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Introduction

The energy sector is one of the pillars of growth, competitiveness and development for modern economies. To keep up with the ongoing transformation of the energy sector in Europe, we need data that is accurate and up-to-date.

This publication provides an overview of the most relevant annual energy-related statistics for the European Union as a whole and for each of its Member States.

The data contained in this pocketbook is drawn from several sources: from the European Commission's services, from international organisations such as the European Environment Agency and the International Energy Agency and also from the European Commission's estimates when other data is unavailable.

The publication is divided into five parts:

- Part 1. Energy overview at global and EU levels.
- Part 2. Main energy indicators, at EU and Member States levels.
- Part 3. Socio-economic indicators in the EU.
- Part 4. Impact of the energy sector on the environment.
- Part 5. Country profiles – Main energy indicators.

Indicators have been calculated using the methodology established by the European Commission – DG Energy. The appendices include a glossary and methodological notes.

This publication was produced using the most recently available data.

Corrections and updates will be published at:

<https://ec.europa.eu/energy/en/data-analysis>

Recommended sources of data:

European Commission websites:

DG Energy

Energy pocketbook, country statistics, data and analysis

<https://ec.europa.eu/energy/en/data-analysis>

Eurostat

Eurostat Database: <http://ec.europa.eu/eurostat/data/database>

DG Economic and Financial Affairs

AMECO: http://ec.europa.eu/economy_finance/db_indicators/ameco/index_en.htm

DG Climate Action

Climate strategies, targets and progress reports:

http://ec.europa.eu/clima/policies/strategies/index_en.htm

Websites of other organisations:

European Environment Agency

Data and maps: <http://www.eea.europa.eu/>

International Energy Agency

Statistics and balances: <http://www.iea.org/statistics/>

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Overview



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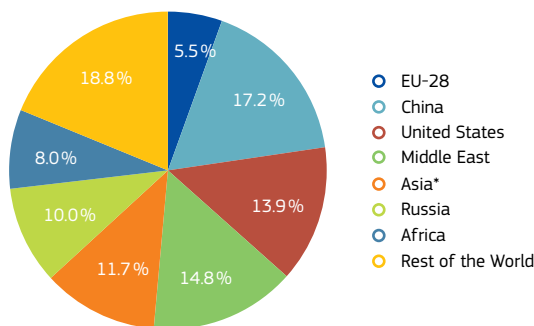
1.1 Energy in the World (Overview)

1.1.1 World Energy Production by Region

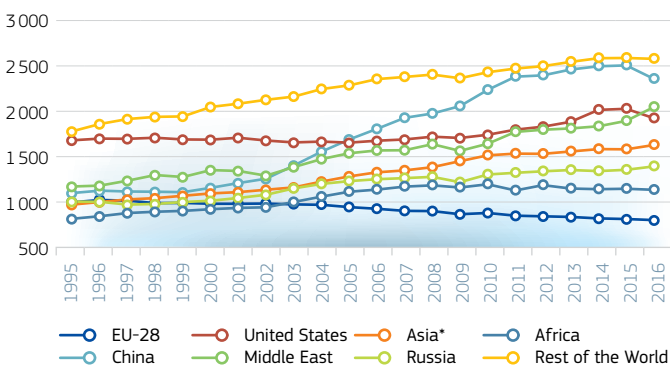
(Mtoe)

	1995	2000	2005	2010	2015	2016
EU-28	967	951	910	843	772	759
China	1 065	1 124	1 671	2 236	2 514	2 361
United States	1 659	1 667	1 631	1 724	2 023	1 916
Middle East	1 137	1 324	1 516	1 624	1 885	2 043
Asia*	934	1 062	1 255	1 497	1 566	1 615
Russia	968	978	1 203	1 280	1 334	1 374
Africa	773	884	1 086	1 172	1 120	1 108
Rest of the World	1 760	2 039	2 286	2 434	2 598	2 588
World	9 263	10 029	11 558	12 808	13 811	13 764

TOTAL 2016: 13 764 Mtoe



Mtoe



* non OECD and OECD Asia, excluding China.

Source: IEA, August 2018

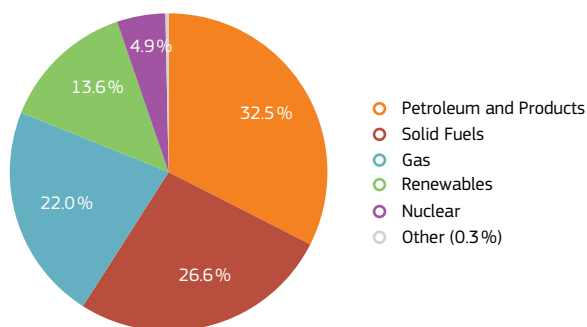
Methodology and Notes: See Appendix 13 – No 1

1.1.2 World Energy Production by Fuel

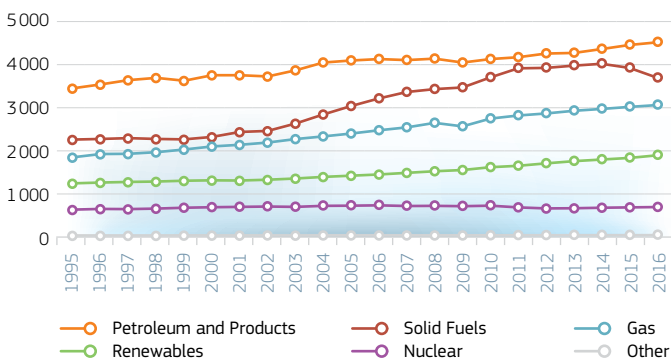
(Mtoe)

	1995	2000	2005	2010	2015	2016
Petroleum and Products	3 397	3 703	4 050	4 084	4 411	4 473
Solid Fuels	2 219	2 278	2 998	3 663	3 886	3 657
Gas	1 812	2 065	2 369	2 715	2 989	3 032
Renewables	1 210	1 287	1 396	1 595	1 814	1 878
Nuclear	608	675	722	719	670	680
Other	17	21	23	32	40	44
Total	9 263	10 029	11 558	12 808	13 811	13 764

TOTAL 2016: 13 764 Mtoe



Mtoe



Source: IEA, August 2018

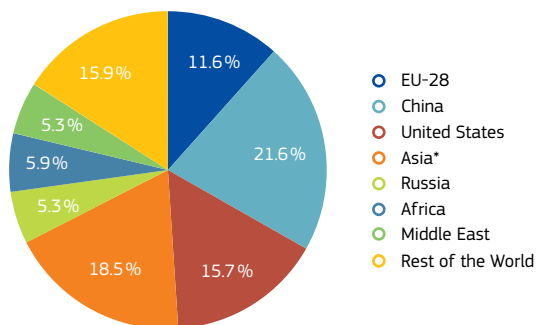
Methodology and Notes: [See Appendix 13 – No 1](#)

1.1.3 World Gross Inland Consumption by Region

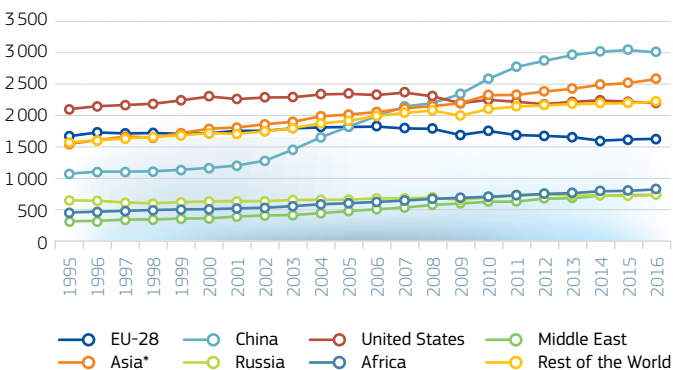
(Mtoe)

	1995	2000	2005	2010	2015	2016
EU-28	1 648	1 695	1 796	1 730	1 590	1 599
China	1 055	1 143	1 794	2 550	3 005	2 973
United States	2 067	2 274	2 319	2 217	2 188	2 167
Asia*	1 521	1 761	1 984	2 294	2 483	2 547
Russia	637	619	652	689	710	732
Africa	443	498	594	700	796	818
Middle East	307	354	469	622	729	734
Rest of the World	1 547	1 691	1 887	2 075	2 171	2 192
World	9 226	10 036	11 495	12 876	13 672	13 761

TOTAL 2016: 13 761 Mtoe



Mtoe



* non OECD and OECD Asia, excluding China.

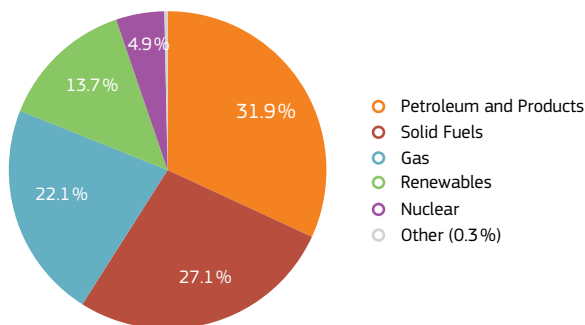
Source: IEA, August 2018

Methodology and Notes: See Appendix 13 – No 1

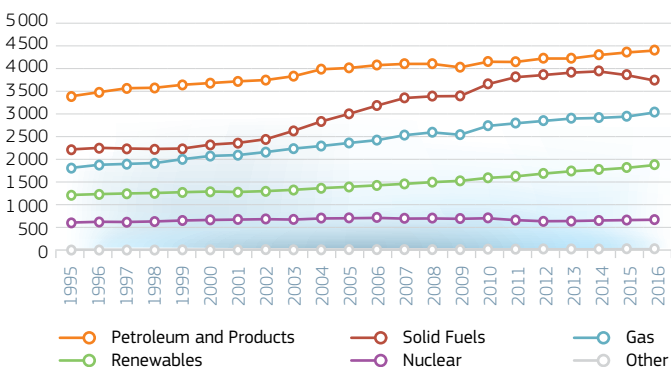
1.1.4 World Gross Inland Consumption by Fuel (Mtoe)

	1995	2000	2005	2010	2015	2016
Petroleum and Products	3 375	3 663	4 001	4 140	4 347	4 390
Solid Fuels	2 207	2 316	2 994	3 652	3 851	3 731
Gas	1 808	2 072	2 359	2 735	2 944	3 035
Renewables	1 211	1 288	1 397	1 598	1 819	1 882
Hydro*	213	225	252	296	336	349
Geothermal*	39	52	54	62	77	81
Solar/Wind/Other*	3	8	17	48	127	145
Biofuels and Waste*	972	1 022	1 096	1 222	1 317	1 349
Nuclear	608	675	722	719	670	680
Other	16	22	23	32	42	44
Total	9 226	10 036	11 495	12 876	13 672	13 761

TOTAL 2016: 13 761 Mtoe



Mtoe



* Partial disaggregation of the Renewables group. Waste also includes non-RES wastes.

Source: IEA, August 2018

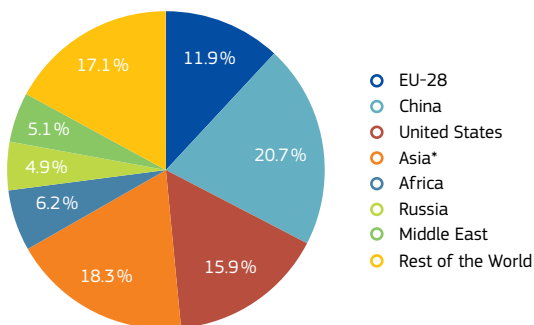
Methodology and Notes: See Appendix 13 – No 1

1.1.5 World Final Energy Consumption by Region

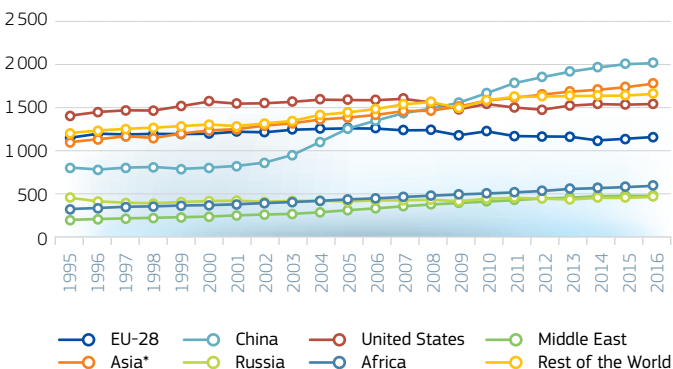
(Mtoe)

	1995	2000	2005	2010	2015	2016
EU-28	1 132	1 179	1 242	1 207	1 118	1 138
China	791	791	1 234	1 635	1 966	1 978
United States	1 378	1 546	1 563	1 513	1 508	1 515
Asia*	1 077	1 212	1 359	1 552	1 706	1 745
Africa	324	368	436	506	579	594
Russia	458	418	412	447	457	470
Middle East	202	241	313	415	481	483
Rest of the World	1 181	1 280	1 419	1 557	1 613	1 632
World	6 543	7 035	7 978	8 832	9 428	9 555

TOTAL 2016: 9 555 Mtoe



Mtoe



* non OECD and OECD Asia, excluding China.

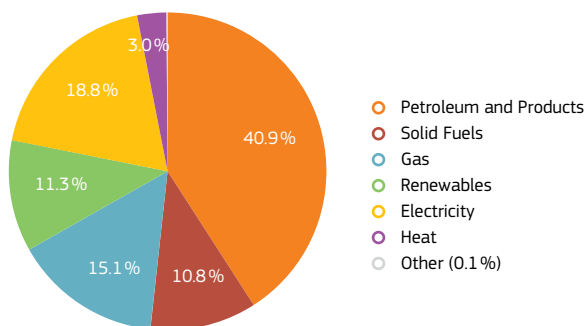
Source: IEA, August 2018

Methodology and Notes: [See Appendix 13 – No 1](#)

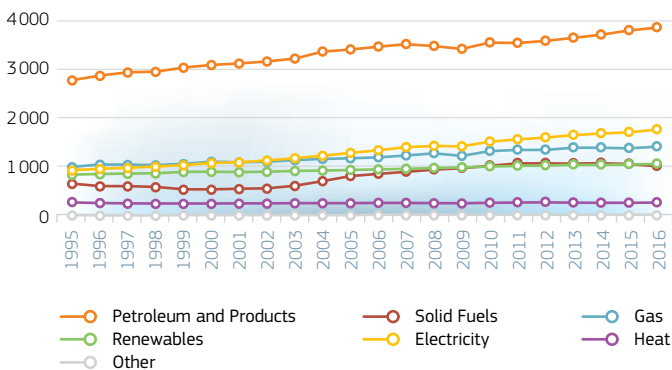
1.1.6 World Final Energy Consumption by Fuel (Mtoe)

	1995	2000	2005	2010	2015	2016
Petroleum and Products	2804	3122	3445	3593	3846	3908
Solid Fuels	661	542	825	1046	1081	1036
Gas	1006	1118	1192	1344	1407	1440
Renewables	847	910	949	1028	1075	1083
Electricity	934	1089	1301	1539	1738	1794
Heat	287	248	260	274	271	283
Other	4	7	7	8	10	11
Total	6543	7035	7978	8832	9428	9555

TOTAL 2016: 9555 Mtoe



Mtoe



Source: IEA, August 2018

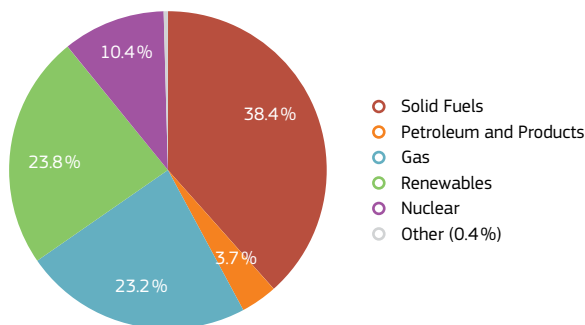
Methodology and Notes: [See Appendix 13 – No 1](#)

1.1.7 World Electricity Generation by Fuel

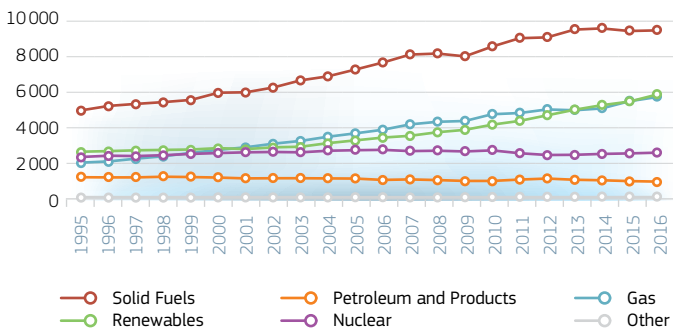
(TWh)

	1995	2000	2005	2010	2015	2016
Solid Fuels	4996	6001	7331	8660	9552	9594
Petroleum and Products	1237	1212	1135	974	973	931
Gas	2016	2747	3701	4810	5552	5794
Renewables	2636	2836	3294	4200	5536	5939
Hydro*	2479	2618	2935	3445	3905	4061
Solar/Wind/Other*	33	55	141	408	1132	1330
Biofuels and Waste*	130	164	226	360	517	571
Geothermal*	40	52	58	68	80	82
Nuclear	2332	2591	2768	2756	2570	2606
Other	47	54	68	84	102	109
Total	13264	15441	18297	21484	24284	24973

TOTAL 2016: 24973 TWh



TWh



* Partial disaggregation of the Renewables group. Waste also includes non-RES wastes.

Source: IEA, August 2018

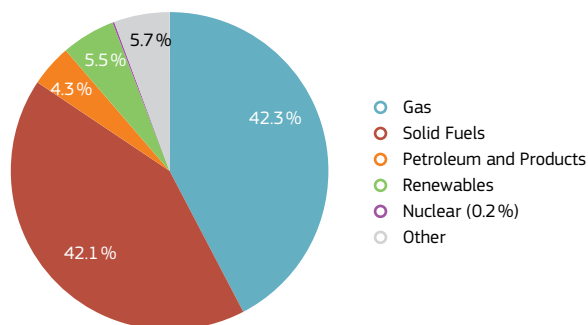
Methodology and Notes: See Appendix 13 – No 1

1.1.8 World Heat Generation by Fuel

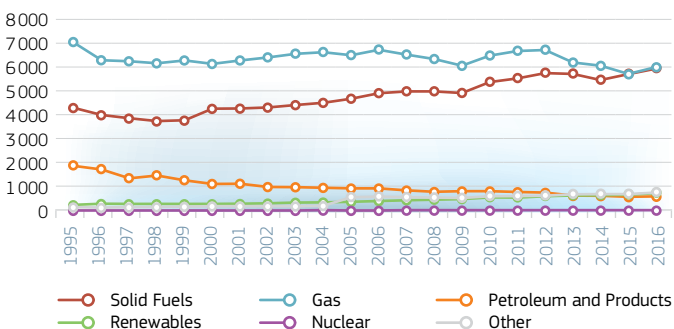
(PJ)

	1995	2000	2005	2010	2015	2016
Gas	7156	6231	6610	6586	5793	6092
Solid Fuels	4367	4332	4763	5481	5822	6053
Petroleum and Products	1939	1160	965	840	600	617
Renewables	254	296	395	593	721	787
Geothermal*	17	18	24	26	34	44
Solar/Wind/Other*	10	13	388	350	374	407
Biofuels and Waste*	345	414	530	799	960	1054
Nuclear	20	19	21	27	26	27
Other	162	204	603	645	742	815
Total	13899	12242	13355	14171	13703	14390

TOTAL 2016: 14390 PJ



PJ



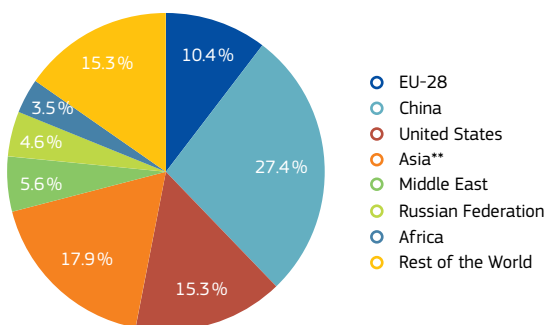
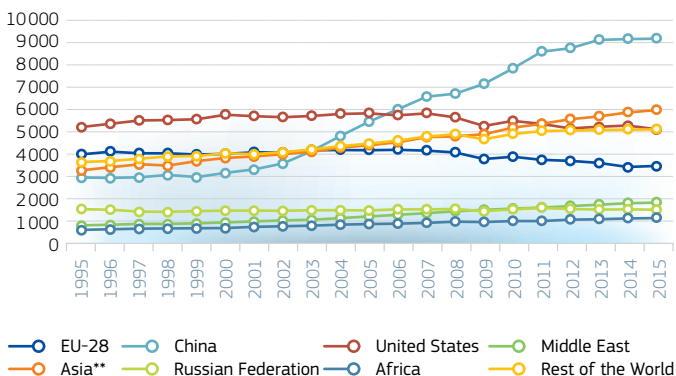
* Partial disaggregation of the Renewables group. Waste also includes non-RES wastes.

Source: IEA, August 2018

Methodology and Notes: See Appendix 13 – No 1

1.1.9 World CO₂ Emissions* by Region(Mio ton CO₂)

	1995	2000	2005	2010	2014	2015
EU-28	4012	4036	4207	3898	3426	3472
China	2951	3160	5458	7847	9171	9184
United States	5211	5790	5854	5496	5282	5109
Asia**	3277	3836	4412	5204	5896	5994
Middle East	816	950	1230	1596	1843	1874
Russian Federation	1562	1488	1497	1552	1551	1533
Africa	614	700	896	1035	1162	1182
Rest of the World	3640	4040	4487	4926	5126	5132
World	22084	23999	28040	31555	33457	33481

TOTAL 2015: 33481 Mio ton CO₂Mio ton CO₂* Contains CO₂ emissions from fuel combustion and international maritime and aviation bunkers.

** non OECD and OECD Asia, excluding China.

Source: IEA, June 2018

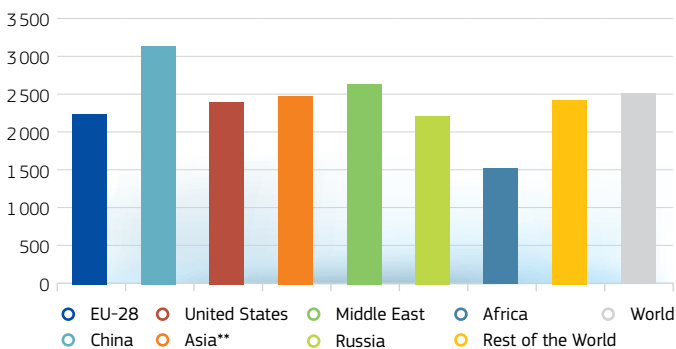
Methodology and Notes: See Appendix 13 – No 1

1.1.10 World CO₂ Intensity* by Region

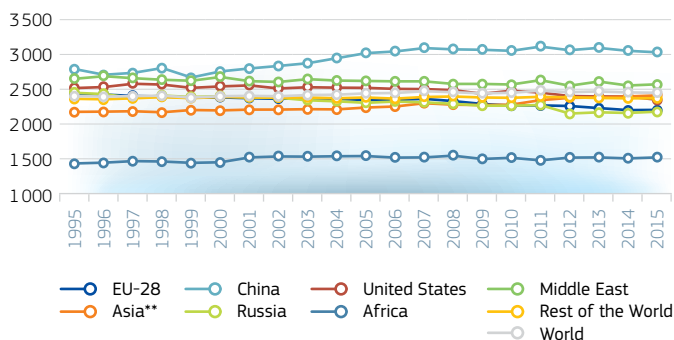
(Kg CO₂ per toe – Average)

	1995	2000	2005	2010	2014	2015
EU-28	2434	2381	2342	2254	2183	2184
China	2797	2764	3042	3078	3080	3056
United States	2521	2546	2524	2479	2389	2335
Asia**	2155	2178	2223	2269	2398	2414
Middle East	2661	2688	2625	2565	2549	2570
Russia	2453	2402	2297	2253	2141	2160
Africa	1386	1406	1508	1480	1471	1485
Rest of the World	2352	2389	2378	2374	2364	2364
World	2394	2391	2439	2451	2456	2449

WORLD AVERAGE 2015: 2449 Kg CO₂ per toe



Kg CO₂ per toe



* Per Unit of Gross Inland Consumption.

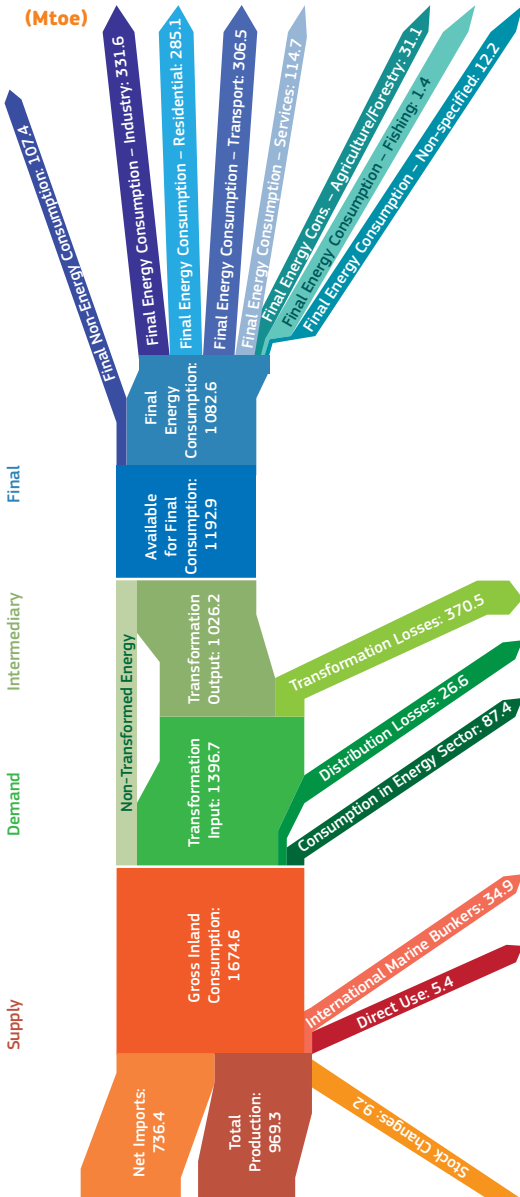
** non OECD and OECD Asia, excluding China and Middle East.

Source: IEA, August 2018

Methodology and Notes: See Appendix 13 – No 1

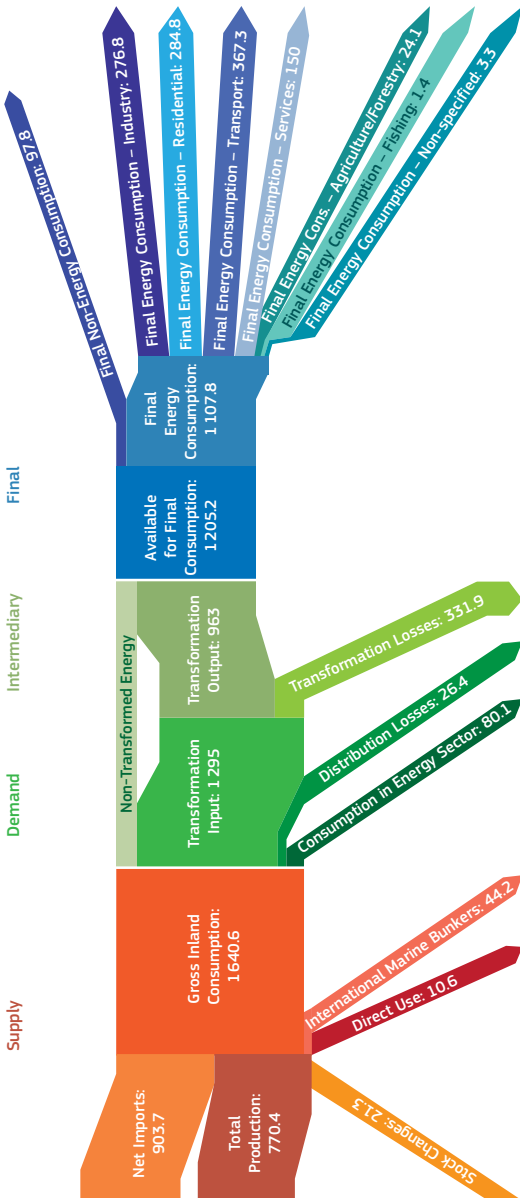
1.2 Energy in the EU (Overview)

1.2.1 EU-28 Energy Flow – 1995



Source: Eurostat, May 2018
 Methodology and Notes: See Appendix 13 – No 1

1.2.2 EU-28 Energy Flow – 2016 (Mtoe)



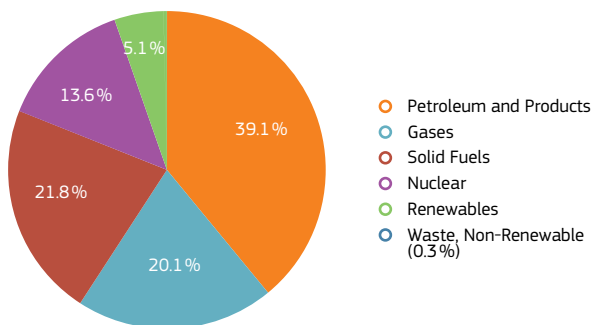
Source: Eurostat, May 2018
Methodology and Notes: See Appendix 13 – No 1

1.2.3 EU-28 Gross Inland Consumption

ENERGY MIX (%) – PRIMARY PRODUCTS ONLY

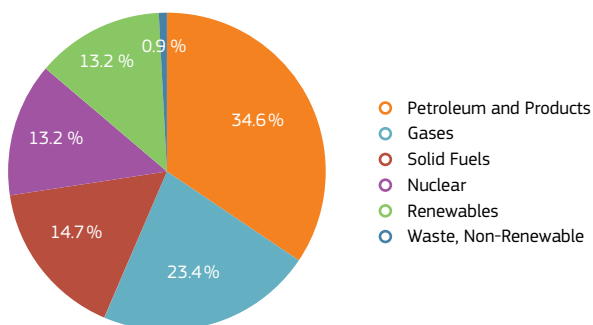
TOTAL PRIMARY 1995: 1 672.8 Mtoe

(Total Primary and Secondary 1995: 1 674.6 Mtoe)



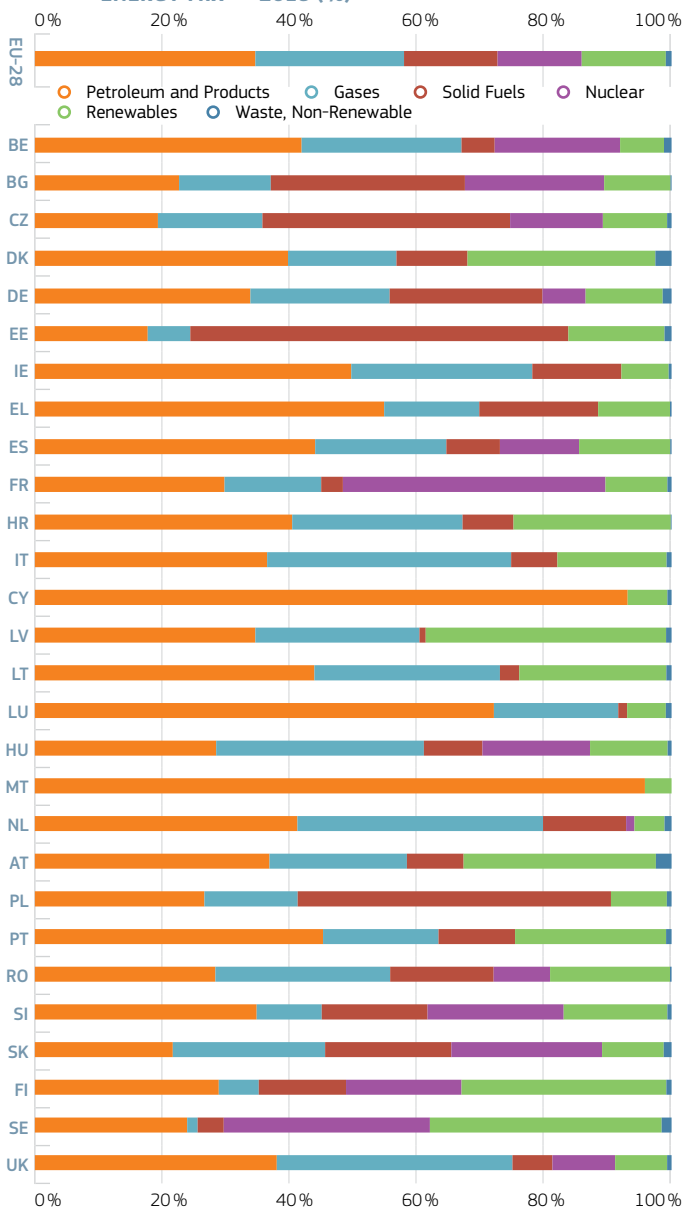
TOTAL PRIMARY 2016: 1 639 Mtoe

(Total Primary and Secondary 2016: 1 640.6 Mtoe)



1.2.3 EU-28 Gross Inland Consumption

ENERGY MIX* – 2016 (%)



* Primary Products Only.

Source: Eurostat, May 2018

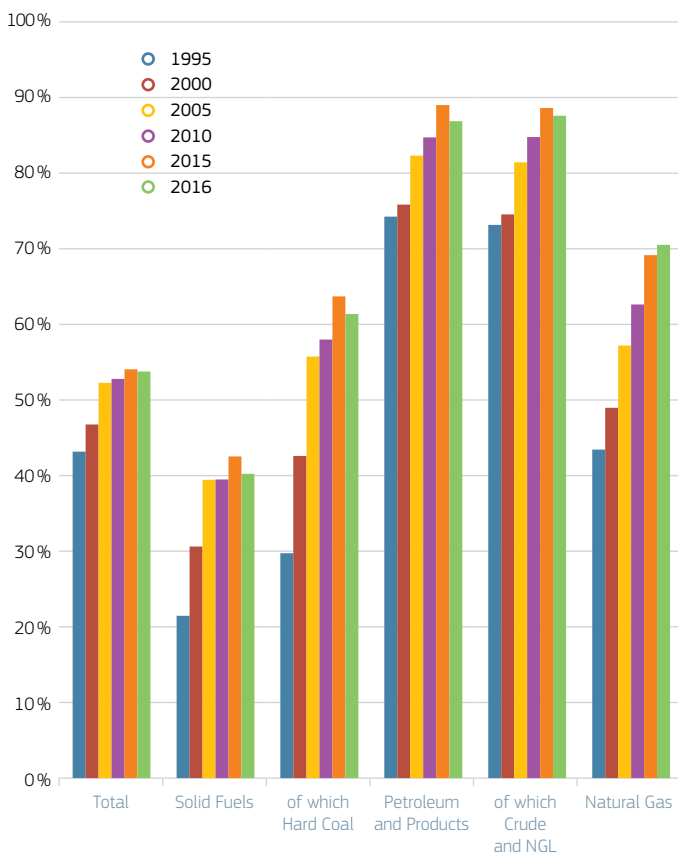
Methodology and Notes: See Appendix 13 – No 1

1.2.4 EU-28 Energy Import Dependency

BY FUEL – (%)

	1995	2000	2005	2010	2015	2016
Total	43.1	46.7	52.1	52.7	53.9	53.6
Solid Fuels	21.4	30.6	39.4	39.4	42.4	40.2
of which Hard Coal	29.7	42.5	55.6	57.9	63.6	61.2
Petroleum and Products	74.1	75.7	82.2	84.5	88.8	86.7
of which Crude and NGL	73.0	74.4	81.3	84.6	88.4	87.4
Natural Gas	43.4	48.9	57.1	62.5	69.0	70.4

1995-2016 (%)



Source: Eurostat, May 2018

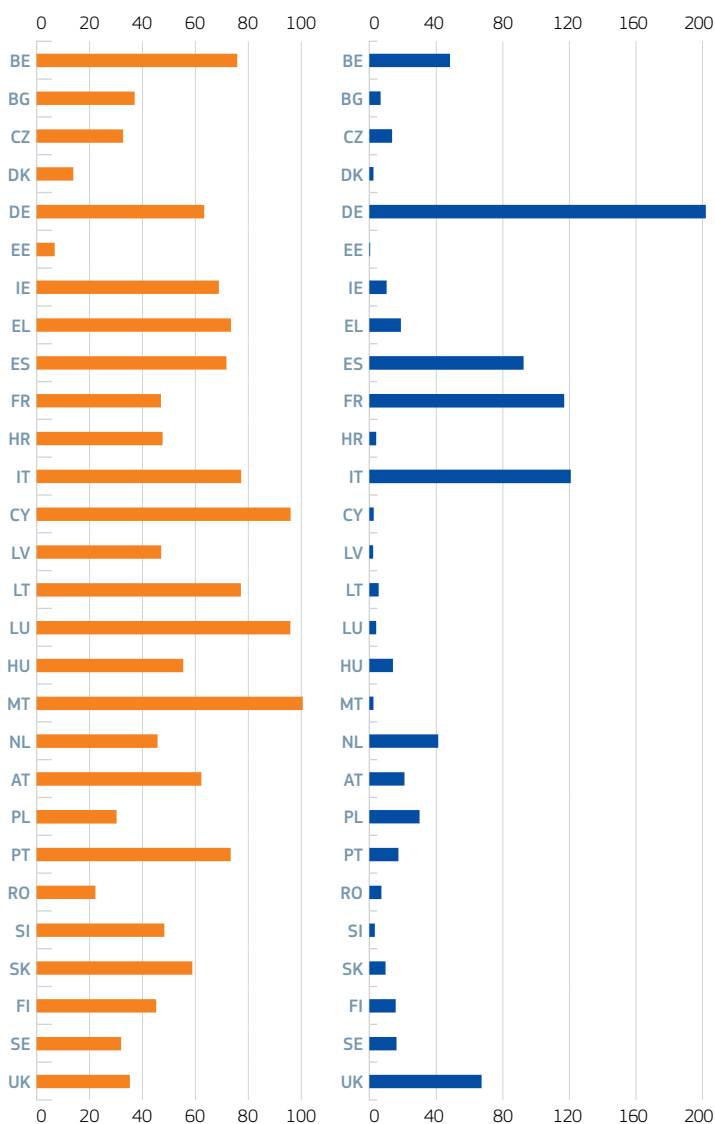
Methodology and Notes: See Appendix 13 – No 1

1.2.5 EU-28 Energy Import Dependency – Net Imports

2016

ENERGY IMPORT DEPENDENCY (%)

NET IMPORTS (Mtoe)



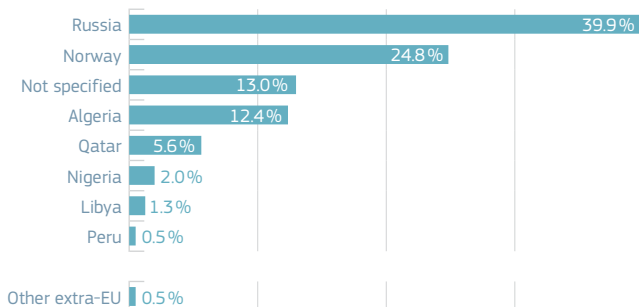
Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 1

1.2.6 EU-28 Imports by Country of Origin

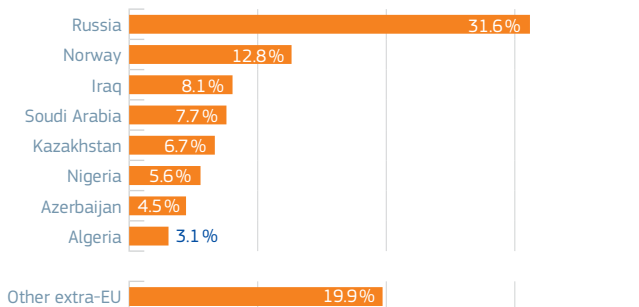
EU-28 IMPORTS* OF NATURAL GAS – 2016

Total extra-EU = 14745784 TJ-GCV



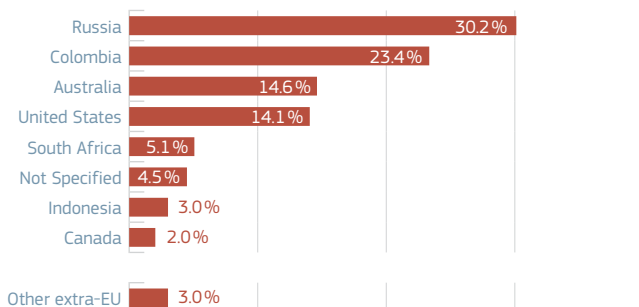
EU-28 IMPORTS* OF CRUDE OIL – 2016

Total extra-EU = 528924 kton



EU-28 IMPORTS* OF SOLID FUELS – 2016

Total extra-EU = 187948 kton



* From non-EU suppliers and as a share of total non-EU imports.

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 1

1.3 EU 2020 Targets

1.3.1 Renewable Energy Targets*

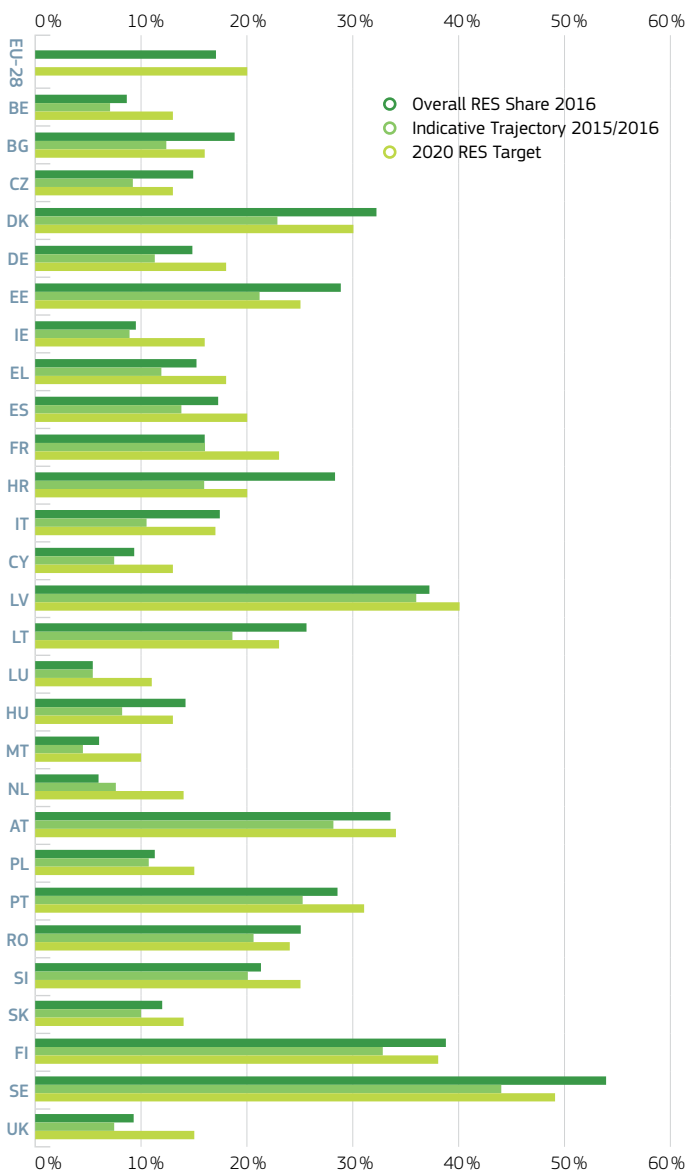
% EU-28	2016 Renewable Energy Shares				Indicative Trajectory 2015/2016	2020 RES Target
	RES Transport	RES Electricity	RES Heating and Cooling	Overall RES Share		
EU-28	7.1	29.6	19.1	17.0	n.a.	20.0
BE	5.9	15.8	8.1	8.7	7.1	13.0
BG	7.3	19.2	30.0	18.8	12.4	16.0
CZ	6.4	13.6	19.9	14.9	9.2	13.0
DK	6.8	53.7	41.7	32.2	22.9	30.0
DE	6.9	32.2	13.0	14.8	11.3	18.0
EE	0.4	15.5	51.2	28.8	21.2	25.0
IE	5.0	27.2	6.8	9.5	8.9	16.0
EL	1.4	23.8	24.5	15.2	11.9	18.0
ES	5.3	36.6	16.8	17.3	13.8	20.0
FR	8.9	19.2	21.1	16.0	16.0	23.0
HR	1.3	46.7	37.6	28.3	15.9	20.0
IT	7.2	34.0	18.9	17.4	10.5	17.0
CY	2.7	8.6	23.0	9.3	7.4	13.0
LV	2.8	51.3	51.9	37.2	35.9	40.0
LT	3.6	16.8	46.5	25.6	18.6	23.0
LU	5.9	6.7	7.3	5.4	5.4	11.0
HU	7.4	7.2	20.8	14.2	8.2	13.0
MT	5.4	5.6	15.3	6.0	4.5	10.0
NL	4.6	12.5	5.5	6.0	7.6	14.0
AT	10.6	72.6	33.3	33.5	28.1	34.0
PL	3.9	13.4	14.7	11.3	10.7	15.0
PT	7.5	54.1	35.1	28.5	25.2	31.0
RO	6.2	42.7	26.9	25.0	20.6	24.0
SI	1.6	32.1	34.0	21.3	20.1	25.0
SK	7.5	22.5	9.9	12.0	10.0	14.0
FI	8.4	32.9	53.7	38.7	32.8	38.0
SE	30.3	64.9	68.6	53.8	43.9	49.0
UK	4.9	24.6	7.0	9.3	7.5	15.0

* In % of the Gross Final Energy Consumption.

Source: Eurostat-RES SHARES, February 2018
Methodology and Notes: [See Appendix 13 – No 1](#)

1.3.1 Renewable Energy Targets*

OVERALL RENEWABLE ENERGY SHARE 2016 (%)

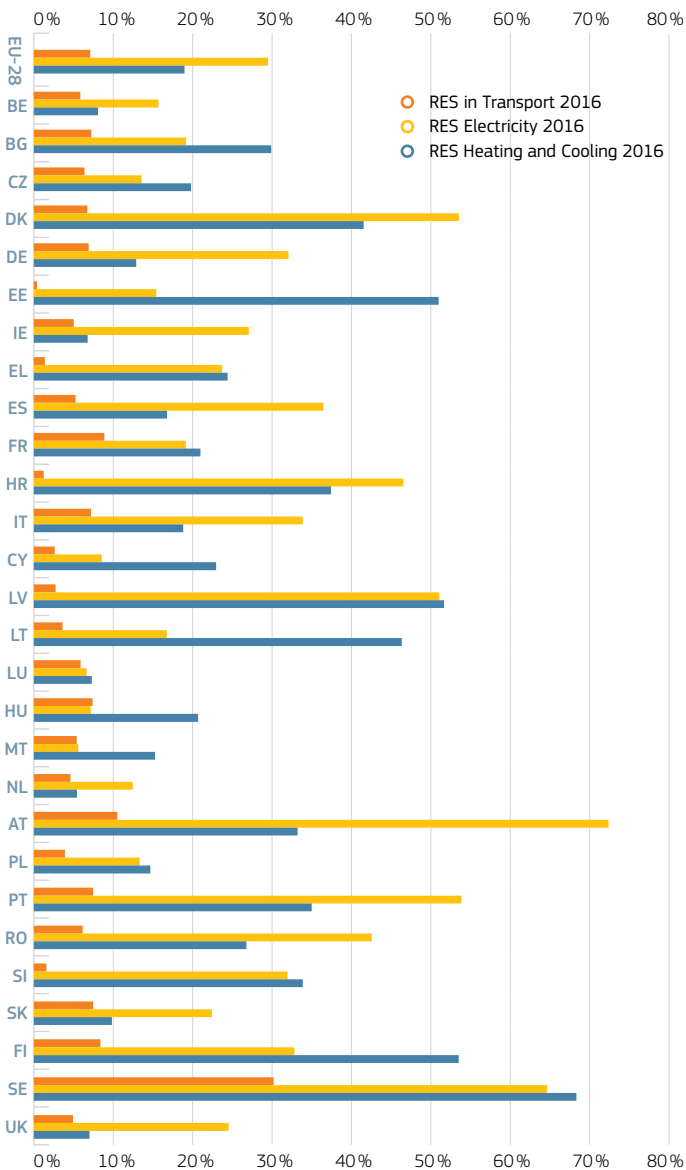


* In Gross Final Energy Consumption.

Source: Eurostat-RES SHARES, February 2018
Methodology and Notes: [See Appendix 13 - No 1](#)

1.3.2 Renewable Energy Shares*

RES SHARES IN HEATING AND COOLING, ELECTRICITY, AND TRANSPORT – 2016 (%)



* In Gross Final Energy Consumption.

Source: Eurostat-RES SHARES, February 2018
 Methodology and Notes: See Appendix 13 – No 1

1.3.3 GHG Emissions Targets*

EMISSIONS COMPARED TO 1990

Index 100=1990	1990	1995	2000	2005	2010	2015	2016
EU-28	100.0	94.2	92.3	93.6	85.8	78.0	77.6
BE	100.0	105.3	103.2	99.5	91.4	81.5	81.5
BG	100.0	72.1	57.1	61.6	58.3	59.5	57.0
CZ	100.0	79.7	75.3	74.5	70.7	64.6	65.6
DK	100.0	111.1	101.3	95.5	91.2	70.9	73.9
DE	100.0	90.1	84.2	80.4	76.5	73.7	74.1
EE	100.0	50.0	42.9	47.6	52.5	44.7	48.6
IE	100.0	106.7	124.4	127.4	112.4	109.6	113.4
EL	100.0	105.9	122.1	131.5	114.6	93.0	89.7
ES	100.0	114.2	135.1	154.1	125.9	119.7	116.4
FR	100.0	99.5	101.9	102.5	95.1	85.7	85.6
HR	100.0	71.5	80.4	93.2	87.3	75.8	76.2
IT	100.0	103.0	107.6	112.8	98.1	84.7	83.9
CY	100.0	123.2	144.2	159.3	162.4	143.9	152.9
LV	100.0	48.9	39.8	43.6	47.8	43.7	43.8
LT	100.0	46.2	40.3	47.3	43.0	42.1	42.0
LU	100.0	80.9	80.6	108.5	102.0	88.3	87.5
HU	100.0	80.7	78.6	81.2	70.1	65.3	65.8
MT	100.0	131.6	136.4	141.2	142.3	112.0	99.4
NL	100.0	105.8	101.5	99.8	99.0	91.3	91.6
AT	100.0	101.9	103.2	118.9	109.3	101.8	103.1
PL	100.0	93.8	83.4	85.2	87.1	82.7	85.0
PT	100.0	117.3	138.9	145.3	118.4	118.3	115.8
RO	100.0	73.2	57.0	59.9	49.6	47.2	45.8
SI	100.0	100.6	102.5	110.4	105.7	90.7	95.2
SK	100.0	73.0	67.0	69.3	62.7	55.4	55.6
FI	100.0	100.7	98.5	98.3	106.7	79.3	84.0
SE	100.0	102.9	96.9	94.3	91.3	76.8	76.1
UK	100.0	94.8	91.5	89.7	79.3	66.7	63.6

* Emissions of the Kyoto basket of GHG.

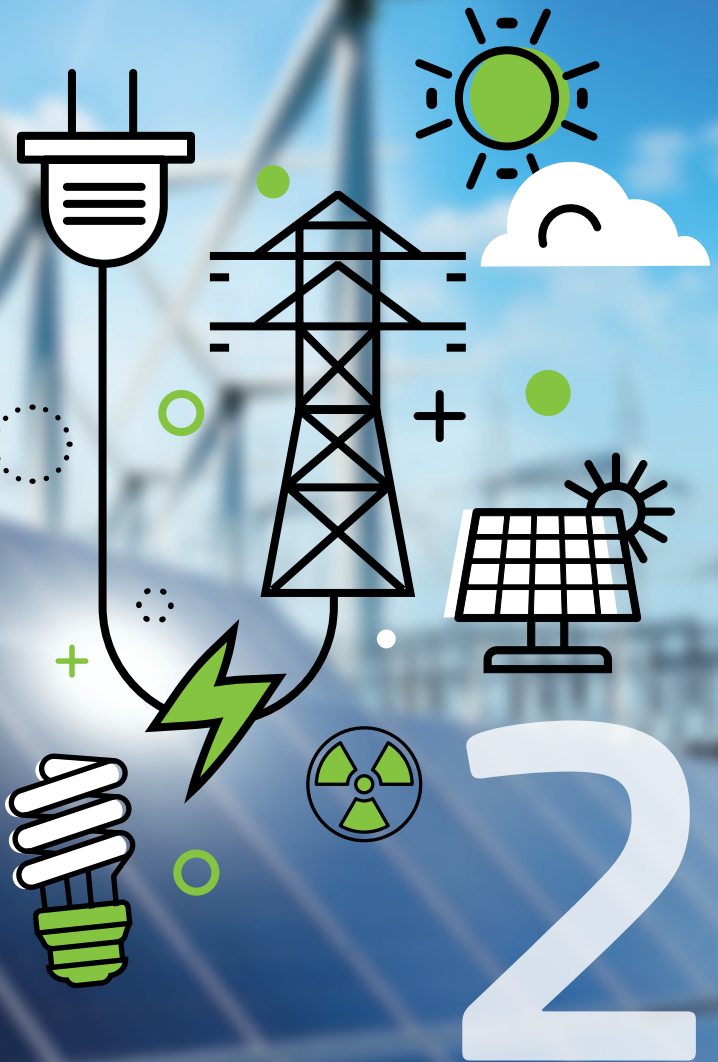
EU-28 GHG emission target by 2020: 80% of 1990 GHG emissions.

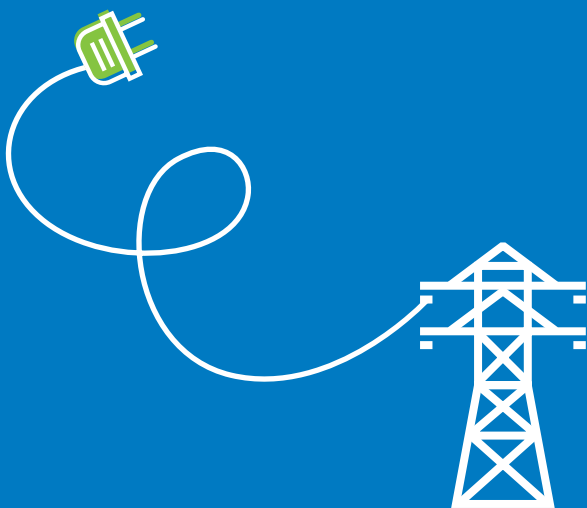
Source: Eurostat, May 2018

Methodology and Notes: [See Appendix 13 – No 1](#)

Energy

in the EU





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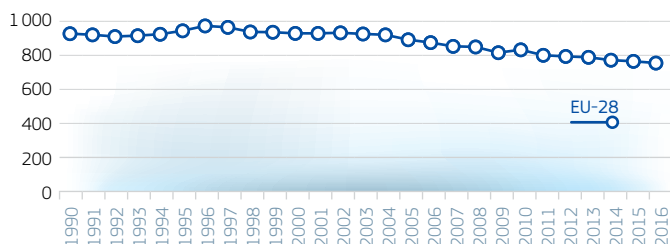
2.1 Energy Supply

2.1.1 Production*

ALL FUELS

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	969.3	952.7	914.6	851.3	781.9	770.4
Index 1995	100 %	98 %	94 %	88 %	81 %	79 %
BE	11.83	13.61	13.72	16.19	11.63	16.24
BG	10.27	9.87	10.70	10.53	12.13	11.46
CZ	32.69	30.81	33.17	32.03	28.90	27.37
DK	16.26	28.77	30.78	22.92	15.76	14.97
DE	145.26	135.60	138.78	132.44	123.68	119.55
EE	3.86	3.55	4.39	5.60	6.55	5.50
IE	4.10	2.16	1.64	1.89	2.02	4.31
EL	9.36	10.01	10.33	9.46	8.51	6.78
ES	31.43	31.49	30.09	34.53	33.60	34.15
FR	127.37	130.14	136.26	135.86	138.38	131.43
HR	5.00	4.26	4.75	5.16	4.47	4.50
IT	29.83	28.49	30.33	33.07	36.13	33.80
CY	0.04	0.04	0.05	0.09	0.13	0.13
LV	1.43	1.47	1.87	1.98	2.35	2.46
LT	3.78	3.28	3.96	1.33	1.61	1.64
LU	0.05	0.06	0.11	0.12	0.15	0.16
HU	13.90	11.60	10.87	11.92	11.29	11.45
MT	0.00	0.00	0.00	0.00	0.02	0.02
NL	70.04	62.51	66.76	75.63	52.13	50.91
AT	8.77	9.79	9.77	11.66	12.00	12.35
PL	99.38	79.59	78.60	67.44	68.64	67.37
PT	3.38	3.89	3.62	5.80	5.50	6.19
RO	32.31	28.47	28.22	27.82	26.74	25.15
SI	2.96	3.09	3.49	3.78	3.39	3.57
SK	5.06	6.39	6.68	6.35	6.74	6.59
FI	13.13	15.16	16.95	17.99	17.80	17.85
SE	31.38	30.05	34.17	32.58	33.73	34.72
UK	256.46	268.55	204.60	147.15	117.89	119.75

PRODUCTION – ALL FUELS – 1990-2016 (Mtoe)



* Primary Production and Receipt, Production from Other Sources and Recycled Products.

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.1.1 Production*

BY FUEL

Mtoe	2016					
	Nuclear	Solid Fuels	Renewables	Gases	Petroleum and Products	Wastes, Non-Renewable
EU-28	216.7	132.3	210.7	107.5	88.6	14.5
Share (%)	28.1%	17.2%	27.4%	14.0%	11.5%	1.9%
BE	11.23	0.01	3.07	0.00	1.26	0.68
BG	4.08	5.11	1.92	0.08	0.23	0.03
CZ	6.24	16.12	4.28	0.18	0.25	0.30
DK	0.00	0.00	3.49	4.07	7.03	0.38
DE	21.83	39.73	39.48	6.55	7.45	4.51
EE	0.00	3.15	1.46	0.00	0.82	0.07
IE	0.00	0.68	0.97	2.48	0.11	0.07
EL	0.00	3.97	2.50	0.01	0.24	0.06
ES	15.13	0.74	17.69	0.05	0.32	0.24
FR	104.01	0.00	23.90	0.04	1.84	1.65
HR	0.00	0.00	2.28	1.37	0.83	0.01
IT	0.00	0.00	23.82	4.74	4.06	1.18
CY	0.00	0.00	0.12	0.00	0.01	0.01
LV	0.00	0.00	2.44	0.00	0.01	0.01
LT	0.00	0.01	1.50	0.00	0.08	0.05
LU	0.00	0.00	0.13	0.01	0.00	0.03
HU	4.16	1.46	3.19	1.43	1.08	0.13
MT	0.00	0.00	0.02	0.00	0.00	0.00
NL	1.02	0.00	4.71	38.18	6.33	0.68
AT	0.00	0.00	9.77	0.98	0.79	0.82
PL	0.00	52.31	9.03	3.55	1.74	0.74
PT	0.00	0.00	5.82	0.00	0.19	0.17
RO	2.91	4.24	6.10	7.78	4.04	0.08
SI	1.47	0.94	1.11	0.00	0.00	0.05
SK	3.86	0.45	1.60	0.08	0.40	0.20
FI	5.99	0.72	10.52	0.01	0.35	0.27
SE	16.28	0.13	17.38	0.01	0.15	0.79
UK	18.50	2.50	12.43	35.96	49.02	1.35

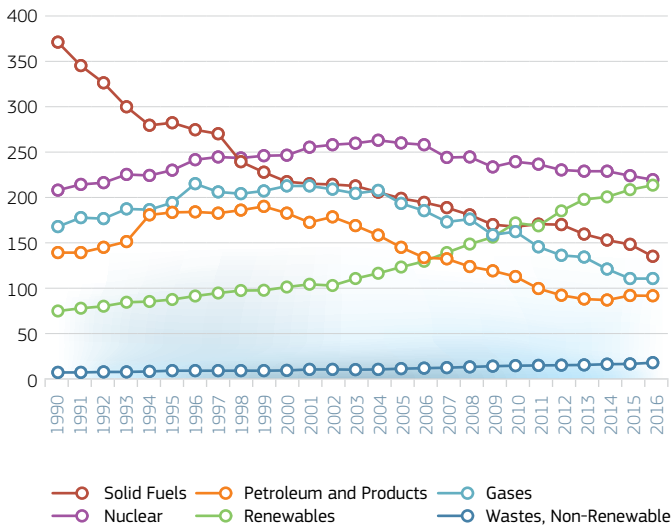
* Primary Production and Receipt, Production from Other Sources and Recycled Products.

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

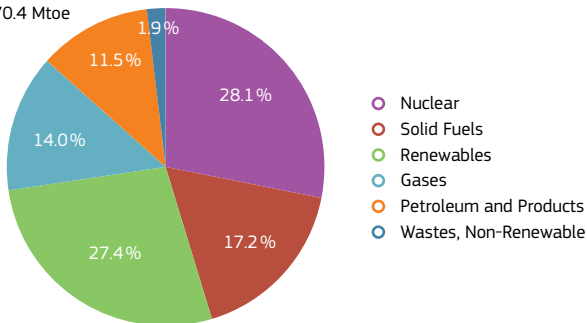
2.1.1 Production*

BY FUEL – EU-28 – 1990-2016 (Mtoe)



PRODUCTION – BY FUEL – EU-28 – 1990-2016 (% OF TOTAL)

Total = 770.4 Mtoe



* Primary Production and Receipt, Production from Other Sources and Recycled Products.

Source: Eurostat, May 2018

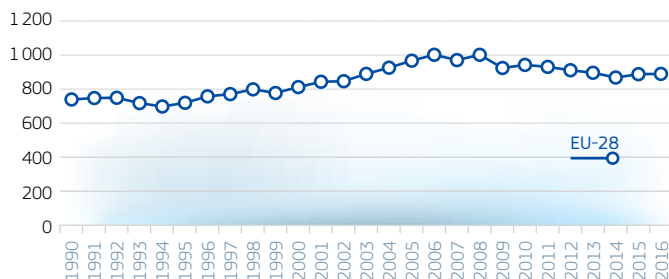
Methodology and Notes: See Appendix 13 – No 2

2.1.2 Net Imports

ALL FUELS

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	736.43	826.77	980.27	955.58	901.62	903.71
Index 1995	100%	112%	133%	130%	122%	123%
BE	46.64	50.50	53.43	53.56	50.63	48.72
BG	12.83	8.54	9.28	7.08	6.59	6.77
CZ	8.60	9.41	12.64	11.59	13.58	13.68
DK	7.27	-7.37	-10.15	-3.25	2.35	2.52
DE	195.18	204.71	208.41	202.15	195.93	203.21
EE	1.81	1.63	1.50	0.87	0.48	0.44
IE	7.77	12.37	13.77	13.21	12.71	10.36
EL	18.29	22.15	23.50	21.72	18.81	19.05
ES	75.42	99.34	123.83	106.34	94.43	93.23
FR	116.88	133.93	143.81	131.67	116.42	117.76
HR	2.85	4.08	5.15	4.39	4.12	4.11
IT	134.50	152.07	160.37	149.46	121.83	121.71
CY	2.04	2.57	2.84	2.94	2.45	2.62
LV	3.36	2.36	3.10	2.22	2.37	2.22
LT	5.54	4.25	5.03	5.67	5.48	5.57
LU	3.25	3.64	4.68	4.51	4.01	4.03
HU	12.55	13.96	17.42	15.00	13.43	14.29
MT	0.84	1.46	1.59	2.37	2.23	2.50
NL	17.16	34.50	37.54	30.00	46.08	41.58
AT	18.02	19.01	24.52	21.57	20.22	21.16
PL	-1.16	8.77	15.94	31.53	28.02	30.32
PT	18.02	22.07	24.85	18.59	18.30	17.57
RO	14.03	7.99	10.84	7.83	5.54	7.23
SI	3.09	3.41	3.86	3.58	3.23	3.35
SK	12.14	12.00	12.43	11.26	9.64	9.74
FI	15.91	18.22	18.95	17.84	15.91	15.80
SE	20.43	20.44	19.58	19.48	14.22	16.37
UK	-36.83	-39.22	31.61	62.43	72.58	67.82

NET IMPORTS – ALL FUELS – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.1.2 Net Imports

BY FUEL

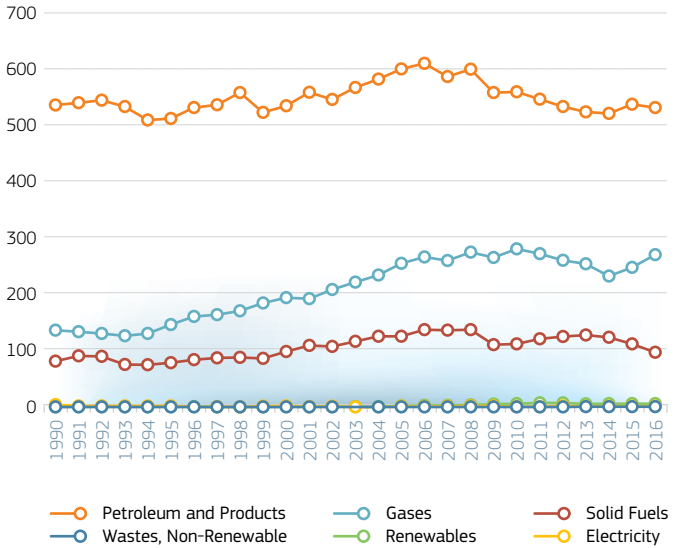
Mtoe	2016					
	Net imports	Petroleum and Products	Gases	Solid Fuels	Renewables	Electricity
EU-28	903.7	529.8	269.5	96.7	5.8	1.6
Share (%)	100%	58.6%	29.8%	10.7%	0.6%	0.2%
BE	48.72	30.15	14.38	2.80	0.85	0.53
BG	6.77	4.14	2.59	0.56	0.03	-0.55
CZ	13.68	8.03	6.72	-0.15	0.03	-0.94
DK	2.52	0.21	-1.29	1.60	1.50	0.44
DE	203.21	107.54	62.29	38.30	-0.57	-4.34
EE	0.44	0.68	0.43	0.00	-0.50	-0.18
IE	10.36	7.44	1.70	1.14	0.14	-0.06
EL	19.05	14.50	3.46	0.19	0.14	0.76
ES	93.23	60.49	24.73	7.75	-0.40	0.66
FR	117.76	74.70	37.90	8.02	0.71	-3.57
HR	4.11	2.52	0.73	0.66	-0.28	0.48
IT	121.71	52.32	53.29	10.71	2.20	3.18
CY	2.62	2.57	0.00	0.00	0.03	0.00
LV	2.22	1.97	0.92	0.04	-0.82	0.09
LT	5.57	2.88	1.85	0.17	-0.04	0.71
LU	4.03	2.64	0.71	0.05	0.10	0.54
HU	14.29	6.26	6.33	0.78	-0.21	1.09
MT	2.50	2.36	0.00	0.00	0.01	0.13
NL	41.58	42.48	-9.85	9.30	-0.96	0.42
AT	21.16	11.28	6.16	2.82	0.28	0.62
PL	30.32	24.81	11.47	-5.88	-0.25	0.17
PT	17.57	11.00	4.26	2.91	-0.21	-0.44
RO	7.23	5.30	1.18	1.08	0.11	-0.43
SI	3.35	2.53	0.70	0.20	0.02	-0.10
SK	9.74	3.24	3.62	2.69	-0.03	0.23
FI	15.80	9.29	2.06	2.72	0.10	1.63
SE	16.37	13.43	0.82	2.23	0.91	-1.01
UK	67.82	25.09	32.34	5.98	2.91	1.51

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

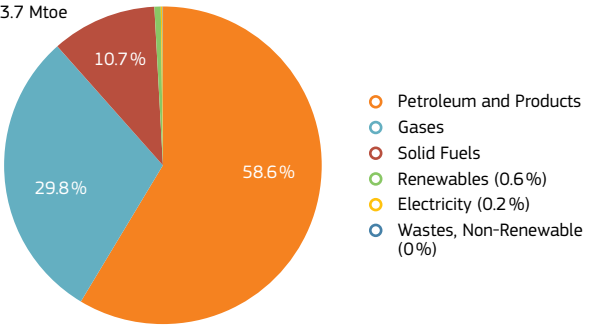
2.1.2 Net Imports

BY FUEL – EU-28 – 1990-2016 (Mtoe)



NET IMPORTS – BY FUEL – EU-28 – 2016 (% TOTAL)

Total = 903.7 Mtoe



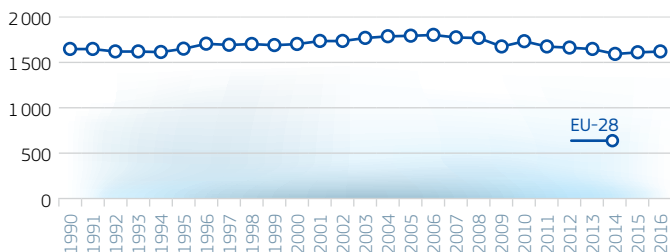
Source: Eurostat, May 2018
Methodology and Notes: See Appendix 13 – No 2

2.1.3 Gross Inland Consumption

ALL FUELS

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	1674.62	1729.80	1831.07	1765.19	1629.32	1640.62
Index 1995	100%	103%	109%	105%	97%	98%
BE	53.83	59.30	59.06	60.90	54.26	57.45
BG	22.69	18.52	19.75	17.77	18.51	18.13
CZ	41.94	41.37	45.43	45.43	42.33	41.81
DK	20.20	19.74	19.53	20.04	16.85	17.42
DE	341.64	342.33	341.93	332.49	313.97	317.27
EE	5.49	4.97	5.62	6.15	6.30	6.22
IE	11.07	14.43	15.24	15.18	14.19	14.85
EL	23.87	28.29	31.41	28.72	24.45	24.14
ES	102.08	123.64	144.22	130.25	121.42	122.18
FR	241.61	257.39	276.30	267.18	253.08	248.75
HR	7.86	8.42	9.78	9.43	8.52	8.59
IT	161.77	174.22	190.08	177.93	156.17	154.75
CY	1.97	2.41	2.54	2.74	2.27	2.44
LV	4.62	3.86	4.59	4.63	4.38	4.39
LT	8.64	7.06	8.71	6.79	6.91	7.03
LU	3.32	3.65	4.80	4.64	4.18	4.20
HU	26.18	25.30	28.11	26.60	25.18	25.71
MT	0.76	0.80	0.94	0.94	0.76	0.73
NL	75.34	77.86	84.04	86.64	77.37	78.53
AT	27.11	29.02	34.04	34.12	33.40	33.87
PL	98.83	88.65	92.22	100.68	95.63	99.93
PT	20.64	25.29	27.48	24.28	23.02	23.26
RO	46.31	36.65	39.21	35.80	32.43	32.40
SI	6.07	6.45	7.33	7.34	6.57	6.80
SK	17.72	18.30	19.03	17.86	16.43	16.51
FI	29.36	32.41	34.50	37.11	33.28	34.62
SE	51.47	48.90	51.02	50.79	45.56	49.23
UK	222.25	230.56	234.17	212.78	191.90	189.44

GROSS INLAND CONSUMPTION – ALL FUELS – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: [See Appendix 13 – No 2](#)

2.1.3 Gross Inland Consumption

BY FUEL

Mtoe	2016						
	Petroleum and Products	Gases	Solid Fuels	Nuclear	Renewables	Waste, Non-Renewable	Electricity
EU-28	567.1	383.0	240.7	216.7	216.6	14.9	1.6
Share (%)	34.6%	23.3%	14.7%	13.2%	13.2%	0.9%	0.1%
BE	23.84	14.30	2.96	11.23	3.92	0.68	0.53
BG	4.23	2.69	5.70	4.08	1.95	0.03	-0.55
CZ	8.27	7.02	16.62	6.24	4.31	0.30	-0.94
DK	6.75	2.90	1.90	0.00	5.01	0.44	0.44
DE	108.80	70.33	77.23	21.83	38.92	4.51	-4.34
EE	1.13	0.43	3.80	0.00	0.97	0.07	-0.18
IE	7.41	4.24	2.09	0.00	1.11	0.07	-0.06
EL	12.83	3.49	4.37	0.00	2.64	0.06	0.76
ES	53.49	25.04	10.19	15.13	17.43	0.24	0.66
FR	75.19	38.31	8.58	104.01	24.59	1.65	-3.57
HR	3.28	2.17	0.65	0.00	2.00	0.01	0.48
IT	55.30	58.08	10.99	0.00	26.02	1.18	3.18
CY	2.27	0.00	0.00	0.00	0.15	0.02	0.00
LV	1.49	1.11	0.04	0.00	1.62	0.04	0.09
LT	2.77	1.84	0.19	0.00	1.46	0.05	0.71
LU	2.64	0.71	0.05	0.00	0.22	0.03	0.54
HU	7.01	8.03	2.26	4.16	3.00	0.16	1.09
MT	0.57	0.00	0.00	0.00	0.03	0.00	0.13
NL	32.19	30.13	10.21	1.02	3.70	0.86	0.42
AT	12.24	7.18	2.96	0.00	10.05	0.82	0.62
PL	26.54	14.63	49.08	0.00	8.77	0.74	0.17
PT	10.73	4.30	2.85	0.00	5.62	0.21	-0.44
RO	9.31	9.01	5.33	2.91	6.19	0.08	-0.43
SI	2.40	0.71	1.15	1.47	1.13	0.05	-0.10
SK	3.53	3.90	3.23	3.86	1.58	0.20	0.23
FI	9.53	2.07	4.53	5.99	10.61	0.27	1.63
SE	12.02	0.83	2.05	16.28	18.28	0.79	-1.01
UK	71.40	69.55	11.76	18.50	15.36	1.35	1.51

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

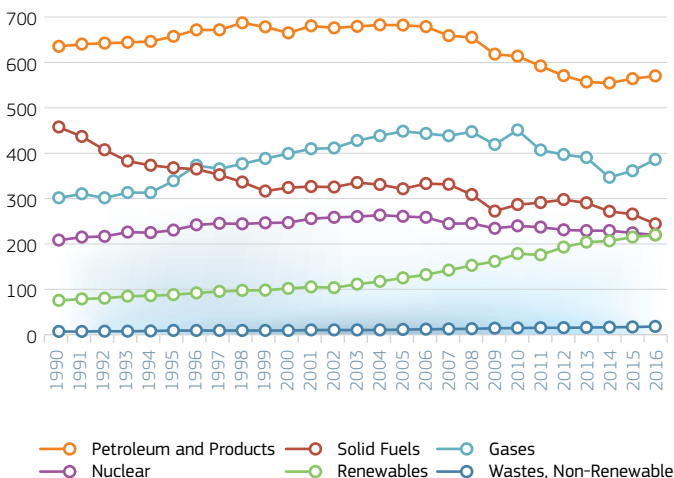
2.1.3 Gross Inland Consumption

RENEWABLES

Mtoe	2016						
	Renewables	Biomass and Renewable Wastes	Hydro	Wind	Solar	Geothermal	Tide, Wave and Ocean
EU-28	216.6	140.4	30.1	26.0	13.4	6.7	0.0
Share (%)	13.2%	8.6%	1.8%	1.6%	0.8%	0.4%	0.0%
BE	3.92	3.13	0.03	0.47	0.29	0.00	0.00
BG	1.95	1.31	0.34	0.12	0.14	0.04	0.00
CZ	4.31	3.89	0.17	0.04	0.20	0.00	0.00
DK	5.01	3.79	0.00	1.10	0.11	0.01	0.00
DE	38.92	26.18	1.77	6.76	3.95	0.27	0.00
EE	0.97	0.91	0.00	0.05	0.00	0.00	0.00
IE	1.11	0.51	0.06	0.53	0.01	0.00	0.00
EL	2.64	1.17	0.48	0.44	0.54	0.01	0.00
ES	17.43	6.90	3.13	4.21	3.18	0.02	0.00
FR	24.59	16.50	5.16	1.84	0.80	0.24	0.04
HR	2.00	1.30	0.59	0.09	0.02	0.01	0.00
IT	26.02	13.18	3.65	1.52	2.10	5.57	0.00
CY	0.15	0.05	0.00	0.02	0.08	0.00	0.00
LV	1.62	1.39	0.22	0.01	0.00	0.00	0.00
LT	1.46	1.32	0.04	0.10	0.01	0.00	0.00
LU	0.22	0.19	0.01	0.01	0.01	0.00	0.00
HU	3.00	2.77	0.02	0.06	0.03	0.12	0.00
MT	0.03	0.01	0.00	0.00	0.02	0.00	0.00
NL	3.70	2.75	0.01	0.70	0.16	0.07	0.00
AT	10.05	5.86	3.43	0.45	0.28	0.03	0.00
PL	8.77	7.42	0.18	1.08	0.06	0.02	0.00
PT	5.62	2.89	1.35	1.07	0.16	0.16	0.00
RO	6.19	3.88	1.55	0.57	0.16	0.04	0.00
SI	1.13	0.66	0.39	0.00	0.03	0.05	0.00
SK	1.58	1.14	0.38	0.00	0.05	0.01	0.00
FI	10.61	8.99	1.36	0.26	0.00	0.00	0.00
SE	18.28	11.60	5.33	1.33	0.02	0.00	0.00
UK	15.36	10.74	0.46	3.21	0.95	0.00	0.00

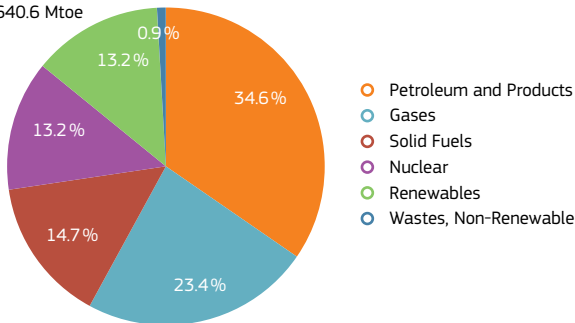
2.1.3 Gross Inland Consumption

BY FUEL – EU-28 – 1990-2016 (Mtoe)



GROSS INLAND CONSUMPTION – BY FUEL – EU-28 – 2016 (% TOTAL)

Total = 1640.6 Mtoe



Source: Eurostat, May 2018
Methodology and Notes: See Appendix 13 – No 2

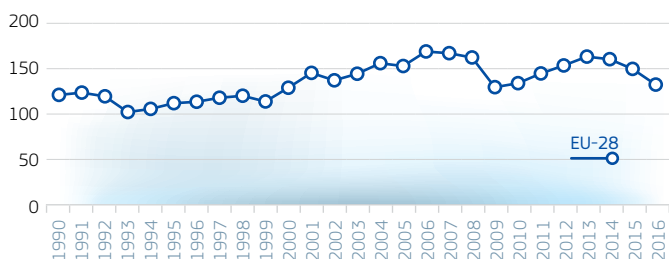
2.2 Energy Imports

2.2.1 Imports – Solid Fuels

TOTAL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	116.2	131.6	153.4	136.1	150.6	134.9
Index 1995	100%	113%	132%	117%	130%	116%
BE	10.34	8.41	6.01	4.39	3.16	2.85
BG	2.42	2.38	2.57	1.75	0.76	0.56
CZ	1.84	1.04	1.35	2.38	2.85	3.00
DK	7.68	3.86	3.56	2.68	1.53	1.62
DE	12.26	22.20	26.57	32.55	37.45	39.65
EE	0.35	0.33	0.07	0.05	0.01	0.02
IE	1.90	1.70	1.91	0.96	1.48	1.16
EL	0.92	0.81	0.40	0.40	0.16	0.19
ES	8.67	13.35	14.83	7.85	10.96	8.10
FR	9.42	13.40	13.99	12.26	8.70	8.07
HR	0.15	0.48	0.62	0.70	0.62	0.66
IT	13.09	13.22	16.52	14.00	12.58	10.97
CY	0.01	0.03	0.04	0.01	0.00	0.00
LV	0.17	0.06	0.08	0.12	0.04	0.04
LT	0.16	0.08	0.18	0.22	0.17	0.18
LU	0.49	0.11	0.08	0.07	0.05	0.05
HU	1.65	1.21	1.45	1.41	1.11	1.14
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	11.62	14.01	12.99	12.78	34.27	30.48
AT	2.64	3.06	3.99	3.37	2.76	2.86
PL	1.08	1.02	2.15	8.27	5.07	5.04
PT	3.86	3.97	3.23	1.63	3.21	2.91
RO	3.07	1.93	2.96	1.28	1.10	1.08
SI	0.19	0.24	0.33	0.28	0.20	0.20
SK	4.18	3.47	3.90	3.22	2.83	2.75
FI	3.86	3.55	3.36	3.98	2.60	2.79
SE	2.80	2.43	2.58	2.57	2.01	2.24
UK	11.34	15.23	27.73	16.92	14.91	6.31

IMPORTS – SOLID FUELS – TOTAL – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

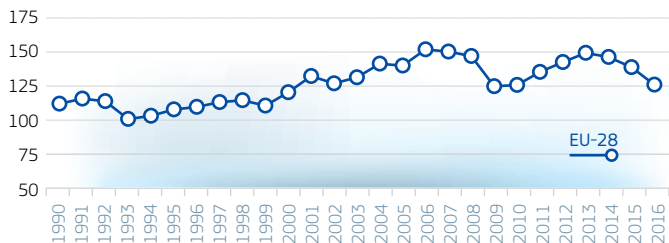
Methodology and Notes: See Appendix 13 – No 2

2.2.1 Imports – Solid Fuels

HARD COAL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	105.7	120.5	144.0	127.0	142.6	127.1
Index 1995	100%	114%	136%	120%	135%	120%
BE	9.44	7.46	5.70	4.09	2.69	2.33
BG	2.35	2.25	2.49	1.70	0.70	0.50
CZ	1.63	0.63	0.76	1.42	1.96	2.22
DK	7.65	3.82	3.54	2.67	1.52	1.61
DE	9.50	17.39	23.93	29.33	35.35	37.91
EE	0.05	0.06	0.04	0.05	0.01	0.02
IE	1.87	1.68	1.88	0.95	1.47	1.15
EL	0.92	0.81	0.40	0.40	0.16	0.19
ES	8.09	13.25	14.74	7.71	10.73	7.97
FR	8.73	12.33	12.85	11.30	8.29	7.74
HR	0.07	0.44	0.57	0.66	0.59	0.63
IT	12.58	12.87	15.94	13.99	12.12	10.30
CY	0.01	0.03	0.04	0.01	0.00	0.00
LV	0.17	0.05	0.07	0.11	0.04	0.04
LT	0.16	0.07	0.16	0.18	0.14	0.14
LU	0.13	0.10	0.07	0.06	0.04	0.05
HU	1.23	1.12	1.30	1.40	1.05	1.09
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	11.06	13.63	12.71	12.54	34.03	29.94
AT	2.05	2.34	3.00	2.48	2.09	2.28
PL	1.05	1.01	2.05	8.16	4.91	4.88
PT	3.84	3.97	3.22	1.63	3.20	2.90
RO	3.01	1.65	2.42	0.52	0.47	0.47
SI	0.14	0.20	0.30	0.23	0.18	0.18
SK	3.10	3.15	3.48	2.57	2.53	2.46
FI	3.67	3.21	3.01	3.68	2.28	2.56
SE	2.37	2.14	2.22	2.29	1.92	2.16
UK	10.87	14.90	27.11	16.84	14.14	5.46

IMPORTS – SOLID FUELS – HARD COAL – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.1 Imports – Solid Fuels

RANKING

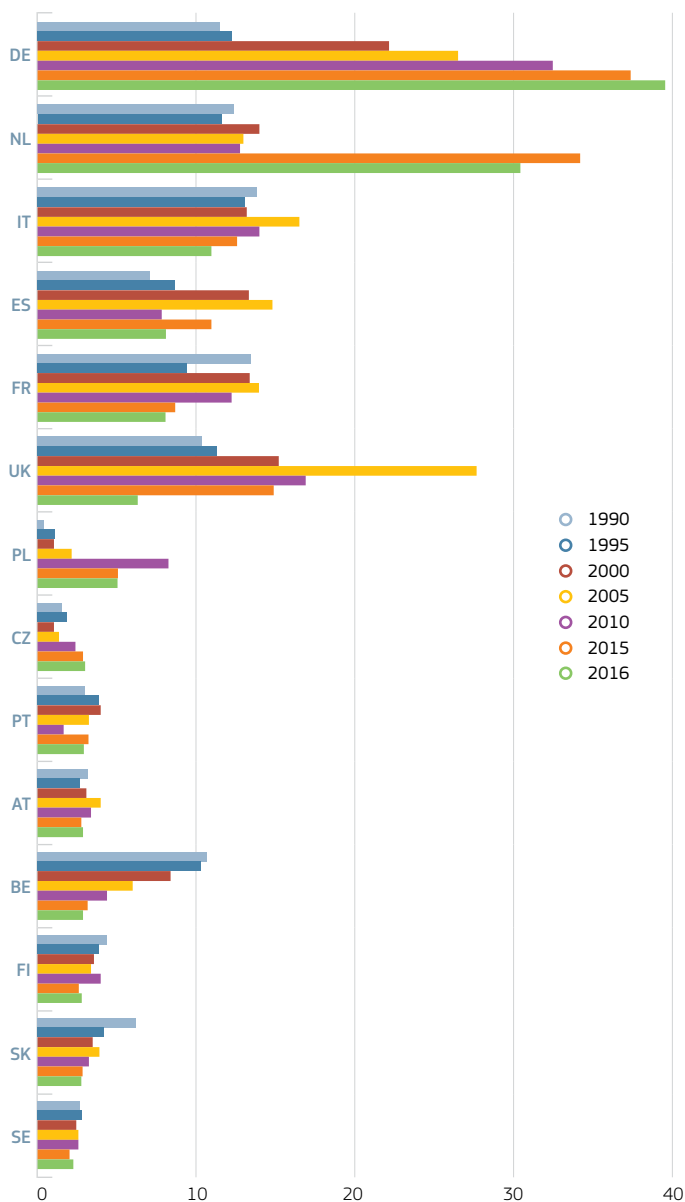
Mtoe and % Top 10 Ranking	1995			2016		
	MS	Imports	EU-28 Share	MS	Imports	EU-28 Share
Solid Fuels						
1	IT	13.1	11.3%	DE	39.6	29.4%
2	DE	12.3	10.6%	NL	30.5	22.6%
3	NL	11.6	10.0%	IT	11.0	8.1%
4	UK	11.3	9.8%	ES	8.1	6.0%
5	BE	10.3	8.9%	FR	8.1	6.0%
6	FR	9.4	8.1%	UK	6.3	4.7%
7	ES	8.7	7.5%	PL	5.0	3.7%
8	DK	7.7	6.6%	CZ	3.0	2.2%
9	SK	4.2	3.6%	PT	2.9	2.2%
10	PT	3.9	3.3%	AT	2.9	2.1%
Top 5 Total		58.6	50.5%		97.3	72.1%
Total EU-28		116.2	100.0%		134.9	100.0%
Of which: Hard Coal						
1	IT	12.6	11.9%	DE	37.9	29.8%
2	NL	11.1	10.5%	NL	29.9	23.6%
3	UK	10.9	10.3%	IT	10.3	8.1%
4	DE	9.5	9.0%	ES	8.0	6.3%
5	BE	9.4	8.9%	FR	7.7	6.1%
6	FR	8.7	8.3%	UK	5.5	4.3%
7	ES	8.1	7.7%	PL	4.9	3.8%
8	DK	7.6	7.2%	PT	2.9	2.3%
9	PT	3.8	3.6%	FI	2.6	2.0%
10	FI	3.7	3.5%	SK	2.5	1.9%
Top 5 Total		53.4	50.6%		93.9	73.8%
Total EU-28		105.7	100.0%		127.1	100.0%

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.1 Imports – Solid Fuels

BY MEMBER STATE – TOP 14 IMPORTERS
1990-2016 (Mtoe)

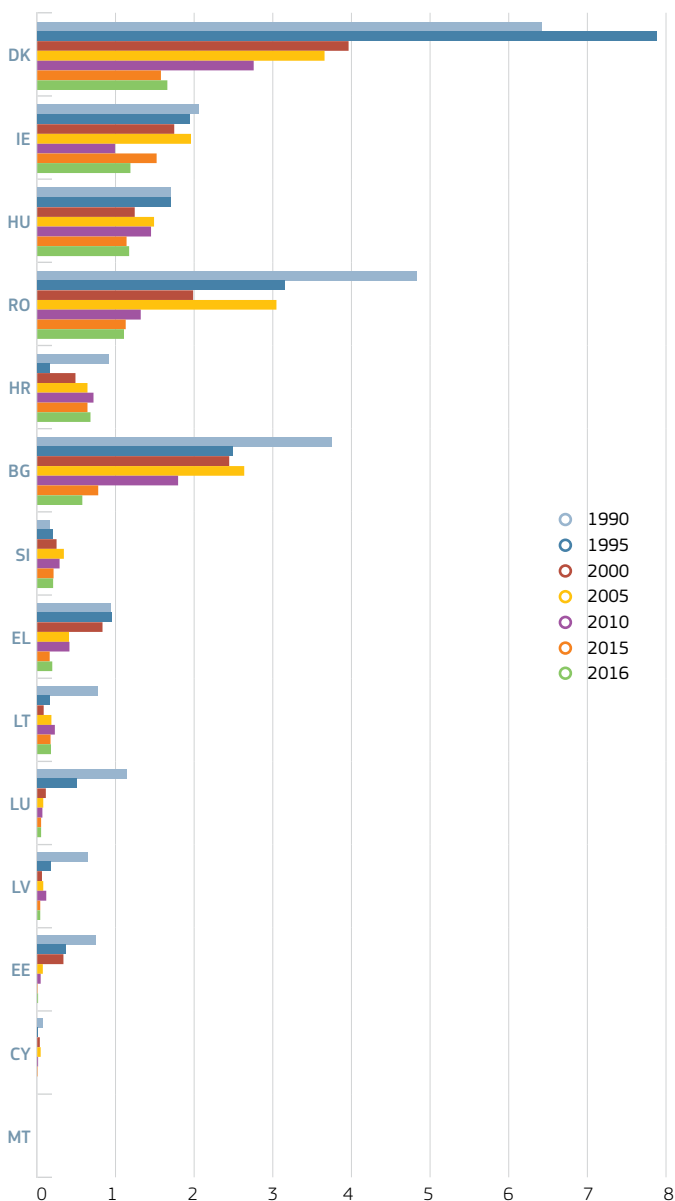


Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.1 Imports – Solid Fuels

BY MEMBER STATE – LEAST 14 IMPORTERS
1990-2016 (Mtoe)



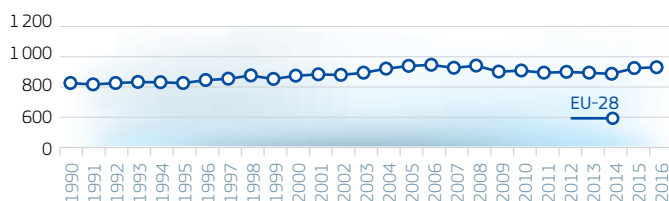
Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.2 Imports – Petroleum and Products

TOTAL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	800.8	867.4	954.1	914.1	934.9	941.6
Index 1995	100%	108%	119%	114%	117%	118%
BE	44.53	52.79	58.21	56.35	60.19	59.22
BG	7.96	5.97	7.55	7.60	8.73	8.76
CZ	8.89	8.60	10.90	10.61	11.21	10.25
DK	10.32	9.88	8.69	9.38	13.81	13.07
DE	146.77	147.99	147.67	128.86	128.08	130.24
EE	1.17	0.93	1.16	1.16	1.71	1.84
IE	6.80	9.56	10.14	9.17	9.24	9.06
EL	21.43	23.81	26.44	27.05	31.36	32.86
ES	67.52	78.17	87.72	80.31	83.58	85.15
FR	102.35	114.09	122.74	105.66	99.60	95.42
HR	4.49	4.19	5.50	4.94	4.51	4.64
IT	106.72	109.37	108.86	97.87	81.13	82.21
CY	2.03	2.53	2.79	2.91	2.44	2.59
LV	2.14	1.35	2.28	1.94	2.76	2.79
LT	5.32	5.41	9.61	10.22	11.18	11.56
LU	1.78	2.39	3.16	2.86	2.62	2.64
HU	7.59	7.09	8.79	8.37	9.17	9.16
MT	0.84	1.46	1.59	2.38	2.67	2.64
NL	89.86	103.67	124.84	146.20	155.91	156.12
AT	11.02	12.29	15.39	13.70	13.83	13.75
PL	15.42	20.98	24.46	28.68	31.96	32.04
PT	17.96	17.48	19.55	15.30	17.92	17.81
RO	11.18	6.30	9.88	8.46	9.80	10.61
SI	2.35	2.69	2.85	3.28	4.08	4.60
SK	5.11	6.01	6.92	6.69	7.44	7.40
FI	12.65	15.33	15.75	16.06	16.57	18.38
SE	26.90	27.93	27.30	27.94	28.11	30.50
UK	59.68	69.14	83.34	80.18	85.26	86.25

IMPORTS – PETROLEUM AND PRODUCTS – TOTAL –
1990-2016 (Mtoe)

Source: Eurostat, May 2018

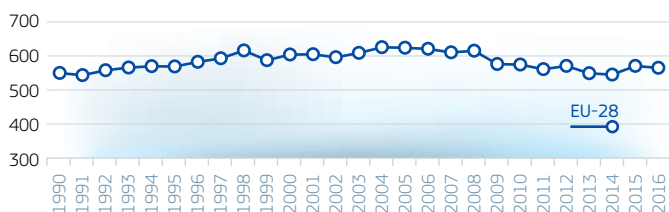
Methodology and Notes: See Appendix 13 – No 2

2.2.2 Imports – Petroleum and Products

CRUDE AND NGL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	565.2	609.4	635.3	572.9	567.7	560.2
Index 1995	100%	108%	112%	101%	100%	99%
BE	26.18	34.04	31.77	33.11	32.26	32.07
BG	7.39	5.18	5.84	5.37	5.91	5.98
CZ	7.06	5.68	7.70	7.83	7.27	5.35
DK	5.43	3.77	2.71	2.69	4.15	3.89
DE	102.37	104.69	112.04	92.77	90.01	90.70
EE	0.00	0.00	0.00	0.00	0.00	0.00
IE	2.27	2.98	3.16	3.08	3.69	3.21
EL	15.51	19.60	18.92	20.40	22.34	23.83
ES	55.34	57.70	59.94	52.69	64.97	64.21
FR	78.65	86.84	85.22	64.77	57.93	55.72
HR	4.23	3.95	4.02	3.56	2.34	2.51
IT	73.82	83.27	89.91	79.59	62.87	61.32
CY	0.80	1.16	0.00	0.00	0.00	0.00
LV	0.00	0.00	0.00	0.00	0.00	0.00
LT	3.10	4.86	9.05	9.16	8.73	9.38
LU	0.00	0.00	0.00	0.00	0.00	0.00
HU	5.89	5.88	6.25	5.68	6.19	5.98
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	60.64	60.16	61.72	60.17	60.26	61.68
AT	7.56	7.28	7.88	6.70	8.03	7.27
PL	11.95	17.48	17.74	22.48	26.31	24.35
PT	13.04	11.63	13.46	11.39	14.18	13.95
RO	8.31	4.76	8.86	6.11	6.77	7.67
SI	0.49	0.13	0.00	0.00	0.00	0.00
SK	5.09	5.74	5.46	5.33	5.78	5.65
FI	8.67	11.56	10.57	11.21	11.09	12.33
SE	19.50	21.97	19.49	19.62	19.95	19.37
UK	41.91	49.11	53.57	49.24	46.71	43.83

IMPORTS – PETROLEUM AND PRODUCTS – CRUDE AND NGL – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.2 Imports – Petroleum and Products

RANKING

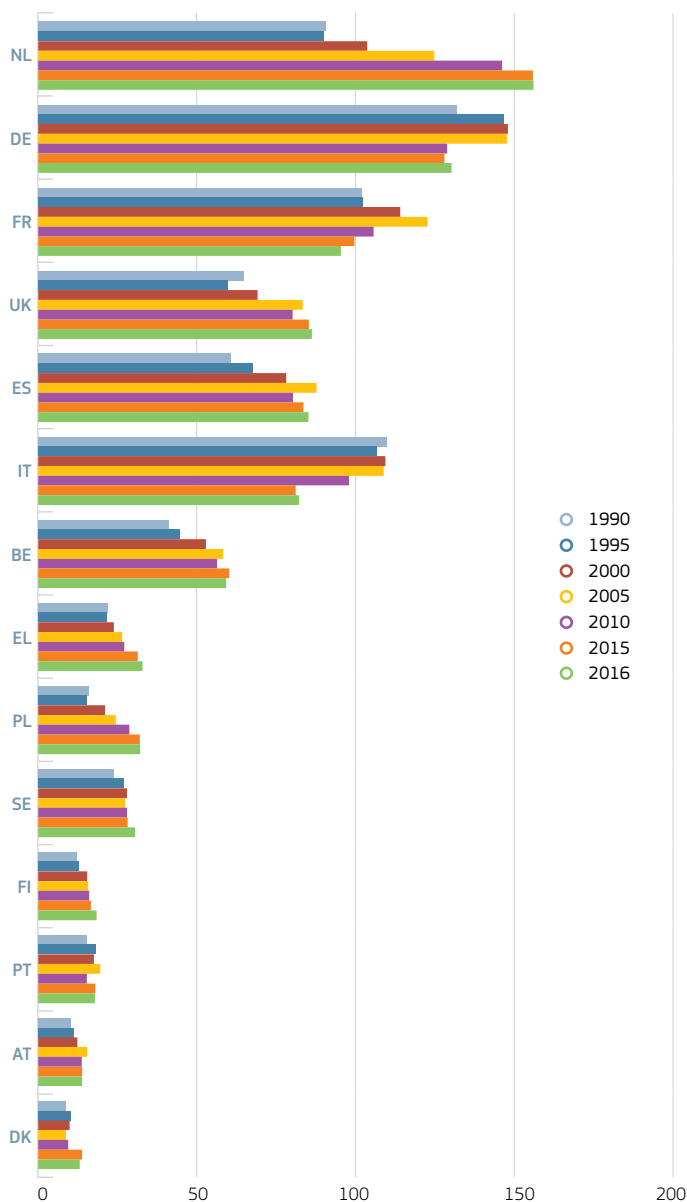
Mtoe and % Top 10 Ranking	1995			2016		
	MS	Imports	EU-28 Share	MS	Imports	EU-28 Share
Petroleum and Products						
1	DE	146.8	18.3%	NL	156.1	16.6%
2	IT	106.7	13.3%	DE	130.2	13.8%
3	FR	102.3	12.8%	FR	95.4	10.1%
4	NL	89.9	11.2%	UK	86.2	9.2%
5	ES	67.5	8.4%	ES	85.2	9.0%
6	UK	59.7	7.5%	IT	82.2	8.7%
7	BE	44.5	5.6%	BE	59.2	6.3%
8	SE	26.9	3.4%	EL	32.9	3.5%
9	EL	21.4	2.7%	PL	32.0	3.4%
10	PT	18.0	2.2%	SE	30.5	3.2%
Top 5 Total		513.2	64.1%		553.2	58.8%
Total		800.8	100.0%		941.6	100.0%
Of which: Crude and NGL						
1	DE	102.4	18.1%	DE	90.7	16.2%
2	FR	78.7	13.9%	ES	64.2	11.5%
3	IT	73.8	13.1%	NL	61.7	11.0%
4	NL	60.6	10.7%	IT	61.3	10.9%
5	ES	55.3	9.8%	FR	55.7	9.9%
6	UK	41.9	7.4%	UK	43.8	7.8%
7	BE	26.2	4.6%	BE	32.1	5.7%
8	SE	19.5	3.4%	PL	24.3	4.3%
9	EL	15.5	2.7%	EL	23.8	4.3%
10	PT	13.0	2.3%	SE	19.4	3.5%
Top 5 Total		370.8	65.6%		333.6	59.6%
Total		565.2	100.0%		560.2	100.0%

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.2 Imports – Petroleum and Products

BY MEMBER STATE – TOP 14 IMPORTERS
1990-2016 (Mtoe)

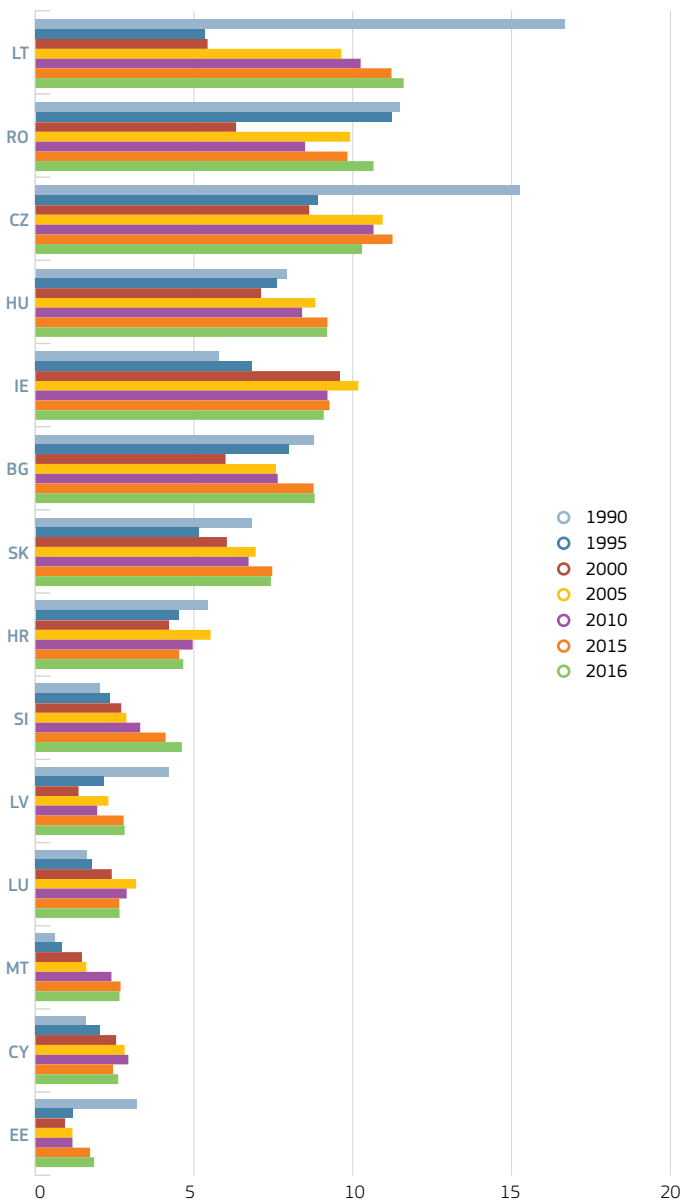


Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.2 Imports – Petroleum and Products

BY MEMBER STATE – LEAST 14 IMPORTERS
1990-2016 (Mtoe)



Source: Eurostat, May 2018

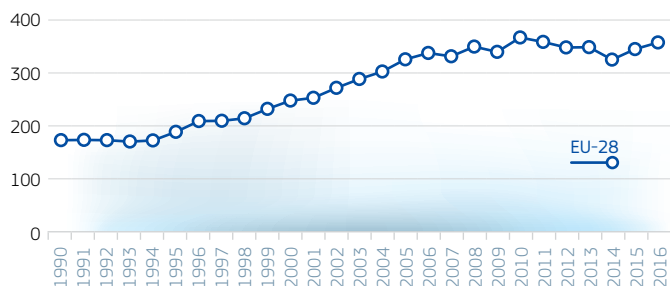
Methodology and Notes: See Appendix 13 – No 2

2.2.3 Imports – Gases

TOTAL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	180.18	242.43	323.75	366.96	343.93	357.10
Index 1995	100%	135%	180%	204%	191%	198%
BE	10.42	13.28	14.82	19.55	15.32	14.96
BG	4.56	2.74	2.46	2.13	2.52	2.59
CZ	6.43	7.48	7.60	6.98	6.16	6.72
DK	0.00	0.00	0.00	0.14	0.59	0.61
DE	55.32	61.09	78.90	78.80	85.92	81.61
EE	0.58	0.66	0.80	0.56	0.39	0.43
IE	0.09	2.48	3.01	4.48	3.62	1.70
EL	0.00	1.69	2.33	3.23	2.67	3.46
ES	7.52	15.47	30.25	31.96	28.18	28.19
FR	28.11	36.46	41.62	42.11	39.38	41.23
HR	0.22	0.91	0.93	0.87	0.87	1.05
IT	28.56	47.05	60.16	61.72	50.18	53.47
CY	0.00	0.00	0.00	0.00	0.00	0.00
LV	1.00	1.11	1.43	0.90	1.08	0.92
LT	2.03	2.07	2.49	2.49	2.14	1.89
LU	0.56	0.67	1.18	1.20	0.77	0.71
HU	5.53	7.35	9.81	7.91	5.68	7.23
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	2.76	12.48	16.44	18.45	29.16	32.89
AT	5.47	5.32	8.03	10.19	9.43	11.86
PL	5.84	6.64	8.57	8.91	9.99	12.19
PT	0.00	2.04	3.89	4.51	4.07	4.26
RO	4.79	2.71	4.19	1.82	0.16	1.18
SI	0.75	0.82	0.93	0.86	0.66	0.70
SK	4.53	5.71	6.05	5.00	3.69	3.62
FI	2.84	3.43	3.61	3.84	2.24	2.06
SE	0.76	0.78	0.84	1.47	0.72	0.82
UK	1.51	2.01	13.42	46.92	38.34	40.76

IMPORTS – GASES – TOTAL – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.3 Imports – Gases

RANKING

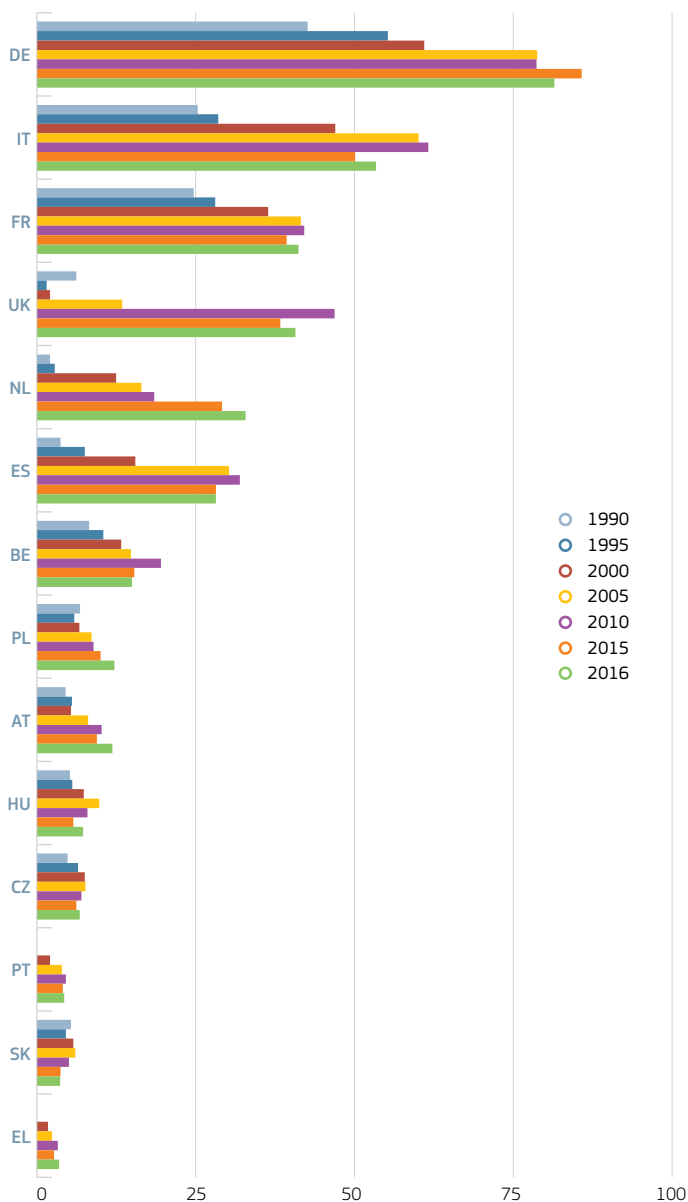
Mtoe and % EU-28 Ranking	1995			2016		
	MS	Imports	EU-28 Share	MS	Imports	EU-28 Share
Gases						
1	DE	55.3	30.7%	DE	81.6	22.9%
2	IT	28.6	15.9%	IT	53.5	15.0%
3	FR	28.1	15.6%	FR	41.2	11.5%
4	BE	10.4	5.8%	UK	40.8	11.4%
5	ES	7.5	4.2%	NL	32.9	9.2%
6	CZ	6.4	3.6%	ES	28.2	7.9%
7	PL	5.8	3.2%	BE	15.0	4.2%
8	HU	5.5	3.1%	PL	12.2	3.4%
9	AT	5.5	3.0%	AT	11.9	3.3%
10	RO	4.8	2.7%	HU	7.2	2.0%
11	BG	4.6	2.5%	CZ	6.7	1.9%
12	SK	4.5	2.5%	PT	4.3	1.2%
13	FI	2.8	1.6%	SK	3.6	1.0%
14	NL	2.8	1.5%	EL	3.5	1.0%
15	LT	2.0	1.1%	BG	2.6	0.7%
16	UK	1.5	0.8%	FI	2.1	0.6%
17	LV	1.0	0.6%	LT	1.9	0.5%
18	SE	0.8	0.4%	IE	1.7	0.5%
19	SI	0.8	0.4%	RO	1.2	0.3%
20	EE	0.6	0.3%	HR	1.1	0.3%
21	LU	0.6	0.3%	LV	0.9	0.3%
22	HR	0.2	0.1%	SE	0.8	0.2%
23	IE	0.1	0.0%	LU	0.7	0.2%
24	DK	0.0	0.0%	SI	0.7	0.2%
25	EL	0.0	0.0%	DK	0.6	0.2%
26	CY	0.0	0.0%	EE	0.4	0.1%
27	MT	0.0	0.0%	CY	0.0	0.0%
28	PT	0.0	0.0%	MT	0.0	0.0%
Top 5 Total		129.9	72.1%		250.0	70.0%
Total		180.2	100.0%		357.1	100.0%

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.3 Imports – Gases

BY MEMBER STATE – TOP 14 IMPORTERS
1990-2016 (Mtoe)

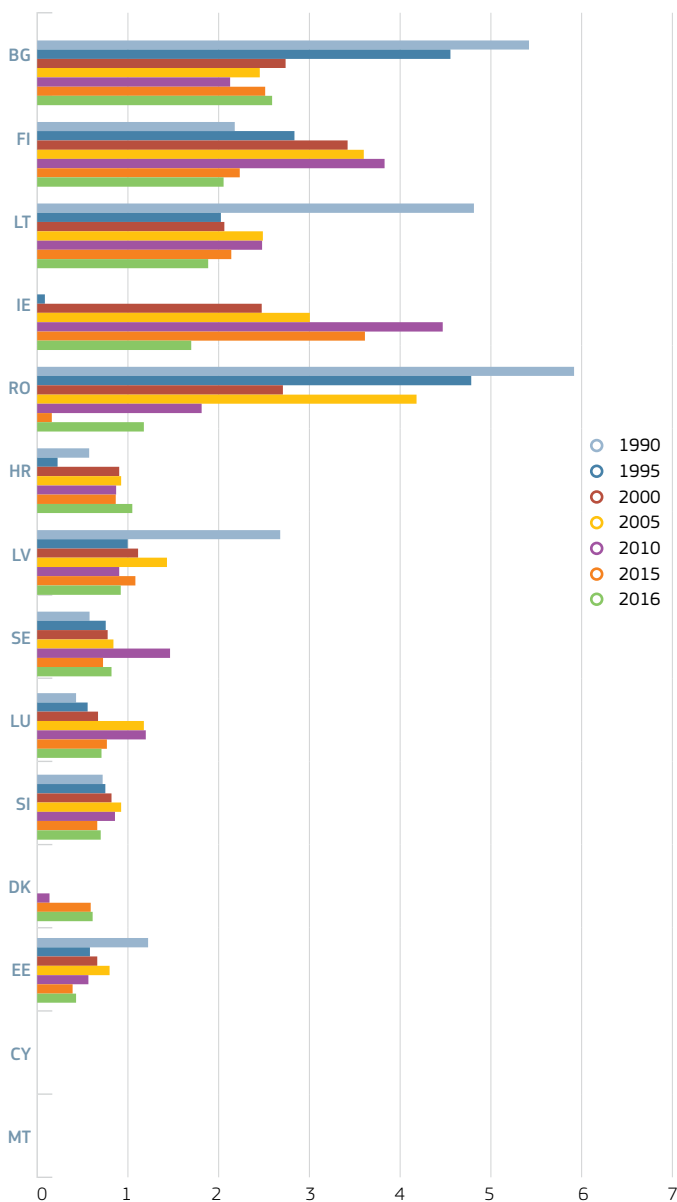


Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.3 Imports – Gases

BY MEMBER STATE – LEAST 14 IMPORTERS
1990-2016 (Mtoe)



Source: Eurostat, May 2018

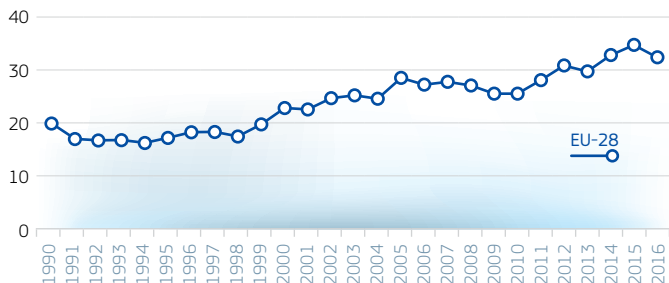
Methodology and Notes: See Appendix 13 – No 2

2.2.4 Imports – Electricity

TOTAL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	17.0	22.9	28.8	25.7	35.3	32.9
Index 1995	100%	135%	170%	151%	208%	193%
BE	0.81	1.00	1.23	1.07	2.04	1.26
BG	0.17	0.08	0.07	0.10	0.37	0.39
CZ	0.58	0.75	1.06	0.57	1.39	1.19
DK	0.35	0.72	1.11	0.91	1.35	1.29
DE	3.42	3.88	4.89	3.69	3.18	2.44
EE	0.02	0.03	0.03	0.10	0.47	0.31
IE	0.00	0.02	0.18	0.07	0.15	0.08
EL	0.12	0.15	0.48	0.73	0.95	0.85
ES	0.66	1.06	0.88	0.45	1.29	1.88
FR	0.25	0.32	0.69	1.68	0.86	1.71
HR	0.38	0.38	0.75	1.07	1.13	1.07
IT	3.32	3.86	4.32	3.95	4.37	3.71
CY	0.00	0.00	0.00	0.00	0.00	0.00
LV	0.23	0.18	0.25	0.34	0.45	0.42
LT	0.45	0.44	0.49	0.70	0.68	0.96
LU	0.49	0.55	0.55	0.63	0.65	0.66
HU	0.28	0.82	1.35	0.85	1.71	1.54
MT	0.00	0.00	0.00	0.00	0.09	0.13
NL	1.03	1.97	2.04	1.34	2.65	2.09
AT	0.63	1.19	1.75	1.71	2.53	2.27
PL	0.38	0.28	0.43	0.54	1.24	1.21
PT	0.23	0.40	0.83	0.50	0.69	0.40
RO	0.07	0.07	0.20	0.07	0.39	0.36
SI	0.06	0.36	0.80	0.74	0.78	0.72
SK	0.30	0.51	0.69	0.63	1.29	1.14
FI	0.73	1.05	1.54	1.35	1.85	1.90
SE	0.66	1.57	1.25	1.28	0.80	1.23
UK	1.41	1.23	0.96	0.61	1.95	1.69

IMPORTS – ELECTRICITY – TOTAL – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.4 Imports – Electricity

RANKING

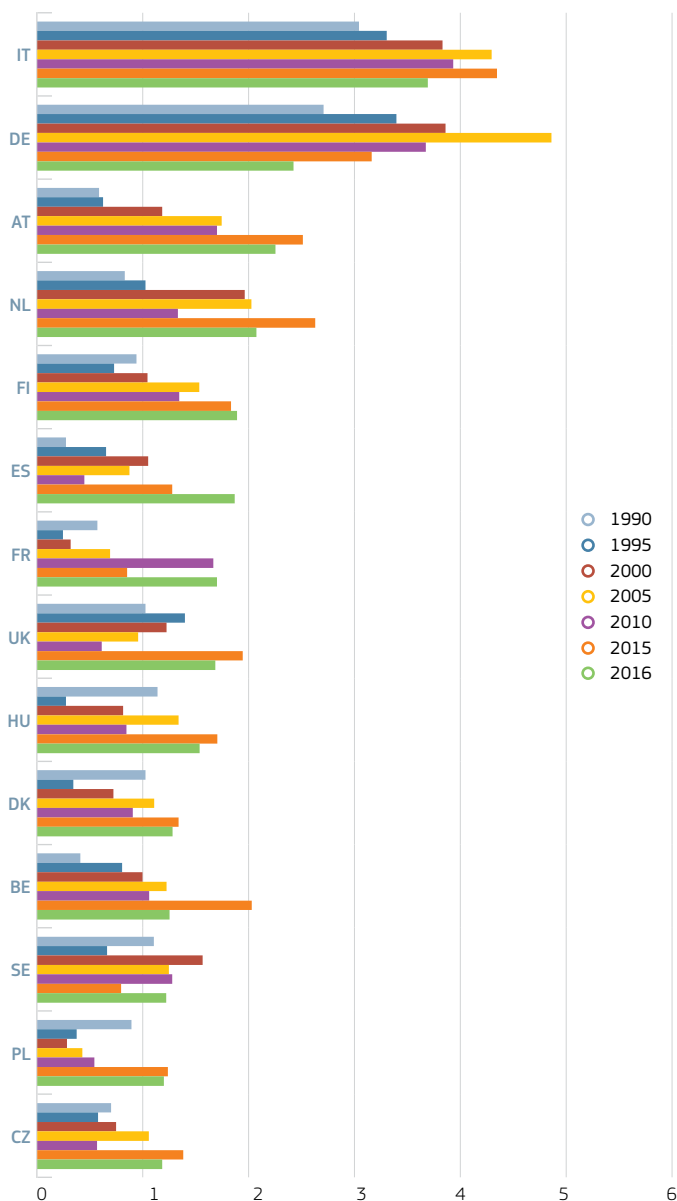
Mtoe and % EU-28 Ranking	1995			2016		
	MS	Imports	EU-28 Share	MS	Imports	EU-28 Share
Electricity						
1	DE	3.42	20.1%	IT	3.71	11.3%
2	IT	3.32	19.6%	DE	2.44	7.4%
3	UK	1.41	8.3%	AT	2.27	6.9%
4	NL	1.03	6.1%	NL	2.09	6.3%
5	BE	0.81	4.8%	FI	1.90	5.8%
6	FI	0.73	4.3%	ES	1.88	5.7%
7	SE	0.66	3.9%	FR	1.71	5.2%
8	ES	0.66	3.9%	UK	1.69	5.2%
9	AT	0.63	3.7%	HU	1.54	4.7%
10	CZ	0.58	3.4%	DK	1.29	3.9%
11	LU	0.49	2.9%	BE	1.26	3.8%
12	LT	0.45	2.7%	SE	1.23	3.7%
13	HR	0.38	2.2%	PL	1.21	3.7%
14	PL	0.38	2.2%	CZ	1.19	3.6%
15	DK	0.35	2.0%	SK	1.14	3.5%
16	SK	0.30	1.7%	HR	1.07	3.2%
17	HU	0.28	1.6%	LT	0.96	2.9%
18	FR	0.25	1.4%	EL	0.85	2.6%
19	LV	0.23	1.3%	SI	0.72	2.2%
20	PT	0.23	1.3%	LU	0.66	2.0%
21	BG	0.17	1.0%	LV	0.42	1.3%
22	EL	0.12	0.7%	PT	0.40	1.2%
23	RO	0.07	0.4%	BG	0.39	1.2%
24	SI	0.06	0.4%	RO	0.36	1.1%
25	EE	0.02	0.1%	EE	0.31	0.9%
26	IE	0.00	0.0%	MT	0.13	0.4%
27	CY	0.00	0.0%	IE	0.08	0.2%
28	MT	0.00	0.0%	CY	0.00	0.0%
Top 5 Total		10.0	58.7%		12.4	37.7%
Total		17.0	100.0%		32.9	100.0%

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.4 Imports – Electricity

BY MEMBER STATE – TOP 14 IMPORTERS
1990-2016 (Mtoe)

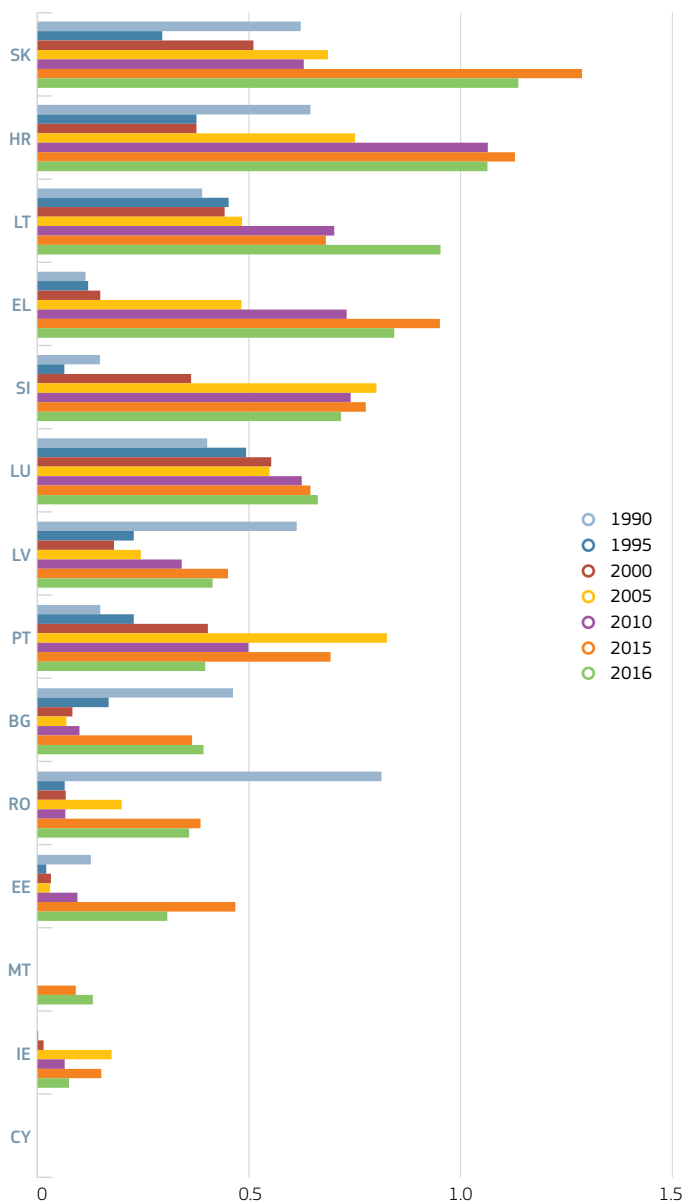


Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.2.4 Imports – Electricity

BY MEMBER STATE – LEAST 14 IMPORTERS
1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

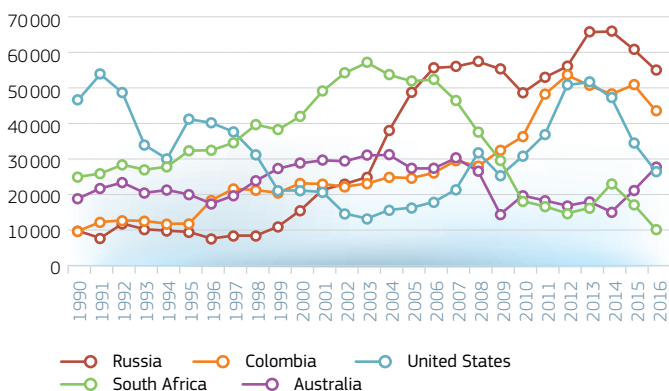
2.2.5 Imports by Country of Origin

EU-28 – HARD COAL

TOP 15 EXTRA-EU – (ORDERED BY 2016 VOLUME)

kton	1995	2000	2005	2010	2015	2016
Russia	8800	14966	48784	48666	61048	55145
Colombia	11181	22763	24253	36144	50977	43511
Australia	19551	28608	27120	19251	20729	27407
United States	41140	20665	15737	30519	34307	26098
South Africa	32108	41920	51988	17622	16631	9561
Not specified	6604	5229	3359	7594	11593	7936
Indonesia	3411	9102	14949	10158	7626	5714
Canada	4237	6378	6642	3637	3366	3833
Mozambique	0	107	0	0	1100	1476
Kazakhstan	262	0	932	332	1001	1463
Ukraine	348	2058	4229	3183	835	552
Norway	329	928	1124	1385	673	449
Venezuela	2822	3621	2003	685	337	81
China except Hong Kong	2446	1853	587	61	116	59
Chile	0	0	0	0	254	45
Other extra-EU	421	606	258	161	253	25
kton						
Extra-EU	133660	158804	201965	179398	210846	183355
Intra-EU	30115	31206	26519	22090	18764	18971
Total Intra-EU and Extra-EU	163775	190010	228484	201488	229610	202326

EU-28 – HARD COAL – TOP 5 IMPORTS FROM EXTRA-EU (1990-2016) VOLUME (kton)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

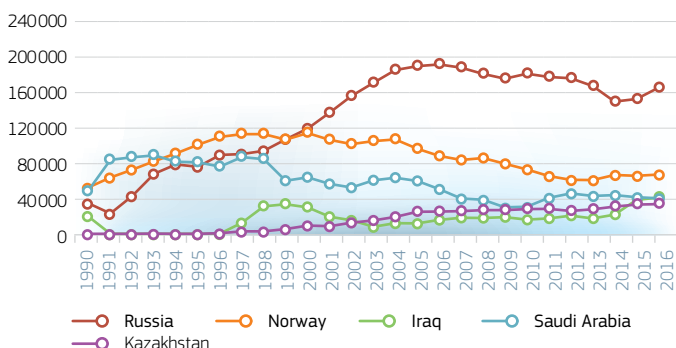
2.2.5 Imports by Country of Origin

EU-28 – CRUDE OIL AND NGL

TOP 15 EXTRA-EU – (ORDERED BY 2016 VOLUME)

kton	1995	2000	2005	2010	2015	2016
Russia	76 349	120 165	191 504	182 879	153 913	166 894
Norway	102 382	115 861	97 606	73 406	66 148	67 621
Iraq	0	31 317	12 290	16 945	40 349	42 990
Saudi Arabia	82 630	65 089	60 740	30 759	41 730	40 516
Kazakhstan	78	9 993	26 386	29 701	35 197	35 679
Nigeria	28 633	22 530	18 617	21 783	44 192	29 678
Azerbaijan	0	3 712	7 255	22 922	27 296	23 694
Algeria	17 069	21 434	22 776	8 252	24 451	16 332
Iran	52 547	35 460	35 610	29 671	0	14 975
Mexico	7 247	9 770	10 647	6 782	12 978	13 461
Angola	4 758	3 861	7 065	8 479	22 029	13 198
Libya	47 978	45 883	50 681	53 751	12 816	12 727
Kuwait	12 239	9 741	7 618	3 420	6 649	7 369
Egypt	6 950	5 579	1 716	4 654	7 794	6 592
Other African countries	0	0	0	29	1 944	4 913
Other extra-EU	71 651	42 590	33 970	37 658	36 998	32 285
kton						
Extra-EU	510 511	542 985	584 481	531 091	534 484	528 924
Intra-EU	50 375	62 254	48 269	39 612	30 286	28 182
Total Intra-EU and Extra-EU	560 886	605 239	632 750	570 703	564 770	557 106
Mio barrels						
Extra-EU	3 743	3 981	4 285	3 894	3 919	3 878
Intra-EU	369	456	354	290	222	207
Total Intra-EU and Extra-EU	4 112	4 437	4 639	4 184	4 141	4 084

EU-28 – CRUDE OIL AND NGL – TOP 5 IMPORTS FROM EXTRA-EU (1990-2016) VOLUME (kton)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

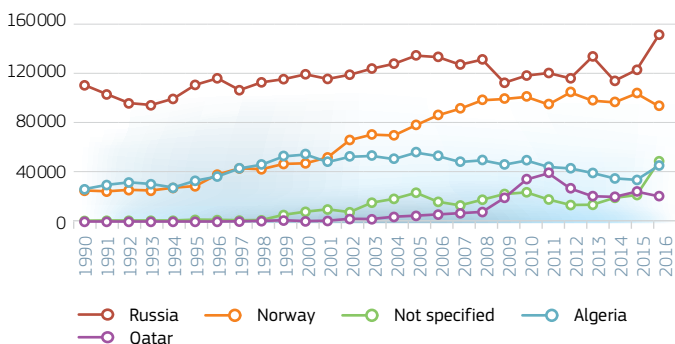
2.2.5 Imports by Country of Origin

EU-28 – NATURAL GAS

TOP 8 EXTRA-EU SUPPLIERS – (ORDERED BY 2016 VOLUME)

TJ (GCV)	1995	2000	2005	2010	2015	2016
Russia	4 245 121	4 582 197	5 207 617	4 555 369	4 779 585	5 880 308
Norway	1 159 815	1 921 076	3 040 082	3 984 437	4 063 547	3 664 104
Not specified	61 134	334 765	937 105	957 962	843 277	1 916 069
Algeria	1 362 649	2 203 075	2 256 826	1 986 974	1 369 359	1 824 745
Qatar	0	12 443	195 713	1 383 263	972 668	829 673
Nigeria	0	172 020	436 319	576 236	250 949	293 454
Libya	54 497	33 442	209 499	381 660	269 748	184 404
Peru	0	0	0	3 254	42 295	76 773
Other extra-EU	47 267	85 416	505 352	437 988	103 895	76 254
Extra-EU	6 930 483	9 344 434	12 788 513	14 267 143	12 695 323	14 745 784
Intra-EU	1 451 242	1 933 308	2 272 266	2 803 992	3 304 181	1 866 605
Total Intra-EU and Extra-EU	8 381 725	11 277 742	15 060 779	17 071 135	15 999 504	16 612 389
Mio m³						
Russia	112 079	120 699	136 283	119 665	124 346	153 220
Norway	28 968	47 879	79 256	102 695	105 371	94 911
Not specified	1 473	8 126	23 859	24 111	21 886	49 592
Algeria	33 607	55 513	57 004	50 360	34 217	46 106
Qatar	0	309	4 859	34 996	24 752	20 931
Nigeria	0	4 385	10 586	14 025	6 212	7 247
Libya	1 353	830	5 445	9 980	7 080	4 840
Peru	0	0	0	82	1 042	1 903
Other extra-EU	1 172	2 174	12 713	10 919	2 648	1 926
Extra-EU	178 652	239 915	330 005	366 833	327 554	380 676
Intra-EU	41 582	54 625	60 169	74 336	86 765	49 854
Total Intra-EU and Extra-EU	220 234	294 540	390 174	441 169	414 319	430 530

EU-28 – NATURAL GAS – TOP 5 IMPORTS FROM EXTRA-EU (1990-2016) VOLUME (Mio m³)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.3 Energy Import Dependency

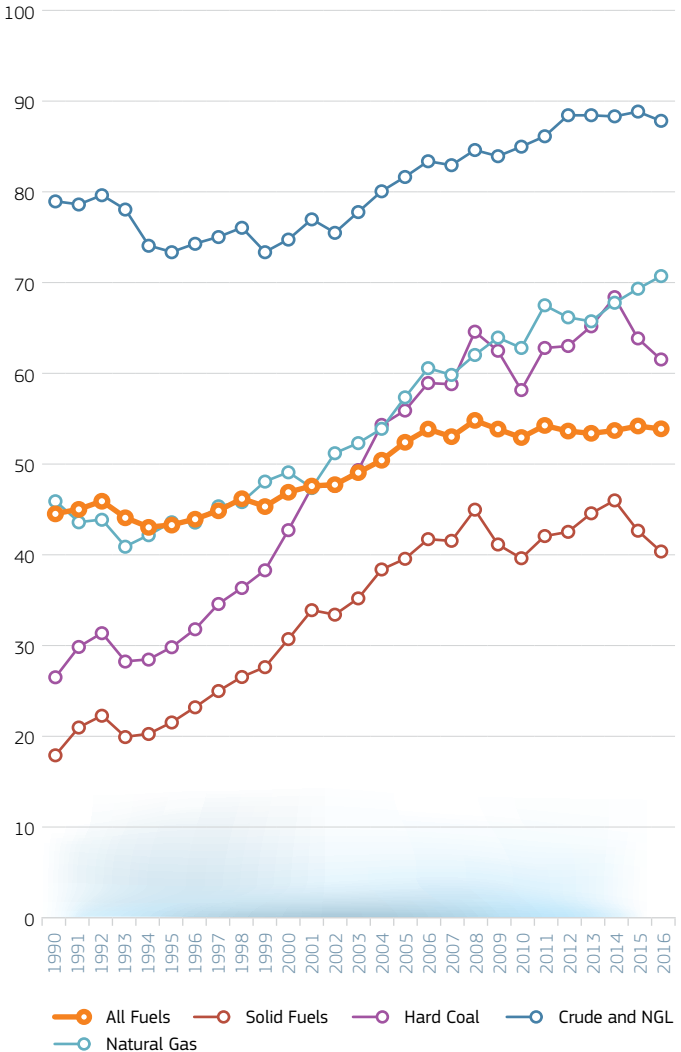
2.3.1 Import Dependency – All Fuels* (%)

Imports from Extra-EU	1995	2000	2005	2010	2015	2016
EU-28	43.1	46.7	52.1	52.7	53.9	53.6
Index 1995	100.0	108.3	121.1	122.3	125.2	124.5
Intra and Extra-EU Imports						
BE	80.8	78.1	80.1	78.2	84.3	76.0
BG	55.9	46.0	46.7	39.6	35.4	37.2
CZ	20.5	22.8	27.8	25.5	32.1	32.7
DK	33.4	-35.0	-50.0	-15.7	13.4	13.9
DE	56.8	59.4	60.5	60.3	61.9	63.5
EE	32.5	32.2	26.1	13.6	7.3	6.8
IE	69.5	84.9	89.7	86.6	88.6	69.1
EL	66.7	69.5	68.6	69.1	71.7	73.7
ES	71.7	76.6	81.4	76.7	73.3	71.9
FR	48.0	51.5	51.6	48.9	45.7	47.1
HR	36.1	48.4	52.5	46.6	48.3	47.8
IT	81.9	86.5	83.4	82.6	77.1	77.5
CY	100.5	98.6	100.7	100.8	97.7	96.2
LV	70.4	61.0	63.9	45.5	51.2	47.2
LT	63.1	59.4	56.8	81.8	78.4	77.4
LU	97.7	99.6	97.4	97.1	95.9	96.1
HU	47.9	55.2	62.0	56.4	53.3	55.6
MT	104.8	100.3	100.0	99.0	97.3	100.8
NL	19.9	38.0	37.8	29.9	51.4	45.8
AT	66.4	65.4	72.0	63.2	60.5	62.4
PL	-1.2	9.9	17.2	31.3	29.2	30.3
PT	85.3	85.1	88.6	75.1	77.3	73.5
RO	30.3	21.8	27.6	21.9	17.1	22.3
SI	50.9	52.8	52.5	48.7	48.8	48.4
SK	68.5	65.6	65.3	63.1	58.7	59.0
FI	53.6	55.1	54.1	47.8	47.4	45.3
SE	38.9	40.7	37.0	36.9	30.0	32.0
UK	-16.4	-16.9	13.4	29.0	37.3	35.3

* Negative Rate Indicates a Net Exporter.
Values Over 100 % Indicate Stocks Build Up.

Source: Eurostat, May 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.3.2 Import Dependency – By Fuel EU-28 – IMPORTS FROM EXTRA-EU – 1990-2016 (%)



Source: Eurostat, May 2018
Methodology and Notes: See Appendix 13 – No 2

2.3.3 Import Dependency – Solid Fuels * (%)

Imports from Extra-EU	1995	2000	2005	2010	2015	2016
EU-28	21.4	30.6	39.4	39.4	42.4	40.2
Index 1995	100.0	142.6	183.7	183.9	198.0	187.4
Intra and Extra-EU Imports						
BE	108.9	91.2	101.3	98.3	97.1	94.9
BG	31.8	35.1	37.0	24.7	11.2	9.8
CZ	-25.5	-21.8	-16.1	-15.1	-1.5	-0.9
DK	117.9	94.9	94.4	69.4	85.0	84.6
DE	11.2	25.5	31.7	40.1	45.5	49.6
EE	8.5	9.1	0.8	-0.6	-0.3	0.0
IE	64.9	64.6	71.4	48.8	66.5	54.7
EL	11.0	8.5	4.1	5.1	2.8	4.3
ES	45.4	61.3	70.1	85.5	78.3	76.0
FR	56.3	86.3	94.4	101.0	98.5	93.5
HR	85.7	110.9	91.4	102.3	103.1	102.2
IT	105.9	104.6	99.4	101.0	100.2	97.5
CY	100.0	100.0	119.4	64.7	100.0	
LV	61.6	46.2	93.9	102.8	87.0	85.4
LT	64.4	87.0	94.6	92.0	87.2	89.6
LU	100.0	100.0	100.0	100.0	100.0	100.0
HU	29.5	28.2	42.9	41.9	34.0	34.5
MT						
NL	97.9	102.0	101.5	121.7	112.4	91.0
AT	75.7	83.9	100.7	99.4	85.2	95.5
PL	-30.2	-29.1	-23.9	-5.2	-11.6	-12.0
PT	105.8	102.9	96.3	98.3	98.5	102.3
RO	26.5	25.6	33.4	17.6	17.4	20.2
SI	13.6	18.7	21.0	19.2	19.0	17.2
SK	76.7	80.2	88.4	75.7	84.6	83.3
FI	63.4	68.9	67.4	57.5	61.5	60.1
SE	95.4	98.3	97.2	102.2	92.3	108.5
UK	22.2	39.6	71.9	51.9	61.1	50.8

* Negative Rate Indicates a Net Exporter.
Values Over 100% Indicate Stocks Build Up.

Source: Eurostat, May 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.3.4 Import Dependency – Hard Coal* (%)

Imports from Extra-EU	1995	2000	2005	2010	2015	2016
EU-28	29.7	42.5	55.6	57.9	63.6	61.2
Index 1995	100.0	143.3	187.5	195.0	214.2	206.4
Intra and Extra-EU Imports						
BE	108.5	90.4	100.9	100.7	96.3	94.3
BG	73.0	100.5	94.7	88.3	94.9	84.2
CZ	-34.2	-56.1	-49.4	-54.3	-8.6	-3.8
DK	118.0	94.7	94.3	69.3	85.0	84.6
DE	17.1	39.2	57.5	73.7	87.6	94.7
EE	101.9	116.4	97.2	117.9	26.3	83.3
IE	105.9	93.2	100.8	79.3	102.7	84.9
EL	95.2	105.9	112.5	100.3	91.4	93.6
ES	48.5	66.8	74.4	85.4	78.2	75.4
FR	57.4	87.2	92.8	100.6	96.9	92.6
HR	73.9	112.9	90.5	102.7	102.5	102.5
IT	105.6	105.7	99.7	101.5	100.5	98.0
CY	100.0	100.0	119.4	64.7	100.0	
LV	93.6	81.8	97.3	106.7	87.0	87.5
LT	69.1	100.0	102.6	95.3	90.1	91.2
LU	100.0	100.0	100.0	100.0	100.0	100.0
HU	103.5	99.0	105.1	99.5	99.3	98.8
MT						
NL	97.4	101.5	100.3	122.3	112.8	90.9
AT	88.3	91.6	107.1	97.5	82.9	96.8
PL	-31.7	-29.9	-21.3	3.7	-2.4	-2.1
PT	105.9	103.4	96.3	98.2	98.5	102.3
RO	81.7	96.0	102.2	100.9	95.3	100.4
SI	100.0	100.5	93.8	100.9	100.6	98.3
SK	92.9	103.8	105.2	91.9	97.5	97.2
FI	89.0	97.7	102.6	85.5	89.8	82.8
SE	101.6	107.7	104.3	115.2	99.5	116.9
UK	21.8	39.4	71.3	52.1	60.0	46.7

* Negative Rate Indicates a Net Exporter.
Values Over 100% Indicate Stocks Build Up.

Source: Eurostat, May 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.3.5 Import Dependency – Petroleum and Products *

(%)

Imports from Extra-EU	1995	2000	2005	2010	2015	2016
EU-28	74.1	75.7	82.2	84.5	88.8	86.7
Index 1995	100.0	102.1	110.9	114.1	119.9	117.0
Intra and Extra-EU Imports						
BE	99.6	100.2	100.8	101.4	103.8	98.8
BG	99.6	95.4	102.2	101.1	99.1	96.1
CZ	98.0	95.3	97.5	96.5	97.8	97.2
DK	11.0	-80.8	-103.3	-43.4	5.8	2.8
DE	95.8	94.6	97.3	96.7	96.5	96.4
EE	80.2	77.4	70.8	57.5	39.3	48.7
IE	100.1	98.9	100.0	97.2	103.9	98.4
EL	98.4	100.2	97.7	98.7	105.4	99.6
ES	101.5	101.0	101.2	99.9	102.2	99.2
FR	96.9	99.5	99.3	97.9	98.5	97.5
HR	55.6	61.0	79.4	80.4	79.7	76.9
IT	93.3	96.1	91.8	93.5	89.5	91.0
CY	102.6	100.3	102.3	104.2	102.9	100.7
LV	102.6	94.8	102.2	94.4	102.9	109.1
LT	114.5	100.4	91.9	98.7	100.7	97.9
LU	98.2	102.1	99.4	99.4	99.3	100.0
HU	71.0	76.0	81.2	84.7	93.2	89.3
MT	104.8	100.3	100.1	99.2	97.8	101.6
NL	85.7	97.3	96.2	94.3	101.6	95.6
AT	89.3	89.1	91.6	89.9	93.9	92.0
PL	95.9	98.7	97.5	97.0	96.9	92.8
PT	100.6	99.4	102.3	97.5	99.9	96.9
RO	48.6	34.2	38.5	51.9	53.3	56.7
SI	97.8	101.5	101.2	99.2	99.6	100.3
SK	100.6	90.5	88.2	89.5	89.4	91.8
FI	94.6	103.5	98.4	89.4	106.0	94.7
SE	95.6	100.8	104.0	93.6	103.8	95.9
UK	-57.4	-54.9	-3.2	14.1	36.7	33.9

* Negative Rate Indicates a Net Exporter.
Values Over 100% Indicate Stocks Build Up.

Source: Eurostat, May 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.3.6 Import Dependency – Crude and NGL* (%)

Imports from Extra-EU	1995	2000	2005	2010	2015	2016
EU-28	73.0	74.4	81.3	84.6	88.4	87.4
Index 1995	100.0	101.9	111.3	115.9	121.1	119.7
Intra and Extra-EU Imports						
BE	99.8	100.2	99.5	99.9	100.0	99.7
BG	99.7	98.7	97.7	99.1	100.5	99.0
CZ	100.2	95.2	99.3	97.6	98.4	97.7
DK	6.3	-120.5	-141.3	-68.8	-4.9	-0.6
DE	96.9	93.8	97.3	97.3	97.1	96.7
EE						
IE	100.2	89.8	98.8	101.6	108.2	100.1
EL	98.8	99.5	95.2	99.5	101.5	100.5
ES	99.1	100.6	100.1	99.3	99.5	98.7
FR	95.8	98.5	98.2	98.2	98.8	97.0
HR	69.2	72.1	78.9	82.2	79.6	76.4
IT	92.8	95.1	94.0	94.5	92.2	93.3
CY	96.3	98.5				
LV						
LT	99.5	94.5	95.3	99.0	99.5	99.4
LU						
HU	71.9	78.6	81.2	85.2	91.3	86.2
MT						
NL	94.2	96.7	96.7	97.7	98.0	98.9
AT	87.6	86.9	88.5	86.2	90.8	89.5
PL	97.1	99.1	97.3	98.4	100.5	94.5
PT	100.0	99.0	100.2	98.8	100.9	98.7
RO	54.9	43.5	61.3	56.5	62.4	65.4
SI	95.9	87.5				
SK	101.5	97.6	97.7	99.9	99.3	100.7
FI	94.1	101.5	97.5	101.1	104.1	100.5
SE	99.3	100.6	100.4	99.0	100.7	100.0
UK	-47.7	-48.0	-0.2	12.7	22.9	16.2

* Negative Rate Indicates a Net Exporter.
Values Over 100% Indicate Stocks Build Up.

Source: Eurostat, May 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.3.7 Import Dependency – Natural Gas* (%)

Imports from Extra-EU	1995	2000	2005	2010	2015	2016
EU-28	43.4	48.9	57.1	62.5	69.0	70.4
Index 1995	100.0	112.7	131.6	144.1	159.1	162.3
Intra and Extra-EU Imports						
BE	98.2	99.3	100.5	100.3	99.3	100.6
BG	99.5	93.6	87.7	92.7	97.0	96.5
CZ	98.0	99.8	97.8	84.8	95.1	95.7
DK	-47.2	-64.8	-113.9	-68.3	-48.2	-44.6
DE	78.6	79.1	79.6	81.2	90.1	88.6
EE	100.0	100.0	100.0	100.0	100.0	100.0
IE	3.6	72.1	86.7	95.5	96.5	40.1
EL	0.0	99.1	99.1	99.9	99.9	99.2
ES	97.4	101.6	101.4	99.4	96.9	98.7
FR	93.0	100.0	99.3	92.8	98.5	98.9
HR	11.6	41.0	23.7	18.1	27.1	33.5
IT	63.9	81.1	84.7	90.5	90.4	91.8
CY						
LV	98.9	101.9	105.6	61.8	98.6	83.4
LT	100.0	100.0	100.7	99.7	99.7	100.5
LU	100.0	100.0	100.0	100.0	99.4	99.3
HU	60.3	75.4	81.1	78.7	69.7	78.9
MT						
NL	-76.4	-49.1	-59.3	-60.4	-36.5	-32.7
AT	84.8	80.6	88.5	75.3	72.5	85.8
PL	64.6	66.3	69.7	69.3	72.2	78.4
PT		100.2	103.8	100.4	99.8	99.1
RO	24.9	19.8	30.1	16.8	1.8	13.0
SI	100.5	99.3	99.6	99.3	99.7	99.4
SK	86.8	98.8	97.5	99.9	95.1	92.9
FI	100.0	100.0	100.0	100.0	99.7	99.7
SE	100.0	100.0	100.0	100.0	100.0	100.0
UK	1.0	-10.7	7.0	40.0	42.8	46.5

* Negative Rate Indicates a Net Exporter.
Values Over 100% Indicate Stocks Build Up.

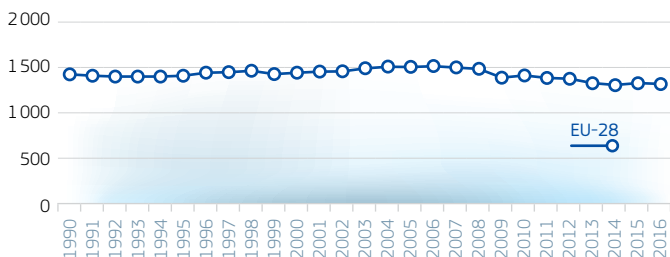
Source: Eurostat, May 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.4 Energy Transformation

2.4.1 Transformation Input – All Fuels

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	1.396.7	1.433.5	1.503.6	1.398.3	1.305.1	1.295.0
Index 1995	100%	103%	108%	100%	93%	93%
BE	51.36	61.54	60.49	58.68	50.55	53.12
BG	23.49	18.20	20.19	18.85	19.06	18.63
CZ	33.11	30.61	35.46	35.55	32.55	30.21
DK	19.19	16.81	15.38	15.68	14.16	14.83
DE	268.82	264.63	276.08	250.59	234.01	236.16
EE	3.68	3.41	3.89	4.68	4.17	4.50
IE	6.30	8.33	8.03	7.64	7.33	7.59
EL	27.08	34.06	33.95	33.42	36.60	37.91
ES	94.09	106.42	114.63	102.18	110.68	107.32
FR	198.67	217.94	228.31	206.40	191.28	183.78
HR	6.50	6.64	6.81	5.68	4.60	5.11
IT	141.98	150.89	165.68	149.47	124.22	122.59
CY	1.48	2.07	1.08	1.18	0.92	1.01
LV	1.49	1.09	1.06	1.16	1.19	1.29
LT	8.46	8.85	13.94	11.29	10.39	11.16
LU	0.28	0.10	0.58	0.56	0.24	0.15
HU	20.05	18.95	18.75	19.58	16.85	16.93
MT	0.45	0.49	0.61	0.58	0.26	0.17
NL	82.30	82.64	85.07	85.88	86.13	85.99
AT	15.90	15.20	17.42	16.73	16.77	16.06
PL	68.92	69.51	69.86	75.97	77.86	76.97
PT	19.53	19.52	21.87	17.94	22.36	22.22
RO	36.90	26.90	29.77	23.88	23.33	23.42
SI	3.30	2.78	3.12	3.08	2.67	2.77
SK	14.26	15.55	16.64	15.01	15.07	14.72
FI	25.67	28.35	29.38	33.54	28.65	30.79
SE	45.28	44.24	46.58	45.86	43.46	45.41
UK	178.14	177.78	178.99	157.26	129.71	124.18

TRANSFORMATION INPUT – ALL FUELS – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.4.2 Transformation Input – By Fuel

	2016						
	Total, All Products	Solid Fuels	Petroleum and Products	Gases	Nuclear	Renewables	Wastes non-RES
Mtoe							
EU-28	1.295.0	224.5	654.7	125.1	216.7	61.9	11.0
Share (%)	100.0%	17.3%	50.6%	9.7%	16.7%	4.8%	0.9%
BE	53.12	1.87	33.92	4.07	11.23	1.27	0.51
BG	18.63	6.13	7.27	1.03	4.08	0.10	0.00
CZ	30.21	14.88	5.76	2.12	6.24	1.13	0.06
DK	14.83	1.84	9.39	0.90	0.00	2.28	0.41
DE	236.16	75.66	103.13	19.88	21.83	12.30	3.37
EE	4.50	3.64	0.06	0.26	0.00	0.50	0.05
IE	7.59	1.71	3.31	2.38	0.00	0.16	0.03
EL	37.91	4.16	31.39	2.23	0.00	0.09	0.03
ES	107.32	10.67	69.03	8.32	15.13	3.94	0.23
FR	183.78	6.28	60.52	7.10	104.01	4.37	1.49
HR	5.11	0.58	3.80	0.58	0.00	0.15	0.00
IT	122.59	10.40	76.87	23.50	0.00	10.91	0.91
CY	1.01	0.00	1.00	0.00	0.00	0.01	0.00
LV	1.29	0.01	0.00	0.77	0.00	0.51	0.00
LT	11.16	0.01	9.98	0.42	0.00	0.63	0.05
LU	0.15	0.00	0.00	0.08	0.00	0.05	0.02
HU	16.93	2.50	7.34	2.10	4.16	0.73	0.09
MT	0.17	0.00	0.17	0.00	0.00	0.00	0.00
NL	85.99	10.24	62.18	9.65	1.02	1.73	0.83
AT	16.06	2.46	8.71	2.38	0.00	2.04	0.48
PL	76.97	44.22	27.41	3.26	0.00	1.95	0.11
PT	22.22	2.83	15.71	2.60	0.00	0.96	0.12
RO	23.42	4.62	12.85	2.84	2.91	0.21	0.00
SI	2.77	1.10	0.01	0.10	1.47	0.08	0.01
SK	14.72	3.02	6.36	0.88	3.86	0.58	0.02
FI	30.79	4.35	15.09	1.51	5.99	3.56	0.22
SE	45.41	1.72	21.00	0.47	16.28	4.96	0.79
UK	124.18	9.62	62.44	25.70	18.50	6.69	1.23

2.4.3 Transformation Input – By Sector

Mtoe	2016					
	Total, All Sectors	Conventional Thermal Power Stations	Nuclear Power Stations	District Heating Plants	Refineries, Petroleum and sub-products	Other Transformation Input Industry
EU-28	1.295.0	358.5	216.7	21.0	640.3	58.5
Share (%)	100.0%	27.7%	16.7%	1.6%	49.4%	4.5%
BE	53.12	6.18	11.23	0.00	33.92	1.79
BG	18.63	6.44	4.08	0.24	7.05	0.83
CZ	30.21	14.23	6.24	0.71	5.72	3.31
DK	14.83	4.48	0.00	1.05	9.29	0.01
DE	236.16	91.07	21.83	4.06	102.18	17.03
EE	4.50	3.06	0.00	0.38	0.00	1.06
IE	7.59	4.21	0.00	0.00	3.24	0.13
EL	37.91	7.41	0.00	0.00	30.50	0.00
ES	107.32	24.35	15.13	0.00	65.75	2.10
FR	183.78	13.20	104.01	2.43	59.91	4.23
HR	5.11	1.16	0.00	0.07	3.79	0.10
IT	122.59	47.44	0.00	0.14	72.55	2.45
CY	1.01	1.01	0.00	0.00	0.00	0.00
LV	1.29	1.04	0.00	0.23	0.00	0.02
LT	11.16	0.62	0.00	0.57	9.97	0.00
LU	0.15	0.14	0.00	0.01	0.00	0.00
HU	16.93	3.52	4.16	0.74	7.33	1.19
MT	0.17	0.17	0.00	0.00	0.00	0.00
NL	85.99	20.04	1.02	0.41	61.46	3.06
AT	16.06	4.39	0.00	1.05	8.60	2.03
PL	76.97	36.30	0.00	2.84	27.27	10.56
PT	22.22	6.53	0.00	0.00	15.46	0.24
RO	23.42	7.26	2.91	0.37	12.52	0.36
SI	2.77	1.25	1.47	0.04	0.00	0.00
SK	14.72	2.12	3.86	0.32	6.13	2.29
FI	30.79	6.61	5.99	1.76	14.78	1.65
SE	45.41	5.54	16.28	1.30	20.84	1.46
UK	124.18	38.73	18.50	2.31	62.07	2.57

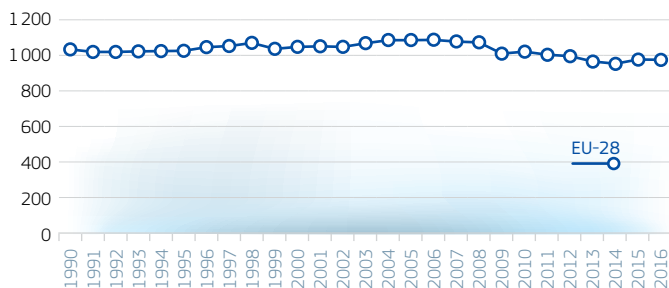
Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.4.4 Transformation Output – All Fuels

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	1.026.2	1.056.1	1.102.7	1.021.9	963.8	963.0
Index 1995	100%	103%	107%	100%	94%	94%
BE	39.85	49.65	48.44	46.39	43.21	43.02
BG	15.81	11.40	12.61	11.58	11.86	12.08
CZ	21.85	19.56	22.47	22.37	20.46	18.55
DK	15.83	14.01	13.32	13.47	13.48	14.01
DE	190.24	188.46	199.84	177.68	169.54	172.34
EE	1.69	1.52	1.66	1.91	1.48	1.69
IE	3.91	5.41	5.36	5.18	5.28	5.33
EL	21.19	26.84	26.24	26.55	31.92	33.71
ES	71.54	79.39	85.48	78.39	84.41	83.26
FR	127.11	140.68	142.41	122.64	110.06	107.81
HR	6.00	6.00	6.06	5.09	4.03	4.47
IT	114.66	119.80	133.23	120.58	99.36	97.83
CY	1.05	1.47	0.38	0.46	0.36	0.39
LV	1.19	0.87	0.88	0.95	0.92	1.02
LT	6.04	7.11	11.81	10.98	10.33	11.17
LU	0.18	0.04	0.35	0.34	0.15	0.10
HU	14.19	13.35	13.40	13.94	12.20	12.19
MT	0.14	0.17	0.19	0.18	0.10	0.06
NL	73.52	73.83	75.35	75.65	76.36	76.02
AT	13.45	13.36	14.92	14.37	14.79	14.25
PL	46.70	47.97	48.42	54.79	56.94	56.64
PT	16.15	15.79	17.69	15.06	18.52	18.50
RO	28.82	20.70	23.79	17.54	17.38	17.87
SI	1.65	1.24	1.24	1.24	1.13	1.20
SK	9.96	11.03	12.17	11.17	11.20	10.98
FI	19.83	22.46	23.27	26.22	22.88	24.94
SE	32.79	33.76	33.26	34.49	32.86	33.52
UK	130.84	130.20	128.51	112.73	92.61	90.09

TRANSFORMATION OUTPUT – ALL FUELS – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.4.5 Transformation Output – By Fuel

Mtoe	2016					
	Total, All Products	Solid Fuels	Petroleum and Products	Gases	Electricity	Derived Heat
EU-28	963.0	31.4	640.1	20.2	212.1	59.2
Share (%)	100.0%	3.3%	66.5%	2.1%	22.0%	6.1%
BE	43.02	0.86	33.91	0.87	6.49	0.89
BG	12.08	0.63	7.04	0.00	3.26	1.15
CZ	18.55	1.73	5.72	1.38	6.66	3.07
DK	14.01	0.00	9.29	0.00	1.46	3.26
DE	172.34	9.46	102.12	6.02	43.53	11.21
EE	1.69	0.01	0.00	0.11	0.99	0.57
IE	5.33	0.09	3.24	0.00	2.00	0.00
EL	33.71	0.00	30.50	0.00	3.16	0.05
ES	83.26	1.40	65.73	0.80	15.30	0.00
FR	107.81	2.22	59.90	1.73	39.66	4.29
HR	4.47	0.00	3.79	0.00	0.40	0.27
IT	97.83	1.24	72.54	1.01	17.69	5.35
CY	0.39	0.00	0.00	0.00	0.39	0.00
LV	1.02	0.00	0.00	0.00	0.32	0.69
LT	11.17	0.00	9.97	0.00	0.17	1.03
LU	0.10	0.00	0.00	0.00	0.04	0.06
HU	12.19	0.64	7.33	0.29	2.64	1.29
MT	0.06	0.00	0.00	0.00	0.06	0.00
NL	76.02	1.45	61.45	1.23	9.06	2.84
AT	14.25	0.96	8.60	0.99	1.64	2.06
PL	56.64	6.96	27.26	2.41	13.01	6.99
PT	18.50	0.00	15.46	0.00	2.59	0.45
RO	17.87	0.00	12.52	0.24	3.28	1.83
SI	1.20	0.00	0.00	0.00	0.98	0.22
SK	10.98	1.17	6.13	0.90	1.89	0.90
FI	24.94	0.64	14.77	0.55	4.28	4.69
SE	33.52	0.80	20.82	0.55	6.73	4.62
UK	90.09	1.14	62.05	1.14	24.36	1.41

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.4.6 Transformation Output – By Sector

Mtoe	2016					
	Total, All Sectors	Conventional Thermal Power Stations	Nuclear Power Stations, Electricity	District Heating Plants, Heat	Refineries, Petroleum and sub-products	Other Transformation Output Industry
EU-28	963.0	181.2	72.2	17.8	640.1	51.8
Share (%)	100.0%	18.8%	7.5%	1.8%	66.5%	5.4%
BE	43.02	3.64	3.74	0.00	33.91	1.73
BG	12.08	2.79	1.36	0.25	7.04	0.65
CZ	18.55	6.98	2.07	0.66	5.72	3.13
DK	14.01	3.64	0.00	1.09	9.29	0.00
DE	172.34	44.38	7.28	3.08	102.12	15.48
EE	1.69	1.28	0.00	0.29	0.00	0.12
IE	5.33	2.00	0.00	0.00	3.24	0.09
EL	33.71	3.21	0.00	0.00	30.50	0.00
ES	83.26	10.26	5.04	0.00	65.73	2.23
FR	107.81	7.21	34.67	2.08	59.90	3.95
HR	4.47	0.62	0.00	0.06	3.79	0.01
IT	97.83	22.94	0.00	0.10	72.54	2.26
CY	0.39	0.39	0.00	0.00	0.00	0.00
LV	1.02	0.84	0.00	0.17	0.00	0.01
LT	11.17	0.62	0.00	0.58	9.97	0.00
LU	0.10	0.09	0.00	0.01	0.00	0.00
HU	12.19	1.80	1.38	0.73	7.33	0.95
MT	0.06	0.06	0.00	0.00	0.00	0.00
NL	76.02	11.21	0.34	0.35	61.45	2.68
AT	14.25	2.83	0.00	0.87	8.60	1.95
PL	56.64	17.54	0.00	2.47	27.26	9.37
PT	18.50	3.04	0.00	0.00	15.46	0.01
RO	17.87	3.81	0.97	0.33	12.52	0.24
SI	1.20	0.67	0.49	0.04	0.00	0.00
SK	10.98	1.19	1.27	0.28	6.13	2.12
FI	24.94	5.27	2.00	1.71	14.77	1.19
SE	33.52	4.69	5.43	1.23	20.82	1.35
UK	90.09	18.19	6.17	1.41	62.05	2.27

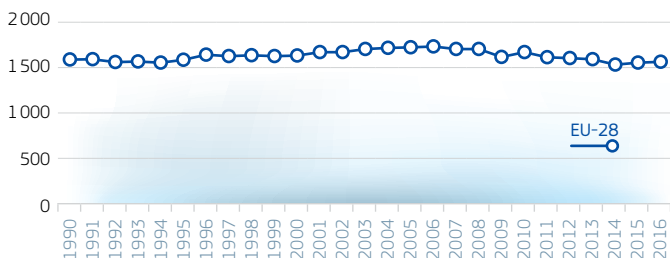
2.5 Final Energy

2.5.1 Primary Energy Consumption

TOTAL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	1567.2	1617.6	1713.3	1657.5	1531.8	1542.8
Index 1995	100%	103%	109%	106%	98%	98%
BE	47.91	52.32	51.33	53.54	45.74	48.99
BG	21.46	17.54	18.91	17.35	17.90	17.63
CZ	39.63	39.27	42.48	42.62	39.88	40.04
DK	19.88	19.44	19.24	19.78	16.60	17.17
DE	318.02	317.27	317.26	309.90	292.71	295.84
EE	5.31	4.79	5.39	6.06	6.20	6.13
IE	10.49	13.75	14.73	14.84	13.98	14.58
EL	23.37	27.57	30.65	27.61	23.75	23.55
ES	94.20	114.25	135.87	123.22	117.11	117.24
FR	225.75	241.21	260.18	253.23	239.22	235.40
HR	7.05	7.77	9.11	8.83	7.99	8.07
IT	152.03	165.79	181.47	168.37	149.56	148.44
CY	1.90	2.33	2.47	2.66	2.25	2.40
LV	4.58	3.79	4.50	4.56	4.27	4.29
LT	8.10	6.40	7.98	6.13	5.80	5.99
LU	3.28	3.60	4.77	4.61	4.15	4.16
HU	24.55	23.71	25.94	24.63	23.28	23.86
MT	0.76	0.80	0.92	0.93	0.75	0.72
NL	64.27	65.88	68.82	70.42	64.40	64.85
AT	25.73	27.30	32.33	32.28	31.47	31.84
PL	95.12	84.29	87.65	95.72	89.96	94.32
PT	18.55	22.89	24.89	22.55	21.69	22.12
RO	45.07	34.77	36.74	34.33	31.30	31.26
SI	5.95	6.21	7.02	7.13	6.44	6.67
SK	16.79	16.94	17.75	16.80	15.38	15.53
FI	28.24	31.37	33.35	35.88	31.77	33.06
SE	49.48	47.17	48.73	48.68	43.79	47.05
UK	209.76	219.23	222.81	204.87	184.47	181.66

PRIMARY ENERGY CONSUMPTION – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.5.2 Available for Final Consumption

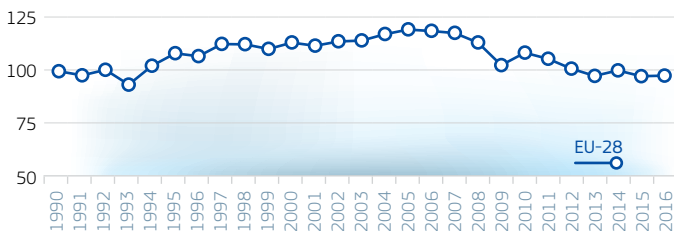
Mtoe	1995	2000	2005	2010	2015	2016
EU-28	1 192.9	1 243.0	1 313.7	1 275.7	1 184.1	1 205.2
Index 1995	100%	104%	110%	107%	99%	101%
BE	39.93	44.83	44.42	45.66	44.43	44.76
BG	12.93	9.99	10.56	8.79	9.65	9.99
CZ	28.09	27.50	29.55	29.01	27.23	27.24
DK	15.03	15.02	15.44	15.67	14.26	14.72
DE	244.01	247.33	247.18	242.62	232.90	235.96
EE	3.04	2.69	3.00	3.02	3.25	3.00
IE	8.30	11.05	12.02	12.23	11.65	12.10
EL	16.40	19.08	21.39	19.66	17.15	17.55
ES	72.46	88.79	105.95	95.95	83.11	85.75
FR	156.89	166.23	177.09	169.60	161.38	162.21
HR	6.10	6.66	7.91	7.81	7.12	7.16
IT	124.85	133.74	145.23	137.17	121.73	121.13
CY	1.48	1.75	1.80	1.97	1.67	1.78
LV	3.94	3.28	4.11	4.17	3.89	3.91
LT	5.13	4.28	5.39	5.48	5.99	6.15
LU	3.17	3.56	4.53	4.36	4.02	4.08
HU	18.16	17.72	20.87	19.41	19.07	19.42
MT	0.41	0.44	0.48	0.52	0.58	0.59
NL	64.10	67.61	72.08	73.46	64.13	65.59
AT	22.74	25.45	29.50	29.83	29.40	30.16
PL	67.25	58.57	62.71	71.09	66.74	71.74
PT	15.92	20.22	21.69	19.81	17.34	17.24
RO	30.36	25.03	26.87	24.77	23.06	23.35
SI	4.23	4.70	5.23	5.27	4.82	5.01
SK	12.23	12.72	12.84	12.65	11.16	11.42
FI	21.92	24.76	26.44	27.50	25.56	26.76
SE	36.67	36.21	35.26	36.90	32.75	34.98
UK	157.11	163.83	164.16	151.29	140.08	141.44

2.5.3 Final Non-Energy Consumption

TOTAL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	107.4	112.2	117.8	107.7	97.5	97.8
Index 1995	100%	104%	110%	100%	91%	91%
BE	5.92	6.99	7.73	7.36	8.52	8.46
BG	1.23	0.98	0.85	0.42	0.61	0.50
CZ	2.32	2.09	2.95	2.81	2.45	1.76
DK	0.32	0.30	0.29	0.26	0.25	0.25
DE	23.62	25.06	24.66	22.58	21.27	21.43
EE	0.18	0.18	0.23	0.09	0.10	0.09
IE	0.57	0.68	0.52	0.34	0.22	0.27
EL	0.49	0.72	0.76	1.11	0.70	0.59
ES	7.87	9.40	8.35	7.03	4.31	4.94
FR	15.86	16.18	16.12	13.95	13.87	13.35
HR	0.81	0.66	0.68	0.60	0.53	0.52
IT	9.73	8.43	8.61	9.56	6.61	6.31
CY	0.06	0.09	0.07	0.09	0.02	0.04
LV	0.04	0.08	0.10	0.07	0.11	0.10
LT	0.54	0.66	0.73	0.66	1.12	1.05
LU	0.05	0.06	0.03	0.03	0.03	0.04
HU	1.63	1.59	2.17	1.97	1.91	1.85
MT	0.00	0.00	0.02	0.01	0.01	0.01
NL	11.07	11.99	15.22	16.23	12.97	13.68
AT	1.38	1.72	1.71	1.84	1.93	2.03
PL	3.71	4.36	4.57	4.96	5.66	5.61
PT	2.08	2.39	2.59	1.73	1.34	1.15
RO	1.24	1.88	2.47	1.47	1.13	1.14
SI	0.12	0.24	0.31	0.21	0.13	0.13
SK	0.93	1.37	1.28	1.05	1.05	0.98
FI	1.13	1.04	1.15	1.22	1.51	1.57
SE	1.99	1.73	2.29	2.11	1.77	2.18
UK	12.49	11.33	11.37	7.91	7.43	7.78

FINAL NON-ENERGY CONSUMPTION – TOTAL – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

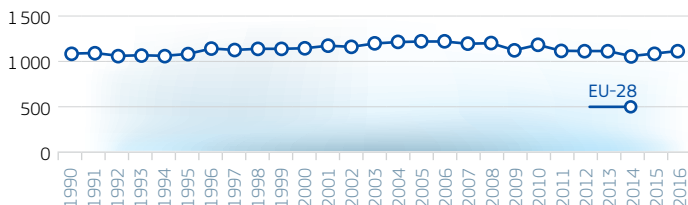
Methodology and Notes: See Appendix 13 – No 2

2.5.4 Final Energy Consumption

TOTAL

Mtoe	1995	2000	2005	2010	2015	2016
EU-28	1082.6	1132.7	1192.7	1163.2	1086.2	1107.8
Index 1995	100%	105%	110%	107%	100%	102%
BE	34.35	37.53	36.58	37.63	35.87	36.33
BG	11.42	9.11	10.19	8.84	9.51	9.66
CZ	26.32	25.07	26.33	25.41	24.25	24.88
DK	14.82	14.72	15.50	15.52	14.01	14.45
DE	221.62	220.01	218.46	219.65	212.12	216.45
EE	2.56	2.43	2.88	2.91	2.77	2.82
IE	7.99	10.80	12.64	12.02	11.22	11.61
EL	15.81	18.68	20.96	19.00	16.50	16.70
ES	64.03	79.90	97.77	89.08	80.38	82.50
FR	143.48	155.31	160.77	154.43	145.26	147.16
HR	5.28	6.00	7.24	7.21	6.59	6.64
IT	114.58	124.72	137.15	128.46	116.23	115.93
CY	1.43	1.65	1.83	1.93	1.66	1.76
LV	3.85	3.25	4.02	4.12	3.79	3.82
LT	4.60	3.77	4.67	4.81	4.87	5.11
LU	3.11	3.50	4.48	4.32	3.99	4.04
HU	16.23	16.14	18.75	17.43	17.38	17.87
MT	0.46	0.44	0.46	0.50	0.57	0.58
NL	50.77	52.14	53.98	55.11	48.50	49.52
AT	21.37	23.69	27.76	27.94	27.46	28.13
PL	62.94	55.21	58.47	66.33	62.33	66.65
PT	13.85	17.92	19.01	18.10	16.04	16.12
RO	26.97	22.77	24.71	22.59	21.89	22.28
SI	4.09	4.46	4.90	5.04	4.69	4.88
SK	11.03	10.98	11.56	11.55	10.08	10.42
FI	21.97	24.32	25.19	26.25	24.25	25.25
SE	35.05	34.97	33.68	34.08	31.71	32.59
UK	142.65	153.24	152.76	142.99	132.31	133.69

FINAL ENERGY CONSUMPTION – TOTAL – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.5.4 Final Energy Consumption

BY FUEL

Mtoe	2016						
	Petroleum and Products	Gases	Electricity	Renewables	Derived Heat	Solid Fuels	Wastes, Non-Renewable
EU-28	437.1	245.3	239.4	88.9	47.9	45.3	3.8
Share (%)	39.5 %	22.1 %	21.6 %	8.0 %	4.3 %	4.1 %	0.3 %
BE	15.30	9.73	7.04	1.88	0.50	1.75	0.14
BG	3.45	1.31	2.49	1.27	0.78	0.34	0.03
CZ	6.80	5.68	4.82	2.78	2.13	2.42	0.25
DK	6.01	1.50	2.68	1.56	2.57	0.11	0.02
DE	82.23	54.39	44.49	14.27	9.78	10.16	1.13
EE	1.01	0.25	0.63	0.41	0.47	0.03	0.01
IE	6.75	1.77	2.20	0.37	0.00	0.48	0.04
EL	9.50	1.05	4.60	1.29	0.05	0.20	0.03
ES	41.92	13.67	19.99	5.49	0.00	1.41	0.01
FR	59.79	29.87	38.04	12.37	3.37	3.61	0.13
HR	2.82	1.03	1.32	1.18	0.22	0.07	0.01
IT	43.83	33.47	24.59	8.04	3.95	1.77	0.28
CY	1.25	0.00	0.38	0.11	0.00	0.00	0.02
LV	1.40	0.32	0.56	0.89	0.58	0.04	0.04
LT	2.01	0.55	0.84	0.69	0.83	0.19	0.00
LU	2.59	0.63	0.55	0.15	0.05	0.05	0.01
HU	5.30	5.71	3.19	2.15	1.06	0.39	0.06
MT	0.39	0.00	0.18	0.01	0.00	0.00	0.00
NL	17.67	17.86	9.08	1.17	2.14	1.55	0.03
AT	10.13	5.13	5.32	4.05	1.74	1.43	0.34
PL	21.63	9.69	11.42	5.54	5.67	12.07	0.64
PT	8.03	1.62	3.99	2.17	0.21	0.01	0.09
RO	7.36	5.36	3.72	3.68	1.28	0.79	0.08
SI	2.28	0.60	1.12	0.63	0.18	0.04	0.04
SK	2.34	3.21	2.15	0.57	0.67	1.29	0.18
FI	7.19	0.85	6.95	5.39	4.13	0.70	0.05
SE	8.77	0.64	10.96	6.74	4.43	1.05	0.00
UK	59.41	39.39	26.13	4.10	1.14	3.40	0.12

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.5.4 Final Energy Consumption

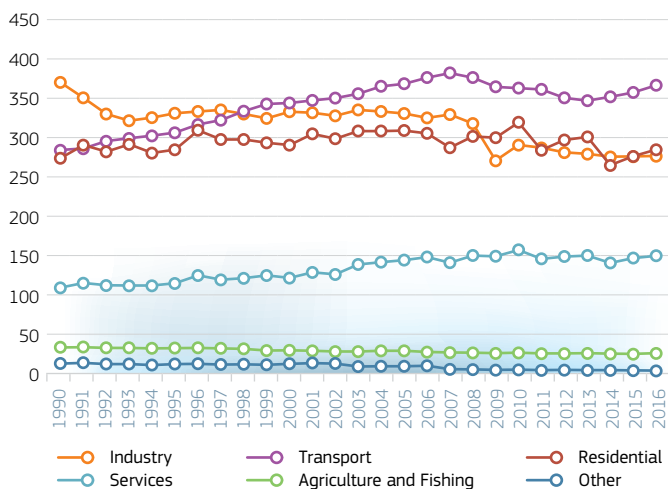
BY SECTOR

Mtoe	2016					
	Transport	Residential	Industry	Services	Agriculture and Fishing	Other
EU-28	367.3	284.8	276.8	150.0	25.5	3.3
Share (%)	33.2%	25.7%	25.0%	13.5%	2.3%	0.3%
BE	10.51	8.14	12.21	4.66	0.77	0.05
BG	3.49	2.25	2.64	1.08	0.19	0.02
CZ	6.73	6.99	7.42	3.05	0.64	0.04
DK	5.11	4.46	2.14	1.98	0.75	0.01
DE	65.17	56.05	61.12	34.00	0.00	0.11
EE	0.81	0.93	0.45	0.49	0.13	0.00
IE	4.95	2.67	2.45	1.32	0.23	0.00
EL	6.79	4.29	3.07	2.04	0.28	0.24
ES	34.97	15.06	18.97	10.63	2.65	0.22
FR	49.62	39.83	29.37	23.20	4.50	0.64
HR	2.16	2.39	1.09	0.76	0.23	0.00
IT	39.11	32.19	26.17	15.44	2.87	0.16
CY	0.93	0.33	0.21	0.23	0.05	0.02
LV	1.16	1.14	0.75	0.59	0.18	0.00
LT	1.96	1.44	0.99	0.61	0.11	0.01
LU	2.42	0.49	0.67	0.43	0.02	0.00
HU	4.54	6.16	4.26	2.23	0.65	0.04
MT	0.32	0.08	0.05	0.12	0.01	0.00
NL	14.30	9.86	14.66	6.81	3.87	0.03
AT	9.19	6.32	9.45	2.65	0.52	0.00
PL	19.24	19.75	15.62	8.51	3.54	0.00
PT	6.78	2.62	4.33	1.94	0.42	0.03
RO	6.03	7.42	6.32	1.81	0.45	0.26
SI	1.90	1.15	1.24	0.49	0.07	0.02
SK	2.48	2.03	4.45	1.31	0.15	0.00
FI	4.96	5.29	11.04	2.86	0.72	0.38
SE	9.05	7.46	11.43	4.30	0.34	0.00
UK	52.60	38.05	24.25	16.52	1.16	1.10

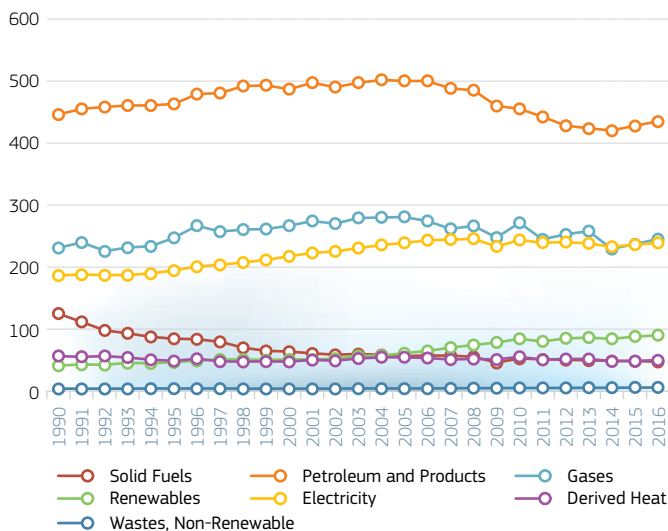
Source: Eurostat, May 2018
Methodology and Notes: See Appendix 13 – No 2

2.5.4 Final Energy Consumption

BY SECTOR – EU-28 – 1990-2016 (Mtoe)



FINAL ENERGY CONSUMPTION – BY FUEL – EU-28 – 1990-2016 (Mtoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

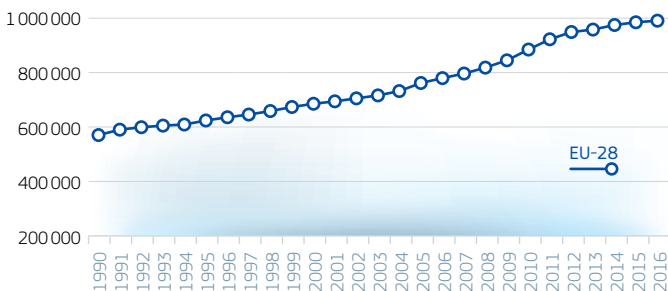
2.6 Electricity

2.6.1 Installed Electricity Capacity

TOTAL

MW	1995	2000	2005	2010	2015	2016
EU-28*	618490	680930	757871	883774	984772	990918
Index 1995	100%	110%	123%	143%	159%	160%
BE	14917	15685	16096	18690	21157	21554
BG	1975	11085	12260	10031	10913	10739
CZ	13803	15323	17406	20073	21866	21989
DK	10823	12316	13036	13438	14002	14337
DE	116226	118884	128485	162874	203419	208500
EE	1	2800	2559	2751	2857	2567
IE	4060	4711	6175	8019	9557	9945
EL	8942	10904	13306	15312	18942	19165
ES	45621	53924	76574	101788	106901	106185
FR	107616	114518	115730	124138	129939	130794
HR	2072	2079	3866	4121	4798	4878
IT	65923	75510	85498	106610	116964	114162
CY	690	988	1125	1560	1756	1760
LV	2068	2092	2166	2557	2933	2928
LT	5866	5716	4556	3570	3587	3665
LU	1250	1217	1682	1711	2023	1709
HU	7404	8282	8586	8993	8636	8750
MT	0	0	0	572	667	573
NL	19034	21062	21800	26688	33866	34176
AT	17395	17802	18898	21187	24443	24789
PL	29482	30559	32257	33360	37327	38104
PT	9384	10908	13374	18932	19625	20561
RO	5998	6120	18951	19912	23830	23580
SI	2518	2614	2992	3193	3359	3537
SK	7238	7454	8257	7873	7782	7742
FI	14434	16260	16468	15682	16612	16273
SE	33625	33724	33390	36454	39712	40316
UK	70125	78393	82378	93685	97299	97640

INSTALLED ELECTRICITY CAPACITY – TOTAL – 1990-2016 (MW)



* No complete EU-28 data available for 1990-2004.

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.6.1 Installed Electricity Capacity

BY FUEL

MW	2016						
	Installed Electricity Capacity	Combustible Fuels	Hydro	Wind	Nuclear	Solar PV	Other Sources
EU-28	990 918	455 583	153 969	154 325	122 051	100 812	4 178
Share (%)	100.0 %	46.0 %	15.5 %	15.6 %	12.3 %	10.2 %	0.4 %
BE	21 554	8 542	1 425	2 370	5 913	3 300	4
BG	10 739	3 822	3 223	699	1 967	1 028	0
CZ	21 989	13 087	2 262	282	4 290	2 068	0
DK	14 337	8 231	10	5 245	0	851	0
DE	208 500	95 716	11 300	49 592	10 799	40 714	379
EE	2 567	2 251	6	310	0	0	0
IE	9 945	6 583	529	2 827	0	6	0
EL	19 165	10 799	3 392	2 370	0	2 604	0
ES	106 185	48 454	20 056	23 003	7 399	4 973	2 300
FR	130 794	23 138	25 517	11 467	63 130	7 320	222
HR	4 878	2 134	2 205	483	0	56	0
IT	114 162	62 096	22 298	9 384	0	19 283	1 101
CY	1 760	1 518	0	158	0	84	0
LV	2 928	1 292	1 565	70	0	1	0
LT	3 665	2 184	877	509	0	70	25
LU	1 709	137	1 330	120	0	122	0
HU	8 750	6 107	57	329	2 000	220	37
MT	573	480	0	0	0	93	0
NL	34 176	27 311	37	4 257	485	2 049	37
AT	24 789	7 273	13 689	2 730	0	1 096	1
PL	38 104	29 783	2 385	5 747	0	187	2
PT	20 561	7 990	6 960	5 124	0	462	25
RO	23 580	11 038	6 734	3 025	1 411	1 372	0
SI	3 537	1 318	1 293	5	688	233	0
SK	7 742	2 710	2 524	3	1 940	533	32
FI	16 273	8 659	3 250	1 565	2 764	35	0
SE	40 316	7 495	16 466	6 434	9 768	153	0
UK	97 640	55 435	4 579	16 217	9 497	11 899	13

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.6.1 Installed Electricity Capacity *

RENEWABLES

MW	2016						
	Total Renewables	Hydro	Wind	Solar PV	Solar Thermal	Geothermal	Tide Wave and Ocean
EU-28	412 465	153 969	154 325	100 812	2 302	824	233
Share (%)	41.6%	15.5%	15.6%	10.2%	0.2%	0.1%	0.0%
BE	7 095	1 425	2 370	3 300	0	0	0
BG	4 950	3 223	699	1 028	0	0	0
CZ	4 612	2 262	282	2 068	0	0	0
DK	6 106	10	5 245	851	0	0	0
DE	101 637	11 300	49 592	40 714	2	29	0
EE	316	6	310	0	0	0	0
IE	3 362	529	2 827	6	0	0	0
EL	8 366	3 392	2 370	2 604	0	0	0
ES	50 332	20 056	23 003	4 973	2 300	0	0
FR	44 526	25 517	11 467	7 320	0	2	220
HR	2 744	2 205	483	56	0	0	0
IT	51 732	22 298	9 384	19 283	0	767	0
CY	242	0	158	84	0	0	0
LV	1 636	1 565	70	1	0	0	0
LT	1 456	877	509	70	0	0	0
LU	1 572	1 330	120	122	0	0	0
HU	606	57	329	220	0	0	0
MT	93	0	0	93	0	0	0
NL	6 343	37	4 257	2 049	0	0	0
AT	17 516	13 689	2 730	1 096	0	1	0
PL	8 319	2 385	5 747	187	0	0	0
PT	12 571	6 960	5 124	462	0	25	0
RO	11 131	6 734	3 025	1 372	0	0	0
SI	1 531	1 293	5	233	0	0	0
SK	3 060	2 524	3	533	0	0	0
FI	4 850	3 250	1 565	35	0	0	0
SE	23 053	16 466	6 434	153	0	0	0
UK	32 708	4 579	16 217	11 899	0	0	13

* Net maximum capacity.

Source: Eurostat, May 2018
Methodology and Notes: See Appendix 13 – No 2

2.6.2 Gross Electricity Generation

TOTAL

TWh	1995	2000	2005	2010	2015	2016
EU-28	2 743.6	3 035.8	3 325.8	3 366.6	3 235.2	3 255.1
Index 1995	100%	111%	121%	123%	118%	119%
BE	74.41	84.01	87.03	95.19	69.85	85.52
BG	41.79	40.92	44.37	46.65	49.23	45.28
CZ	60.85	73.47	82.58	85.90	83.89	83.31
DK	36.76	36.05	36.25	38.86	28.95	30.52
DE	537.28	576.54	622.58	632.98	646.89	649.12
EE	8.69	8.51	10.21	12.96	10.42	12.18
IE	17.86	23.98	25.97	28.35	28.39	30.42
EL	41.55	53.84	60.02	57.39	51.87	51.41
ES	167.09	224.47	294.08	301.53	281.02	274.78
FR	494.27	539.95	576.06	569.29	570.32	556.18
HR	9.28	11.28	13.16	14.90	11.40	12.82
IT	241.49	276.64	303.70	302.06	282.99	289.77
CY	2.50	3.37	4.38	5.32	4.53	4.89
LV	3.98	4.14	4.91	6.63	5.53	6.43
LT	13.90	11.43	14.78	5.75	4.93	4.27
LU	1.23	1.17	4.13	4.59	2.77	2.20
HU	34.02	35.19	35.76	37.37	30.34	31.86
MT	1.63	1.92	2.24	2.11	1.30	0.86
NL	81.17	89.63	99.92	119.27	110.07	115.17
AT	56.23	61.26	66.83	71.13	65.30	68.35
PL	139.01	145.18	156.94	157.66	164.94	166.64
PT	33.27	43.76	46.58	54.09	52.42	60.28
RO	59.27	51.93	59.41	60.98	66.30	65.10
SI	12.91	13.62	15.12	16.44	15.10	16.50
SK	26.77	31.16	31.46	27.86	26.90	27.06
FI	64.04	69.98	70.58	80.67	68.60	68.75
SE	148.35	145.27	158.44	148.56	162.06	156.01
UK	334.04	377.07	398.36	382.07	338.92	339.40

2.6.2 Gross Electricity Generation

BY FUEL

TWh	2016						
	Gross Electricity Generation	Solid Fuels	Renewables	Nuclear	Gases	Petroleum and Products	Wastes non-RES
EU-28	3 255.1	701.3	981.5	839.7	642.3	59.5	25.9
Share (%)	100.0%	21.5%	30.2%	25.8%	19.7%	1.8%	0.8%
BE	85.52	0.39	15.29	43.52	24.36	0.19	1.26
BG	45.28	19.36	7.73	15.78	2.05	0.32	0.00
CZ	83.31	41.97	10.59	24.10	6.38	0.09	0.08
DK	30.52	8.87	18.46	0.00	2.17	0.32	0.71
DE	649.12	261.75	193.93	84.63	93.75	5.85	7.33
EE	12.18	9.67	1.51	0.00	0.61	0.26	0.13
IE	30.42	7.02	7.81	0.00	15.23	0.29	0.07
EL	51.41	17.05	14.92	0.00	13.67	5.57	0.21
ES	274.78	36.43	108.11	58.63	53.84	16.92	0.74
FR	556.18	8.47	102.09	403.20	36.92	2.54	2.42
HR	12.82	2.60	8.57	0.00	1.59	0.07	0.00
IT	289.77	35.61	109.85	0.00	128.94	12.13	2.50
CY	4.89	0.00	0.42	0.00	0.00	4.46	0.00
LV	6.43	0.00	3.48	0.00	2.94	0.00	0.00
LT	4.27	0.00	2.68	0.00	0.99	0.22	0.11
LU	2.20	0.00	1.87	0.00	0.26	0.00	0.07
HU	31.86	5.63	3.22	16.05	6.61	0.06	0.21
MT	0.86	0.00	0.13	0.00	0.00	0.72	0.00
NL	115.17	36.72	14.73	3.96	56.57	1.28	1.71
AT	68.35	2.04	53.85	0.00	10.52	0.99	0.93
PL	166.64	130.32	23.29	0.00	10.44	2.30	0.21
PT	60.28	12.63	33.45	0.00	12.58	1.30	0.32
RO	65.10	15.88	27.48	11.29	9.76	0.70	0.00
SI	16.50	5.01	5.34	5.72	0.42	0.01	0.01
SK	27.06	2.80	6.88	14.77	1.99	0.47	0.02
FI	68.75	9.88	30.41	23.20	4.37	0.20	0.43
SE	156.01	0.48	89.25	63.10	1.20	0.40	1.59
UK	339.40	30.71	86.19	71.73	144.13	1.84	4.81

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.6.2 Gross Electricity Generation

RENEWABLES

TWh	2016						
	Renewables	Hydro	Wind	Biomass and Renewable	Solar	Geothermal	Tide, Wave and Ocean
EU-28	981.5	380.2	302.9	180.5	110.8	6.6	0.5
Share (%)	100.0 %	38.7 %	30.9 %	18.4 %	11.3 %	0.7 %	0.1 %
BE	15.29	1.49	5.44	5.28	3.09	0.00	0.00
BG	7.73	4.57	1.43	0.35	1.39	0.00	0.00
CZ	10.59	3.20	0.50	4.76	2.13	0.00	0.00
DK	18.46	0.02	12.78	4.92	0.74	0.00	0.00
DE	193.93	26.14	78.60	50.92	38.10	0.18	0.00
EE	1.51	0.04	0.59	0.89	0.00	0.00	0.00
IE	7.81	0.97	6.15	0.68	0.00	0.00	0.00
EL	14.92	5.57	5.15	0.27	3.93	0.00	0.00
ES	108.11	39.87	48.91	5.69	13.65	0.00	0.00
FR	102.09	64.89	21.40	7.13	8.16	0.00	0.50
HR	8.57	7.06	1.01	0.43	0.07	0.00	0.00
IT	109.85	44.26	17.69	19.51	22.10	6.29	0.00
CY	0.42	0.00	0.23	0.05	0.15	0.00	0.00
LV	3.48	2.53	0.13	0.82	0.00	0.00	0.00
LT	2.68	1.04	1.14	0.43	0.07	0.00	0.00
LU	1.87	1.53	0.10	0.14	0.10	0.00	0.00
HU	3.22	0.26	0.68	2.07	0.20	0.00	0.00
MT	0.13	0.00	0.00	0.01	0.13	0.00	0.00
NL	14.73	0.10	8.17	4.90	1.56	0.00	0.00
AT	53.85	42.92	5.24	4.60	1.10	0.00	0.00
PL	23.29	2.62	12.59	7.96	0.12	0.00	0.00
PT	33.45	16.91	12.47	3.07	0.82	0.17	0.00
RO	27.48	18.54	6.59	0.53	1.82	0.00	0.00
SI	5.34	4.78	0.01	0.28	0.27	0.00	0.00
SK	6.88	4.61	0.01	1.73	0.53	0.00	0.00
FI	30.41	15.80	3.07	11.52	0.02	0.00	0.00
SE	89.25	62.14	15.48	11.49	0.14	0.00	0.00
UK	86.19	8.35	37.37	30.04	10.42	0.00	0.00

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

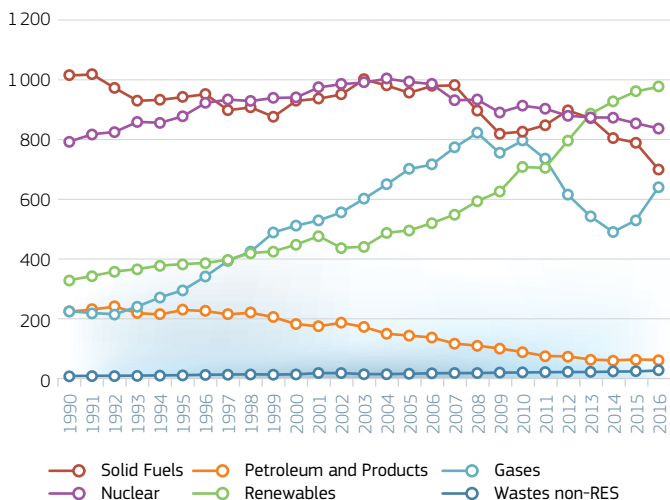
2.6.2 Gross Electricity Generation

BY FUEL – EU-28

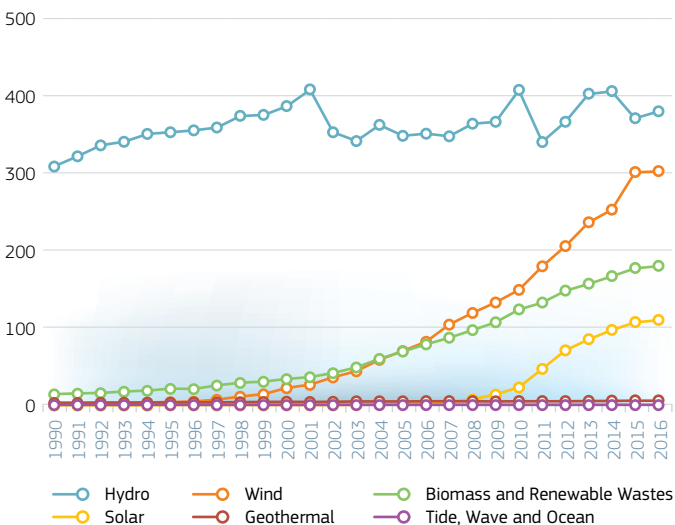
Share of Total (%)	2016				
	Solid Fuels	Nuclear	Renewables	Gases	Petroleum and Products
1990	39.3	30.6	12.6	8.6	8.6
1991	38.7	31.1	13.0	8.2	8.8
1992	37.2	31.5	13.6	8.1	9.2
1993	35.5	32.8	13.9	9.1	8.3
1994	35.1	32.2	14.1	10.2	8.1
1995	34.5	32.1	13.9	10.7	8.4
1996	33.6	32.5	13.6	12.0	8.0
1997	31.6	32.8	13.9	13.8	7.5
1998	31.2	31.9	14.4	14.6	7.5
1999	29.8	31.9	14.4	16.6	6.9
2000	30.8	31.1	14.8	16.9	6.0
2001	30.2	31.4	15.3	17.0	5.6
2002	30.4	31.5	13.9	17.7	5.9
2003	31.1	30.8	13.6	18.7	5.3
2004	29.8	30.5	14.8	19.8	4.5
2005	28.9	30.0	14.9	21.2	4.3
2006	29.2	29.4	15.5	21.3	4.0
2007	29.1	27.6	16.2	23.0	3.4
2008	26.6	27.7	17.6	24.4	3.2
2009	25.5	27.7	19.5	23.5	3.1
2010	24.6	27.2	21.1	23.7	2.6
2011	25.8	27.5	21.4	22.4	2.2
2012	27.3	26.8	24.2	18.7	2.2
2013	26.7	26.8	27.2	16.6	1.9
2014	25.3	27.5	29.2	15.4	1.8
2015	24.5	26.5	29.9	16.4	1.9
2016	21.5	25.8	30.2	19.7	1.8

2.6.2 Gross Electricity Generation

BY FUEL – EU-28 – ALL FUELS – 1990-2016 (TWh)



GROSS ELECTRICITY GENERATION – EU-28 – RENEWABLES – 1990-2016 (TWh)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.6.3 Market Share of the Largest Electricity Producer

%	2000	2005	2010	2014	2015	2016
BE	91.1	85.0	79.1	59.8	48.5	62.6
BG						
CZ	69.2	72.0	73.0	57.5	55.4	52.4
DK	36.0	33.0	46.0	36.6	33.0	35.2
DE	34.0	31.0	28.4	32.0	32.0	33.5
EE	91.0	92.0	89.0	84.8	79.8	80.8
IE	97.0	71.0	34.0	51.0	55.0	47.0
EL	97.0	97.0	85.1	71.5	70.7	72.0
ES	42.4	35.0	24.0	23.8	24.5	25.4
FR	90.2	89.1	86.5	86.8	85.7	82.5
HR		87.0	88.0	80.3	77.8	80.7
IT	46.7	38.6	28.0	29.0	27.0	24.0
CY	99.6	100.0	100.0	100.0	100.0	100.0
LV	95.8	92.7	88.0	54.8	57.4	58.6
LT	72.8	70.3	35.4	20.6	22.7	14.3
LU			85.4	61.3	43.8	18.0
HU	41.3	38.7	42.1	54.0	53.1	52.9
MT	100.0	100.0	100.0	100.0	100.0	100.0
NL						
AT	32.6					
PL	19.5	18.5	17.4	17.9	17.4	16.0
PT	58.5	53.9	47.2	46.5	42.5	47.0
RO		36.4	33.6	29.9	25.7	28.5
SI		50.1	56.3	52.4	51.3	53.9
SK	85.1	83.6	80.9	81.8	73.1	71.3
FI	23.3	23.0	26.6	25.2	25.9	25.6
SE	49.5	47.0	42.0	42.9	40.6	42.0
UK	20.6	20.5	21.0			

Source: Eurostat, May 2018

Methodology and Notes: [See Appendix 13 – No 2](#)

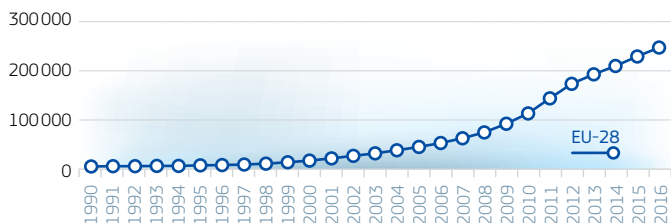
2.7 Solar and Wind Energy

2.7.1 Solar and Wind Energy – Cumulative Capacity

TOTAL

MW	1995	2000	2005	2010	2015	2016
EU-28	2479	12890	42570	115032	238396	257439
BE	5	14	169	1816	5298	5670
BG	0	0	8	513	1728	1727
CZ	0	1	23	1940	2356	2350
DK	599	2391	3131	3809	5858	6096
DE	1155	6209	20304	44910	83825	90308
EE	0	0	31	108	300	310
IE	6	119	517	1375	2442	2833
EL	27	226	492	1500	4695	4974
ES	105	2218	9978	25346	30099	30276
FR	5	45	703	6956	16972	18787
HR	0	0	6	79	466	539
IT	38	382	1669	9386	28038	28667
CY	0	0	1	89	234	242
LV	1	2	26	30	69	71
LT	0	0	1	133	505	579
LU	0	14	59	73	180	242
HU	0	0	17	295	497	549
MT	0	0	0	1	74	93
NL	252	460	1275	2327	4906	6306
AT	2	55	808	1135	3426	3826
PL	0	4	121	1108	4994	5934
PT	8	84	1066	3930	5384	5586
RO	0	0	1	389	4456	4397
SI	0	0	0	12	243	238
SK	0	0	5	22	536	536
FI	7	40	86	204	1020	1600
SE	69	212	497	2030	5944	6587
UK	200	414	1576	5516	23851	28116

SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – TOTAL – 1990-2016 (MW)



Source: Eurostat, May 2018

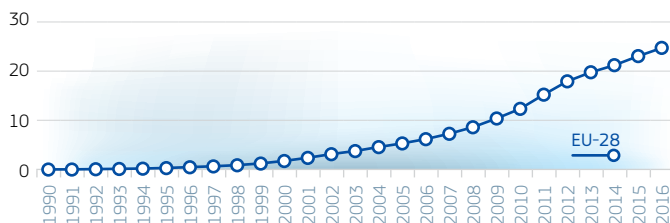
Methodology and Notes: See Appendix 13 – No 2

2.7.1 Solar and Wind Energy – Cumulative Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

%	1995	2000	2005	2010	2015	2016
EU-28	0.4	1.9	5.6	13.0	24.2	26.0
BE	0.03	0.09	1.05	9.72	25.04	26.31
BG	0.00	0.00	0.07	5.11	15.83	16.08
CZ	0.00	0.01	0.13	9.66	10.77	10.69
DK	5.53	19.41	24.02	28.34	41.84	42.52
DE	0.99	5.22	15.80	27.57	41.21	43.31
EE	0.00	0.00	1.21	3.93	10.50	12.08
IE	0.15	2.53	8.37	17.15	25.55	28.49
EL	0.30	2.07	3.70	9.80	24.79	25.95
ES	0.23	4.11	13.03	24.90	28.16	28.51
FR	0.00	0.04	0.61	5.60	13.06	14.36
HR	0.00	0.00	0.16	1.92	9.71	11.05
IT	0.06	0.51	1.95	8.80	23.97	25.11
CY	0.00	0.00	0.09	5.71	13.33	13.75
LV	0.05	0.10	1.20	1.17	2.35	2.42
LT	0.00	0.00	0.02	3.73	14.08	15.80
LU	0.00	1.15	3.51	4.27	8.90	14.16
HU	0.00	0.00	0.20	3.28	5.75	6.27
MT	0.00	0.00	0.00	0.17	11.09	16.23
NL	1.32	2.18	5.85	8.72	14.49	18.45
AT	0.01	0.31	4.28	5.36	14.02	15.43
PL	0.00	0.01	0.38	3.32	13.38	15.57
PT	0.09	0.77	7.97	20.76	27.43	27.17
RO	0.00	0.00	0.01	1.95	18.70	18.65
SI	0.00	0.00	0.00	0.38	7.23	6.73
SK	0.00	0.00	0.06	0.28	6.89	6.92
FI	0.05	0.25	0.52	1.30	6.14	9.83
SE	0.21	0.63	1.49	5.57	14.97	16.34
UK	0.29	0.53	1.91	5.89	24.51	28.80

SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – SHARE OF TOTAL – 1990-2016 (%)



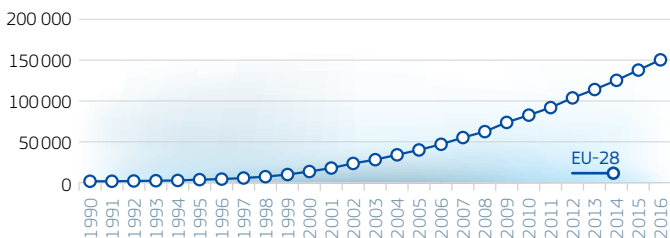
Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.7.2 Wind Cumulative Installed Capacity

TOTAL

MW	1995	2000	2005	2010	2015	2016
EU-28	2430	12711	40273	84309	141416	154325
BE	5	14	167	912	2176	2370
BG	0	0	8	488	699	699
CZ	0	1	22	213	281	282
DK	599	2390	3128	3802	5076	5245
DE	1137	6095	18248	26903	44580	49592
EE	0	0	31	108	300	310
IE	6	119	517	1374	2440	2827
EL	27	226	491	1298	2091	2370
ES	98	2206	9918	20693	22943	23003
FR	3	38	690	5912	10217	11467
HR	0	0	6	79	418	483
IT	22	363	1635	5794	9137	9384
CY	0	0	0	82	158	158
LV	1	2	26	30	69	70
LT	0	0	1	133	436	509
LU	0	14	35	44	64	120
HU	0	0	17	293	329	329
MT	0	0	0	0	0	0
NL	250	447	1224	2237	3391	4257
AT	1	50	778	981	2489	2730
PL	0	4	121	1108	4886	5747
PT	8	83	1064	3796	4937	5124
RO	0	0	1	389	3130	3025
SI	0	0	0	0	5	5
SK	0	0	5	3	3	3
FI	6	38	82	197	1005	1565
SE	67	209	493	2019	5840	6434
UK	200	412	1565	5421	14316	16217

WIND CUMULATIVE INSTALLED CAPACITY – TOTAL –
1990-2016 (MW)

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.7.2 Wind Cumulative Installed Capacity

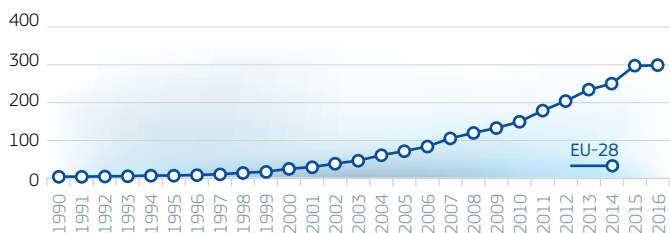
SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

%	1995	2000	2005	2010	2015	2016
EU-28	0.4	1.9	5.3	9.5	14.4	15.6
BE	0.0	0.1	1.0	4.9	10.3	11.0
BG	0.0	0.0	0.1	4.9	6.4	6.5
CZ	0.0	0.0	0.1	1.1	1.3	1.3
DK	5.5	19.4	24.0	28.3	36.3	36.6
DE	1.0	5.1	14.2	16.5	21.9	23.8
EE	0.0	0.0	1.2	3.9	10.5	12.1
IE	0.1	2.5	8.4	17.1	25.5	28.4
EL	0.3	2.1	3.7	8.5	11.0	12.4
ES	0.2	4.1	13.0	20.3	21.5	21.7
FR	0.0	0.0	0.6	4.8	7.9	8.8
HR	0.0	0.0	0.2	1.9	8.7	9.9
IT	0.0	0.5	1.9	5.4	7.8	8.2
CY	0.0	0.0	0.0	5.3	9.0	9.0
LV	0.0	0.1	1.2	1.2	2.4	2.4
LT	0.0	0.0	0.0	3.7	12.2	13.9
LU	0.0	1.2	2.1	2.6	3.2	7.0
HU	0.0	0.0	0.2	3.3	3.8	3.8
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	1.3	2.1	5.6	8.4	10.0	12.5
AT	0.0	0.3	4.1	4.6	10.2	11.0
PL	0.0	0.0	0.4	3.3	13.1	15.1
PT	0.1	0.8	8.0	20.1	25.2	24.9
RO	0.0	0.0	0.0	2.0	13.1	12.8
SI	0.0	0.0	0.0	0.0	0.1	0.1
SK	0.0	0.0	0.1	0.0	0.0	0.0
FI	0.0	0.2	0.5	1.3	6.0	9.6
SE	0.2	0.6	1.5	5.5	14.7	16.0
UK	0.3	0.5	1.9	5.8	14.7	16.6

2.7.3 Wind Gross Electricity Production

TOTAL

TWh	1995	2000	2005	2010	2015	2016
EU-28	4.1	22.2	70.5	149.4	301.9	302.9
BE	0.0	0.0	0.2	1.3	5.6	5.4
BG	0.0	0.0	0.0	0.7	1.5	1.4
CZ	0.0	0.0	0.0	0.3	0.6	0.5
DK	1.2	4.2	6.6	7.8	14.1	12.8
DE	1.7	9.4	27.2	37.8	79.2	78.6
EE	0.0	0.0	0.1	0.3	0.7	0.6
IE	0.0	0.2	1.1	2.8	6.6	6.1
EL	0.0	0.5	1.3	2.7	4.6	5.1
ES	0.3	4.7	21.2	44.3	49.3	48.9
FR	0.0	0.0	1.0	9.9	21.2	21.4
HR	0.0	0.0	0.0	0.1	0.8	1.0
IT	0.0	0.6	2.3	9.1	14.8	17.7
CY	0.0	0.0	0.0	0.0	0.2	0.2
LV	0.0	0.0	0.0	0.0	0.1	0.1
LT	0.0	0.0	0.0	0.2	0.8	1.1
LU	0.0	0.0	0.1	0.1	0.1	0.1
HU	0.0	0.0	0.0	0.5	0.7	0.7
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.3	0.8	2.1	4.0	7.6	8.2
AT	0.0	0.1	1.3	2.1	4.8	5.2
PL	0.0	0.0	0.1	1.7	10.9	12.6
PT	0.0	0.2	1.8	9.2	11.6	12.5
RO	0.0	0.0	0.0	0.3	7.1	6.6
SI	0.0	0.0	0.0	0.0	0.0	0.0
SK	0.0	0.0	0.0	0.0	0.0	0.0
FI	0.0	0.1	0.2	0.3	2.3	3.1
SE	0.1	0.5	0.9	3.5	16.3	15.5
UK	0.4	0.9	2.9	10.3	40.3	37.4

WIND GROSS ELECTRICITY PRODUCTION – TOTAL –
1990-2016 (TWh)

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.7.4 Wind Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

%	1995	2000	2005	2010	2015	2016
EU-28	0.1	0.7	2.1	4.4	9.3	9.3
BE	0.0	0.0	0.3	1.4	8.0	6.4
BG	0.0	0.0	0.0	1.5	2.9	3.1
CZ	0.0	0.0	0.0	0.4	0.7	0.6
DK	3.2	11.8	18.2	20.1	48.8	41.9
DE	0.3	1.6	4.4	6.0	12.2	12.1
EE	0.0	0.0	0.5	2.1	6.9	4.9
IE	0.1	1.0	4.3	9.9	23.2	20.2
EL	0.1	0.8	2.1	4.7	8.9	10.0
ES	0.2	2.1	7.2	14.7	17.6	17.8
FR	0.0	0.0	0.2	1.7	3.7	3.8
HR	0.0	0.0	0.1	0.9	7.0	7.9
IT	0.0	0.2	0.8	3.0	5.2	6.1
CY	0.0	0.0	0.0	0.6	4.9	4.6
LV	0.0	0.1	1.0	0.7	2.7	2.0
LT	0.0	0.0	0.0	3.9	16.4	26.6
LU	0.0	2.3	1.3	1.2	3.7	4.6
HU	0.0	0.0	0.0	1.4	2.3	2.1
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.4	0.9	2.1	3.3	6.9	7.1
AT	0.0	0.1	2.0	2.9	7.4	7.7
PL	0.0	0.0	0.1	1.1	6.6	7.6
PT	0.0	0.4	3.8	17.0	22.1	20.7
RO	0.0	0.0	0.0	0.5	10.7	10.1
SI	0.0	0.0	0.0	0.0	0.0	0.0
SK	0.0	0.0	0.0	0.0	0.0	0.0
FI	0.0	0.1	0.2	0.4	3.4	4.5
SE	0.1	0.3	0.6	2.4	10.0	9.9
UK	0.1	0.3	0.7	2.7	11.9	11.0

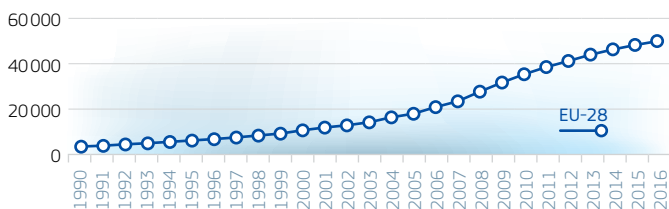
2.7.5 Wind Capacity Factor

ANNUAL AVERAGE

%	1995	2000	2005	2010	2015	2016
EU-28	20.9	21.9	21.9	22.1	26.7	24.5
BE	22.5	14.3	17.0	17.7	32.0	28.7
BG	0.0	0.0	7.8	17.4	26.0	25.5
CZ	0.0	12.5	11.9	19.7	25.5	22.0
DK	24.6	22.2	26.4	25.7	34.8	30.5
DE	18.8	19.2	18.7	17.6	22.2	19.8
EE	0.0	0.0	21.8	32.1	29.8	24.0
IE	33.3	25.6	26.9	25.6	33.7	27.2
EL	15.7	24.9	32.2	26.1	27.6	27.1
ES	34.4	26.8	26.7	26.7	26.9	26.6
FR	20.8	15.8	17.4	21.0	26.0	23.3
HR	0.0	0.0	20.8	22.0	23.8	26.2
IT	5.1	19.4	17.9	19.7	20.3	23.6
CY	0.0	0.0	0.0	4.7	17.5	17.9
LV	0.0	25.0	22.6	20.4	26.6	22.9
LT	0.0	0.0	25.0	21.1	23.2	27.9
LU	0.0	24.1	18.6	15.6	19.9	10.5
HU	0.0	0.0	7.4	22.8	26.3	26.0
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	15.9	23.2	21.1	22.3	27.8	24.0
AT	12.5	16.8	21.4	26.3	24.3	24.0
PL	0.0	15.6	13.9	18.8	27.8	27.4
PT	25.0	25.3	20.8	30.2	29.4	30.4
RO	0.0	0.0	0.0	9.8	28.2	27.2
SI	0.0	0.0	0.0	0.0	15.0	15.0
SK	0.0	0.0	15.0	25.0	25.0	25.0
FI	22.9	25.7	25.9	18.7	28.9	24.5
SE	18.5	27.3	23.7	21.7	34.8	30.1
UK	24.4	28.7	23.2	23.7	35.2	28.8

2.7.6 Solar Collectors' Surface

1 000 m ²	1995	2000	2005	2010	2015	2016
EU-28	6543	11052	18291	35537	48333	50070
BE	36	41	77	371	661	705
BG	0	0	0	194	344	354
CZ	0	0	85	309	538	569
DK	144	243	286	480	1016	1369
DE	1166	3251	7099	14044	18625	19122
EE	0	0	0	0	0	0
IE	2	4	13	185	320	343
EL	2101	2941	3047	4100	4390	4477
ES	319	403	797	2373	3582	3796
FR	598	513	583	1447	2171	2219
HR	0	20	41	92	183	204
IT	174	271	680	2415	3724	3891
CY	0	0	730	909	1009	1025
LV	0	0	0	0	0	0
LT	0	0	0	0	0	0
LU	0	0	6	29	56	59
HU	27	36	45	140	280	292
MT	0	0	0	40	65	65
NL	139	276	422	576	647	652
AT	1241	2202	3083	4441	5221	5210
PL	0	0	95	656	1900	2016
PT	200	238	289	752	1121	1176
RO	0	0	0	104	159	174
SI	0	0	0	178	239	245
SK	0	0	64	123	171	177
FI	7	10	16	31	50	55
SE	135	207	371	510	478	475
UK	254	396	462	1038	1383	1400

SOLAR COLLECTORS' SURFACE – TOTAL – 1990-2016 (1 000 m²)

Source: Eurostat, May 2018

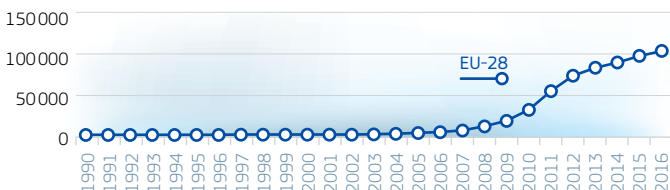
Methodology and Notes: See Appendix 13 – No 2

2.7.7 Solar Installed Capacity

TOTAL

MW	1995	2000	2005	2010	2015	2016
EU-28	49	179	2 297	30 723	96 980	103 114
BE	0	0	2	904	3 122	3 300
BG	0	0	0	25	1 029	1 028
CZ	0	0	1	1 727	2 075	2 068
DK	0	1	3	7	782	851
DE	18	114	2 056	18 007	39 245	40 716
EE	0	0	0	0	0	0
IE	0	0	0	1	2	6
EL	0	0	1	202	2 604	2 604
ES	7	12	60	4 653	7 156	7 273
FR	2	7	13	1 044	6 755	7 320
HR	0	0	0	0	48	56
IT	16	19	34	3 592	18 901	19 283
CY	0	0	1	7	76	84
LV	0	0	0	0	0	1
LT	0	0	0	0	69	70
LU	0	0	24	29	116	122
HU	0	0	0	2	168	220
MT	0	0	0	1	74	93
NL	2	13	51	90	1 515	2 049
AT	1	5	30	154	937	1 096
PL	0	0	0	0	108	187
PT	0	1	2	134	447	462
RO	0	0	0	0	1 326	1 372
SI	0	0	0	12	238	233
SK	0	0	0	19	533	533
FI	1	2	4	7	15	35
SE	2	3	4	11	104	153
UK	0	2	11	95	9 535	11 899

SOLAR INSTALLED CAPACITY – TOTAL – 1990-2016 (MW)



Source: Eurostat, May 2018

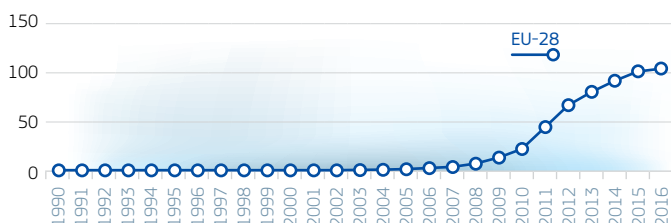
Methodology and Notes: See Appendix 13 – No 2

2.7.8 Solar Gross Electricity Production

TOTAL

TWh	1995	2000	2005	2010	2015	2016
EU-28	0.0	0.1	1.5	23.3	107.9	110.8
BE	0.0	0.0	0.0	0.6	3.1	3.1
BG	0.0	0.0	0.0	0.0	1.4	1.4
CZ	0.0	0.0	0.0	0.6	2.3	2.1
DK	0.0	0.0	0.0	0.0	0.6	0.7
DE	0.0	0.1	1.3	11.7	38.7	38.1
EE	0.0	0.0	0.0	0.0	0.0	0.0
IE	0.0	0.0	0.0	0.0	0.0	0.0
EL	0.0	0.0	0.0	0.2	3.9	3.9
ES	0.0	0.0	0.0	7.2	13.9	13.6
FR	0.0	0.0	0.0	0.6	7.3	8.2
HR	0.0	0.0	0.0	0.0	0.1	0.1
IT	0.0	0.0	0.0	1.9	22.9	22.1
CY	0.0	0.0	0.0	0.0	0.1	0.1
LV	0.0	0.0	0.0	0.0	0.0	0.0
LT	0.0	0.0	0.0	0.0	0.1	0.1
LU	0.0	0.0	0.0	0.0	0.1	0.1
HU	0.0	0.0	0.0	0.0	0.1	0.2
MT	0.0	0.0	0.0	0.0	0.1	0.1
NL	0.0	0.0	0.0	0.1	1.1	1.6
AT	0.0	0.0	0.0	0.1	0.9	1.1
PL	0.0	0.0	0.0	0.0	0.1	0.1
PT	0.0	0.0	0.0	0.2	0.8	0.8
RO	0.0	0.0	0.0	0.0	2.0	1.8
SI	0.0	0.0	0.0	0.0	0.3	0.3
SK	0.0	0.0	0.0	0.0	0.5	0.5
FI	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.1	0.1
UK	0.0	0.0	0.0	0.0	7.5	10.4

SOLAR GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2016 (TWh)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.7.9 Solar Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

%	1995	2000	2005	2010	2015	2016
EU-28	0.0	0.0	0.0	0.7	3.3	3.4
BE	0.0	0.0	0.0	0.6	4.4	3.6
BG	0.0	0.0	0.0	0.0	2.8	3.1
CZ	0.0	0.0	0.0	0.7	2.7	2.6
DK	0.0	0.0	0.0	0.0	2.1	2.4
DE	0.0	0.0	0.2	1.9	6.0	5.9
EE	0.0	0.0	0.0	0.0	0.0	0.0
IE	0.0	0.0	0.0	0.0	0.0	0.0
EL	0.0	0.0	0.0	0.3	7.5	7.6
ES	0.0	0.0	0.0	2.4	4.9	5.0
FR	0.0	0.0	0.0	0.1	1.3	1.5
HR	0.0	0.0	0.0	0.0	0.5	0.5
IT	0.0	0.0	0.0	0.6	8.1	7.6
CY	0.0	0.0	0.0	0.1	2.8	3.0
LV	0.0	0.0	0.0	0.0	0.0	0.0
LT	0.0	0.0	0.0	0.0	1.5	1.5
LU	0.0	0.0	0.4	0.5	3.8	4.6
HU	0.0	0.0	0.0	0.0	0.4	0.6
MT	0.0	0.0	0.0	0.0	7.1	14.6
NL	0.0	0.0	0.0	0.0	1.0	1.4
AT	0.0	0.0	0.0	0.1	1.4	1.6
PL	0.0	0.0	0.0	0.0	0.0	0.1
PT	0.0	0.0	0.0	0.4	1.5	1.4
RO	0.0	0.0	0.0	0.0	3.0	2.8
SI	0.0	0.0	0.0	0.1	1.8	1.6
SK	0.0	0.0	0.0	0.1	1.9	2.0
FI	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.1	0.1
UK	0.0	0.0	0.0	0.0	2.2	3.1

2.8 CHP

2.8.1 CHP Electricity

GENERATION AND CAPACITY

	CHP Electricity Generation			CHP Electrical Capacity		
	TWh			GW		
	2014	2015	2016	2014	2015	2016
EU-28	331.1	362.9	358.4	119.3	119.7	123.9
BE	12.2	12.5	12.2	2.4	2.4	2.2
BG	3.0	2.9	3.6	0.9	1.1	1.5
CZ	11.8	11.8	8.4	4.6	4.6	9.0
DK	11.5	11.6	12.0	6.2	6.1	5.9
DE	74.8	78.8	87.9	37.2	37.1	37.2
EE	1.2	1.2		0.5	0.4	
IE	2.0	2.1	2.2	0.3	0.3	0.3
EL	1.9	2.0	2.6	0.6	0.6	0.5
ES	23.3	22.7	27.2	3.9	3.5	8.5
FR	11.6	13.9	15.0	6.2	5.6	6.1
HR	0.9	0.8	1.5	0.7	0.6	0.8
IT	36.7	39.5	40.3	8.6	9.0	8.5
CY	0.1	0.0	0.0	0.0	0.0	0.0
LV	2.4	2.5	3.1	1.1	1.1	1.3
LT	1.5	1.5	1.1	1.1	1.0	0.6
LU	0.4	0.4	0.3	0.1	0.1	0.1
HU	3.8	4.1	4.8	2.3	1.6	1.5
MT	0.0	0.0	0.2	0.0	0.0	0.1
NL	30.0	29.8	30.8	9.2	9.2	9.0
AT	8.5	9.0	10.9	4.0	2.8	3.4
PL	24.1	26.5	27.6	8.6	8.6	8.7
PT	6.8	6.5	6.2	1.4	1.3	1.2
RO	6.1	5.6	5.3	1.8	1.8	1.9
SI	1.2	1.2	1.2	0.4	0.4	0.4
SK		21.1	3.0		3.7	1.0
FI	23.0	21.7	21.8	6.0	5.8	5.9
SE	12.1	13.7	9.2	5.0	4.9	3.9
UK	20.3	19.4	19.8	6.3	5.9	4.6

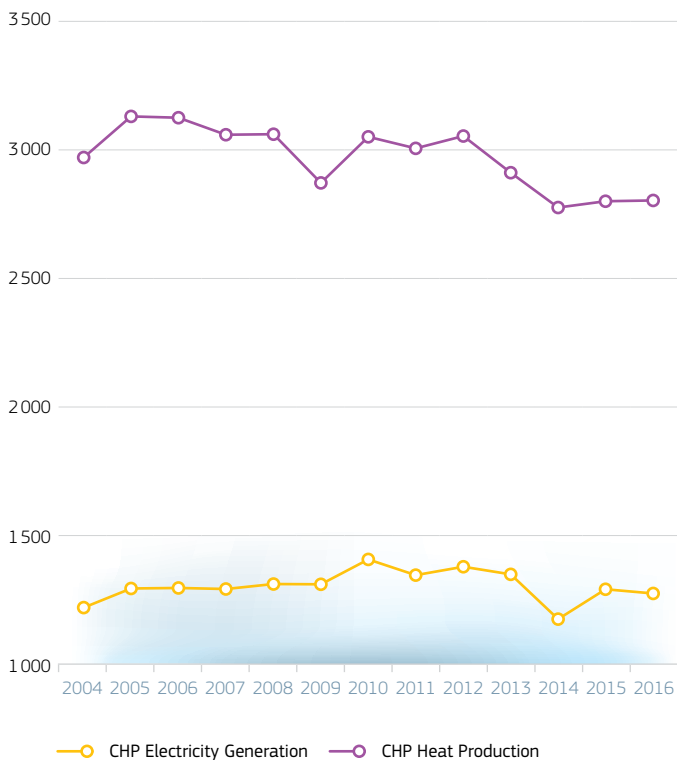
2.8.2 CHP Heat

PRODUCTION AND CAPACITY

	CHP Heat Production			CHP Heat Capacity*		
	PJ			GW		
	2014	2015	2016	2014	2015	2016
EU-28	2767.9	2791.7	2794.7	285.7	303.8	271.5
BE	107.4	104.4	104.4	5.5	5.1	5.0
BG	33.4	31.9	39.3	3.4	3.7	4.7
CZ	105.6	106.0	101.6	21.0	21.0	20.8
DK	91.1	93.3	94.9	9.6	9.5	8.8
DE	651.4	669.9	698.0	92.2	95.1	94.6
EE	12.7	12.5		1.4	1.3	
IE	11.6	12.6	11.2	0.6	0.6	0.6
EL	10.1	10.9	18.9	0.8	0.7	1.3
ES	138.2	120.3	124.2	5.5	5.0	5.8
FR	132.0	154.9	163.9	13.7	14.1	14.9
HR	11.3	10.0	16.3	1.7	1.6	2.1
IT	202.5	213.2	219.8	19.8	14.2	14.0
CY	0.2	0.2	0.1	0.0	0.0	0.0
LV	11.8	12.4	14.5	1.3	1.2	1.2
LT	13.1	12.4	9.5	2.2	1.9	1.2
LU	2.5	2.4	2.3	0.2	0.2	0.2
HU	25.9	24.4	24.7	4.8	3.2	2.8
MT	0.0	0.0	0.1	0.0	0.0	0.0
NL	196.3	189.6	174.3	18.3	18.1	16.0
AT	102.5	105.9	114.9	8.9	8.6	8.9
PL	237.6	238.6	246.5	25.2	23.9	23.8
PT	69.3	59.3	61.7	4.6	4.3	3.8
RO	55.4	51.0	45.9	10.0	9.8	6.3
SI	10.2	10.4	10.8	0.7	0.7	0.7
SK		27.3	34.4		24.3	4.0
FI	247.6	242.4	241.6	15.4	15.2	14.6
SE	145.1	151.3	91.1	10.7	12.8	8.4
UK	143.3	124.2	129.8	8.2	7.6	7.1

Source: source: Eurostat July 2018, preliminary 2016 data
 Methodology and Notes: [See Appendix 13 – No 2](#)

2.8.3 CHP Electricity and Heat

CHP ELECTRICITY AND HEAT GENERATION
EU-28 (PJ – GCV)*

* Data before 2009 is not consistent across the EU28

Source: Eurostat July 2018, preliminary 2016 data
Methodology and Notes: [See Appendix 13 – No 2](#)

2.9 Heat*

2.9.1 Gross Heat Generation

TOTAL

PJ (GCV)	1995	2000	2005	2010	2015	2016
EU-28	2 286.7	2 187.3	2 593.1	2 710.5	2 399.6	2 478.2
Index 1995	100 %	96 %	113 %	119 %	105 %	108 %
BE	10.0	23.2	22.4	38.3	37.9	37.4
BG	133.5	50.8	52.1	59.4	50.3	48.2
CZ	175.9	139.2	139.2	148.6	121.3	128.4
DK	119.1	119.2	129.0	152.1	130.6	136.7
DE	416.6	315.9	494.0	515.2	457.6	469.3
EE	30.7	27.0	26.8	25.5	21.2	23.9
IE	0.0	0.0	0.0	0.0	0.0	0.0
EL	0.0	1.2	2.0	1.9	2.1	2.1
ES	0.0	0.0	0.0	0.0	0.0	0.0
FR	23.0	135.5	178.3	169.2	162.5	179.8
HR	13.2	11.5	13.3	12.5	11.1	11.4
IT	0.0	0.0	193.1	205.3	216.9	223.9
CY	0.0	0.0	0.0	0.0	0.1	0.1
LV	46.1	31.9	31.1	28.7	25.5	29.0
LT	66.9	48.2	49.9	48.8	41.5	43.1
LU	0.0	0.5	3.2	3.1	2.4	2.4
HU	61.3	69.2	63.6	53.0	52.1	54.0
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	130.1	172.4	178.5	159.9	139.3	118.7
AT	39.2	47.9	58.7	82.4	84.1	86.3
PL	420.8	340.7	336.3	335.8	281.4	292.8
PT	1.5	5.6	13.7	21.1	19.6	18.8
RO	287.0	190.8	127.7	99.1	76.6	76.8
SI	8.9	9.4	10.1	9.8	8.7	9.0
SK	42.1	36.8	52.5	48.6	36.7	37.5
FI	97.7	150.6	179.3	211.0	177.6	196.3
SE	163.1	157.9	181.1	224.2	183.5	193.4
UK	0.0	102.1	57.2	57.0	59.1	59.0

* Only Heat sold, as considered currently in the energy balances.

Source: Eurostat, May 2018

Methodology and Notes: [See Appendix 13 – No 2](#)

2.9.1 Gross Heat Generation

BY FUEL

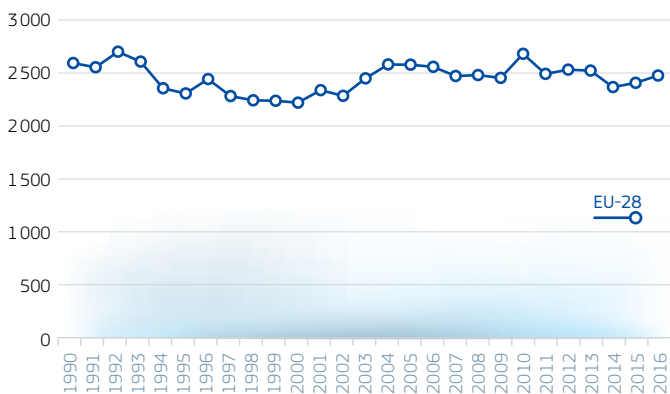
PJ (GCV)	2016						
	Gross Heat Generation	Gases	Solid Fuels	Renewables	Petroleum and Products	Wastes non-RES	Nuclear
EU-28	2 478.2	939.6	620.7	601.3	106.9	133.8	4.3
Share (%)	100.0 %	37.9 %	25.0 %	24.3 %	4.3 %	5.4 %	0.2 %
BE	37.4	22.8	0.0	1.9	0.5	1.6	0.0
BG	48.2	21.9	16.8	0.7	6.3	0.0	0.6
CZ	128.4	41.3	72.2	8.8	1.1	1.4	0.9
DK	136.7	25.3	24.9	68.2	1.4	12.6	0.0
DE	469.3	212.2	140.1	66.7	5.2	37.7	0.0
EE	23.9	6.7	2.7	12.9	0.6	1.1	0.0
IE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EL	2.1	0.0	2.1	0.0	0.0	0.0	0.0
ES	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FR	179.8	64.5	6.2	69.8	8.7	25.5	0.0
HR	11.4	10.0	0.0	1.2	0.2	0.0	0.0
IT	223.9	144.1	1.9	38.9	33.8	5.2	0.0
CY	0.1	0.0	0.0	0.1	0.0	0.0	0.0
LV	29.0	17.3	0.1	11.5	0.0	0.0	0.0
LT	43.1	11.3	0.1	21.0	0.3	0.9	0.0
LU	2.4	1.8	0.0	0.6	0.0	0.0	0.0
HU	54.0	38.4	2.6	8.5	0.1	1.2	0.8
MT	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NL	118.7	79.6	3.5	13.5	12.7	9.5	0.0
AT	86.3	31.0	3.2	39.7	5.4	6.8	0.0
PL	292.8	32.1	241.2	14.0	3.6	1.4	0.0
PT	18.8	18.7	0.0	0.0	0.2	0.0	0.0
RO	76.8	48.0	18.7	3.4	6.5	0.0	0.0
SI	9.0	2.2	5.1	1.5	0.2	0.1	0.0
SK	37.5	16.9	8.0	5.9	4.6	0.1	2.0
FI	196.3	28.1	61.3	81.6	9.5	5.7	0.0
SE	193.4	12.9	6.7	130.2	4.3	22.4	0.0
UK	59.0	52.8	3.4	0.6	1.5	0.7	0.0

Source: Eurostat, May 2018

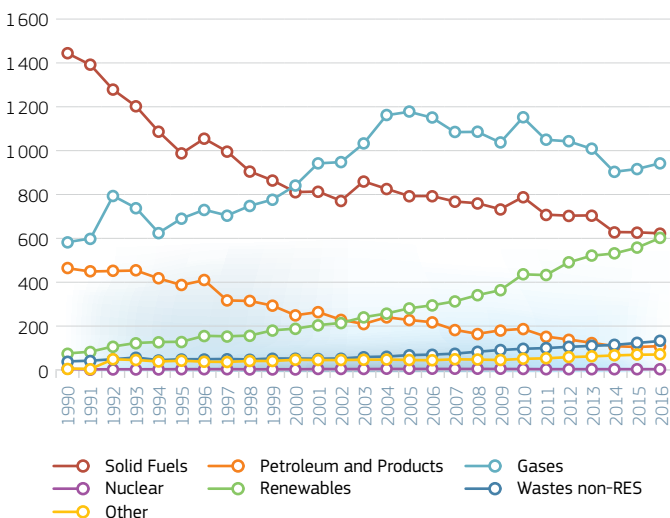
Methodology and Notes: See Appendix 13 – No 2

2.9.1 Gross Heat Generation

TOTAL – EU-28 – 1990-2016 (PJ – GCV)



GROSS HEAT GENERATION – BY FUEL – 1990-2016 (PJ – GCV)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

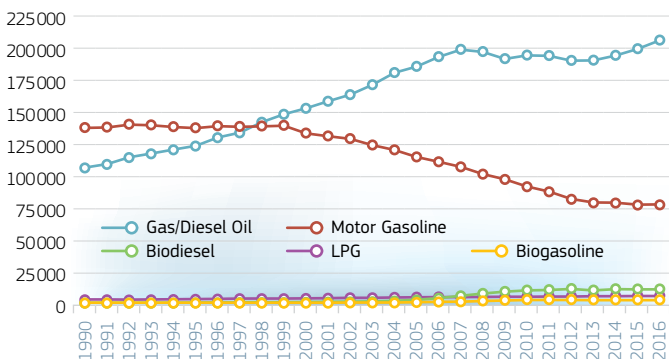
2.10 Transport

2.10.1 Fuels Final Consumption

PETROLEUM PRODUCTS AND BIOFUELS – EU-28

ktoe	Final Consumption Petroleum Products	Gas/Diesel Oil	Motor Gasoline	LPG	Final Consumption Biofuels	Biodiesel	Biogasoline
1990	278 355	106 322	138 030	2 707	6	6	0
1995	300 163	123 470	137 901	3 046	216	187	24
1996	310 233	130 103	139 450	3 182	317	274	39
1997	315 825	133 966	138 956	3 470	432	368	55
1998	327 064	142 201	139 249	3 552	408	335	63
1999	336 371	148 441	139 850	3 531	455	383	60
2000	336 943	153 195	133 773	3 653	709	636	58
2001	339 316	158 840	131 425	3 872	836	752	65
2002	342 181	164 033	129 397	4 132	1 109	930	158
2003	346 588	171 836	124 387	4 292	1 420	1 168	241
2004	355 842	181 281	120 551	4 632	1 927	1 603	304
2005	357 761	186 198	115 037	4 774	3 216	2 470	591
2006	363 573	193 814	111 144	4 936	5 394	3 905	898
2007	367 370	199 610	107 227	4 897	7 597	5 802	1 172
2008	359 279	197 764	101 430	5 050	9 753	7 694	1 800
2009	345 856	192 228	97 213	5 267	11 553	9 258	2 238
2010	342 695	195 050	91 483	5 312	13 104	10 262	2 804
2011	339 826	194 736	87 638	5 510	13 583	10 697	2 874
2012	328 620	190 931	81 728	5 478	14 280	11 448	2 820
2013	325 970	191 136	78 964	5 788	12 982	10 303	2 674
2014	329 918	194 872	78 744	5 857	14 077	11 412	2 657
2015	335 479	200 028	77 223	5 985	13 850	11 159	2 686
2016	344 648	206 900	77 299	5 984	13 708	11 083	2 620

EU-28 – FUELS CONSUMPTION IN THE TRANSPORT SECTOR – 1990-2016 (ktoe)



Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.10.2 Biofuels

BY FUEL – EU-28

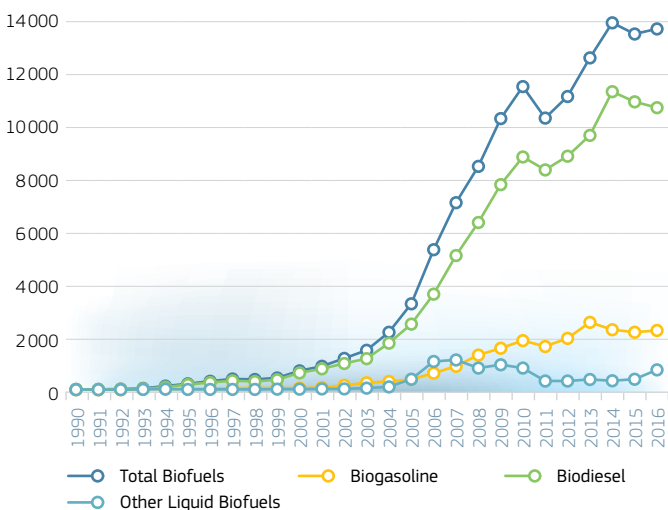
	Production			Share in Transport Fuels		
	Total Biofuels	Biodiesel	Biogasoline	Total Biofuels	of Biogasoline in Motor Gasoline	of Biodiesel in Gas/Diesel Oil
	ktoe			%		
1990	6	6	0	0.0%	0.0%	0.0%
1991	7	7	0	0.0%	0.0%	0.0%
1992	20	16	2	0.0%	0.0%	0.0%
1993	48	25	18	0.0%	0.0%	0.0%
1994	136	96	25	0.0%	0.0%	0.1%
1995	223	188	25	0.1%	0.0%	0.2%
1996	314	269	39	0.1%	0.0%	0.2%
1997	402	339	54	0.1%	0.0%	0.3%
1998	385	311	63	0.1%	0.0%	0.2%
1999	442	371	59	0.1%	0.0%	0.3%
2000	711	635	60	0.2%	0.0%	0.4%
2001	888	791	71	0.2%	0.0%	0.5%
2002	1 188	998	160	0.3%	0.1%	0.6%
2003	1 498	1 185	263	0.4%	0.2%	0.7%
2004	2 193	1 773	311	0.5%	0.3%	0.9%
2005	3 278	2 502	382	0.9%	0.5%	1.3%
2006	5 343	3 644	628	1.5%	0.8%	2.0%
2007	7 133	5 119	887	2.0%	1.1%	2.8%
2008	8 517	6 378	1 315	2.6%	1.7%	3.7%
2009	10 346	7 825	1 575	3.2%	2.3%	4.6%
2010	11 570	8 879	1 868	3.7%	3.0%	5.0%
2011	10 360	8 388	1 645	3.8%	3.2%	5.2%
2012	11 187	8 905	1 957	4.2%	3.3%	5.7%
2013	12 658	9 701	2 571	3.8%	3.3%	5.1%
2014	13 996	11 376	2 283	4.1%	3.3%	5.5%
2015	13 573	10 983	2 191	4.0%	3.4%	5.3%
2016	13 772	10 762	2 254	3.8%	3.3%	5.1%

Source: Eurostat, May 2018

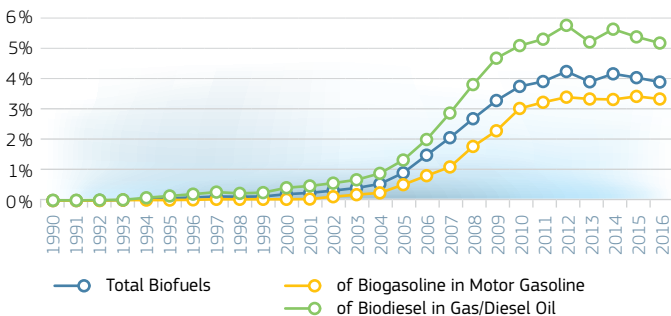
Methodology and Notes: See Appendix 13 – No 2

2.10.2 Biofuels

PRODUCTION BIOFUELS – EU-28 – 1990-2016 (ktoe)



BIOFUELS SHARE IN TRANSPORT FUELS – EU-28 – 1990-2016 (%)



Source: Eurostat, May 2018
 Methodology and Notes: See Appendix 13 – No 2

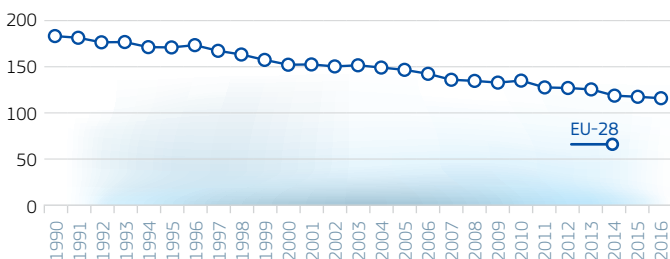
2.11 Energy Efficiency

2.11.1 Energy Intensity

ALL FUELS

toe/M€ '2010	1995	2000	2005	2010	2015	2016
EU-28	173	155	149	138	120	119
Index 1995	100%	89%	86%	79%	69%	68%
BE	200	191	174	167	141	148
BG	947	759	614	465	448	423
CZ	399	361	327	290	249	239
DK	104	88	81	82	65	66
DE	159	145	141	129	112	111
EE	692	466	374	418	358	346
IE	140	117	94	91	59	59
EL	150	149	137	127	132	131
ES	144	142	141	121	113	110
FR	157	145	144	134	121	117
HR	263	239	223	209	191	186
IT	115	112	117	111	100	99
CY	166	169	149	142	128	133
LV	483	314	252	260	207	203
LT	592	386	330	242	205	204
LU	144	119	135	116	90	88
HU	375	313	281	269	232	231
MT	175	149	157	142	89	81
NL	168	140	142	137	118	117
AT	124	114	123	115	107	107
PL	519	360	322	278	228	231
PT	151	151	157	135	134	133
RO	550	441	356	285	225	215
SI	268	231	220	202	178	178
SK	503	437	355	264	215	209
FI	238	205	192	198	178	181
SE	205	163	150	138	111	116
UK	166	146	129	116	94	91

ENERGY INTENSITY – ALL FUELS – 1990-2016 (toe/M€ '2010)

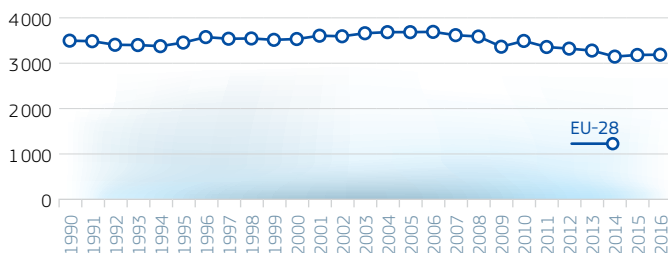


Source: Eurostat, DG Economic and Financial Affairs, May 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.11.2 Energy Consumption per Capita

GROSS INLAND CONSUMPTION – ALL FUELS

kgoe/cap	1995	2000	2005	2010	2015	2016
EU-28	3475	3550	3702	3508	3204	3215
Index 1995	100%	102%	107%	101%	92%	93%
BE	5314	5792	5654	5618	4828	5079
BG	2692	2261	2569	2395	2570	2534
CZ	4059	4025	4454	4342	4017	3961
DK	3873	3703	3609	3621	2978	3053
DE	4190	4166	4145	4065	3867	3861
EE	3791	3549	4132	4613	4789	4726
IE	3076	3819	3707	3337	3034	3141
EL	2265	2626	2863	2583	2252	2239
ES	2575	3055	3331	2802	2614	2631
FR	4073	4251	4402	4132	3808	3728
HR	1686	1872	2269	2191	2017	2049
IT	2846	3061	3284	3006	2569	2551
CY	3045	3495	3464	3345	2682	2879
LV	1849	1622	2041	2183	2205	2227
LT	2371	2011	2596	2160	2366	2435
LU	8194	8427	10407	9244	7425	7283
HU	2533	2475	2784	2656	2555	2615
MT	2006	2060	2324	2270	1722	1612
NL	4884	4908	5154	5227	4578	4625
AT	3413	3627	4151	4085	3890	3892
PL	2562	2317	2416	2648	2516	2632
PT	2062	2467	2618	2297	2219	2250
RO	2039	1632	1834	1764	1632	1640
SI	3052	3245	3667	3584	3184	3293
SK	3308	3390	3542	3312	3030	3043
FI	5759	6267	6589	6934	6082	6309
SE	5838	5518	5662	5437	4674	4998
UK	3836	3922	3891	3404	2958	2897

ENERGY CONSUMPTION PER CAPITA – ALL FUELS –
1990-2016 (kgoe/cap)

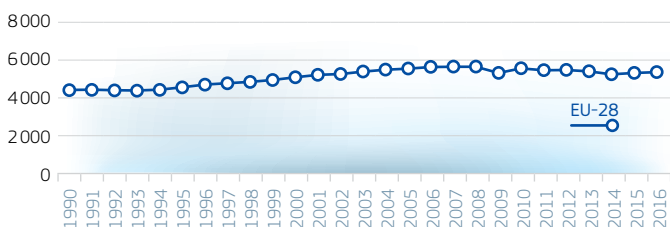
Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.11.3 Final Electricity Consumption per Capita

ALL FUELS

kWh/cap	1995	2000	2005	2010	2015	2016
EU-28	4685	5189	5630	5641	5411	5456
Index 1995	100%	111%	120%	120%	115%	116%
BE	6757	7573	7678	7686	7271	7236
BG	3404	2961	3345	3652	3933	4040
CZ	4653	4804	5421	5183	5185	5311
DK	5922	6089	6184	5792	5456	5459
DE	5534	5884	6330	6509	6339	6296
EE	3146	3579	4445	5181	5211	5547
IE	4128	5371	5923	5588	5360	5411
EL	3235	4005	4640	4777	4677	4958
ES	3555	4657	5595	5266	4995	5007
FR	5780	6357	6735	6868	6541	6629
HR	2129	2631	3344	3686	3631	3651
IT	4192	4795	5199	5057	4729	4715
CY	3444	4339	5402	5960	4830	5186
LV	1786	1880	2547	2931	3253	3292
LT	1744	1764	2377	2652	3198	3375
LU	12316	13319	13334	13132	11058	11049
HU	2684	2880	3203	3416	3682	3776
MT	3345	4031	4614	4406	4808	4693
NL	5245	6020	6419	6516	6101	6221
AT	5881	6441	6987	7172	7113	7109
PL	2325	2563	2751	3122	3363	3499
PT	2878	3744	4414	4718	4416	4482
RO	1601	1511	1817	2036	2166	2189
SI	4696	5293	6379	5835	6199	6310
SK	4057	4077	4253	4477	4495	4605
FI	12791	14636	15420	15603	14340	14730
SE	14129	14526	14504	14048	12810	12942
UK	5086	5611	5797	5263	4679	4648

FINAL ELECTRICITY CONSUMPTION PER CAPITA – ALL FUELS –
1990-2016 (kWh/cap)

Source: Eurostat, May 2018

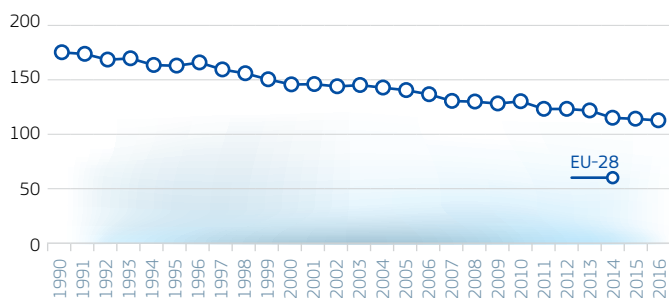
Methodology and Notes: See Appendix 13 – No 2

2.11.4 Primary Energy Intensity

ALL FUELS

toe/M€ '2010	1995	2000	2005	2010	2015	2016
EU-28	162	145	140	129	113	112
Index 1995	100%	89%	86%	80%	70%	69%
BE	178	168	151	147	119	126
BG	896	719	588	454	434	411
CZ	377	342	306	272	234	229
DK	102	86	80	81	64	65
DE	148	135	131	120	105	104
EE	670	450	359	412	352	341
IE	133	111	91	89	59	58
EL	147	145	133	122	128	128
ES	133	132	133	114	109	106
FR	147	136	135	127	114	111
HR	236	220	207	196	179	175
IT	108	107	111	105	96	94
CY	161	163	145	138	127	131
LV	479	308	247	256	202	198
LT	555	349	302	219	172	173
LU	142	117	134	115	90	87
HU	352	293	260	249	214	215
MT	175	149	153	141	88	80
NL	143	119	116	112	98	96
AT	117	107	117	109	101	100
PL	499	342	306	265	214	218
PT	136	137	143	125	126	126
RO	535	418	334	273	217	207
SI	263	223	211	197	174	175
SK	477	404	331	249	201	197
FI	229	198	186	192	170	173
SE	197	157	143	132	107	111
UK	156	139	123	111	90	87

PRIMARY ENERGY INTENSITY – ALL FUELS – 1990-2016 (toe/M€ '2010)

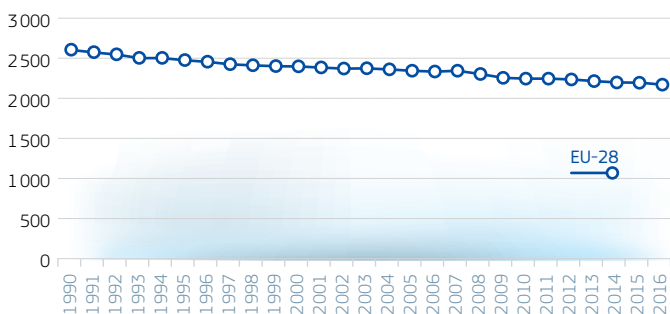


Source: Eurostat, DG Economic and Financial Affairs, May 2018
 Methodology and Notes: See Appendix 13 – No 2

2.11.5 Carbon Intensity

ALL FUELS

kg CO ₂ /toe	1995	2000	2005	2010	2015	2016
EU-28	2516	2423	2359	2244	2185	2159
Index 1995	100%	96%	94%	89%	87%	86%
BE	2236	2034	1937	1719	1742	1632
BG	2546	2445	2575	2703	2616	2522
CZ	3201	3110	2803	2629	2515	2590
DK	2963	2732	2695	2516	2171	2224
DE	2778	2671	2584	2558	2596	2587
EE	3272	3038	3013	3004	2424	2705
IE	3304	3224	3297	2882	2854	2835
EL	3267	3311	3402	3180	2967	2879
ES	2607	2480	2502	2137	2218	2134
FR	1665	1645	1577	1502	1397	1429
HR	2191	2372	2422	2283	2152	2165
IT	2788	2722	2619	2397	2309	2298
CY	3278	3050	3118	3027	3049	3005
LV	1945	1861	1657	1849	1657	1629
LT	1723	1658	1607	2001	1915	1868
LU	2910	2631	2774	2675	2536	2500
HU	2374	2342	2181	1986	1875	1874
MT	3539	1992	1840	1212	919	724
NL	2102	2007	1900	1922	1969	1955
AT	2415	2340	2387	2180	2060	2058
PL	3656	3571	3479	3302	3260	3228
PT	2683	2632	2567	2253	2346	2252
RO	2709	2564	2585	2347	2417	2341
SI	2520	2403	2313	2233	2062	2091
SK	2535	2272	2262	2171	2072	2068
FI	1993	1760	1669	1761	1381	1431
SE	1156	1128	1054	1044	961	880
UK	2599	2553	2547	2508	2328	2233

CARBON INTENSITY – ALL FUELS – 1990-2016 (kg CO₂/toe)

Sources: EEA/UNFCCC, Eurostat, June 2018
 Methodology and Notes: See Appendix 13 – No 2

2.12 RES Indicators

2.12.1 RES Shares*

OVERALL AND HEATING & COOLING

%	Overall RES with Aviation Cap**				RES-H&C – Heating and Cooling			
	2005	2010	2015	2016	2005	2010	2015	2016
EU-28	9.0	12.9	16.7	17.0	10.9	15.0	18.7	19.1
BE	2.3	5.7	7.9	8.7	3.4	6.1	7.8	8.1
BG	9.4	14.1	18.2	18.8	14.3	24.4	28.6	30.0
CZ	7.1	10.5	15.0	14.9	10.9	14.0	19.6	19.9
DK	16.0	22.1	31.0	32.2	22.8	31.0	40.1	41.7
DE	6.7	10.5	14.6	14.8	6.8	9.8	12.9	13.0
EE	17.5	24.6	28.6	28.8	32.2	43.3	49.6	51.2
IE	2.9	5.7	9.2	9.5	3.5	4.5	6.6	6.8
EL	7.0	9.8	15.4	15.2	12.8	17.9	25.6	24.5
ES	8.5	13.8	16.2	17.3	9.4	12.6	16.8	16.8
FR	9.6	12.7	15.1	16.0	12.3	16.2	19.7	21.1
HR	23.8	25.1	29.0	28.3	30.0	32.8	38.5	37.6
IT	7.5	13.0	17.5	17.4	8.2	15.6	19.3	18.9
CY	3.1	6.0	9.4	9.3	10.0	18.2	22.5	23.0
LV	32.3	30.4	37.6	37.2	42.7	40.7	51.8	51.9
LT	16.8	19.6	25.8	25.6	29.3	32.5	46.1	46.5
LU	1.4	2.9	5.0	5.4	3.6	4.7	7.1	7.3
HU	6.9	12.7	14.4	14.2	9.9	18.1	21.2	20.8
MT	0.1	1.0	5.0	6.0	1.0	7.8	14.1	15.3
NL	2.5	3.9	5.8	6.0	2.4	3.1	5.5	5.5
AT	23.7	30.2	32.8	33.5	22.0	29.0	32.4	33.3
PL	6.9	9.3	11.7	11.3	10.2	11.7	14.5	14.7
PT	19.5	24.2	28.0	28.5	32.1	33.9	33.4	35.1
RO	17.3	23.4	24.8	25.0	18.0	27.2	25.9	26.9
SI	16.0	20.4	21.9	21.3	18.9	28.1	33.9	34.0
SK	6.4	9.1	12.9	12.0	5.0	7.9	10.8	9.9
FI	28.8	32.4	39.2	38.7	39.1	44.2	52.5	53.7
SE	40.6	47.2	53.8	53.8	51.9	60.9	68.6	68.6
UK	1.3	3.7	8.5	9.3	0.8	2.7	6.3	7.0

* Of the Gross Final Energy.

** Break in Series between 2010 and 2011 due to the Application of the Biofuels Compliance Rules.

Source: Eurostat-RES SHARES, February 2018
Methodology and Notes: See Appendix 13 – No 2

2.12.1 RES Shares*

ELECTRICITY AND TRANSPORT

%	RES-E – Electricity Generation				RES-T – Transport**			
	2005	2010	2015	2016	2005	2010	2015	2016
EU-28	14.8	19.7	28.8	29.6	1.8	5.2	6.6	7.1
BE	2.4	7.1	15.5	15.8	0.6	4.7	3.8	5.9
BG	9.3	12.7	19.1	19.2	0.8	1.4	6.5	7.3
CZ	3.7	7.5	14.1	13.6	0.9	5.1	6.5	6.4
DK	24.6	32.7	51.3	53.7	0.4	1.1	6.7	6.8
DE	10.5	18.2	30.8	32.2	4.0	6.4	6.6	6.9
EE	1.1	10.4	15.1	15.5	0.2	0.4	0.4	0.4
IE	7.2	14.6	25.2	27.2	0.1	2.5	5.7	5.0
EL	8.2	12.3	22.1	23.8	0.1	1.9	1.4	1.4
ES	19.1	29.8	37.0	36.6	1.3	5.0	1.2	5.3
FR	13.7	14.8	18.7	19.2	2.1	6.5	8.5	8.9
HR	35.6	37.6	45.4	46.7	1.0	1.1	3.6	1.3
IT	16.3	20.1	33.5	34.0	1.0	4.8	6.4	7.2
CY	0.0	1.4	8.4	8.6	0.0	2.0	2.5	2.7
LV	43.0	42.1	52.2	51.3	2.4	4.0	3.9	2.8
LT	3.8	7.4	15.5	16.8	0.6	3.8	4.6	3.6
LU	3.2	3.8	6.2	6.7	0.1	2.1	6.5	5.9
HU	4.4	7.1	7.3	7.2	0.9	6.0	7.0	7.4
MT	0.0	0.0	4.2	5.6	0.0	0.0	4.7	5.4
NL	6.3	9.6	11.1	12.5	0.4	3.3	5.3	4.6
AT	61.9	65.7	70.3	72.6	4.8	10.7	11.4	10.6
PL	2.7	6.6	13.4	13.4	1.6	6.6	5.6	3.9
PT	27.7	40.7	52.6	54.1	0.5	5.5	7.4	7.5
RO	26.9	30.4	43.2	42.7	1.6	3.8	5.5	6.2
SI	28.7	32.2	32.7	32.1	0.8	3.1	2.2	1.6
SK	15.7	17.8	22.7	22.5	1.6	5.3	8.5	7.5
FI	26.9	27.7	32.5	32.9	0.9	4.4	22.0	8.4
SE	50.9	56.0	65.8	64.9	6.2	9.2	24.0	30.3
UK	4.1	7.5	22.3	24.6	0.5	3.3	4.4	4.9

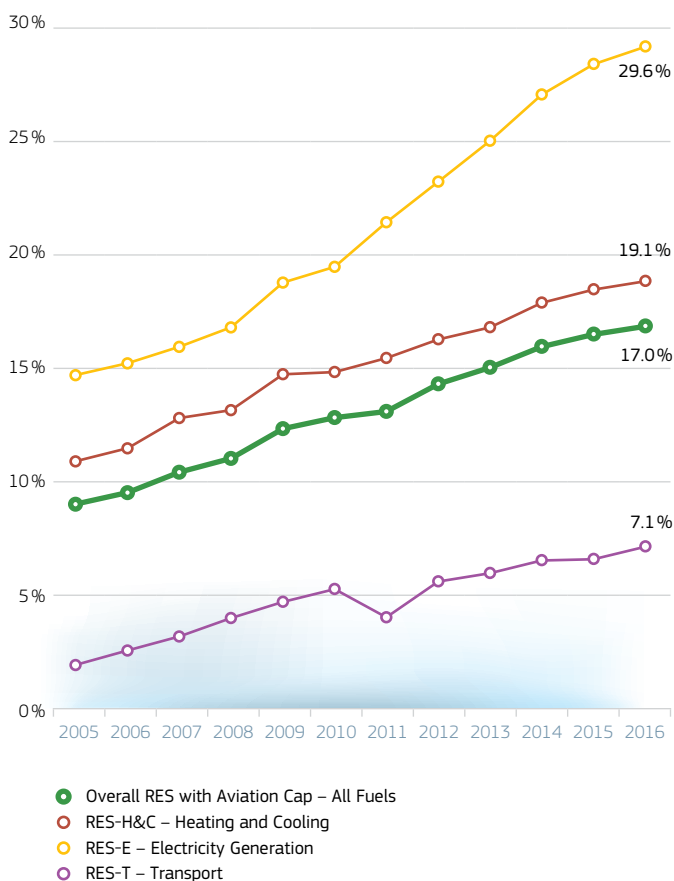
* Of the Gross Final Energy.

** Break in Series between 2010 and 2011 due to the Application of the Biofuels Compliance Rules.

Source: Eurostat-RES SHARES, February 2018
Methodology and Notes: See Appendix 13 – No 2

2.12.1 RES Shares*

IN THE GROSS FINAL ENERGY CONSUMPTION – EU-28 (%)



* Break in Series between 2010 and 2011 due to the Application of the Biofuels Compliance Rules.

Source: Eurostat-RES SHARES, February 2018
 Methodology and Notes: [See Appendix 13 – No 2](#)

2.13 Energy Prices

2.13.1 Prices of Transport Fuels

AUTOMOTIVE DIESEL OIL – ALL TAXES INCLUDED*

Current Prices (€/litre)	2009	2010	2015	2016	2017	2018
EU-28	1.01	1.17	1.24	1.12	1.21	1.30
BE	0.95	1.14	1.16	1.10	1.25	1.35
BG	0.84	0.98	1.13	0.95	1.01	1.07
CZ	0.99	1.21	1.15	1.01	1.12	1.20
DK	1.05	1.21	1.28	1.17	1.25	1.33
DE	1.07	1.20	1.18	1.08	1.17	1.22
EE	0.91	1.10	1.08	1.03	1.17	1.28
IE	1.02	1.22	1.26	1.15	1.24	1.31
EL	0.97	1.24	1.18	1.07	1.26	1.35
ES	0.91	1.07	1.12	1.01	1.10	1.18
FR	1.00	1.14	1.15	1.10	1.23	1.41
HR			1.16	1.07	1.17	1.27
IT	1.08	1.21	1.41	1.28	1.38	1.46
CY	0.83	1.00	1.23	1.13	1.20	1.27
LV	0.92	1.06	1.06	0.95	1.05	1.15
LT	0.89	1.02	1.07	0.95	1.03	1.11
LU	0.85	0.99	1.02	0.92	0.99	1.07
HU	0.96	1.16	1.16	1.06	1.16	1.21
MT	0.96	1.04	1.27	1.17	1.18	1.18
NL	1.00	1.15	1.24	1.13	1.22	1.31
AT	0.97	1.10	1.12	1.03	1.11	1.18
PL	0.84	1.06	1.08	0.94	1.04	1.12
PT	1.00	1.15	1.19	1.13	1.24	1.32
RO	0.83	1.03	1.20	1.07	1.04	1.19
SI	1.01	1.15	1.18	1.07	1.18	1.25
SK	1.10	1.11	1.14	1.03	1.13	1.21
FI	0.99	1.13	1.31	1.20	1.30	1.36
SE	1.04	1.25	1.37	1.34	1.43	1.48
UK	1.17	1.39	1.59	1.35	1.37	1.43

* First semester 2018.

Sources: DG Energy, Member States, Weekly Oil Bulletin 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.13.1 Prices of Transport Fuels

EURO-SUPER 95 – ALL TAXES INCLUDED*

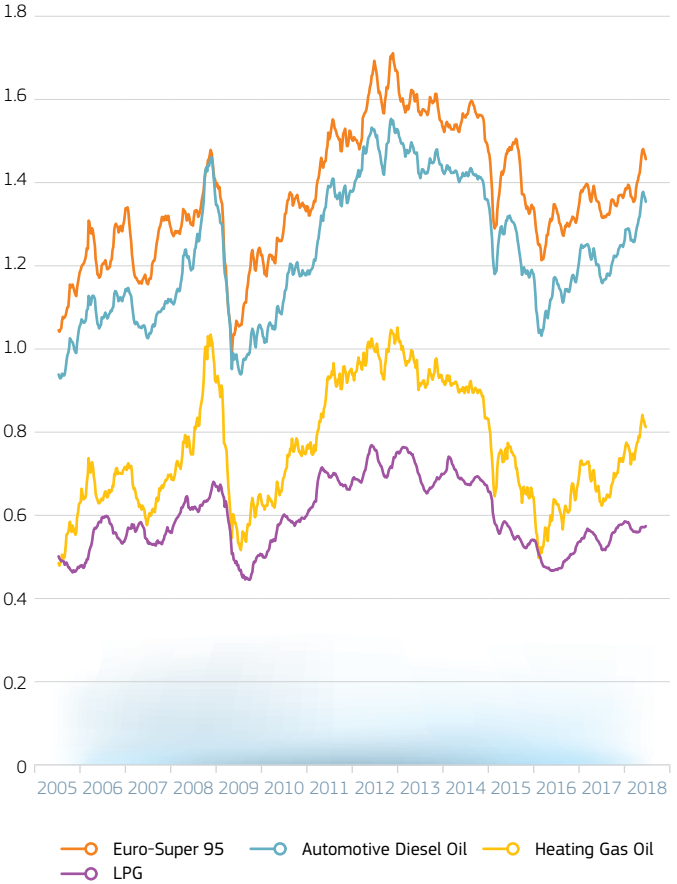
Current Prices (€/litre)	2009	2010	2015	2016	2017	2018
EU-28	1.16	1.33	1.40	1.29	1.35	1.40
BE	1.24	1.40	1.37	1.26	1.35	1.38
BG	0.88	1.02	1.10	0.98	1.03	1.07
CZ	1.03	1.25	1.15	1.06	1.15	1.22
DK	1.28	1.44	1.50	1.41	1.50	1.57
DE	1.26	1.39	1.40	1.31	1.37	1.39
EE	0.92	1.11	1.11	1.06	1.19	1.32
IE	1.11	1.30	1.37	1.28	1.36	1.41
EL	1.00	1.43	1.48	1.39	1.51	1.57
ES	1.01	1.16	1.23	1.15	1.22	1.27
FR	1.21	1.34	1.36	1.30	1.38	1.49
HR			1.26	1.18	1.27	1.34
IT	1.23	1.36	1.54	1.44	1.53	1.58
CY	0.88	1.04	1.23	1.15	1.21	1.26
LV	0.96	1.09	1.13	1.07	1.15	1.25
LT	1.02	1.18	1.16	1.06	1.13	1.19
LU	1.03	1.16	1.18	1.09	1.16	1.20
HU	1.00	1.22	1.16	1.07	1.15	1.19
MT	1.12	1.19	1.36	1.29	1.31	1.31
NL	1.35	1.49	1.56	1.48	1.55	1.61
AT	1.04	1.19	1.20	1.11	1.18	1.23
PL	0.96	1.13	1.11	1.00	1.08	1.14
PT	1.23	1.37	1.43	1.38	1.46	1.53
RO	0.84	1.06	1.20	1.09	1.05	1.17
SI	1.05	1.20	1.29	1.19	1.27	1.32
SK	1.11	1.25	1.29	1.21	1.28	1.34
FI	1.28	1.43	1.47	1.38	1.46	1.49
SE	1.12	1.34	1.41	1.38	1.46	1.49
UK	1.12	1.36	1.54	1.33	1.34	1.39

* First semester 2018.

Sources: DG Energy, Member States, Weekly Oil Bulletin 2018
Methodology and Notes: See Appendix 13 – No 2

2.13.1 Prices of Transport Fuels

CONSUMER PRICES OF PETROLEUM PRODUCTS EU-28 WEIGHTED AVERAGE * (€ per LITRE)



*All Taxes Included, weekly prices.

First semester 2018.

Incomplete EU-28 series for the period 2005-2013 due to later accession to the EU of Bulgaria, Croatia and Romania.

Sources: DG Energy, Member States, Weekly Oil Bulletin 2018
Methodology and Notes: [See Appendix 13 – No 2](#)

2.13.2 Fuel Prices* – Domestic Consumers

GAS – BAND D2

20GJ < CONSUMPTION < 200GJ – 2ND SEMESTER**

€/GJ (GCV)	2009	2010	2015	2016	2017
EU-28	14.60	15.85	19.75	17.67	17.58
BE	14.33	16.78	17.24	14.83	15.32
BG	9.67	11.98	10.86	8.65	10.42
CZ	13.11	14.35	16.21	15.65	15.73
DK	23.64	26.81	21.22	20.59	24.30
DE	16.35	15.86	18.93	17.83	16.93
EE	10.07	11.14	10.68	9.10	11.46
IE	15.29	14.63	20.11	18.83	18.04
EL			20.83	18.12	
ES	14.88	15.00	26.57	23.82	24.03
FR	16.20	15.98	20.35	18.79	19.31
HR	9.10	10.54	12.76	10.28	10.16
IT	14.84	21.86	25.13	23.29	24.28
CY					
LV	10.52	11.28	13.47	11.29	10.91
LT	11.29	12.59	12.12	10.76	10.98
LU	12.82	13.13	13.40	11.62	11.06
HU	13.23	15.38	9.78	9.99	10.14
MT					
NL	18.73	19.99	22.30	22.45	22.65
AT	17.23	16.71	19.75	18.71	19.41
PL	12.78	14.04	13.84	12.26	12.27
PT	16.52	17.49	27.28	22.63	22.19
RO	7.45	7.73	9.45	8.98	8.58
SI	14.96	18.68	16.91	15.64	14.76
SK	13.21	12.39	13.74	12.37	12.36
FI					
SE	26.12	29.48	32.58	31.73	31.26
UK	11.84	11.72	18.56	13.93	13.32

* All Taxes and Levies Included.

**Prices from second semester each year.

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.13.2 Fuel Prices* – Domestic Consumers

ELECTRICITY – BAND DC

2 500 kWh < CONSUMPTION < 5 000 kWh

2ND SEMESTER**

€/100 kWh	2009	2010	2015	2016	2017
EU-28	16.38	17.31	21.03	20.53	20.48
BE	18.64	19.74	23.52	27.45	28.77
BG	8.18	8.30	9.57	9.38	9.83
CZ	15.33	15.49	14.08	14.21	14.88
DK	25.55	27.08	30.42	30.84	30.10
DE	22.94	24.38	29.46	29.77	30.48
EE	9.20	10.04	12.91	12.38	13.19
IE	18.55	18.75	24.54	23.38	23.55
EL	10.32	12.11	17.71	17.23	16.20
ES	16.84	18.51	23.70	22.84	21.77
FR	12.07	13.50	16.82	17.11	17.56
HR	11.64	11.53	13.12	13.31	12.36
IT	19.97	19.20	24.28	23.40	20.80
CY	16.42	20.21	18.38	16.21	18.26
LV	10.54	10.48	16.50	16.24	15.82
LT	9.26	12.16	12.43	11.71	11.07
LU	18.82	17.47	17.67	16.98	16.18
HU	16.62	15.74	11.45	11.25	11.34
MT	15.13	16.53	12.69	12.74	13.64
NL	19.06	17.89	18.46	15.92	15.56
AT	19.09	19.30	19.83	20.10	19.78
PL	12.91	13.82	14.18	13.52	14.51
PT	15.94	16.66	22.85	22.98	22.30
RO	9.79	10.52	13.19	12.33	12.89
SI	13.41	14.26	16.31	16.29	16.13
SK	15.60	16.37	15.17	15.37	14.42
FI	12.89	13.70	15.30	15.45	15.99
SE	16.46	19.58	18.74	19.62	19.93
UK	14.07	14.49	21.83	18.31	18.56

* All Taxes and Levies Included.

**Prices from second semester each year.

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.13.3 Fuel Prices* – Industrial Consumers

GAS – BAND I3

10000 GJ < CONSUMPTION < 100000 GJ

2ND SEMESTER**

€/GJ (GCV)	2009	2010	2015	2016	2017
EU-28	8.34	9.04	9.55	8.31	7.82
BE	8.50	8.20	7.94	7.15	6.36
BG	5.96	8.41	7.49	5.34	7.02
CZ	7.56	10.07	8.17	7.16	6.82
DK	6.85	10.72	9.54	8.37	9.30
DE	9.61	11.09	10.47	9.21	8.51
EE	6.39	7.85	7.54	6.50	7.69
IE	7.31	8.80	10.28	9.43	8.96
EL			10.00	7.85	
ES	7.53	8.08	8.81	7.22	7.40
FR	8.80	9.69	10.19	10.51	9.59
HR	7.43	10.95	9.74	7.63	6.87
IT	7.83	8.34	8.87	7.58	7.02
CY					
LV	7.69	8.84	8.17	6.89	7.92
LT	7.55	9.40	6.05	6.81	9.19
LU	10.03	11.72	10.33	9.17	8.71
HU	10.06	9.93	9.38	7.63	6.84
MT					
NL	9.72	8.62	8.91	7.91	7.48
AT	9.07	9.78	10.50	9.48	9.06
PL	8.36	9.02	9.39	7.26	7.66
PT	7.22	9.28	10.52	7.68	7.52
RO	5.93	6.11	8.05	7.27	7.16
SI	9.61	11.81	10.57	9.07	8.88
SK	8.91	10.22	9.63	8.67	8.07
FI	8.00	9.13	11.73	12.21	14.79
SE	12.47	13.43	11.61	10.67	12.95
UK	6.06	6.33	9.75	6.91	6.22

* Excluding VAT and other recoverable Taxes and Levies.

**Prices from second semester each year.

Source: Eurostat, May 2018

Methodology and Notes: See Appendix 13 – No 2

2.13.3 Fuel Prices* – Industrial Consumers

ELECTRICITY – BAND IC

500 MWh < CONSUMPTION < 2 000 MWh

2ND SEMESTER**

€/100 kWh	2009	2010	2015	2016	2017
EU-28	10.15	10.41	11.83	11.33	11.21
BE	10.79	10.54	10.81	11.58	10.87
BG	6.39	6.64	7.82	7.88	7.42
CZ	11.22	10.81	7.83	7.32	7.10
DK	9.20	9.61	9.06	9.36	9.78
DE	11.34	11.90	14.93	14.92	15.14
EE	6.45	7.27	9.58	8.96	8.46
IE	11.75	11.31	13.57	12.45	12.41
EL	9.36	10.26	11.50	11.15	11.90
ES	11.20	10.93	11.33	10.29	10.32
FR	6.48	7.16	9.51	9.03	9.20
HR	9.04	9.04	9.28	8.77	9.20
IT	13.70	14.43	15.97	15.56	14.49
CY	14.94	17.30	14.12	12.95	13.92
LV	8.93	9.07	11.83	12.01	11.59
LT	7.90	10.46	9.97	8.82	8.25
LU	11.58	10.24	8.93	8.58	8.03
HU	12.97	10.53	8.70	7.96	7.79
MT	12.91	18.10	14.05	13.99	13.77
NL	10.61	9.70	8.46	8.05	7.64
AT	11.62	11.28	10.47	10.04	9.97
PL	9.33	9.87	8.61	8.15	8.62
PT	9.44	9.20	11.54	11.32	11.47
RO	8.28	8.08	8.02	7.71	7.86
SI	9.62	10.05	8.70	8.32	7.84
SK	14.03	11.98	11.22	11.12	11.13
FI	6.83	6.83	7.06	6.94	6.76
SE	6.89	8.41	5.90	6.56	6.47
UK	10.12	10.00	15.20	12.78	12.46

* Excluding VAT and other recoverable Taxes and Levies.

**Prices from second semester each year.

Source: Eurostat, May 2018

Methodology and Notes: [See Appendix 13 – No 2](#)

Socio-Economic Indicators in the EU





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3.1 Classification of the Energy Sector*

3.1.1 Comparative Table

EUROSTAT (NACE) AND UN (ISIC) CLASSIFICATIONS

NACE rev 2	ISIC 4
B05: Mining of Coal and Lignite	
05.10: Mining of Hard Coal	05.10
05.20: Mining of Lignite	05.20
B06: Extraction of Crude Petroleum and Natural Gas	
06.10: Extraction of Crude Petroleum	06.10
06.20: Extraction of Natural Gas	06.20
B07: Mining of Metal Ores	
07.21: Mining of Uranium and Thorium Ores	07.21
B08: Other Mining and Quarrying	
08.92: Extraction of Peat	08.92
B09: Mining Support Service Activities	
09.10: Support Activities for Petroleum and Natural Gas Extraction	09.10
C19: Manufacture of Coke and Refined Petroleum Products	
19.10: Manufacture of Coke Oven Products	19.10
19.20: Manufacture of Refined Petroleum Products	19.20
D35: Electricity, Gas, Steam and Air Conditioning Supply	
35.11: Production of Electricity	35.10
Power Generation, Hydroelectric	
Power Generation, Fossil Fuel	
Power Generation, Nuclear	
Electric Power Generation, Solar	
Electric Power Generation, Wind	
Electric Power Generation, Geothermal	
Electric Power Generation, Biomass	
Electric Power Generation, Tidal	
35.12: Transmission of Electricity	
35.13: Distribution of Electricity	
35.14: Trade of Electricity	
35.21: Manufacture of Gas	35.20
35.22: Distribution of Gaseous Fuels through Mains	
35.23: Trade of Gas through Mains	
35.30: Steam and Air Conditioning Supply	35.30

* Broad Definition, The Narrow Definition only Includes Division D35.

Sources: Eurostat, UN, June 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2 Enterprises in the Energy Sector

3.2.1 Number of Enterprises in the Energy Sector

ENTERPRISES SURVEY – EU-28

	2013	2015	2016*
B05: Mining of Coal and Lignite	236	260	229
B06: Extraction of Crude Petroleum and Natural Gas	416	463	420
B07.21: Mining of Uranium and Thorium Ores	5	4	4
B08.92: Extraction of Peat	917	1 000	950
B09.1: Support Activities for Petroleum and Natural Gas Extraction	1 050	1 151	1 158
C19: Manufacture of Coke and Refined Petroleum Products	1 108	1 050	1 039
D35: Electricity, Gas, Steam and Air Conditioning Supply	78 601	101 173	107 027
D35.1: Electricity Power Generation, Transmission and Distribution	70 000	90 000	100 000
35.11: Production of Electricity	65 958	86 842	
35.12: Transmission of Electricity			
35.13: Distribution of Electricity	2 070	2 235	
35.14: Trade of Electricity	3 472	4 450	
D35.2: Manufacture of Gas; Distribution of Gaseous Fuels through Mains	1 857	2 000	2 000
35.21: Manufacture of Gas	341	400	
35.22: Distribution of Gaseous Fuels through Mains	726	716	
35.23: Trade of Gas through Mains	785	874	
D35.3: Steam and Air Conditioning Supply	5 000	5 379	5 388
35.30: Steam and Air Conditioning Supply	5 000	5 379	5 388
Broad Sector – no. of Enterprises Reported	82 333	105 101	110 827

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.1 Number of Enterprises in the Energy Sector

ENTERPRISES SURVEY

	Mining of Coal and Lignite (B05)				Extraction of Crude Petroleum and Natural Gas (B06)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	298	236	260	229	315	416	463	420
BE	0	0	0	0		0	0	0
BG	23	24	22	22	9	6	4	4
CZ		12	12	12		5	5	5
DK	0	0	0	0	10	10	12	13
DE	7	5	7	7	4	4	4	4
EE	0	0	0	0	1	2	2	2
IE								
EL	4		12	11				3
ES	110	56	81	77	4		19	22
FR	10		1	1	61	58		
HR	0	0	0	0	7	4	4	5
IT			0		5	12	12	
CY	0	0	0	0	0	0	0	0
LV	3	0	0	0	0	1	2	2
LT	0	0	0	0	4	4	4	5
LU	0	0	0	0	0	0	0	0
HU	12	17	14	11	10	10	8	13
MT	0	0	0	0	0	0	0	0
NL		0	0	0	45	45	41	42
AT	0	0	0	0	2	2	2	2
PL	44	57	62	59	28	52	62	57
PT	0	0	0	0	0	0	0	0
RO	38	35	27	23	10	34	38	35
SI	2	1	1	1	1	1	1	3
SK								
FI	0	0	0	0	0	0	0	0
SE			0	0			0	0
UK	22	20			105	158	140	139

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.1 Number of Enterprises in the Energy Sector

ENTERPRISES SURVEY

	Extraction of Peat (B08.92)				Support Activities for Petroleum and Natural Gas Extraction (B09.1)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	<i>1 010</i>	917	1 000	<i>895</i>	<i>810</i>	1 050	<i>1 151</i>	1 158
BE	0	0	0	0				
BG		10	4	3	4	11	14	12
CZ			17	13		5	6	6
DK	7	2	2		47	52	55	55
DE	90	83	91	97				
EE	38	42	41	37	0	0	0	1
IE					28	41	35	35
EL		0					9	9
ES	6	5	7	7	24	48	46	43
FR		21	39	12		45	54	45
HR	2	0	0	0	8	6	4	4
IT	0	4	4			42	52	
CY	0	0	0		0			
LV	54	50	91	95	0	1	2	2
LT	20	25	26	23	0	0	0	0
LU	0	0	0		0	0	0	0
HU		15	13	14	29	35	37	34
MT	0	0	0	0				
NL	8	7	6	5	103	201	251	256
AT	7	6	5	5	6	8	7	7
PL	49	34	32	31	52	92	104	109
PT	1	0	1	1	1	2	4	6
RO	10	5	5		93	90	106	109
SI	0	0	0	0	3	4	2	2
SK			42					
FI	519	473	450		0	0	0	0
SE	87	73	70		39	58	63	63
UK	24	21	19		267	286	251	237

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.1 Number of Enterprises in the Energy Sector

ENTERPRISES SURVEY

	Manufacture of Coke and Refined Petroleum Products (C19)				Electricity, Gas, Steam and Air Conditioning Supply (D35)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	<i>1274</i>	1108	1050	1039	<i>33758</i>	78601	101173	107027
BE		17	<i>20</i>	11		618	851	727
BG	21	10	11	10	583	1784	1745	1704
CZ	22	33	25	29	1264	8446	10996	11026
DK	4	4	3	6	1692	1845	1745	1601
DE	86	80	54	73	1589	1974	2059	1974
EE	9	7	5	6	181	226	230	235
IE					204	485	515	551
EL	7	48	40	39	5	32	7036	6733
ES	13	14	14	18	12004	13867	14044	14077
FR	88	56	43	37	3866	20756	27062	29687
HR	19	15	14	15	133	513	573	670
IT	353	297	281		2472	10169	10775	
CY					1		58	65
LV	3	10	16	11	279	480	533	567
LT	5	7	9	5	213	1214	1489	1441
LU	0	0	0	0	60	74	80	72
HU	10	14	8	8	542	675	610	678
MT							3	14
NL	37	38	45	29	558	950	1130	1201
AT	5	4	5	5	1512	2256	2390	2430
PL	158	175	176	203	1788	2546	3192	3670
PT	6	17	18	15	678	925	1209	3977
RO	33	42	44	37	506	1345	1460	1349
SI	5	7	4	2	417	1526	1530	1503
SK					203	430	451	551
FI	13	17	17	17	722	816	907	930
SE	44	40	34		1528	2287	4221	5897
UK	245	134	132	120	478	2577	4279	4999

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.2 Turnover in the Energy Sector

ENTERPRISES SURVEY – EU-28

Mio EUR	2013	2015	2016*
B05: Mining of Coal and Lignite	13 282.4	11 102.3	9 639.5
B06: Extraction of Crude Petroleum and Natural Gas	172 599.5	118 176.1	96 631.0
B07.21: Mining of Uranium and Thorium Ores			
B08.92: Extraction of Peat	1 749.8	1 698.4	<i>1 700.0</i>
B09.1: Support Activities for Petroleum and Natural Gas Extraction	16 389.7	20 196.9	14 384.0
C19: Manufacture of Coke and Refined Petroleum Products	606 176.5	422 998.2	368 997.1
D35: Electricity, Gas, Steam and Air Conditioning Supply	1 539 990.8	1 460 000.0	1 390 000.0
D35.1: Electricity Power Generation, Transmission and Distribution	1 233 856.6	1 203 380.0	1 151 055.8
35.11: Production of Electricity	335 039.1	321 171.0	
35.12: Transmission of Electricity	68 751.2	73 471.4	
35.13: Distribution of Electricity	237 541.8	244 506.9	
35.14: Trade of Electricity	592 524.5	564 230.8	
D35.2: Manufacture of Gas; Distribution of Gaseous Fuels through Mains	265 273.3	220 200.7	206 274.0
35.21: Manufacture of Gas	5 794.6	6 230.8	
35.22: Distribution of Gaseous Fuels through Mains	83 482.4	50 063.3	
35.23: Trade of Gas through Mains	175 988.6	163 893.1	
D35.3: Steam and Air Conditioning Supply	40 860.9	<i>36 000.0</i>	36 000.0
35.30: Steam and Air Conditioning Supply	40 860.9	<i>36 000.0</i>	36 000.0
Broad Sector – Turnover Reported	2 350 188.7	2 034 171.9	1 881 351.6

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.2 Turnover in the Energy Sector

ENTERPRISES SURVEY

Mio EUR	Mining of Coal and Lignite (B05)				Extraction of Crude Petroleum and Natural Gas (B06)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	<i>16674.9</i>	13282.4	11102.3	9639.5	<i>176436.0</i>	172599.5	118176.1	96631.0
BE	0.0	0.0	0.0	0.0		0.0	0.0	0.0
BG	326.6	287.5	348.8	301.0	40.9	80.7	30.4	30.4
CZ		2097.4	1578.0	1391.8				
DK	0.0	0.0	0.0	0.0	9239.9	6823.6	3896.0	3120.0
DE	4015.8	2387.2	2161.5	1968.0	3829.2	3431.5	2978.4	2479.0
EE	0.0	0.0	0.0	0.0				
IE								
EL	82.0		92.7	88.5				26.2
ES	858.2	433.8	235.6	187.7	77.9		126.2	225.6
FR	47.6		0.3	0.1	851.0	729.1		
HR	0.0	0.0	0.0	0.0				
IT			0.0	0.0	48042.4	63194.3	46394.8	46394.8
CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LV		0.0	0.0	0.0	0.0			
LT	0.0	0.0	0.0	0.0	91.2	77.1	38.6	29.3
LU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HU	53.2	13.1	8.6	4.3	89.1	135.1	33.2	36.5
MT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NL		0.0	0.0	0.0	37828.5	46068.0	26734.8	17614.2
AT	0.0	0.0	0.0	0.0				
PL	7212.1	6669.3	5754.9					124.0
PT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RO	485.1	102.0	20.5	18.1	5472.7	5051.5	4246.2	3657.7
SI								
SK								
FI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE			0.0	0.0			0.0	0.0
UK	1024.8				65153.9	41147.4	28916.7	21722.9

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.2 Turnover in the Energy Sector

ENTERPRISES SURVEY

Mio EUR	Extraction of Peat (B08.92)				Support Activities for Petroleum and Natural Gas Extraction (B09.1)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	<i>1 651.4</i>	1749.8	1698.4	<i>1 700.0</i>	<i>13 587.4</i>	16 389.7	20 196.9	14 384.0
BE	0.0	0.0	0.0	0.0				
BG		1.7				1.2	0.2	
CZ			6.7	6.8				
DK					358.5	377.5	633.0	314.9
DE	348.8	413.4	399.6	334.5				
EE	71.5	79.8	83.5	85.8	0.0	0.0	0.0	
IE					49.5	38.1	10.0	12.8
EL		0.0					28.9	29.4
ES	11.6	9.1	9.9	10.0	60.1	226.1	98.6	57.8
FR		63.3	51.9	44.1			266.1	240.3
HR		0.0	0.0	0.0				
IT	0.0	2.6	4.7			486.2	2 238.1	2 038.1
CY	0.0	0.0	0.0		0.0			
LV		132.6	150.7	167.2	0.0			
LT	32.5	58.5	61.1		0.0	0.0	0.0	0.0
LU	0.0	0.0	0.0		0.0	0.0	0.0	0.0
HU		3.0	5.3	5.0	146.1	130.0	133.4	100.9
MT	0.0	0.0	0.0	0.0				
NL								
AT		2.7			11.3	35.6		
PL	39.3	49.3		50.5	213.9	424.9	325.5	190.7
PT		0.0						
RO	1.1	0.7	0.7		973.4	796.4	637.5	425.5
SI	0.0	0.0	0.0	0.0				
SK			12.3					
FI	460.1	494.2	472.0		0.0	0.0	0.0	0.0
SE	38.3	40.8	29.3			168.6	83.8	178.7
UK		80.2	101.6		7537.0	9101.7	9776.7	6133.0

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.2 Turnover in the Energy Sector

ENTERPRISES SURVEY

Mio EUR	Manufacture of Coke and Refined Petroleum Products (C19)				Electricity, Gas, Steam and Air Conditioning Supply (D35)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	<i>547992.2</i>	606176.5	422998.2	368997.1	<i>1149803.8</i>	1539990.8	1460000.0	1390000.0
BE		60047.0		35665.9		44457.8	36969.2	31311.1
BG					7313.3	7993.7	8357.4	7751.6
CZ	5021.9	4837.5			30927.4	45257.8	40927.3	36571.0
DK					20410.1	26655.8	21487.0	23733.2
DE	134361.4	140054.5	107407.8	97982.7	357896.1	581264.4	537677.0	491909.7
EE	179.9	297.0	253.8		1542.3	2245.2	1764.7	1772.2
IE					6891.7	8711.8	8012.8	8212.8
EL	17296.6	19688.0	14818.1	12973.5	5977.0	12353.6	19683.8	20053.4
ES	44349.3	52243.3	36051.4	30810.1	74338.8	93620.4	93787.0	83242.0
FR	69128.4	53048.3	39383.1	33732.1	106500.6	119162.0	110123.2	109833.4
HR					3147.9	4336.7	4358.9	4270.5
IT	48947.8	51131.3	35595.7	34093.8	156801.7	212610.2	195056.2	179796.9
CY					738.2		630.0	570.0
LV			7.5		2390.8	2819.9	2081.6	2011.2
LT					2690.3	3234.6	2431.0	2305.3
LU	0.0	0.0	0.0	0.0	2252.1	4133.7	4646.6	4333.4
HU	9384.0	8728.3	6529.2	5860.7	26852.9	18953.1	16726.6	14392.5
MT								
NL		52344.4	34361.9	26441.9	38660.1	38759.4	31408.8	28410.2
AT		9698.2	7225.8	6400.0	27553.5	38505.7	35906.3	33871.1
PL	28312.7	34880.3	27045.0	24091.8	44091.4	46297.7	47825.8	44374.7
PT	7841.7	9659.7	7130.6	5736.0	18485.1	21552.4	21119.1	20571.5
RO	4112.9	4323.3	3374.3	3100.0	13180.6	12671.6	13174.7	12749.1
SI	14.6	8.1			3580.0	5949.9	6075.6	5583.3
SK					11021.1	12834.5	11283.9	11486.6
FI				6546.4	12012.3	13630.5	12422.2	12913.1
SE	1526.2		11224.9		24823.9	30323.3	26217.7	25143.2
UK	49837.4	57903.5	40197.8	62601.6	107875.7	130805.0	148344.2	132795.1

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.3 Number of Persons Declared as Employed in the Energy Sector

ENTERPRISES SURVEY – EU-28

	2013	2015	2016*
B05: Mining of Coal and Lignite	194 900	156 135	150 350
B06: Extraction of Crude Petroleum and Natural Gas	77 000	77 025	65 391
B07.21: Mining of Uranium and Thorium Ores			
B08.92: Extraction of Peat	11 200	11 114	<i>10 200</i>
B09.1: Support Activities for Petroleum and Natural Gas Extraction	56 100	56 816	49 000
C19: Manufacture of Coke and Refined Petroleum Products	119 600	124 733	126 295
D35: Electricity, Gas, Steam and Air Conditioning Supply	1 216 300	1 232 167	1 233 195
D35.1: Electricity Power Generation, Transmission and Distribution	916 300	941 130	939 876
35.11: Production of Electricity	457 800	450 642	
35.12: Transmission of Electricity	54 800	57 236	
35.13: Distribution of Electricity	309 700	337 511	
35.14: Trade of Electricity	94 000	95 743	
D35.2: Manufacture of Gas; Distribution of Gaseous Fuels through Mains	152 300	146 716	148 784
35.21: Manufacture of Gas	8 800	7 801	
35.22: Distribution of Gaseous Fuels through Mains	102 700	70 531	
35.23: Trade of Gas through Mains	40 800	68 370	
D35.3: Steam and Air Conditioning Supply	147 700	144 321	144 534
35.30: Steam and Air Conditioning Supply	147 700	144 321	
Broad Sector – Employment Reported	1 675 100	1 657 990	<i>1 634 431</i>

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.3 Number of Persons Declared as Employed in the Energy Sector

ENTERPRISES SURVEY

	Mining of Coal and Lignite (B05)				Extraction of Crude Petroleum and Natural Gas (B06)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	<i>232 883</i>	194 900	156 135	150 350	<i>88 205</i>	77 000	77 025	65 391
BE	0	0	0	0		0	0	0
BG	13 905	12 534	11 995	11 332				
CZ		21 595	18 716	17 299				
DK	0	0	0	0	444	971	1 051	929
DE	38 415	22 511	17 468	16 729	3 544	3 764	3 927	3 679
EE	0	0	0	0				
IE								
EL	159		316	319				39
ES	7 311	4 012	1 684	1 690	215		368	908
FR			2	1		672		
HR	0	0	0	0			7 852	63
IT			0	0	13 047	12 354	12 681	12 681
CY	0	0	0	0	0	0	0	0
LV	18	0	0	0	0	15	20	15
LT	0	0	0	0	351	269	212	154
LU	0	0	0	0	0	0	0	0
HU	121	243	124	97	36	82	68	134
MT	0	0	0	0	0	0	0	0
NL		0	0	0	3 076	3 627	3 913	3 764
AT	0	0	0	0				
PL	138 338	116 760	96 076					653
PT	0	0	0	0	0	0	0	0
RO	20 804	5 758	1 843	1 246	38 538	25 680	23 486	20 823
SI						1		
SK								
FI	0	0	0	0	0	0	0	0
SE			0	0			0	0
UK	5 944	5 421	2 844	1 420	13 405	14 363	17 127	16 475

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.3 Number of Persons Declared as Employed in the Energy Sector

ENTERPRISES SURVEY

	Extraction of Peat (B08.92)				Support Activities for Petroleum and Natural Gas Extraction (B09.1)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	<i>12537</i>	11 200	11 114	<i>10200</i>	<i>47333</i>	56 100	56 816	49 000
BE	0	0	0	0				
BG		107	55			38	25	24
CZ			71	48				
DK					1 716	2 044	1 587	1 690
DE	1 912	1 844	1 762	1 585				
EE	1 276	1 076	963	859	0	0	0	
IE					46	59	29	28
EL		0					276	281
ES	57	34	36	39	224	217	191	176
FR		195	130	123			386	411
HR		0	0	0			2 273	2 005
IT	0	17	21			1 815	2 188	1 940
CY	0	0	0		0			
LV	1 970	2 081	2 158	2 157	0	1	2	2
LT	1 229	1 091	1 149		0	0	0	0
LU	0	0	0		0	0	0	0
HU		94	97	94	1 275	1 190	1 062	877
MT	0	0	0	0				
NL	36	110	104	107	2 270			
AT		29			19	88		
PL	711	532		523	2 181	5 118	4 638	3 345
PT		0						
RO	41	29	25		9 882	7 526	6 771	5 202
SI	0	0	0	0		69		
SK			114					
FI	1 735	2 044	1 977		0	0	0	0
SE	358	311	165			77	75	62
UK	634	29			18 489			

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.2.3 Number of Persons Declared as Employed in the Energy Sector

ENTERPRISES SURVEY

	Manufacture of Coke and Refined Petroleum Products (C19)				Electricity, Gas, Steam and Air Conditioning Supply (D35)			
	2008	2013	2015	2016*	2008	2013	2015	2016*
EU-28	<i>135 372</i>	119 600	124 733	126 295	<i>124 3616</i>	1 216 300	1 232 167	1 233 195
BE		4 453		4 650		20 181	20 293	18 394
BG		2 208	2 078	1 989	36 197	32 809	31 751	32 137
CZ	2 926	2 173			32 652	33 495	34 536	34 799
DK					13 206	11 265	13 815	13 941
DE	19 611	19 269	22 302	22 251	221 450	219 936	224 669	227 843
EE	1 330	1 644	1 679		6 290	5 218	4 949	4 930
IE					9 235	8 246	8 846	9 206
EL	4 557	3 945	3 588	3 516	23 955	20 481	25 764	29 652
ES	8 823	8 855	8 453	8 918	47 622	38 974	39 764	41 022
FR						181 335	190 364	189 412
HR			262	5 018	16 849	15 472	14 893	15 076
IT	16 383	13 292	11 065	10 955	84 224	87 908	89 109	88 213
CY					2 347		2 130	2 089
LV	9	30	65	56	12 185	11 109	11 344	11 320
LT					18 303	13 781	13 881	12 692
LU	0	0	0	0	1 091	1 435	1 529	1 613
HU	6 538	6 106	5 691	5 648	27 387	24 608	24 601	24 712
MT							10	
NL	6 652	5 213	5 299	5 416	23 869	27 056	27 969	27 721
AT		1 124	1 180	1 217	28 218	29 402	29 168	29 340
PL	16 606	13 220	13 495	13 587	153 286	139 998	128 183	125 805
PT	2 132	1 990	1 830	1 790	10 336	8 913	9 589	12 343
RO	5 017	2 516	2 560	2 382	89 511	77 393	72 333	70 554
SI	93	34	26		7 828	8 942	8 958	8 861
SK					21 641	17 885	17 873	17 525
FI				2 807	13 430	13 729	13 368	13 679
SE	2 748		2 879		31 151	31 264	31 379	31 292
UK	9 998				121 447	129 496	141 099	140 703

* Provisional data.

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.3 Economy

3.3.1 GDP at Current Market Prices

Mrd EUR*	1995	2000	2005	2010	2016	2017
EU-28	7 358.0	9 663.2	11 602.4	12 828.0	14 909.1	15 327.2
BE	221.4	258.2	311.5	365.1	423.0	438.5
BG	11.0	14.3	23.9	38.2	48.1	50.4
CZ	45.7	66.8	109.6	156.7	176.6	192.0
DK	141.4	178.0	212.8	243.2	277.5	288.4
DE	1 982.1	2 116.5	2 300.9	2 580.1	3 144.1	3 263.4
EE	2.9	6.2	11.3	14.7	21.1	23.0
IE	52.9	108.4	170.2	167.6	275.6	296.2
EL	104.7	143.0	199.2	226.0	174.2	177.7
ES	468.9	646.3	930.6	1 080.9	1 118.5	1 163.7
FR	1 231.4	1 485.3	1 772.0	1 998.5	2 228.9	2 287.6
HR	17.1	23.6	36.5	45.1	46.4	48.7
IT	895.3	1 239.3	1 489.7	1 604.5	1 680.9	1 716.9
CY	7.6	10.8	15.0	19.3	18.2	19.2
LV	4.1	8.6	13.7	17.8	24.9	26.9
LT	5.1	12.5	21.0	28.0	38.7	41.9
LU	16.5	23.1	30.0	40.2	53.0	55.4
HU	35.5	51.3	90.9	98.8	113.7	123.5
MT	2.8	4.4	5.1	6.6	10.2	11.1
NL	341.6	448.1	545.6	631.5	702.6	733.2
AT	184.4	213.6	254.1	295.9	353.3	369.2
PL	108.7	186.4	246.2	361.8	425.9	465.6
PT	91.0	128.5	158.7	179.9	185.5	193.0
RO	28.8	40.8	80.2	125.7	169.8	187.9
SI	16.3	21.9	29.2	36.3	40.4	43.3
SK	15.3	22.3	39.3	67.6	81.2	85.0
FI	102.7	136.3	164.4	187.1	215.8	223.5
SE	201.8	281.9	313.2	369.1	465.2	477.9
UK	1 020.9	1 787.0	2 027.5	1 841.7	2 395.8	2 324.3

* Units in Milliard – Long Scale = 1 000 Million €.

Source: DG Economic and Financial Affairs, AMECO, July 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.3.2 GDP per Capita at Current Market Prices

Thousand EUR/cap*	1995	2000	2005	2010	2016	2017
EU-28	15.3	19.8	23.5	25.5	29.2	30.0
BE	21.9	25.2	29.8	33.7	37.4	38.6
BG	1.3	1.7	3.1	5.2	6.7	7.1
CZ	4.4	6.5	10.7	15.0	16.7	18.2
DK	27.1	33.4	39.3	43.9	48.6	50.2
DE	24.3	25.8	27.9	31.5	38.3	39.5
EE	2.0	4.4	8.3	11.0	16.0	17.5
IE	14.7	28.7	41.4	36.8	58.3	61.9
EL	9.9	13.3	18.2	20.3	16.2	16.5
ES	11.8	16.0	21.5	23.3	24.1	25.0
FR	20.8	24.5	28.2	30.9	33.4	34.1
HR	3.7	5.2	8.5	10.5	11.1	11.7
IT	15.8	21.8	25.7	27.1	27.7	28.3
CY	11.8	15.6	20.5	23.6	21.5	22.5
LV	1.7	3.6	6.1	8.4	12.7	13.8
LT	1.4	3.6	6.3	8.9	13.4	14.7
LU	40.7	53.2	65.1	80.0	92.0	93.8
HU	3.4	5.0	9.0	9.9	11.6	12.6
MT	7.5	11.3	12.8	15.9	22.6	24.1
NL	22.1	28.2	33.5	38.1	41.4	42.9
AT	23.2	26.7	31.0	35.4	40.6	42.1
PL	2.8	4.9	6.4	9.5	11.2	12.3
PT	9.1	12.5	15.1	17.0	17.9	18.7
RO	1.3	1.8	3.8	6.2	8.6	9.6
SI	8.2	11.0	14.6	17.7	19.6	20.9
SK	2.8	4.1	7.3	12.5	15.0	15.6
FI	20.1	26.3	31.4	35.0	39.3	40.6
SE	22.9	31.8	34.8	39.5	47.2	47.8
UK	17.6	30.4	33.7	29.5	36.6	35.3

* 1000 €' per Capita.

Sources: DG Economic and Financial Affairs, AMECO, July 2018;
Eurostat, Demography and Migration, July 2018

Methodology and Notes: [See Appendix 13 – No 3](#)

3.3.3 GDP at 2010 Market Prices

Mrd EUR*	1995	2000	2005	2010	2016	2017
EU-28	9655.9	11 163.8	12 270.6	12 828.0	13 824.9	14 162.2
BE	269.6	310.9	340.2	365.1	389.3	395.8
BG	24.0	24.4	32.2	38.2	42.9	44.4
CZ	105.0	114.7	138.9	156.7	174.7	182.4
DK	194.1	225.2	240.6	243.2	262.4	268.3
DE	2 145.1	2 358.7	2 426.5	2 580.1	2 855.4	2 918.8
EE	7.9	10.7	15.0	14.7	18.0	18.8
IE	78.9	123.4	161.8	167.6	250.9	270.5
EL	158.8	189.9	229.8	226.0	184.6	187.1
ES	710.5	867.9	1 025.4	1 080.9	1 105.8	1 139.5
FR	1 535.1	1 771.7	1 923.2	1 998.5	2 122.1	2 160.7
HR	29.8	35.3	44.0	45.1	46.1	47.4
IT	1 409.1	1 555.6	1 629.9	1 604.5	1 571.0	1 594.6
CY	11.8	14.3	17.0	19.3	18.4	19.1
LV	9.6	12.3	18.2	17.8	21.6	22.6
LT	14.6	18.3	26.4	28.0	34.5	35.9
LU	23.1	30.8	35.6	40.2	47.7	48.8
HU	69.8	80.9	99.9	98.8	111.1	115.5
MT	4.3	5.4	6.0	6.6	9.0	9.6
NL	448.7	554.7	592.8	631.5	672.1	693.3
AT	219.3	254.1	277.3	295.9	317.1	326.4
PL	190.5	246.2	286.7	361.8	432.3	452.4
PT	136.9	167.1	174.5	179.9	175.0	179.7
RO	84.2	83.1	110.0	125.7	151.1	161.5
SI	22.6	27.9	33.3	36.3	38.1	40.0
SK	35.2	41.9	53.6	67.6	79.0	81.7
FI	123.4	158.1	179.6	187.1	190.8	195.8
SE	251.4	299.7	341.2	369.1	423.5	433.7
UK	1 342.7	1 580.7	1 810.9	1 841.7	2 080.4	2 117.6

* Units in Milliard – Long Scale = 1 000 Million €.

Sources: DG Economic and Financial Affairs, AMECO, July 2018;
Eurostat, Demography and Migration, July 2018

Methodology and Notes: [See Appendix 13 – No 3](#)

3.3.4 GDP per Capita at 2010 Market Prices

Thousand EUR/cap*	1995	2000	2005	2010	2016	2017
EU-28	20.0	22.9	24.8	25.5	27.1	27.7
BE	26.6	30.4	32.6	33.7	34.4	34.9
BG	2.8	3.0	4.2	5.2	6.0	6.3
CZ	10.2	11.2	13.6	15.0	16.6	17.2
DK	37.2	42.3	44.5	43.9	46.0	46.7
DE	26.3	28.7	29.4	31.5	34.7	35.4
EE	5.5	7.6	11.1	11.0	13.7	14.3
IE	21.9	32.7	39.4	36.8	53.1	56.5
EL	15.1	17.6	20.9	20.3	17.1	17.4
ES	17.9	21.4	23.7	23.3	23.8	24.5
FR	25.9	29.3	30.6	30.9	31.8	32.3
HR	6.4	7.8	10.2	10.5	11.0	11.4
IT	24.8	27.3	28.2	27.1	25.9	26.3
CY	18.3	20.7	23.2	23.6	21.6	22.3
LV	3.8	5.2	8.1	8.4	11.0	11.6
LT	4.0	5.2	7.9	8.9	12.0	12.6
LU	56.9	71.0	77.2	80.0	82.8	82.7
HU	6.8	7.9	9.9	9.9	11.3	11.8
MT	11.5	13.9	14.8	15.9	20.0	20.9
NL	29.1	35.0	36.4	38.1	39.6	40.6
AT	27.6	31.7	33.8	35.4	36.5	37.2
PL	4.9	6.4	7.5	9.5	11.4	11.9
PT	13.7	16.3	16.6	17.0	16.9	17.4
RO	3.7	3.7	5.1	6.2	7.6	8.2
SI	11.4	14.0	16.7	17.7	18.5	19.4
SK	6.6	7.8	10.0	12.5	14.6	15.0
FI	24.2	30.6	34.3	35.0	34.8	35.6
SE	28.5	33.8	37.9	39.5	43.0	43.4
UK	23.2	26.9	30.1	29.5	31.8	32.2

* 1000€' 2010 per Capita.

Sources: DG Economic and Financial Affairs, AMECO, July 2018;
Eurostat, Demography and Migration, July 2018

Methodology and Notes: [See Appendix 13 – No 3](#)

3.4 Demography

3.4.1 Population

ON 1ST JANUARY

Thousand Inhabitants	1995	2000	2005	2010	2016	2017
EU-28	481 904.0	487 259.1	494 598.3	503 170.6	510 277.2	511 522.7
BE	10 130.6	10 239.1	10 445.9	10 839.9	11 311.1	11 351.7
BG	8 427.4	8 190.9	7 688.6	7 421.8	7 153.8	7 101.9
CZ	10 333.2	10 278.1	10 198.9	10 462.1	10 553.8	10 578.8
DK	5 215.7	5 330.0	5 411.4	5 534.7	5 707.3	5 748.8
DE	81 538.6	82 163.5	82 500.8	81 802.3	82 175.7	82 521.7
EE	1 448.1	1 401.3	1 358.9	1 333.3	1 315.9	1 315.6
IE	3 597.6	3 777.6	4 111.7	4 549.4	4 726.3	4 784.4
EL	10 536.0	10 775.6	10 969.9	11 119.3	10 783.7	10 768.2
ES	39 639.7	40 470.2	43 296.3	46 486.6	46 440.1	46 528.0
FR	59 315.1	60 545.0	62 772.9	64 658.9	66 730.5	66 989.1
HR	4 658.9	4 497.7	4 310.9	4 302.8	4 190.7	4 154.2
IT	56 844.4	56 923.5	57 874.8	59 190.1	60 665.6	60 589.4
CY	645.4	690.5	733.1	819.1	848.3	854.8
LV	2 500.6	2 381.7	2 249.7	2 120.5	1 969.0	1 950.1
LT	3 643.0	3 512.1	3 355.2	3 142.0	2 888.6	2 847.9
LU	405.7	433.6	461.2	502.1	576.2	590.7
HU	10 336.7	10 221.6	10 097.5	10 014.3	9 830.5	9 797.6
MT	376.4	388.8	402.7	414.0	450.4	460.3
NL	15 424.1	15 864.0	16 305.5	16 575.0	16 979.1	17 081.5
AT	7 943.5	8 002.2	8 201.4	8 351.6	8 700.5	8 772.9
PL	38 580.6	38 263.3	38 173.8	38 022.9	37 967.2	37 973.0
PT	10 008.7	10 249.0	10 494.7	10 573.5	10 341.3	10 309.6
RO	22 712.4	22 455.5	21 382.4	20 294.7	19 760.3	19 644.4
SI	1 989.5	1 987.8	1 997.6	2 047.0	2 064.2	2 065.9
SK	5 356.2	5 398.7	5 372.7	5 390.4	5 426.3	5 435.3
FI	5 098.8	5 171.3	5 236.6	5 351.4	5 487.3	5 503.3
SE	8 816.4	8 861.4	9 011.4	9 340.7	9 851.0	9 995.2
UK	57 943.5	58 785.2	60 182.1	62 510.2	65 382.6	65 808.6

3.5 Employment

3.5.1 Total Persons Employed in the Energy Sector (15-64 years)

MEMBER STATES DATA – EU-28

Thousands	2008	2012	2015	2016	2017
B05 Mining of Coal and Lignite	342.5	328.8	294.5	274.1	258.9
B06 Extraction of Crude Petroleum and Natural Gas	98.9	96.2	88.9	81.4	70.0
B0892 Extraction of Peat*	<i>12.5</i>	11.6	11.1	10.2	<i>10.0</i>
B091 Support Activities for Petroleum and Natural Gas Extraction*	<i>47.3</i>	53.2	56.8	49.0	<i>50.0</i>
C19 Manufacture of Coke and refined Petroleum Products	243.2	205.9	190.0	186.4	188.5
D35 Electricity, Gas, Steam and Air Conditioning Supply	1 545.4	1 652.3	1 550.6	1 552.4	1 545.4
Broad Sector Total Employment**	2 289.9	2 348.0	2 191.9	2 153.5	<i>2 122.8</i>

* According to the Structural Business Survey (SBS), August 2018.

** Estimate of total employment as a sum of available figures presented in the table.
Italics: DG Energy Estimates

Sources: Eurostat, Labour Force Survey (LFS), July 2018
Methodology and Notes: [See Appendix 13 – No 3](#)

3.5.2 Employment Rate in all Economic Sectors

MEMBER STATES' DATA – ALL SECTORS (15-64 YEARS)

%	2005	2010	2012	2015	2016	2017
EU-28	63.4	64.1	64.1	65.7	66.7	67.7
BE	61.1	62.0	61.8	61.8	62.3	63.1
BG	55.8	59.8	58.8	62.9	63.4	66.9
CZ	64.8	65.0	66.5	70.2	72.0	73.6
DK	75.9	73.3	72.6	73.5	74.9	74.2
DE	65.5	71.3	73.0	74.0	74.7	75.2
EE	64.8	61.2	67.1	71.9	72.1	74.1
IE	70.4	61.0	59.9	64.7	66.5	67.7
EL	59.6	59.1	50.8	50.8	52.0	53.5
ES	63.6	58.8	55.8	57.8	59.5	61.1
FR	63.8	64.0	64.0	64.3	64.6	65.2
HR	55.0	57.4	53.5	56.0	56.9	58.9
IT	57.6	56.8	56.6	56.3	57.2	58.0
CY	68.5	68.9	64.6	62.7	63.7	65.4
LV	62.1	58.5	63.0	68.1	68.7	70.1
LT	62.9	57.6	62.0	67.2	69.4	70.4
LU	63.6	65.2	65.8	66.1	65.6	66.3
HU	56.9	54.9	56.7	63.9	66.5	68.2
MT	53.6	56.2	59.1	63.9	65.8	67.6
NL	73.2	74.7	74.4	74.1	74.8	75.8
AT	67.4	70.8	71.4	71.1	71.5	72.2
PL	52.8	58.9	59.7	62.9	64.5	66.1
PT	67.3	65.3	61.4	63.9	65.2	67.8
RO	57.6	60.2	60.2	61.4	61.6	63.9
SI	66.0	66.2	64.1	65.2	65.8	69.3
SK	57.7	58.8	59.7	62.7	64.9	66.2
FI	68.4	68.1	69.4	68.5	69.1	70.0
SE	72.3	72.1	73.8	75.5	76.2	76.9
UK	71.8	69.4	69.9	72.7	73.5	74.1

3.5.3 Unemployment Rate in all Economic Sectors *

MEMBER STATES' DATA – ALL SECTORS

%	2005	2010	2012	2015	2016	2017
EU-28	9.0	9.6	10.5	9.4	8.6	7.6
BE	8.5	8.3	7.6	8.5	7.8	7.1
BG	10.1	10.3	12.3	9.2	7.6	6.2
CZ	7.9	7.3	7.0	5.1	4.0	2.9
DK	4.8	7.5	7.5	6.2	6.2	5.7
DE	11.2	7.0	5.4	4.6	4.1	3.8
EE	8.0	16.7	10.0	6.2	6.8	5.8
IE	4.6	14.6	15.5	10.0	8.4	6.7
EL	10.0	12.7	24.5	24.9	23.6	21.5
ES	9.2	19.9	24.8	22.1	19.6	17.2
FR	8.9	9.3	9.8	10.4	10.1	9.4
HR	13.0	11.8	15.8	16.1	13.4	11.1
IT	7.7	8.4	10.7	11.9	11.7	11.2
CY	5.3	6.3	11.9	15.0	13.0	11.1
LV	10.0	19.5	15.0	9.9	9.6	8.7
LT	8.3	17.8	13.4	9.1	7.9	7.1
LU	4.6	4.6	5.1	6.5	6.3	5.6
HU	7.2	11.2	11.0	6.8	5.1	4.2
MT	6.9	6.9	6.3	5.4	4.7	4.0
NL	5.9	5.0	5.8	6.9	6.0	4.9
AT	5.6	4.8	4.9	5.7	6.0	5.5
PL	17.9	9.7	10.1	7.5	6.2	4.9
PT	8.8	12.0	15.8	12.6	11.2	9.0
RO	7.1	7.0	6.8	6.8	5.9	4.9
SI	6.5	7.3	8.9	9.0	8.0	6.6
SK	16.4	14.5	14.0	11.5	9.7	8.1
FI	8.4	8.4	7.7	9.4	8.8	8.6
SE	7.7	8.6	8.0	7.4	6.9	6.7
UK	4.8	7.8	7.9	5.3	4.8	4.4

* Percentage of active population.

Sources: Eurostat, Labour Force Survey (LFS), July 2018
Methodology and Notes: See Appendix 13 – No 3



Environment Indicators in the EU





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4.1 Gases Emissions

4.1.1 GHGs Emissions

EU-28 AND MEMBER STATES – TOTAL

Million ton CO ₂ equiv.	1995	2000	2005	2010	2015	2016
EU-28	5 386.7	5 277.7	5 351.2	4 909.1	4 460.5	4 440.8
Index 1995	100.0 %	98.0 %	99.3 %	91.1 %	82.8 %	82.4 %
BE	157.7	154.5	149.0	136.9	122.0	122.1
BG	75.5	59.8	64.5	61.1	62.3	59.7
CZ	159.4	150.8	149.0	141.5	129.3	131.3
DK	80.2	73.1	68.9	65.8	51.2	53.3
DE	1 138.3	1 064.3	1 016.0	967.0	931.2	935.8
EE	20.3	17.4	19.3	21.2	18.1	19.7
IE	60.3	70.4	72.1	63.6	62.0	64.2
EL	111.8	128.9	138.9	121.0	98.2	94.7
ES	334.0	395.2	450.6	368.3	350.0	340.5
FR	552.1	565.3	568.6	527.7	475.5	475.4
HR	23.2	26.0	30.2	28.3	24.5	24.7
IT	538.5	562.5	589.4	512.9	442.5	438.2
CY	7.8	9.1	10.1	10.3	9.1	9.7
LV	13.0	10.6	11.6	12.7	11.7	11.7
LT	22.4	19.5	23.0	20.9	20.4	20.4
LU	10.7	10.6	14.3	13.4	11.6	11.5
HU	76.0	74.1	76.6	66.1	61.6	62.1
MT	3.0	3.1	3.2	3.3	2.6	2.3
NL	238.9	229.4	225.4	223.7	206.2	207.0
AT	81.1	82.1	94.6	87.0	81.0	82.0
PL	438.9	390.4	398.6	407.4	387.1	397.8
PT	72.1	85.4	89.3	72.8	72.7	71.2
RO	181.1	141.2	148.2	122.7	116.9	113.4
SI	18.8	19.1	20.6	19.7	16.9	17.8
SK	54.0	49.6	51.3	46.4	41.1	41.2
FI	72.8	71.2	71.1	77.2	57.4	60.8
SE	75.0	70.6	68.7	66.5	56.0	55.5
UK	769.6	743.4	728.1	643.7	541.4	516.8

* GHG emissions without LULUCF, with indirect CO₂ and including international aviation.

Source: EEA_UNFCCC v_20 June 2018

Methodology and Notes: [See Appendix 13 – No 4](#)

4.1.1 GHGs Emissions

EU-28 AND MEMBER STATES – FUEL COMBUSTION

	2016								
	Fuel Combustion Activities	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/ Institutional	Residential	Agriculture/ Forestry/ Fisheries	Other Sectors	Other Combustion and Fugitive Emissions
Million ton CO ₂ equiv.									
EU-28	3348.3	1195.2	474.3	931.5	160.2	414.9	80.9	6.8	84.4
Share (%)	75.4%	26.9%	10.7%	21.0%	3.6%	9.3%	1.8%	0.2%	1.9%
BE	85.9	20.0	13.3	26.4	5.9	17.2	2.3	0.1	0.6
BG	42.4	27.1	2.9	9.4	0.3	1.1	0.5	0.0	1.0
CZ	100.3	54.4	9.4	18.4	2.9	9.4	1.2	0.4	4.0
DK	36.3	14.0	3.9	13.0	0.7	2.3	1.6	0.2	0.4
DE	771.9	332.2	126.4	166.8	37.5	91.5	6.6	1.0	10.0
EE	17.5	13.8	0.5	2.4	0.1	0.3	0.3	0.0	0.0
IE	37.9	12.5	4.6	12.3	1.9	6.0	0.6	0.0	0.0
EL	66.8	37.0	5.4	17.4	0.7	4.8	0.5	0.2	0.8
ES	244.1	71.1	40.9	86.1	11.4	18.0	11.6	0.5	4.5
FR	321.9	45.2	49.1	132.8	25.1	53.3	12.1	0.0	4.2
HR	17.1	4.9	2.2	6.2	0.6	2.0	0.7	0.0	0.5
IT	347.1	104.4	47.9	104.5	23.3	51.5	7.8	0.5	7.2
CY	6.5	3.3	0.6	2.0	0.1	0.4	0.1	0.0	0.0
LV	7.2	1.9	0.6	3.2	0.4	0.5	0.5	0.0	0.1
LT	11.4	3.0	1.2	5.5	0.3	0.9	0.2	0.0	0.3
LU	8.5	0.3	1.1	5.5	0.6	1.1	0.0	0.0	0.0
HU	44.6	13.6	4.7	12.5	3.3	8.1	1.5	0.0	0.8
MT	1.4	0.6	0.0	0.6	0.1	0.0	0.0	0.0	0.0
NL	161.9	67.7	26.6	30.5	7.9	17.5	9.9	0.2	1.7
AT	54.3	10.6	10.8	23.5	1.5	6.6	0.9	0.1	0.4
PL	326.5	163.2	28.5	53.4	8.6	38.8	11.0	0.0	22.9
PT	47.1	17.4	7.4	16.7	1.1	2.0	1.2	0.0	1.2
RO	75.4	25.8	11.3	16.8	2.1	7.2	1.1	0.5	10.6
SI	14.2	4.9	1.6	5.7	0.5	0.9	0.2	0.0	0.4
SK	27.5	7.5	6.7	6.7	1.5	2.9	0.4	0.1	1.7
FI	44.1	19.1	7.2	12.6	1.1	1.5	1.4	1.1	0.1
SE	37.8	9.2	7.6	16.9	0.8	1.0	1.4	0.2	0.7
UK	390.5	110.4	51.8	123.5	19.9	68.1	5.3	1.6	9.9

Source: EEA_UNFCCC v_20 June 2018

Methodology and Notes: See Appendix 13 – No 4

4.1.1 GHGs Emissions

EU-28 AND MEMBER STATES –
OTHER THAN FUEL COMBUSTION

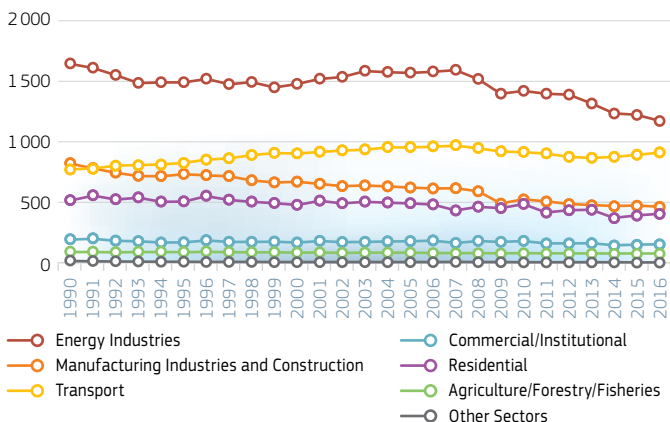
Million ton CO ₂ equiv.	2016				
	Industrial Processes and Solvent Use	Agriculture	Waste and Others	Indirect CO ₂	International aviation
EU-28	374.5	430.0	138.5	1.5	148.0
Share (%)	8.4%	9.7%	3.1%	0.0%	3.3%
BE	20.5	9.9	1.5	0.0	4.4
BG	6.1	6.5	4.1	0.0	0.6
CZ	15.2	8.5	5.6	0.8	1.0
DK	2.1	10.5	1.3	0.3	2.9
DE	61.8	65.2	10.5	0.0	26.4
EE	0.5	1.3	0.3	0.0	0.1
IE	3.4	19.3	1.0	0.0	2.6
EL	12.4	7.8	4.5	0.0	3.1
ES	31.8	34.4	14.4	0.0	15.8
FR	43.4	76.7	16.2	0.0	17.2
HR	0.0	0.0	0.0	0.0	0.0
IT	32.1	30.4	18.3	0.0	10.4
CY	1.3	0.5	0.6	0.0	0.9
LV	0.7	2.7	0.7	0.0	0.4
LT	3.3	4.4	1.0	0.0	0.3
LU	0.7	0.8	0.1	0.0	1.5
HU	6.5	6.9	3.5	0.0	0.6
MT	0.3	0.1	0.2	0.0	0.4
NL	10.7	19.2	3.3	0.2	11.8
AT	16.5	7.3	1.6	0.0	2.3
PL	28.7	30.1	10.6	0.0	2.0
PT	7.3	6.8	6.5	0.2	3.4
RO	12.9	18.3	5.8	0.0	0.9
SI	1.1	1.8	0.6	0.0	0.1
SK	9.3	2.7	1.5	0.0	0.2
FI	6.1	6.5	2.0	0.1	2.0
SE	6.9	6.9	1.3	0.0	2.6
UK	30.7	41.7	20.0	0.0	34.0

4.1.1 GHGs Emissions

EU-28 – TOTAL AND FUEL COMBUSTION

Million ton CO ₂ equiv.	GHG Emissions - National Total (including intern)	Fuel Combustion Activities	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors
1990	5 720	4 350.8	1 677.9	841.1	787.1	201.7	529.8	99.1	23.6
1995	5 387	4 083.5	1 521.4	750.5	843.2	176.8	520.5	97.3	13.9
1996	5 500	4 191.8	1 551.1	741.1	870.2	194.1	567.9	99.9	12.4
1997	5 403	4 090.8	1 504.4	732.6	881.3	180.2	533.7	96.8	12.4
1998	5 364	4 074.3	1 521.7	697.6	909.3	181.7	519.6	93.9	11.8
1999	5 264	4 012.5	1 477.3	679.4	928.0	182.6	507.2	93.6	10.6
2000	5 278	4 017.3	1 507.9	686.1	924.0	175.3	492.2	91.5	9.9
2001	5 334	4 101.1	1 550.7	668.6	937.0	188.3	526.2	91.5	9.1
2002	5 286	4 070.9	1 566.7	648.8	948.4	178.6	505.2	89.3	9.1
2003	5 374	4 150.2	1 617.7	654.2	957.3	180.3	518.8	89.7	9.7
2004	5 382	4 141.8	1 606.7	646.1	976.6	185.5	511.2	90.2	10.8
2005	5 351	4 118.1	1 600.4	635.9	975.9	186.4	505.9	90.5	10.9
2006	5 344	4 116.8	1 610.2	628.3	983.4	192.5	496.0	87.2	10.8
2007	5 301	4 061.6	1 624.0	631.3	992.8	171.0	443.4	84.1	11.1
2008	5 184	3 980.6	1 548.4	604.5	968.2	188.1	475.0	84.6	10.2
2009	4 804	3 696.3	1 423.8	501.3	940.7	180.2	463.1	82.8	9.0
2010	4 909	3 795.5	1 448.0	536.1	935.0	188.9	499.0	85.1	8.7
2011	4 755	3 647.1	1 424.1	518.7	922.8	167.9	427.4	83.5	8.4
2012	4 690	3 603.5	1 417.3	497.1	893.4	166.4	446.5	82.1	7.6
2013	4 596	3 513.9	1 341.5	487.9	886.3	168.3	449.7	81.6	7.3
2014	4 427	3 335.2	1 257.4	479.7	894.1	149.0	378.9	80.5	7.0
2015	4 460	3 371.1	1 245.4	483.9	910.8	156.3	400.0	79.7	6.9
2016	4 441	3 348.3	1 195.2	474.3	931.5	160.2	414.9	80.9	6.8

GHGs EMISSIONS – EU-28 – FUEL COMBUSTION (MILLION ton CO₂ EQUIV.)



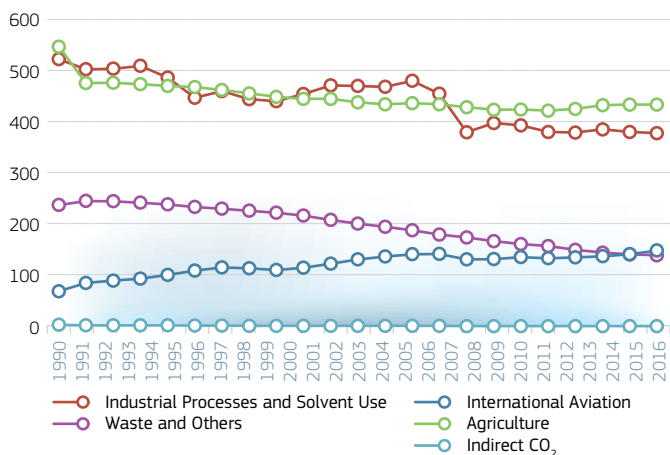
Source: EEA_UNFCCC v_20 June 2018

Methodology and Notes: See Appendix 13 – No 4

4.1.1 GHGs Emissions

EU-28 – OTHER THAN FUEL COMBUSTION

Million ton CO ₂ equiv.	Industrial Processes and Solvent Use	Agriculture	Waste and Other	Indirect CO ₂	International aviation
1990	517.5	541.9	236.0	4.3	69.2
1995	498.4	471.6	244.1	3.7	85.5
1996	499.5	472.0	243.2	3.6	89.6
1997	505.1	469.4	240.5	3.5	93.8
1998	482.3	465.8	237.4	3.3	101.1
1999	443.2	464.0	232.0	3.0	109.2
2000	455.7	458.0	228.8	2.7	115.3
2001	440.5	451.3	224.7	2.5	113.5
2002	436.6	444.6	221.2	2.4	110.3
2003	450.6	440.8	215.5	2.3	114.8
2004	466.8	441.0	207.1	2.2	122.6
2005	465.7	434.3	199.9	2.3	130.8
2006	464.5	430.4	193.8	2.3	136.3
2007	476.1	432.7	187.2	2.2	141.0
2008	450.8	430.2	178.8	2.1	141.5
2009	376.6	424.8	173.0	1.9	131.0
2010	394.4	419.7	165.9	2.0	131.6
2011	390.0	420.2	160.4	1.8	135.3
2012	377.1	418.0	156.4	1.8	133.3
2013	375.7	421.3	149.2	1.6	134.6
2014	381.9	428.4	143.5	1.6	136.8
2015	376.8	429.5	140.5	1.6	141.0
2016	374.5	430.0	138.5	1.5	148.0

GHGs EMISSIONS – EU-28 – OTHER THAN FUEL COMBUSTION
(MILLION ton CO₂ EQUIV.)

Source: EEA_UNFCCC v_20 June 2018

Methodology and Notes: See Appendix 13 – No 4

4.1.2 CO₂ Emissions *

EU-28 AND MEMBER STATES – TOTAL

Million ton CO ₂	1995	2000	2005	2010	2015	2016
EU-28	4301.4	4293.9	4434.5	4071.0	3651.9	3637.3
Index 1995	100.0%	99.8%	103.1%	94.6%	84.9%	84.6%
BE	129.0	131.5	129.2	117.8	104.6	104.6
BG	58.4	45.5	51.2	48.3	48.7	45.9
CZ	134.3	128.6	127.3	119.4	106.5	108.3
DK	64.5	57.4	54.7	52.2	38.2	40.2
DE	954.8	920.1	889.9	857.7	821.3	827.9
EE	18.3	15.4	17.3	19.1	16.0	17.6
IE	36.9	47.0	50.6	44.0	41.0	42.5
EL	89.6	105.5	116.5	99.9	77.8	74.5
ES	274.3	321.5	380.4	296.2	285.8	276.7
FR	405.7	428.0	439.9	404.8	355.8	357.5
HR	17.3	20.0	23.7	21.5	18.4	18.6
IT	457.8	478.7	503.7	433.7	365.1	360.6
CY	6.7	7.9	8.8	8.8	7.7	8.2
LV	9.3	7.2	8.0	9.0	7.7	7.7
LT	15.1	11.9	14.2	13.9	13.4	13.4
LU	9.7	9.6	13.3	12.4	10.6	10.5
HU	62.2	59.3	61.3	52.8	47.2	48.2
MT	2.8	2.9	2.9	2.9	2.1	1.8
NL	181.1	182.2	188.7	192.6	176.6	177.4
AT	65.5	68.0	81.3	74.4	68.8	69.7
PL	361.8	317.6	322.0	333.1	312.4	323.2
PT	56.7	68.3	72.0	55.7	55.5	53.8
RO	125.5	94.0	101.3	84.0	78.5	75.9
SI	15.3	15.5	17.0	16.4	13.7	14.5
SK	44.9	41.6	43.0	38.8	34.0	34.2
FI	59.2	58.2	58.4	65.7	46.4	49.9
SE	60.7	56.7	55.8	55.0	45.5	45.1
UK	584.0	594.0	601.7	540.6	452.7	428.9

* CO₂ emissions without LULUCF, with indirect CO₂ and including international aviation.

Source: EEA_UNFCCC v_20 June 2018

Methodology and Notes: See Appendix 13 – No 4

4.1.2 CO₂ EmissionsEU-28 AND MEMBER STATES –
FUEL COMBUSTION

Million ton CO ₂	2016								
	Fuel Combustion Activities	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emissions
EU-28	3233.9	1183.4	468.2	920.6	158.8	396.7	75.0	6.7	24.6
Share (%)	88.9%	32.5%	12.9%	25.3%	4.4%	10.9%	2.1%	0.2%	0.7%
BE	84.2	19.8	13.2	26.1	5.9	16.9	2.2	0.1	0.1
BG	40.7	27.0	2.9	9.2	0.3	0.8	0.4	0.0	0.0
CZ	94.6	54.2	9.3	18.0	2.9	8.5	1.2	0.4	0.2
DK	35.5	13.9	3.9	12.8	0.7	2.1	1.5	0.2	0.3
DE	754.1	326.5	125.3	165.0	37.4	90.3	6.1	1.0	2.4
EE	17.2	13.7	0.5	2.3	0.1	0.2	0.3	0.0	0.0
IE	37.3	12.4	4.5	12.1	1.9	5.9	0.5	0.0	0.0
EL	65.4	36.9	5.3	17.1	0.7	4.7	0.4	0.2	0.0
ES	239.6	70.6	39.9	85.1	11.3	17.0	11.4	0.5	3.8
FR	315.0	44.9	48.5	131.1	25.0	51.6	11.0	0.0	3.0
HR	16.3	4.9	2.2	6.1	0.6	1.5	0.6	0.0	0.3
IT	334.9	103.8	47.0	103.4	22.8	48.0	7.0	0.5	2.5
CY	6.4	3.3	0.6	2.0	0.1	0.4	0.1	0.0	0.0
LV	6.8	1.8	0.6	3.1	0.4	0.5	0.4	0.0	0.0
LT	10.7	2.9	1.2	5.4	0.3	0.7	0.2	0.0	0.0
LU	8.4	0.2	1.1	5.4	0.6	1.0	0.0	0.0	0.0
HU	42.9	13.5	4.7	12.3	3.3	7.4	1.5	0.0	0.1
MT	1.4	0.6	0.0	0.6	0.1	0.0	0.0	0.0	0.0
NL	159.1	67.3	26.5	30.2	7.9	17.0	9.0	0.2	1.1
AT	53.1	10.4	10.7	23.3	1.5	6.3	0.8	0.0	0.1
PL	300.8	162.4	28.2	52.8	8.5	35.7	9.9	0.0	3.4
PT	46.1	17.3	7.3	16.5	1.1	1.7	1.1	0.0	1.1
RO	64.3	25.7	11.3	16.6	2.1	6.2	1.1	0.4	0.9
SI	13.7	4.9	1.6	5.7	0.5	0.7	0.2	0.0	0.1
SK	25.5	7.5	6.7	6.7	1.4	2.8	0.3	0.1	0.0
FI	43.2	18.8	7.0	12.5	1.0	1.3	1.3	1.1	0.1
SE	36.7	8.9	7.4	16.7	0.8	0.7	1.4	0.2	0.7
UK	380.0	109.3	50.9	122.2	19.8	67.0	4.8	1.5	4.5

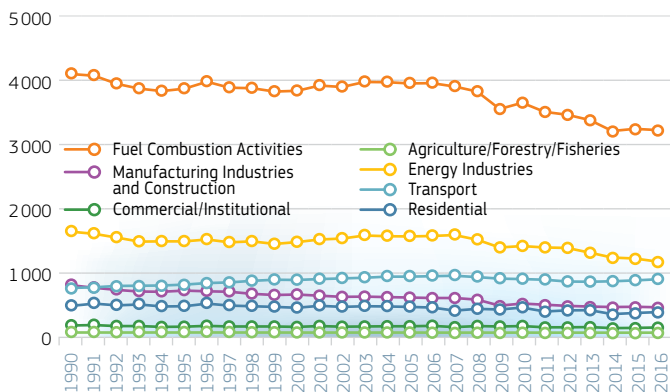
4.1.2 CO₂ EmissionsEU-28 AND MEMBER STATES –
OTHER THAN FUEL COMBUSTION

Million ton CO ₂	2016				
	Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO ₂	International aviation
EU-28	241.1	10.7	3.4	1.5	146.7
Share (%)	6.6%	0.3%	0.1%	0.0%	4.0%
BE	15.7	0.2	0.2	0.0	4.4
BG	4.5	0.0	0.0	0.0	0.6
CZ	11.5	0.4	0.1	0.8	1.0
DK	1.4	0.2	0.0	0.3	2.8
DE	44.9	2.8	0.0	0.0	26.2
EE	0.3	0.0	0.0	0.0	0.1
IE	2.1	0.5	0.0	0.0	2.6
EL	6.0	0.0	0.0	0.0	3.1
ES	20.8	0.5	0.0	0.0	15.7
FR	21.8	2.0	1.6	0.0	17.1
HR	1.9	0.1	0.0	0.0	0.4
IT	14.8	0.5	0.1	0.0	10.3
CY	0.9	0.0	0.0	0.0	0.9
LV	0.4	0.0	0.0	0.0	0.4
LT	2.4	0.0	0.0	0.0	0.3
LU	0.6	0.0	0.0	0.0	1.5
HU	4.5	0.2	0.0	0.0	0.6
MT	0.0	0.0	0.0	0.0	0.4
NL	6.4	0.1	0.0	0.2	11.7
AT	14.2	0.1	0.0	0.0	2.3
PL	18.6	1.0	0.8	0.0	2.0
PT	4.1	0.0	0.0	0.2	3.4
RO	10.6	0.1	0.0	0.0	0.9
SI	0.7	0.0	0.0	0.0	0.1
SK	8.5	0.1	0.0	0.0	0.2
FI	4.4	0.3	0.0	0.1	2.0
SE	5.7	0.1	0.1	0.0	2.5
UK	13.7	1.3	0.3	0.0	33.6

4.1.2 CO₂ Emissions

EU-28 – TOTAL AND FUEL COMBUSTION

Million ton CO ₂	CO ₂ emissions - National total (including international aviation)	Fuel Combustion Activities	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/ Institutional	Residential	Agriculture/ Forestry/ Fisheries	Other Sectors
1990	4545	4126.0	1668.3	833.6	772.7	199.1	506.1	93.9	23.0
1995	4301	3892.9	1512.2	743.6	827.2	175.4	499.8	91.8	13.6
1996	4409	4003.6	1541.7	734.3	853.7	192.7	545.7	94.2	12.1
1997	4323	3909.7	1495.2	725.8	864.6	178.8	513.1	91.0	12.2
1998	4322	3903.1	1512.4	690.6	892.4	180.4	500.3	88.4	11.6
1999	4265	3847.4	1468.2	672.5	912.3	181.3	488.4	88.1	10.5
2000	4294	3858.1	1498.6	679.1	909.2	174.0	474.5	86.0	9.7
2001	4364	3941.9	1541.1	661.5	923.1	187.0	508.4	86.1	8.9
2002	4337	3919.0	1556.8	641.5	935.3	177.3	489.0	84.0	8.9
2003	4433	3999.7	1607.2	646.7	944.6	179.0	501.5	84.3	9.5
2004	4450	3998.1	1596.0	638.3	964.1	184.1	494.5	84.8	10.5
2005	4434	3978.1	1589.6	628.1	964.1	185.1	488.6	85.0	10.7
2006	4446	3981.3	1599.0	620.9	971.8	191.0	478.5	81.8	10.5
2007	4404	3929.9	1612.5	623.6	981.3	169.6	425.6	78.5	10.8
2008	4304	3849.0	1536.8	597.1	957.1	186.6	456.0	78.7	10.0
2009	3951	3571.1	1412.5	495.1	930.3	178.7	443.8	76.9	8.8
2010	4071	3668.6	1436.2	529.5	924.6	187.3	478.4	79.0	8.5
2011	3929	3523.9	1412.3	512.2	912.5	166.4	409.5	77.5	8.3
2012	3868	3479.2	1405.2	490.7	883.2	164.9	427.1	75.9	7.4
2013	3781	3393.3	1329.4	481.6	876.2	166.9	430.2	75.6	7.2
2014	3614	3219.1	1245.7	473.5	883.7	147.6	361.6	74.5	6.9
2015	3652	3254.0	1233.5	477.5	900.1	154.9	382.0	73.9	6.7
2016	3637	3233.9	1183.4	468.2	920.6	158.8	396.7	75.0	6.7

CO₂ EMISSIONS – EU-28 – TOTAL AND FUEL COMBUSTION
(MILLION ton CO₂)

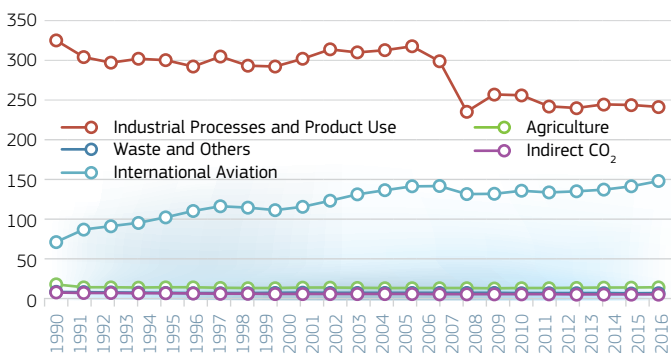
Source: EEA_UNFCCC v_20 June 2018

Methodology and Notes: See Appendix 13 – No 4

4.1.2 CO₂ Emissions

EU-28 – OTHER THAN FUEL COMBUSTION

Million ton CO ₂	Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO ₂	International aviation
1990	326.1	14.8	5.3	4.3	68.6
1995	304.8	10.7	4.6	3.7	84.7
1996	297.6	10.7	4.4	3.6	88.8
1997	302.5	10.4	3.9	3.5	92.9
1998	301.0	10.7	3.8	3.3	100.1
1999	292.6	10.6	3.5	3.0	108.2
2000	305.3	10.2	3.4	2.7	114.2
2001	293.7	9.8	3.5	2.5	112.5
2002	292.6	9.8	3.7	2.4	109.3
2003	302.6	10.4	4.0	2.3	113.8
2004	314.7	10.3	3.7	2.2	121.5
2005	310.7	9.9	3.8	2.3	129.7
2006	313.6	9.6	3.8	2.3	135.1
2007	318.6	9.7	3.7	2.2	139.7
2008	299.4	9.6	3.7	2.1	140.3
2009	234.9	9.6	3.6	1.9	129.8
2010	257.1	9.3	3.7	2.0	130.4
2011	255.8	9.7	3.5	1.8	134.1
2012	241.8	9.6	3.5	1.8	132.1
2013	239.6	10.0	3.4	1.6	133.4
2014	243.9	10.4	3.4	1.6	135.5
2015	243.3	10.3	3.0	1.6	139.7
2016	241.1	10.7	3.4	1.5	146.7

CO₂ EMISSIONS – EU-28 – OTHER THAN FUEL COMBUSTION
(MILLION ton CO₂)

Source: EEA_UNFCCC v_20 June 2018

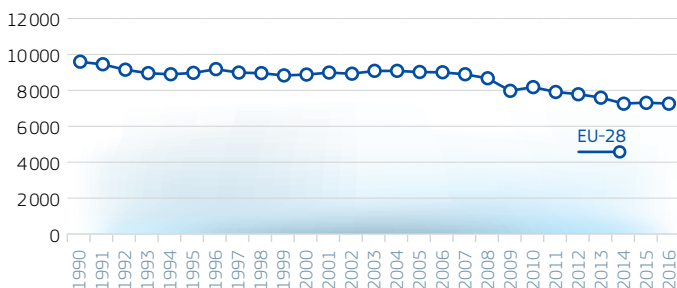
Methodology and Notes: See Appendix 13 – No 4

4.2 Main Emissions Indicators

4.2.1 CO₂ per Capita

kg CO ₂ /cap	1995	2000	2005	2010	2015	2016
EU-28	8926	8812	8966	8091	7181	7128
Index 1995	100.0%	98.7%	100.4%	90.6%	80.5%	79.9%
BE	12733	12842	12369	10864	9311	9249
BG	6935	5549	6653	6507	6756	6420
CZ	12995	12516	12483	11414	10103	10258
DK	12372	10772	10107	9423	6757	7049
DE	11710	11198	10787	10485	10115	10075
EE	12606	11009	12717	14345	12142	13343
IE	10269	12443	12308	9670	8758	8996
EL	8503	9791	10622	8987	7168	6904
ES	6921	7943	8787	6371	6154	5958
FR	6840	7070	7008	6261	5354	5357
HR	3710	4450	5509	5006	4343	4438
IT	8053	8410	8704	7327	6005	5944
CY	10321	11493	12012	10799	9036	9648
LV	3710	3025	3572	4253	3866	3887
LT	4151	3376	4241	4411	4582	4654
LU	23845	22170	28873	24723	18830	18210
HU	6014	5797	6072	5276	4790	4901
MT	7513	7450	7283	6991	4794	3985
NL	11742	11483	11574	11622	10451	10449
AT	8250	8492	9916	8912	8018	8014
PL	9379	8300	8435	8762	8220	8512
PT	5661	6662	6862	5271	5351	5203
RO	5524	4185	4740	4141	3949	3842
SI	7691	7797	8505	8024	6628	7005
SK	8385	7702	8012	7190	6279	6294
FI	11605	11256	11156	12280	8473	9102
SE	6886	6393	6189	5892	4673	4577
UK	10079	10104	9998	8648	6978	6560

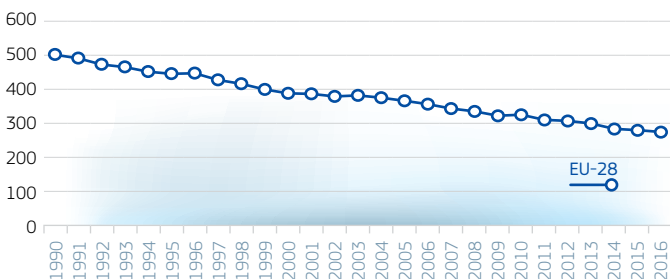
CO₂ PER CAPITA – EU-28 – kg CO₂/cap



Source: EEA_UNFCCC v_20 June 2017, Eurostat 2018
Methodology and Notes: See Appendix 13 – No 4

4.2.2 Carbon GDP Intensity

ton CO ₂ /M€'10	1995	2000	2005	2010	2015	2016
EU-28	445.5	384.6	361.4	317.4	269.3	263.1
Index 1995	100.0%	86.3%	81.1%	71.2%	60.5%	59.1%
BE	478.4	422.9	379.8	322.6	272.7	268.8
BG	2.439.3	1.862.0	1.589.9	1.263.2	1.179.0	1.070.5
CZ	1.278.6	1.121.6	916.5	762.0	625.1	619.6
DK	332.4	254.9	227.3	214.5	148.6	153.3
DE	445.1	390.1	366.8	332.4	293.2	290.0
EE	2.301.0	1.446.8	1.150.7	1.299.6	906.4	976.7
IE	468.2	381.0	312.7	262.5	171.6	169.4
EL	564.2	555.6	507.1	442.1	420.6	403.3
ES	386.1	370.4	371.0	274.0	267.0	250.2
FR	264.3	241.6	228.7	202.6	169.7	168.5
HR	579.2	567.3	540.2	477.3	410.8	0.0
IT	324.9	307.8	309.0	270.3	234.4	229.6
CY	564.1	554.4	516.6	458.4	431.1	445.9
LV	970.0	586.1	440.8	507.0	363.0	354.0
LT	1.036.8	647.3	538.2	494.4	396.7	389.3
LU	419.3	312.2	374.0	308.9	229.0	219.9
HU	890.6	732.9	613.7	534.6	434.3	433.6
MT	655.0	537.2	491.1	438.6	246.8	199.3
NL	403.7	328.4	318.4	305.0	268.6	264.0
AT	298.9	267.5	293.3	251.5	220.2	219.9
PL	1.899.1	1.289.9	1.123.2	920.8	744.1	747.6
PT	413.9	408.5	412.6	309.7	322.4	307.5
RO	1.489.8	1.130.2	921.4	668.4	544.6	502.6
SI	676.1	555.8	510.6	453.1	369.8	379.2
SK	1.275.3	992.5	803.3	573.5	445.0	432.1
FI	479.5	368.2	325.2	351.2	248.2	261.8
SE	241.5	189.0	163.5	149.1	111.0	106.5
UK	435.0	375.8	332.3	293.5	221.8	206.2

CARBON GDP INTENSITY – EU-28 – ton CO₂/M€'10

Source: EEA_UNFCCC v_20 June 2017, Eurostat 2018
 Methodology and Notes: See Appendix 13 – No 4

Country Profiles



5



Summary

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5.0 European Union 28

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	969.3	952.7	914.6	851.3	781.9	770.4
Solid Fuels	279.8	214.6	196.2	165.0	145.3	132.3
of which Hard Coal	174.9	120.7	100.2	75.0	58.0	51.4
Petroleum and Products	180.8	180.0	142.2	109.9	88.7	88.6
of which Crude and NGL	172.2	169.9	129.9	94.9	72.9	72.2
Gases	191.4	210.0	190.6	159.4	107.5	107.5
of which Natural Gas	191.0	209.8	190.5	159.3	107.5	107.5
Nuclear	227.3	243.8	257.5	236.6	221.2	216.7
Renewables	84.3	98.2	120.3	169.2	205.8	210.7
Wastes, Non-Renewable	5.7	6.1	7.9	11.2	13.3	14.5
Net Imports	736.4	826.8	980.3	955.6	901.6	903.7
Solid Fuels	78.2	98.1	125.2	111.6	111.5	96.7
of which Hard Coal	76.4	94.1	122.6	111.0	111.7	97.5
Petroleum and Products	510.6	532.8	598.1	557.6	535.7	529.8
of which Crude and NGL	471.0	500.6	563.6	522.4	528.4	520.2
Gases	145.6	193.5	254.1	279.7	247.0	269.5
of which Natural Gas	145.6	193.5	254.1	279.7	247.0	269.5
Renewables	0.3	0.3	1.6	6.0	5.9	5.8
Electricity	1.8	2.0	1.4	0.6	1.2	1.6
Gross Inland Consumption	1 674.6	1 729.8	1 831.1	1 765.2	1 629.3	1 640.6
Solid Fuels	364.8	321.1	318.0	283.2	262.7	240.7
of which Hard Coal	257.5	221.4	220.4	191.9	175.8	159.2
Petroleum and Products	654.3	662.1	679.3	610.6	560.9	567.1
of which Crude and NGL	645.1	673.1	693.6	617.6	597.6	595.2
Gases	336.1	396.2	445.2	447.7	357.9	383.0
of which Natural Gas	335.7	396.0	445.1	447.6	357.9	382.9
Nuclear	227.3	243.8	257.5	236.6	221.2	216.7
Renewables	84.6	98.5	121.8	175.2	211.7	216.6
Electricity	1.8	2.0	1.4	0.6	1.2	1.6
Wastes, Non-Renewable	5.7	6.1	7.9	11.3	13.6	14.9
Primary Energy Consumption	1 567.2	1 617.6	1 713.3	1 657.5	1 531.8	1 542.8
Available for Final Consumption	1 192.9	1 243.0	1 313.7	1 275.7	1 184.1	1 205.2
Final Non-Energy Consumption	107.4	112.2	117.8	107.7	97.5	97.8
Final Energy Consumption	1 082.6	1 132.7	1 192.7	1 163.2	1 086.2	1 107.8
by Fuel/Product						
Solid Fuels	83.0	61.9	53.9	50.2	45.9	45.3
Petroleum and Products	465.9	490.3	503.7	458.1	429.9	437.1
Gases	247.5	267.6	282.0	272.0	236.9	245.3
Biomass and Renewable Wastes	43.6	48.3	58.2	80.9	84.4	86.3
Solar	0.3	0.4	0.7	1.5	2.0	2.1
Geothermal	0.4	0.4	0.4	0.4	0.5	0.5
Electricity	194.1	217.4	239.4	244.0	236.6	239.4
Derived heat	46.3	45.3	52.7	53.5	46.5	47.9
Wastes, Non-Renewable	1.6	1.0	1.5	2.7	3.5	3.8
by Sector						
Industry	331.6	333.4	331.2	290.8	276.1	276.8
Transport	306.5	344.5	369.2	363.7	358.1	367.3
Residential	285.1	290.9	309.4	320.0	276.4	284.8
Services	114.7	121.7	144.6	157.7	147.1	150.0
Agriculture and Fishing	32.5	29.5	29.1	26.3	24.8	25.5
Other	12.2	12.7	9.3	4.7	3.7	3.3

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	618.5	680.9	757.9	883.8	984.8	990.9
Combustible Fuels	353.3	391.3	435.1	487.8	470.1	455.6
Nuclear	128.4	136.6	135.0	131.7	122.0	122.1
Hydro	133.5	139.0	143.4	147.3	152.4	154.0
Wind	2.4	12.7	40.3	84.3	141.4	154.3
Solar PV	0.0	0.2	2.3	30.0	94.7	100.8
Geothermal	0.5	0.6	0.7	0.8	0.8	0.8
Tide, Wave and Ocean	0.2	0.2	0.2	0.2	0.2	0.2
Other Sources	0.1	0.2	0.9	0.9	0.8	0.8
Gross Electricity Generation, by Fuel (TWh)	2 743.6	3 035.8	3 325.8	3 366.6	3 235.2	3 255.1
Solid Fuels	945.9	933.9	960.3	829.2	791.8	701.3
Petroleum and Products	230.3	181.3	142.8	86.9	61.0	59.5
Gases	294.4	513.1	704.0	799.4	530.3	642.3
Nuclear	880.8	945.0	997.7	916.6	857.1	839.7
Renewables	382.6	448.6	496.0	710.8	965.7	981.5
Wastes, non-RES	8.7	12.1	14.4	19.0	23.1	25.9
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)					119.7	124.4
CHP Electricity Generation (TWh)				394.6	362.9	359.6
CHP in Total Electricity Generation (%)				11.8%	11.2%	11.0%
CHP Heat Production (PJ)				3038.4	2791.7	2807.9
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	300163	336943	357761	342695	335479	344648
Motor Gasoline	137901	133773	115037	91483	77223	77299
Gas/Diesel Oil	123470	153195	186198	195050	200028	206900
Final Consumption Biofuels	216	709	3216	13104	13850	13708
Biogasoline	24	58	591	2804	2686	2620
Biodiesel	187	636	2470	10262	11159	11083
Main Energy Indicators						
Energy Intensity (toe/M€'10)	173.4	154.9	149.2	137.6	120.2	118.7
Energy per Capita (kgoe/cap)	3475.0	3550.1	3702.1	3508.1	3203.9	3215.1
Final Electricity per Capita (KWh/cap)	4685.2	5188.9	5630.0	5640.7	5411.4	5456.4
Primary Energy Intensity (toe/M€'10)	162.3	144.9	139.6	129.2	113.0	111.6
Import Dependency (%)	43.1%	46.7%	52.1%	52.7%	53.9%	53.6%
of Solid Fuels	21.4%	30.6%	39.4%	39.4%	42.4%	40.2%
of Hard Coal	29.7%	42.5%	55.6%	57.9%	63.6%	61.2%
of Petroleum Fuels	74.1%	75.7%	82.2%	84.5%	88.8%	86.7%
of Crude and NGL	73.0%	74.4%	81.3%	84.6%	88.4%	87.4%
of Natural Gas	43.4%	48.9%	57.1%	62.5%	69.0%	70.4%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			9.0%	12.9%	16.7%	17.0%
RES-H&C – Heating and Cooling			10.9%	15.0%	18.7%	19.1%
RES-E – Electricity Generation			14.8%	19.7%	28.8%	29.6%
RES-T – Transport			1.8%	5.2%	6.6%	7.1%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	4301.4	4293.9	4434.5	4071.0	3651.9	3637.3
GHGs Emissions**	5386.7	5277.7	5351.2	4909.1	4460.5	4440.8
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	8925.9	8812.3	8965.8	8090.7	7181.1	7128.0
Carbon Intensity (kg CO ₂ /toe)	2516.2	2423.5	2359.0	2244.0	2184.7	2158.9
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	445.5	384.6	361.4	317.4	269.3	263.1

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.1 Belgium

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	11.83	13.61	13.72	16.19	11.63	16.24
Solid Fuels	0.31	0.21	0.06			
of which Hard Coal	0.31	0.21	0.06	0.01	0.01	0.01
Petroleum and Products	0.00	0.00	0.01	0.80	1.22	1.26
of which Crude and NGL						
Gases	0.00	0.00				
of which Natural Gas	0.00	0.00				
Nuclear	10.67	12.42	12.28	12.37	6.73	11.23
Renewables	0.44	0.53	0.88	2.27	2.99	3.07
Wastes, Non-Renewable	0.41	0.44	0.50	0.74	0.68	0.68
Net Imports	46.64	50.50	53.43	53.56	50.63	48.72
Solid Fuels	9.42	7.30	5.24	3.70	3.10	2.80
of which Hard Coal	8.90	6.56	4.96	3.72	2.64	2.29
Petroleum and Products	26.37	29.45	32.55	32.45	31.18	30.15
of which Crude and NGL	26.18	34.04	31.77	33.11	32.26	32.07
Gases	10.42	13.28	14.82	16.79	13.87	14.38
of which Natural Gas	10.42	13.28	14.82	16.79	13.87	14.38
Renewables	0.09	0.10	0.28	0.57	0.68	0.85
Electricity	0.35	0.37	0.54	0.05	1.81	0.53
Gross Inland Consumption	53.83	59.30	59.06	60.90	54.26	57.45
Solid Fuels	8.65	8.00	5.17	3.76	3.19	2.96
of which Hard Coal	8.21	7.26	4.91	3.69	2.74	2.43
Petroleum and Products	22.61	24.06	24.67	24.41	24.22	23.84
of which Crude and NGL	26.23	33.97	31.92	33.13	32.24	32.17
Gases	10.61	13.37	14.74	16.75	13.97	14.30
of which Natural Gas	10.61	13.37	14.74	16.75	13.97	14.30
Nuclear	10.67	12.42	12.28	12.37	6.73	11.23
Renewables	0.53	0.64	1.16	2.83	3.66	3.92
Electricity	0.35	0.37	0.54	0.05	1.81	0.53
Wastes, Non-Renewable	0.41	0.44	0.50	0.74	0.68	0.68
Primary Energy Consumption	47.91	52.32	51.33	53.54	45.74	48.99
Available for Final Consumption	39.93	44.83	44.42	45.66	44.43	44.76
Final Non-Energy Consumption	5.92	6.99	7.73	7.36	8.52	8.46
Final Energy Consumption	34.35	37.53	36.58	37.63	35.87	36.33
by Fuel/Product						
Solid Fuels	3.33	3.40	2.03	1.63	1.61	1.75
Petroleum and Products	16.03	16.54	16.52	16.10	15.72	15.30
Gases	8.44	9.89	9.94	10.44	9.25	9.73
Biomass and Renewable Wastes	0.35	0.41	0.64	1.52	1.58	1.86
Solar	0.00	0.00	0.00	0.01	0.02	0.02
Geothermal					0.00	0.00
Electricity	5.89	6.67	6.90	7.16	7.03	7.04
Derived heat	0.23	0.49	0.43	0.64	0.51	0.50
Wastes, Non-Renewable	0.09	0.12	0.12	0.14	0.14	0.14
by Sector						
Industry	11.91	14.10	11.71	12.06	11.90	12.21
Transport	8.57	9.66	9.95	10.35	10.44	10.51
Residential	9.30	9.47	9.93	9.41	8.16	8.14
Services	3.46	3.48	4.15	5.03	4.61	4.66
Agriculture and Fishing	1.10	0.78	0.81	0.76	0.72	0.77
Other	0.00	0.03	0.03	0.03	0.03	0.05

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	14.92	15.69	16.10	18.69	21.16	21.55
Combustible Fuels	7.88	8.55	8.71	9.52	8.52	8.54
Nuclear	5.63	5.71	5.80	5.93	5.91	5.91
Hydro	1.40	1.41	1.41	1.43	1.42	1.43
Wind	0.01	0.01	0.17	0.91	2.18	2.37
Solar PV	0.00	0.00	0.00	0.90	3.12	3.30
Geothermal					0.00	0.00
Tide, Wave and Ocean						
Other Sources					0.00	0.00
Gross Electricity Generation, by Fuel (TWh)	74.41	84.01	87.03	95.19	69.85	85.52
Solid Fuels	16.52	12.92	8.20	4.20	2.21	0.39
Petroleum and Products	1.31	0.80	1.74	0.41	0.21	0.19
Gases	12.94	19.09	25.14	33.18	24.07	24.36
Nuclear	41.36	48.16	47.60	47.94	26.10	43.52
Renewables	1.56	2.28	3.42	7.85	15.55	15.29
Wastes, non-RES	0.72	0.77	0.66	1.36	1.25	1.26
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			1.89	2.58	2.38	2.2
CHP Electricity Generation (TWh)			7.36	15.20	12.48	12.2
CHP in Total Electricity Generation (%)			8.5%	16.0%	17.7%	14.2%
CHP Heat Production (PJ)			75.86	0.00	104.41	104.4
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	8440	9537	9803	9748	9996	9895
Motor Gasoline	2977	2359	1846	1236	1321	1429
Gas/Diesel Oil	4283	5416	6522	7075	7155	6958
Final Consumption Biofuels				366	261	441
Biogasoline				57	41	43
Biodiesel				309	221	398
Main Energy Indicators						
Energy Intensity (toe/M€'10)	199.6	190.7	173.6	166.8	141.4	147.6
Energy per Capita (kgoe/cap)	5313.7	5791.8	5653.9	5618.3	4828.3	5079.2
Final Electricity per Capita (KWh/cap)	6756.6	7573.1	7677.9	7685.6	7271.2	7236.1
Primary Energy Intensity (toe/M€'10)	177.7	168.3	150.9	146.7	119.2	125.9
Import Dependency (%)	80.8%	78.1%	80.1%	78.2%	84.3%	76.0%
of Solid Fuels	108.9%	91.2%	101.3%	98.3%	97.1%	94.9%
of Hard Coal	108.5%	90.4%	100.9%	100.7%	96.3%	94.3%
of Petroleum Fuels	99.6%	100.2%	100.8%	101.4%	103.8%	98.8%
of Crude and NGL	99.8%	100.2%	99.5%	99.9%	100.0%	99.7%
of Natural Gas	98.2%	99.3%	100.5%	100.3%	99.3%	100.6%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			2.3%	5.7%	7.9%	8.7%
RES-H&C – Heating and Cooling			3.4%	6.1%	7.8%	8.1%
RES-E – Electricity Generation			2.4%	7.1%	15.5%	15.8%
RES-T – Transport			0.6%	4.7%	3.8%	5.9%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	128.99	131.49	129.21	117.76	104.64	104.62
GHGs Emissions**	157.68	154.52	149.01	136.93	122.03	122.14
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	12732.9	12841.8	12369.3	10864.0	9311.5	9249.0
Carbon Intensity (kg CO ₂ /toe)	2235.6	2034.0	1937.4	1719.2	1741.7	1631.7
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	478.4	422.9	379.8	322.6	272.7	268.8

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.2 Bulgaria

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	10.27	9.87	10.70	10.53	12.13	11.46
Solid Fuels	5.29	4.30	4.18	4.94	5.87	5.11
of which Hard Coal	0.97	0.05	0.00	0.02	0.03	0.03
Petroleum and Products	0.06	0.07	0.13	0.06	0.14	0.23
of which Crude and NGL	0.04	0.04	0.03	0.02	0.02	0.02
Gases	0.04	0.01	0.38	0.06	0.09	0.08
of which Natural Gas	0.04	0.01	0.38	0.06	0.09	0.08
Nuclear	4.46	4.70	4.83	3.96	3.98	4.08
Renewables	0.42	0.78	1.12	1.50	2.03	1.92
Wastes, Non-Renewable	0.00	0.01	0.06	0.01	0.03	0.03
Net Imports	12.83	8.54	9.28	7.08	6.59	6.77
Solid Fuels	2.42	2.26	2.55	1.70	0.74	0.56
of which Hard Coal	2.35	2.25	2.49	1.67	0.70	0.50
Petroleum and Products	5.87	3.94	4.94	4.03	4.25	4.14
of which Crude and NGL	7.39	5.18	5.84	5.37	5.91	5.98
Gases	4.56	2.74	2.46	2.13	2.52	2.59
of which Natural Gas	4.56	2.74	2.46	2.13	2.52	2.59
Renewables	-0.01	0.00	-0.03	-0.06	-0.02	0.03
Electricity	-0.01	-0.40	-0.65	-0.73	-0.91	-0.55
Gross Inland Consumption	22.69	18.52	19.75	17.77	18.51	18.13
Solid Fuels	7.62	6.43	6.90	6.89	6.62	5.70
of which Hard Coal	3.21	2.23	2.63	1.89	0.74	0.59
Petroleum and Products	5.63	4.07	4.72	3.89	4.20	4.23
of which Crude and NGL	7.41	5.25	5.98	5.41	5.88	6.04
Gases	4.58	2.93	2.80	2.30	2.60	2.69
of which Natural Gas	4.58	2.93	2.80	2.30	2.60	2.69
Nuclear	4.46	4.70	4.83	3.96	3.98	4.08
Renewables	0.41	0.78	1.10	1.46	1.99	1.95
Electricity	-0.01	-0.40	-0.65	-0.73	-0.91	-0.55
Wastes, Non-Renewable	0.00	0.01	0.06	0.01	0.03	0.03
Primary Energy Consumption	21.46	17.54	18.91	17.35	17.90	17.63
Available for Final Consumption	12.93	9.99	10.56	8.79	9.65	9.99
Final Non-Energy Consumption	1.23	0.98	0.85	0.42	0.61	0.50
Final Energy Consumption	11.42	9.11	10.19	8.84	9.51	9.66
by Fuel/Product						
Solid Fuels	1.26	0.88	0.98	0.41	0.33	0.34
Petroleum and Products	2.93	3.03	3.72	3.13	3.37	3.45
Gases	1.79	1.68	1.57	1.06	1.31	1.31
Biomass and Renewable Wastes	0.18	0.55	0.69	0.91	1.15	1.21
Solar			0.00	0.01	0.02	0.02
Geothermal			0.03	0.03	0.03	0.04
Electricity	2.47	2.09	2.21	2.33	2.44	2.49
Derived heat	2.80	0.88	0.94	0.96	0.82	0.78
Wastes, Non-Renewable	0.00	0.01	0.05	0.01	0.03	0.03
by Sector						
Industry	6.01	3.97	4.04	2.56	2.71	2.64
Transport	1.85	2.01	2.90	2.86	3.40	3.49
Residential	2.47	2.16	2.12	2.25	2.20	2.25
Services	0.19	0.65	0.82	0.99	0.99	1.08
Agriculture and Fishing	0.38	0.31	0.30	0.19	0.19	0.19
Other	0.51	0.01	0.00	0.00	0.02	0.02

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	1.98	11.09	12.26	10.03	10.91	10.74
Combustible Fuels	0.00	5.67	6.68	4.58	3.99	3.82
Nuclear	0.00	3.53	2.72	1.89	1.98	1.97
Hydro	1.98	1.88	2.85	3.05	3.22	3.22
Wind	0.00	0.00	0.01	0.49	0.70	0.70
Solar PV	0.00	0.00	0.00	0.03	1.03	1.03
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	41.79	40.92	44.37	46.65	49.23	45.28
Solid Fuels	17.32	16.94	18.46	22.61	22.52	19.36
Petroleum and Products	1.44	0.66	0.61	0.39	0.18	0.32
Gases	3.45	2.18	1.90	1.97	1.86	2.05
Nuclear	17.26	18.18	18.65	15.25	15.38	15.78
Renewables	2.31	2.95	4.74	6.42	9.25	7.73
Wastes, non-RES	0.00	0.02	0.02	0.00	0.00	0.00
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			1.2	1.0	1.1	1.5
CHP Electricity Generation (TWh)			2.7	3.7	2.9	3.6
CHP in Total Electricity Generation (%)			6.1%	8.0%	6.0%	8.0%
CHP Heat Production (PJ)			50.4	40.4	31.9	39.3
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1 776	1 804	2 624	2 608	2 987	3 068
Motor Gasoline	1 161	707	571	611	520	492
Gas/Diesel Oil	278	779	1 416	1 441	1 815	1 849
Final Consumption Biofuels				13	146	163
Biogasoline					32	33
Biodiesel				10	114	130
Main Energy Indicators						
Energy Intensity (toe/M€'10)	947.0	758.8	614.0	464.9	448.5	422.6
Energy per Capita (kgoe/cap)	2 692.3	2 261.4	2 569.3	2 394.8	2 570.2	2 534.0
Final Electricity per Capita (KWh/cap)	3 404.2	2 960.7	3 344.7	3 651.8	3 933.0	4 039.5
Primary Energy Intensity (toe/M€'10)	895.5	718.7	587.6	453.9	433.8	411.0
Import Dependency (%)	55.9%	46.0%	46.7%	39.6%	35.4%	37.2%
of Solid Fuels	31.8%	35.1%	37.0%	24.7%	11.2%	9.8%
of Hard Coal	73.0%	100.5%	94.7%	88.3%	94.9%	84.2%
of Petroleum Fuels	99.6%	95.4%	102.2%	101.1%	99.1%	96.1%
of Crude and NGL	99.7%	98.7%	97.7%	99.1%	100.5%	99.0%
of Natural Gas	99.5%	93.6%	87.7%	92.7%	97.0%	96.5%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			9.4%	14.1%	18.2%	18.8%
RES-H&C – Heating and Cooling			14.3%	24.4%	28.6%	30.0%
RES-E – Electricity Generation			9.3%	12.7%	19.1%	19.2%
RES-T – Transport			0.8%	1.4%	6.5%	7.3%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	58.44	45.45	51.16	48.29	48.66	45.92
GHGs Emissions**	75.48	59.81	64.48	61.05	62.28	59.70
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	6 934.7	5 549.3	6 653.4	6 507.1	6 756.5	6 419.5
Carbon Intensity (kg CO ₂ /toe)	2 545.8	2 445.2	2 574.9	2 702.5	2 616.5	2 522.5
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	2 439.3	1 862.0	1 589.9	1 263.2	1 179.0	1 070.5

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.3 Czech Republic

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	32.69	30.81	33.17	32.03	28.90	27.37
Solid Fuels	27.57	25.05	23.57	20.83	16.91	16.12
of which Hard Coal	10.80	9.42	8.41	7.50	5.42	4.61
Petroleum and Products	0.30	0.39	0.59	0.30	0.28	0.25
of which Crude and NGL	0.15	0.17	0.31	0.18	0.13	0.12
Gases	0.20	0.17	0.15	0.20	0.21	0.18
of which Natural Gas	0.20	0.17	0.15	0.20	0.21	0.18
Nuclear	3.16	3.51	6.41	7.25	6.95	6.24
Renewables	1.43	1.61	2.27	3.25	4.28	4.28
Wastes, Non-Renewable	0.03	0.09	0.17	0.20	0.28	0.30
Net Imports	8.60	9.41	12.64	11.59	13.58	13.68
Solid Fuels	-5.78	-4.72	-3.27	-2.83	-0.25	-0.15
of which Hard Coal	-2.86	-3.52	-2.77	-2.73	-0.42	-0.19
Petroleum and Products	7.91	7.51	9.65	8.98	8.75	8.03
of which Crude and NGL	6.96	5.57	7.65	7.81	7.24	5.32
Gases	6.42	7.48	7.54	6.85	6.16	6.72
of which Natural Gas	6.42	7.48	7.54	6.85	6.16	6.72
Renewables	0.01	0.00	-0.19	-0.12	-0.01	0.03
Electricity	0.04	-0.86	-1.09	-1.29	-1.08	-0.94
Gross Inland Consumption	41.94	41.37	45.43	45.43	42.33	41.81
Solid Fuels	22.66	21.64	20.25	18.77	16.47	16.62
of which Hard Coal	8.35	6.28	5.61	5.03	4.92	4.96
Petroleum and Products	8.08	7.88	9.90	9.30	8.96	8.27
of which Crude and NGL	6.95	5.85	7.70	8.01	7.35	5.45
Gases	6.55	7.50	7.70	8.07	6.48	7.02
of which Natural Gas	6.55	7.50	7.70	8.07	6.48	7.02
Nuclear	3.16	3.51	6.41	7.25	6.95	6.24
Renewables	1.43	1.62	2.09	3.13	4.28	4.31
Electricity	0.04	-0.86	-1.09	-1.29	-1.08	-0.94
Wastes, Non-Renewable	0.03	0.09	0.17	0.20	0.28	0.30
Primary Energy Consumption	39.63	39.27	42.48	42.62	39.88	40.04
Available for Final Consumption	28.09	27.50	29.55	29.01	27.23	27.24
Final Non-Energy Consumption	2.32	2.09	2.95	2.81	2.45	1.76
Final Energy Consumption	26.32	25.07	26.33	25.41	24.25	24.88
by Fuel/Product						
Solid Fuels	6.12	5.13	3.77	2.71	2.39	2.42
Petroleum and Products	5.09	5.32	6.82	6.58	6.72	6.80
Gases	6.17	6.49	6.74	6.53	5.43	5.68
Biomass and Renewable Wastes	1.12	1.20	1.64	2.24	2.71	2.77
Solar	0.00	0.00	0.00	0.01	0.02	0.02
Geothermal					0.00	0.00
Electricity	4.13	4.25	4.75	4.66	4.70	4.82
Derived heat	3.66	2.62	2.48	2.53	2.07	2.13
Wastes, Non-Renewable	0.02	0.06	0.13	0.16	0.22	0.25
by Sector						
Industry	12.51	10.13	9.68	7.92	7.45	7.42
Transport	2.84	4.37	6.10	6.23	6.49	6.73
Residential	6.58	6.42	6.65	7.40	6.69	6.99
Services	2.42	2.97	3.11	3.24	2.94	3.05
Agriculture and Fishing	1.23	0.66	0.55	0.55	0.61	0.64
Other	0.74	0.52	0.25	0.08	0.07	0.04

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	13.80	15.32	17.41	20.07	21.87	21.99
Combustible Fuels	10.64	11.47	11.46	12.04	12.96	13.09
Nuclear	1.76	1.76	3.76	3.90	4.29	4.29
Hydro	1.40	2.10	2.17	2.20	2.26	2.26
Wind	0.00	0.00	0.02	0.21	0.28	0.28
Solar PV	0.00	0.00	0.00	1.73	2.08	2.07
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	60.85	73.47	82.58	85.90	83.89	83.31
Solid Fuels	44.34	52.75	49.52	46.90	41.14	41.97
Petroleum and Products	0.59	0.37	0.33	0.20	0.09	0.09
Gases	1.00	3.91	4.22	4.20	4.96	6.38
Nuclear	12.23	13.59	24.73	28.00	26.84	24.10
Renewables	2.68	2.84	3.78	6.49	10.70	10.59
Wastes, non-RES	0.00	0.01	0.01	0.03	0.08	0.08
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			5.20	4.79	4.64	9.0
CHP Electricity Generation (TWh)			13.87	12.24	11.79	8.4
CHP in Total Electricity Generation (%)			16.8%	14.2%	14.0%	10.1%
CHP Heat Production (PJ)			150.67	135.67	106.04	101.6
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	2601	4076	5866	5784	5988	6236
Motor Gasoline	1694	1922	2125	1868	1570	1617
Gas/Diesel Oil	704	1886	3322	3492	3981	4156
Final Consumption Biofuels	16	62	3	231	297	301
Biogasoline	0	0	0	58	63	48
Biodiesel	16	62	3	173	233	253
Main Energy Indicators						
Energy Intensity (toe/M€'10)	399.4	360.7	327.0	289.9	248.5	239.2
Energy per Capita (kgoe/cap)	4059.1	4024.8	4453.9	4342.2	4016.5	3961.3
Final Electricity per Capita (KWh/cap)	4653.2	4804.5	5421.3	5182.8	5184.7	5310.9
Primary Energy Intensity (toe/M€'10)	377.3	342.4	305.8	272.0	234.1	229.2
Import Dependency (%)	20.5%	22.8%	27.8%	25.5%	32.1%	32.7%
of Solid Fuels	-25.5%	-21.8%	-16.1%	-15.1%	-1.5%	-0.9%
of Hard Coal	-34.2%	-56.1%	-49.4%	-54.3%	-8.6%	-3.8%
of Petroleum Fuels	98.0%	95.3%	97.5%	96.5%	97.8%	97.2%
of Crude and NGL	100.2%	95.2%	99.3%	97.6%	98.4%	97.7%
of Natural Gas	98.0%	99.8%	97.8%	84.8%	95.1%	95.7%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			7.1%	10.5%	15.0%	14.9%
RES-H&C – Heating and Cooling			10.9%	14.0%	19.6%	19.9%
RES-E – Electricity Generation			3.7%	7.5%	14.1%	13.6%
RES-T – Transport			0.9%	5.1%	6.5%	6.4%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	134.28	128.64	127.32	119.42	106.47	108.26
GHGs Emissions**	159.43	150.75	149.02	141.50	129.31	131.31
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	12994.6	12516.3	12483.5	11414.2	10103.2	10258.3
Carbon Intensity (kg CO ₂ /toe)	3201.4	3109.8	2802.8	2628.6	2515.4	2589.6
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	1278.6	1121.6	916.5	762.0	625.1	619.6

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.4 Denmark

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	16.26	28.77	30.78	22.92	15.76	14.97
Solid Fuels						
of which Hard Coal						
Petroleum and Products	9.99	19.28	18.46	12.04	7.67	7.03
of which Crude and NGL	9.29	18.09	18.46	12.04	7.67	7.03
Gases	4.73	7.43	9.40	7.36	4.16	4.07
of which Natural Gas	4.70	7.41	9.38	7.34	4.14	4.05
Nuclear						
Renewables	1.29	1.74	2.51	3.11	3.56	3.49
Wastes, Non-Renewable	0.25	0.33	0.41	0.41	0.37	0.38
Net Imports	7.27	-7.37	-10.15	-3.25	2.35	2.52
Solid Fuels	7.66	3.78	3.51	2.64	1.48	1.60
of which Hard Coal	7.63	3.75	3.48	2.63	1.47	1.60
Petroleum and Products	1.17	-8.39	-9.09	-3.59	0.42	0.21
of which Crude and NGL	0.62	-9.86	-10.87	-4.94	-0.36	-0.04
Gases	-1.50	-2.88	-5.01	-3.02	-1.38	-1.29
of which Natural Gas	-1.50	-2.88	-5.01	-3.02	-1.38	-1.29
Renewables	0.01	0.06	0.33	0.81	1.26	1.50
Electricity	-0.07	0.06	0.12	-0.10	0.51	0.44
Gross Inland Consumption	20.20	19.74	19.53	20.04	16.85	17.42
Solid Fuels	6.50	3.99	3.71	3.81	1.74	1.90
of which Hard Coal	6.47	3.96	3.69	3.79	1.73	1.89
Petroleum and Products	9.03	9.10	8.04	7.57	6.48	6.75
of which Crude and NGL	9.77	8.18	7.70	7.18	7.23	7.01
Gases	3.20	4.47	4.41	4.44	2.87	2.90
of which Natural Gas	3.17	4.45	4.40	4.42	2.85	2.88
Nuclear						
Renewables	1.30	1.80	2.84	3.92	4.82	5.01
Electricity	-0.07	0.06	0.12	-0.10	0.51	0.44
Wastes, Non-Renewable	0.25	0.33	0.41	0.41	0.43	0.44
Primary Energy Consumption	19.88	19.44	19.24	19.78	16.60	17.17
Available for Final Consumption	15.03	15.02	15.44	15.67	14.26	14.72
Final Non-Energy Consumption	0.32	0.30	0.29	0.26	0.25	0.25
Final Energy Consumption	14.82	14.72	15.50	15.52	14.01	14.45
by Fuel/Product						
Solid Fuels	0.38	0.29	0.25	0.14	0.12	0.11
Petroleum and Products	7.26	7.06	7.30	6.75	5.84	6.01
Gases	1.69	1.67	1.71	1.75	1.45	1.50
Biomass and Renewable Wastes	0.58	0.63	0.91	1.26	1.45	1.55
Solar	0.01	0.01	0.01	0.01	0.01	0.01
Geothermal				0.00	0.00	0.00
Electricity	2.66	2.79	2.88	2.76	2.66	2.68
Derived heat	2.24	2.25	2.42	2.84	2.46	2.57
Wastes, Non-Renewable	0.01	0.02	0.03	0.02	0.02	0.02
by Sector						
Industry	3.00	2.92	2.85	2.41	2.09	2.14
Transport	4.54	4.82	5.32	5.18	4.95	5.11
Residential	4.48	4.16	4.45	4.91	4.30	4.46
Services	1.84	1.84	2.00	2.13	1.90	1.98
Agriculture and Fishing	0.94	0.96	0.86	0.88	0.76	0.75
Other	0.02	0.01	0.01	0.01	0.01	0.01

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	10.82	12.32	13.04	13.44	14.00	14.34
Combustible Fuels	10.21	9.92	9.89	9.62	8.14	8.23
Nuclear						
Hydro	0.01	0.01	0.01	0.01	0.01	0.01
Wind	0.60	2.39	3.13	3.80	5.08	5.25
Solar PV	0.00	0.00	0.00	0.01	0.78	0.85
Geothermal					0.00	0.00
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	36.76	36.05	36.25	38.86	28.95	30.52
Solid Fuels	27.36	16.67	15.46	17.01	7.11	8.87
Petroleum and Products	3.63	4.44	1.38	0.77	0.31	0.32
Gases	3.64	8.77	8.78	7.91	1.81	2.17
Nuclear						
Renewables	1.85	5.57	9.81	12.43	18.97	18.46
Wastes, non-RES	0.27	0.56	0.82	0.75	0.75	0.71
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			5.69	5.81	6.13	5.9
CHP Electricity Generation (TWh)			18.89	19.10	11.57	12.0
CHP in Total Electricity Generation (%)			52.1%	49.2%	40.0%	39.4%
CHP Heat Production (PJ)			118.98	124.74	93.31	94.9
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	4522	4786	5292	5118	4685	4835
Motor Gasoline	1944	2019	1922	1574	1317	1306
Gas/Diesel Oil	1814	1863	2372	2649	2436	2532
Final Consumption Biofuels				27	232	236
Biogasoline				27	0	0
Biodiesel				0	232	236
Main Energy Indicators						
Energy Intensity (toe/M€'10)	104.1	87.6	81.2	82.4	65.5	66.4
Energy per Capita (kgoe/cap)	3873.5	3702.8	3609.0	3621.5	2977.7	3052.6
Final Electricity per Capita (KWh/cap)	5921.5	6089.5	6183.6	5792.1	5456.1	5458.7
Primary Energy Intensity (toe/M€'10)	102.4	86.3	80.0	81.3	64.5	65.4
Import Dependency (%)	33.4%	-35.0%	-50.0%	-15.7%	13.4%	13.9%
of Solid Fuels	117.9%	94.9%	94.4%	69.4%	85.0%	84.6%
of Hard Coal	118.0%	94.7%	94.3%	69.3%	85.0%	84.6%
of Petroleum Fuels	11.0%	-80.8%	-103.3%	-43.4%	5.8%	2.8%
of Crude and NGL	6.3%	-120.5%	-141.3%	-68.8%	-4.9%	-0.6%
of Natural Gas	-47.2%	-64.8%	-113.9%	-68.3%	-48.2%	-44.6%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			16.0%	22.1%	31.0%	32.2%
RES-H&C – Heating and Cooling			22.8%	31.0%	40.1%	41.7%
RES-E – Electricity Generation			24.6%	32.7%	51.3%	53.7%
RES-T – Transport			0.4%	1.1%	6.7%	6.8%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	64.53	57.42	54.69	52.15	38.24	40.23
GHGs Emissions**	80.19	73.12	68.88	65.77	51.15	53.33
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	12371.9	10772.3	10107.0	9422.7	6757.1	7048.5
Carbon Intensity (kg CO ₂ /toe)	2962.7	2731.8	2695.0	2515.6	2170.6	2223.8
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	332.4	254.9	227.3	214.5	148.6	153.3

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.5 Germany

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	145.26	135.60	138.78	132.44	123.68	119.55
Solid Fuels	78.94	60.63	56.48	45.91	43.00	39.73
of which Hard Coal	38.10	24.16	18.03	9.25	4.60	2.84
Petroleum and Products	4.30	4.73	7.20	7.54	7.53	7.45
of which Crude and NGL	2.97	3.20	3.46	2.47	2.38	2.34
Gases	15.10	15.82	14.33	11.11	6.34	6.55
of which Natural Gas	15.10	15.80	14.33	11.11	6.34	6.55
Nuclear	39.51	43.75	42.06	36.26	23.68	21.83
Renewables	5.98	8.98	16.85	27.71	38.89	39.48
Wastes, Non-Renewable	1.44	1.68	1.85	3.91	4.25	4.51
Net Imports	195.18	204.71	208.41	202.15	195.93	203.21
Solid Fuels	10.27	21.66	25.97	31.65	36.17	38.30
of which Hard Coal	8.17	17.19	23.76	29.15	35.22	37.71
Petroleum and Products	131.60	125.92	120.54	110.29	105.77	107.54
of which Crude and NGL	101.60	101.44	111.34	92.07	89.68	90.60
Gases	52.90	56.87	61.94	61.65	58.68	62.29
of which Natural Gas	52.90	56.87	61.94	61.65	58.68	62.29
Renewables	0.00	0.00	0.36	-0.14	-0.53	-0.57
Electricity	0.42	0.26	-0.39	-1.29	-4.15	-4.34
Gross Inland Consumption	341.64	342.33	341.93	332.49	313.97	317.27
Solid Fuels	91.64	84.80	81.95	78.82	79.52	77.23
of which Hard Coal	47.71	43.80	41.30	39.57	40.19	39.83
Petroleum and Products	135.37	130.98	121.48	111.32	107.17	108.80
of which Crude and NGL	104.82	108.09	114.47	94.64	92.34	93.70
Gases	67.30	71.88	77.78	75.91	65.15	70.33
of which Natural Gas	67.30	71.85	77.78	75.91	65.15	70.33
Nuclear	39.51	43.75	42.06	36.26	23.68	21.83
Renewables	5.98	8.98	17.21	27.57	38.35	38.92
Electricity	0.42	0.26	-0.39	-1.29	-4.15	-4.34
Wastes, Non-Renewable	1.44	1.68	1.85	3.91	4.25	4.51
Primary Energy Consumption	318.02	317.27	317.26	309.90	292.71	295.84
Available for Final Consumption	244.01	247.33	247.18	242.62	232.90	235.96
Final Non-Energy Consumption	23.62	25.06	24.66	22.58	21.27	21.43
Final Energy Consumption	221.62	220.01	218.46	219.65	212.12	216.45
by Fuel/Product						
Solid Fuels	13.89	10.96	8.24	9.38	10.40	10.16
Petroleum and Products	105.63	99.74	90.31	83.17	81.12	82.23
Gases	51.83	56.08	55.14	56.43	51.76	54.39
Biomass and Renewable Wastes	2.69	4.72	8.54	12.14	13.22	13.52
Solar	0.04	0.11	0.26	0.48	0.67	0.67
Geothermal	0.00	0.00	0.04	0.05	0.07	0.08
Electricity	38.80	41.57	44.91	45.78	44.26	44.49
Derived heat	8.75	6.83	10.75	11.27	9.59	9.78
Wastes, Non-Renewable	0.00	0.00	0.28	0.95	1.03	1.13
by Sector						
Industry	60.14	57.57	59.09	60.56	60.95	61.12
Transport	63.66	66.77	62.32	61.10	63.17	65.17
Residential	66.25	65.24	63.50	62.45	53.17	56.05
Services	25.89	25.79	33.19	35.36	34.72	34.00
Agriculture and Fishing	1.99	0.29	0.02	0.00	0.00	0.00
Other	3.69	4.35	0.34	0.18	0.12	0.11

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	116.23	118.88	128.49	162.87	203.42	208.50
Combustible Fuels	83.36	80.79	76.38	85.82	96.97	95.72
Nuclear	22.83	22.40	20.38	20.47	10.80	10.80
Hydro	8.88	9.49	10.86	11.22	11.40	11.30
Wind	1.14	6.10	18.25	26.90	44.58	49.59
Solar PV	0.02	0.11	2.06	18.01	39.24	40.71
Geothermal				0.01	0.03	0.03
Tide, Wave and Ocean						
Other Sources	0.00	0.00	0.57	0.45	0.40	0.35
Gross Electricity Generation, by Fuel (TWh)	537.28	576.54	622.58	632.98	646.89	649.12
Solid Fuels	289.14	296.69	288.14	262.90	272.20	261.75
Petroleum and Products	8.98	4.79	12.00	8.74	6.21	5.85
Gases	50.40	59.97	83.61	100.91	74.53	93.75
Nuclear	153.09	169.61	163.06	140.56	91.79	84.63
Renewables	30.40	39.71	69.28	111.21	193.29	193.93
Wastes, non-RES	5.26	5.79	3.25	6.35	7.06	7.33
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			20.8		37.1	37.2
CHP Electricity Generation (TWh)			77.9	83.2	78.8	87.9
CHP in Total Electricity Generation (%)			12.5%	13.2%	12.2%	13.5%
CHP Heat Production (PJ)			652.5	675.8	669.9	698.0
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	62 229	65 139	58 489	56 660	59 205	61 146
Motor Gasoline	32 059	30 651	23 722	18 859	16 926	16 938
Gas/Diesel Oil	24 099	27 047	26 364	28 449	32 944	34 278
Final Consumption Biofuels	36	236	1 859	2 884	2 537	2 540
Biogasoline			153	749	744	745
Biodiesel	31	222	1 552	2 104	1 792	1 792
Main Energy Indicators						
Energy Intensity (toe/M€'10)	159.3	145.1	140.9	128.9	112.1	111.1
Energy per Capita (kgoe/cap)	4 189.9	4 166.5	4 144.5	4 064.5	3 866.8	3 860.9
Final Electricity per Capita (KWh/cap)	5 533.7	5 884.0	6 330.4	6 508.7	6 339.2	6 296.0
Primary Energy Intensity (toe/M€'10)	148.3	134.5	130.7	120.1	104.5	103.6
Import Dependency (%)	56.8%	59.4%	60.5%	60.3%	61.9%	63.5%
of Solid Fuels	11.2%	25.5%	31.7%	40.1%	45.5%	49.6%
of Hard Coal	17.1%	39.2%	57.5%	73.7%	87.6%	94.7%
of Petroleum Fuels	95.8%	94.6%	97.3%	96.7%	96.5%	96.4%
of Crude and NGL	96.9%	93.8%	97.3%	97.3%	97.1%	96.7%
of Natural Gas	78.6%	79.1%	79.6%	81.2%	90.1%	88.6%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			6.7%	10.5%	14.6%	14.8%
RES-H&C – Heating and Cooling			6.8%	9.8%	12.9%	13.0%
RES-E – Electricity Generation			10.5%	18.2%	30.8%	32.2%
RES-T – Transport			4.0%	6.4%	6.6%	6.9%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	954.84	920.06	889.94	857.68	821.29	827.92
GHGs Emissions**	1 138.26	1 064.25	1 016.02	967.00	931.19	935.82
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	11 710.3	11 197.9	10 787.0	10 484.8	10 114.7	10 075.0
Carbon Intensity (kg CO ₂ /toe)	2 778.1	2 670.6	2 584.1	2 558.4	2 596.0	2 586.7
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	445.1	390.1	366.8	332.4	293.2	290.0

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.6 Estonia

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	3.86	3.55	4.39	5.60	6.55	5.50
Solid Fuels	3.03	2.67	3.18	3.94	4.25	3.15
of which Hard Coal						
Petroleum and Products	0.48	0.37	0.52	0.67	0.95	0.82
of which Crude and NGL						
Gases						
of which Natural Gas						
Nuclear						
Renewables	0.35	0.51	0.69	0.99	1.29	1.46
Wastes, Non-Renewable					0.07	0.07
Net Imports	1.81	1.63	1.50	0.87	0.48	0.44
Solid Fuels	0.30	0.27	0.02	-0.02	-0.01	0.00
of which Hard Coal	0.05	0.06	0.04	0.05	0.01	0.02
Petroleum and Products	1.01	0.79	0.92	0.76	0.55	0.68
of which Crude and NGL						
Gases	0.58	0.66	0.80	0.56	0.39	0.43
of which Natural Gas	0.58	0.66	0.80	0.56	0.39	0.43
Renewables	-0.01	-0.01	-0.11	-0.15	-0.37	-0.50
Electricity	-0.07	-0.08	-0.14	-0.28	-0.08	-0.18
Gross Inland Consumption	5.49	4.97	5.62	6.15	6.30	6.22
Solid Fuels	3.46	2.97	3.19	3.92	3.89	3.80
of which Hard Coal	0.05	0.06	0.04	0.04	0.02	0.02
Petroleum and Products	1.17	0.91	1.18	1.10	1.12	1.13
of which Crude and NGL						
Gases	0.58	0.66	0.80	0.56	0.39	0.43
of which Natural Gas	0.58	0.66	0.80	0.56	0.39	0.43
Nuclear						
Renewables	0.34	0.51	0.59	0.85	0.91	0.97
Electricity	-0.07	-0.08	-0.14	-0.28	-0.08	-0.18
Wastes, Non-Renewable	0.00	0.00	0.00	0.00	0.07	0.07
Primary Energy Consumption	5.31	4.79	5.39	6.06	6.20	6.13
Available for Final Consumption	3.04	2.69	3.00	3.02	3.25	3.00
Final Non-Energy Consumption	0.18	0.18	0.23	0.09	0.10	0.09
Final Energy Consumption	2.56	2.43	2.88	2.91	2.77	2.82
by Fuel/Product						
Solid Fuels	0.19	0.12	0.12	0.08	0.04	0.03
Petroleum and Products	0.85	0.77	0.98	0.94	0.99	1.01
Gases	0.25	0.18	0.26	0.21	0.22	0.25
Biomass and Renewable Wastes	0.28	0.43	0.45	0.55	0.48	0.41
Solar	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.39	0.43	0.52	0.59	0.59	0.63
Derived heat	0.59	0.51	0.55	0.53	0.43	0.47
Wastes, Non-Renewable	0.00	0.00	0.00	0.00	0.01	0.01
by Sector						
Industry	0.84	0.57	0.72	0.58	0.52	0.45
Transport	0.50	0.59	0.77	0.79	0.79	0.81
Residential	0.96	0.93	0.89	1.03	0.86	0.93
Services	0.17	0.29	0.39	0.42	0.47	0.49
Agriculture and Fishing	0.08	0.06	0.11	0.10	0.13	0.13
Other	0.00	0.00	0.00	0.00	0.00	0.00

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	0.00	2.80	2.56	2.75	2.86	2.57
Combustible Fuels	0.00	2.80	2.52	2.64	2.55	2.25
Nuclear						
Hydro	0.00	0.00	0.01	0.01	0.01	0.01
Wind	0.00	0.00	0.03	0.11	0.30	0.31
Solar PV						
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	8.69	8.51	10.21	12.96	10.42	12.18
Solid Fuels	8.29	7.68	9.30	11.17	8.04	9.67
Petroleum and Products	0.10	0.06	0.03	0.04	0.13	0.26
Gases	0.30	0.76	0.76	0.71	0.62	0.61
Nuclear						
Renewables	0.01	0.02	0.11	1.04	1.50	1.51
Wastes, non-RES	0.00	0.00	0.00	0.00	0.13	0.13
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			0.38	0.45	0.43	
CHP Electricity Generation (TWh)			1.04	1.34	1.24	
CHP in Total Electricity Generation (%)			10.2%	10.3%	11.9%	
CHP Heat Production (PJ)			11.46	12.32	12.47	
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	487	578	765	778	775	801
Motor Gasoline	264	299	309	289	241	254
Gas/Diesel Oil	204	257	408	451	509	519
Final Consumption Biofuels					3	3
Biogasoline					3	3
Biodiesel						
Main Energy Indicators						
Energy Intensity (toe/M€'10)	692.0	466.4	373.9	417.9	357.5	345.9
Energy per Capita (kgoe/cap)	3791.2	3549.0	4132.2	4612.6	4789.1	4725.9
Final Electricity per Capita (KWh/cap)	3146.2	3578.9	4444.9	5181.2	5211.2	5546.6
Primary Energy Intensity (toe/M€'10)	669.7	449.5	358.6	411.8	352.0	341.0
Import Dependency (%)	32.5%	32.2%	26.1%	13.6%	7.3%	6.8%
of Solid Fuels	8.5%	9.1%	0.8%	-0.6%	-0.3%	0.0%
of Hard Coal	101.9%	116.4%	97.2%	117.9%	26.3%	83.3%
of Petroleum Fuels	80.2%	77.4%	70.8%	57.5%	39.3%	48.7%
of Crude and NGL						
of Natural Gas	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			17.5%	24.6%	28.6%	28.8%
RES-H&C – Heating and Cooling			32.2%	43.3%	49.6%	51.2%
RES-E – Electricity Generation			1.1%	10.4%	15.1%	15.5%
RES-T – Transport			0.2%	0.4%	0.4%	0.4%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	18.25	15.43	17.28	19.13	15.96	17.56
GHGs Emissions**	20.26	17.37	19.29	21.24	18.12	19.69
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	12606.0	11008.6	12717.3	14345.2	12141.7	13342.7
Carbon Intensity (kg CO ₂ /toe)	3272.0	3037.8	3013.2	3004.0	2424.0	2705.0
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	2301.0	1446.8	1150.7	1299.6	906.4	976.7

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.7 Ireland

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	4.10	2.16	1.64	1.89	2.02	4.31
Solid Fuels	1.70	0.97	0.82	1.00	0.77	0.68
of which Hard Coal	0.00					
Petroleum and Products	0.00	0.00	0.00	0.04	0.09	0.11
of which Crude and NGL						
Gases	2.25	0.96	0.46	0.22	0.11	2.48
of which Natural Gas	2.25	0.96	0.46	0.22	0.11	2.48
Nuclear						
Renewables	0.16	0.24	0.37	0.62	0.99	0.97
Wastes, Non-Renewable	0.00	0.00	0.00	0.01	0.07	0.07
Net Imports	7.77	12.37	13.77	13.21	12.71	10.36
Solid Fuels	1.88	1.68	1.89	0.95	1.46	1.14
of which Hard Coal	1.87	1.67	1.87	0.95	1.46	1.14
Petroleum and Products	5.80	8.20	8.69	7.70	7.48	7.44
of which Crude and NGL	2.27	2.98	3.16	2.98	3.69	3.21
Gases	0.09	2.48	3.01	4.48	3.62	1.70
of which Natural Gas	0.09	2.48	3.01	4.48	3.62	1.70
Renewables	0.00	0.00	0.00	0.04	0.09	0.14
Electricity	0.00	0.01	0.18	0.04	0.06	-0.06
Gross Inland Consumption	11.07	14.43	15.24	15.18	14.19	14.85
Solid Fuels	2.90	2.60	2.64	1.94	2.20	2.09
of which Hard Coal	1.76	1.80	1.86	1.19	1.42	1.34
Petroleum and Products	5.68	8.14	8.59	7.84	7.04	7.41
of which Crude and NGL	2.27	3.32	3.20	2.94	3.41	3.20
Gases	2.33	3.44	3.47	4.69	3.75	4.24
of which Natural Gas	2.33	3.44	3.47	4.69	3.75	4.24
Nuclear						
Renewables	0.16	0.24	0.37	0.66	1.08	1.11
Electricity	0.00	0.01	0.18	0.04	0.06	-0.06
Wastes, Non-Renewable	0.00	0.00	0.00	0.01	0.07	0.07
Primary Energy Consumption	10.49	13.75	14.73	14.84	13.98	14.58
Available for Final Consumption	8.30	11.05	12.02	12.23	11.65	12.10
Final Non-Energy Consumption	0.57	0.68	0.52	0.34	0.22	0.27
Final Energy Consumption	7.99	10.80	12.64	12.02	11.22	11.61
by Fuel/Product						
Solid Fuels	0.94	0.67	0.75	0.60	0.51	0.48
Petroleum and Products	4.89	7.07	8.25	7.33	6.46	6.75
Gases	0.80	1.20	1.36	1.59	1.72	1.77
Biomass and Renewable Wastes	0.09	0.12	0.18	0.29	0.32	0.36
Solar	0.00	0.00	0.00	0.01	0.01	0.01
Geothermal						
Electricity	1.28	1.75	2.09	2.19	2.16	2.20
Derived heat						
Wastes, Non-Renewable	0.00	0.00	0.00	0.01	0.04	0.04
by Sector						
Industry	1.95	2.50	2.58	2.15	2.39	2.45
Transport	2.39	4.11	5.13	4.78	4.62	4.95
Residential	2.22	2.51	2.95	3.30	2.71	2.67
Services	1.09	1.33	1.60	1.50	1.26	1.32
Agriculture and Fishing	0.34	0.35	0.38	0.30	0.24	0.23
Other	0.00	0.00	0.00	0.00	0.00	0.00

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	4.06	4.71	6.18	8.02	9.56	9.95
Combustible Fuels	3.54	4.06	5.13	6.41	6.59	6.58
Nuclear						
Hydro	0.52	0.53	0.53	0.24	0.53	0.53
Wind	0.01	0.12	0.52	1.37	2.44	2.83
Solar PV				0.00	0.00	0.01
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	17.86	23.98	25.97	28.35	28.39	30.42
Solid Fuels	9.04	8.59	8.84	5.73	7.39	7.02
Petroleum and Products	2.68	4.64	3.34	0.60	0.41	0.29
Gases	5.16	9.26	11.57	18.11	12.37	15.23
Nuclear	0.00	0.00	0.00	0.00	0.00	0.00
Renewables	0.98	1.49	2.22	3.91	8.15	7.81
Wastes, non-RES	0.00	0.00	0.00	0.00	0.07	0.07
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			0.11	0.29	0.31	0.3
CHP Electricity Generation (TWh)			0.60	1.92	2.13	2.2
CHP in Total Electricity Generation (%)			2.3%	6.7%	7.5%	7.1%
CHP Heat Production (PJ)			4.40	11.96	12.63	11.2
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	2 386	4 105	5 123	4 679	4 532	4 826
Motor Gasoline	1 104	1 590	1 823	1 527	1 020	1 003
Gas/Diesel Oil	851	1 856	2 417	2 365	2 665	2 951
Final Consumption Biofuels			1	93	88	118
Biogasoline				30	24	32
Biodiesel			1	63	64	86
Main Energy Indicators						
Energy Intensity (toe/M€'10)	140.2	116.9	94.2	90.6	59.5	59.2
Energy per Capita (kgoe/cap)	3 075.9	3 818.6	3 707.3	3 336.7	3 034.2	3 141.2
Final Electricity per Capita (KWh/cap)	4 127.7	5 370.9	5 922.7	5 587.5	5 360.0	5 411.0
Primary Energy Intensity (toe/M€'10)	133.0	111.4	91.0	88.5	58.6	58.1
Import Dependency (%)	69.5%	84.9%	89.7%	86.6%	88.6%	69.1%
of Solid Fuels	64.9%	64.6%	71.4%	48.8%	66.5%	54.7%
of Hard Coal	105.9%	93.2%	100.8%	79.3%	102.7%	84.9%
of Petroleum Fuels	100.1%	98.9%	100.0%	97.2%	103.9%	98.4%
of Crude and NGL	100.2%	89.8%	98.8%	101.6%	108.2%	100.1%
of Natural Gas	3.6%	72.1%	86.7%	95.5%	96.5%	40.1%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			2.9%	5.7%	9.2%	9.5%
RES-H&C – Heating and Cooling			3.5%	4.5%	6.6%	6.8%
RES-E – Electricity Generation			7.2%	14.6%	25.2%	27.2%
RES-T – Transport			0.1%	2.5%	5.7%	5.0%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	36.95	47.00	50.61	43.99	40.97	42.52
GHGs Emissions**	60.35	70.38	72.07	63.57	61.97	64.16
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	10 269.4	12 443.0	12 308.0	9 670.4	8 757.8	8 995.8
Carbon Intensity (kg CO ₂ /toe)	3 303.7	3 224.3	3 297.1	2 882.1	2 854.4	2 834.8
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	468.2	381.0	312.7	262.5	171.6	169.4

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.8 Greece

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	9.36	10.01	10.33	9.46	8.51	6.78
Solid Fuels	7.51	8.22	8.54	7.32	5.68	3.97
of which Hard Coal						
Petroleum and Products	0.46	0.28	0.10	0.13	0.10	0.24
of which Crude and NGL	0.46	0.28	0.10	0.12	0.06	0.18
Gases	0.06	0.04	0.02	0.01	0.01	0.01
of which Natural Gas	0.04	0.04	0.02	0.01	0.01	0.01
Nuclear						
Renewables	1.29	1.40	1.64	1.97	2.64	2.50
Wastes, Non-Renewable	0.04	0.06	0.03	0.03	0.09	0.06
Net Imports	18.29	22.15	23.50	21.72	18.81	19.05
Solid Fuels	0.92	0.77	0.36	0.40	0.16	0.19
of which Hard Coal	0.92	0.77	0.39	0.40	0.16	0.19
Petroleum and Products	17.30	19.70	20.48	17.44	15.02	14.50
of which Crude and NGL	14.86	19.60	17.99	19.54	22.26	23.67
Gases	0.00	1.69	2.33	3.23	2.67	3.46
of which Natural Gas	0.00	1.69	2.33	3.23	2.67	3.46
Renewables	0.00	0.00	0.00	0.16	0.13	0.14
Electricity	0.07	0.00	0.33	0.49	0.83	0.76
Gross Inland Consumption	23.87	28.29	31.41	28.72	24.45	24.14
Solid Fuels	8.39	9.04	8.94	7.86	5.61	4.37
of which Hard Coal	0.96	0.73	0.34	0.40	0.17	0.20
Petroleum and Products	14.02	16.09	18.12	14.97	12.48	12.83
of which Crude and NGL	15.05	19.70	18.90	19.64	21.94	23.55
Gases	0.06	1.71	2.35	3.24	2.68	3.49
of which Natural Gas	0.04	1.71	2.35	3.24	2.68	3.49
Nuclear						
Renewables	1.29	1.40	1.64	2.13	2.78	2.64
Electricity	0.07	0.00	0.33	0.49	0.83	0.76
Wastes, Non-Renewable	0.04	0.06	0.03	0.03	0.09	0.06
Primary Energy Consumption	23.37	27.57	30.65	27.61	23.75	23.55
Available for Final Consumption	16.40	19.08	21.39	19.66	17.15	17.55
Final Non-Energy Consumption	0.49	0.72	0.76	1.11	0.70	0.59
Final Energy Consumption	15.81	18.68	20.96	19.00	16.50	16.70
by Fuel/Product						
Solid Fuels	1.04	0.89	0.46	0.30	0.22	0.20
Petroleum and Products	10.84	12.74	14.41	12.11	9.39	9.50
Gases	0.01	0.26	0.59	0.78	0.97	1.05
Biomass and Renewable Wastes	0.90	0.95	0.96	0.99	1.23	1.08
Solar	0.08	0.10	0.10	0.18	0.20	0.20
Geothermal	0.00	0.00	0.01	0.02	0.01	0.01
Electricity	2.93	3.71	4.38	4.57	4.37	4.60
Derived heat	0.00	0.03	0.05	0.05	0.05	0.05
Wastes, Non-Renewable						
by Sector						
Industry	4.01	4.45	4.16	3.47	3.13	3.07
Transport	6.52	7.30	8.19	8.16	6.58	6.79
Residential	3.33	4.50	5.51	4.62	4.40	4.29
Services	0.94	1.31	1.95	1.95	1.87	2.04
Agriculture and Fishing	1.01	1.12	1.15	0.80	0.27	0.28
Other	0.00	0.00	0.00	0.00	0.25	0.24

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	8.94	10.90	13.31	15.31	18.94	19.17
Combustible Fuels	6.39	7.61	9.71	10.60	10.86	10.80
Nuclear	0.00	0.00	0.00	0.00	0.00	0.00
Hydro	2.52	3.07	3.11	3.22	3.39	3.39
Wind	0.03	0.23	0.49	1.30	2.09	2.37
Solar PV	0.00	0.00	0.00	0.20	2.60	2.60
Geothermal	0.00					
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	41.55	53.84	60.02	57.39	51.87	51.41
Solid Fuels	28.70	34.31	35.54	30.80	22.11	17.05
Petroleum and Products	8.86	8.89	9.21	6.09	5.66	5.57
Gases	0.08	5.92	8.17	9.83	9.09	13.67
Nuclear						
Renewables	3.82	4.56	7.00	10.55	14.90	14.92
Wastes, non-RES	0.10	0.16	0.10	0.13	0.11	0.21
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			0.24	0.59	0.63	0.5
CHP Electricity Generation (TWh)			1.02	2.48	2.03	2.6
CHP in Total Electricity Generation (%)			1.7%	4.3%	3.9%	5.0%
CHP Heat Production (PJ)			9.70	12.71	10.85	18.9
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	6504	7278	8157	8004	6387	6592
Motor Gasoline	2921	3464	4170	3867	2574	2537
Gas/Diesel Oil	2037	2247	2483	2730	2254	2419
Final Consumption Biofuels				124	142	149
Biogasoline						
Biodiesel				124	142	149
Main Energy Indicators						
Energy Intensity (toe/M€'10)	150.3	149.0	136.7	127.1	132.1	130.8
Energy per Capita (kgoe/cap)	2265.2	2625.6	2863.3	2582.7	2251.7	2238.7
Final Electricity per Capita (KWh/cap)	3235.3	4004.5	4640.3	4777.3	4677.4	4957.7
Primary Energy Intensity (toe/M€'10)	147.2	145.2	133.4	122.2	128.3	127.6
Import Dependency (%)	66.7%	69.5%	68.6%	69.1%	71.7%	73.7%
of Solid Fuels	11.0%	8.5%	4.1%	5.1%	2.8%	4.3%
of Hard Coal	95.2%	105.9%	112.5%	100.3%	91.4%	93.6%
of Petroleum Fuels	98.4%	100.2%	97.7%	98.7%	105.4%	99.6%
of Crude and NGL	98.8%	99.5%	95.2%	99.5%	101.5%	100.5%
of Natural Gas	0.0%	99.1%	99.1%	99.9%	99.9%	99.2%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			7.0%	9.8%	15.4%	15.2%
RES-H&C – Heating and Cooling			12.8%	17.9%	25.6%	24.5%
RES-E – Electricity Generation			8.2%	12.3%	22.1%	23.8%
RES-T – Transport			0.1%	1.9%	1.4%	1.4%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	89.58	105.51	116.53	99.93	77.83	74.45
GHGs Emissions**	111.81	128.89	138.90	120.97	98.20	94.71
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	8502.6	9791.4	10622.3	8986.8	7168.1	6904.1
Carbon Intensity (kg CO ₂ /toe)	3267.4	3310.9	3401.7	3179.6	2967.0	2878.9
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	564.2	555.6	507.1	442.1	420.6	403.3

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.9 Spain

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	31.43	31.49	30.09	34.53	33.60	34.15
Solid Fuels	10.15	7.97	6.27	3.30	1.25	0.74
of which Hard Coal	8.28	6.46	5.09	3.30	1.25	0.74
Petroleum and Products	0.80	0.24	0.21	0.36	0.40	0.32
of which Crude and NGL	0.80	0.23	0.17	0.12	0.23	0.14
Gases	0.45	0.23	0.19	0.08	0.05	0.05
of which Natural Gas	0.38	0.15	0.14	0.05	0.05	0.05
Nuclear	14.31	16.05	14.84	15.99	14.78	15.13
Renewables	5.51	6.82	8.40	14.64	16.87	17.69
Wastes, Non-Renewable	0.21	0.19	0.19	0.17	0.25	0.24
Net Imports	75.42	99.34	123.83	106.34	94.43	93.23
Solid Fuels	8.61	12.84	14.42	6.98	10.36	7.75
of which Hard Coal	8.09	13.25	14.74	7.09	10.23	7.72
Petroleum and Products	58.91	70.65	79.28	68.70	60.70	60.49
of which Crude and NGL	55.34	57.70	59.94	52.69	64.97	64.21
Gases	7.52	15.47	30.25	30.95	23.78	24.73
of which Natural Gas	7.52	15.47	30.25	30.95	23.78	24.73
Renewables				0.42	-0.40	-0.40
Electricity	0.39	0.38	-0.12	-0.72	-0.01	0.66
Gross Inland Consumption	102.08	123.64	144.22	130.25	121.42	122.18
Solid Fuels	18.99	20.94	20.57	8.16	13.24	10.19
of which Hard Coal	16.68	19.83	19.82	8.30	13.08	10.23
Petroleum and Products	54.89	63.97	70.46	60.44	52.00	53.49
of which Crude and NGL	55.82	57.33	59.91	53.04	65.27	65.03
Gases	7.79	15.31	29.89	31.16	24.54	25.04
of which Natural Gas	7.72	15.22	29.84	31.13	24.54	25.04
Nuclear	14.31	16.05	14.84	15.99	14.78	15.13
Renewables	5.51	6.82	8.40	15.05	16.62	17.43
Electricity	0.39	0.38	-0.12	-0.72	-0.01	0.66
Wastes, Non-Renewable	0.21	0.19	0.19	0.17	0.25	0.24
Primary Energy Consumption	94.20	114.25	135.87	123.22	117.11	117.24
Available for Final Consumption	72.46	88.79	105.95	95.95	83.11	85.75
Final Non-Energy Consumption	7.87	9.40	8.35	7.03	4.31	4.94
Final Energy Consumption	64.03	79.90	97.77	89.08	80.38	82.50
by Fuel/Product						
Solid Fuels	2.24	1.77	1.71	1.26	1.31	1.41
Petroleum and Products	39.51	46.31	53.46	46.79	40.47	41.92
Gases	6.84	12.14	17.98	14.65	13.37	13.67
Biomass and Renewable Wastes	3.23	3.43	3.72	5.14	4.99	5.18
Solar	0.03	0.03	0.06	0.18	0.28	0.29
Geothermal	0.00	0.01	0.01	0.02	0.02	0.02
Electricity	12.12	16.21	20.83	21.05	19.95	19.99
Derived heat						
Wastes, Non-Renewable	0.08					
by Sector						
Industry	20.54	25.38	30.98	21.45	18.91	18.97
Transport	26.44	33.23	39.94	37.19	33.61	34.97
Residential	10.01	12.00	15.13	16.92	14.88	15.06
Services	4.33	6.71	8.42	9.80	10.02	10.63
Agriculture and Fishing	2.20	2.57	3.11	2.24	2.50	2.65
Other	0.51	0.00	0.19	1.49	0.47	0.22

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	45.62	53.92	76.57	101.79	106.90	106.19
Combustible Fuels	21.94	26.24	40.80	50.46	49.35	48.45
Nuclear	7.07	7.50	7.58	7.45	7.40	7.40
Hydro	16.51	17.96	18.22	18.54	20.05	20.06
Wind	0.10	2.21	9.92	20.69	22.94	23.00
Solar PV	0.01	0.01	0.06	3.92	4.86	4.97
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	167.09	224.47	294.08	301.53	281.02	274.78
Solid Fuels	65.91	79.09	79.05	25.33	51.37	36.43
Petroleum and Products	14.62	22.58	24.42	16.56	17.24	16.92
Gases	4.92	21.94	80.73	95.84	53.81	53.84
Nuclear	55.46	62.21	57.54	61.99	57.31	58.63
Renewables	25.87	38.05	46.90	100.98	100.32	108.11
Wastes, non-RES	0.31	0.61	0.45	0.66	0.77	0.74
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			3.05	3.38	3.47	8.5
CHP Electricity Generation (TWh)			22.88	22.42	22.70	27.2
CHP in Total Electricity Generation (%)			7.8%	7.4%	8.1%	9.9%
CHP Heat Production (PJ)			192.5	153.3	120.3	124.2
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	26101	32791	39227	35409	31803	33069
Motor Gasoline	9152	9141	7786	5696	4623	4832
Gas/Diesel Oil	13373	18859	25977	24171	21383	21931
Final Consumption Biofuels		70	256	1412	958	1088
Biogasoline			113	230	189	133
Biodiesel		70	142	1181	769	955
Main Energy Indicators						
Energy Intensity (toe/M€'10)	143.7	142.5	140.7	120.5	113.4	110.5
Energy per Capita (kgoe/cap)	2575.1	3055.1	3331.1	2801.9	2614.0	2630.8
Final Electricity per Capita (KWh/cap)	3554.8	4656.7	5594.5	5266.1	4995.5	5006.8
Primary Energy Intensity (toe/M€'10)	132.6	131.6	132.5	114.0	109.4	106.0
Import Dependency (%)	71.7%	76.6%	81.4%	76.7%	73.3%	71.9%
of Solid Fuels	45.4%	61.3%	70.1%	85.5%	78.3%	76.0%
of Hard Coal	48.5%	66.8%	74.4%	85.4%	78.2%	75.4%
of Petroleum Fuels	101.5%	101.0%	101.2%	99.9%	102.2%	99.2%
of Crude and NGL	99.1%	100.6%	100.1%	99.3%	99.5%	98.7%
of Natural Gas	97.4%	101.6%	101.4%	99.4%	96.9%	98.7%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			8.5%	13.8%	16.2%	17.3%
RES-H&C – Heating and Cooling			9.4%	12.6%	16.8%	16.8%
RES-E – Electricity Generation			19.1%	29.8%	37.0%	36.6%
RES-T – Transport			1.3%	5.0%	1.2%	5.3%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	274.33	321.46	380.43	296.18	285.83	276.69
GHGs Emissions**	334.04	395.19	450.63	368.29	350.03	340.54
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	6920.7	7943.2	8786.7	6371.3	6153.5	5958.0
Carbon Intensity (kg CO ₂ /toe)	2606.9	2480.3	2501.7	2137.0	2218.5	2134.4
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	386.1	370.4	371.0	274.0	267.0	250.2

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.10 France

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	127.37	130.14	136.26	135.86	138.38	131.43
Solid Fuels	6.02	2.48	0.38	0.16	0.00	0.00
of which Hard Coal	5.45	2.36	0.38	0.16	0.00	0.00
Petroleum and Products	3.48	2.39	1.64	1.98	1.93	1.84
of which Crude and NGL	2.98	1.69	1.24	0.94	0.85	0.83
Gases	2.79	1.51	0.91	0.65	0.03	0.04
of which Natural Gas	2.79	1.51	0.91	0.65	0.03	0.04
Nuclear	97.31	107.09	116.47	110.54	112.84	104.01
Renewables	17.04	15.74	15.79	21.07	21.95	23.90
Wastes, Non-Renewable	0.72	0.93	1.06	1.47	1.64	1.65
Net Imports	116.88	133.93	143.81	131.67	116.42	117.76
Solid Fuels	8.96	12.85	13.36	12.09	8.68	8.02
of which Hard Coal	8.49	12.28	12.66	11.21	8.29	7.74
Petroleum and Products	86.44	91.27	94.97	82.52	78.30	74.70
of which Crude and NGL	78.65	86.84	85.22	64.77	57.89	55.72
Gases	27.49	35.78	40.72	39.55	34.52	37.90
of which Natural Gas	27.49	35.78	40.72	39.55	34.52	37.90
Renewables	0.00	0.01	-0.05	0.16	0.44	0.71
Electricity	-6.01	-5.97	-5.19	-2.64	-5.51	-3.57
Gross Inland Consumption	241.61	257.39	276.30	267.18	253.08	248.75
Solid Fuels	15.91	14.89	14.15	11.97	8.82	8.58
of which Hard Coal	14.78	14.09	13.65	11.14	8.55	8.36
Petroleum and Products	87.06	88.94	93.04	82.00	77.90	75.19
of which Crude and NGL	82.08	88.19	86.80	65.95	58.62	57.43
Gases	29.58	35.77	41.03	42.62	35.05	38.31
of which Natural Gas	29.58	35.77	41.03	42.62	35.05	38.31
Nuclear	97.31	107.09	116.47	110.54	112.84	104.01
Renewables	17.04	15.74	15.74	21.23	22.35	24.59
Electricity	-6.01	-5.97	-5.19	-2.64	-5.51	-3.57
Wastes, Non-Renewable	0.72	0.93	1.06	1.47	1.64	1.65
Primary Energy Consumption	225.75	241.21	260.18	253.23	239.22	235.40
Available for Final Consumption	156.89	166.23	177.09	169.60	161.38	162.21
Final Non-Energy Consumption	15.86	16.18	16.12	13.95	13.87	13.35
Final Energy Consumption	143.48	155.31	160.77	154.43	145.26	147.16
by Fuel/Product						
Solid Fuels	6.49	5.78	5.22	4.55	3.82	3.61
Petroleum and Products	69.82	73.18	71.45	64.16	60.74	59.79
Gases	27.25	30.91	34.34	32.77	28.62	29.87
Biomass and Renewable Wastes	9.67	8.82	9.14	11.49	11.44	12.24
Solar	0.03	0.02	0.03	0.06	0.10	0.10
Geothermal	0.13	0.13	0.02	0.02	0.03	0.03
Electricity	29.48	33.10	36.35	38.19	37.38	38.04
Derived heat	0.55	3.24	4.16	3.10	3.00	3.37
Wastes, Non-Renewable	0.08	0.15	0.06	0.10	0.13	0.13
by Sector						
Industry	36.20	37.35	36.74	31.60	29.51	29.37
Transport	45.70	50.41	50.22	49.06	49.71	49.62
Residential	35.40	40.52	42.92	44.33	38.09	39.83
Services	21.11	18.63	20.94	23.95	22.74	23.20
Agriculture and Fishing	4.07	4.28	4.68	4.50	4.49	4.50
Other	1.01	4.14	5.26	1.00	0.73	0.64

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	107.62	114.52	115.73	124.14	129.94	130.79
Combustible Fuels	23.87	25.92	26.42	28.41	24.32	23.14
Nuclear	58.52	63.18	63.26	63.13	63.13	63.13
Hydro	24.99	25.15	25.13	25.43	25.30	25.52
Wind	0.00	0.04	0.69	5.91	10.22	11.47
Solar PV	0.00	0.01	0.01	1.04	6.76	7.32
Geothermal					0.00	0.00
Tide, Wave and Ocean	0.24	0.21	0.22	0.22	0.22	0.22
Other Sources					0.00	0.00
Gross Electricity Generation, by Fuel (TWh)	494.27	539.95	576.06	569.29	570.32	556.18
Solid Fuels	24.18	27.00	27.52	23.36	9.76	8.47
Petroleum and Products	7.75	7.17	7.93	5.52	2.14	2.54
Gases	6.22	15.37	26.26	26.71	23.69	36.92
Nuclear	377.23	415.16	451.53	428.52	437.43	403.20
Renewables	78.53	74.17	61.18	83.01	94.37	102.09
Wastes, non-RES	0.37	1.08	1.66	2.03	2.25	2.42
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			6.60	4.61	5.59	6.1
CHP Electricity Generation (TWh)			23.21	15.69	13.94	15.0
CHP in Total Electricity Generation (%)			4.0%	2.8%	2.5%	2.7%
CHP Heat Production (PJ)			209.20	173.95	154.93	163.9
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	44879	49276	48779	45761	45745	45591
Motor Gasoline	16711	14655	11428	7713	6732	6835
Gas/Diesel Oil	23352	28172	30814	31532	32139	31964
Final Consumption Biofuels	154	325	582	2400	2949	3030
Biogasoline	24	58	100	396	421	447
Biodiesel	130	266	482	2005	2528	2582
Main Energy Indicators						
Energy Intensity (toe/M€'10)	157.4	145.3	143.7	133.7	120.7	117.2
Energy per Capita (kgoe/cap)	4073.3	4251.2	4401.5	4132.2	3808.3	3727.6
Final Electricity per Capita (KWh/cap)	5780.1	6357.3	6734.9	6868.2	6540.7	6629.2
Primary Energy Intensity (toe/M€'10)	147.1	136.1	135.3	126.7	114.1	110.9
Import Dependency (%)	48.0%	51.5%	51.6%	48.9%	45.7%	47.1%
of Solid Fuels	56.3%	86.3%	94.4%	101.0%	98.5%	93.5%
of Hard Coal	57.4%	87.2%	92.8%	100.6%	96.9%	92.6%
of Petroleum Fuels	96.9%	99.5%	99.3%	97.9%	98.5%	97.5%
of Crude and NGL	95.8%	98.5%	98.2%	98.2%	98.8%	97.0%
of Natural Gas	93.0%	100.0%	99.3%	92.8%	98.5%	98.9%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			9.6%	12.7%	15.1%	16.0%
RES-H&C – Heating and Cooling			12.3%	16.2%	19.7%	21.1%
RES-E – Electricity Generation			13.7%	14.8%	18.7%	19.2%
RES-T – Transport			2.1%	6.5%	8.5%	8.9%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	405.72	428.03	439.89	404.85	355.81	357.49
GHGs Emissions**	552.13	565.32	568.64	527.73	475.52	475.36
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	6840.1	7069.6	7007.6	6261.3	5354.1	5357.2
Carbon Intensity (kg CO ₂ /toe)	1664.7	1645.1	1577.5	1502.3	1397.0	1428.8
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	264.3	241.6	228.7	202.6	169.7	168.5

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.11 Croatia

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	5.00	4.26	4.75	5.16	4.47	4.50
Solid Fuels	0.05					
of which Hard Coal	0.05					
Petroleum and Products	1.80	1.35	1.03	0.77	0.76	0.83
of which Crude and NGL	1.80	1.35	1.03	0.76	0.69	0.75
Gases	1.61	1.36	1.87	2.22	1.47	1.37
of which Natural Gas	1.61	1.36	1.87	2.22	1.47	1.37
Nuclear						
Renewables	1.54	1.56	1.86	2.17	2.23	2.28
Wastes, Non-Renewable	0.00	0.00	0.00	0.01	0.01	0.01
Net Imports	2.85	4.08	5.15	4.39	4.12	4.11
Solid Fuels	0.15	0.48	0.62	0.70	0.62	0.66
of which Hard Coal	0.07	0.44	0.57	0.66	0.59	0.63
Petroleum and Products	2.21	2.41	3.58	2.98	2.62	2.52
of which Crude and NGL	3.98	3.91	4.02	3.56	2.34	2.51
Gases	0.22	0.91	0.56	0.48	0.56	0.73
of which Natural Gas	0.22	0.91	0.56	0.48	0.56	0.73
Renewables				-0.10	-0.27	-0.28
Electricity	0.27	0.29	0.38	0.34	0.58	0.48
Gross Inland Consumption	7.86	8.42	9.78	9.43	8.52	8.59
Solid Fuels	0.18	0.43	0.68	0.68	0.61	0.65
of which Hard Coal	0.09	0.39	0.63	0.64	0.57	0.61
Petroleum and Products	3.94	3.93	4.49	3.70	3.28	3.28
of which Crude and NGL	5.76	5.43	5.10	4.33	2.94	3.29
Gases	1.93	2.21	2.37	2.63	2.08	2.17
of which Natural Gas	1.93	2.21	2.37	2.63	2.08	2.17
Nuclear						
Renewables	1.54	1.56	1.86	2.07	1.96	2.00
Electricity	0.27	0.29	0.38	0.34	0.58	0.48
Wastes, Non-Renewable	0.00	0.00	0.00	0.01	0.01	0.01
Primary Energy Consumption	7.05	7.77	9.11	8.83	7.99	8.07
Available for Final Consumption	6.10	6.66	7.91	7.81	7.12	7.16
Final Non-Energy Consumption	0.81	0.66	0.68	0.60	0.53	0.52
Final Energy Consumption	5.28	6.00	7.24	7.21	6.59	6.64
by Fuel/Product						
Solid Fuels	0.11	0.07	0.15	0.15	0.08	0.07
Petroleum and Products	2.11	2.68	3.11	2.90	2.75	2.82
Gases	0.91	1.01	1.24	1.29	0.98	1.03
Biomass and Renewable Wastes	1.05	1.00	1.24	1.24	1.22	1.16
Solar		0.00	0.00	0.01	0.01	0.01
Geothermal				0.01	0.01	0.01
Electricity	0.85	1.02	1.24	1.36	1.32	1.32
Derived heat	0.25	0.21	0.26	0.25	0.21	0.22
Wastes, Non-Renewable	0.00	0.00	0.00	0.01	0.01	0.01
by Sector						
Industry	1.25	1.38	1.56	1.37	1.09	1.09
Transport	1.20	1.55	1.92	2.07	2.11	2.16
Residential	2.19	2.29	2.82	2.76	2.42	2.39
Services	0.44	0.49	0.69	0.78	0.74	0.76
Agriculture and Fishing	0.20	0.29	0.24	0.25	0.23	0.23
Other						

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	2.07	2.08	3.87	4.12	4.80	4.88
Combustible Fuels			1.80	1.90	2.12	2.13
Nuclear						
Hydro	2.07	2.08	2.06	2.14	2.21	2.21
Wind			0.01	0.08	0.42	0.48
Solar PV					0.05	0.06
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	9.28	11.28	13.16	14.90	11.40	12.82
Solid Fuels	0.24	1.55	2.33	2.39	2.31	2.60
Petroleum and Products	2.46	1.69	1.86	0.56	0.22	0.07
Gases	0.88	1.57	1.81	2.55	1.20	1.59
Nuclear						
Renewables	5.69	6.47	7.17	9.40	7.68	8.57
Wastes, non-RES	0.00	0.00	0.00	0.00	0.00	0.00
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)				0.69	0.64	0.8
CHP Electricity Generation (TWh)				2.02	0.81	1.5
CHP in Total Electricity Generation (%)				14.3%	7.1%	11.5%
CHP Heat Production (PJ)				14.92	10.00	16.3
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1 186	1 526	1 901	2 042	2 059	2 137
Motor Gasoline	594	815	739	678	554	557
Gas/Diesel Oil	477	623	1 038	1 186	1 303	1 366
Final Consumption Biofuels				3	24	1
Biogasoline					0	0
Biodiesel				3	24	1
Main Energy Indicators						
Energy Intensity (toe/M€'10)	263.3	238.7	222.5	208.9	190.8	186.3
Energy per Capita (kgoe/cap)	1 686.5	1 872.5	2 269.2	2 190.9	2 017.4	2 048.6
Final Electricity per Capita (KWh/cap)	2 129.5	2 630.9	3 344.3	3 686.4	3 631.2	3 651.0
Primary Energy Intensity (toe/M€'10)	236.1	220.1	207.2	195.7	179.0	175.1
Import Dependency (%)	36.1%	48.4%	52.5%	46.6%	48.3%	47.8%
of Solid Fuels	85.7%	110.9%	91.4%	102.3%	103.1%	102.2%
of Hard Coal	73.9%	112.9%	90.5%	102.7%	102.5%	102.5%
of Petroleum Fuels	55.6%	61.0%	79.4%	80.4%	79.7%	76.9%
of Crude and NGL	69.2%	72.1%	78.9%	82.2%	79.6%	76.4%
of Natural Gas	11.6%	41.0%	23.7%	18.1%	27.1%	33.5%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			23.8%	25.1%	29.0%	28.3%
RES-H&C – Heating and Cooling			30.0%	32.8%	38.5%	37.6%
RES-E – Electricity Generation			35.6%	37.6%	45.4%	46.7%
RES-T – Transport			1.0%	1.1%	3.6%	1.3%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	17.29	20.02	23.75	21.54	18.35	18.60
GHGs Emissions**	23.18	26.03	30.19	28.28	24.55	24.68
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	3 710.2	4 450.4	5 508.7	5 006.1	4 343.0	4 437.6
Carbon Intensity (kg CO ₂ /toe)	2 191.1	2 371.7	2 421.7	2 283.3	2 151.8	2 164.9
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	579.2	567.3	540.2	477.3	410.8	403.5

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.12 Italy

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	29.83	28.49	30.33	33.07	36.13	33.80
Solid Fuels	0.04	0.00	0.06	0.06	0.05	0.00
of which Hard Coal			0.06	0.06	0.05	0.00
Petroleum and Products	5.57	5.01	6.38	5.68	5.82	4.06
of which Crude and NGL	5.26	4.56	6.15	5.14	5.51	3.77
Gases	16.56	13.63	9.89	6.89	5.55	4.74
of which Natural Gas	16.35	13.62	9.89	6.89	5.55	4.74
Nuclear						
Renewables	7.49	9.60	13.33	19.40	23.56	23.82
Wastes, Non-Renewable	0.16	0.26	0.67	1.04	1.15	1.18
Net Imports	134.50	152.07	160.37	149.46	121.83	121.71
Solid Fuels	13.00	13.13	16.37	13.79	12.32	10.71
of which Hard Coal	12.58	12.87	15.94	13.98	12.07	10.30
Petroleum and Products	89.52	87.60	79.15	67.78	52.83	52.32
of which Crude and NGL	73.67	83.27	89.10	79.21	62.15	60.69
Gases	28.53	47.01	59.84	61.60	50.00	53.29
of which Natural Gas	28.53	47.01	59.84	61.60	50.00	53.29
Renewables	0.23	0.52	0.78	2.50	2.69	2.20
Electricity	3.22	3.81	4.23	3.80	3.99	3.18
Gross Inland Consumption	161.77	174.22	190.08	177.93	156.17	154.75
Solid Fuels	12.28	12.55	16.46	13.66	12.30	10.99
of which Hard Coal	11.91	12.18	15.98	13.78	12.00	10.50
Petroleum and Products	93.52	89.54	83.96	69.51	57.16	55.30
of which Crude and NGL	79.35	87.52	94.76	83.87	67.43	65.05
Gases	44.87	57.95	70.65	68.06	55.30	58.08
of which Natural Gas	44.65	57.94	70.65	68.06	55.30	58.08
Nuclear						
Renewables	7.72	10.11	14.11	21.86	26.27	26.02
Electricity	3.22	3.81	4.23	3.80	3.99	3.18
Wastes, Non-Renewable	0.16	0.26	0.67	1.04	1.15	1.18
Primary Energy Consumption	152.03	165.79	181.47	168.37	149.56	148.44
Available for Final Consumption	124.85	133.74	145.23	137.17	121.73	121.13
Final Non-Energy Consumption	9.73	8.43	8.61	9.56	6.61	6.31
Final Energy Consumption	114.58	124.72	137.15	128.46	116.23	115.93
by Fuel/Product						
Solid Fuels	3.93	3.59	3.98	2.86	1.50	1.77
Petroleum and Products	54.06	57.84	59.01	48.73	44.34	43.83
Gases	34.65	38.02	40.61	38.50	33.19	33.47
Biomass and Renewable Wastes	1.14	1.52	4.30	8.81	8.06	7.72
Solar	0.01	0.01	0.03	0.13	0.19	0.20
Geothermal	0.21	0.21	0.21	0.13	0.11	0.13
Electricity	20.49	23.47	25.87	25.74	24.72	24.59
Derived heat			3.08	3.33	3.85	3.95
Wastes, Non-Renewable	0.08	0.06	0.06	0.22	0.27	0.28
by Sector						
Industry	36.02	39.74	39.86	31.25	25.81	26.17
Transport	38.57	42.52	44.84	41.73	39.54	39.11
Residential	26.32	27.59	33.92	35.39	32.49	32.19
Services	9.82	11.54	15.05	16.98	15.39	15.44
Agriculture and Fishing	3.25	3.16	3.32	2.94	2.85	2.87
Other	0.59	0.17	0.16	0.16	0.14	0.16

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	65.92	75.51	85.50	106.61	116.96	114.16
Combustible Fuels	45.48	54.03	61.93	74.66	65.62	62.10
Nuclear						
Hydro	19.84	20.35	20.99	21.52	22.22	22.30
Wind	0.02	0.36	1.64	5.79	9.14	9.38
Solar PV	0.02	0.02	0.03	3.59	18.90	19.28
Geothermal	0.47	0.59	0.67	0.73	0.77	0.77
Tide, Wave and Ocean						
Other Sources	0.09	0.16	0.23	0.32	0.32	0.33
Gross Electricity Generation, by Fuel (TWh)	241.49	276.64	303.70	302.06	282.99	289.77
Solid Fuels	24.12	26.27	43.61	39.73	43.20	35.61
Petroleum and Products	120.80	85.88	47.12	21.71	13.38	12.13
Gases	50.44	105.61	155.08	157.44	113.05	128.94
Nuclear						
Renewables	45.58	57.58	55.30	80.26	110.34	109.85
Wastes, non-RES	0.17	0.51	1.48	2.15	2.43	2.50
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			5.89	7.35	9.02	8.5
CHP Electricity Generation (TWh)			27.39	34.71	39.52	40.3
CHP in Total Electricity Generation (%)			9.0%	11.5%	14.0%	13.9%
CHP Heat Production (PJ)			193.07	202.51	213.20	219.8
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	37665	41461	43427	38702	36353	36004
Motor Gasoline	18279	17556	14175	10276	8192	7650
Gas/Diesel Oil	15238	18415	23793	22703	22090	22136
Final Consumption Biofuels			177	1419	1167	1041
Biogasoline				122	25	33
Biodiesel			177	1297	1142	1008
Main Energy Indicators						
Energy Intensity (toe/M€'10)	114.8	112.0	116.6	110.9	100.3	98.5
Energy per Capita (kgoe/cap)	2845.8	3060.6	3284.4	3006.0	2568.8	2550.8
Final Electricity per Capita (KWh/cap)	4191.7	4795.5	5198.8	5056.8	4728.7	4714.8
Primary Energy Intensity (toe/M€'10)	107.9	106.6	111.3	104.9	96.0	94.5
Import Dependency (%)	81.9%	86.5%	83.4%	82.6%	77.1%	77.5%
of Solid Fuels	105.9%	104.6%	99.4%	101.0%	100.2%	97.5%
of Hard Coal	105.6%	105.7%	99.7%	101.5%	100.5%	98.0%
of Petroleum Fuels	93.3%	96.1%	91.8%	93.5%	89.5%	91.0%
of Crude and NGL	92.8%	95.1%	94.0%	94.5%	92.2%	93.3%
of Natural Gas	63.9%	81.1%	84.7%	90.5%	90.4%	91.8%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			7.5%	13.0%	17.5%	17.4%
RES-H&C – Heating and Cooling			8.2%	15.6%	19.3%	18.9%
RES-E – Electricity Generation			16.3%	20.1%	33.5%	34.0%
RES-T – Transport			1.0%	4.8%	6.4%	7.2%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	457.78	478.72	503.72	433.69	365.06	360.62
GHGs Emissions**	538.49	562.49	589.41	512.88	442.53	438.25
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	8053.2	8409.9	8703.7	7327.0	6004.7	5944.5
Carbon Intensity (kg CO ₂ /toe)	2788.2	2722.1	2619.2	2397.4	2309.5	2297.5
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	324.9	307.8	309.0	270.3	234.4	229.6

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.13 Cyprus

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	0.04	0.04	0.05	0.09	0.13	0.13
Solid Fuels						
of which Hard Coal						
Petroleum and Products				0.00	0.01	0.01
of which Crude and NGL						
Gases						
of which Natural Gas						
Nuclear						
Renewables	0.04	0.04	0.05	0.08	0.12	0.12
Wastes, Non-Renewable			0.00	0.01	0.00	0.01
Net Imports	2.04	2.57	2.84	2.94	2.45	2.62
Solid Fuels	0.01	0.03	0.04	0.01	0.00	0.00
of which Hard Coal	0.01	0.03	0.04	0.01	0.00	0.00
Petroleum and Products	2.03	2.53	2.79	2.91	2.42	2.57
of which Crude and NGL	0.80	1.16				
Gases						
of which Natural Gas						
Renewables	0.00	0.00	0.01	0.02	0.03	0.03
Electricity						
Gross Inland Consumption	1.97	2.41	2.54	2.74	2.27	2.44
Solid Fuels	0.01	0.03	0.04	0.02	0.00	0.00
of which Hard Coal	0.01	0.03	0.04	0.02	0.00	0.00
Petroleum and Products	1.91	2.33	2.45	2.61	2.11	2.27
of which Crude and NGL	0.83	1.18				
Gases						
of which Natural Gas						
Nuclear						
Renewables	0.05	0.05	0.05	0.11	0.15	0.15
Electricity						
Wastes, Non-Renewable	0.00	0.00	0.00	0.01	0.01	0.02
Primary Energy Consumption	1.90	2.33	2.47	2.66	2.25	2.40
Available for Final Consumption	1.48	1.75	1.80	1.97	1.67	1.78
Final Non-Energy Consumption	0.06	0.09	0.07	0.09	0.02	0.04
Final Energy Consumption	1.43	1.65	1.83	1.93	1.66	1.76
by Fuel/Product						
Solid Fuels	0.01	0.03	0.04	0.02	0.00	0.00
Petroleum and Products	1.18	1.32	1.40	1.38	1.18	1.25
Gases						
Biomass and Renewable Wastes	0.01	0.01	0.01	0.04	0.04	0.04
Solar	0.03	0.04	0.04	0.06	0.07	0.07
Geothermal	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.19	0.26	0.34	0.42	0.35	0.38
Derived heat					0.00	0.00
Wastes, Non-Renewable	0.00	0.00	0.00	0.01	0.01	0.02
by Sector						
Industry	0.39	0.44	0.32	0.24	0.21	0.21
Transport	0.76	0.86	0.98	1.05	0.87	0.93
Residential	0.14	0.18	0.32	0.33	0.32	0.33
Services	0.07	0.11	0.16	0.25	0.21	0.23
Agriculture and Fishing	0.01	0.01	0.04	0.04	0.04	0.05
Other	0.05	0.05	0.02	0.02	0.02	0.02

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	0.69	0.99	1.13	1.56	1.76	1.76
Combustible Fuels	0.69	0.99	1.12	1.47	1.52	1.52
Nuclear						
Hydro						
Wind				0.08	0.16	0.16
Solar PV			0.00	0.01	0.08	0.08
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	2.50	3.37	4.38	5.32	4.53	4.89
Solid Fuels						
Petroleum and Products	2.50	3.37	4.38	5.25	4.14	4.46
Gases						
Nuclear						
Renewables	0.00	0.00	0.00	0.07	0.40	0.42
Wastes, non-RES						0.00
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			0.01	0.02	0.01	0.01
CHP Electricity Generation (TWh)			0.0	0.06	0.00	0.0
CHP in Total Electricity Generation (%)			0.3%	1.0%	0.1%	0.6%
CHP Heat Production (PJ)			0.1	0.1	0.2	0.1
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	760	860	982	1035	858	922
Motor Gasoline	194	218	321	413	365	375
Gas/Diesel Oil	293	359	355	338	247	271
Final Consumption Biofuels				15	10	9
Biogasoline						
Biodiesel				15	10	9
Main Energy Indicators						
Energy Intensity (toe/M€'10)	166.4	168.6	149.0	142.0	128.0	133.0
Energy per Capita (kgoe/cap)	3044.6	3494.6	3463.5	3345.0	2682.4	2878.6
Final Electricity per Capita (KWh/cap)	3444.4	4338.9	5402.0	5959.9	4829.9	5185.5
Primary Energy Intensity (toe/M€'10)	161.1	162.6	144.7	137.6	126.6	130.9
Import Dependency (%)	100.5%	98.6%	100.7%	100.8%	97.7%	96.2%
of Solid Fuels	100.0%	100.0%	119.4%	64.7%	100.0%	
of Hard Coal	100.0%	100.0%	119.4%	64.7%	100.0%	
of Petroleum Fuels	102.6%	100.3%	102.3%	104.2%	102.9%	100.7%
of Crude and NGL	96.3%	98.5%				
of Natural Gas						
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			3.1%	6.0%	9.4%	9.3%
RES-H&C – Heating and Cooling			10.0%	18.2%	22.5%	23.0%
RES-E – Electricity Generation			0.0%	1.4%	8.4%	8.6%
RES-T – Transport			0.0%	2.0%	2.5%	2.7%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	6.66	7.94	8.81	8.85	7.65	8.18
GHGs Emissions**	7.78	9.11	10.06	10.25	9.08	9.66
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	10321.0	11493.4	12011.5	10799.1	9036.2	9648.4
Carbon Intensity (kg CO ₂ /toe)	3278.1	3050.0	3118.0	3027.4	3049.3	3004.8
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	564.1	554.4	516.6	458.4	431.1	445.9

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.14 Latvia

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	1.43	1.47	1.87	1.98	2.35	2.46
Solid Fuels	0.08	0.02	0.00	0.00	0.00	0.00
of which Hard Coal						
Petroleum and Products	0.00	0.06	0.01	0.00	0.01	0.01
of which Crude and NGL						
Gases						
of which Natural Gas						
Nuclear						
Renewables	1.35	1.39	1.85	1.96	2.33	2.44
Wastes, Non-Renewable			0.00	0.01	0.01	0.01
Net Imports	3.36	2.36	3.10	2.22	2.37	2.22
Solid Fuels	0.17	0.06	0.08	0.11	0.04	0.04
of which Hard Coal	0.16	0.05	0.07	0.11	0.04	0.04
Petroleum and Products	2.09	1.24	1.78	1.67	1.79	1.97
of which Crude and NGL						
Gases	1.00	1.11	1.43	0.90	1.08	0.92
of which Natural Gas	1.00	1.11	1.43	0.90	1.08	0.92
Renewables	-0.09	-0.20	-0.38	-0.56	-0.74	-0.82
Electricity	0.19	0.15	0.18	0.08	0.16	0.09
Gross Inland Consumption	4.62	3.86	4.59	4.63	4.38	4.39
Solid Fuels	0.27	0.13	0.08	0.11	0.05	0.04
of which Hard Coal	0.17	0.07	0.08	0.11	0.05	0.04
Petroleum and Products	1.89	1.30	1.49	1.52	1.49	1.49
of which Crude and NGL						
Gases	1.01	1.09	1.36	1.46	1.10	1.11
of which Natural Gas	1.01	1.09	1.36	1.46	1.10	1.11
Nuclear						
Renewables	1.26	1.19	1.48	1.44	1.54	1.62
Electricity	0.19	0.15	0.19	0.08	0.16	0.09
Wastes, Non-Renewable	0.00	0.00	0.00	0.03	0.06	0.04
Primary Energy Consumption	4.58	3.79	4.50	4.56	4.27	4.29
Available for Final Consumption	3.94	3.28	4.11	4.17	3.89	3.91
Final Non-Energy Consumption	0.04	0.08	0.10	0.07	0.11	0.10
Final Energy Consumption	3.85	3.25	4.02	4.12	3.79	3.82
by Fuel/Product						
Solid Fuels	0.13	0.06	0.07	0.09	0.04	0.04
Petroleum and Products	1.16	1.06	1.32	1.45	1.37	1.40
Gases	0.37	0.33	0.51	0.50	0.32	0.32
Biomass and Renewable Wastes	0.88	0.82	1.01	0.95	0.94	0.89
Solar						
Geothermal						
Electricity	0.38	0.39	0.49	0.53	0.56	0.56
Derived heat	0.93	0.60	0.60	0.58	0.50	0.58
Wastes, Non-Renewable	0.00	0.00	0.00	0.03	0.06	0.04
by Sector						
Industry	0.70	0.58	0.70	0.77	0.79	0.75
Transport	0.72	0.75	1.07	1.20	1.15	1.16
Residential	1.60	1.33	1.50	1.39	1.11	1.14
Services	0.66	0.47	0.59	0.60	0.59	0.59
Agriculture and Fishing	0.17	0.13	0.15	0.16	0.16	0.18
Other	0.00	0.00	0.00	0.00	0.00	0.00

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	2.07	2.09	2.17	2.56	2.93	2.93
Combustible Fuels	0.56	0.58	0.60	0.95	1.28	1.29
Nuclear						
Hydro	1.51	1.51	1.54	1.58	1.59	1.57
Wind	0.00	0.00	0.03	0.03	0.07	0.07
Solar PV						
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	3.98	4.14	4.91	6.63	5.53	6.43
Solid Fuels	0.10	0.08	0.00	0.00	0.00	0.00
Petroleum and Products	0.42	0.11	0.01	0.00	0.00	0.00
Gases	0.53	1.13	1.49	2.99	2.76	2.94
Nuclear						
Renewables	2.94	2.82	3.41	3.64	2.78	3.48
Wastes, non-RES						
Cogeneration Heat and Power *						
CHP Electrical Capacity (GW)			0.59	0.87	1.10	1.3
CHP Electricity Generation (TWh)			1.51	2.98	2.48	3.1
CHP in Total Electricity Generation (%)			30.7%	45.0%	44.7%	48.5%
CHP Heat Production (PJ)			11.91	10.45	12.35	14.5
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	699	734	1050	1163	1113	1136
Motor Gasoline	430	347	352	294	205	200
Gas/Diesel Oil	242	340	613	728	737	752
Final Consumption Biofuels			3	27	25	13
Biogasoline			0	8	8	8
Biodiesel			3	19	17	4
Main Energy Indicators						
Energy Intensity (toe/M€'10)	483.3	314.3	251.9	260.2	207.1	202.8
Energy per Capita (kgoe/cap)	1848.8	1622.4	2041.1	2183.0	2205.3	2227.1
Final Electricity per Capita (KWh/cap)	1785.6	1879.7	2546.5	2930.9	3253.1	3292.1
Primary Energy Intensity (toe/M€'10)	478.9	308.2	246.6	256.1	201.7	198.4
Import Dependency (%)	70.4%	61.0%	63.9%	45.5%	51.2%	47.2%
of Solid Fuels	61.6%	46.2%	93.9%	102.8%	87.0%	85.4%
of Hard Coal	93.6%	81.8%	97.3%	106.7%	87.0%	87.5%
of Petroleum Fuels	102.6%	94.8%	102.2%	94.4%	102.9%	109.1%
of Crude and NGL						
of Natural Gas	98.9%	101.9%	105.6%	61.8%	98.6%	83.4%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			32.3%	30.4%	37.6%	37.2%
RES-H&C – Heating and Cooling			42.7%	40.7%	51.8%	51.9%
RES-E – Electricity Generation			43.0%	42.1%	52.2%	51.3%
RES-T – Transport			2.4%	4.0%	3.9%	2.8%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	9.28	7.20	8.04	9.02	7.68	7.65
GHGs Emissions**	13.04	10.62	11.64	12.75	11.67	11.68
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	3710.2	3025.1	3571.6	4253.4	3865.5	3886.9
Carbon Intensity (kg CO ₂ /toe)	1944.6	1860.8	1656.7	1849.0	1657.1	1629.0
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	970.0	586.1	440.8	507.0	363.0	354.0

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.15 Lithuania

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	3.8	3.3	4.0	1.3	1.6	1.6
Solid Fuels	0.02	0.01	0.02	0.01	0.02	0.01
of which Hard Coal						
Petroleum and Products	0.15	0.37	0.33	0.14	0.10	0.08
of which Crude and NGL	0.13	0.32	0.22	0.12	0.08	0.06
Gases						
of which Natural Gas						
Nuclear	3.11	2.22	2.71			
Renewables	0.50	0.68	0.90	1.19	1.47	1.50
Wastes, Non-Renewable					0.02	0.05
Net Imports	5.54	4.25	5.03	5.67	5.48	5.57
Solid Fuels	0.16	0.08	0.18	0.20	0.16	0.17
of which Hard Coal	0.15	0.07	0.16	0.16	0.14	0.14
Petroleum and Products	3.58	2.22	2.62	2.61	2.69	2.88
of which Crude and NGL	3.10	4.55	8.90	9.05	8.68	9.33
Gases	2.03	2.07	2.49	2.49	2.06	1.85
of which Natural Gas	2.03	2.07	2.49	2.49	2.06	1.85
Renewables	0.00	-0.01	-0.01	-0.14	-0.06	-0.04
Electricity	-0.23	-0.12	-0.26	0.52	0.62	0.71
Gross Inland Consumption	8.64	7.06	8.71	6.79	6.91	7.03
Solid Fuels	0.25	0.09	0.19	0.21	0.19	0.19
of which Hard Coal	0.22	0.07	0.15	0.17	0.15	0.15
Petroleum and Products	2.99	2.13	2.71	2.50	2.60	2.77
of which Crude and NGL	3.11	4.82	9.34	9.14	8.73	9.38
Gases	2.03	2.06	2.48	2.49	2.07	1.84
of which Natural Gas	2.03	2.06	2.48	2.49	2.07	1.84
Nuclear						
Renewables	0.49	0.68	0.88	1.07	1.42	1.46
Electricity	-0.23	-0.12	-0.26	0.52	0.62	0.71
Wastes, Non-Renewable	0.00	0.00	0.00	0.00	0.02	0.05
Primary Energy Consumption	8.10	6.40	7.98	6.13	5.80	5.99
Available for Final Consumption	5.13	4.28	5.39	5.48	5.99	6.15
Final Non-Energy Consumption	0.54	0.66	0.73	0.66	1.12	1.05
Final Energy Consumption	4.60	3.77	4.67	4.81	4.87	5.11
by Fuel/Product						
Solid Fuels	0.23	0.08	0.18	0.21	0.18	0.19
Petroleum and Products	1.67	1.36	1.62	1.61	1.87	2.01
Gases	0.51	0.36	0.59	0.62	0.52	0.55
Biomass and Renewable Wastes	0.45	0.61	0.70	0.74	0.70	0.69
Solar						
Geothermal						
Electricity	0.55	0.53	0.69	0.72	0.80	0.84
Derived heat	1.19	0.83	0.91	0.92	0.80	0.83
Wastes, Non-Renewable						
by Sector						
Industry	1.02	0.78	1.06	0.95	0.98	0.99
Transport	1.04	1.06	1.43	1.55	1.83	1.96
Residential	1.64	1.37	1.51	1.60	1.37	1.44
Services	0.69	0.46	0.56	0.60	0.58	0.61
Agriculture and Fishing	0.20	0.10	0.11	0.11	0.10	0.11
Other	0.00	0.00	0.00	0.01	0.01	0.01

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	5.87	5.72	4.56	3.57	3.59	3.67
Combustible Fuels	2.46	2.46	2.47	2.54	2.18	2.18
Nuclear	2.73	2.37	1.18			
Hydro	0.67	0.86	0.88	0.88	0.88	0.88
Wind			0.00	0.13	0.44	0.51
Solar PV				0.00	0.07	0.07
Geothermal						
Tide, Wave and Ocean						
Other Sources	0.01	0.03	0.03	0.03	0.03	0.03
Gross Electricity Generation, by Fuel (TWh)	13.90	11.43	14.78	5.75	4.93	4.27
Solid Fuels						0.00
Petroleum and Products	1.07	0.66	0.40	0.65	0.28	0.22
Gases	0.23	1.62	3.02	3.19	1.98	0.99
Nuclear	11.82	8.42	10.34			
Renewables	0.75	0.64	0.83	1.67	2.35	2.68
Wastes, non-RES					0.06	0.11
Cogeneration Heat and Power *						
CHP Electrical Capacity (GW)			1.04	1.10	0.96	0.6
CHP Electricity Generation (TWh)			2.30	1.99	1.54	1.1
CHP in Total Electricity Generation (%)			15.5%	34.6%	31.3%	25.9%
CHP Heat Production (PJ)			19.90	19.34	12.40	9.5
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1 031	1 050	1 405	1 469	1 728	1 866
Motor Gasoline	618	390	351	296	200	216
Gas/Diesel Oil	346	513	779	951	1 313	1 429
Final Consumption Biofuels			3	45	68	57
Biogasoline			1	10	10	6
Biodiesel			3	34	58	50
Main Energy Indicators						
Energy Intensity (toe/M€'10)	592.4	385.5	329.5	242.2	204.9	203.7
Energy per Capita (kgoe/cap)	2 371.4	2 011.1	2 596.3	2 160.1	2 366.4	2 435.1
Final Electricity per Capita (KWh/cap)	1 744.4	1 764.5	2 377.5	2 651.8	3 197.9	3 375.4
Primary Energy Intensity (toe/M€'10)	555.1	349.4	301.8	218.5	171.8	173.4
Import Dependency (%)	63.1%	59.4%	56.8%	81.8%	78.4%	77.4%
of Solid Fuels	64.4%	87.0%	94.6%	92.0%	87.2%	89.6%
of Hard Coal	69.1%	100.0%	102.6%	95.3%	90.1%	91.2%
of Petroleum Fuels	114.5%	100.4%	91.9%	98.7%	100.7%	97.9%
of Crude and NGL	99.5%	94.5%	95.3%	99.0%	99.5%	99.4%
of Natural Gas	100.0%	100.0%	100.7%	99.7%	99.7%	100.5%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			16.8%	19.6%	25.8%	25.6%
RES-H&C – Heating and Cooling			29.3%	32.5%	46.1%	46.5%
RES-E – Electricity Generation			3.8%	7.4%	15.5%	16.8%
RES-T – Transport			0.6%	3.8%	4.6%	3.6%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	15.12	11.86	14.23	13.86	13.39	13.44
GHGs Emissions**	22.43	19.54	22.96	20.86	20.42	20.37
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	4 150.8	3 376.4	4 240.6	4 410.6	4 582.5	4 654.3
Carbon Intensity (kg CO ₂ /toe)	1 722.8	1 657.6	1 607.2	2 000.6	1 915.4	1 868.0
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	1 036.8	647.3	538.2	494.4	396.7	389.3

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.16 Luxembourg

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	0.05	0.06	0.11	0.12	0.15	0.16
Solid Fuels						
of which Hard Coal						
Petroleum and Products						
of which Crude and NGL						
Gases					0.01	0.01
of which Natural Gas					0.01	0.01
Nuclear						
Renewables	0.04	0.04	0.07	0.09	0.12	0.13
Wastes, Non-Renewable	0.01	0.03	0.04	0.03	0.03	0.03
Net Imports	3.25	3.64	4.68	4.51	4.01	4.03
Solid Fuels	0.49	0.11	0.08	0.07	0.05	0.05
of which Hard Coal	0.13	0.10	0.07	0.06	0.04	0.05
Petroleum and Products	1.77	2.37	3.14	2.85	2.62	2.64
of which Crude and NGL						
Gases	0.56	0.67	1.18	1.20	0.77	0.71
of which Natural Gas	0.56	0.67	1.18	1.20	0.77	0.71
Renewables				0.04	0.09	0.10
Electricity	0.43	0.49	0.28	0.35	0.48	0.54
Gross Inland Consumption	3.32	3.65	4.80	4.64	4.18	4.20
Solid Fuels	0.49	0.11	0.08	0.07	0.05	0.05
of which Hard Coal	0.13	0.10	0.07	0.06	0.04	0.05
Petroleum and Products	1.80	2.32	3.16	2.87	2.64	2.64
of which Crude and NGL						
Gases	0.56	0.67	1.18	1.20	0.77	0.71
of which Natural Gas	0.56	0.67	1.18	1.20	0.77	0.71
Nuclear						
Renewables	0.04	0.04	0.07	0.13	0.21	0.22
Electricity	0.43	0.49	0.28	0.35	0.48	0.54
Wastes, Non-Renewable	0.01	0.03	0.04	0.03	0.03	0.03
Primary Energy Consumption	3.28	3.60	4.77	4.61	4.15	4.16
Available for Final Consumption	3.17	3.56	4.53	4.36	4.02	4.08
Final Non-Energy Consumption	0.05	0.06	0.03	0.03	0.03	0.04
Final Energy Consumption	3.11	3.50	4.48	4.32	3.99	4.04
by Fuel/Product						
Solid Fuels	0.34	0.11	0.08	0.07	0.05	0.05
Petroleum and Products	1.75	2.26	3.11	2.84	2.61	2.59
Gases	0.58	0.61	0.63	0.68	0.60	0.63
Biomass and Renewable Wastes	0.02	0.02	0.04	0.09	0.13	0.14
Solar				0.00	0.00	0.00
Geothermal						
Electricity	0.43	0.50	0.53	0.57	0.54	0.55
Derived heat	0.00	0.01	0.07	0.07	0.05	0.05
Wastes, Non-Renewable	0.00	0.01	0.02	0.01	0.01	0.01
by Sector						
Industry	1.17	0.74	0.78	0.76	0.64	0.67
Transport	1.30	1.91	2.78	2.60	2.42	2.42
Residential	0.56	0.47	0.53	0.51	0.51	0.49
Services	0.07	0.36	0.37	0.43	0.40	0.43
Agriculture and Fishing	0.01	0.02	0.02	0.03	0.02	0.02
Other	0.01	0.01				

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	1.25	1.22	1.68	1.71	2.02	1.71
Combustible Fuels	0.12	0.07	0.49	0.50	0.51	0.14
Nuclear						
Hydro	1.13	1.13	1.13	1.13	1.33	1.33
Wind		0.01	0.04	0.04	0.06	0.12
Solar PV			0.02	0.03	0.12	0.12
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	1.23	1.17	4.13	4.59	2.77	2.20
Solid Fuels						
Petroleum and Products	0.01	0.00	0.00	0.00	0.00	0.00
Gases	0.34	0.22	3.11	2.92	0.84	0.26
Nuclear	0.00	0.00	0.00	0.00	0.00	0.00
Renewables	0.85	0.92	1.00	1.63	1.86	1.87
Wastes, non-RES	0.03	0.03	0.03	0.05	0.07	0.07
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			0.10	0.12	0.12	0.1
CHP Electricity Generation (TWh)			0.42	0.44	0.35	0.3
CHP in Total Electricity Generation (%)			10.1%	9.6%	12.7%	15.7%
CHP Heat Production (PJ)			1.19	3.21	2.37	2.3
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1 291	1 909	2 772	2 552	2 326	2 319
Motor Gasoline	529	595	514	360	293	285
Gas/Diesel Oil	569	990	1 823	1 760	1 574	1 519
Final Consumption Biofuels			1	42	83	90
Biogasoline				1	7	9
Biodiesel				41	76	81
Main Energy Indicators						
Energy Intensity (toe/M€'10)	144.1	118.7	134.8	115.5	90.3	87.9
Energy per Capita (kgoe/cap)	8 194.3	8 427.1	10 407.0	9 243.8	7 425.1	7 283.3
Final Electricity per Capita (KWh/cap)	12 316.0	13 318.7	13 333.9	13 131.7	11 057.7	11 049.0
Primary Energy Intensity (toe/M€'10)	142.1	116.9	134.0	114.7	89.6	87.2
Import Dependency (%)	97.7%	99.6%	97.4%	97.1%	95.9%	96.1%
of Solid Fuels	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
of Hard Coal	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
of Petroleum Fuels	98.2%	102.1%	99.4%	99.4%	99.3%	100.0%
of Crude and NGL						
of Natural Gas	100.0%	100.0%	100.0%	100.0%	99.4%	99.3%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			1.4%	2.9%	5.0%	5.4%
RES-H&C – Heating and Cooling			3.6%	4.7%	7.1%	7.3%
RES-E – Electricity Generation			3.2%	3.8%	6.2%	6.7%
RES-T – Transport			0.1%	2.1%	6.5%	5.9%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	9.67	9.61	13.32	12.41	10.60	10.49
GHGs Emissions**	10.66	10.62	14.29	13.44	11.63	11.53
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	2 3845.4	22 170.1	28 873.1	24 723.4	18 830.1	18 209.6
Carbon Intensity (kg CO ₂ /toe)	2 910.0	2 630.8	2 774.4	2 674.6	2 536.0	2 500.2
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	419.3	312.2	374.0	308.9	229.0	219.9

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.17 Hungary

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	13.90	11.60	10.87	11.92	11.29	11.45
Solid Fuels	3.27	2.89	1.75	1.59	1.52	1.46
of which Hard Coal						
Petroleum and Products	2.33	1.70	1.46	1.18	0.94	1.08
of which Crude and NGL	2.33	1.69	1.39	1.06	0.84	0.97
Gases	3.79	2.48	2.33	2.24	1.37	1.43
of which Natural Gas	3.79	2.48	2.33	2.24	1.37	1.43
Nuclear	3.62	3.67	3.59	4.08	4.10	4.16
Renewables	0.87	0.83	1.69	2.74	3.25	3.19
Wastes, Non-Renewable	0.03	0.03	0.06	0.09	0.11	0.13
Net Imports	12.55	13.96	17.42	15.00	13.43	14.29
Solid Fuels	1.36	1.09	1.30	1.14	0.80	0.78
of which Hard Coal	1.23	1.12	1.30	1.39	1.05	1.09
Petroleum and Products	5.44	5.29	5.78	5.64	6.43	6.26
of which Crude and NGL	5.89	5.88	5.90	5.66	6.07	5.87
Gases	5.53	7.28	9.81	7.73	5.22	6.33
of which Natural Gas	5.53	7.28	9.81	7.73	5.22	6.33
Renewables	0.00	0.00	0.00	0.04	-0.23	-0.21
Electricity	0.21	0.30	0.54	0.45	1.18	1.09
Gross Inland Consumption	26.18	25.30	28.11	26.60	25.18	25.71
Solid Fuels	4.62	3.85	3.03	2.73	2.36	2.26
of which Hard Coal	1.19	1.13	1.24	1.40	1.05	1.10
Petroleum and Products	7.67	6.96	7.12	6.67	6.90	7.01
of which Crude and NGL	8.20	7.48	7.27	6.65	6.65	6.81
Gases	9.18	9.66	12.09	9.82	7.49	8.03
of which Natural Gas	9.18	9.66	12.09	9.82	7.49	8.03
Nuclear	3.62	3.67	3.59	4.08	4.10	4.16
Renewables	0.87	0.83	1.69	2.78	3.02	3.00
Electricity	0.21	0.30	0.54	0.45	1.18	1.09
Wastes, Non-Renewable	0.03	0.03	0.06	0.09	0.13	0.16
Primary Energy Consumption	24.55	23.71	25.94	24.63	23.28	23.86
Available for Final Consumption	18.16	17.72	20.87	19.41	19.07	19.42
Final Non-Energy Consumption	1.63	1.59	2.17	1.97	1.91	1.85
Final Energy Consumption	16.23	16.14	18.75	17.43	17.38	17.87
by Fuel/Product						
Solid Fuels	1.16	0.67	0.73	0.52	0.44	0.39
Petroleum and Products	4.20	4.22	4.90	4.59	5.14	5.30
Gases	6.37	6.50	7.84	6.28	5.46	5.71
Biomass and Renewable Wastes	0.73	0.69	1.08	1.88	2.11	2.09
Solar			0.00	0.01	0.01	0.01
Geothermal	0.08	0.08	0.08	0.09	0.05	0.05
Electricity	2.39	2.53	2.78	2.94	3.12	3.19
Derived heat	1.30	1.45	1.31	1.09	0.99	1.06
Wastes, Non-Renewable			0.03	0.03	0.06	0.06
by Sector						
Industry	3.85	3.51	3.40	2.92	4.24	4.26
Transport	2.70	3.31	4.31	4.32	4.36	4.54
Residential	6.26	5.60	6.97	6.65	5.97	6.16
Services	2.64	3.03	3.50	3.05	2.20	2.23
Agriculture and Fishing	0.66	0.67	0.56	0.49	0.58	0.65
Other	0.13	0.02	0.00	0.00	0.03	0.04

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	7.40	8.28	8.59	8.99	8.64	8.75
Combustible Fuels	5.52	6.38	6.65	6.65	6.07	6.11
Nuclear	1.84	1.85	1.87	2.00	2.00	2.00
Hydro	0.05	0.05	0.05	0.05	0.06	0.06
Wind			0.02	0.29	0.33	0.33
Solar PV				0.00	0.17	0.22
Geothermal						
Tide, Wave and Ocean						
Other Sources					0.01	0.04
Gross Electricity Generation, by Fuel (TWh)	34.02	35.19	35.76	37.37	30.34	31.86
Solid Fuels	9.08	9.59	7.02	6.23	5.79	5.63
Petroleum and Products	5.28	4.40	0.46	0.49	0.08	0.06
Gases	5.36	6.72	12.50	11.71	5.23	6.61
Nuclear	14.03	14.18	13.83	15.76	15.83	16.05
Renewables	0.22	0.24	1.87	3.02	3.21	3.22
Wastes, non-RES	0.05	0.06	0.07	0.15	0.14	0.21
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			2.05	1.86	1.57	1.5
CHP Electricity Generation (TWh)			6.84	7.31	4.09	4.8
CHP in Total Electricity Generation (%)			19.1%	19.6%	13.5%	15.1%
CHP Heat Production (PJ)			47.42	42.18	24.37	24.7
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	2609	3220	4208	4021	4047	4199
Motor Gasoline	1530	1433	1589	1348	1283	1388
Gas/Diesel Oil	897	1553	2323	2414	2559	2591
Final Consumption Biofuels			3	175	175	187
Biogasoline			3	57	43	44
Biodiesel				118	133	143
Main Energy Indicators						
Energy Intensity (toe/M€'10)	375.1	312.9	281.4	269.2	231.7	231.4
Energy per Capita (kgoe/cap)	2533.0	2474.9	2784.0	2656.1	2555.3	2614.8
Final Electricity per Capita (KWh/cap)	2684.0	2880.3	3202.6	3415.8	3682.3	3775.8
Primary Energy Intensity (toe/M€'10)	351.7	293.2	259.7	249.2	214.2	214.7
Import Dependency (%)	47.9%	55.2%	62.0%	56.4%	53.3%	55.6%
of Solid Fuels	29.5%	28.2%	42.9%	41.9%	34.0%	34.5%
of Hard Coal	103.5%	99.0%	105.1%	99.5%	99.3%	98.8%
of Petroleum Fuels	71.0%	76.0%	81.2%	84.7%	93.2%	89.3%
of Crude and NGL	71.9%	78.6%	81.2%	85.2%	91.3%	86.2%
of Natural Gas	60.3%	75.4%	81.1%	78.7%	69.7%	78.9%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			6.9%	12.7%	14.4%	14.2%
RES-H&C – Heating and Cooling			9.9%	18.1%	21.2%	20.8%
RES-E – Electricity Generation			4.4%	7.1%	7.3%	7.2%
RES-T – Transport			0.9%	6.0%	7.0%	7.4%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	62.16	59.26	61.31	52.83	47.21	48.18
GHGs Emissions**	76.05	74.11	76.58	66.06	61.56	62.07
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	6013.7	5797.4	6071.8	5275.6	4790.0	4900.8
Carbon Intensity (kg CO ₂ /toe)	2374.1	2342.4	2180.9	1986.2	1874.5	1874.2
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	890.6	732.9	613.7	534.6	434.3	433.6

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.18 Malta

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production			0.00	0.00	0.02	0.02
Solid Fuels						
of which Hard Coal						
Petroleum and Products						0.001
of which Crude and NGL						
Gases						
of which Natural Gas						
Nuclear						
Renewables			0.00	0.00	0.02	0.02
Wastes, Non-Renewable						
Net Imports	0.84	1.46	1.59	2.37	2.23	2.50
Solid Fuels						
of which Hard Coal						
Petroleum and Products	0.84	1.46	1.59	2.37	2.14	2.36
of which Crude and NGL						
Gases						
of which Natural Gas						
Renewables				0.00	0.01	0.01
Electricity						
Gross Inland Consumption	0.76	0.80	0.94	0.94	0.76	0.73
Solid Fuels						
of which Hard Coal						
Petroleum and Products	0.76	0.80	0.94	0.93	0.65	0.57
of which Crude and NGL						
Gases						
of which Natural Gas						
Nuclear						
Renewables	0.00	0.00	0.00	0.01	0.02	0.03
Electricity						
Wastes, Non-Renewable						
Primary Energy Consumption	0.76	0.80	0.92	0.93	0.75	0.72
Available for Final Consumption	0.41	0.44	0.48	0.52	0.58	0.59
Final Non-Energy Consumption	0.00	0.00	0.02	0.01	0.01	0.01
Final Energy Consumption	0.46	0.44	0.46	0.50	0.57	0.58
by Fuel/Product						
Solid Fuels						
Petroleum and Products	0.35	0.31	0.30	0.34	0.38	0.39
Gases						
Biomass and Renewable Wastes				0.00	0.01	0.01
Solar			0.00	0.00	0.00	0.00
Geothermal						
Electricity	0.11	0.14	0.16	0.16	0.18	0.18
Derived heat						
Wastes, Non-Renewable						
by Sector						
Industry	0.04	0.04	0.05	0.04	0.05	0.05
Transport	0.31	0.28	0.25	0.29	0.31	0.32
Residential	0.07	0.08	0.07	0.07	0.08	0.08
Services	0.03	0.04	0.06	0.09	0.13	0.12
Agriculture and Fishing	0.00	0.00	0.01	0.01	0.01	0.01
Other	0.00	0.00	0.02	0.00	0.00	0.00

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)				0.57	0.67	0.57
Combustible Fuels				0.57	0.59	0.48
Nuclear						
Hydro						
Wind						
Solar PV				0.00	0.07	0.09
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	1.63	1.92	2.24	2.11	1.30	0.86
Solid Fuels	0.09					
Petroleum and Products	1.54	1.92	2.24	2.11	1.20	0.72
Gases						
Nuclear						
Renewables				0.00	0.10	0.13
Wastes, non-RES						
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)						
CHP Electricity Generation (TWh)						
CHP in Total Electricity Generation (%)						
CHP Heat Production (PJ)						
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	308	277	253	286	307	315
Motor Gasoline	129	76	67	74	77	78
Gas/Diesel Oil	106	78	94	108	111	110
Final Consumption Biofuels				1	4	6
Biogasoline						
Biodiesel				1	4	6
Main Energy Indicators						
Energy Intensity (toe/M€'10)	174.9	148.6	156.7	142.4	88.6	80.6
Energy per Capita (kgoe/cap)	2005.7	2060.4	2324.5	2270.4	1721.7	1611.8
Final Electricity per Capita (KWh/cap)	3344.6	4030.8	4614.2	4405.5	4807.9	4693.4
Primary Energy Intensity (toe/M€'10)	174.9	148.6	153.4	140.9	87.9	79.6
Import Dependency (%)	104.8%	100.3%	100.0%	99.0%	97.3%	100.8%
of Solid Fuels						
of Hard Coal						
of Petroleum Fuels	104.8%	100.3%	100.1%	99.2%	97.8%	101.6%
of Crude and NGL						
of Natural Gas						
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			0.1%	1.0%	5.0%	6.0%
RES-H&C – Heating and Cooling			1.0%	7.8%	14.1%	15.3%
RES-E – Electricity Generation			0.0%	0.0%	4.2%	5.6%
RES-T – Transport			0.0%	0.0%	4.7%	5.4%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	2.83	2.90	2.93	2.89	2.11	1.80
GHGs Emissions**	3.03	3.14	3.25	3.27	2.58	2.29
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	7512.7	7449.8	7282.9	6990.8	4793.5	3985.5
Carbon Intensity (kg CO ₂ /toe)	3539.4	1991.9	1839.8	1211.5	918.8	724.4
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	655.0	537.2	491.1	438.6	246.8	199.3

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.19 The Netherlands

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	70.04	62.51	66.76	75.63	52.13	50.91
Solid Fuels						
of which Hard Coal						
Petroleum and Products	6.90	6.69	6.85	6.07	6.15	6.33
of which Crude and NGL	3.51	2.39	2.30	1.43	1.84	1.27
Gases	60.87	52.77	56.19	64.75	39.53	38.18
of which Natural Gas	60.87	52.77	56.19	64.75	39.53	38.18
Nuclear	1.04	1.01	1.03	1.02	1.05	1.02
Renewables	0.92	1.45	1.97	3.06	4.75	4.71
Wastes, Non-Renewable	0.32	0.58	0.72	0.73	0.65	0.68
Net Imports	17.16	34.50	37.54	30.00	46.08	41.58
Solid Fuels	8.74	7.92	8.22	9.18	12.30	9.30
of which Hard Coal	8.96	7.94	8.21	9.06	12.46	9.35
Petroleum and Products	33.81	42.23	48.39	44.67	44.49	42.48
of which Crude and NGL	59.02	59.84	60.64	59.56	59.93	61.29
Gases	-26.37	-17.19	-20.94	-24.21	-10.49	-9.85
of which Natural Gas	-26.37	-17.19	-20.94	-24.21	-10.49	-9.85
Renewables	0.00	-0.10	0.29	0.13	-1.12	-0.96
Electricity	0.98	1.63	1.57	0.24	0.75	0.42
Gross Inland Consumption	75.34	77.86	84.04	86.64	77.37	78.53
Solid Fuels	8.93	7.77	8.09	7.54	10.94	10.21
of which Hard Coal	9.20	7.82	8.19	7.40	11.04	10.28
Petroleum and Products	28.66	30.50	35.02	33.83	31.47	32.19
of which Crude and NGL	62.64	61.86	62.73	60.99	61.12	61.95
Gases	34.50	35.02	35.34	40.10	28.72	30.13
of which Natural Gas	34.50	35.02	35.34	40.10	28.72	30.13
Nuclear	1.04	1.01	1.03	1.02	1.05	1.02
Renewables	0.92	1.35	2.27	3.19	3.64	3.70
Electricity	0.98	1.63	1.57	0.24	0.75	0.42
Wastes, Non-Renewable	0.32	0.58	0.72	0.73	0.80	0.86
Primary Energy Consumption	64.27	65.88	68.82	70.42	64.40	64.85
Available for Final Consumption	64.10	67.61	72.08	73.46	64.13	65.59
Final Non-Energy Consumption	11.07	11.99	15.22	16.23	12.97	13.68
Final Energy Consumption	50.77	52.14	53.98	55.11	48.50	49.52
by Fuel/Product						
Solid Fuels	1.45	1.38	1.55	1.36	1.53	1.55
Petroleum and Products	15.76	17.27	18.43	18.44	17.20	17.67
Gases	23.32	21.05	20.51	22.02	17.17	17.86
Biomass and Renewable Wastes	0.44	0.49	0.58	0.92	1.15	1.08
Solar	0.01	0.01	0.02	0.02	0.03	0.03
Geothermal				0.01	0.06	0.07
Electricity	6.96	8.21	9.00	9.29	8.87	9.08
Derived heat	2.83	3.70	3.85	3.00	2.46	2.14
Wastes, Non-Renewable	0.01	0.03	0.05	0.06	0.04	0.03
by Sector						
Industry	16.08	16.51	17.02	15.44	14.27	14.66
Transport	12.38	13.94	15.03	15.07	14.25	14.30
Residential	11.79	10.83	10.74	12.46	9.56	9.86
Services	5.77	6.24	6.93	7.80	6.56	6.81
Agriculture and Fishing	4.63	4.51	4.17	4.23	3.77	3.87
Other	0.12	0.10	0.08	0.12	0.10	0.03

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	19.03	21.06	21.80	26.69	33.87	34.18
Combustible Fuels	18.20	20.07	19.97	23.74	28.40	27.31
Nuclear	0.51	0.45	0.45	0.51	0.49	0.49
Hydro	0.04	0.04	0.04	0.04	0.04	0.04
Wind	0.25	0.45	1.22	2.24	3.39	4.26
Solar PV	0.00	0.01	0.05	0.09	1.52	2.05
Geothermal						
Tide, Wave and Ocean						
Other Sources	0.05	0.05	0.07	0.07	0.04	0.04
Gross Electricity Generation, by Fuel (TWh)	81.17	89.63	99.92	119.27	110.07	115.17
Solid Fuels	27.40	24.28	23.50	22.59	38.44	36.72
Petroleum and Products	2.81	2.64	2.26	1.25	1.43	1.28
Gases	44.63	54.36	61.03	78.55	49.39	56.57
Nuclear	4.02	3.93	4.00	3.97	4.08	3.96
Renewables	1.41	2.97	7.45	11.20	13.70	14.73
Wastes, non-RES	0.60	1.21	1.43	1.56	1.63	1.71
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			7.16	9.30	9.18	9.0
CHP Electricity Generation (TWh)			29.47	39.24	29.78	30.8
CHP in Total Electricity Generation (%)			29.4%	33.2%	27.1%	26.7%
CHP Heat Production (PJ)			220.28	233.61	189.64	174.3
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	12248	13803	14885	14677	13770	13850
Motor Gasoline	3948	3964	4039	4048	3774	3910
Gas/Diesel Oil	4874	5916	6738	6863	5962	5853
Final Consumption Biofuels				229	297	242
Biogasoline				134	142	121
Biodiesel				95	156	121
Main Energy Indicators						
Energy Intensity (toe/M€'10)	167.9	140.4	141.8	137.2	117.7	116.8
Energy per Capita (kgoe/cap)	4884.4	4908.2	5153.9	5227.3	4577.8	4625.0
Final Electricity per Capita (KWh/cap)	5244.7	6020.1	6419.1	6515.8	6101.0	6221.1
Primary Energy Intensity (toe/M€'10)	143.3	118.8	116.1	111.5	97.9	96.5
Import Dependency (%)	19.9%	38.0%	37.8%	29.9%	51.4%	45.8%
of Solid Fuels	97.9%	102.0%	101.5%	121.7%	112.4%	91.0%
of Hard Coal	97.4%	101.5%	100.3%	122.3%	112.8%	90.9%
of Petroleum Fuels	85.7%	97.3%	96.2%	94.3%	101.6%	95.6%
of Crude and NGL	94.2%	96.7%	96.7%	97.7%	98.0%	98.9%
of Natural Gas	-76.4%	-49.1%	-59.3%	-60.4%	-36.5%	-32.7%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			2.5%	3.9%	5.8%	6.0%
RES-H&C – Heating and Cooling			2.4%	3.1%	5.5%	5.5%
RES-E – Electricity Generation			6.3%	9.6%	11.1%	12.5%
RES-T – Transport			0.4%	3.3%	5.3%	4.6%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	181.12	182.17	188.72	192.64	176.63	177.41
GHGs Emissions**	238.94	229.37	225.37	223.72	206.25	207.02
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	11742.5	11483.1	11574.0	11622.5	10450.9	10448.7
Carbon Intensity (kg CO ₂ /toe)	2102.4	2007.4	1900.2	1922.5	1969.0	1954.6
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	403.7	328.4	318.4	305.0	268.6	264.0

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.20 Austria

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	8.77	9.79	9.77	11.66	12.00	12.35
Solid Fuels	0.34	0.29				
of which Hard Coal	0.00					
Petroleum and Products	1.08	1.09	1.00	1.04	0.87	0.79
of which Crude and NGL	1.07	1.07	0.97	1.00	0.87	0.79
Gases	1.27	1.55	1.33	1.40	1.04	0.98
of which Natural Gas	1.27	1.55	1.33	1.40	1.04	0.98
Nuclear						
Renewables	5.85	6.61	7.00	8.61	9.33	9.77
Wastes, Non-Renewable	0.23	0.25	0.44	0.62	0.76	0.82
Net Imports	18.02	19.01	24.52	21.57	20.22	21.16
Solid Fuels	2.64	3.02	3.97	3.36	2.71	2.82
of which Hard Coal	2.05	2.34	2.99	2.48	2.08	2.28
Petroleum and Products	10.10	10.84	13.21	11.50	11.26	11.28
of which Crude and NGL	7.56	7.22	7.88	6.70	8.03	7.27
Gases	5.46	5.31	7.15	6.12	4.99	6.16
of which Natural Gas	5.46	5.31	7.15	6.12	4.99	6.16
Renewables	0.04	-0.03	-0.04	0.39	0.40	0.28
Electricity	-0.21	-0.12	0.23	0.20	0.87	0.62
Gross Inland Consumption	27.11	29.02	34.04	34.12	33.40	33.87
Solid Fuels	3.48	3.60	3.94	3.38	3.18	2.96
of which Hard Coal	2.32	2.56	2.80	2.54	2.51	2.35
Petroleum and Products	11.29	12.13	14.40	12.77	11.98	12.24
of which Crude and NGL	8.63	8.31	8.90	7.78	8.85	8.12
Gases	6.44	6.59	8.09	8.12	6.88	7.18
of which Natural Gas	6.44	6.59	8.09	8.12	6.88	7.18
Nuclear						
Renewables	5.89	6.57	6.95	9.02	9.74	10.05
Electricity	-0.21	-0.12	0.23	0.20	0.87	0.62
Wastes, Non-Renewable	0.23	0.25	0.44	0.62	0.76	0.82
Primary Energy Consumption	25.73	27.30	32.33	32.28	31.47	31.84
Available for Final Consumption	22.74	25.45	29.50	29.83	29.40	30.16
Final Non-Energy Consumption	1.38	1.72	1.71	1.84	1.93	2.03
Final Energy Consumption	21.37	23.69	27.76	27.94	27.46	28.13
by Fuel/Product						
Solid Fuels	1.58	1.40	1.36	1.25	1.44	1.43
Petroleum and Products	8.83	9.78	12.04	10.50	9.87	10.13
Gases	3.79	4.50	5.19	5.32	4.95	5.13
Biomass and Renewable Wastes	2.15	2.34	2.63	3.44	3.72	3.86
Solar	0.04	0.06	0.09	0.16	0.18	0.18
Geothermal	0.00	0.01	0.01	0.01	0.01	0.01
Electricity	4.02	4.43	4.93	5.15	5.25	5.32
Derived heat	0.85	1.02	1.30	1.82	1.70	1.74
Wastes, Non-Renewable	0.12	0.15	0.23	0.27	0.34	0.34
by Sector						
Industry	6.41	7.30	8.62	9.08	9.13	9.45
Transport	5.83	6.98	9.03	8.74	9.02	9.19
Residential	6.32	6.34	6.00	6.24	6.16	6.32
Services	2.27	2.55	3.61	3.36	2.64	2.65
Agriculture and Fishing	0.54	0.53	0.50	0.51	0.52	0.52
Other						

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	17.40	17.80	18.90	21.19	24.44	24.79
Combustible Fuels	6.13	6.13	6.46	7.35	7.67	7.27
Nuclear						
Hydro	11.26	11.61	11.63	12.71	13.35	13.69
Wind	0.00	0.05	0.78	0.98	2.49	2.73
Solar PV	0.00	0.01	0.03	0.15	0.94	1.10
Geothermal			0.00	0.00	0.00	0.00
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	56.23	61.26	66.83	71.13	65.30	68.35
Solid Fuels	4.32	5.73	7.17	4.92	2.98	2.04
Petroleum and Products	2.12	1.70	1.64	1.27	0.86	0.99
Gases	9.76	8.86	14.35	16.14	9.88	10.52
Nuclear						
Renewables	39.95	44.82	43.23	48.18	50.78	53.85
Wastes, non-RES	0.07	0.13	0.45	0.61	0.78	0.93
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			2.17	3.16	2.81	3.4
CHP Electricity Generation (TWh)			7.68	10.96	9.00	10.9
CHP in Total Electricity Generation (%)			11.6%	15.4%	13.8%	16.0%
CHP Heat Production (PJ)			100.11	110.61	105.91	114.9
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	5444	6515	8536	7763	7842	8128
Motor Gasoline	2429	2016	2109	1700	1546	1528
Gas/Diesel Oil	2537	3892	5721	5330	5541	5783
Final Consumption Biofuels	10	16	49	495	645	532
Biogasoline				79	60	57
Biodiesel	10	16	49	417	585	475
Main Energy Indicators						
Energy Intensity (toe/M€'10)	123.6	114.2	122.8	115.3	106.8	106.8
Energy per Capita (kgoe/cap)	3413.0	3626.9	4150.9	4084.9	3890.2	3892.3
Final Electricity per Capita (KWh/cap)	5880.5	6440.9	6987.1	7172.0	7112.7	7109.0
Primary Energy Intensity (toe/M€'10)	117.4	107.5	116.6	109.1	100.7	100.4
Import Dependency (%)	66.4%	65.4%	72.0%	63.2%	60.5%	62.4%
of Solid Fuels	75.7%	83.9%	100.7%	99.4%	85.2%	95.5%
of Hard Coal	88.3%	91.6%	107.1%	97.5%	82.9%	96.8%
of Petroleum Fuels	89.3%	89.1%	91.6%	89.9%	93.9%	92.0%
of Crude and NGL	87.6%	86.9%	88.5%	86.2%	90.8%	89.5%
of Natural Gas	84.8%	80.6%	88.5%	75.3%	72.5%	85.8%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			23.7%	30.2%	32.8%	33.5%
RES-H&C – Heating and Cooling			22.0%	29.0%	32.4%	33.3%
RES-E – Electricity Generation			61.9%	65.7%	70.3%	72.6%
RES-T – Transport			4.8%	10.7%	11.4%	10.6%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	65.53	67.96	81.33	74.43	68.83	69.73
GHGs Emissions**	81.07	82.14	94.64	87.00	81.01	82.02
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	8249.9	8492.3	9916.2	8912.3	8017.7	8014.2
Carbon Intensity (kg CO ₂ /toe)	2415.4	2339.6	2387.1	2180.3	2060.0	2057.9
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	298.9	267.5	293.3	251.5	220.2	219.9

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.21 Poland

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	99.38	79.59	78.60	67.44	68.64	67.37
Solid Fuels	91.07	71.30	68.86	55.38	53.87	52.31
of which Hard Coal	78.19	59.18	56.12	43.82	41.57	40.63
Petroleum and Products	0.37	1.06	1.15	1.12	1.73	1.74
of which Crude and NGL	0.27	0.63	0.84	0.68	0.92	0.99
Gases	3.18	3.32	3.89	3.70	3.68	3.55
of which Natural Gas	3.17	3.31	3.88	3.69	3.68	3.55
Nuclear						
Renewables	3.92	3.81	4.55	6.85	8.84	9.03
Wastes, Non-Renewable	0.84	0.10	0.16	0.40	0.52	0.74
Net Imports	-1.16	8.77	15.94	31.53	28.02	30.32
Solid Fuels	-21.25	-16.35	-13.04	-2.81	-5.61	-5.88
of which Hard Coal	-18.94	-13.85	-9.70	1.80	-0.96	-0.90
Petroleum and Products	14.52	19.07	21.47	25.16	23.56	24.81
of which Crude and NGL	11.95	17.36	17.53	22.28	26.06	24.13
Gases	5.81	6.61	8.53	8.87	9.95	11.47
of which Natural Gas	5.81	6.61	8.53	8.87	9.95	11.47
Renewables	0.00	0.00	-0.07	0.43	0.14	-0.25
Electricity	-0.24	-0.55	-0.96	-0.12	-0.03	0.17
Gross Inland Consumption	98.83	88.65	92.22	100.68	95.63	99.93
Solid Fuels	70.31	56.29	54.61	54.61	48.26	49.08
of which Hard Coal	59.72	46.35	45.55	47.94	40.69	42.33
Petroleum and Products	15.00	19.04	21.69	25.71	24.13	26.54
of which Crude and NGL	12.31	17.51	18.02	22.63	25.93	25.54
Gases	9.00	9.96	12.24	12.81	13.78	14.63
of which Natural Gas	9.00	9.96	12.24	12.81	13.78	14.63
Nuclear						
Renewables	3.92	3.80	4.49	7.27	8.97	8.77
Electricity	-0.24	-0.55	-0.96	-0.12	-0.03	0.17
Wastes, Non-Renewable	0.84	0.10	0.16	0.40	0.52	0.74
Primary Energy Consumption	95.12	84.29	87.65	95.72	89.96	94.32
Available for Final Consumption	67.25	58.57	62.71	71.09	66.74	71.74
Final Non-Energy Consumption	3.71	4.36	4.57	4.96	5.66	5.61
Final Energy Consumption	62.94	55.21	58.47	66.33	62.33	66.65
by Fuel/Product						
Solid Fuels	22.58	13.22	12.21	13.77	11.69	12.07
Petroleum and Products	11.65	15.50	17.84	20.73	19.30	21.63
Gases	7.76	7.57	8.77	9.46	8.98	9.69
Biomass and Renewable Wastes	3.73	3.52	3.85	5.22	5.37	5.47
Solar				0.01	0.05	0.05
Geothermal		0.00	0.01	0.01	0.02	0.02
Electricity	7.71	8.43	9.03	10.21	10.99	11.42
Derived heat	8.82	6.89	6.63	6.55	5.46	5.67
Wastes, Non-Renewable	0.70	0.08	0.14	0.38	0.49	0.64
by Sector						
Industry	23.03	18.45	15.32	14.10	15.04	15.62
Transport	8.30	9.92	12.54	17.70	17.21	19.24
Residential	22.67	17.19	19.45	21.97	18.92	19.75
Services	4.16	4.97	6.73	8.83	7.83	8.51
Agriculture and Fishing	4.78	4.64	4.43	3.73	3.33	3.54
Other	0.01	0.04	0.00	0.00	0.00	0.00

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	29.48	30.56	32.26	33.36	37.33	38.10
Combustible Fuels	27.42	28.37	29.78	29.91	29.96	29.78
Nuclear						
Hydro	2.06	2.18	2.32	2.34	2.37	2.39
Wind		0.00	0.12	1.11	4.89	5.75
Solar PV					0.11	0.19
Geothermal						
Tide, Wave and Ocean						
Other Sources			0.04	0.00	0.00	0.00
Gross Electricity Generation, by Fuel (TWh)	139.01	145.18	156.94	157.66	164.94	166.64
Solid Fuels	131.77	135.89	141.88	136.51	130.52	130.32
Petroleum and Products	1.52	1.92	2.76	2.89	2.12	2.30
Gases	1.50	2.96	6.53	6.67	8.83	10.44
Nuclear						
Renewables	3.92	4.34	5.42	11.46	23.29	23.29
Wastes, non-RES	0.30	0.08	0.04	0.05	0.08	0.21
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			8.31	8.69	8.55	8.7
CHP Electricity Generation (TWh)			26.30	27.71	26.54	27.6
CHP in Total Electricity Generation (%)			16.8%	17.6%	16.1%	16.6%
CHP Heat Production (PJ)			275.43	277.10	238.61	246.5
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	7891	9459	11911	16320	15930	18117
Motor Gasoline	4610	5319	4230	4243	3654	3860
Gas/Diesel Oil	2796	3396	5657	9740	9817	11654
Final Consumption Biofuels			49	867	653	457
Biogasoline			34	170	153	168
Biodiesel			15	698	500	290
Main Energy Indicators						
Energy Intensity (toe/M€'10)	518.7	360.0	321.7	278.3	227.8	231.2
Energy per Capita (kgoe/cap)	2561.6	2316.8	2415.9	2647.9	2516.1	2632.0
Final Electricity per Capita (KWh/cap)	2324.8	2563.1	2750.7	3121.5	3363.2	3498.8
Primary Energy Intensity (toe/M€'10)	499.2	342.3	305.8	264.6	214.3	218.2
Import Dependency (%)	-1.2%	9.9%	17.2%	31.3%	29.2%	30.3%
of Solid Fuels	-30.2%	-29.1%	-23.9%	-5.2%	-11.6%	-12.0%
of Hard Coal	-31.7%	-29.9%	-21.3%	3.7%	-2.4%	-2.1%
of Petroleum Fuels	95.9%	98.7%	97.5%	97.0%	96.9%	92.8%
of Crude and NGL	97.1%	99.1%	97.3%	98.4%	100.5%	94.5%
of Natural Gas	64.6%	66.3%	69.7%	69.3%	72.2%	78.4%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			6.9%	9.3%	11.7%	11.3%
RES-H&C – Heating and Cooling			10.2%	11.7%	14.5%	14.7%
RES-E – Electricity Generation			2.7%	6.6%	13.4%	13.4%
RES-T – Transport			1.6%	6.6%	5.6%	3.9%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	361.83	317.60	321.99	333.14	312.40	323.18
GHGs Emissions**	438.93	390.38	398.56	407.42	387.06	397.84
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	9378.5	8300.4	8434.8	8761.6	8219.9	8512.2
Carbon Intensity (kg CO ₂ /toe)	3656.1	3571.4	3479.3	3301.9	3260.3	3228.2
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	1899.1	1289.9	1123.2	920.8	744.1	747.6

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.22 Portugal

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	3.38	3.89	3.62	5.80	5.50	6.19
Solid Fuels						
of which Hard Coal						
Petroleum and Products					0.20	0.19
of which Crude and NGL						
Gases	0.07	0.05				
of which Natural Gas						
Nuclear						
Renewables	3.32	3.76	3.48	5.64	5.18	5.82
Wastes, Non-Renewable		0.09	0.14	0.16	0.12	0.17
Net Imports	18.02	22.07	24.85	18.59	18.30	17.57
Solid Fuels	3.81	3.91	3.23	1.63	3.21	2.91
of which Hard Coal	3.84	3.97	3.22	1.63	3.20	2.90
Petroleum and Products	14.14	16.04	17.14	12.44	11.00	11.00
of which Crude and NGL	13.04	11.63	13.46	11.39	14.18	13.95
Gases	0.00	2.04	3.89	4.51	4.07	4.26
of which Natural Gas	0.00	2.04	3.89	4.51	4.07	4.26
Renewables				-0.21	-0.21	-0.21
Electricity	0.08	0.08	0.59	0.23	0.19	-0.44
Gross Inland Consumption	20.64	25.29	27.48	24.28	23.02	23.26
Solid Fuels	3.60	3.81	3.35	1.66	3.26	2.85
of which Hard Coal	3.63	3.84	3.35	1.66	3.25	2.84
Petroleum and Products	13.57	15.48	16.17	12.29	10.38	10.73
of which Crude and NGL	13.04	11.76	13.44	11.53	14.06	14.13
Gases	0.07	2.08	3.75	4.49	4.07	4.30
of which Natural Gas	0.00	2.03	3.75	4.49	4.07	4.30
Nuclear						
Renewables	3.32	3.76	3.48	5.46	4.97	5.62
Electricity	0.08	0.08	0.59	0.23	0.20	-0.44
Wastes, Non-Renewable	0.00	0.09	0.14	0.16	0.16	0.21
Primary Energy Consumption	18.55	22.89	24.89	22.55	21.69	22.12
Available for Final Consumption	15.92	20.22	21.69	19.81	17.34	17.24
Final Non-Energy Consumption	2.08	2.39	2.59	1.73	1.34	1.15
Final Energy Consumption	13.85	17.92	19.01	18.10	16.04	16.12
by Fuel/Product						
Solid Fuels	0.54	0.47	0.02	0.05	0.01	0.01
Petroleum and Products	8.27	10.71	10.81	9.28	7.96	8.03
Gases	0.11	0.87	1.31	1.56	1.64	1.62
Biomass and Renewable Wastes	2.40	2.41	2.51	2.48	2.10	2.08
Solar	0.02	0.02	0.02	0.05	0.08	0.08
Geothermal	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	2.48	3.30	3.98	4.29	3.94	3.99
Derived heat	0.04	0.13	0.33	0.34	0.24	0.21
Wastes, Non-Renewable			0.03	0.06	0.06	0.09
by Sector						
Industry	4.93	6.32	5.80	5.45	4.45	4.33
Transport	4.94	6.64	7.19	7.30	6.61	6.78
Residential	2.56	2.80	3.22	2.97	2.54	2.62
Services	0.91	1.40	2.20	1.88	1.96	1.94
Agriculture and Fishing	0.49	0.73	0.58	0.46	0.44	0.42
Other	0.03	0.04	0.03	0.03	0.04	0.03

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	9.38	10.91	13.37	18.93	19.63	20.56
Combustible Fuels	4.89	6.28	7.28	9.87	8.05	7.99
Nuclear						
Hydro	4.48	4.54	5.02	5.11	6.17	6.96
Wind	0.01	0.08	1.06	3.80	4.94	5.12
Solar PV		0.00	0.00	0.13	0.45	0.46
Geothermal	0.01	0.01	0.01	0.03	0.03	0.03
Tide, Wave and Ocean						0.00
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	33.27	43.76	46.58	54.09	52.42	60.28
Solid Fuels	13.41	14.60	15.23	7.10	14.73	12.63
Petroleum and Products	10.31	8.42	8.79	3.01	1.31	1.30
Gases	0.05	7.23	13.61	14.90	10.56	12.58
Nuclear						
Renewables	9.50	13.26	8.65	28.75	25.51	33.45
Wastes, non-RES	0.00	0.26	0.31	0.33	0.30	0.32
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			1.08	1.31	1.33	1.2
CHP Electricity Generation (TWh)			5.42	6.36	6.47	6.2
CHP in Total Electricity Generation (%)			11.6%	11.8%	12.3%	10.4%
CHP Heat Production (PJ)			59.61	67.22	59.28	61.7
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	4913	6604	7137	6940	6245	6458
Motor Gasoline	2022	2272	1935	1450	1099	1082
Gas/Diesel Oil	2273	3523	4286	4366	3886	3984
Final Consumption Biofuels				309	328	264
Biogasoline					22	26
Biodiesel				305	302	236
Main Energy Indicators						
Energy Intensity (toe/M€'10)	150.8	151.3	157.4	135.0	133.7	133.0
Energy per Capita (kgoe/cap)	2061.7	2467.1	2618.0	2296.5	2219.1	2249.6
Final Electricity per Capita (KWh/cap)	2877.9	3744.1	4413.9	4718.2	4415.7	4482.3
Primary Energy Intensity (toe/M€'10)	135.6	137.0	142.6	125.3	126.0	126.4
Import Dependency (%)	85.3%	85.1%	88.6%	75.1%	77.3%	73.5%
of Solid Fuels	105.8%	102.9%	96.3%	98.3%	98.5%	102.3%
of Hard Coal	105.9%	103.4%	96.3%	98.2%	98.5%	102.3%
of Petroleum Fuels	100.6%	99.4%	102.3%	97.5%	99.9%	96.9%
of Crude and NGL	100.0%	99.0%	100.2%	98.8%	100.9%	98.7%
of Natural Gas		100.2%	103.8%	100.4%	99.8%	99.1%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			19.5%	24.2%	28.0%	28.5%
RES-H&C – Heating and Cooling			32.1%	33.9%	33.4%	35.1%
RES-E – Electricity Generation			27.7%	40.7%	52.6%	54.1%
RES-T – Transport			0.5%	5.5%	7.4%	7.5%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	56.66	68.28	72.01	55.73	55.51	53.81
GHGs Emissions**	72.10	85.38	89.32	72.80	72.75	71.17
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	5660.7	6662.4	6861.6	5271.0	5350.6	5203.1
Carbon Intensity (kg CO ₂ /toe)	2682.6	2631.6	2567.2	2252.7	2345.7	2251.9
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	413.9	408.5	412.6	309.7	322.4	307.5

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.23 Romania

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	32.31	28.47	28.22	27.82	26.74	25.15
Solid Fuels	7.89	5.60	5.80	5.90	4.71	4.24
of which Hard Coal	0.65	0.16	0.02	0.00	0.01	0.00
Petroleum and Products	6.82	6.36	6.23	4.57	4.24	4.04
of which Crude and NGL	6.72	6.30	5.58	4.52	4.13	3.92
Gases	14.45	10.97	9.70	8.62	8.79	7.78
of which Natural Gas	14.45	10.97	9.70	8.62	8.79	7.78
Nuclear	0.00	1.41	1.43	3.00	3.00	2.91
Renewables	2.80	4.04	4.98	5.71	5.94	6.10
Wastes, Non-Renewable	0.37	0.09	0.09	0.03	0.07	0.08
Net Imports	14.03	7.99	10.84	7.83	5.54	7.23
Solid Fuels	2.86	1.92	2.94	1.23	1.03	1.08
of which Hard Coal	3.01	1.65	2.42	0.47	0.47	0.47
Petroleum and Products	6.36	3.42	3.96	4.84	4.89	5.30
of which Crude and NGL	8.31	4.76	8.86	6.03	6.72	7.61
Gases	4.79	2.71	4.19	1.82	0.16	1.18
of which Natural Gas	4.79	2.71	4.19	1.82	0.16	1.18
Renewables	0.00	0.00	0.00	0.14	0.04	0.11
Electricity	0.03	-0.06	-0.25	-0.20	-0.58	-0.43
Gross Inland Consumption	46.31	36.65	39.21	35.80	32.43	32.40
Solid Fuels	10.79	7.49	8.79	7.01	5.91	5.33
of which Hard Coal	3.69	1.72	2.37	0.47	0.49	0.47
Petroleum and Products	13.09	9.99	10.29	9.31	9.13	9.31
of which Crude and NGL	15.14	10.96	14.44	10.67	10.78	11.63
Gases	19.24	13.68	13.92	10.79	8.92	9.01
of which Natural Gas	19.24	13.68	13.92	10.79	8.92	9.01
Nuclear	0.00	1.41	1.43	3.00	3.00	2.91
Renewables	2.80	4.04	4.94	5.86	5.97	6.19
Electricity	0.03	-0.06	-0.25	-0.20	-0.58	-0.43
Wastes, Non-Renewable	0.37	0.10	0.09	0.03	0.07	0.08
Primary Energy Consumption	45.07	34.77	36.74	34.33	31.30	31.26
Available for Final Consumption	30.36	25.03	26.87	24.77	23.06	23.35
Final Non-Energy Consumption	1.24	1.88	2.47	1.47	1.13	1.14
Final Energy Consumption	26.97	22.77	24.71	22.59	21.89	22.28
by Fuel/Product						
Solid Fuels	1.64	1.05	1.61	0.94	0.84	0.79
Petroleum and Products	5.70	5.53	6.63	6.19	7.01	7.36
Gases	10.34	6.91	7.75	6.19	5.47	5.36
Biomass and Renewable Wastes	1.28	2.74	3.17	4.02	3.51	3.66
Solar				0.00	0.00	0.00
Geothermal	0.00	0.01	0.02	0.02	0.02	0.03
Electricity	3.13	2.92	3.34	3.55	3.70	3.72
Derived heat	4.68	3.57	2.14	1.65	1.27	1.28
Wastes, Non-Renewable	0.20	0.06	0.06	0.03	0.07	0.08
by Sector						
Industry	15.15	9.30	10.01	6.88	6.47	6.32
Transport	3.11	3.46	4.28	5.12	5.58	6.03
Residential	6.33	8.41	7.99	8.10	7.38	7.42
Services	0.51	0.67	1.67	1.88	1.76	1.81
Agriculture and Fishing	1.00	0.40	0.22	0.39	0.46	0.45
Other	0.87	0.54	0.56	0.21	0.25	0.26

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	6.00	6.12	18.95	19.91	23.83	23.58
Combustible Fuels			11.95	11.64	11.23	11.04
Nuclear			0.71	1.41	1.41	1.41
Hydro	6.00	6.12	6.29	6.47	6.73	6.73
Wind			0.00	0.39	3.13	3.03
Solar PV					1.33	1.37
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	59.27	51.93	59.41	60.98	66.30	65.10
Solid Fuels	20.59	18.93	21.92	20.68	18.13	15.88
Petroleum and Products	5.80	3.40	1.89	0.69	0.47	0.70
Gases	15.97	9.00	9.83	7.32	9.48	9.76
Nuclear		5.46	5.56	11.62	11.64	11.29
Renewables	16.69	14.78	20.21	20.66	26.58	27.48
Wastes, non-RES	0.00	0.00	0.00	0.00	0.00	0.00
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			5.25	4.58	1.83	1.9
CHP Electricity Generation (TWh)			15.55	6.54	5.60	5.3
CHP in Total Electricity Generation (%)			26.2%	10.8%	8.4%	8.1%
CHP Heat Production (PJ)			95.39	69.00	50.98	45.9
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	2912	3273	4103	4882	5280	5680
Motor Gasoline	1082	1321	1600	1412	1269	1326
Gas/Diesel Oil	1583	1756	2298	3172	3676	3961
Final Consumption Biofuels				115	202	257
Biogasoline				47	61	81
Biodiesel				69	141	176
Main Energy Indicators						
Energy Intensity (toe/M€'10)	549.8	440.8	356.4	284.7	225.0	214.5
Energy per Capita (kgoe/cap)	2038.8	1632.1	1833.6	1764.0	1632.1	1639.8
Final Electricity per Capita (KWh/cap)	1600.6	1511.4	1817.3	2035.9	2165.5	2189.1
Primary Energy Intensity (toe/M€'10)	535.1	418.2	334.0	273.0	217.2	206.9
Import Dependency (%)	30.3%	21.8%	27.6%	21.9%	17.1%	22.3%
of Solid Fuels	26.5%	25.6%	33.4%	17.6%	17.4%	20.2%
of Hard Coal	81.7%	96.0%	102.2%	100.9%	95.3%	100.4%
of Petroleum Fuels	48.6%	34.2%	38.5%	51.9%	53.3%	56.7%
of Crude and NGL	54.9%	43.5%	61.3%	56.5%	62.4%	65.4%
of Natural Gas	24.9%	19.8%	30.1%	16.8%	1.8%	13.0%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			17.3%	23.4%	24.8%	25.0%
RES-H&C – Heating and Cooling			18.0%	27.2%	25.9%	26.9%
RES-E – Electricity Generation			26.9%	30.4%	43.2%	42.7%
RES-T – Transport			1.6%	3.8%	5.5%	6.2%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	125.46	93.97	101.34	84.05	78.48	75.92
GHGs Emissions**	181.11	141.17	148.21	122.69	116.91	113.42
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	5523.9	4184.6	4739.6	4141.4	3949.4	3842.1
Carbon Intensity (kg CO ₂ /toe)	2709.4	2564.0	2584.9	2346.7	2416.5	2340.9
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	1489.8	1130.2	921.4	668.4	544.6	502.6

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.24 Slovenia

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	2.96	3.09	3.49	3.78	3.39	3.57
Solid Fuels	1.19	1.06	1.18	1.20	0.86	0.94
of which Hard Coal						
Petroleum and Products	0.00	0.00	0.00	0.01	0.00	0.00
of which Crude and NGL	0.00	0.00				
Gases	0.02	0.01	0.00	0.01	0.00	0.00
of which Natural Gas	0.02	0.01	0.00	0.01	0.00	0.00
Nuclear	1.23	1.23	1.52	1.46	1.46	1.47
Renewables	0.51	0.79	0.77	1.09	1.02	1.11
Wastes, Non-Renewable	0.00	0.00	0.01	0.02	0.04	0.05
Net Imports	3.09	3.41	3.86	3.58	3.23	3.35
Solid Fuels	0.19	0.24	0.32	0.28	0.20	0.20
of which Hard Coal	0.14	0.20	0.29	0.23	0.18	0.18
Petroleum and Products	2.26	2.46	2.63	2.60	2.34	2.53
of which Crude and NGL	0.49	0.13				
Gases	0.75	0.82	0.93	0.86	0.66	0.70
of which Natural Gas	0.75	0.82	0.93	0.86	0.66	0.70
Renewables	0.03	0.00	0.00	0.03	0.03	0.02
Electricity	-0.14	-0.11	-0.03	-0.18	0.00	-0.10
Gross Inland Consumption	6.07	6.45	7.33	7.34	6.57	6.80
Solid Fuels	1.38	1.31	1.54	1.45	1.07	1.15
of which Hard Coal	0.14	0.19	0.30	0.23	0.17	0.18
Petroleum and Products	2.32	2.42	2.58	2.60	2.29	2.40
of which Crude and NGL	0.51	0.14				
Gases	0.75	0.83	0.93	0.86	0.66	0.71
of which Natural Gas	0.75	0.83	0.93	0.86	0.66	0.71
Nuclear	1.23	1.23	1.52	1.46	1.46	1.47
Renewables	0.54	0.79	0.77	1.12	1.05	1.13
Electricity	-0.14	-0.11	-0.03	-0.18	0.00	-0.10
Wastes, Non-Renewable	0.00	0.00	0.01	0.02	0.04	0.05
Primary Energy Consumption	5.95	6.21	7.02	7.13	6.44	6.67
Available for Final Consumption	4.23	4.70	5.23	5.27	4.82	5.01
Final Non-Energy Consumption	0.12	0.24	0.31	0.21	0.13	0.13
Final Energy Consumption	4.09	4.46	4.90	5.04	4.69	4.88
by Fuel/Product						
Solid Fuels	0.11	0.09	0.08	0.05	0.04	0.04
Petroleum and Products	2.13	2.26	2.41	2.47	2.17	2.28
Gases	0.58	0.57	0.67	0.62	0.56	0.60
Biomass and Renewable Wastes	0.26	0.44	0.44	0.62	0.57	0.58
Solar				0.01	0.01	0.01
Geothermal				0.03	0.04	0.04
Electricity	0.80	0.91	1.10	1.03	1.10	1.12
Derived heat	0.21	0.20	0.20	0.19	0.17	0.18
Wastes, Non-Renewable	0.00	0.00	0.01	0.02	0.04	0.04
by Sector						
Industry	1.18	1.42	1.64	1.27	1.23	1.24
Transport	1.35	1.26	1.49	1.81	1.80	1.90
Residential	1.16	1.13	1.19	1.33	1.11	1.15
Services	0.40	0.53	0.48	0.53	0.46	0.49
Agriculture and Fishing	0.00	0.08	0.08	0.07	0.07	0.07
Other	0.00	0.04	0.02	0.03	0.02	0.02

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	2.52	2.61	2.99	3.19	3.36	3.54
Combustible Fuels	1.10	1.12	1.36	1.26	1.13	1.32
Nuclear	0.66	0.66	0.66	0.67	0.69	0.69
Hydro	0.76	0.84	0.98	1.25	1.30	1.29
Wind					0.01	0.01
Solar PV				0.01	0.24	0.23
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	12.91	13.62	15.12	16.44	15.10	16.50
Solid Fuels	4.60	4.61	5.27	5.29	4.39	5.01
Petroleum and Products	0.26	0.06	0.04	0.01	0.02	0.01
Gases	0.02	0.29	0.34	0.55	0.40	0.42
Nuclear	4.78	4.76	5.88	5.66	5.65	5.72
Renewables	3.25	3.90	3.58	4.93	4.64	5.34
Wastes, non-RES			0.01	0.01	0.01	0.01
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			0.34	0.33	0.36	0.4
CHP Electricity Generation (TWh)			1.10	1.14	1.16	1.2
CHP in Total Electricity Generation (%)			7.3%	6.9%	7.7%	7.3%
CHP Heat Production (PJ)			15.00	11.60	10.38	10.8
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1 334	1 236	1 476	1 746	1 754	1 869
Motor Gasoline	880	860	698	600	437	434
Gas/Diesel Oil	433	350	754	1 111	1 276	1 397
Final Consumption Biofuels				46	29	18
Biogasoline				4	7	4
Biodiesel				41	23	14
Main Energy Indicators						
Energy Intensity (toe/M€'10)	268.3	231.3	220.1	202.4	177.6	178.2
Energy per Capita (kgoe/cap)	3 052.1	3 245.4	3 666.9	3 584.3	3 183.9	3 292.8
Final Electricity per Capita (KWh/cap)	4 696.2	5 292.9	6 378.7	5 835.4	6 199.1	6 310.0
Primary Energy Intensity (toe/M€'10)	263.1	222.8	210.9	196.6	174.2	174.9
Import Dependency (%)	50.9%	52.8%	52.5%	48.7%	48.8%	48.4%
of Solid Fuels	13.6%	18.7%	21.0%	19.2%	19.0%	17.2%
of Hard Coal	100.0%	100.5%	93.8%	100.9%	100.6%	98.3%
of Petroleum Fuels	97.8%	101.5%	101.2%	99.2%	99.6%	100.3%
of Crude and NGL	95.9%	87.5%				
of Natural Gas	100.5%	99.3%	99.6%	99.3%	99.7%	99.4%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			16.0%	20.4%	21.9%	21.3%
RES-H&C – Heating and Cooling			18.9%	28.1%	33.9%	34.0%
RES-E – Electricity Generation			28.7%	32.2%	32.7%	32.1%
RES-T – Transport			0.8%	3.1%	2.2%	1.6%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	15.30	15.50	16.99	16.43	13.67	14.46
GHGs Emissions**	18.79	19.14	20.61	19.74	16.93	17.78
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	7 691.3	7 797.2	8 505.1	8 024.2	6 628.3	7 005.4
Carbon Intensity (kg CO ₂ /toe)	2 520.0	2 402.6	2 312.8	2 233.2	2 062.3	2 091.2
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	676.1	555.8	510.6	453.1	369.8	379.2

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.25 Slovak Republic

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	5.06	6.39	6.68	6.35	6.74	6.59
Solid Fuels	1.02	1.02	0.64	0.61	0.50	0.45
of which Hard Coal						
Petroleum and Products	0.13	0.17	0.38	0.39	0.43	0.40
of which Crude and NGL	0.07	0.06	0.04	0.02	0.01	0.01
Gases	0.26	0.13	0.13	0.09	0.08	0.08
of which Natural Gas	0.26	0.13	0.13	0.09	0.08	0.08
Nuclear	2.95	4.26	4.63	3.82	3.95	3.86
Renewables	0.50	0.50	0.86	1.40	1.59	1.60
Wastes, Non-Renewable	0.21	0.32	0.05	0.03	0.19	0.20
Net Imports	12.14	12.00	12.43	11.26	9.64	9.74
Solid Fuels	4.14	3.43	3.74	2.95	2.77	2.69
of which Hard Coal	3.10	3.15	3.48	2.57	2.53	2.46
Petroleum and Products	3.36	3.09	3.27	3.30	2.99	3.24
of which Crude and NGL	5.09	5.72	5.43	5.31	5.77	5.64
Gases	4.53	5.71	5.74	5.00	3.69	3.62
of which Natural Gas	4.53	5.71	5.74	5.00	3.69	3.62
Renewables			-0.04	-0.08	-0.02	-0.03
Electricity	0.12	-0.23	-0.28	0.09	0.21	0.23
Gross Inland Consumption	17.72	18.30	19.03	17.86	16.43	16.51
Solid Fuels	5.39	4.28	4.23	3.90	3.28	3.23
of which Hard Coal	3.34	3.03	3.31	2.79	2.59	2.53
Petroleum and Products	3.34	3.42	3.71	3.68	3.34	3.53
of which Crude and NGL	5.01	5.86	5.56	5.32	5.81	5.60
Gases	5.22	5.78	5.88	5.01	3.88	3.90
of which Natural Gas	5.22	5.78	5.88	5.01	3.88	3.90
Nuclear	2.95	4.26	4.63	3.82	3.95	3.86
Renewables	0.50	0.49	0.81	1.33	1.58	1.58
Electricity	0.12	-0.23	-0.28	0.09	0.21	0.23
Wastes, Non-Renewable	0.21	0.32	0.05	0.04	0.19	0.20
Primary Energy Consumption	16.79	16.94	17.75	16.80	15.38	15.53
Available for Final Consumption	12.23	12.72	12.84	12.65	11.16	11.42
Final Non-Energy Consumption	0.93	1.37	1.28	1.05	1.05	0.98
Final Energy Consumption	11.03	10.98	11.56	11.55	10.08	10.42
by Fuel/Product						
Solid Fuels	2.56	1.75	1.57	1.64	1.32	1.29
Petroleum and Products	1.61	1.70	2.18	2.30	2.12	2.34
Gases	4.07	4.70	4.54	4.12	3.09	3.21
Biomass and Renewable Wastes	0.08	0.09	0.33	0.54	0.63	0.57
Solar				0.00	0.01	0.01
Geothermal			0.00	0.00	0.00	0.00
Electricity	1.87	1.89	1.97	2.08	2.10	2.15
Derived heat	0.72	0.62	0.95	0.85	0.63	0.67
Wastes, Non-Renewable	0.12	0.23	0.02	0.02	0.17	0.18
by Sector						
Industry	4.69	4.53	4.71	4.36	4.43	4.45
Transport	1.41	1.45	2.39	2.63	2.21	2.48
Residential	1.98	2.59	2.54	2.31	1.99	2.03
Services	2.66	2.20	1.75	2.11	1.30	1.31
Agriculture and Fishing	0.30	0.21	0.17	0.13	0.15	0.15
Other						

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	7.24	7.45	8.26	7.87	7.78	7.74
Combustible Fuels	3.22	2.39	3.09	3.50	2.75	2.71
Nuclear	1.76	2.64	2.64	1.82	1.94	1.94
Hydro	2.26	2.42	2.51	2.52	2.52	2.52
Wind			0.01	0.00	0.00	0.00
Solar PV				0.02	0.53	0.53
Geothermal						
Tide, Wave and Ocean						
Other Sources			0.01	0.02	0.03	0.03
Gross Electricity Generation, by Fuel (TWh)	26.77	31.16	31.46	27.86	26.90	27.06
Solid Fuels	6.46	5.58	5.54	3.57	2.83	2.80
Petroleum and Products	0.74	0.20	0.74	0.60	0.38	0.47
Gases	2.92	3.87	2.63	2.72	2.11	1.99
Nuclear	11.44	16.49	17.73	14.57	15.15	14.77
Renewables	5.23	4.98	4.78	6.33	6.31	6.88
Wastes, non-RES		0.03	0.02	0.02	0.03	0.02
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			5.41	2.82	3.7	1.0
CHP Electricity Generation (TWh)			4.80	4.43	21.1	3.0
CHP in Total Electricity Generation (%)			15.3%	15.9%	78.5%	11.1%
CHP Heat Production (PJ)			33.68	20.06	27.3	34.4
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1 294	1 372	1 731	2 093	1 924	2 146
Motor Gasoline	512	605	667	600	577	609
Gas/Diesel Oil	742	740	1 011	1 450	1 267	1 451
Final Consumption Biofuels			11	98	144	140
Biogasoline				24	23	16
Biodiesel			11	74	121	124
Main Energy Indicators						
Energy Intensity (toe/M€'10)	503.1	436.9	355.1	264.2	214.7	208.9
Energy per Capita (kgoe/cap)	3 308.1	3 390.1	3 541.8	3 312.4	3 029.9	3 042.8
Final Electricity per Capita (KWh/cap)	4 057.0	4 076.9	4 253.0	4 477.4	4 495.4	4 604.8
Primary Energy Intensity (toe/M€'10)	476.8	404.3	331.2	248.6	201.0	196.5
Import Dependency (%)	68.5%	65.6%	65.3%	63.1%	58.7%	59.0%
of Solid Fuels	76.7%	80.2%	88.4%	75.7%	84.6%	83.3%
of Hard Coal	92.9%	103.8%	105.2%	91.9%	97.5%	97.2%
of Petroleum Fuels	100.6%	90.5%	88.2%	89.5%	89.4%	91.8%
of Crude and NGL	101.5%	97.6%	97.7%	99.9%	99.3%	100.7%
of Natural Gas	86.8%	98.8%	97.5%	99.9%	95.1%	92.9%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			6.4%	9.1%	12.9%	12.0%
RES-H&C – Heating and Cooling			5.0%	7.9%	10.8%	9.9%
RES-E – Electricity Generation			15.7%	17.8%	22.7%	22.5%
RES-T – Transport			1.6%	5.3%	8.5%	7.5%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	44.91	41.58	43.05	38.76	34.04	34.15
GHGs Emissions**	54.05	49.62	51.29	46.39	41.05	41.19
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	8 385.5	7 702.0	8 012.2	7 190.3	6 279.2	6 293.6
Carbon Intensity (kg CO ₂ /toe)	2 534.8	2 271.9	2 262.2	2 170.7	2 072.4	2 068.4
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	1 275.3	992.5	803.3	573.5	445.0	432.1

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.26 Finland

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	13.13	15.16	16.95	17.99	17.80	17.85
Solid Fuels	2.03	1.09	2.14	1.81	0.84	0.72
of which Hard Coal						
Petroleum and Products	0.02	0.46	0.54	0.72	0.33	0.35
of which Crude and NGL						
Gases					0.01	0.01
of which Natural Gas					0.01	0.01
Nuclear	4.96	5.80	6.00	5.88	6.00	5.99
Renewables	6.12	7.75	8.16	9.43	10.39	10.52
Wastes, Non-Renewable	0.01	0.07	0.11	0.15	0.24	0.27
Net Imports	15.91	18.22	18.95	17.84	15.91	15.80
Solid Fuels	3.83	3.51	3.31	3.95	2.51	2.72
of which Hard Coal	3.67	3.21	3.01	3.68	2.28	2.56
Petroleum and Products	8.51	10.26	10.65	9.23	9.67	9.29
of which Crude and NGL	8.67	11.56	10.57	11.21	11.09	12.33
Gases	2.84	3.43	3.61	3.84	2.24	2.06
of which Natural Gas	2.84	3.43	3.61	3.84	2.24	2.06
Renewables			-0.08	-0.08	0.09	0.10
Electricity	0.72	1.02	1.46	0.90	1.41	1.63
Gross Inland Consumption	29.36	32.41	34.50	37.11	33.28	34.62
Solid Fuels	6.05	5.09	4.90	6.87	4.08	4.53
of which Hard Coal	4.12	3.28	2.93	4.31	2.54	3.09
Petroleum and Products	8.66	9.25	10.33	10.12	8.83	9.53
of which Crude and NGL	9.21	11.39	10.83	11.09	10.65	12.27
Gases	2.84	3.43	3.61	3.84	2.24	2.07
of which Natural Gas	2.84	3.43	3.61	3.84	2.24	2.07
Nuclear	4.96	5.80	6.00	5.88	6.00	5.99
Renewables	6.13	7.75	8.09	9.35	10.49	10.61
Electricity	0.72	1.02	1.46	0.90	1.41	1.63
Wastes, Non-Renewable	0.01	0.07	0.11	0.15	0.24	0.27
Primary Energy Consumption	28.24	31.37	33.35	35.88	31.77	33.06
Available for Final Consumption	21.92	24.76	26.44	27.50	25.56	26.76
Final Non-Energy Consumption	1.13	1.04	1.15	1.22	1.51	1.57
Final Energy Consumption	21.97	24.32	25.19	26.25	24.25	25.25
by Fuel/Product						
Solid Fuels	1.30	1.03	0.89	0.85	0.60	0.70
Petroleum and Products	7.67	7.81	8.15	7.70	6.78	7.19
Gases	1.33	1.21	1.10	1.03	0.85	0.85
Biomass and Renewable Wastes	3.94	4.48	4.23	4.89	5.38	5.39
Solar				0.00	0.00	0.00
Geothermal						
Electricity	5.61	6.51	6.94	7.18	6.75	6.95
Derived heat	2.13	3.27	3.85	4.55	3.83	4.13
Wastes, Non-Renewable	0.00	0.02	0.03	0.04	0.05	0.05
by Sector						
Industry	9.86	12.20	11.88	11.34	10.75	11.04
Transport	4.18	4.28	4.65	4.84	4.79	4.96
Residential	5.44	4.49	5.02	5.81	4.90	5.29
Services	1.01	2.32	2.62	3.08	2.71	2.86
Agriculture and Fishing	0.76	0.77	0.75	0.81	0.73	0.72
Other	0.72	0.26	0.27	0.36	0.37	0.38

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	14.43	16.26	16.47	15.68	16.61	16.27
Combustible Fuels	9.34	10.70	10.68	9.61	9.59	8.66
Nuclear	2.31	2.64	2.67	2.72	2.75	2.76
Hydro	2.78	2.88	3.04	3.16	3.25	3.25
Wind	0.01	0.04	0.08	0.20	1.01	1.57
Solar PV	0.00	0.00	0.00	0.01	0.02	0.04
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	64.04	69.98	70.58	80.67	68.60	68.75
Solid Fuels	16.62	12.45	11.00	20.83	8.21	9.88
Petroleum and Products	1.45	0.59	0.50	0.48	0.21	0.20
Gases	7.21	10.82	11.92	11.85	5.77	4.37
Nuclear	19.22	22.48	23.27	22.80	23.25	23.20
Renewables	19.55	23.38	23.47	24.20	30.53	30.41
Wastes, non-RES	0.00	0.07	0.18	0.21	0.39	0.43
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			5.83	6.17	5.85	5.9
CHP Electricity Generation (TWh)			27.46	29.24	21.74	21.8
CHP in Total Electricity Generation (%)			38.9%	36.2%	31.7%	31.8%
CHP Heat Production (PJ)			249.98	272.84	242.43	241.6
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	4127	4213	4569	4624	4223	4710
Motor Gasoline	2024	1748	1835	1531	1359	1358
Gas/Diesel Oil	1650	1943	2167	2433	2152	2640
Final Consumption Biofuels				140	498	177
Biogasoline				78	66	68
Biodiesel				63	432	109
Main Energy Indicators						
Energy Intensity (toe/M€'10)	237.9	205.0	192.1	198.3	178.1	181.5
Energy per Capita (kgoe/cap)	5758.9	6267.1	6588.8	6933.7	6082.0	6309.1
Final Electricity per Capita (KWh/cap)	12790.8	14635.6	15420.1	15603.3	14340.2	14730.4
Primary Energy Intensity (toe/M€'10)	228.8	198.4	185.6	191.8	170.1	173.2
Import Dependency (%)	53.6%	55.1%	54.1%	47.8%	47.4%	45.3%
of Solid Fuels	63.4%	68.9%	67.4%	57.5%	61.5%	60.1%
of Hard Coal	89.0%	97.7%	102.6%	85.5%	89.8%	82.8%
of Petroleum Fuels	94.6%	103.5%	98.4%	89.4%	106.0%	94.7%
of Crude and NGL	94.1%	101.5%	97.5%	101.1%	104.1%	100.5%
of Natural Gas	100.0%	100.0%	100.0%	100.0%	99.7%	99.7%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			28.8%	32.4%	39.2%	38.7%
RES-H&C – Heating and Cooling			39.1%	44.2%	52.5%	53.7%
RES-E – Electricity Generation			26.9%	27.7%	32.5%	32.9%
RES-T – Transport			0.9%	4.4%	22.0%	8.4%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	59.17	58.21	58.42	65.72	46.36	49.95
GHGs Emissions**	72.84	71.22	71.07	77.20	57.38	60.77
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	11604.6	11256.4	11156.3	12280.0	8473.0	9102.3
Carbon Intensity (kg CO ₂ /toe)	1992.6	1760.0	1669.1	1761.1	1380.9	1431.0
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	479.5	368.2	325.2	351.2	248.2	261.8

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.27 Sweden

Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	31.38	30.05	34.17	32.58	33.73	34.72
Solid Fuels	0.22	0.16	0.21	0.24	0.11	0.13
of which Hard Coal						
Petroleum and Products	0.00	0.00	0.03	0.07	0.13	0.15
of which Crude and NGL	0.00					
Gases	0.04	0.04	0.04	0.02	0.01	0.01
of which Natural Gas						
Nuclear	18.04	14.79	18.67	14.92	14.54	16.28
Renewables	12.84	14.74	14.73	16.82	18.32	17.38
Wastes, Non-Renewable	0.24	0.32	0.48	0.52	0.62	0.79
Net Imports	20.43	20.44	19.58	19.48	14.22	16.37
Solid Fuels	2.75	2.41	2.56	2.55	1.95	2.23
of which Hard Coal	2.37	2.14	2.22	2.29	1.92	2.16
Petroleum and Products	17.07	16.85	16.70	15.10	12.68	13.43
of which Crude and NGL	19.22	21.97	19.49	19.62	19.95	19.37
Gases	0.76	0.78	0.84	1.47	0.72	0.82
of which Natural Gas	0.76	0.78	0.84	1.47	0.72	0.82
Renewables					0.81	0.91
Electricity	-0.14	0.40	-0.64	0.18	-1.94	-1.01
Gross Inland Consumption	51.47	48.90	51.02	50.79	45.56	49.23
Solid Fuels	2.88	2.45	2.63	2.49	2.12	2.05
of which Hard Coal	2.33	1.98	2.12	1.99	1.93	1.85
Petroleum and Products	16.82	15.38	14.14	14.20	10.40	12.02
of which Crude and NGL	19.36	21.83	19.40	19.81	19.82	19.37
Gases	0.80	0.82	0.89	1.48	0.73	0.83
of which Natural Gas	0.76	0.78	0.84	1.47	0.72	0.82
Nuclear	18.04	14.79	18.67	14.92	14.54	16.28
Renewables	12.84	14.74	14.85	17.00	19.09	18.28
Electricity	-0.15	0.40	-0.64	0.18	-1.94	-1.01
Wastes, Non-Renewable	0.24	0.32	0.48	0.52	0.62	0.79
Primary Energy Consumption	49.48	47.17	48.73	48.68	43.79	47.05
Available for Final Consumption	36.67	36.21	35.26	36.90	32.75	34.98
Final Non-Energy Consumption	1.99	1.73	2.29	2.11	1.77	2.18
Final Energy Consumption	35.05	34.97	33.68	34.08	31.71	32.59
by Fuel/Product						
Solid Fuels	1.19	1.11	1.35	1.20	1.04	1.05
Petroleum and Products	13.93	13.27	11.42	10.04	8.52	8.77
Gases	0.61	0.67	0.76	0.73	0.75	0.64
Biomass and Renewable Wastes	5.07	5.29	4.73	5.68	6.46	6.73
Solar	0.01	0.01	0.01	0.01	0.01	0.01
Geothermal						
Electricity	10.71	11.07	11.24	11.28	10.74	10.96
Derived heat	3.54	3.55	4.17	5.14	4.19	4.43
Wastes, Non-Renewable	0.00	0.00	0.00	0.00	0.00	0.00
by Sector						
Industry	13.82	14.27	12.63	12.21	11.53	11.43
Transport	7.79	8.19	8.63	8.60	8.61	9.05
Residential	7.74	7.30	7.31	8.04	7.20	7.46
Services	4.86	4.41	4.30	4.55	4.01	4.30
Agriculture and Fishing	0.84	0.76	0.80	0.68	0.37	0.34
Other	0.01	0.05	0.02	0.01		

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	33.63	33.72	33.39	36.45	39.71	40.32
Combustible Fuels	7.35	7.53	7.08	8.72	7.75	7.50
Nuclear	10.06	9.46	9.47	8.98	9.69	9.77
Hydro	16.15	16.53	16.35	16.73	16.33	16.47
Wind	0.07	0.21	0.49	2.02	5.84	6.43
Solar PV	0.00	0.00	0.00	0.01	0.10	0.15
Geothermal						
Tide, Wave and Ocean						
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	148.35	145.27	158.44	148.56	162.06	156.01
Solid Fuels	2.45	1.71	1.17	1.77	0.57	0.48
Petroleum and Products	3.95	1.53	1.38	1.77	0.25	0.40
Gases	1.34	1.29	1.34	3.78	1.12	1.20
Nuclear	69.94	57.32	72.38	57.83	56.35	63.10
Renewables	70.61	83.18	81.30	82.20	102.57	89.25
Wastes, non-RES	0.07	0.24	0.87	1.21	1.20	1.59
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			3.49	5.10	4.85	3.9
CHP Electricity Generation (TWh)			10.67	18.53	13.66	9.2
CHP in Total Electricity Generation (%)			6.7%	12.5%	8.4%	5.9%
CHP Heat Production (PJ)			132.73	187.20	151.35	91.1
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	7 550	7 907	8 217	7 959	7 308	7 488
Motor Gasoline	4 559	4 265	4 142	3 320	2 568	2 416
Gas/Diesel Oil	2 100	2 671	3 154	3 653	3 848	4 069
Final Consumption Biofuels			152	377	951	1 202
Biogasoline			145	203	138	109
Biodiesel			7	174	813	1 093
Main Energy Indicators						
Energy Intensity (toe/M€'10)	204.7	163.2	149.5	137.6	111.1	116.2
Energy per Capita (kgoe/cap)	5 837.9	5 518.1	5 661.7	5 437.3	4 674.2	4 997.6
Final Electricity per Capita (KWh/cap)	14 128.9	14 526.4	14 503.6	14 047.9	12 809.5	12 942.4
Primary Energy Intensity (toe/M€'10)	196.8	157.4	142.8	131.9	106.7	111.1
Import Dependency (%)	38.9%	40.7%	37.0%	36.9%	30.0%	32.0%
of Solid Fuels	95.4%	98.3%	97.2%	102.2%	92.3%	108.5%
of Hard Coal	101.6%	107.7%	104.3%	115.2%	99.5%	116.9%
of Petroleum Fuels	95.6%	100.8%	104.0%	93.6%	103.8%	95.9%
of Crude and NGL	99.3%	100.6%	100.4%	99.0%	100.7%	100.0%
of Natural Gas	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			40.6%	47.2%	53.8%	53.8%
RES-H&C – Heating and Cooling			51.9%	60.9%	68.6%	68.6%
RES-E – Electricity Generation			50.9%	56.0%	65.8%	64.9%
RES-T – Transport			6.2%	9.2%	24.0%	30.3%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	60.71	56.65	55.77	55.03	45.55	45.09
GHGs Emissions**	75.00	70.60	68.68	66.55	55.95	55.45
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	6 886.4	6 393.0	6 188.8	5 891.7	4 673.1	4 577.5
Carbon Intensity (kg CO ₂ /toe)	1 156.3	1 127.5	1 053.5	1 043.7	961.5	880.4
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	241.5	189.0	163.5	149.1	111.0	106.5

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

5.28 United Kingdom

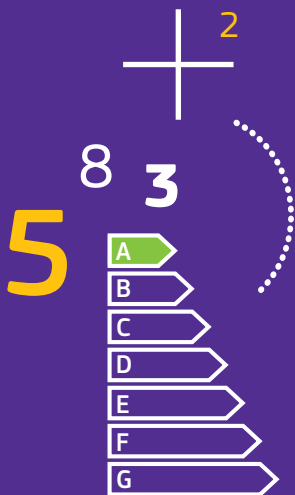
Mtoe, unless otherwise stated	1995	2000	2005	2010	2015	2016
Production	256.46	268.55	204.60	147.15	117.89	119.75
Solid Fuels	32.07	18.66	12.07	10.84	5.12	2.50
of which Hard Coal	32.07	18.66	12.07	10.84	5.12	2.50
Petroleum and Products	135.72	127.94	87.94	64.26	46.73	49.02
of which Crude and NGL	134.40	127.81	87.62	64.26	46.71	49.02
Gases	63.72	97.55	79.40	49.79	35.04	35.96
of which Natural Gas	63.72	97.55	79.40	49.79	35.04	35.96
Nuclear	22.95	21.94	21.05	16.03	18.15	18.50
Renewables	1.84	2.26	3.49	5.78	11.85	12.43
Wastes, Non-Renewable	0.16	0.19	0.66	0.46	1.01	1.35
Net Imports	-36.83	-39.22	31.61	62.43	72.58	67.82
Solid Fuels	10.48	14.45	27.24	16.06	14.56	5.98
of which Hard Coal	10.26	14.43	26.71	16.33	13.87	5.14
Petroleum and Products	-49.35	-45.58	-2.74	10.68	26.86	25.09
of which Crude and NGL	-43.68	-41.82	-0.19	9.39	13.89	9.46
Gases	0.64	-9.31	5.97	33.90	26.47	32.34
of which Natural Gas	0.64	-9.31	5.97	33.90	26.47	32.34
Renewables			0.42	1.57	2.89	2.91
Electricity	1.40	1.22	0.72	0.23	1.80	1.51
Gross Inland Consumption	222.25	230.56	234.17	212.78	191.90	189.44
Solid Fuels	47.18	36.52	37.91	30.92	23.83	11.76
of which Hard Coal	47.09	36.60	37.48	31.33	23.09	11.01
Petroleum and Products	83.61	81.03	84.46	72.98	70.58	71.40
of which Crude and NGL	91.60	87.15	87.23	73.86	60.60	58.46
Gases	65.12	87.40	85.47	84.82	61.78	69.55
of which Natural Gas	65.12	87.40	85.47	84.82	61.78	69.55
Nuclear	22.95	21.94	21.05	16.03	18.15	18.50
Renewables	1.84	2.26	3.91	7.35	14.76	15.36
Electricity	1.40	1.22	0.72	0.23	1.80	1.51
Wastes, Non-Renewable	0.16	0.19	0.66	0.46	1.01	1.35
Primary Energy Consumption	209.76	219.23	222.81	204.87	184.47	181.66
Available for Final Consumption	157.11	163.83	164.16	151.29	140.08	141.44
Final Non-Energy Consumption	12.49	11.33	11.37	7.91	7.43	7.78
Final Energy Consumption	142.65	153.24	152.76	142.99	132.31	133.69
by Fuel/Product						
Solid Fuels	8.22	5.95	4.57	4.08	4.37	3.40
Petroleum and Products	61.02	63.67	65.85	59.53	58.57	59.41
Gases	47.14	52.18	50.38	46.94	38.26	39.39
Biomass and Renewable Wastes	0.86	0.57	0.55	2.77	3.71	4.05
Solar	0.01	0.01	0.03	0.04	0.05	0.05
Geothermal	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	25.34	28.36	30.00	28.29	26.10	26.13
Derived heat	0.00	2.44	1.27	1.27	1.14	1.14
Wastes, Non-Renewable	0.06	0.05	0.12	0.09	0.11	0.12
by Sector						
Industry	34.87	36.93	33.33	27.58	25.46	24.25
Transport	47.67	52.90	55.49	51.39	51.64	52.60
Residential	39.34	43.03	44.24	45.50	36.93	38.05
Services	16.32	16.86	16.75	16.52	16.16	16.52
Agriculture and Fishing	1.27	1.15	0.94	0.99	1.03	1.16
Other	3.18	2.37	2.01	1.01	1.09	1.10

	1995	2000	2005	2010	2015	2016
Installed Electricity Capacity (GW)	70.13	78.39	82.38	93.69	97.30	97.64
Combustible Fuels	52.94	61.22	64.66	72.91	59.43	55.44
Nuclear	12.76	12.49	11.85	10.87	9.49	9.50
Hydro	4.22	4.27	4.29	4.39	4.52	4.58
Wind	0.20	0.41	1.57	5.42	14.32	16.22
Solar PV		0.00	0.01	0.10	9.54	11.90
Geothermal						
Tide, Wave and Ocean		0.00		0.00	0.01	0.01
Other Sources						
Gross Electricity Generation, by Fuel (TWh)	334.04	377.07	398.36	382.07	338.92	339.40
Solid Fuels	153.84	119.95	134.64	107.59	75.88	30.71
Petroleum and Products	17.30	8.45	5.34	4.81	2.04	1.84
Gases	65.10	150.43	154.34	176.79	100.97	144.13
Nuclear	88.96	85.06	81.62	62.14	70.35	71.73
Renewables	8.42	12.66	19.87	29.33	86.14	86.19
Wastes, non-RES	0.41	0.52	2.56	1.41	3.55	4.81
Cogeneration Heat and Power*						
CHP Electrical Capacity (GW)			5.44	6.10	5.91	4.6
CHP Electricity Generation (TWh)			27.24	23.64	19.40	19.8
CHP in Total Electricity Generation (%)			6.8%	6.2%	5.7%	5.8%
CHP Heat Production (PJ)			185.24	155.52	124.15	129.8
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	46975	52154	55072	49873	50309	51243
Motor Gasoline	23543	23167	19975	15598	12926	12784
Gas/Diesel Oil	15322	17754	21497	22392	25390	26377
Final Consumption Biofuels			69	1151	933	946
Biogasoline			43	321	404	386
Biodiesel			26	830	529	560
Main Energy Indicators						
Energy Intensity (toe/M€'10)	165.5	145.9	129.3	115.5	94.0	91.1
Energy per Capita (kgoe/cap)	3835.6	3922.1	3891.1	3403.9	2958.0	2897.4
Final Electricity per Capita (KWh/cap)	5086.4	5610.7	5797.0	5262.6	4679.1	4648.1
Primary Energy Intensity (toe/M€'10)	156.2	138.7	123.0	111.2	90.4	87.3
Import Dependency (%)	-16.4%	-16.9%	13.4%	29.0%	37.3%	35.3%
of Solid Fuels	22.2%	39.6%	71.9%	51.9%	61.1%	50.8%
of Hard Coal	21.8%	39.4%	71.3%	52.1%	60.0%	46.7%
of Petroleum Fuels	-57.4%	-54.9%	-3.2%	14.1%	36.7%	33.9%
of Crude and NGL	-47.7%	-48.0%	-0.2%	12.7%	22.9%	16.2%
of Natural Gas	1.0%	-10.7%	7.0%	40.0%	42.8%	46.5%
Renewables in Gross Final Energy (%)						
Overall RES with Aviation Cap			1.3%	3.7%	8.5%	9.3%
RES-H&C – Heating and Cooling			0.8%	2.7%	6.3%	7.0%
RES-E – Electricity Generation			4.1%	7.5%	22.3%	24.6%
RES-T – Transport			0.5%	3.3%	4.4%	4.9%
Gases Emissions (Mio ton CO₂)						
CO ₂ Emissions**	584.02	593.97	601.70	540.61	452.67	428.92
GHGs Emissions**	769.63	743.41	728.14	643.71	541.39	516.80
Main Emissions Indicators						
CO ₂ per Capita (kg CO ₂ /cap)	10079.2	10104.0	9998.0	8648.3	6977.6	6560.2
Carbon Intensity (kg CO ₂ /toe)	2599.3	2553.3	2547.5	2508.4	2328.4	2232.8
CO ₂ GDP Intensity (ton CO ₂ /M€'10)	435.0	375.8	332.3	293.5	221.8	206.2

* Preliminary 2016 CHP data from Eurostat. ** Total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport.

Appendices





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Appendices Methodology

Appendix 1 – Country Nomenclature

Interinstitutional Style Guide (ISG) Country Code	ISG Short Name EN	ISG Short Name, Source Language*	ISG Protocol Order	ISO 3166 Alpha-2 Country Codes	ESTAT Partner Code	ESTAT – Energy Numeric Code
BE	Belgium	Belgique/België	1	BE	0012	09
BG	Bulgaria	Bulgaria*	2	BG	0068	82
CZ	Czech Republic	Česká republika	3	CZ	0061	22
DK	Denmark	Danmark	4	DK	0008	10
DE	Germany	Deutschland	5	DE	0004	04
EE	Estonia	Eesti	6	EE	0053	85
IE	Ireland	Éire/Ireland	7	IE	0007	12
EL	Greece	Elláda*	8	GR	0009	11
ES	Spain	España	9	ES	0042	15
FR	France	France	10	FR	0001	06
HR	Croatia	Hrvatska	11	HR	0092	84
IT	Italy	Italia	12	IT	0005	07
CY	Cyprus	Kýpros	13	CY	0600	21
LV	Latvia	Latvija	14	LV	0055	24
LT	Lithuania	Lietuva	15	LT	0054	25
LU	Luxembourg	Luxembourg	16	LU	0022	13
HU	Hungary	Magyarország	17	HU	0064	23
MT	Malta	Malta	18	MT	0085	27
NL	Netherlands	Nederland	19	NL	0003	08
AT	Austria	Österreich	20	AT	0038	16
PL	Poland	Polska	21	PL	0060	87
PT	Portugal	Portugal	22	PT	0040	14
RO	Romania	România	23	RO	0066	83
SI	Slovenia	Slovenija	24	SI	0091	86
SK	Slovakia	Slovensko	25	SK	0063	26
FI	Finland	Suomi/Finland	26	FI	0032	18
SE	Sweden	Sverige	27	SE	0030	17
UK	United Kingdom	United Kingdom	28	GB	0006	05

* Latin transliterated.

EU Interinstitutional Style Guide (ISG): <http://publications.europa.eu/code/>

Eurostat Website: <http://ec.europa.eu/eurostat/>

ISO 3166 Country Codes Maintenance Agency: http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm

Appendix 2 – Main Indicators – EN

ESTAT Energy Database – EN	
Indicator	Code
B_100100	Primary production
B_100200	Recovered products
B_100300	Imports
B_100400	Stock changes
B_100500	Exports
B_100600	Net imports
B_101700	Final energy consumption
B_100800	Bunkers
B_100900	Gross inland consumption
B_101000	Transformation input
B_101100	Transformation output
B_101200	Exchanges, transfers, returns
B_101300	Consumption in energy sector
B_101400	Distribution losses
B_101500	Energy available for final consumption
B_101700	Final energy consumption
B_101800	Final energy consumption – industry
B_101805	Iron and steel
B_101810	Non-ferrous metals
B_101815	Chemical and petrochemical
B_101820	Non-metallic minerals
B_101825	Mining and quarrying
B_101830	Food and tobacco
B_101835	Textile and leather
B_101840	Paper, pulp and print
B_101851	Wood and wood products
B_101852	Construction
B_101900	Final energy consumption – transport
B_101910	Final energy consumption – rail transport
B_101920	Final energy consumption – road transport
B_101930	Final energy consumption – air transport
B_101940	Final energy consumption – inland navigation
B_102000	Final energy consumption – Residential, commerce, etc.
B_102010	Residential
B_102030	Final energy consumption – agriculture
B_102035	Final energy consumption – services
B_102020	Final energy consumption – fisheries
B_102040	Final energy consumption – other sectors
B_102200	Statistical difference

Appendix 3 – Main Indicators – DE

ESTAT Energy Database – DE

Indicator	Code
B_100100	Primärerzeugung
B_100200	Wiedergewinnung
B_100300	Gesamteinfuhren
B_100400	Bestandsveränderungen
B_100500	Gesamtausfuhren
B_100600	Nettoeinfuhren
B_101700	Energetischer Endverbrauch
B_100800	Bunker
B_100900	Bruttoinlandsverbrauch
B_101000	Umwandlungseinsatz
B_101100	Umwandlungsausstoß
B_101200	Austausch, Übertragung, Rückläufe
B_101300	Verbrauch des Produktionsbereichs Energie
B_101400	Netzverluste
B_101500	Für den Endverbrauch zur Verfügung stehende Energie
B_101700	Energetischer Endverbrauch
B_101800	Energetischer Endverbrauch der Industrie
B_101805	Energetischer Endverbrauch der Stahlindustrie
B_101810	Energetischer Endverbrauch der NE-Metallindustrie
B_101815	Energetischer Endverbrauch der chemischen Industrie
B_101820	Energetischer Endverbrauch der Nichtmetallische Mineralstoffe verarbeitenden Industrie
B_101825	Energetischer Endverbrauch der Erzgewinnungsindustrie (mit Ausnahme der Brenn- und Kraftstoffgewinnung)
B_101830	Energetischer Endverbrauch der Nahrungs- und Genussmittelindustrie
B_101835	Energetischer Endverbrauch der Textil-, Lederwaren- und Bekleidungsindustrie
B_101840	Energetischer Endverbrauch der Papier- und Druckindustrie
B_101851	Energetischer Endverbrauch der Holz
B_101852	Energetischer Endverbrauch – Baugewerbe
B_101900	Energetischer Endverbrauch im Verkehrssektor
B_101910	Energetischer Endverbrauch des Bahnverkehrs
B_101920	Energetischer Endverbrauch des Strassenverkehrs
B_101930	Energetischer Endverbrauch des Luftverkehrs
B_101940	Energetischer Endverbrauch der Binnenschifffahrt
B_102000	Energetischer Endverbrauch der Privathaushalte, des Handels usw..
B_102010	Energetischer Endverbrauch der Privathaushalte
B_102030	Energetischer Endverbrauch der Landwirtschaft
B_102035	Energetischer Endverbrauch des Dienstleistungssektors
B_102020	Energetischer Endverbrauch des Fischereisektors
B_102040	Energetischer Endverbrauch anderer Sektoren
B_102200	Statistische Differenz

Appendix 4 – Main Indicators – FR

ESTAT Energy Database – FR	
Indicator	Code
B_100100	Production primaire
B_100200	Récupération
B_100300	Importations totales
B_100400	Variations de stocks
B_100500	Exportations totales
B_100600	Importations nettes
B_101700	Consommation finale énergétique
B_100800	Soutes maritimes
B_100900	Consommation intérieure brute
B_101000	Entrées en transformation
B_101100	Sorties de transformation
B_101200	Échanges, transferts, restitutions
B_101300	Consommation de la branche énergie
B_101400	Pertes sur les réseaux
B_101500	Disponible pour la consommation finale
B_101700	Consommation finale énergétique
B_101800	Consommation finale énergétique – industrie
B_101805	Consommation finale énergétique – sidérurgie
B_101810	Consommation finale énergétique – métaux non ferreux
B_101815	Consommation finale énergétique – chimie et pétrochimie
B_101820	Consommation finale énergétique – minéraux non métalliques
B_101825	Consommation finale énergétique – extraction
B_101830	Consommation finale énergétique – aliments, boissons
B_101835	Consommation finale énergétique – textile, cuir, habillement
B_101840	Consommation finale énergétique – papier, carton, imprimerie
B_101851	Consommation finale énergétique – bois
B_101852	Consommation finale énergétique – construction
B_101900	Consommation finale énergétique – transports
B_101910	Consommation finale énergétique – transports ferroviaires
B_101920	Consommation finale énergétique – transports routiers
B_101930	Consommation finale énergétique – transports aériens
B_101940	Consommation finale énergétique – navigation intérieure
B_102000	Consommation finale énergétique – foyers, etc.
B_102010	Consommation finale énergétique – ménages
B_102030	Consommation finale énergétique – agriculture
B_102035	Consommation finale énergétique – services
B_102020	Consommation finale énergétique – pêche
B_102040	Consommation finale énergétique – autres
B_102200	Écart statistique

Appendix 5 – Main Products – EN

ESTAT Energy Database – EN

Indicator	Code
0000	All products
2000	Solid fuels
2100	Hard coal and derivatives
2111	Hard coal
2112	Patent fuels
2120	Coke
2200	Lignite and derivatives
3000	Total petroleum and products
3100	Crude oil and feedstocks
3105	Crude oil
3110	Crude oil and NGL
3190	Feedstocks
3200	All petroleum product
3220	LPG
3230	Motor spirit
3234	Motor gasoline, unleaded motor spirit
3240	Kerosenes – jet fuels
3250	Naphtha
3260	Gas/diesel oil
3270A	Residual fuel oil
4000	Gas
4100	Natural gas
4200	Derived gas
5100	Nuclear power
5200	Derived heat
5500	Renewable energies
5510	Hydro power
5520	Wind energy
5530	Solar energy
5535	Tide/wave/ocean energy
5540	Biomass and wastes
5541	Wood and wood waste
5542	Biogas
55431	Municipal solid wastes – RES
5545	Biofuels
5546	Biogasoline
5547	Biodiesel
5550	Geothermal energy
6000	Electrical energy
7100	Industrial waste

Appendix 6 – Main Products – DE

ESTAT Energy Database – DE	
Indicator	Code
0000	Alle produkte
2000	Feste Brennstoffe
2100	Steinkohle und Nebenprodukte
2111	Steinkohle
2112	Steinkohlebriketts
2120	Koks
2200	Braunkohle und Nebenprodukte
3000	Rohöl und Mineralölerzeugnisse
3100	Rohöl und Feedstocks
3105	Rohöl
3110	Rohöl und Erdgaskondensate
3190	Feedstocks
3200	Alle Mineralölerzeugnisse
3220	Flüssiggas
3230	Motorenbenzin
3234	Unverbleites Benzin
3240	Petroleum und Flugturbinenkraftstoffe
3250	Rohbenzin
3260	Dieselmotorkraftstoffe und Destillattheizöle
3270A	Rückstandsheizöle
4000	Gas
4100	Naturgas
4200	Abgeleitete Gase
4100	Kernenergie
5200	Abgeleitete Wärme
5500	Erneuerbare Energien
5510	Wasserkraftenergie
5520	Windenergie
5530	Sonnenenergie
5535	Gezeiten-/Wellen-/Meeresenergie
5540	Biomasse und Abfälle
5541	Holz und Holzabfälle
5542	Biogas
55431	Hausmüll Erneuerbare
5545	Biotreibstoff
5546	Biobenzin
5547	Biodiesel
5550	Geothermische Energie
6000	Elektrizität
7100	Industrieabfälle

Appendix 7 – Main Products – FR

ESTAT Energy Database – FR

Indicator	Code
0000	Tous produits
2000	Combustibles solides
2100	Houille et dérivés solides
2111	Houille
2112	Agglomérés de houille
2120	Coke
2200	Lignite et dérivés
3000	Pétrole brut et produits pétroliers
3100	Pétrole brut et feedstocks
3105	Pétrole brut
3110	Pétrole brut et liquides de gaz naturel
3190	Feedstocks
3200	Tous produits pétroliers
3220	GPL
3230	Essences moteurs
3234	Essences sans plomb
3240	Pétrole lampant et carburéacteurs
3250	Naphta
3260	Gasoil et fuel oil fluide
3270A	Fuel oil résiduel
4000	Gaz
4100	Gaz naturel
4200	Gaz dérivés
5100	Énergie nucléaire
5200	Chaleur dérivée
5500	Énergies renouvelables
5510	Hydro-électricité
5520	Énergie éolienne
5530	Énergie solaire
5535	Énergie hydrocinétique/houlomotrice/marémotrice
5540	Biomasse/déchets
5541	Bois – déchets de bois
5542	Biogaz
55431	Déchets urbains solides renouvelables
5545	Biocarburants
5546	Bioessence
5547	Biodiesel
5550	Énergie géothermique
6000	Énergie électrique
7100	Déchets industriels

Appendix 8 – Symbols and Abbreviations

%	per cent
€	euro
0	zero or figure less than half of the unit represented
bbl	barrel
bcm	billion cubic meters
Blank	data not available
CHP	combined heat & power
CO ₂	carbon dioxide
DG	Directorate-General of the European Commission
EEA	European Environment Agency
equiv.	equivalent
ESTAT	Eurostat, Statistical Office of the European Union
GCV	gross calorific value
GDP	gross domestic product
GHG	greenhouse gas
GJ	gigajoule
IEA	International Energy Agency
k	thousand
kgoe	kilogram of oil equivalent
ktoe	kiloton of oil equivalent
kton	kiloton
kWh	kilowatt hour
LPG	liquefied petroleum gas
ME '2010	millions of euro, chain-linked volumes, reference year 2010, at 2010 exchange rates
m ³	cubic meter
Mio	million
MS	European Union Member State
MSW	municipal solid waste
Mtoe	million ton of oil equivalent
MW	megawatt
MWh	megawatt hour
NCV	net calorific value
NGL	natural gas liquid
p/cap	per capita
PJ	petajoule
PV	photovoltaic
RES	renewable energy
RES-E	renewable energy – electricity generation
RES-H&C	renewable energy – heating and cooling
RES-T	renewable energy – transport
SI Units	International System of Units
TJ	terajoule
toe	ton of oil equivalent
ton	metric ton, metric tonne, mt
TPES	Total Primary Energy Supply
TWh	terawatt hour
UNFCCC	United Nations Framework Convention on Climate Change
VAT	value added tax

Appendix 9 – SI Units – Prefixes

Standard Prefixes for the SI Units of Measure

Multiple		Sub-Multiple	
10^1	deca (da)	10^{-1}	deci (d)
10^2	hecto (h)	10^{-2}	centi (c)
10^3	kilo (k)	10^{-3}	milli (m)
10^6	mega (M)	10^{-6}	micro (μ)
10^9	giga (G)	10^{-9}	nano (n)
10^{12}	tera (T)	10^{-12}	pico (p)
10^{15}	peta (P)	10^{-15}	femto (f)
10^{18}	exa (E)	10^{-18}	atto (a)
10^{21}	zetta (Z)	10^{-21}	zepto (z)
10^{24}	yotta (Y)	10^{-24}	yocto (y)

Appendix 10 – Conversion Factors

ENERGY

		TO:			
		TJ	Gcal	Mtoe	GWh
		Multiply by			
FROM:		1	238.8	2.388×10^{-5}	0.2778
	Terajoule (TJ)				
	Gigacalorie (Gcal)	4.1868×10^{-3}	1	1×10^{-7}	1.163×10^{-3}
	Million ton of oil equivalent (Mtoe)	4.1868×10^4	1×10^7	1	11630
	Gigawatt-hour GWh	3.6	860	8.6×10^{-5}	1

VOLUME

		TO:			
		l	bbl	gal US	gal UK
		Multiply by			
FROM:		1	0.6290×10^{-2}	0.2642	0.2200
	Litre (l)				
	Barrel (bbl)	158.99	1	42	34.9723
	US gallon (gal US)	3.7854	0.2381×10^{-1}	1	0.8327
	UK gallon (gal UK)	4.5461	0.2859×10^{-1}	1.2009	1

MASS

		TO:		
		t	lt	st
		Multiply by		
FROM:		1	0.9842	1.1023
	Ton, Tonne (t)			
	Long ton (lt) UK	1.0160	1	1.1200
	Short ton (st) US	0.9072	0.8929	1

Appendix 11 – Average Calorific Values

Energy Content			
		kJ (NCV)	kgoe (NCV)
Hard Coal	1 kg	17 200 – 30 700	0.411 – 0.733
Recovered Hard Coal	1 kg	13 800 – 28 300	0.330 – 0.676
Patent Fuels	1 kg	26 800 – 31 400	0.640 – 0.750
Hard Coke	1 kg	28 500	0.681
Brown Coal	1 kg	5 600 – 10 500	0.134 – 0.251
Black Lignite	1 kg	10 500 – 21 000	0.251 – 0.502
Peat	1 kg	7 800 – 13 800	0.186 – 0.330
Brown Coal Briquettes	1 kg	20 000	0.478
Tar	1 kg	37 700	0.900
Benzol	1 kg	39 500	0.943
Oil Equivalent	1 kg	41 868	1
Crude Oil	1 kg	41 600 – 42 800	0.994 – 1.022
Feedstocks	1 kg	42 500	1.015
Refinery Gas	1 kg	50 000	1.194
LPG	1 kg	46 000	1.099
Motor Spirit	1 kg	44 000	1.051
Kerosenes, Jet Fuel	1 kg	43 000	1.027
Naphtha	1 kg	44 000	1.051
Gas Diesel Oil	1 kg	42 300	1.010
Residual Fuel Oil	1 kg	40 000	0.955
White Spirit	1 kg	44 000	1.051
Lubricants	1 kg	42 300	1.010
Bitumen	1 kg	37 700	0.900
Petroleum Cokes	1 kg	31 400	0.750
Other Petro. Products	1 kg	30 000	0.717
Electrical Energy	1 kWh	3 600	0.086

Appendix Glossary

Appendix 12 – Glossary

In parenthesis EUROSTAT Energy database/EUROBASE, (Energy section) codes for products (p:) and indicators (B_), as of June 2018.

ALL FUELS

The code 'all fuels', (p: 0000), covers all energy products. These consist of hard coal and derivatives, lignite and derivatives, peat and derivatives, oil shale and oil sands, petroleum (crude oil) and petroleum products (such as LPG, refinery gas, motor spirit, kerosene, gas/diesel oil, residual fuel oil), natural gas, manufactured gases, derived heat, renewable energies (such as hydro power, wind energy, biomass, wastes, geothermal energy), electrical energy and nuclear power.

ANNUAL INSTALLED CAPACITY

Annual installed or new installed capacity of a given source refers to the capacity entering in operation, during a year period.

AUTOPRODUCER THERMAL POWER STATIONS

Autoproducer thermal power stations are defined as undertakings which generate electricity wholly or partly for their own use as an activity which supports their primary activity.

AVAILABLE FOR FINAL CONSUMPTION (ENERGY)

Energy available for final consumption covers the energy placed at the disposal of final users. This code is calculated as follows: gross inland consumption (B_100900) + transformation output (B_101100) - transformation input (B_101000) + exchanges, transfers, returns (B_101200) - consumption of the energy sector (B_101300) - distribution losses (B_101400).

BIOFUELS

Liquid or gaseous fuels used primarily for transport, produced from biomass, and wastes (p:5545). Liquid biofuels cover bioethanol (ethanol produced from biomass), biodiesel (diesel produced from biomass or used fried oil), bio methanol, bio-dimethylether and bio-oil (a pyrolysis oil fuel produced from biomass).

The code biofuels (p:5545), groups biogasoline (p:5546), biodiesel (p:5547), bio jet kerosene (p:5549) and other liquid biofuels (p:5548).

BIOMASS AND RES WASTES

Biomass and RES wastes (p: 5540), covers organic, non-fossil material of biological origin, which may be used for heat production or electricity generation. They comprise wood and wood waste (p: 5541), biogas (p: 5542), municipal RES solid waste (p:55431), charcoal (p:5544) and biofuels (p: 5545). The non-renewable part of municipal waste (p: 55432) and the industrial waste (p:7100) are included in Wastes non-RES (p:7200).

CAPACITY FACTOR – ANNUAL AVERAGE

It is a measure of efficiency, which is defined as the ratio of actual energy output of a source against its annual maximum potential output, or in other words, to the energy it would produce if operated at full rated power for 24 hours per day during a year. It is equal to the total annual energy production, divided by the cumulative capacity converted to average statistical year base.

CARBON ENERGY INTENSITY

This is the average emission rate of CO₂ relative to the intensity of the energy activity. It is calculated, in the tables, in kg CO₂ emissions per ton of oil equivalent of energy used.

CARBON GDP INTENSITY

This represents the average emission rate of CO₂ emissions of an economy relative to its GDP.

CHP – COMBINED HEAT AND POWER

A combined heat and power unit is an installation in which energy released from fuel combustion is partly used for generating electrical energy and partly for supplying heat for various purposes.

The definition of Combined Heat and Power (CHP) or 'cogeneration' implies that heat and electricity are produced simultaneously in one process.

CO₂ ENERGY INTENSITY

Carbon Energy Intensity represents the average emission rate of CO₂ emissions of an economy relative to its energy consumption.

CONVENTIONAL THERMAL POWER

It is a technology for the production of electricity by fuel combustion. It will include biomass use, which is also considered a renewable source of electricity. Thermal power stations cover conventional public utility power stations for the production of electricity and heat, as well as in auto-producer power stations for the generation of electricity and heat sold to third parties only.

CUMULATIVE INSTALLED CAPACITY

This represents the running sum for consecutive periods of a given installed source. It indicates the total capacity availability in each of those periods.

ELECTRICITY MIX

The electricity mix is the proportion of different sources in electricity production. While energy mix is measured at gross inland consumption level, electricity mix is measured at energy transformation level.

ENERGY AVAILABLE FOR FINAL CONSUMPTION

Energy available for final consumption, (B_101500), covers the energy placed at the disposal of final users. This code is calculated as follows: gross inland consumption + transformation output - transformation input + exchanges, transfers, returns - consumption of the energy sector - distribution losses. It includes final non energy consumption, (B_101600).

ENERGY IMPORT 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: $\text{net imports (B_100300 - B_100500)} / (\text{gross inland consumption (B_100900) + bunkers (B_100800)})$.

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 (B_100900), to gross domestic product.

ENERGY MIX

The energy mix is the proportion of different sources in energy production, supply side, at gross inland consumption level.

ENERGY SECTOR BROAD DEFINITION

It includes the electricity, gas, steam, and air conditioning supply sector as well as the energy commodities production activities, mining and extraction, support activities and manufacture of energy products.

ENERGY SECTOR NARROW DEFINITION

It includes the electricity, gas, steam, and air conditioning supply sector.

EUROBASE

The Eurostat, web based, dissemination database contains the full range of publically available data from Eurostat.

FINAL ENERGY CONSUMPTION (FEC)

Final energy consumption covers energy supplied to the final consumer's door for all energy uses, (B_101700). It excludes deliveries to the energy transformation sector (B_101000...) and to the energy industries themselves (B_101300...). It is the sum of final energy consumption by industry (B_101800), transport (B_101900), household (B_102010), services (B_102035), agriculture/forestry (B_102030), fishing (B_102020) and other unspecified (B_102040).

FINAL ENERGY CONSUMPTION – TRANSPORT

Final energy consumption – transport, (B_101900), covers the consumption in all types of transportation, i.e., rail, road, air transport and inland navigation.

FINAL NON-ENERGY CONSUMPTION (FNEC)

Final non-energy consumption covers the use of energy products for non-energy purposes (B_101600). It is the sum of final non-energy consumption in the chemical industry, (B_101601) and in non-chemical industries (B_101602).

GASES, GASEOUS FUELS

Gases covers fossil natural gas and derived gases, coke oven gas (p:4210), blast furnace gas (p:4220), gas work gas (p:4230), and oxygen steel furnace gas (p:4240). Gases (p:4000) is the sum of natural gas (p:4100) and derived gases (p:4200).

GDP – GROSS DOMESTIC PRODUCT

The gross domestic product is the value of the output of all goods and services produced within the borders of a country.

The income measure of gross domestic product (GDP) is derived as compensation of employees plus gross operating surplus plus gross mixed incomes plus taxes less subsidies on both production and imports.

GDP AT CONSTANT MARKET PRICES

GDP values, used, were referenced to year 2010, in millions of euro, chain-linked volumes, at 2010 exchange rates.

GHG – GREEN HOUSES GASES

GHG includes gases that contribute to the natural greenhouse effect. The Kyoto Protocol covers a basket of six greenhouse gases (GHGs) produced by human activities: Carbon dioxide, methane, nitrous oxide, hydro fluoro-carbons, perfluorocarbons and sulphur hexafluoride.

GROSS CALORIFIC VALUE (GCV)

The gross calorific value 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 ELECTRICITY GENERATION

The gross electricity generation is measured at the outlet of the main transformers, i.e. the consumption of electricity in the plant auxiliaries and in transformers is included.

GROSS ELECTRICITY GENERATION PENETRATION LEVEL

Electricity penetration level refers to the fraction of gross electricity production of a source, compared with the total gross electricity generation, all sources.

GROSS FINAL CONSUMPTION OF ENERGY

Gross final consumption of energy means the energy commodities delivered for energy purposes, including the consumption of electricity and heat, by the energy branch for electricity and heat production including losses of electricity and heat in distribution. It excludes the final non energy use (FNEC).

The gross (overall) final consumption of energy from renewable sources is calculated as the sum of: (a) gross final consumption of electricity from renewable energy sources; (b) gross final consumption of energy from renewable sources for heating and cooling; and (c) final consumption of energy from renewable sources in transport.

GROSS HEAT PRODUCED

It is the total heat produced, including losses in the installations/network heat exchanges, as well as heat from chemical processes used as primary energy form. For auto-producers, the heat used by the undertaking for its own processes is not included here. Only heat sold to third parties should be reported.

GROSS INLAND CONSUMPTION (GIC)

Gross inland consumption represents the quantity of energy necessary to satisfy inland consumption of the geographical entity under consideration, (B_100900). It is calculated using the following formula: indigenous production (B_100100) + primary product receipts (B_100110) + recovered products from other sources (B_100200) + recycled products (B_100210) + imports (B_100300) + stock changes (B_100400) - exports (B_100500) - international marine bunkers (B_100800).

GROSS INSTALLED (ELECTRICITY) CAPACITY

This covers the gross installed electrical capacity of thermal, nuclear, hydro, geothermal, wind and any other types of power plants.

ISIC

The International Standard Industrial Classification of All Economic Activities is a United Nations system for classifying economic activity data, in the fields of production, employment, gross domestic product and other statistical areas.

ISG

The Inter-institutional style guide is intended to serve as a reference tool for written works for all European Union institutions, bodies and organisations, representing an achievement in linguistic harmonisation.

INHABITANTS

This represents the group of persons fulfilling the requirements for legal permanent residency in a region/country.

LFS

The EU Labour Force Survey (LFS) is a large sample survey among private residential which provides detailed annual and quarterly data on: employment, unemployment and inactivity.

The LFS is an important source of information about the situation and trends in the EU labour market, with a sample size is about 1.5 million people every quarter.

The data can be broken down along many dimensions including age, sex, educational attainment, and distinctions between permanent/temporary and full-time/part-time employment. In terms of employment figures are more representative of the total sector, but unfortunately not so disaggregated as the SBS survey.

LONG SCALE – SHORT SCALE

The long and short scales are two of several different large-number naming systems used for integer powers of ten.

Many countries, including most in continental Europe, use the long scale whereas most English-speaking countries and Arabic-speaking countries use the short scale.

In the long scale every new term greater than a million is a million times the previous term. Thus, billion means a million millions, trillion means a million billions, and so on.

In the short scale every new term greater than million is 1000 times the previous term. Thus, billion means a thousand millions, trillion means a thousand billions.

Name	Long Scale Value in Scientific notation	Short Scale Value in Scientific notation
million	10^6	10^6
billion	10^{12}	10^9
trillion	10^{18}	10^{12}
	to the next: multiply by 1 000 000	to the next: multiply by 1 000

Milliard, is used in several languages that use the long scale to represent a corresponding value to billions in short scale, i.e. 10^9 .

NACE

NACE is the acronym used to designate the various statistical classifications of economic activities developed since 1970 in the European Union. It provides the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment, national accounts) and in other statistical domains.

NET CALORIFIC VALUE (NCV)

The net calorific value 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.

NET IMPORTS

Net import is calculated as the difference between imports (B_100300) and exports (B_100500).

NET ELECTRICITY GENERATION

It is the amount of gross generation a generator produces less the electricity used to operate the plant.

PETROLEUM AND PRODUCTS

Petroleum and (petroleum) sub-products include crude oil (p: 3105), natural gas liquids (p:3106), feedstocks (p:3190) and all petroleum sub-products such as LPG (p:3220), refinery gas (p:3210), motor gasoline (p:3234) aviation gasoline (p:3235), kerosene and jet fuels (p:3240), naphtha (p:3250), gas/diesel oil (p:3260), residual fuel oil (p:3270A), white spirit, lubricants, bitumen, petroleum coke (p:3280) and other petroleum products (p:3295). Petroleum and petroleum products (p:3000) is the sum of Crude oil, NGL, feedstocks, and other hydrocarbon (p:3100) and all petroleum sub-products (p:3200).

PRIMARY ENERGY CONSUMPTION

Primary energy corresponds to the gross inland consumption minus the energy included in the final non-energy consumption.

PRIMARY ENERGY INTENSITY

Primary energy intensity gives an indication of the effectiveness with which primary energy consumption produces added value. It is defined as the ratio of primary energy consumption to gross domestic product.

PRIMARY ENERGY PRODUCTION – INDIGENOUS PRODUCTION

Any kind of extraction of energy products from natural sources to a usable form is called primary production. Primary production takes place when the natural sources are exploited, for example in coal mines, crude oil fields, hydro power plants or fabrication of biofuels. Transformation of energy from one form to another, such as electricity or heat generation in thermal power plants, or coke production in coke ovens, is not included in primary production (B_100100).

The precise definition depends on the fuel involved:

> SOLID FOSSIL FUELS: HARD COAL, LIGNITE, PEAT AND PRODUCTS, OIL SHALE AND OIL SANDS

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 as well as any quantities supplied to other on-site producers of energy for transformation or other uses.

> LIQUID FOSSIL FUELS: PETROLEUM AND PETROLEUM SUB PRODUCTS

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.

> GAS FOSSIL FUELS: NATURAL GAS AND DERIVED 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.

> RENEWABLE ENERGY

> **Hydropower, Wind energy, Solar thermal, Solar photovoltaic energy...**

Quantities of electricity generated. Production is calculated on the basis of the gross electricity generated and a conversion factor of 3600 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. In the case of biofuels, the production is the heat content (NCV) of the fuel.

PUMPING, PUMPED STORAGE

Method for storing electrical energy at hydroelectric installations by pumping water between reservoirs at different altitudes.

RENEWABLE ENERGY SOURCES (RES)

See the definition at Primary Energy Production.

PUBLIC SUPPLY THERMAL POWER STATIONS

Are defined as undertakings which generate electricity (and heat) for sale to third parties as their primary activity. They may be privately or publicly owned.

SOLAR ENERGY

Solar radiation exploited for hot water production - solar thermal (p:5532) and electricity generation - solar photovoltaic (p:5534). This energy production (p:5530), is the heat available to the heat transfer medium, i.e. the incident solar energy less the optical and collectors' losses.

SOLID FUELS

Solid fuels cover solid fossil fuels such as hard coal (p: 2111), coal patent fuels (p: 2112), coke (p: 2120), coal tar (p: 2130), lignite (p: 2210), brown-coal briquettes and peat briquettes (p: 2230), peat (p: 2310) and oil shale and oil sands (p: 2410). Solid fuels (p: 2000) is the sum of the codes hard coal & derivatives (p: 2100), lignite and derivatives (p: 2200) and oil shale and oil sands (p: 2410).

SBS

Structural business statistics cover industry, construction, trade and services. Presented according to the NACE activity classification, they describe the structure, conduct and performance of businesses across the European Union.

TONNE OF OIL EQUIVALENT (toe)

The tonne of oil equivalent is a conventional standardised unit for measuring energy, defined on the basis of a tonne of oil with a net calorific value of 41 868 kilojoules/kg.

TPES

Total primary energy supply, an IEA definition, represents the quantity of energy necessary to satisfy inland consumption of the geographical entity under consideration. It corresponds to EUROSTAT gross inland consumption. It is equal to the indigenous production + imports - exports - international marine bunkers +/- stock changes.

TRANSFORMATION INPUT

Covers all inputs into the transformation plants destined to be converted into derived products, (B_101000). Transformation is only recorded when the energy products are physically or chemically modified to produce other energy products, electricity and/or heat. It is the sum of the Input to conventional thermal power stations (B_101001), Input to nuclear power stations (B_101002), Input to patent fuel and briquetting plants (B_101003), Input to coke-oven plants (B_101004), Input to blast furnace plants (B_101006), Input to gas-works (B_101007), Input to refineries (B_101008), Input to district heating plants and (B_101009).

TRANSFORMATION OUTPUT

It is the result of the transformation process of energy, (B_101100). This output covers derived products, namely: patent fuel, coke, brown-coal and peat briquettes, pitch, tar, benzol, refined petroleum products, derived gases, electricity from conventional thermal and nuclear power stations and derived heat. Transformation output refers always to gross production of derived products, i.e. the own consumption of the transformation plants is included. It is the sum of the Output from conventional thermal power stations (B_101101), Output from nuclear power stations (B_101102), Output from patent fuel and briquetting plants (B_101103), Output from coke-oven plants (B_101104), Output from blast furnace plants (B_101106), Output from gas-works (B_101107), Output from refineries (B_101108) and Output from district heating plants (B_101109).

TRANSFORMATION LOSSES

The difference between transformation input and transformation output constitutes transformation losses.

TURNOVER

Or Gross Premium Written comprises the totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties.

UNEMPLOYMENT RATE

The unemployment rate represents unemployed persons as a percentage of the active population.

Appendix Notes

Appendix 13 – Notes

APPENDIX 13.1

1.1.1, 1.1.2 PAGES 10, 11

Energy production corresponds to the indigenous energy production (IEA methodology). It does not include production from other sources. Asia aggregation does not include China data.

1.1.2, 1.1.4, 1.1.6, 1.1.8, PAGES 11, 13, 15 AND 17

Solid fuels, includes hard coal, lignite and peat, as well as derived fuels. Petroleum and (petroleum) sub-products comprises crude oil, NGL, feed-stock, additives as well as other hydrocarbons. RES (renewables) is equal to the sum of hydro, geothermal, solar PV, solar thermal, tide, wind, municipal waste, primary solid biofuels, biogases, bio gasoline, biodiesel, other liquid biofuels, non-specified biofuels and charcoal energy. Industrial waste not included.

1.1.3, 1.1.4, PAGES 12, 13

Gross inland consumption, EUROSTAT methodology (see glossary), corresponds to the Total primary energy supply (see glossary TPES), of the IEA methodology. Asia aggregation does not include China data.

1.1.5, 1.1.6, PAGES 14, 15

Final energy consumption covers energy supplied to the final consumer's door for all energy uses. Asia aggregation does not include China data.

1.1.8, PAGE 17

It is the total heat produced, including losses in the installations/network heat exchanges. However only autoproducers heat sold to third parties is here included. Autoproducers heat, used by the undertaking for their own processes, is excluded.

1.1.10, PAGE 19

CO₂ Intensity refers to CO₂ emissions activity intensity, measured by its energy gross inland consumption.

1.2.5, PAGE 25

Natural gas, crude oil and solid fuels (p:4100, p:3105 and p:2000).

1.3.1, PAGE 27

Overall RES share, measured against the total gross final energy consumption.

APPENDIX 13.2

2.1.1, PAGES 35-37

Production comprises primary production and products recovered from other sources, (B_100100 + B_100110+ B_100200+ B_100210).

2.1.2, PAGES 38-40

Net imports correspond to the total imports minus the total exports, (B_100300 – B_100500).

2.1.3, PAGES 41-44

Gross inland consumption represents the quantity of energy necessary to satisfy inland consumption of the geographical entity under consideration, (B_100900).

2.2.1, PAGES 45-49

Solid fuels, (p:2000), cover solid fossil fuels such as hard coal, coal patent fuels, coke, coal tar, lignite, brown-coal briquettes, peat briquettes, peat and oil sands. Hard coal, (p:2111), comprises, only, coking coal and steam coal.

2.2.2, PAGES 50-54

Total Petroleum and sub-petroleum products, (p:3000), include crude oil (p: 3105), natural gas liquids (p:3106), feedstock (p:3190) and all petroleum sub-products. Crude oil and NGL (p:3110) is a subgroup containing only crude oil (p: 3105) and natural gas liquids (p:3106) codes.

2.2.3, PAGES 55-58

Gases, (p:4000), include natural gas (p:4100) and derived gases (p:4200).

2.2.5, PAGES 63-65

For products see former points 2.2.1 to 2.2.3.

2.3, PAGES 66-72

See, glossary energy import dependency, appendix 12.

Please note that hard coal dependency is a part of the solid fuels dependency, natural gas, of the gases dependency, and crude and NGL of the total petroleum and petroleum sub-products dependency. The total import dependency – covers all fuels, and it is not a simple average of the upper mentioned products.

2.5.1, PAGE 79

Energy available for final consumption covers the energy placed at the disposal of final users. It includes final non energy consumption.

2.5.2, PAGES 80-83

Final energy consumption covers energy supplied to the final consumer's door for all energy uses. It does not include final non-energy consumption.

2.5.3, PAGE 84

Final non-energy consumption covers the use of energy products in non-energy purposes.

2.5.4, PAGE 85

Primary energy intensity corresponds to the gross inland consumption minus the energy included in the final non-energy consumption, (B_100900-B_101600).

2.6.1, PAGES 86-88

Installed capacity represents the maximum active power that can be supplied, continuously, with all systems running.

Please note that combustible fuels include not only fossil fuels, as well as biomass and wastes, that are later included, also, in the renewables installed capacity.

2.6.2, PAGES 89-93

The gross electricity generation is measured at the outlet of the main transformers, i.e. the consumption of electricity in the plant auxiliaries and in transformers is included.

2.7.1, PAGES 95-96

Intermittent energy only includes wind and solar energy. Tide is not included in the totals. The share of the intermittent energy is measured against to total installed capacity, all sources.

2.7.2-2.7.8, PAGES 97-104

Wind and solar energy generated by all producers. Annual installed capacity includes new installations and replacement of former wind or solar systems.

2.7.3, 2.7.4, PAGES 99-100

Gross electricity production wind share measures the percentage of wind produced electricity in the total production.

Average capacity factor it is the ratio of actual energy output of wind sources against its annual maximum potential output. It is equal to the total annual electricity production, divided by the cumulative capacity converted to an average statistical year base.

2.7.8, PAGE 104

Gross electricity production solar share measures the percentage of solar produced electricity in the total production.

2.8, PAGES 106-108

The data collection for CHP generation is not based in the annual Heat survey, but instead in a specific survey in accordance with the Community Directive 2004/8/EC.

Differences can appear between the two datasets, especially due to the more restrictive methodology employed in the CHP Directive.

While the Directive includes the production of all heat, sold to third parties, under the Directive approach only heat/electricity obeying high-efficiency criteria, is considered. However own heat used by the undertaking for its own processes, is here included.

2.9, PAGES 109-111

Data is generated by the annual heat survey. Heat, in these tables, include the total heat produced, including losses in the installations/network heat exchanges, as well as heat from chemical processes used as primary energy form. Only heat sold to third parties is here reported.

2.10, PAGES 112-114

The tables include the total final energy consumption of petroleum products, and two of its main products: motor gasoline (p:3234), and gas diesel (p:3260), and the total final energy consumption of biofuels (p:5545), and its two main products: biogasoline (p:5546) and biodiesel (p:5547).

2.11.1, PAGE 115

Energy intensity gives an indication of the effectiveness with which energy is being used (GIC) to produce an added value (GDP).

2.11.4, PAGE 118

Primary energy intensity gives an indication of the effectiveness with which primary energy is being used (GIC-FNEC) to produce an added value (GDP).

2.13, PAGES 123-129

All available price data has been used in the calculation of EU-wide fuel price averages. The overall EU price is an average of the prices in the individual countries weighted by their consumption.

PETROLEUM PRODUCTS

Heating gasoil, low sulphur fuel oil, unleaded petrol and automotive diesel prices are supplied to Energy DG by the Member States as those being the most frequently encountered for the specific categories of sales. The prices given are as of January 15th in each year.

The heating gasoil prices given are for deliveries of between 2000 and 5000 litres while those for low sulphur fuel oil are for monthly deliveries of less than 2000 tonnes or annual deliveries of less than 24000 tonnes. The average pump prices are given for motor fuels.

The EU average prices are calculated by weighting the prices from each country by the corresponding final energy consumption.

ELECTRICITY AND GAS

The legal basis for the collection of industrial gas and electricity prices is defined by EC Directive 2008/92/EC. The collection of prices includes national average prices of the last 6 months reported by different consumer bands. All taxes are included in the current prices.

Consumption bands have been selected as the most representative for the exercise.

APPENDIX 13.3

3.1.1, PAGE 134

Energy activities sector in its broad and narrow definition (sector d35), as defined by EUROSTAT/NACE and UN/SIC nomenclatures.

3.2, PAGES 135-137

Data from the LFS survey. At employment level, this dataset presents larger figures than the SBS, due to the difference of methodology, and its sample size.

3.3, PAGES 138-149

Includes data on number of enterprises, turnover, and persons declared as employed, as originated from the SBS survey that targets especially enterprises business. At employment level is more disaggregated but less complete than the LFS survey.

3.4, PAGES 150-154

Data is extracted from DG Economic and Financial Affairs, AMECO database. Differences mainly due to data freshness, constant revisions, and methodology can appear when comparing with Eurostat economic data.

APPENDIX 13.4

4.1.1, PAGES 158-162

GHG, greenhouse gases, are gases that contribute to the natural greenhouse effect. GHG emissions aggregate includes Fuel combustion emissions and other non-fuel linked emissions (Industrial processes, agriculture, etc.). Fuel combustion emissions include combustion in Energy industries, Manufacturing Industries and construction, Transport, Commercial and Institutional, Residential, Agriculture, Forestry/Fisheries and other combustion and fugitive emissions.

4.1.2 PAGES 163-167

Structure of emissions similar to the GHG emissions.

4.2.2 PAGE 169

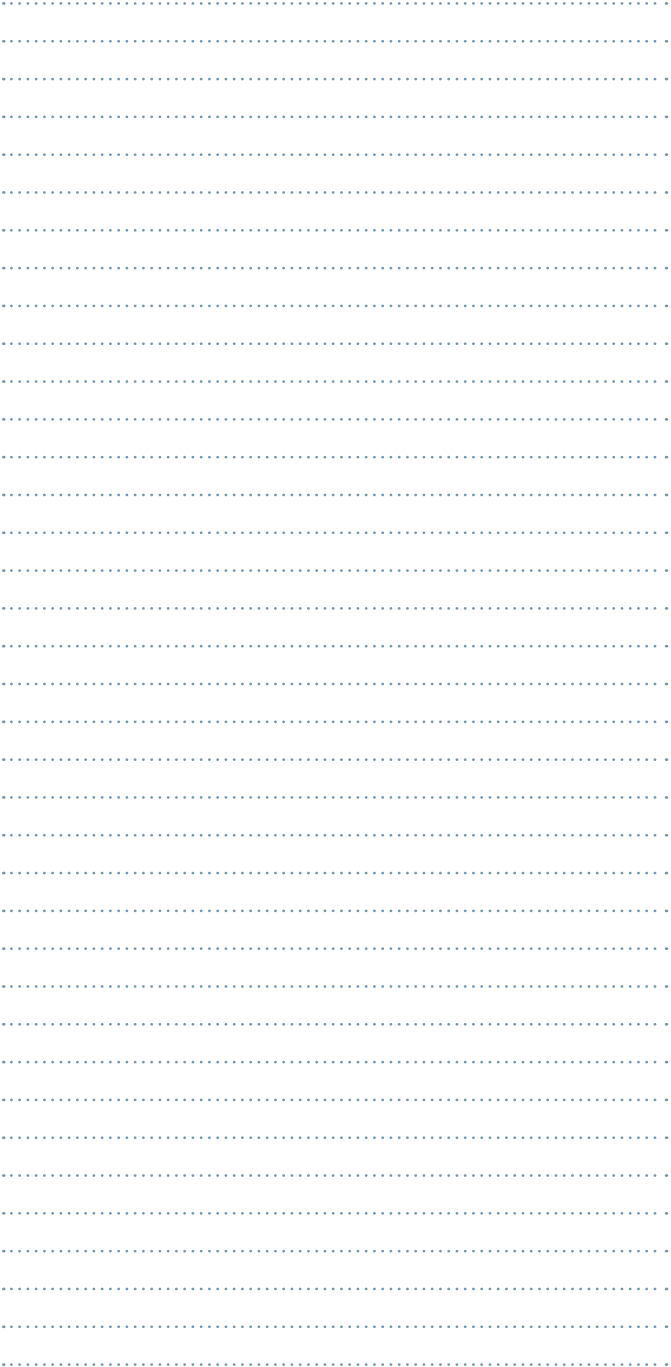
Carbon GDP intensity is the average emission rate of CO₂ relative to the total intensity of the economic activity, measured by its GDP.

APPENDIX 13.5

For products see appendices 5-7 and glossary appendix 12. For indicators see appendices 2-4 and glossary appendix 12. For units see appendices 8-11.

Notes

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A large grid of dotted lines for data entry, consisting of approximately 30 horizontal rows and many vertical columns.

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