between 2004 and 2005 is partly due to an improvement of the data reporting system.
** Up to 2004 data, national transport is excluded.
*** Up to 2003 data exclude cruise passengers.
**** Data exclude cruise passengers.

Data source: Eurostat



Note: (1) EL: Up to 2003 data exclude cruise passengers (2) EE: Up to 2004 data, national transport is excluded.

The number of passengers who passed through EU-27 ports in 2007 is at 414 million, a 1.9 % increase compared to 2006. However, over the period 2002-2007 the number of seaborne passengers shows a negative growth rate. Three countries – Greece (22 %), Italy (21 %) and Denmark (12 %) – made up 55 % of the total passenger handling in the EU-27 ports.

As far as passengers per thousand inhabitants are concerned, Malta maintained the first place with 19 073 while Denmark ranked second with 8 864.

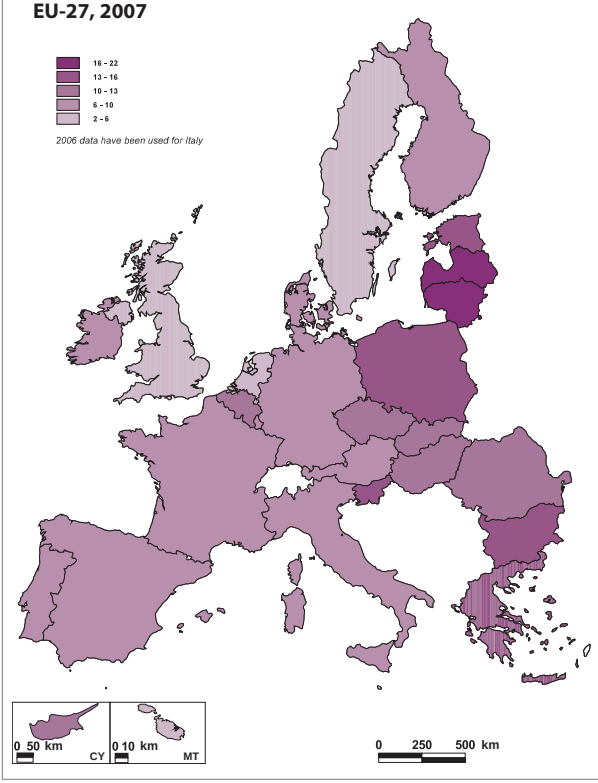
Persons killed in road accidents

Persons killed in road accidents/100 000 inhabitants

	2003	2004	2005	2006	2007
EU-27	**10**	**10**	**9**	**9**	**9**
Belgium	12	11	10	10	10
Bulgaria	12	12	12	14	13
Czech Republic	14	14	13	10	12
Denmark	8	7	6	6	7
Germany	8	7	6	6	6
Estonia	12	13	13	15	15
Ireland	9	9	10	9	8
Greece	15	15	15	15	14
Spain	13	11	10	9	9
France	10	9	8	7	7
Italy	11	10	10	10	:
Cyprus	14	16	14	11	11
Latvia	23	22	19	18	18
Lithuania	20	22	23	22	22
Luxembourg	12	11	10	8	9
Hungary	13	13	13	13	12
Malta	4	3	4	3	3
Netherlands	6	5	5	4	4
Austria	11	11	9	9	8
Poland	15	15	14	14	15
Portugal	15	12	12	9	9
Romania	10	11	11	11	13
Slovenia	12	14	13	13	15
Slovakia	12	11	10	11	12
Finland	7	7	7	6	7
Sweden	6	5	5	5	5
United Kingdom	6	6	6	5	5
Iceland	8	8	6	10	5
Liechtenstein	15	3	6	-	-
Norway	6	6	5	5	5
Switzerland	7	7	6	5	5
Croatia	16	14	13	14	14
Turkey	6	6	6	6	7

Data source: Community database on Accidents on the Roads in Europe, DG for Energy and Transport, International Transport Forum, national statistics

Persons killed in road accidents / 100 000 inhabitants
EU-27, 2007



Note: Fatalities caused by road accidents include drivers and passengers of motorised vehicles and pedal cycles as well as pedestrians, killed within 30 days from the day of the accident. For Member States not using this definition, corrective factors were applied. The population used was that on the 1st January of each year.

The trend in the number of persons killed in road accidents presented a slight decrease for the EU-27 between 2003 and 2007. Yet, compared to two decades ago there has been significant progress. The Commission has a target to halve the number of road fatalities between 2001 and 2010 by raising awareness and making cars safer, among other things. In 2007, the number of persons killed in road accidents for the EU-27 was 42 854 - that is 11 055 less deaths compared to 2001 and 7 003 less deaths compared to 2003. With the exceptions of Romania, Estonia, Slovenia, Bulgaria and Lithuania the rest of the EU-27 presented decreases in the number of persons killed in road accidents per inhabitant. The highest number observed was in Lithuania (22 persons killed /100 000 inhabitants), followed by Latvia (18). In general, numbers appeared to be higher in the countries of East Europe.

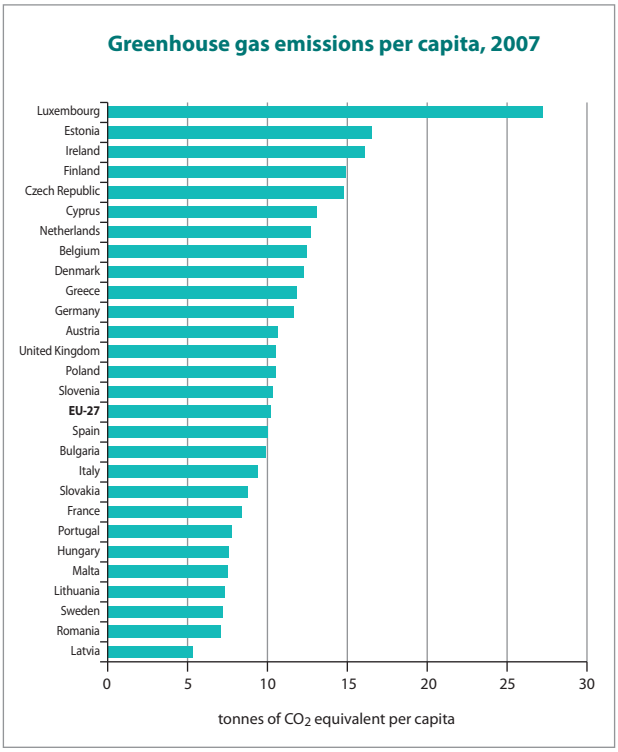
3 Environment indicators

Greenhouse gas emissions per capita

Global warming potential in tonnes of CO_2 equivalent per capita

	1990	1995	2000	2005	2006	2007
EU-27	**11.8**	**10.9**	**10.5**	**10.4**	**10.4**	**10.2**
Belgium	14.4	14.8	14.2	13.6	13.0	12.4
Bulgaria	13.4	10.5	8.5	9.2	9.3	9.9
Czech Republic	18.8	14.8	14.3	14.3	14.5	14.7
Denmark	13.4	14.6	12.7	11.7	13.1	12.2
Germany	15.4	13.3	12.3	11.7	11.9	11.6
Estonia	26.7	14.4	13.4	14.6	14.3	16.4
Ireland	15.8	16.5	18.3	17.1	16.6	16.0
Greece	10.4	10.4	11.7	11.9	11.5	11.8
Spain	7.4	8.1	9.6	10.3	9.9	9.9
France	9.9	9.4	9.2	8.8	8.6	8.4
Italy	9.1	9.3	9.7	9.8	9.6	9.3
Cyprus	9.5	10.6	13.5	13.2	13.0	13.0
Latvia	10.0	5.0	4.2	4.9	5.1	5.3
Lithuania	13.3	6.0	5.5	6.6	6.7	7.3
Luxembourg	34.6	25.6	23.0	29.0	28.4	27.1
Hungary	9.6	7.7	7.6	8.0	7.8	7.5
Malta	5.8	6.8	6.8	7.3	7.3	7.4
Netherlands	14.2	14.6	13.5	13.0	12.8	12.7
Austria	10.3	10.1	10.1	11.3	11.1	10.6
Poland	12.1	11.6	10.1	10.1	10.5	10.5
Portugal	5.9	7.0	8.0	8.5	8.0	7.7
Romania	10.5	8.0	6.0	6.9	7.1	7.1
Slovenia	9.3	9.4	9.5	10.2	10.3	10.3
Slovakia	13.9	9.8	9.0	9.2	9.1	8.7
Finland	14.2	14.0	13.4	13.1	15.2	14.8
Sweden	8.4	8.3	7.7	7.5	7.4	7.2
United Kingdom	13.5	12.3	11.5	10.9	10.7	10.5
Iceland	13.4	11.9	13.4	12.6	14.1	14.8
Liechtenstein	8.1	7.7	7.9	7.8	7.8	6.9
Norway	11.7	11.4	11.9	11.7	11.5	11.8
Switzerland	7.9	7.3	7.2	7.2	7.1	6.8
Croatia	6.6	4.9	5.8	6.8	6.9	7.3
Turkey	3.1	3.6	4.2	4.4	4.6	5.3

Data source: European Environment Agency



There is scientific evidence that emissions of greenhouse gases from human activities, such as the burning of coal, oil and gas, are causing an overall warming of the earth's atmosphere and that climate change is the most likely result with potentially major economic and social consequences ('Winning the battle against global climate change', COM(2005) 35). In 2007, the Member States with the highest per capita emissions were Luxembourg, Estonia and Ireland and the Member States with the lowest per capita emissions were Latvia and Romania. Switzerland and Turkey also had low per capita emissions levels. The data for Luxembourg includes emissions from road fuel sold in Luxembourg, but consumed abroad (fuel tourism). Although overall per capita emissions in EU-27 have fallen since 1990, they have risen in ten countries. In Cyprus, Spain, Portugal, Malta, Greece and Slovenia per capita emissions increased by more than one tonne per capita between 1990 and 2007. For the same period, the largest reductions, of 4 or more tonnes per capita, were observed in Estonia, Luxembourg, Lithuania, Slovakia, Latvia and Czech Republic.

Greenhouse gas emissions and agreed reduction targets

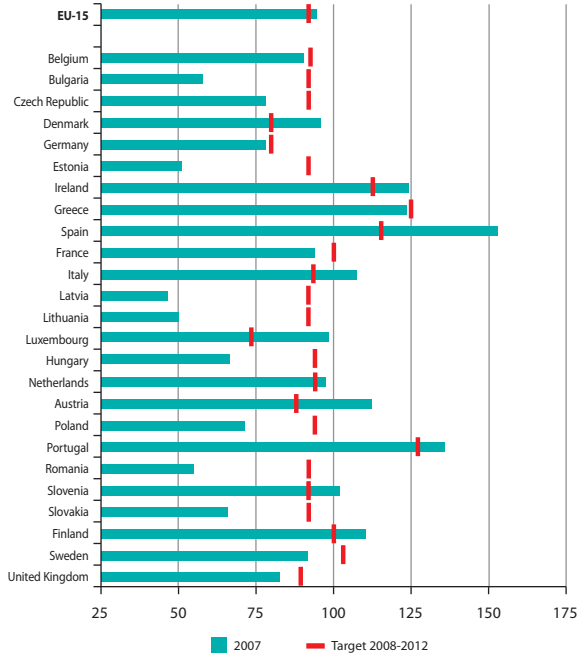
Kyoto base year emissions: Index=100

	1990	1995	2000	2005	2006	2007	Target 2008-2012
EU-27*	**100.0**	**93.7**	**90.8**	**91.9**	**91.8**	**90.7**	**:**
EU-15	**99.2**	**96.8**	**96.3**	**97.1**	**96.5**	**95.0**	**92.0**
Belgium	98.3	102.6	99.6	97.4	93.7	90.1	92.5
Bulgaria	88.7	66.8	52.2	53.6	54.2	57.2	92.0
Czech Republic	100.2	78.9	75.8	75.3	76.8	77.6	92.0
Denmark	99.6	110.0	97.8	91.6	102.5	96.1	79.0
Germany	98.6	88.0	81.8	78.6	79.5	77.6	79.0
Estonia	98.4	48.9	43.1	46.1	45.0	51.7	92.0
Ireland	99.6	106.5	124.0	126.3	125.3	124.5	113.0
Greece	98.7	103.0	118.8	123.2	119.7	123.2	125.0
Spain	99.4	110.1	133.1	152.2	149.5	152.6	115.0
France	99.8	98.6	98.7	98.2	96.1	94.2	100.0
Italy	99.9	102.5	106.3	111.0	108.9	106.9	93.5
Cyprus*	100.0	125.5	170.9	180.3	182.4	185.3	:
Latvia	103.0	48.5	39.0	43.3	45.0	46.6	92.0
Lithuania	99.3	44.1	38.8	45.7	46.3	50.1	92.0
Luxembourg	99.6	78.9	75.7	101.7	101.0	98.1	72.0
Hungary	86.0	69.2	67.6	69.7	68.3	65.8	94.0
Malta*	100.0	123.7	126.9	144.2	145.3	149.0	:
Netherlands	99.5	105.5	100.7	99.6	97.9	97.4	94.0
Austria	100.0	101.8	102.6	117.4	115.8	111.3	87.0
Poland	81.5	79.2	69.0	68.6	70.9	70.8	94.0
Portugal	98.5	116.9	135.8	148.3	140.8	136.1	127.0
Romania	87.4	65.0	48.7	53.7	55.3	54.7	92.0
Slovenia	91.2	91.9	92.9	100.1	101.1	101.8	92.0
Slovakia	101.7	73.0	67.2	68.5	67.9	65.2	92.0
Finland	99.8	100.3	97.9	96.8	112.6	110.3	100.0
Sweden	99.7	102.0	94.5	93.1	92.7	90.7	104.0
United Kingdom	99.3	91.7	86.8	84.1	83.5	82.0	87.5
Iceland	101.0	94.2	110.8	109.7	125.8	134.9	110.0
Liechtenstein	100.0	102.6	111.0	118.0	119.0	106.1	92.0
Norway	100.2	100.2	107.5	108.2	107.8	110.9	101.0
Switzerland	99.8	96.7	97.8	101.7	100.7	97.1	92.0
Croatia*	100.0	72.9	82.7	97.0	98.1	103.2	95.0
Turkey*	100.0	129.8	164.6	183.7	195.6	219.1	:

* As there is no target for these countries, artificial base year = 1990

Data source: European Environment Agency

Index of greenhouse gas emissions in 2007 from the base year and targets according to Kyoto Protocol for 2008-2012



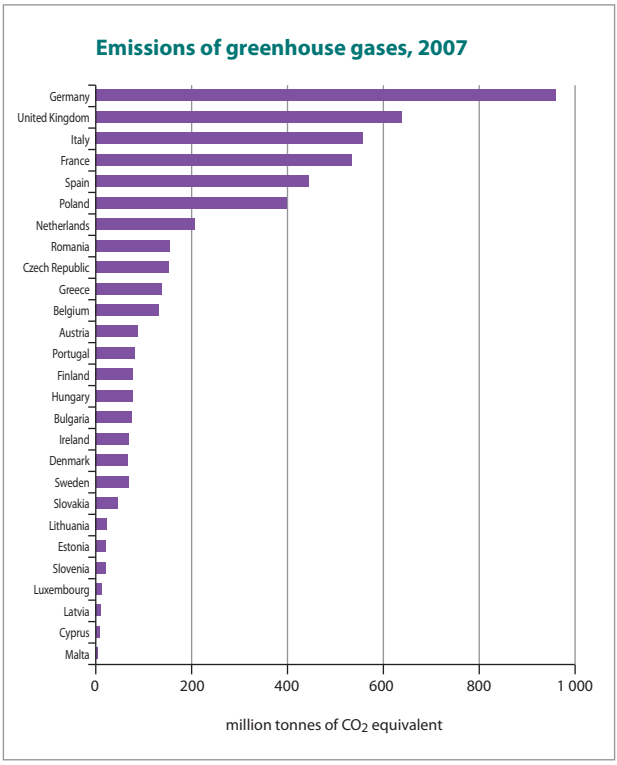
The greenhouse gas emissions are reported under the Kyoto Protocol and the EU Decision 280/2004/EC. For the first quantified emission limitation and reduction commitment period, from 2008 to 2012, the European Community has agreed to an 8 % reduction in its greenhouse gas emissions compared to the base year. Individual targets for each of the EU-15 countries have been agreed under the EU burden sharing agreement (Council Decision 2002/358/EC). The new EU Member States and candidate countries have differing targets and often differing base years under the Kyoto Protocol. Overall emissions in EU-15 have shown a decrease of 4.3 % from the EU-15 base year 1990 until 2007, primarily due to considerable emission cuts by the EU-15's two greatest emitters, which account for about 40 % of total EU-15 greenhouse gas (GHG) emissions: Germany (-21.3 %) and the United Kingdom (-17.4 %). Both countries have exceeded their targets. Italy and France, the third and fourth largest emitters, increased (7.1 %) and decreased (-5.6 %) their emissions between 1990 and 2007, respectively.

Emissions of greenhouse gases, by country

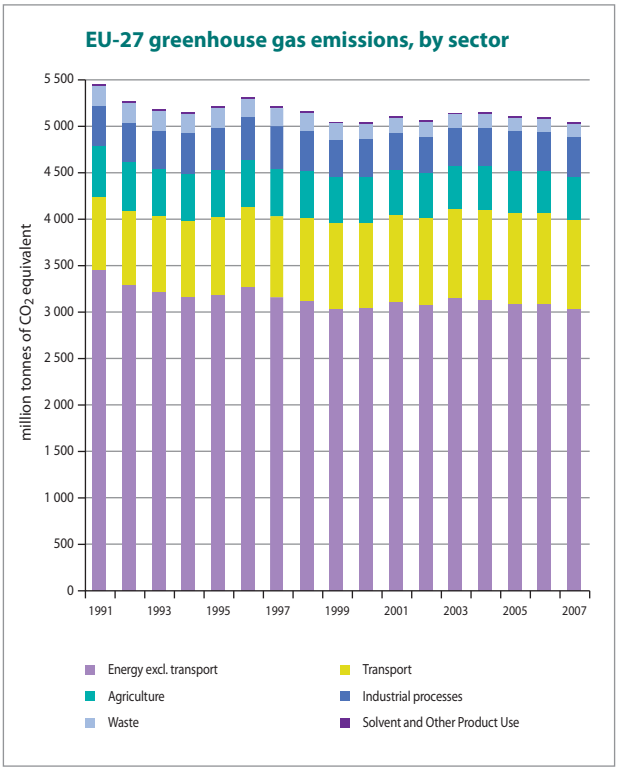
Global warming potential in million tonnes of CO_2 equivalent

	1990	1995	2000	2005	2006	2007
EU-27	**5 564**	**5 213**	**5 054**	**5 111**	**5 105**	**5 045**
Belgium	143	149	145	142	137	131
Bulgaria	118	89	69	71	72	76
Czech Republic	195	153	147	146	149	151
Denmark	69	76	68	63	71	67
Germany	1 215	1 085	1 008	969	980	956
Estonia	42	21	18	20	19	22
Ireland	55	59	69	70	70	69
Greece	106	110	127	132	128	132
Spain	288	319	386	441	433	442
France	563	556	557	554	542	531
Italy	516	530	550	574	563	553
Cyprus	5	7	9	10	10	10
Latvia	27	13	10	11	12	12
Lithuania	49	22	19	23	23	25
Luxembourg	13	10	10	13	13	13
Hungary	99	80	78	80	79	76
Malta	2	3	3	3	3	3
Netherlands	212	225	214	212	209	208
Austria	79	81	81	93	92	88
Poland	459	446	389	387	399	399
Portugal	59	70	82	89	85	82
Romania	243	181	136	149	154	152
Slovenia	19	19	19	20	21	21
Slovakia	73	53	48	49	49	47
Finland	71	71	70	69	80	78
Sweden	72	74	68	67	67	65
United Kingdom	771	712	674	653	648	637
Iceland	3	3	4	4	4	5
Liechtenstein	0	0	0	0	0	0
Norway	50	50	53	54	53	55
Switzerland	53	51	52	54	53	51
Croatia	31	23	26	30	31	32
Turkey	170	221	280	312	333	373

Data source: European Environment Agency



From 1990 to 2007, EU-27 showed a reduction of 9.3 % for total GHG emissions. Whether this is attributable to policy or simply due to structural changes after German reunification and replacement of coal-fired power plants with gas-fired plants in countries such as the United Kingdom is difficult to discern from the statistics. Between 2006 and 2007 the greenhouse gas emissions of the EU-27 decreased 1.2 %, while between 2000 and 2007 the decrease in greenhouse gas emissions for the EU-27 was 0.2 %. A little over half of the EU-27 Member States showed decreases in GHG emissions from 2006 to 2007. Annual changes can be due to weather and economic conditions – therefore, longer time series are needed to observe trends. Of the 27 EU countries, 18 showed increases in GHG emissions from 2000 to 2007. Six countries showed increases of 0-5 %, four others of 6-10 %, three of 11-15 %, whereas five countries experienced an over 15 % increase. Only 2 of the newer members, Hungary and Slovakia, showed reductions from 2000 to 2007. Turkey's GHG emissions increased 33 % from 2000 to 2007 and 119 % from 1990. Norway, a major supplier of oil and natural gas to European countries, showed increased emissions of 11 % from 1990 due primarily to increased gas and oil extraction activity.

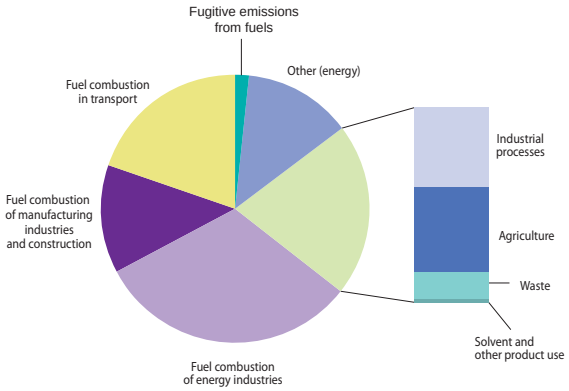


Global warming potential in million tonnes of CO_2 equivalent

	1990	1992	1994	1996	1998	2000	2002	2005	2006	2007
Total	**5 564**	**5 276**	**5 159**	**5 318**	**5 160**	**5 054**	**5 066**	**5 111**	**5 105**	**5 045**
Energy excl. transport	3 498	3 289	3 171	3 280	3 123	3 052	3 079	3 095	3 090	3 017
Transport	780	808	823	863	901	918	944	972	978	983
Agriculture	579	526	505	506	505	493	479	466	463	462
Industry (processes)	478	425	438	453	432	405	390	420	418	431
Waste	213	213	210	203	184	172	160	146	144	141
Solvent and other product use	16	15	14	14	14	14	13	12	13	12

Data source: European Environment Agency

EU-27 greenhouse gas emissions, 2007
Breakdown by sector



Sector	% of total
Fuel combustion of energy industries	31.9
Fuel combustion of manufacturing industries and construction	12.7
Fuel combustion in transport	19.5
Fugitive emissions from fuels	1.7
Other (energy)	13.4
Industrial processes	8.5
Agriculture	9.2
Waste	2.8
Solvent and other product use	0.2

Data source: European Environment Agency

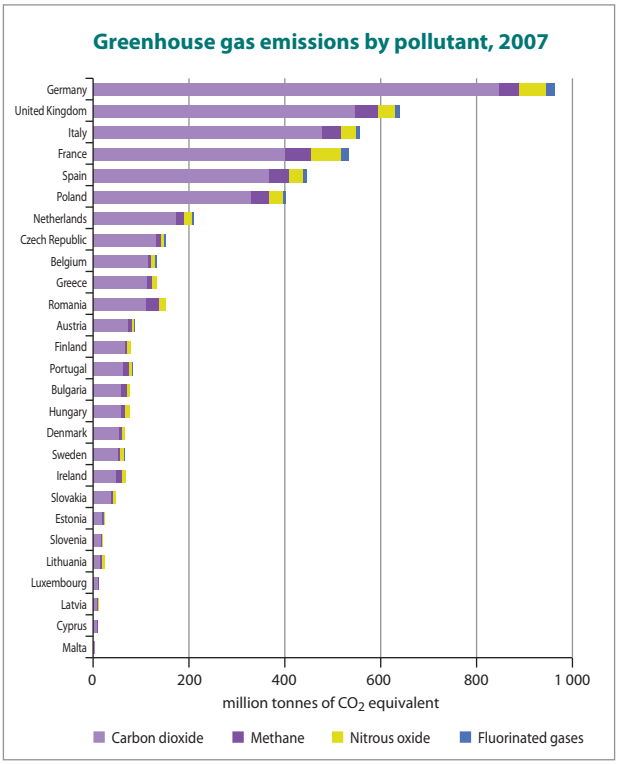
Total energy use in 2007 accounted for about 79 % of total greenhouse gas (GHG) emissions; this includes transportation but excludes international aviation and maritime transport emissions. Emissions from 'Other (energy)', which accounted for about 13 % of the total GHG emissions in 2007, showed nearly an 11 % decrease between 2006 and 2007 and were dominated by fuel combustion from households and services. This decrease in emissions was due to the continued reduction in the use of fossil fuels in this sector and a warmer winter meaning fewer days requiring heating, especially in Germany. In 2007, agriculture accounted for about 9 % of EU-27 GHG emissions, with a reduction of about 20 % between 1990 and 2007. This was mainly due to declining numbers of cattle and lower emissions from agricultural soils. Emissions of methane from solid waste disposal on land decreased 39 % between 1990 and 2007. In contrast, GHG emissions from the transport sector increased continuously between 1990 and 2007 (+26 %), due primarily to high growth in both passenger and freight transport by road.

Greenhouse gas emissions, by pollutant

Global warming potential in thousand tonnes of CO_2 equivalent

2007	Carbon dioxide	Methane	Nitrous oxide	F-Gases
EU-27	**4 186 657**	**411 243**	**370 425**	**77 045**
Belgium	114 545	6 658	8 079	2 019
Bulgaria	58 890	11 604	5 049	250
Czech Republic	129 950	11 702	7 470	1 702
Denmark	53 228	5 748	6 780	886
Germany	841 152	42 552	55 216	17 192
Estonia	19 093	1 724	1 055	146
Ireland	47 499	12 962	8 043	701
Greece	113 566	8 128	9 426	734
Spain	366 366	39 059	30 470	6 426
France	397 076	53 504	64 237	16 287
Italy	475 302	38 217	31 836	7 416
Cyprus	8 328	1 255	525	21
Latvia	8 608	1 837	1 577	60
Lithuania	15 915	3 159	5 639	25
Luxembourg	11 844	454	525	91
Hungary	57 752	8 545	8 858	789
Malta	2 685	258	21	69
Netherlands	172 657	16 963	15 605	2 279
Austria	74 177	6 956	5 373	1 453
Poland	328 275	36 225	30 746	3 636
Portugal	62 793	12 815	5 278	955
Romania	110 883	25 722	15 040	645
Slovenia	16 989	2 172	1 319	241
Slovakia	38 141	4 532	4 008	269
Finland	66 103	4 443	6 864	935
Sweden	51 621	5 357	7 181	1 253
United Kingdom	543 220	48 690	34 202	10 566
Iceland	3 351	484	359	350
Liechtenstein	211	15	13	5
Norway	44 962	4 411	4 233	1 443
Switzerland	43 636	3 511	3 235	882
Croatia	24 865	3 481	3 557	482
Turkey	304 475	54 384	9 652	4 126

Data source: European Environment Agency



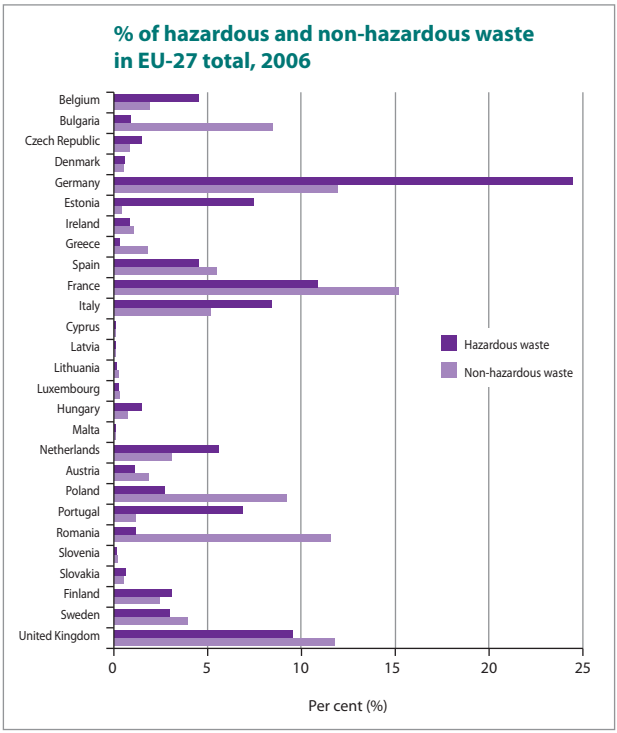
Carbon dioxide (CO_2) accounted for about 83 % of total global warming potentials (GWPs) due to all EU-27 anthropogenic GHG emissions covered by the Kyoto Protocol in 2007. Methane (CH_4) and nitrous oxide (N_2O) accounted for just over 8 % and 7 % respectively of EU-27 total GWP and the fluorinated gases contributed 2 % of GWP. The main source of CO_2 is the burning of fossil fuels and the major industrial source of CO_2 is cement production. Agriculture is the dominant source of anthropogenic methane (CH_4) emissions; the other two important sources are waste management (e.g. landfills) and fugitive emissions from energy use (e.g. coal mining). The largest source of nitrous oxide (N_2O) emissions is agriculture (fertilisers and manure use), followed by the chemical industries (adipic and nitric acid production).

Total waste generated (hazardous, non-hazardous)

(thousand tonnes)

	Hazardous waste		Non-hazardous waste	
	2004	2006	2004	2006
EU-27	***77 859***	***88 731***	***2 835 389***	***2 864 356***
Belgium	5 197	*4 039*	47 612	*55 313*
Bulgaria	528	785	251 530	241 704
Czech Republic	1 446	1 307	27 830	23 439
Denmark	320	493	12 269	14 210
Germany	20 000	21 705	344 022	342 081
Estonia	7 333	6 619	13 527	12 314
Ireland	724	*709*	23 789	*29 296*
Greece	426	275	34 527	51 050
Spain	3 116	4 028	157 552	156 918
France	9 617	9 622	419 537	436 244
Italy	6 134	7 465	133 672	147 560
Cyprus	111	48	2 130	1 723
Latvia	17	65	1 240	1 793
Lithuania	90	127	6 921	7 538
Luxembourg	124	234	8 197	9 353
Hungary	*1 365*	*1 300*	*23 296*	*20 987*
Malta	2	51	2 480	2 810
Netherlands	1 897	4 949	86 202	88 859
Austria	1 014	962	52 007	53 325
Poland	1 612	2 381	249 631	264 360
Portugal	*2 263*	*6 063*	*27 008*	*32 651*
Romania	2 243	1 041	369 260	330 822
Slovenia	108	116	5 663	5 919
Slovakia	422	533	10 246	13 969
Finland	2 153	2 711	67 555	69 495
Sweden	1 625	2 654	108 114	112 929
United Kingdom	7 973	8 448	349 571	337 695
Iceland	8	:	493	:
Norway	670	757	6 784	8 295
Croatia	113	:	7 095	:
Turkey	998	11	57 823	46 081

Data source: Eurostat



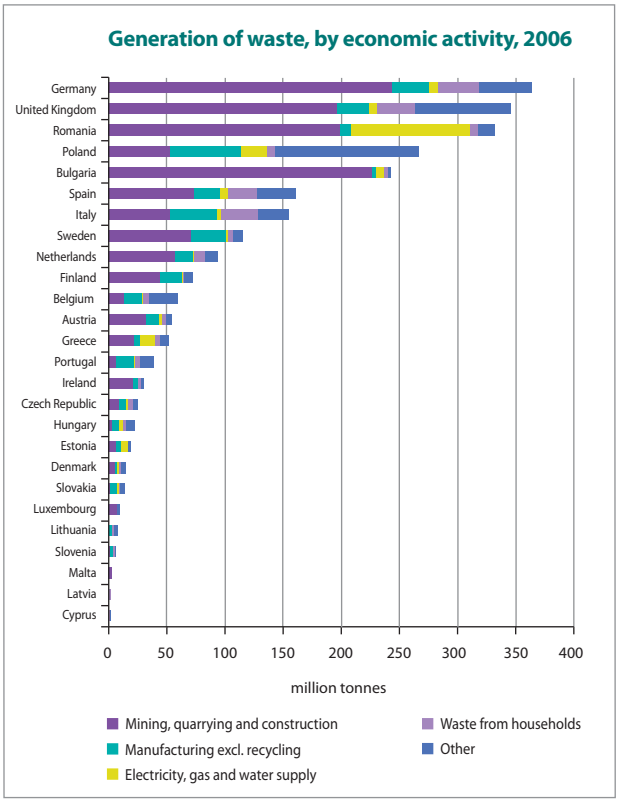
2 953 million tonnes of waste were generated in EU-27 in 2006 according to reporting under the Waste Statistics Regulation. France, Germany, the United Kingdom and Romania reported the highest amounts of total waste generated, with more than 300 million tonnes in each country. The share of hazardous waste was 3 % and the manufacturing industry was the major producer with 38 % of the hazardous waste generated in EU-27. However, the ratio of hazardous waste to non hazardous waste is fairly scattered across the Member States. For example in Estonia 35 % of all waste is classified as hazardous: Estonia uses oil shale for energy production, a process that generates large volumes of hazardous waste.

Generation of waste by economic activity

(thousand tonnes)

2006	Total waste	Mining, quarrying and construction	Manufacturing excl. recycling	Electricity, gas and water supply	Waste from households	Other
EU-27	***2 953 087***	***:***	***364 206***	***195 526***	***215 223***	***467 646***
BE	*59 352*	*13 249*	*15 308*	*1 285*	*4 745*	*24 765*
BG	242 489	226 362	4 316	6 670	2 929	2 212
CZ	24 746	8 851	5 932	2 511	3 482	3 969
DK	14 703	5 804	1 643	1 462	2 070	3 725
DE	363 786	243 758	31 705	8 468	34 626	45 228
EE	18 933	6 678	3 981	5 708	412	*2 154*
IE	*30 005*	*21 392*	*4 067*	*347*	*1 979*	*2 220*
EL	51 325	21 717	5 285	12 986	4 133	7 205
ES	160 947	73 338	22 427	7 229	24 078	33 874
FR	445 865	c	22 973	1 034	26 832	*35 108*
IT	155 025	53 321	39 997	3 005	32 523	26 179
CY	1 771	367	412	3	259	731
LV	1 859	19	570	26	854	389
LT	7 665	354	2 948	34	1 299	3 030
LU	9 586	6 831	604	1	192	1 958
HU	*22 287*	*3 072*	*5 528*	*3 981*	*2 978*	*6 728*
MT	2 861	2 493	50	0	101	217
NL	93 808	56 823	15 562	1 372	9 414	10 636
AT	54 287	32 364	11 470	2 017	3 712	4 723
PL	266 741	52 812	61 131	22 404	6 886	*123 507*
PT	*38 714*	*7 170*	*14 699*	*462*	*4 641*	*11 741*
RO	331 863	199 172	9 184	102 617	6 368	*14 522*
SI	6 036	1 372	2 385	499	1 089	691
SK	14 502	1 248	5 527	1 577	1 623	4 526
FI	72 205	44 647	17 976	1 636	1 191	6 755
SE	115 583	71 028	30 363	1 318	4 341	8 534
UK	346 144	196 325	28 161	6 873	32 466	82 318
IS	:	:	:	:	:	:
NO	9 051	1 384	3 519	46	2 093	2 009
HR	:	:	:	:	:	:
TR	46 092	-	-	16 010	30 082	-

Data source: Eurostat



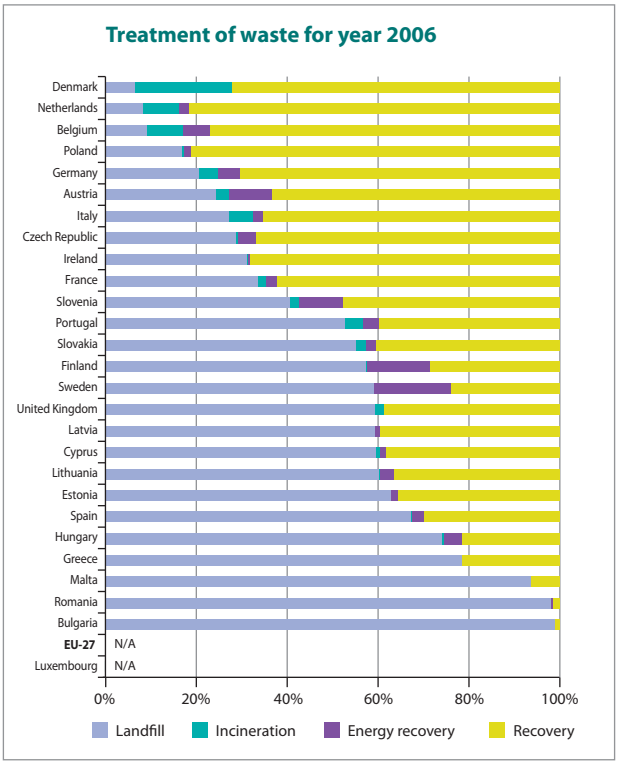
From the amount of 2 953 million tonnes of waste generated in EU-27 in 2006, around 50 % came from mining and quarrying and from construction and demolition activities. 12 % of the total amount was waste generated by the manufacturing industry, 7 % was waste generated by services supplying electricity, gas and water. Households generated 7.3 % of waste in EU-27; in the old Member States (EU-15) this share was higher with 9.3 % to the total amount. 24 % of waste was allocated to the remaining economic activities.

Treatment of waste for year 2006

(thousand tonnes)

	Recovery	Energy recovery	Incineration	Deposit onto or into land
EU-27	**1 137 000**	**c**	**c**	**1 309 592**
Belgium	23 141	1 740	2 373	2 771
Bulgaria	1 987	8	201	235 692
Czech Republic	11 354	650	69	4 893
Denmark	10 787	0	3 221	959
Germany	251 113	17 321	15 229	73 900
Estonia	6 208	257	0	10 972
Ireland	15 462	142	35	7 074
Greece	10 527	16	16	38 432
Spain	42 289	3 612	554	95 312
France	264 778	10 386	7 319	143 083
Italy	75 633	2 633	6 020	31 640
Cyprus	575	22	12	898
Latvia	456	11	1	683
Lithuania	2 119	170	18	3 487
Luxembourg	6 429	c	c	3 635
Hungary	3 217	572	70	11 120
Malta	152	0	0	2 304
Netherlands	69 240	1 737	6 806	7 028
Austria	29 879	4 378	1 399	11 473
Poland	136 879	2 382	681	28 600
Portugal	9 940	837	998	13 229
Romania	4 281	1 222	16	305 290
Slovenia	2 014	421	77	1 726
Slovakia	5 075	260	289	6 909
Finland	18 590	9 088	132	37 430
Sweden	25 938	18 613	105	64 372
United Kingdom	108 937	54	5 273	166 679
Iceland	:	:	:	:
Norway	3 233	1 314	339	2 777
Croatia	:	:	:	:
Turkey	1 464	0	29	39 192

Data source: Eurostat



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

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

Municipal waste generated

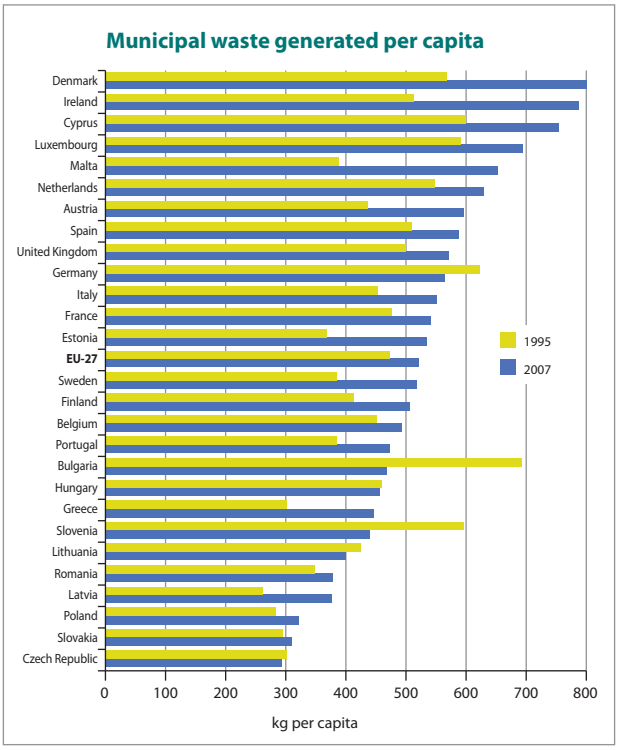
(kg per person per year)

	1995	2000	2005	2006	2007
EU-27	**474**	**524**	**517**	**523**	**522**
Belgium	452	*474*	*482*	*483*	*492*
Bulgaria	693	516	475	446	468
Czech Republic	*302*	334	289	296	294
Denmark	567	665	737	741	*801*
Germany*	*624*	*643*	564	563	*564*
Estonia	368	440	*436*	*466*	*536*
Ireland	514	603	740	804	788
Greece	302	408	438	443	448
Spain	510	662	597	599	*588*
France	476	516	532	538	*541*
Italy	454	509	542	553	550
Cyprus	600	680	739	745	754
Latvia	*263*	*270*	310	411	377
Lithuania	424	363	376	390	400
Luxembourg	592	658	678	*684*	*694*
Hungary	460	445	460	468	456
Malta	*388*	535	624	624	652
Netherlands	549	616	624	622	630
Austria	438	581	620	653	597
Poland**	285	316	*319*	*321*	*322*
Portugal	385	472	446	454	*472*
Romania	350	363	377	388	*379*
Slovenia	596	*513*	423	432	441
Slovakia	295	254	289	301	309
Finland	*414*	503	479	495	507
Sweden	386	428	482	497	518
United Kingdom	499	578	585	587	572
Iceland	427	466	521	570	*566*
Norway	626	615	759	793	824
Switzerland	601	657	663	711	724
Croatia	:	:	:	:	:
Turkey	445	*458*	*438*	415	*430*

* For the period 1995 to 2001 Eurostat estimates were introduced to remove two breaks in the series.

** For the period 1995 to 2004 the figures give the amount of municipal waste collected. As part of the population is not covered by a municipal waste collection scheme (in 2000 about 6% of the city inhabitants and 26% of the country inhabitants were not covered by the system of the organized waste transport), the total amount of waste generated is underestimated.

Data source: Eurostat



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

The total amount of municipal waste generated in the European Union grew between 1995 and 2002, with some slight declines in 1998 and 2001. From 2002 to 2005 a downward trend could be observed, though the generation of municipal waste per capita remained at high levels (517 kg per person in 2005, EU-27). In 2006 and 2007 there was a slight rise again up to 522 kg per person.

The amount of municipal waste generated per person was generally higher in the old Member States (EU-15, 562 kg per person in 2007) than in the new Member States, although Cyprus and Malta also had a relatively high production of municipal waste. Denmark had the highest per capita generation of municipal waste in the European Union; the lowest values were reported by the Czech Republic. Germany alone generated 18 % (46.4 million tonnes) of the total amount of municipal waste generated in EU-27 (258 million tonnes), followed by the United Kingdom (13.5 %) and France (13.3 %).

Municipal waste consists of waste generated by households and waste collected within the municipal waste collection scheme from businesses and institutions. The inclusion of businesses and institutions depends on individual countries' waste management procedures. Municipal waste accounts for around 9 % of the total amount of waste generated in the European Union.

Recycling and recovery rate for packaging waste, 2006

Per cent (%)

	Recycling rate	Recovery rate
EU-27	**57**	**69**
Belgium	79	95
Bulgaria	30	30
Czech Republic	63	69
Denmark	56	94
Germany	67	88
Estonia	46	50
Ireland	55	57
Greece	43	43
Spain	54	61
France	55	64
Italy	55	65
Cyprus	25	25
Latvia	42	46
Lithuania	37	38
Luxembourg	64	93
Hungary	49	51
Malta	11	11
Netherlands	60	88
Austria	68	88
Poland	37	48
Portugal	51	56
Romania	29	36
Slovenia	40	46
Slovakia	36	39
Finland	49	77
Sweden	58	81
United Kingdom	58	62

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 through 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 %, while for new Member States special transition periods apply. In 2006, twelve countries met the 2008 objective, and many others were coming closer. The highest recycling rates were reported by Belgium, followed by Austria and Germany. However, the figures also suggest that some countries with a high recycling rate have problems to further increase or maintain this high level.


Recycling and recovery rate for packaging waste, 2006
Per cent (%)
100
90
80
70
60
50
40
30
20
10
0
EU-27
BE
BG
CZ
DK
DE
EE
IE
EL
ES
FR
IT
CY
LV
LT
LU
HU
MT
NL
AT
PL
PT
RO
SI
SK
FI
SE
UK
Recycling rate
Recovery rate

Recycling and recovery rate for end-of-life vehicles, 2006

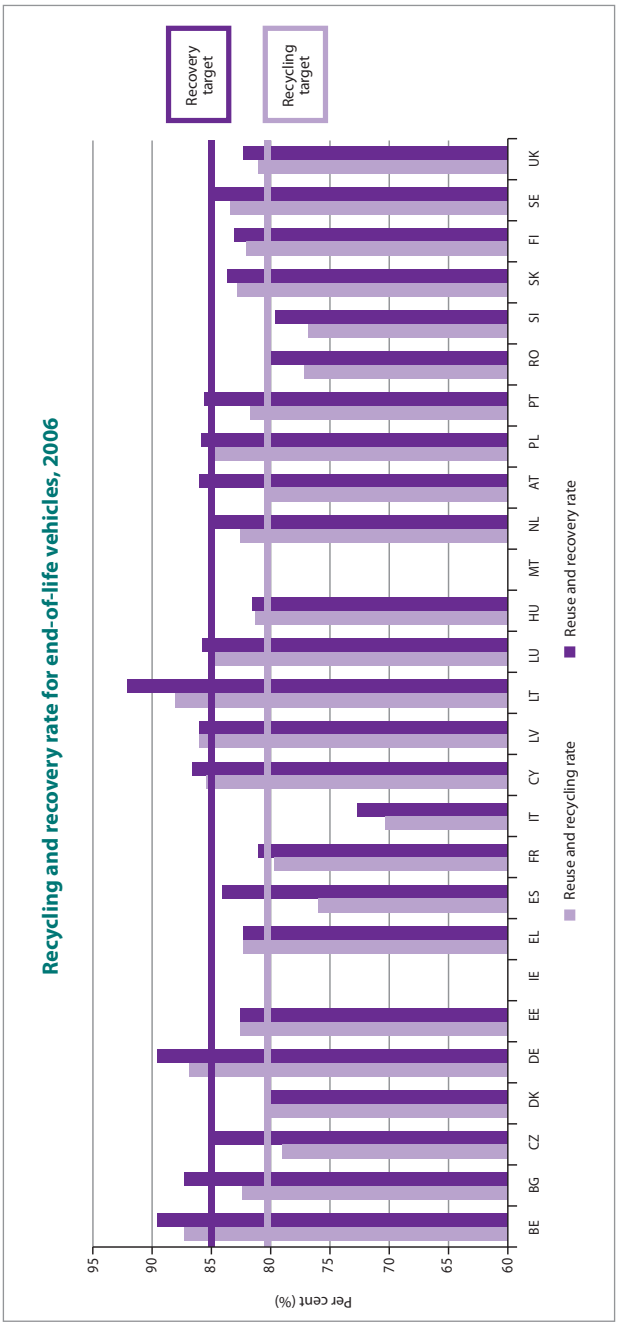
Per cent (%)

	Reuse and recycling rate	Reuse and recovery rate
Target	**80**	**85**
Belgium	87.2	89.5
Bulgaria	82.4	87.2
Czech Republic	79.0	85.1
Denmark	80.0	80.0
Germany	86.8	89.5
Estonia	82.5	82.5
Ireland	0.0	0.0
Greece	82.3	82.3
Spain	76.0	84.0
France	79.6	81.0
Italy	70.3	72.7
Cyprus	85.4	86.6
Latvia	86.0	86.0
Lithuania	88.0	92.0
Luxembourg	85.1	85.8
Hungary	81.2	81.5
Malta	0.0	0.0
Netherlands	82.5	85.2
Austria	80.0	86.0
Poland	84.7	85.8
Portugal	81.7	85.5
Romania	77.1	80.3
Slovenia	76.8	79.6
Slovakia	82.8	83.6
Finland	82.0	83.0
Sweden	83.4	85.0
United Kingdom	81.0	82.3
Norway	83.0	84.0

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

The European Union has also set targets for the re-use, recycling and recovery of end-of-life vehicles. Member States shall ensure a minimum of 85 % of reuse and recovery (including energy recovery) and 80 % of reuse and recycling by 1 January 2006 ("2006 targets"). 19 Member States reached the 2006 recycling target, but only 13 the recovery target. By 1 January 2015 Member States will have to reach targets of 85 % of reuse and recycling and 95 % of reuse and recovery ("2015 targets").

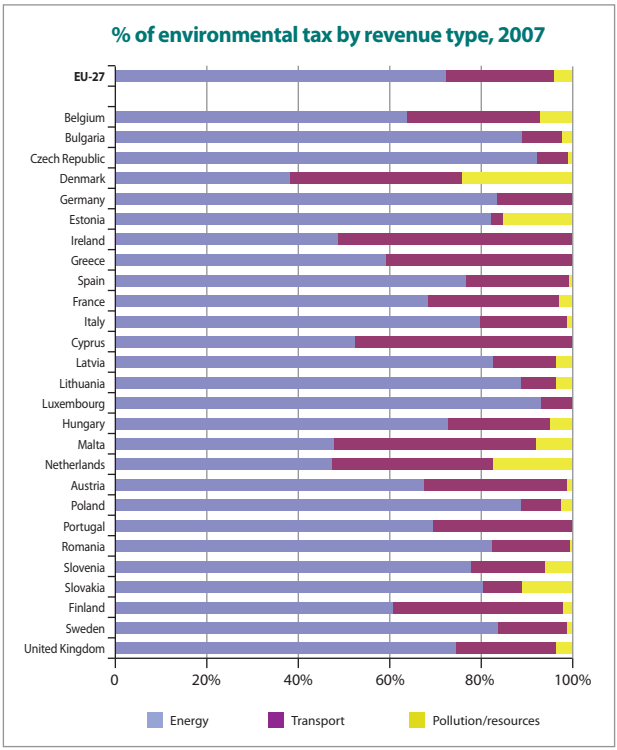
The highest recovery and recycling rates were reported by Lithuania, Belgium and Germany. Six countries already met the 2015 target of 85 % for reuse and recycling. Lithuania with 92 % reuse and recovery is already close to the 2015 target.


Recycling and recovery rate for end-of-life vehicles, 2006
Per cent (%)
95
90
85
80
75
70
65
60
Recovery target
Recycling target
Reuse and recycling rate
Reuse and recovery rate
BE
BG
CZ
DK
DE
EE
IE
EL
ES
FR
IT
CY
LV
LT
LU
HU
MT
NL
AT
PL
PT
RO
SI
SK
FI
SE
UK

Environmental taxes by revenue type

2007	Total environmental taxes (millions of euro)	Energy taxes	Transport taxes	Taxes on pollution/ resources	Total environmental taxes (% of GDP)	Energy taxes	Transport taxes	Taxes on pollution/ resources
EU-27	**302 932**	**219 057**	**71 732**	**12 142**	**2.45**	**1.77**	**0.58**	**0.10**
BE	7 010	4 469	2 042	499	2.09	1.33	0.61	0.15
BG	991	881	88	22	3.43	3.05	0.30	0.08
CZ	3 185	2 939	213	34	2.51	2.31	0.17	0.03
DK	13 381	5 116	5 024	3 241	5.91	2.26	2.22	1.43
DE	54 185	45 275	8 910	-	2.24	1.87	0.37	-
EE	352	290	9	54	2.31	1.90	0.06	0.35
IE	4 632	2 259	2 368	5	2.43	1.19	1.24	0.00
EL	4 626	2 739	1 887	-	2.03	1.20	0.83	-
ES	19 106	14 674	4 281	151	1.82	1.40	0.41	0.01
FR	39 968	27 360	11 444	1 164	2.11	1.45	0.60	0.06
IT	39 552	31 567	7 521	464	2.58	2.06	0.49	0.03
CY	535	280	255	-	3.42	1.79	1.63	-
LV	434	358	60	16	2.06	1.70	0.28	0.07
LT	518	459	40	18	1.82	1.62	0.14	0.06
LU	954	888	66	-	2.63	2.45	0.18	-
HU	2 888	2 099	647	142	2.86	2.08	0.64	0.14
MT	204	98	90	16	3.74	1.79	1.66	0.29
NL	21 888	10 368	7 731	3 789	3.86	1.83	1.36	0.67
AT	6 612	4 453	2 087	72	2.44	1.64	0.77	0.03
PL	8 350	7 403	740	207	2.71	2.40	0.24	0.07
PT	4 785	3 330	1 453	2	2.93	2.04	0.89	0.00
RO	2 567	2 118	433	16	2.07	1.71	0.35	0.01
SI	1 038	807	169	61	3.01	2.34	0.49	0.18
SK	1 249	1 004	106	139	2.28	1.83	0.19	0.25
FI	4 944	3 006	1 829	109	2.75	1.67	1.02	0.06
SE	8 737	7 314	1 308	115	2.64	2.21	0.40	0.03
UK	50 241	37 502	10 933	1 806	2.45	1.83	0.53	0.09
NO	8 210	3 625	3 787	798	2.89	1.28	1.33	0.28

Data source: Commission Services



Environmental taxation is a market-based instrument that aims to integrate the cost of adverse environmental impacts into prices. Through these taxes, producers and consumers are given an incentive to assess the environmental consequences of their behaviour in their production and consumption decisions and are 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 taxes are therefore adjusted to reflect these other concerns. The concept of environmental taxes includes the following four categories of taxes: energy, transport, pollution and resource.

In 2007, energy taxes accounted for 72 % of total environmental taxes in EU 27. The second largest contribution to total environmental taxes in the EU came from transport taxes with 24 %, while the other two categories of taxes accounted for only 4 % of total environmental taxes. Energy taxes include taxes on energy products used for both transport and stationary purposes, as well as CO_2 taxes. Transport taxes include mainly taxes on the ownership and use of vehicles, such as taxes on vehicle registration, road taxes, taxes on imports of vehicles, taxes on transport equipments or transport services.

At EU-27 level, only Ireland had higher taxes on transport than on energy, but this share was also high in Cyprus, Malta, Greece and Netherlands. For Denmark the shares of transport and energy taxes in total were almost equal. For the EFTA countries, in particular for Norway, transport taxes contributed more to the total level of environmental taxes, than the energy category, while the resource/pollution taxes also had a high level of 10 % compared to the majority of EU countries. In terms of pollution/resource taxes, there are two countries, Estonia and Slovakia, for which the level of these taxes was higher than the transport taxes, with 15 % and 11 % respectively.

Energy taxes as % of GDP

Per cent (%)

	1996	2000	2004	2006	2007	Max of period 1996-2007
EU-27	**:**	**2.1**	**2.0**	**1.9**	**1.8**	**2.2**
Belgium	1.6	1.4	1.5	1.4	1.3	1.6
Bulgaria	:	2.3	3.0	2.7	3.1	3.1
Czech Republic	2.2	2.2	2.4	2.4	2.3	2.5
Denmark	2.3	2.6	2.6	2.4	2.3	2.7
Germany	1.8	2.0	2.2	2.0	1.9	2.3
Estonia	1.1	1.3	1.8	1.8	1.9	1.9
Ireland	1.7	1.4	1.3	1.2	1.2	1.7
Greece	2.5	1.6	1.3	1.2	1.2	2.5
Spain	1.8	1.7	1.6	1.4	1.4	1.9
France	2.0	1.8	1.7	1.6	1.5	2.0
Italy	3.0	2.6	2.2	2.2	2.1	3.0
Cyprus	0.5	0.7	2.1	1.8	1.8	2.1
Latvia	1.5	1.8	2.1	2.0	1.7	2.7
Lithuania	1.1	1.8	1.8	1.6	1.6	2.2
Luxembourg	2.8	2.7	2.9	2.5	2.5	2.9
Hungary	2.4	2.4	2.1	2.1	2.1	2.9
Malta	0.8	1.4	1.3	1.3	1.8	1.8
Netherlands	1.7	1.9	1.9	2.0	1.8	2.0
Austria	1.4	1.6	1.9	1.6	1.6	1.9
Poland	1.4	1.8	2.1	2.3	2.4	2.4
Portugal	2.6	1.6	2.2	2.1	2.0	2.6
Romania	:	3.3	2.3	1.7	1.7	3.8
Slovenia	3.3	2.5	2.6	2.4	2.3	3.9
Slovakia	1.9	2.0	2.2	2.0	1.8	2.2
Finland	2.1	2.0	1.9	1.8	1.7	2.3
Sweden	2.7	2.4	2.4	2.3	2.2	2.7
United Kingdom	2.3	2.4	2.1	1.9	1.8	2.4
Norway	:	:	1.5	1.3	1.3	1.7

Data source: Commission Services

In 2007, the members of EU-27 collected revenues from environmental taxes in the amount of 303 billion Euro. This was about 2.5 % of GDP within EU-27. The percentage of energy taxes was 1.8 % of GDP. Between 1997 and 2007, 11 countries 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, Cyprus and Bulgaria the increase of energy taxes took place in countries located in the north of Europe, such as Estonia, Poland, Lithuania, Czech Republic, Denmark, Netherlands and Germany. As in 2006, Bulgaria, had the highest share of energy taxes in GDP for 2007 with 3 %, up from 2.3 % in 2000, followed by Luxembourg with 2.4 % up from 2.7 % in 2000, and Poland with 2.4 % up from 1.8 % in 2000.


Transport taxes as % of GDP
Per cent (%)
0
1
2
EU-27
BE
BG
CZ
DK
DE
EE
IE
EL
ES
FR
IT
CY
LV
LT
LU
HU
MT
NL
AT
PL
PT
RO
SI
SK
FI
SE
UK
1996
2007
Max of period 1996-2007 (%)

Carbon stock in woody biomass of forests, 2000-2005

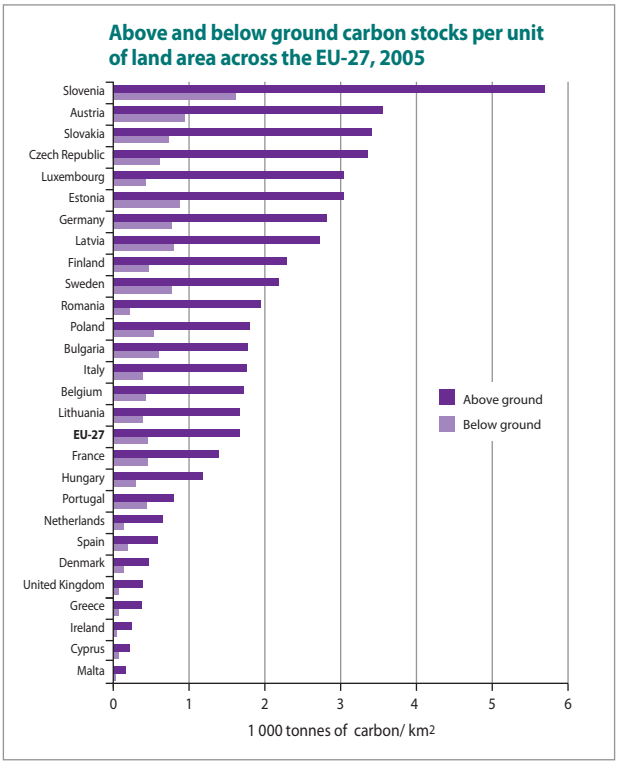
(1 000 tonnes carbon)

	Carbon stock in woody biomass							
	Total		Above ground, living woody biomass		Below ground, living woody biomass		Deadwood	
	2000	2005	2000	2005	2000	2005	2000	2005
Europe*	**46 820 275**	**47 323 839**	**35 071 544**	**35 284 335**	**8 887 137**	**8 988 019**	**7 394 302**	**7 379 874**
EU-27	**8 975 631**	**9 579 792**	**6 728 995**	**7 186 764**	**1 833 056**	**1 947 594**	**413 579**	**445 433**
(%)	**19**	**20**	**19**	**20**	**21**	**22**	**6**	**6**
BE	62 094	66 691	48 570	52 248	12 143	13 062	1 381	1 381
BG	*255 248*	*275 210*	183 000	197 000	61 000	66 000	*11 248*	*12 210*
CZ	308 142	316 692	246 517	259 286	45 426	47 779	16 200	9 628
DK	*26 623*	*27 213*	19 607	20 032	5 811	5 939	*1 205*	*1 242*
DE	*1 250 037*	*1 345 290*	928 000	1 005 000	265 000	278 000	*57 037*	*62 290*
EE	178 594	179 182	132 416	131 664	38 451	38 274	7 727	9 245
IE	18 300	20 000	15 100	16 500	3 000	3 300	200	200
EL	*59 189*	*61 737*	47 000	49 000	9 300	9 700	*2 889*	*3 037*
ES	*369 165*	*410 408*	263 000	297 000	90 000	95 000	*16 165*	*18 408*
FR	*1 116 126*	*1 220 005*	804 711	879 218	261 956	286 293	*49 459*	*54 494*
IT	636 587	715 585	463 790	521 189	101 998	114 798	70 799	79 598
CY	2 730	2 760	2 070	2 090	660	670	0	0
LV	228 561	243 280	162 700	169 561	47 773	49 787	18 089	23 932
LT	130 700	139 400	97 700	104 800	22 800	24 100	10 200	10 500
LU	9 235	9 235	7 860	7 860	1 100	1 100	275	275
HU	161 807	169 026	105 165	109 593	26 291	27 398	30 351	32 035
MT	*63*	*63*	50	50	10	10	*3*	*3*
NL	25 330	27 780	20 560	22 150	4 130	4 450	*640*	*1 180*
AT**	358 000	375 500	280 000	293 500	74 000	77 500	4 000	4 500
PL	673 462	736 199	514 084	561 974	153 702	168 020	5 676	6 205
PT	*105 695*	*118 312*	65 000	72 800	36 700	41 000	*3 995*	*4 512*
RO	*525 535*	*525 767*	448 000	*448 000*	50 000	*50 000*	*27 535*	*27 767*
SI	160 360	171 210	107 310	114 570	30 430	32 490	22 620	24 150
SK	204 300	218 600	156 100	167 000	33 700	35 900	14 500	15 700
FI	797 600	855 857	647 900	696 342	134 700	144 515	15 000	15 000
SE	1 205 548	1 233 691	874 786	893 339	307 476	315 510	23 286	24 842
UK	106 600	115 100	88 000	95 000	15 500	17 000	3 100	3 100

* Europe comprises the 46 MCPFE member countries, inluding the Russian Federation (Source: MCPFE State of European Forests 2007, p. 167).

** Data cover forests and other wooded land (OWL).

Data source: MCPFE/ECE/FAO quantitative indicators enquiry



Forests capture carbon dioxide from the atmosphere and store it in wood, thus reducing the climate-changing effect of this greenhouse gas. The available data show that at least 9 134 million tonnes of carbon are stored in the EU-27's woody forest biomass and another 445 million in the forests' deadwood. The amounts stored in similar biomass on other wooded land have only been estimated in certain Member States. The overall slight increase in carbon stock between the reference years is mainly due to sustainable management practices and afforestation.

Although it is known that further substantial amounts of carbon are stored in forest litter and in soils, information on these components is still very limited. As forest stands age, they grow less and less quickly and thus also store less carbon as the years go by. Sustainable harvesting of wood removes old trees and allows young ones to fill the gaps and grow quickly, thereby increasing the amounts of carbon stored in a given stand.

Increment and fellings in forests available for wood supply, 2000-2005

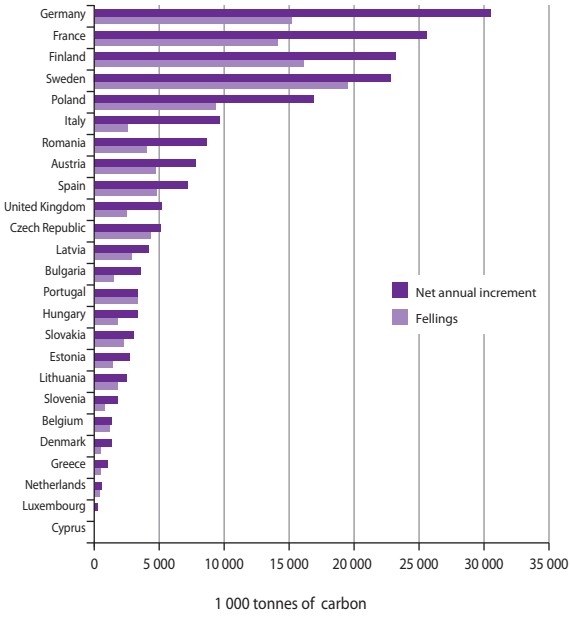
	Net annual increment				Fellings				Fellings as percent of net annual increment	
	2000		2005		2000		2005		2000	2005
	1000 m³ o.b.	1000 t C	1000 m³ o.b.	1000 t C	1000 m³ o.b.	1000 t C	1000 m³ o.b.	1000 t C	%	%
Europe*	**1 344 717**	***336 179***	**1 350 479**	***337 620***	**668 773**	***167 193***	**686 373**	***171 593***	***50***	***51***
EU-27	**666 611**	***166 653***	**764 007**	***191 002***	**443 649**	***110 912***	**460 792**	***115 198***	**67**	***60***
(%)	**49.57**		**56.57**		**66.34**		**67.13**			
BE	5 289	*1 322*	5 289	*1 322*	3 526	*882*	4 475	*1 119*	67	85
BG	13 563	*3 391*	14 120	*3 530*	3 755	*939*	5 768	*1 442*	28	41
CZ	19 800	*4 950*	20 500	*5 125*	15 860	*3 965*	17 190	*4 298*	80	84
DK	4 849	*1 212*	5 176	*1 294*	2 099	*525*	1 837	*459*	43	35
DE	122 000	*30 500*	122 000	*30 500*	48 818	*12 205*	60 770	*15 193*	40	50
EE	11 363	*2 841*	11 015	*2 754*	12 746	*3 187*	5 730	*1 433*	112	52
IE	:	*:*	:	*:*	:	*:*	:	*:*	:	:
EL	3 813	*953*	*3 813*	*953*	2 221	*555*	1 842	*461*	58	*48*
ES	28 589	*7 147*	*28 589*	*7 147*	17 965	*4 491*	19 093	*4 773*	63	*67*
FR	97 578	*24 395*	102 456	*25 614*	63 125	*15 781*	56 623	*14 156*	65	55
IT	31 836	*7 959*	38 320	*9 580*	10 559	*2 640*	10 105	*2 526*	33	26
CY	42	*11*	40	*10*	18	*4*	6	*2*	42	16
LV	16 500	*4 125*	16 500	*4 125*	11 574	*2 894*	11 290	*2 823*	70	68
LT	8 966	*2 242*	9 888	*2 472*	6 343	*1 586*	7 238	*1 810*	71	73
LU	650	*163*	650	*163*	306	*77*	249	*62*	47	38
HU	11 711	2 928	12 899	*3 225*	7 287	*1 822*	7 167	*1 792*	62	56
MT	:	*:*	:	*:*	-	*-*	-	*-*	-	-
NL	2 227	*557*	2 230	*558*	1 312	*328*	1 552	*388*	59	70
AT	31 255	*7 814*	*31 255*	*7 814*	18 797	*4 699*	*18 797*	*4 699*	60	*60*
PL	:	*:*	67 595	*16 899*	32 531	*8 133*	37 156	*9 289*	:	55
PT	12 900	*3 225*	*12 900*	*3 225*	10 590	*2 648*	*13 286*	*3 322*	82	*103*
RO	34 600	*8 650*	34 600	*8 650*	14 300	*3 575*	15 900	*3 975*	41	46
SI	6 546	*1 637*	7 277	*1 819*	2 572	*643*	3 203	*801*	39	44
SK	11 748	*2 937*	11 980	*2 995*	6 683	*1 671*	8 962	*2 240*	57	75
FI	79 362	*19 841*	92 860	*23 215*	67 173	*16 793*	64 526	*16 132*	85	69
SE	90 724	*22 681*	91 355	*22 839*	74 089	*18 522*	78 127	*19 532*	82	86
UK	20 700	*5 175*	20 700	*5 175*	9 400	*2 350*	9 900	*2 475*	45	48

* Europe comprises the 46 MCPFE member Countries, inluding the Russian Federation (Source: MCPFE State of European Forests 2007, p. 167).

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

Data source: MCPFE/ECE/FAO quantitative indicators enquiry

Increment and fellings in forests available for wood supply, 2005



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

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

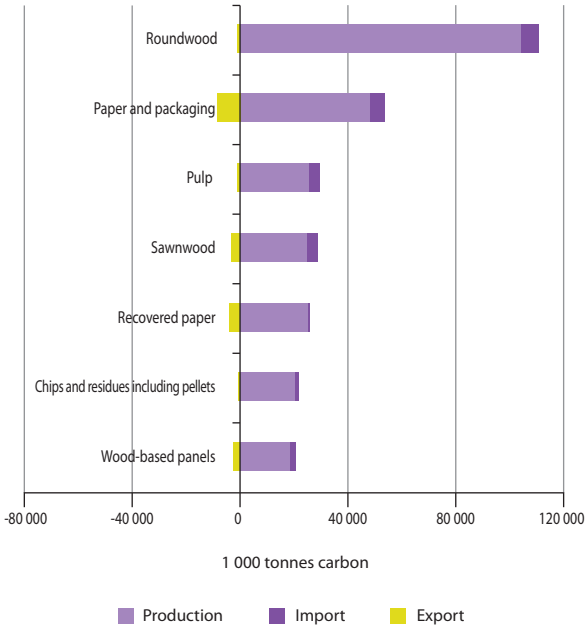
EU-27 supply balance for wood products, in tonnes of carbon, 2000-2005

(1 000 tonnes carbon)

		2000			2005		
		Export	Import	Production	Export	Import	Production
	Total	***15 574***	***26 006***	***232 821***	***19 698***	***23 615***	***267 342***
1	Roundwood	*1 476*	*8 547*	*88 736*	*944*	*6 484*	*104 097*
1.1	Fuelwood, including wood for charcoal	*42*	*236*	*9 967*	*48*	*191*	*19 432*
1.2	Industrial roundwood (Wood in the rough)	*1 434*	*8 311*	*78 769*	*896*	*6 293*	*84 666*
2	Wood charcoal	*8*	*101*	*102*	*7*	*173*	*154*
3	Wood chips and particles	*197*	*621*	*9 823*	*269*	*780*	*10 936*
4	Wood residues including pellets	*56*	*385*	*8 349*	*83*	*618*	*9 435*
5	Sawnwood	*2 636*	*4 936*	*22 987*	*3 054*	*4 070*	*24 813*
6	Wood-based panels	*1 593*	*2 200*	*15 746*	*2 173*	*1 955*	*18 612*
6.1	Veneer sheets	*62*	*172*	*462*	*50*	*162*	*474*
6.2	Plywood	*156*	*961*	*1 220*	*187*	*955*	*1 303*
6.3	Particle board, OSB and others	*709*	*484*	*10 721*	*1 105*	*412*	*11 949*
6.4	Fibreboard	*666*	*583*	*3 343*	*830*	*426*	*4 886*
7	Wood pulp	*708*	*4 418*	*18 953*	*867*	*3 907*	*19 502*
7.1	Mechanical	*41*	*111*	*5 691*	*34*	*117*	*5 602*
7.2	Semi-chemical	*42*	*174*	*679*	*26*	*134*	*669*
7.3	Chemical	*583*	*3 985*	*12 424*	*747*	*3 438*	*12 942*
7.4	Dissolving grades	*43*	*150*	*160*	*60*	*219*	*288*
8	Other pulp	*33*	*73*	*3 273*	*43*	*49*	*5 926*
8.1	Pulp from fibres other than wood	*7*	*46*	*114*	*18*	*42*	*506*
8.2	Recovered fibre pulp	*25*	*27*	*3 158*	*25*	*7*	*5 420*
9	Recovered paper	*1 877*	*464*	*20 251*	*3 809*	*479*	*25 329*
10	Paper and packaging	*6 989*	*4 259*	*44 601*	*8 450*	*5 099*	*48 537*
10.1	Graphic papers	*4 058*	*2 117*	*22 066*	*5 036*	*3 119*	*23 459*
10.2	Sanitary and household papers	*68*	*77*	*2 632*	*160*	*78*	*3 115*
10.3	Packaging materials	*2 532*	*1 924*	*17 661*	*2 970*	*1 846*	*19 792*
10.4	Other paper and paperboard N.E.S.	*331*	*142*	*2 241*	*284*	*56*	*2 171*

Data source: Eurostat/IPCC carbon factors

EU-27 supply balance for wood products, 2005



Supply balances traditionally show the extent to which countries or markets are self-sufficient for certain commodities by looking at production plus imports minus exports. The balance presented shows data for wood products of the EU-27, which is simulated by including the data of the new Member States even though they only joined the EU from 2004 onwards. Only imports from countries outside the EU-27 and exports to such countries are covered, since the EU is a single market. Furthermore, the product data have been converted to tonnes of carbon by applying recommended conversion factors for average carbon content. It thus becomes possible to sum up and compare quantities of products otherwise expressed in incompatible units.

The carbon in roundwood can be compared with the carbon in fellings in the same year. Carbon contained in different types of products can be compared with what is imported and exported by the EU-27. The graph shows that most of the carbon in wood products stays in the EU; only a relatively small amount is exported in the form of paper and packaging products, sawnwood, recovered paper and wood-based panels. On a more detailed product level, these data can be used in models to estimate total carbon emissions based on an estimated average life expectancy of each product. Such estimates are being prepared for the EU in the context of the UNFCCC negotiating process.

Annex A: Glossary of terms used in the energy section

Biofuels:
Liquid or gaseous fuels used primarily for transport produced from biomass. Biofuels comprise biogasoline, biodiesel and other liquid biofuels. Second-generation biofuels refer to biofuels produced from wastes, residues, non-food cellulosic material and lingo-cellulosic material.

CHP:
See "Combined Heat and Power"

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.

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

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.

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.

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.

GCV:
See "Gross Calorific Value"

GDP:
See "Gross Domestic Product"

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.

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

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

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

NCV:
See "Net Calorific Value"

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

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.

RES:

See "Renewable Energy"

Renewable energy:

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

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"

Further clarification of the terms used in transport statistics can be found in the Eurostat/ITF/UNECE "Illustrated Glossary for Transport Statistics" publication, available at "http://www.unece.org/trans/main/wp6/pdfdocs/glossen4.pdf".

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 ITF, 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: Glossary of terms used in the environment section

Carbon content of woody biomass and wood products

Different tree species store different amounts of carbon, which are released into the atmosphere when the wood is incinerated or ultimately broken down during the process of decomposition. Before that happens, the carbon remains stored in products made from wood (rafters used in buildings, panels, veneers, paper, cardboard, etc). The International Panel for Climate Change has developed carbon factors for estimating the carbon content of forests and of different types of wood products[1]. These factors were applied to standard forest data on standing volume of forest trees, net annual increment and wood products to convert these data to tonnes of carbon.

CO_2 equivalent

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

CORINAIR – CORe INventory of AIR emissions

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

CRF – Common reporting format for source and sink categories

The CRF is used by countries for reporting of greenhouse gas inventories since 2000 under the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and EU GHG Monitoring Mechanism (Decision 280/2004/EC). It is in line with the 1996 IPCC Guidelines (IPCC 19971), and is described in the Reporting guidelines (http://www.unfccc.int/resource/docs/cop5/07.pdf). The sources categories in the highest aggregated levels are the following:

CRF 1 Energy
CRF 2 Industrial Processes
CRF 3 Solvent and Other Product Use
CRF 4 Agriculture
CRF 5 Land-Use Change & Forestry
CRF 6 Waste
CRF 7 Other

Please note that the fuel combustion for energy use in the industry and in the agriculture as well as the waste incineration with energy use – all these emissions count to the CRF source and sink categories "Energy".

Environmental protection investments

Capital expenditures for new or adaptation of existing methods, technologies, processes, equipment (or parts thereof) designed to prevent or reduce the amount of

[1] *http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html*

pollution created at the source (e.g. air emissions, effluents or solid waste), thereby reducing the environmental impacts associated with the release of pollutants and/or with polluting activities.

Environmental taxes

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

Fluorinated gases (F-gases)

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

Global warming potential (GWP)

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

Greenhouse gases (GHG)

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

IPCC – Intergovernmental Panel on Climate Change

Kyoto base year

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

Kyoto reduction targets

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

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 158 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.

Net annual increment

The average annual volume over the reference period of gross increment less natural losses[2]. It is measured in cubic metres over bark (including the bark).

Waste

Waste means any substance or object which the holder discards or intends or is required to discard. Municipal waste generated consists of waste collected by or on behalf of municipal authorities and disposed of through the waste management system. The bulk of this waste stream is from households, though similar wastes from sources such as commerce, offices and public institutions are included. For areas not covered by a municipal waste scheme an estimation has been made of the amount of waste generated.

[2] *http://stats.oecd.org/glossary/detail.asp?ID=6517*

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	49 500	1.182
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	42 600	1.017
Residual fuel oil	1 kg	40 000	0.955
White spirit, industrial spirit	1 kg	43 600	1.041
Lubricants	1 kg	42 000	1.003
Bitumen	1 kg	39 000	0.931
Petroleum cokes	1 kg	32 000	0.764
Others petroleum products (paraffins, waxes, etc.)	1 kg	40 000	0.955
Natural gas	1 MJ (GCV)	900	0.0215
Coke-oven gas	1 MJ (GCV)	900	0.0215
Blast-furnace gas	1 MJ (GCV)	1 000	0.0239
Works gas	1 MJ (GCV)	900	0.0215
Nuclear energy	1 MJ (GCV)	1 000	0.0239
Biomass	1 MJ (GCV)	1 000	0.024
Solar energy	1 MJ (GCV)	1 000	0.024
Geothermal energy	1 MJ (GCV)	1 000	0.024
Hydro energy	1 kWh	3 600	0.086
Wind energy	1 kWh	3 600	0.086
Derived heat	1 MJ (GCV)	1 000	0.024
Electrical energy	1 kWh	3 600	0.086

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

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

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

Conversion Factors

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

European Commission

Energy, transport and environment indicators

Luxembourg: Publications Office of the European Union, 2009

2009 — 177 pp. — 10.5 x 21 cm

Theme: Environment and energy
Collection: Pocketbooks

ISBN 978-92-79-13438-8
ISSN 1725-4566

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Energy, transport and environment indicators

The multi-thematic pocketbook *Energy, transport and environment indicators* comprises a broad set of data collected by Eurostat and the European Environment Agency. The objective of this publication is to provide an overview of the most relevant indicators on energy, transport and environment, with particular focus on sustainable development. It presents data for the European Union aggregate (EU-27_, for the EU Member States as well as for the candidate countries and EFTA countries.

http://ec.europa.eu/eurostat

KS-DK-09-001-EN-C

Energy, transport and environment indicators

2009 edition

ISBN 978-92-79-13438-8

Publications Office