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EU energy in figures

STATISTICAL POCKETBOOK 2019

Energy

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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/energy-statistical-pocketbook

Recommended sources of data:

European Commission websites:

DG Energy
Pocketbook and country datasheets:
https://ec.europa.eu/energy/en/data/energy-statistical-pocketbook
Energy data and analysis: http://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 EU bodies and international organisations:

European Environment Agency
Data and maps: http://www.eea.europa.eu/

International Energy Agency
Statistics and balances: http://www.iea.org/statistics/

Please send your comments on this publication and suggestions for improvement to ENER-A4-STATISTICS@ec.europa.eu, with the word 'Pocketbook' in the subject line.

Summary

PART 1 Overview

PART 2 Energy in the EU

Appendices

#1


Overview

Summary

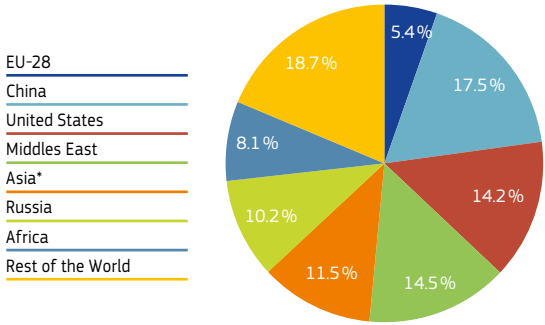
1.1 Energy in the World (Overview)

1.1.1 World Energy Production by Region

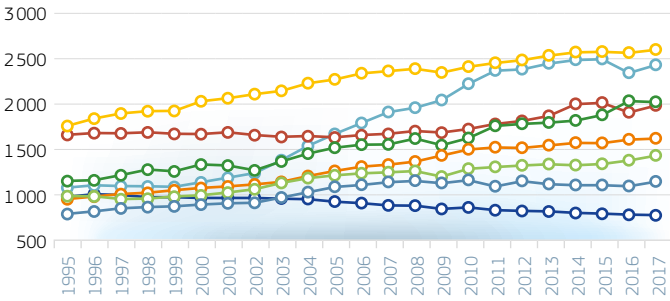
(Mtoe)

	2000	2005	2010	2015	2016	2017
EU-28	951	910	843	771	759	754
China	1124	1671	2236	2514	2361	2450
United States	1667	1631	1724	2023	1916	1993
Middle East	1324	1516	1624	1885	2043	2032
Asia*	1062	1254	1498	1568	1609	1620
Russia	978	1203	1280	1334	1374	1429
Africa	875	1074	1153	1095	1085	1135
Rest of the World	2037	2285	2430	2598	2586	2622
World	10019	11546	12787	13789	13732	14035

TOTAL 2017: 14035 Mtoe



Mtoe



* non OECD and OECD Asia, excluding China.

Source: IEA, August 2019

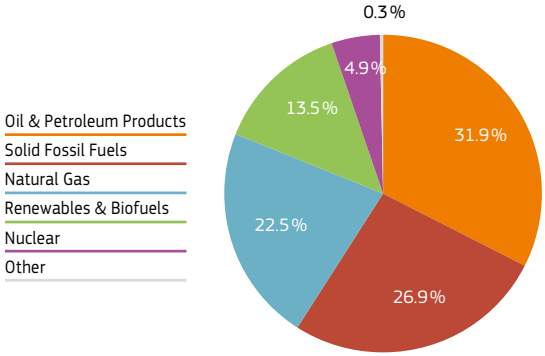
Methodology and Notes: See Appendices

1.1.2 World Energy Production by Fuel

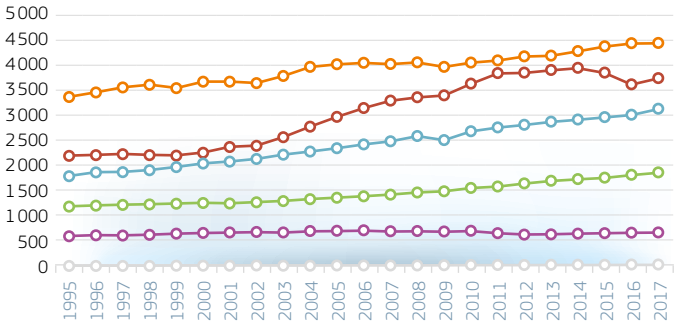
(Mtoe)

	2000	2005	2010	2015	2016	2017
Oil and Petroleum Products	3703	4051	4085	4413	4474	4477
Solid Fossil Fuels	2278	2998	3663	3886	3652	3773
Natural Gas	2066	2371	2713	2996	3042	3163
Renewables and Biofuels	1275	1382	1574	1784	1841	1889
Nuclear	675	722	719	670	680	687
Other	21	23	33	39	43	45
Total	10019	11546	12787	13789	13732	14035

TOTAL 2017: 14035 Mtoe



Mtoe



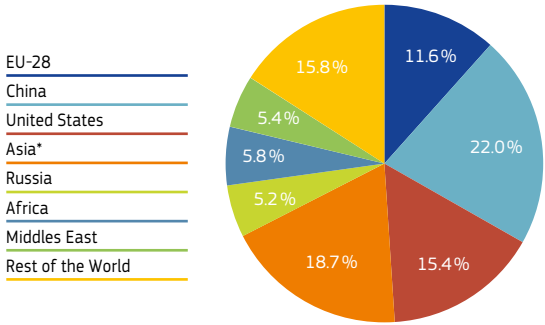
Source: IEA, August 2019
Methodology and Notes: See Appendices

1.1.3 World Total Energy Supply by Region

(Mtoe)

	2000	2005	2010	2015	2016	2017
EU-28	1695	1795	1727	1589	1599	1619
China	1143	1794	2550	3006	2987	3077
United States	2274	2319	2217	2187	2163	2155
Asia*	1762	1984	2294	2487	2544	2615
Russia	619	652	689	693	714	732
Africa	490	583	680	766	786	812
Middle East	354	468	622	732	736	750
Rest of the World	1689	1886	2072	2170	2182	2211
World	10025	11480	12850	13631	13712	13972

TOTAL 2017: 13972 Mtoe



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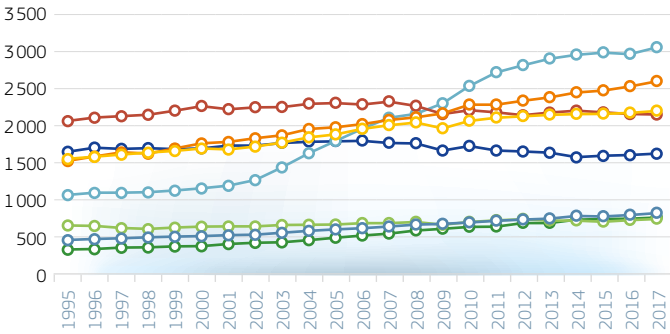


* non OECD and OECD Asia, excluding China

Source: IEA, August 2019

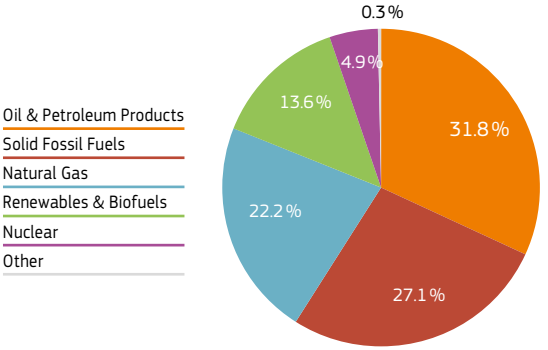
Methodology and Notes: **See Appendices**

1.1.4 World Total Energy Supply by Fuel

(Mtoe)

	2000	2005	2010	2015	2016	2017
Oil and Petroleum Products	3663	3999	4136	4329	4371	4449
Solid Fossil Fuels	2317	2994	3653	3853	3741	3790
Natural Gas	2072	2361	2733	2950	3032	3107
Renewables and Biofuels	1276	1382	1576	1788	1845	1894
Hydro*	225	252	296	336	349	351
Geothermal*	52	53	62	77	80	86
Solar/Wind/Other*	8	17	48	127	145	171
Biofuels and Waste*	1012	1082	1202	1286	1313	1329
Nuclear	675	722	719	670	680	687
Other	22	22	33	41	43	45
Total	10025	11480	12850	13631	13712	13972

TOTAL 2017: 13972 Mtoe



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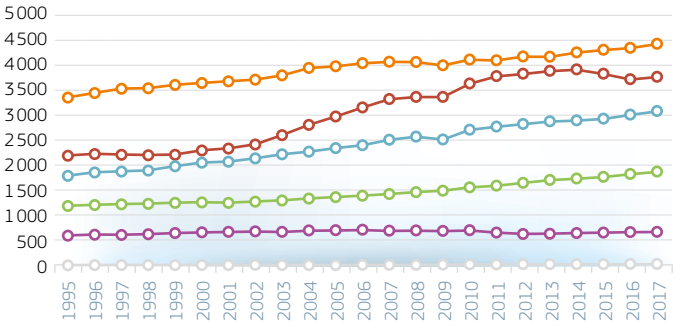


* Partial disaggregation of the Renewables group. Waste also includes non-RES wastes.

Source: IEA, August 2019

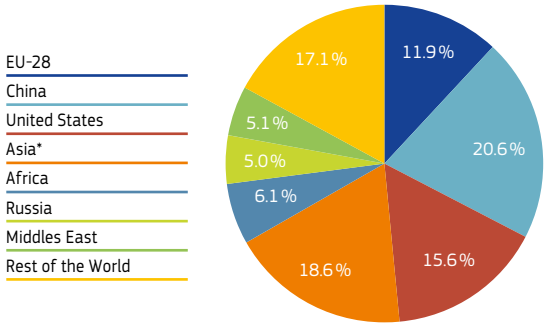
Methodology and Notes: See Appendices

1.1.5 World Total Final Consumption by Region

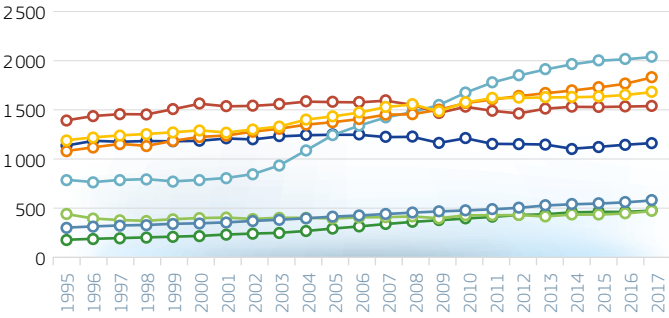
(Mtoe)

	2000	2005	2010	2015	2016	2017
EU-28	1178	1240	1205	1117	1138	1154
China	791	1235	1653	1970	1983	2004
United States	1546	1563	1513	1512	1517	1520
Asia*	1213	1360	1549	1705	1742	1805
Africa	364	432	495	563	575	594
Russia	418	412	447	453	465	488
Middle East	241	313	415	481	481	493
Rest of the World	1278	1417	1557	1614	1632	1659
World	7030	7972	8834	9414	9534	9717

TOTAL 2017: 9717 Mtoe



Mtoe



* non OECD and OECD Asia, excluding China.

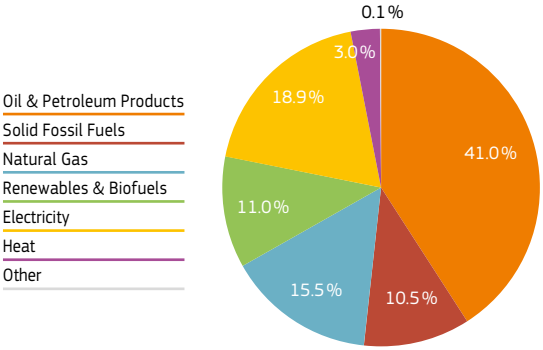
Source: IEA, August 2019
Methodology and Notes: See Appendices

1.1.6 World Total Final Consumption by Fuel

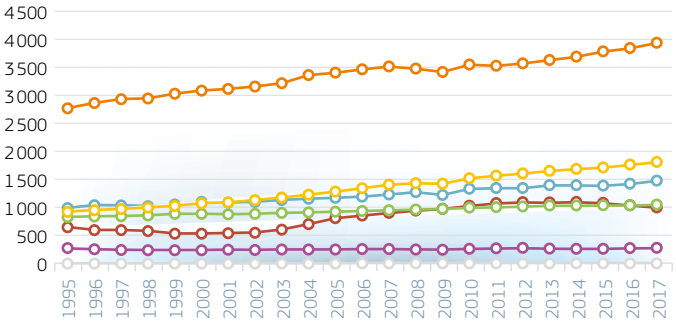
(Mtoe)

	2000	2005	2010	2015	2016	2017
Oil and Petroleum Products	3122	3444	3592	3827	3888	3985
Solid Fuels	542	826	1050	1102	1057	1020
Gas	1116	1193	1353	1411	1444	1502
Renewables and Biofuels	903	940	1014	1056	1059	1072
Electricity	1092	1304	1542	1737	1791	1838
Heat	248	259	274	271	283	289
Other	7	7	8	10	11	12
Total	7030	7972	8834	9414	9534	9717

TOTAL 2017: 9 717 Mtoe



Mtoe

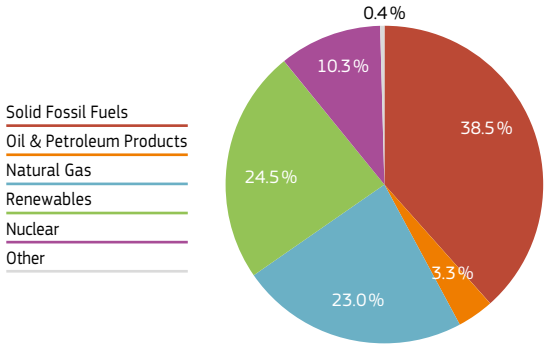


Source: IEA, August 2019
Methodology and Notes: See Appendices

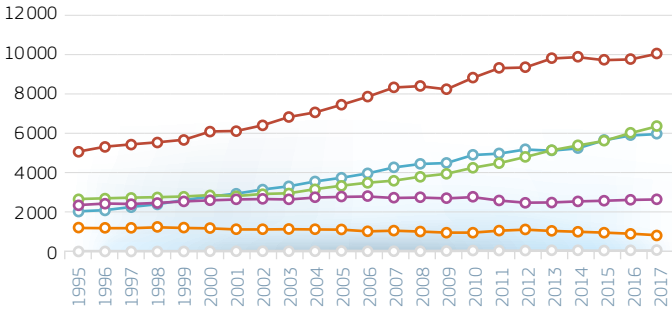
1.1.7 World Electricity Generation by Fuel (TWh)

	2000	2005	2010	2015	2016	2017
Solid Fossil Fuels	5994	7322	8666	9553	9587	9863
Oil and Petroleum Products	1207	1135	977	976	926	842
Natural Gas	2760	3704	4839	5576	5824	5883
Renewables	2830	3297	4201	5537	5933	6269
Hydro*	2613	2935	3443	3902	4054	4082
Solar/Wind/Other*	55	140	408	1131	1331	1615
Biofuels and Waste*	164	229	370	519	571	596
Geothermal*	52	58	68	81	82	85
Nuclear	2591	2768	2756	2570	2608	2636
Other	54	67	90	100	108	113
Total	15436	18293	21529	24313	24986	25606

TOTAL 2017: 25606 TWh



TWh



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

Source: IEA, August 2019

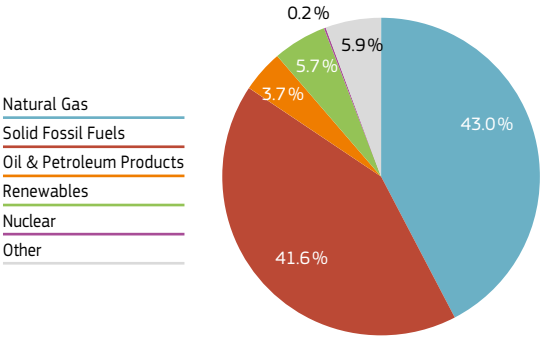
Methodology and Notes: See Appendices

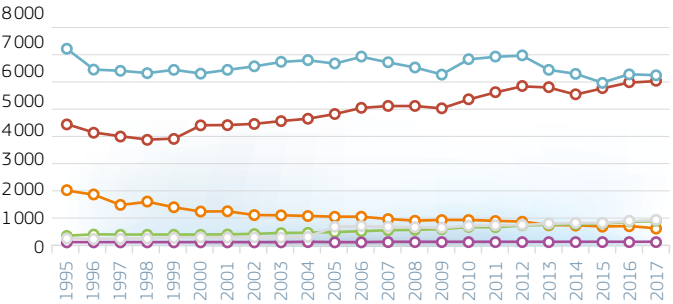
1.1.8 World Heat Generation by Fuel

(PJ)

	2000	2005	2010	2015	2016	2017
Natural Gas	6236	6620	6773	5896	6214	6175
Solid Fossil Fuels	4332	4752	5295	5705	5925	5978
Oil and Petroleum Products	1160	965	839	595	615	526
Renewables	296	395	585	721	786	816
Geothermal*	18	24	26	34	44	40
Solar/Wind/Other*	11	386	347	372	404	422
Biofuels and Waste*	414	530	783	953	1045	1082
Nuclear	19	21	27	26	27	27
Other	202	600	634	732	816	846
Total	12245	13353	14154	13675	14383	14368

TOTAL 2017: 14368 PJ





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

Source: IEA, August 2019

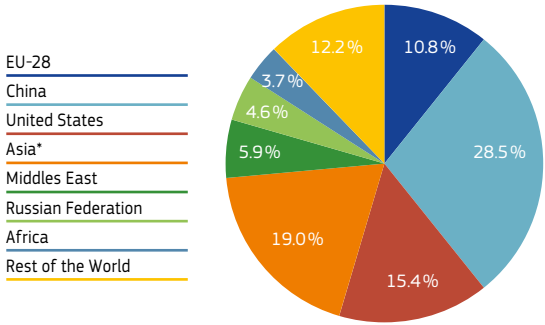
Methodology and Notes: See Appendices

1.1.9 World CO_2 Emissions* by Region

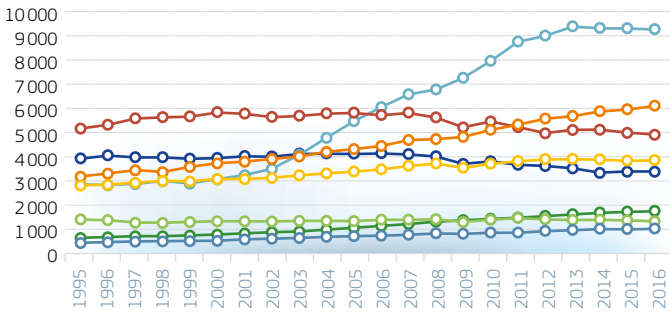
(Mio ton CO_2)

	2000	2005	2010	2014	2015	2016
EU-28	4036	4207	3898	3429	3478	3475
China	3173	5507	7932	9260	9246	9207
United States	5877	5855	5501	5166	5044	4961
Asia**	3814	4391	5169	5911	5989	6128
Middle East	951	1230	1596	1845	1882	1911
Russian Federation	1488	1497	1553	1551	1524	1487
Africa	700	896	1035	1191	1182	1199
Rest of the World	3185	3487	3806	3975	3932	3948
World	23223	27070	30490	32328	32276	32314

TOTAL 2016: 32314 Mio ton CO_2



Mio ton CO_2



* Contains CO_2 emissions from fuel combustion, international aviation and maritime bunkers.
** non OECD and OECD Asia, excluding China.

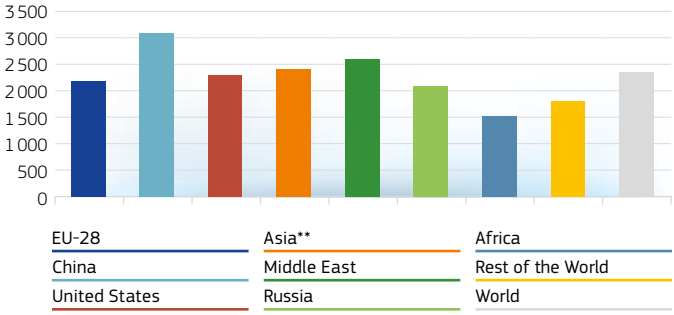
Source: IEA, July 2019
Methodology and Notes: See Appendices

1.1.10 World CO_2 Intensity* by Region

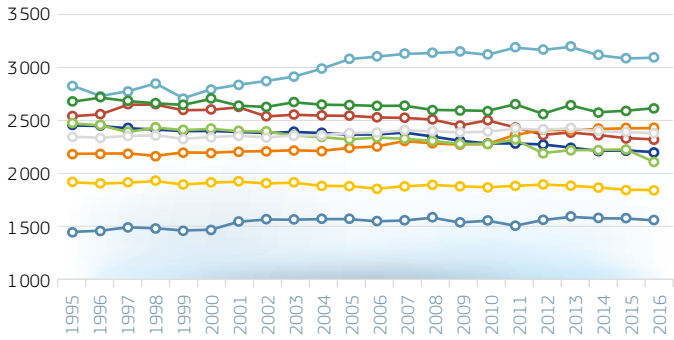
(Kg CO_2 per toe – Average)

	2000	2005	2010	2014	2015	2016
EU-28	2382	2344	2257	2183	2188	2173
China	2775	3070	3111	3109	3076	3083
United States	2585	2525	2481	2337	2306	2293
Asia**	2165	2214	2254	2400	2408	2409
Middle East	2689	2626	2568	2553	2570	2595
Russia	2402	2297	2254	2194	2200	2081
Africa	1429	1537	1521	1545	1543	1525
Rest of the World	1885	1849	1837	1834	1812	1809
World	2316	2358	2373	2379	2368	2357

WORLD AVERAGE 2016: 2357 Kg CO_2 per toe



Kg CO_2 per toe

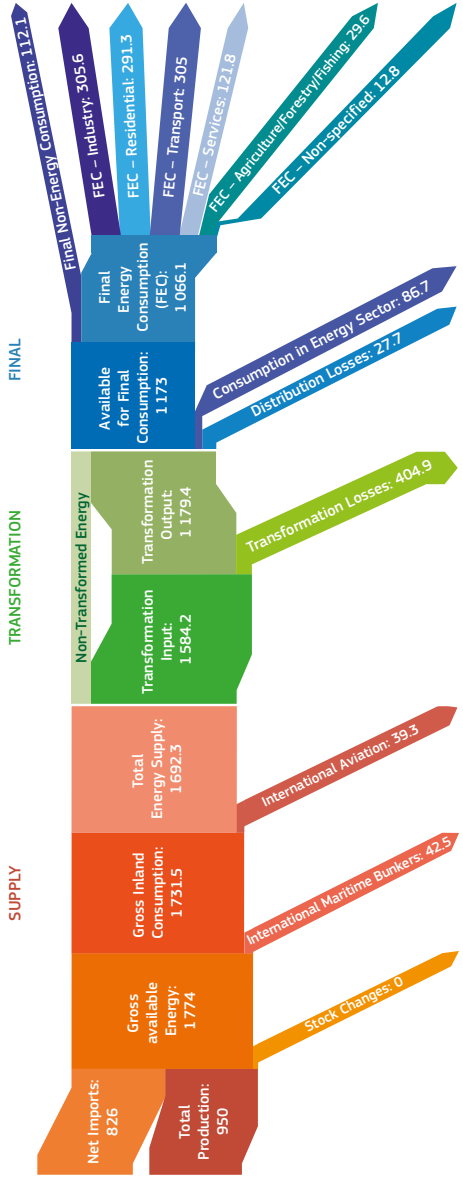


* Per Unit of Gross Inland Consumption.
** non OECD and OECD Asia, excluding China and Middle East.

Source: IEA, August 2019
Methodology and Notes: See Appendices

1.2 Energy in the EU (Overview)

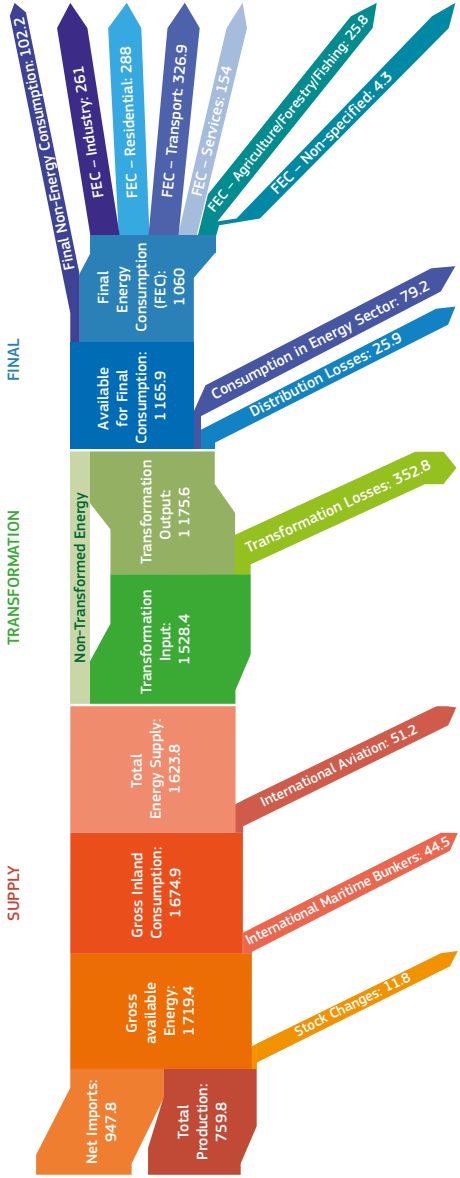
1.2.1 EU-28 Energy Flow – 2000 **(Mtoe)**



Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

1.2.2 EU-28 Energy Flow – 2017

(Mtoe)

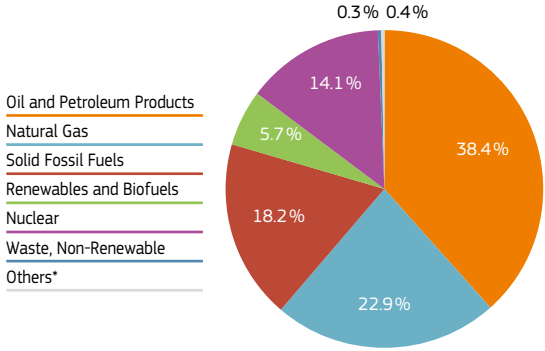


Source: Eurostat, May 2019
Methodology and Notes: See Appendices

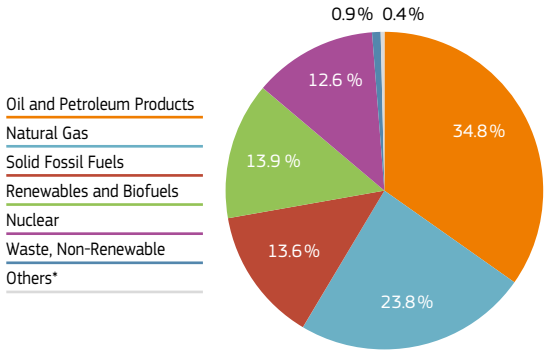
1.2.3 EU-28 Gross Inland Consumption

ENERGY MIX (%) – PRIMARY PRODUCTS ONLY

TOTAL PRIMARY PRODUCTS 2000: 1 729.6 Mtoe
(Total Primary and Secondary Products 2000: 1 731.5 Mtoe)



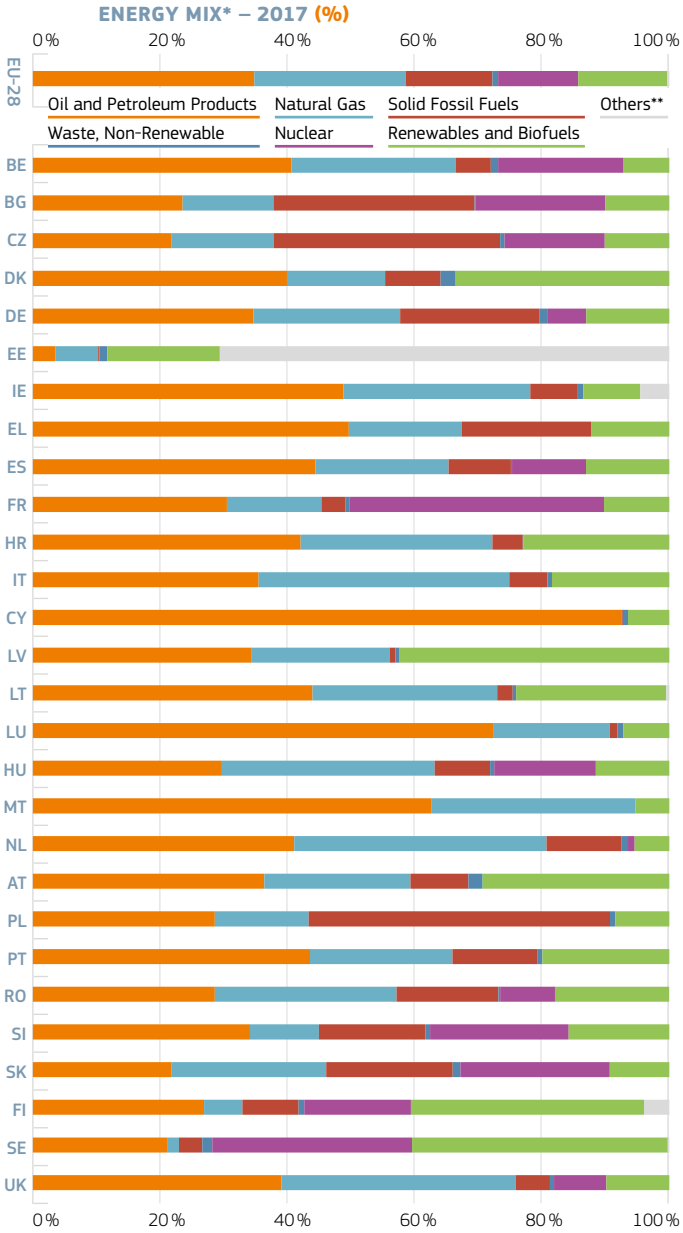
TOTAL PRIMARY PRODUCTS 2017: 1 674 Mtoe
(Total Primary and Secondary Products 2017: 1 674.9 Mtoe)



* Others = manufactured gases, peat and peat products, oil shale and oil sands.

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

1.2.3 EU-28 Gross Inland Consumption



* Primary Products Only.
**Others = manufactured gases, peat and peat products, oil shale and oil sands.

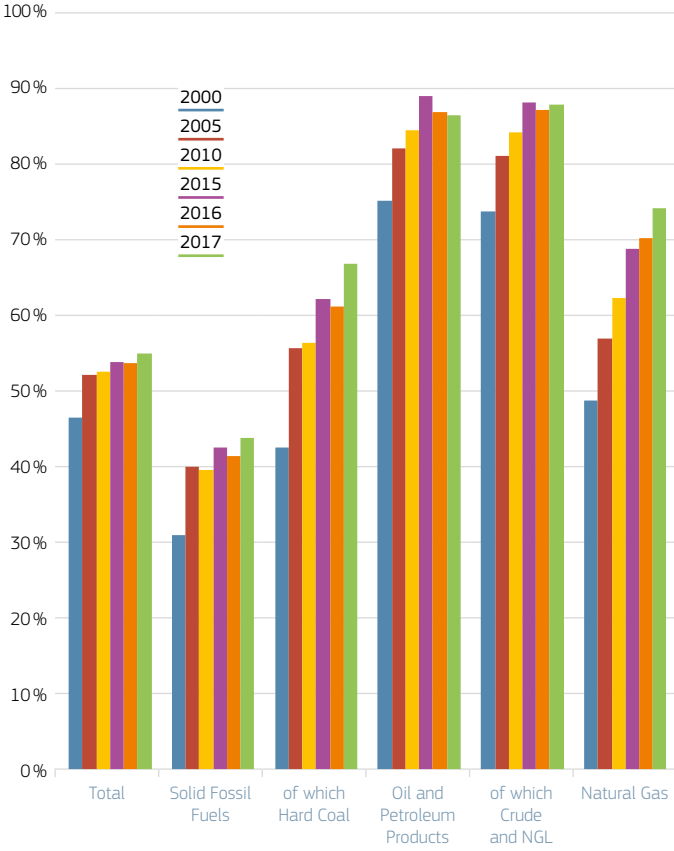
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

1.2.4 EU-28 Energy Import Dependency

BY FUEL – (%)

	2000	2005	2010	2015	2016	2017
Total	46.6	52.3	52.7	53.9	53.8	55.1
Solid Fossil Fuels	31.0	40.1	39.6	42.7	41.5	43.9
of which Hard Coal	42.6	55.8	56.5	62.3	61.4	67.0
Oil and Petroleum Products	75.3	82.3	84.7	89.2	87.1	86.7
of which Crude and NGL	73.9	81.3	84.5	88.5	87.4	88.1
Natural Gas	48.9	57.1	62.5	69.0	70.4	74.3

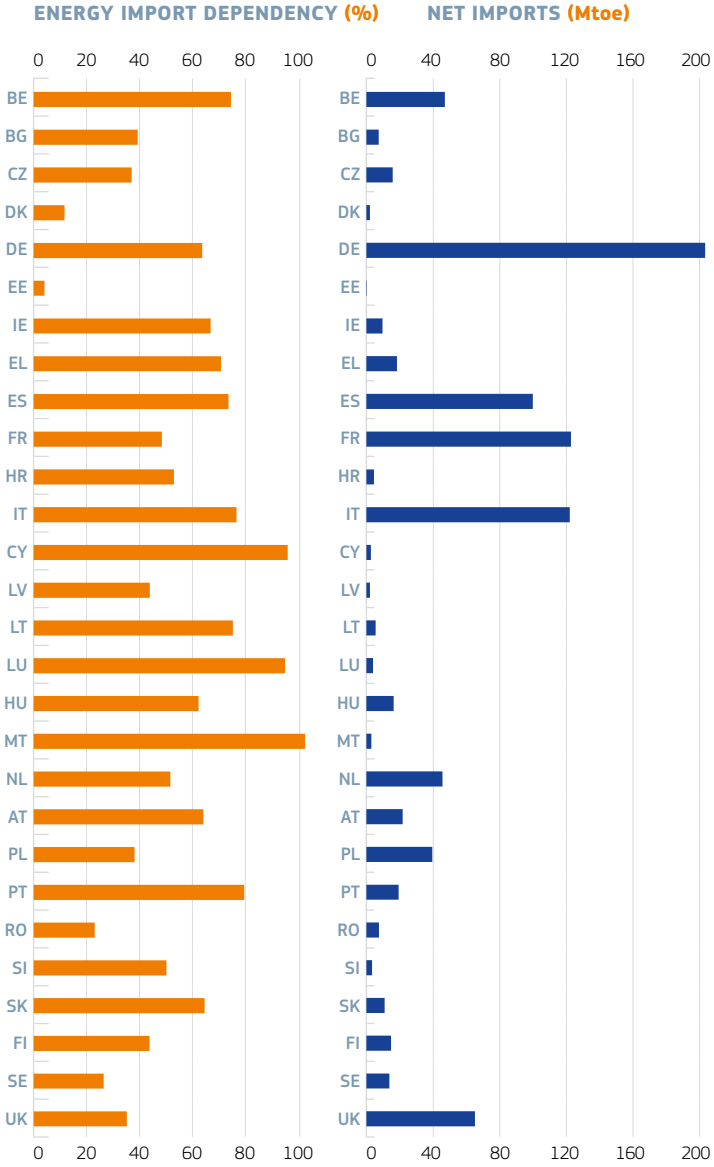
2000-2017 (%)



Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

1.2.5 EU-28 Energy Import Dependency – Net Imports

2017

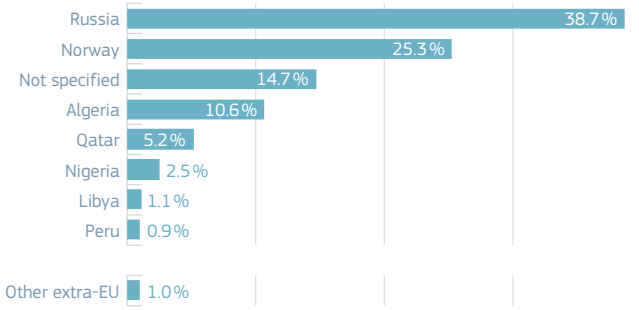


Source: Eurostat, May 2019
Methodology and Notes: See Appendices

1.2.6 EU-28 Imports by Country of Origin

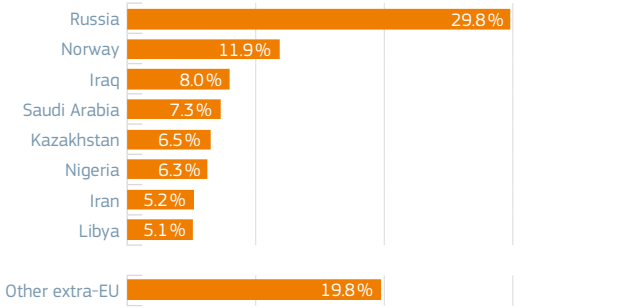
EU-28 IMPORTS* OF NATURAL GAS – 2017

Total extra-EU = 16 261 447.953 TJ-GCV



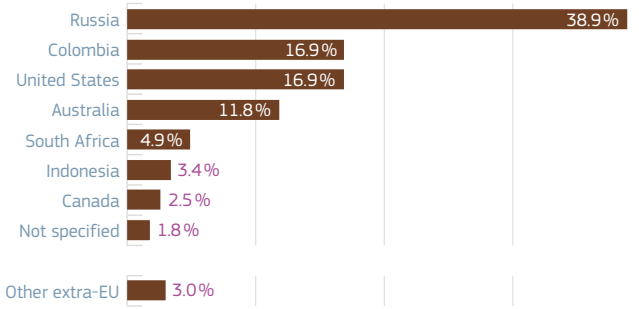
EU-28 IMPORTS* OF CRUDE OIL AND NGL – 2017

Total extra-EU = 547 531.72 kton



EU-28 IMPORTS* OF HARD COAL – 2017

Total extra-EU = 157 439.139 kton



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

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

1.3 EU 2020 Targets

1.3.1 Renewable Energy Targets*

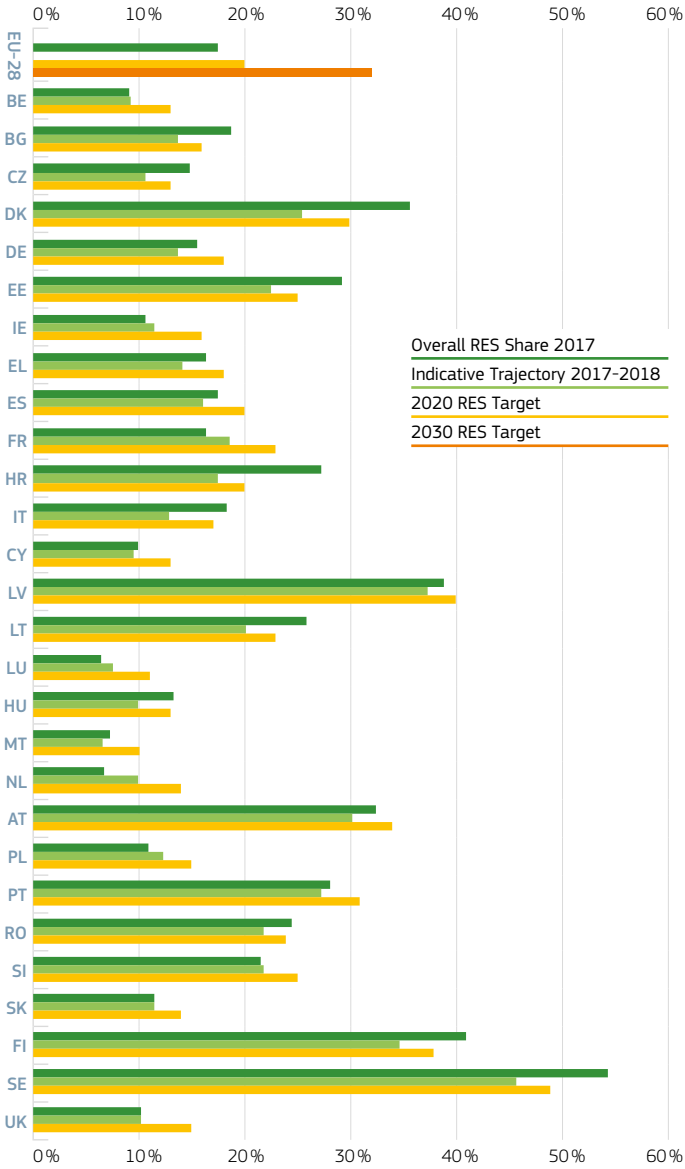
%	2017 Renewable Energy Shares				Indicative 2017/2018	2020 RES Target	2030 RES Target
	RES Transport	RES Electricity	RES Heating and Cooling	Overall RES Share			
EU-28	7.4	30.7	19.5	17.5	n.a.	20.0	32.0
BE	6.6	17.2	8.0	9.1	9.2	13.0	
BG	7.2	19.1	29.9	18.7	13.7	16.0	
CZ	6.6	13.7	19.7	14.8	10.6	13.0	
DK	6.9	60.4	46.6	35.8	25.5	30.0	
DE	7.0	34.4	13.4	15.5	13.7	18.0	
EE	0.4	17.0	51.6	29.2	22.6	25.0	
IE	7.4	30.1	6.9	10.7	11.5	16.0	
EL	1.8	24.5	26.6	16.3	14.1	18.0	
ES	5.9	36.3	17.5	17.5	16.0	20.0	
FR	9.1	19.9	21.4	16.3	18.6	23.0	
HR	1.2	46.4	36.6	27.3	17.4	20.0	
IT	6.5	34.1	20.1	18.3	12.9	17.0	
CY	2.6	8.9	24.5	9.9	9.5	13.0	
LV	2.5	54.4	54.6	39.0	37.4	40.0	
LT	3.7	18.3	46.5	25.8	20.2	23.0	
LU	6.4	8.1	8.1	6.4	7.5	11.0	
HU	6.8	7.5	19.6	13.3	10.0	13.0	
MT	6.8	6.6	19.8	7.2	6.5	10.0	
NL	5.9	13.8	5.9	6.6	9.9	14.0	
AT	9.7	72.2	32.1	32.6	30.3	34.0	
PL	4.2	13.1	14.5	10.9	12.3	15.0	
PT	7.9	54.2	34.4	28.1	27.3	31.0	
RO	6.6	41.6	26.6	24.5	21.8	24.0	
SI	2.7	32.4	33.3	21.6	21.9	25.0	
SK	7.0	21.3	9.8	11.5	11.4	14.0	
FI	18.8	35.2	54.9	41.0	34.7	38.0	
SE	32.1	65.9	69.1	54.5	45.8	49.0	
UK	5.1	28.1	7.5	10.2	10.2	15.0	

* In % of the Gross Final Energy Consumption.

Source: Eurostat-RES SHARES, March 2019
Methodology and Notes: See Appendices

1.3.1 Renewable Energy Targets*

OVERALL RENEWABLE ENERGY SHARE 2017 (%)

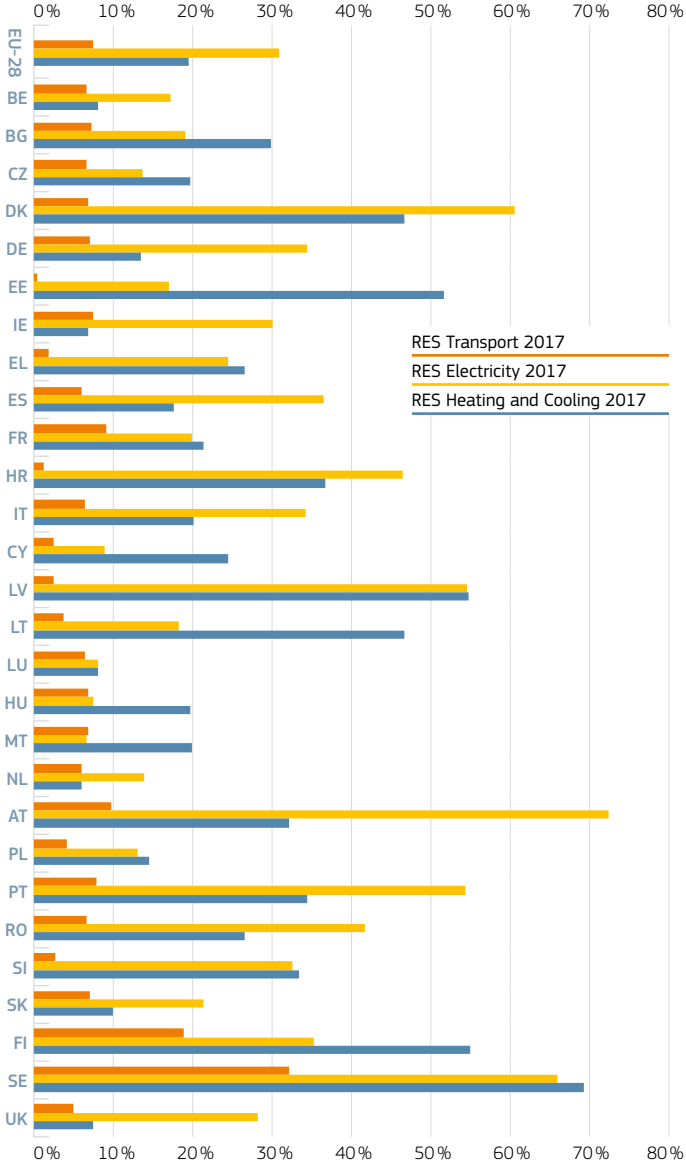


* In Gross Final Energy Consumption.

Source: Eurostat-RES SHARES, March 2019
Methodology and Notes: See Appendices

1.3.2 Renewable Energy Shares*

RES SHARES IN HEATING AND COOLING, ELECTRICITY, AND TRANSPORT – 2017 (%)



* In Gross Final Energy Consumption.

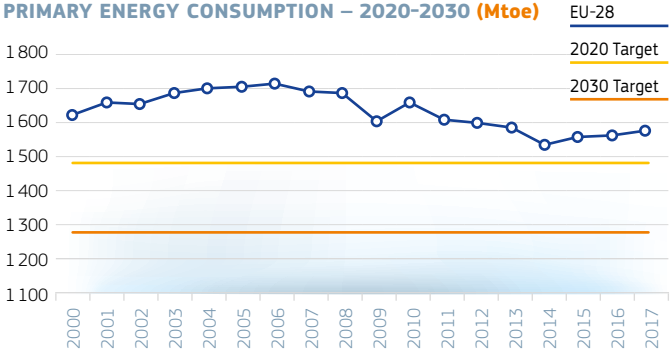
Source: Eurostat-RES SHARES, March 2019
Methodology and Notes: See Appendices

1.3.3 Energy Efficiency Targets

PRIMARY ENERGY CONSUMPTION 2020-2030 TARGETS (Mtoe)

						TARGETS	
	2005	2010	2015	2016	2017	2020	2030
EU-28	1720.0	1660.2	1537.5	1546.9	1561.6	**1483**	**1273**
BE	51.6	54.1	46.1	49.3	49.1		
BG	19.2	17.4	18.0	17.7	18.3		
CZ	42.5	42.7	39.8	40.0	40.4		
DK	19.4	20.0	16.9	17.4	17.7		
DE	320.3	312.0	295.3	297.7	298.3		
EE	5.1	5.6	5.3	5.9	5.6		
IE	14.9	14.8	13.9	14.6	14.4		
EL	30.1	27.1	23.2	22.8	23.1		
ES	136.6	123.3	118.6	119.2	125.6		
FR	260.9	254.4	244.3	240.2	239.5		
HR	9.1	8.9	8.0	8.0	8.3		
IT	180.8	167.3	149.1	148.0	148.9		
CY	2.5	2.7	2.3	2.4	2.5		
LV	4.5	4.6	4.3	4.3	4.5		
LT	8.0	6.2	5.8	6.0	6.2		
LU	4.8	4.6	4.1	4.2	4.3		
HU	26.4	24.6	23.3	23.7	24.5		
MT	0.9	0.9	0.8	0.7	0.8		
NL	70.1	71.7	63.8	64.8	64.5		
AT	32.6	32.4	31.5	31.7	32.5		
PL	88.0	96.6	90.1	94.8	99.1		
PT	24.9	22.6	21.6	21.8	22.8		
RO	36.0	33.0	30.7	30.6	32.4		
SI	7.0	7.0	6.3	6.5	6.6		
SK	17.4	16.7	15.2	15.4	16.1		
FI	33.6	35.5	31.2	32.3	31.9		
SE	49.4	48.6	45.1	46.9	46.5		
UK	223.5	205.1	183.0	179.8	176.8		

PRIMARY ENERGY CONSUMPTION – 2020-2030 (Mtoe)



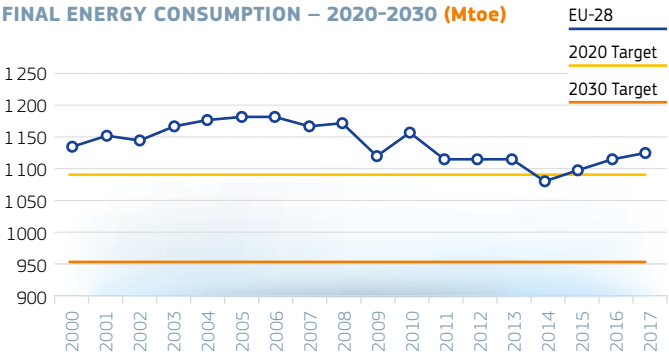
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

1.3.3 Energy Efficiency Targets

FINAL ENERGY CONSUMPTION 2020-2030 TARGETS (Mtoe)

						TARGETS	
	2005	2010	2015	2016	2017	2020	2030
EU-28	1 192.8	1 163.1	1 088.3	1 110.1	1 122.8	1 086	956
BE	36.6	37.7	35.9	36.5	36.1		
BG	10.1	8.8	9.5	9.6	9.9		
CZ	26.3	25.3	24.2	24.8	25.5		
DK	15.5	15.5	14.0	14.4	14.6		
DE	218.7	220.0	212.0	216.7	218.7		
EE	2.9	2.9	2.8	2.8	2.9		
IE	12.7	12.0	11.2	11.6	11.8		
EL	21.0	19.0	16.5	16.7	16.8		
ES	98.1	89.1	80.4	82.5	84.3		
FR	160.2	154.0	146.7	148.7	148.9		
HR	7.2	7.2	6.6	6.6	6.9		
IT	137.2	128.5	116.2	115.9	115.2		
CY	1.8	1.9	1.7	1.8	1.9		
LV	4.0	4.1	3.8	3.8	4.0		
LT	4.7	4.8	4.9	5.1	5.3		
LU	4.5	4.3	4.0	4.0	4.2		
HU	18.7	17.5	17.4	17.8	18.5		
MT	0.5	0.5	0.6	0.6	0.6		
NL	54.1	55.3	49.2	49.9	50.3		
AT	27.7	27.7	27.4	27.8	28.4		
PL	58.5	66.3	62.3	66.6	70.9		
PT	19.0	18.1	16.0	16.2	16.6		
RO	24.6	22.5	21.8	22.2	23.2		
SI	4.9	5.0	4.7	4.9	4.9		
SK	11.6	11.5	10.1	10.4	11.1		
FI	25.2	26.3	24.2	25.2	25.3		
SE	33.7	34.0	31.5	32.4	32.6		
UK	153.0	143.1	132.6	134.4	133.3		

FINAL ENERGY CONSUMPTION – 2020-2030 (Mtoe)



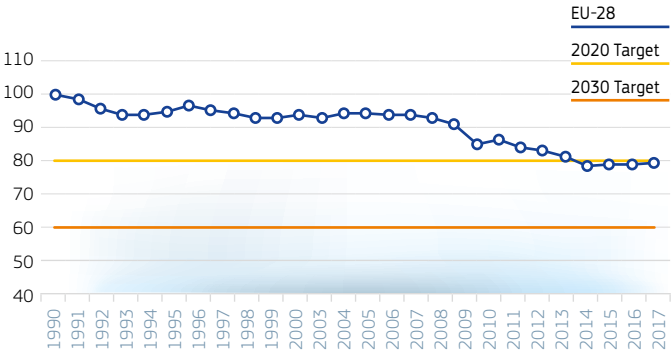
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

1.3.4 Greenhouse Gas (GHG) Emissions Targets*

(index 100=1990)

						TARGETS	
	2000	2005	2010	2016	2017	2020	2030
EU-28	92.4	93.7	85.9	77.8	78.3	80	60
BE	103.2	99.4	91.6	80.3	79.7		
BG	58.3	62.9	59.5	58.2	60.5		
CZ	75.6	74.9	70.9	65.8	65.3		
DK	101.5	95.5	90.8	73.5	70.5		
DE	84.3	80.5	76.5	74.2	74.1		
EE	43.0	47.7	52.6	48.9	52.0		
IE	124.4	127.5	112.3	113.1	112.9		
EL	122.1	131.5	114.6	89.8	93.6		
ES	135.4	154.3	126.2	116.7	121.8		
FR	101.9	102.5	94.9	85.8	86.6		
HR	80.5	93.6	87.7	76.5	78.7		
IT	107.7	112.9	98.6	84.8	84.1		
CY	144.2	159.1	161.0	150.6	155.7		
LV	39.9	43.7	47.7	44.0	44.3		
LT	40.3	47.3	42.9	42.1	42.7		
LU	80.8	108.8	102.3	87.9	90.8		
HU	78.5	80.9	69.7	65.6	68.5		
MT	134.5	138.1	139.7	98.8	112.2		
NL	101.5	99.7	99.0	91.7	90.9		
AT	103.2	118.8	109.1	103.0	106.2		
PL	83.4	85.1	87.0	84.5	87.6		
PT	138.8	145.0	117.9	114.4	122.8		
RO	57.7	61.0	50.0	46.3	46.1		
SI	102.4	110.1	105.4	94.9	93.8		
SK	67.1	69.8	63.2	57.6	59.2		
FI	98.6	98.5	107.0	83.1	79.5		
SE	96.9	94.3	91.4	76.4	76.3		
UK	91.6	89.7	79.3	63.8	62.4		

GHG EMISSIONS – 1990-2017 (index 100=1990)



* Emissions of the Kyoto basket of GHG.

Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

Energy
in the EU

#2


Energy in the EU

Summary

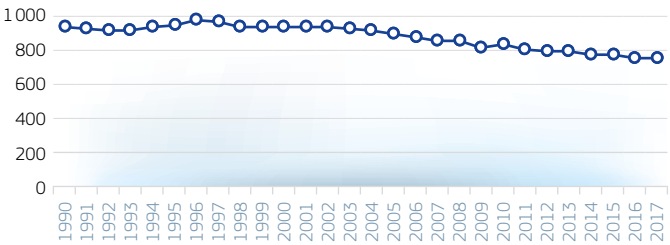
2.1 Energy Supply

2.1.1 Production*

ALL FUELS

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	950.0	908.8	840.0	773.7	760.2	759.8
Index 2000	100 %	96 %	88 %	81 %	80 %	80 %
BE	13.61	13.72	15.55	10.55	15.16	14.90
BG	9.87	10.65	10.43	12.03	11.28	11.72
CZ	30.81	33.24	32.11	28.98	27.47	27.47
DK	27.83	31.41	23.47	16.26	15.41	15.86
DE	135.47	137.03	128.95	120.11	116.15	116.27
EE	3.18	3.87	4.93	5.60	5.19	5.79
IE	2.16	1.70	1.87	1.93	4.20	4.86
EL	10.01	10.32	9.44	8.49	6.76	7.51
ES	31.40	30.01	34.41	33.98	34.64	34.23
FR	129.72	136.29	136.98	140.72	133.72	132.23
HR	4.26	4.76	5.15	4.40	4.42	4.21
IT	28.35	30.28	32.94	36.10	33.52	36.67
CY	0.04	0.05	0.09	0.13	0.13	0.14
LV	1.41	1.87	1.98	2.35	2.46	2.60
LT	3.36	3.95	1.32	1.59	1.63	1.76
LU	0.06	0.11	0.12	0.15	0.16	0.19
HU	11.61	10.94	11.71	11.10	11.28	11.15
MT	0.00	0.00	0.00	0.02	0.02	0.03
NL	58.76	62.72	71.45	48.40	46.55	42.16
AT	9.81	9.75	11.66	12.07	12.29	12.34
PL	79.40	78.44	67.16	68.00	66.76	64.37
PT	3.85	3.61	5.80	5.30	6.00	5.23
RO	28.53	27.99	27.45	26.44	24.80	25.48
SI	3.09	3.49	3.65	3.26	3.44	3.52
SK	6.28	6.44	6.01	6.39	6.23	6.37
FI	14.82	16.58	17.04	17.09	17.13	18.08
SE	30.01	34.08	32.01	35.86	35.39	36.59
UK	272.33	205.50	146.35	116.36	118.00	118.13

PRODUCTION – ALL FUELS – 1990-2017 (Mtoe)



* Primary production. recycled and recovered products.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.1.1 Production*

BY FUEL

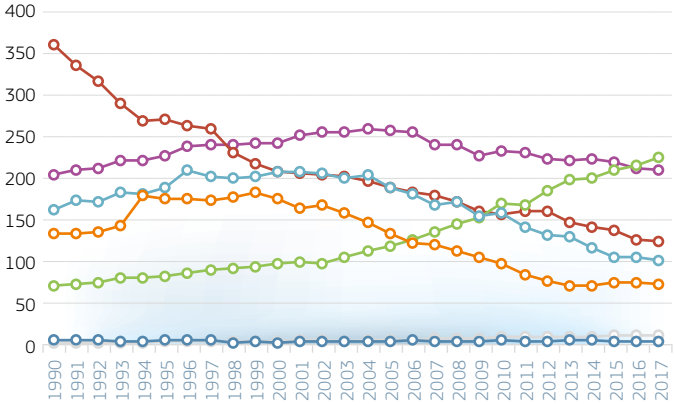
	2017						
Mtoe	Nuclear	Solid Fossil Fuels	Renewables & biofuels	Natural Gas	Oil & Petroleum products	Wastes, Non-Renewable	Peat, Oil Shale & Oil Sands
EU-28	210.7	124.9	226.6	103.1	74.5	14.2	5.8
Share (%)	27.7%	16.4%	29.8%	13.6%	9.8%	1.9%	0.0%
BE	11.00	0.01	3.21	0.00	0.03	0.65	0.00
BG	3.94	5.70	1.94	0.07	0.04	0.04	0.00
CZ	7.02	15.28	4.45	0.19	0.23	0.31	0.00
DK	0.00	0.00	4.20	4.35	6.92	0.38	0.00
DE	19.65	39.44	42.62	6.03	4.01	4.51	0.00
EE	0.00	0.00	1.56	0.00	0.00	0.07	4.15
IE	0.00	0.00	1.14	2.85	0.00	0.13	0.74
EL	0.00	4.57	2.79	0.01	0.15	0.00	0.00
ES	15.13	1.13	17.56	0.02	0.12	0.26	0.00
FR	103.86	0.00	25.87	0.01	0.99	1.49	0.00
HR	0.00	0.00	2.19	1.23	0.77	0.01	0.00
IT	0.00	0.00	26.54	4.54	4.46	1.13	0.00
CY	0.00	0.00	0.13	0.00	0.01	0.00	0.00
LV	0.00	0.00	2.58	0.00	0.01	0.01	0.00
LT	0.00	0.00	1.66	0.00	0.06	0.03	0.01
LU	0.00	0.00	0.16	0.00	0.00	0.04	0.00
HU	4.08	1.28	3.19	1.41	1.05	0.13	0.00
MT	0.00	0.00	0.03	0.00	0.00	0.00	0.00
NL	0.79	0.00	5.61	33.17	1.92	0.68	0.00
AT	0.00	0.00	9.81	1.04	0.75	0.73	0.00
PL	0.00	49.84	9.10	3.51	1.05	0.87	0.00
PT	0.00	0.00	5.07	0.00	0.00	0.15	0.00
RO	2.91	4.47	5.84	8.52	3.64	0.09	0.00
SI	1.49	0.93	1.03	0.01	0.00	0.05	0.00
SK	3.99	0.45	1.62	0.12	0.01	0.20	0.00
FI	5.39	0.00	11.66	0.00	0.01	0.29	0.73
SE	16.35	0.00	19.39	0.00	0.00	0.74	0.11
UK	15.12	1.84	15.63	36.02	48.32	1.19	0.00

* Primary production. recycled and recovered products.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.1.1 Production*

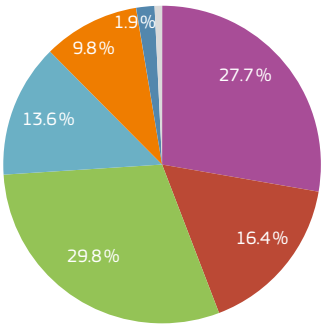
BY FUEL – EU-28 – 1990-2017 (Mtoe)



Nuclear
Solid Fossil Fuels
Renewables and Biofuels
Natural Gas
Oil and Petroleum Products
Wastes, Non-Renewable
Peat, Oil Shale and Oil Sands

PRODUCTION – BY FUEL – EU-28 – 1990-2017 (% OF TOTAL)

Total = 759.8 Mtoe



Nuclear
Solid Fossil Fuels
Renewables and Biofuels
Natural Gas
Oil and Petroleum Products
Wastes, Non-Renewable
Peat, Oil Shale and Oil Sands

* Primary production , recycled and recovered products.

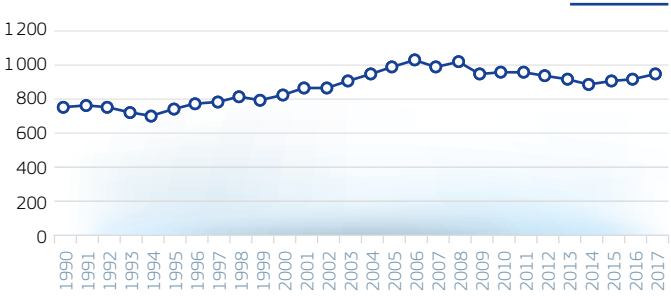
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.1.2 Net Imports

ALL FUELS

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	826.02	985.93	957.61	905.80	910.72	947.78
Index 2000	100%	119%	116%	110%	110%	115%
BE	50.63	53.42	53.63	49.97	47.92	47.99
BG	8.68	9.56	7.23	6.85	7.08	7.50
CZ	9.36	12.68	11.54	13.49	13.66	16.15
DK	-7.47	-10.49	-3.44	2.37	2.49	2.19
DE	204.85	211.52	204.05	198.46	205.11	207.37
EE	1.64	1.52	0.90	0.55	0.50	0.25
IE	12.41	13.95	13.23	12.71	10.39	9.94
EL	21.64	23.01	21.16	18.22	18.33	18.74
ES	100.37	124.77	107.13	95.42	94.53	101.91
FR	132.66	144.63	132.34	120.39	121.90	125.18
HR	4.10	5.17	4.43	4.15	4.16	4.73
IT	152.44	159.77	148.48	121.42	121.52	124.56
CY	2.58	2.86	2.96	2.47	2.64	2.71
LV	2.36	3.10	2.22	2.37	2.22	2.12
LT	4.30	5.05	5.71	5.48	5.62	5.71
LU	3.64	4.68	4.51	4.01	4.03	4.14
HU	13.87	17.73	15.14	13.58	14.28	16.69
MT	1.47	1.59	2.36	2.23	2.50	3.03
NL	34.99	37.53	28.28	42.67	41.14	46.60
AT	19.17	24.69	21.89	20.30	21.12	22.19
PL	9.60	16.47	32.15	28.68	31.00	40.36
PT	22.21	24.81	18.67	18.48	17.54	19.78
RO	8.04	10.50	7.43	5.24	6.88	7.74
SI	3.40	3.85	3.58	3.24	3.35	3.49
SK	11.54	12.34	11.41	9.78	9.90	11.18
FI	18.55	19.25	18.08	15.80	15.68	15.07
SE	19.29	20.31	19.91	14.69	17.02	14.04
UK	-40.31	31.65	62.60	72.78	68.24	66.42

NET IMPORTS – ALL FUELS – 1990-2017 (Mtoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.1.2 Net Imports

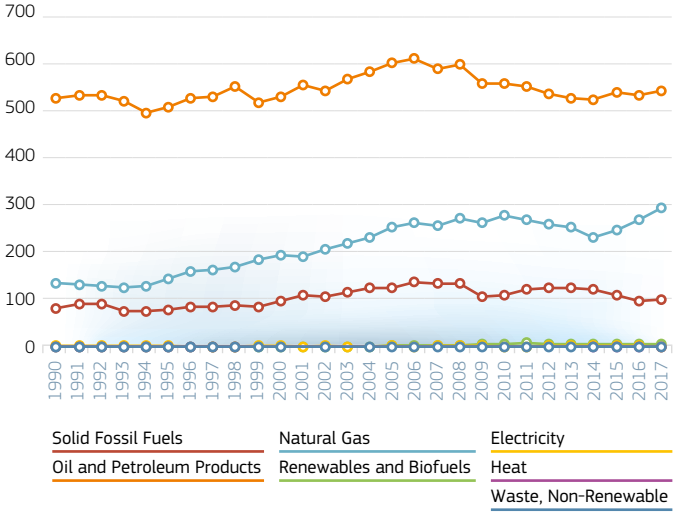
BY FUEL

	2017					
Mtoe	Net Imports	Solid Fossil Fuels	Oil & Petroleum Products	Natural Gas	Renewables & Biofuels	Electricity
EU-28	947.8	100.4	543.3	296.1	6.6	0.9
Share (%)	100 %	10.6 %	57.3 %	31.2 %	0.7 %	0.1 %
BE	47.99	2.94	29.39	14.25	0.88	0.52
BG	7.50	0.57	4.71	2.70	-0.01	-0.47
CZ	16.15	0.47	9.39	7.33	0.08	-1.12
DK	2.19	1.79	-0.29	-1.54	1.79	0.39
DE	207.37	32.30	110.65	68.84	0.09	-4.51
EE	0.25	0.01	0.59	0.41	-0.52	-0.24
IE	9.94	1.22	7.21	1.41	0.17	-0.06
EL	18.74	0.23	13.62	4.23	0.13	0.54
ES	101.91	10.91	63.18	27.62	-0.59	0.79
FR	125.18	10.10	80.08	37.73	0.72	-3.45
HR	4.73	0.40	2.69	1.34	-0.30	0.60
IT	124.56	9.36	52.82	56.82	2.31	3.25
CY	2.71	0.01	2.65	0.00	0.04	0.00
LV	2.12	0.04	1.82	1.01	-0.77	-0.01
LT	5.71	0.18	2.97	1.91	-0.12	0.75
LU	4.14	0.05	2.75	0.69	0.12	0.53
HU	16.69	0.99	6.58	8.22	-0.23	1.11
MT	3.03	0.00	2.69	0.25	0.01	0.07
NL	46.60	9.22	39.50	-1.36	-1.24	0.30
AT	22.19	3.07	11.37	7.01	0.15	0.56
PL	40.36	-1.47	29.80	12.01	-0.18	0.20
PT	19.78	3.41	11.35	5.44	-0.23	-0.23
RO	7.74	0.99	5.85	0.93	0.20	-0.25
SI	3.49	0.20	2.56	0.73	0.05	-0.04
SK	11.18	2.97	3.60	4.37	-0.02	0.26
FI	15.07	2.60	8.67	1.92	0.12	1.76
SE	14.04	1.94	11.31	0.94	1.37	-1.63
UK	66.42	5.86	25.77	30.90	2.62	1.27

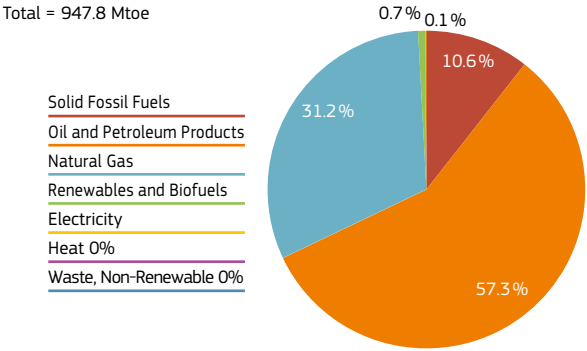
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.1.2 Net Imports

BY FUEL – EU-28 – 1990-2017 (Mtoe)



NET IMPORTS – BY FUEL – EU-28 – 2017 (% TOTAL)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

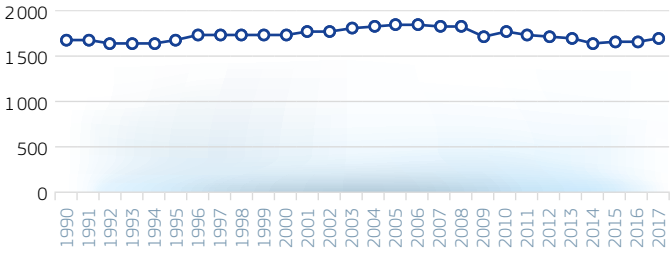
2.1.3 Gross Available Energy

ALL FUELS

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	1773.99	1885.71	1817.61	1680.74	1692.91	1719.42
Index 2000	100 %	106 %	102 %	95 %	95 %	97 %
BE	64.78	66.68	68.77	59.58	63.52	64.12
BG	18.70	20.20	17.97	18.73	18.34	18.98
CZ	41.28	45.54	45.60	42.35	41.94	43.43
DK	20.79	20.59	21.10	18.14	18.51	18.74
DE	344.63	347.42	337.33	318.94	321.93	324.47
EE	4.84	5.39	5.87	5.71	6.26	6.07
IE	14.52	15.56	15.18	14.30	15.04	14.80
EL	31.35	33.75	30.87	25.65	25.15	26.37
ES	130.54	152.91	138.85	130.82	132.22	137.83
FR	258.87	279.77	271.99	261.76	257.38	257.62
HR	8.46	9.84	9.46	8.49	8.57	8.87
IT	176.19	191.69	179.82	157.63	156.49	161.82
CY	2.61	2.84	2.94	2.53	2.74	2.81
LV	3.87	4.85	4.88	4.63	4.71	4.81
LT	7.30	8.92	6.97	6.99	7.25	7.55
LU	3.66	4.80	4.65	4.18	4.19	4.34
HU	25.23	28.52	26.59	25.20	25.58	26.68
MT	1.47	1.59	2.39	2.29	2.47	2.94
NL	91.44	99.33	100.01	88.10	89.60	89.94
AT	29.23	34.24	34.37	33.51	33.78	34.44
PL	89.51	92.88	101.77	95.93	100.64	105.35
PT	26.05	28.02	24.83	23.62	23.69	24.77
RO	36.76	38.64	35.04	31.90	31.79	33.47
SI	6.45	7.35	7.23	6.51	6.79	6.93
SK	17.73	18.70	17.71	16.27	16.35	17.25
FI	33.34	35.22	36.94	32.78	34.09	34.27
SE	49.07	53.61	52.67	50.14	52.66	52.85
UK	235.34	236.86	215.80	194.07	191.23	187.91

GROSS AVAILABLE ENERGY – ALL FUELS – 1990-2017 (Mtoe)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

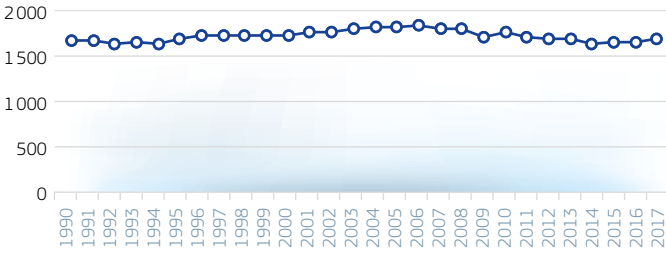
2.1.4 Gross Inland Consumption

ALL FUELS

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	1731.53	1836.47	1768.19	1638.72	1648.85	1674.92
Index 2000	100%	106%	102%	95%	95%	97%
BE	59.44	59.05	61.17	53.75	56.86	56.63
BG	18.64	20.08	17.87	18.64	18.26	18.90
CZ	41.28	45.54	45.60	42.35	41.94	43.43
DK	19.50	19.82	20.41	17.37	17.84	18.21
DE	342.43	344.93	334.55	316.52	319.11	322.18
EE	4.73	5.27	5.66	5.43	5.99	5.76
IE	14.37	15.46	15.10	14.14	14.89	14.65
EL	27.74	30.88	28.16	23.87	23.43	24.23
ES	124.52	144.99	130.43	123.34	124.70	131.15
FR	256.05	277.21	269.70	260.12	255.90	255.97
HR	8.44	9.81	9.46	8.49	8.56	8.87
IT	174.54	189.45	176.84	155.73	154.28	159.51
CY	2.42	2.55	2.76	2.29	2.46	2.56
LV	3.86	4.59	4.63	4.38	4.39	4.55
LT	7.20	8.78	6.83	6.91	7.08	7.37
LU	3.66	4.80	4.65	4.18	4.19	4.34
HU	25.23	28.52	26.59	25.20	25.58	26.68
MT	0.81	0.94	0.94	0.76	0.72	0.83
NL	78.28	83.71	86.15	76.15	77.74	78.28
AT	29.21	34.21	34.35	33.49	33.76	34.42
PL	89.23	92.56	101.56	95.74	100.46	105.08
PT	25.38	27.44	24.37	22.98	22.92	23.99
RO	36.76	38.64	35.02	31.85	31.76	33.45
SI	6.45	7.32	7.22	6.44	6.67	6.78
SK	17.73	18.70	17.71	16.27	16.35	17.25
FI	32.66	34.71	36.72	32.48	33.80	33.92
SE	47.71	51.68	50.71	48.31	50.66	50.47
UK	233.26	234.83	213.02	191.54	188.56	185.47

GROSS INLAND CONSUMPTION – ALL FUELS – 1990-2017 (Mtoe)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.1.4 Gross Inland Consumption

BY FUEL

Mtoe	2017							
	Oil & Petroleum Products	Natural Gas	Solid Fossil Fuels	Renewables & Biofuels	Nuclear	Waste, Non-Renewable	Electricity	Others*
EU-28	582.1	398.4	228.4	233.5	210.7	14.6	0.9	6.4
Share (%)	34.8%	23.8%	13.6%	13.9%	12.6%	0.9%	0.1%	0.4%
BE	22.8	14.5	3.1	4.1	11.0	0.7	0.5	0.0
BG	4.6	2.8	6.1	2.0	3.9	0.0	-0.5	0.0
CZ	9.7	7.2	15.8	4.5	7.0	0.3	-1.1	0.0
DK	7.1	2.7	1.5	6.0	0.0	0.4	0.4	0.0
DE	113.2	75.3	71.3	42.7	19.7	4.5	-4.5	0.0
EE	0.2	0.4	0.0	1.1	0.0	0.1	-0.2	4.2
IE	7.2	4.3	1.1	1.3	0.0	0.1	-0.1	0.7
EL	11.8	4.2	4.8	2.9	0.0	0.0	0.5	0.0
ES	57.9	27.3	12.7	17.1	15.1	0.3	0.8	0.0
FR	79.1	38.5	9.9	26.6	103.9	1.5	-3.4	0.0
HR	3.5	2.5	0.4	1.9	0.0	0.0	0.6	0.0
IT	55.4	61.5	9.3	28.8	0.0	1.1	3.2	0.0
CY	2.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0
LV	1.6	1.0	0.0	1.9	0.0	0.0	0.0	0.0
LT	2.9	1.9	0.2	1.6	0.0	0.0	0.7	0.0
LU	2.8	0.7	0.0	0.3	0.0	0.0	0.5	0.0
HU	7.6	8.5	2.2	3.0	4.1	0.2	1.1	0.0
MT	0.5	0.2	0.0	0.0	0.0	0.0	0.1	0.0
NL	32.0	30.9	9.1	4.3	0.8	0.9	0.3	0.0
AT	12.3	7.8	3.1	9.9	0.0	0.7	0.6	0.0
PL	30.0	15.4	49.7	8.9	0.0	0.9	0.2	0.0
PT	10.5	5.4	3.2	4.8	0.0	0.2	-0.2	0.0
RO	9.6	9.6	5.4	6.0	2.9	0.1	-0.2	0.0
SI	2.3	0.7	1.1	1.1	1.5	0.1	0.0	0.0
SK	3.7	4.1	3.4	1.6	4.0	0.2	0.3	0.0
FI	8.7	1.9	2.8	11.8	5.4	0.3	1.8	1.3
SE	11.0	0.9	1.9	20.9	16.4	0.8	-1.6	0.1
UK	71.9	67.8	9.9	18.2	15.1	1.2	1.3	0.0

* Others = manufactured gases, peat and peat products, oil shale and oil sands.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.1.4 Gross Inland Consumption

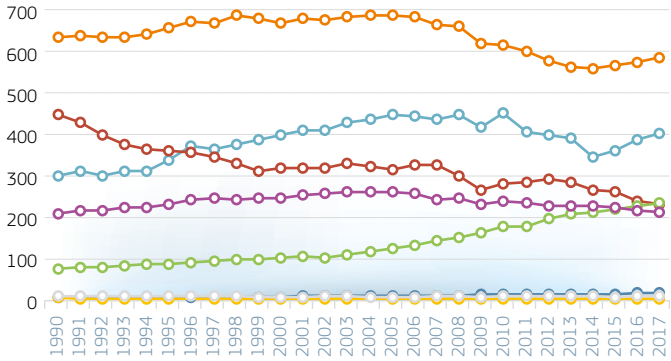
RENEWABLES AND BIOFUELS

	2017								
Mtoe	Renewables & Biofuels	Hydro	Wind	Solar Photovoltaic	Solar Thermal	Tide, Wave & Ocean	Biofuels & Renewable Waste	Geothermal	Ambient Heat (Heat Pumps)
EU-28	233.5	25.9	31.2	9.8	4.6	0.0	144.1	6.8	11.1
Share (%)	100.0%	11.1%	13.3%	4.2%	2.0%	0.0%	61.7%	2.9%	4.8%
BE	4.09	0.02	0.56	0.28	0.03	0.00	3.14	0.00	0.05
BG	1.95	0.24	0.13	0.12	0.02	0.00	1.31	0.03	0.09
CZ	4.52	0.16	0.05	0.19	0.02	0.00	3.98	0.00	0.12
DK	5.98	0.00	1.27	0.06	0.06	0.00	4.36	0.00	0.22
DE	42.71	1.73	9.09	3.39	0.68	0.00	26.50	0.26	1.07
EE	1.06	0.00	0.06	0.00	0.00	0.00	1.00	0.00	0.00
IE	1.32	0.06	0.64	0.00	0.01	0.00	0.61	0.00	0.00
EL	2.92	0.34	0.48	0.34	0.27	0.00	1.19	0.01	0.29
ES	17.08	1.61	4.22	0.73	2.62	0.00	7.28	0.02	0.59
FR	26.59	4.30	2.12	0.82	0.17	0.04	16.42	0.41	2.29
HR	1.89	0.46	0.10	0.01	0.01	0.00	1.31	0.01	0.00
IT	28.82	3.11	1.53	2.10	0.21	0.00	13.73	5.50	2.65
CY	0.17	0.00	0.02	0.01	0.07	0.00	0.06	0.00	0.00
LV	1.94	0.38	0.01	0.00	0.00	0.00	1.54	0.00	0.00
LT	1.56	0.05	0.12	0.01	0.00	0.00	1.39	0.00	0.00
LU	0.27	0.01	0.02	0.01	0.00	0.00	0.23	0.00	0.00
HU	2.95	0.02	0.07	0.03	0.01	0.00	2.68	0.13	0.01
MT	0.04	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01
NL	4.27	0.01	0.91	0.19	0.03	0.00	2.89	0.07	0.18
AT	9.94	3.30	0.57	0.11	0.18	0.00	5.53	0.04	0.22
PL	8.92	0.22	1.28	0.01	0.05	0.00	7.27	0.02	0.06
PT	4.83	0.51	1.05	0.09	0.09	0.00	2.90	0.20	0.00
RO	6.04	1.25	0.64	0.16	0.00	0.00	3.96	0.04	0.00
SI	1.08	0.33	0.00	0.02	0.01	0.00	0.66	0.05	0.00
SK	1.59	0.37	0.00	0.04	0.01	0.00	1.16	0.01	0.00
FI	11.77	1.27	0.41	0.00	0.00	0.00	9.54	0.00	0.55
SE	20.92	5.60	1.51	0.02	0.01	0.00	12.23	0.00	1.55
UK	18.24	0.51	4.30	0.99	0.05	0.00	11.22	0.00	1.17

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

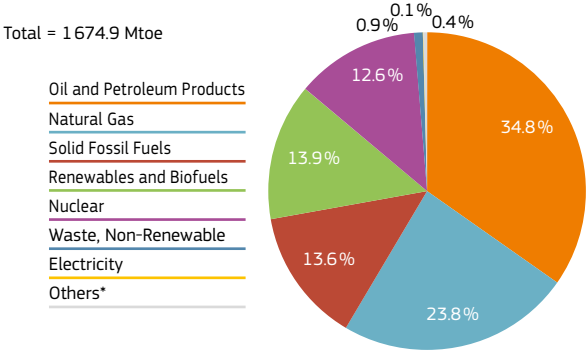
2.1.4 Gross Inland Consumption

BY FUEL – EU-28 – 1990-2017 (Mtoe)



GROSS INLAND CONSUMPTION – BY FUEL – EU-28 – 2017 (% TOTAL)

Total = 1 674.9 Mtoe



* Others = manufactured gases, peat and peat products, oil shale and oil sands.

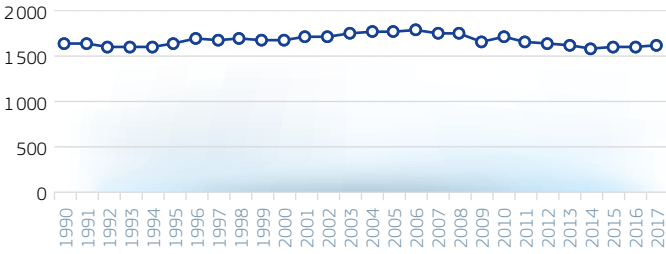
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.1.5 Total Energy Supply

ALL FUELS

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	1692.26	1793.04	1725.11	1592.47	1600.86	1623.77
Index 2000	100%	106%	102%	94%	95%	96%
BE	57.93	57.89	59.80	52.31	55.42	55.05
BG	18.56	19.90	17.71	18.47	18.05	18.66
CZ	41.11	45.22	45.29	42.05	41.62	43.08
DK	18.72	18.97	19.60	16.48	16.89	17.23
DE	335.81	337.48	326.61	308.51	310.49	312.66
EE	4.71	5.22	5.62	5.38	5.95	5.70
IE	13.77	14.64	14.36	13.30	14.02	13.64
EL	26.91	30.08	27.48	23.04	22.55	23.24
ES	121.74	141.82	127.31	119.38	120.50	126.57
FR	250.83	271.78	264.19	253.78	249.61	249.54
HR	8.38	9.73	9.36	8.37	8.44	8.72
IT	171.71	186.45	173.68	152.56	150.98	156.09
CY	2.14	2.24	2.47	2.05	2.18	2.25
LV	3.84	4.53	4.51	4.27	4.27	4.41
LT	7.18	8.73	6.78	6.83	6.99	7.27
LU	3.34	4.37	4.21	3.72	3.69	3.76
HU	24.99	28.26	26.36	25.03	25.39	26.46
MT	0.68	0.85	0.84	0.64	0.59	0.69
NL	74.98	80.07	82.74	72.35	73.84	74.27
AT	28.65	33.57	33.68	32.79	32.99	33.69
PL	88.95	92.23	101.05	95.09	99.77	104.23
PT	24.71	26.68	23.49	21.93	21.77	22.71
RO	36.63	38.51	34.86	31.62	31.47	33.11
SI	6.42	7.30	7.19	6.42	6.65	6.75
SK	17.70	18.66	17.67	16.22	16.30	17.21
FI	32.31	34.29	36.19	31.84	33.16	33.24
SE	46.99	51.03	50.00	47.55	49.82	49.57
UK	222.56	222.54	202.07	180.47	177.46	173.98

TOTAL ENERGY SUPPLY – ALL FUELS – 1990-2017 (Mtoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2 Energy Imports

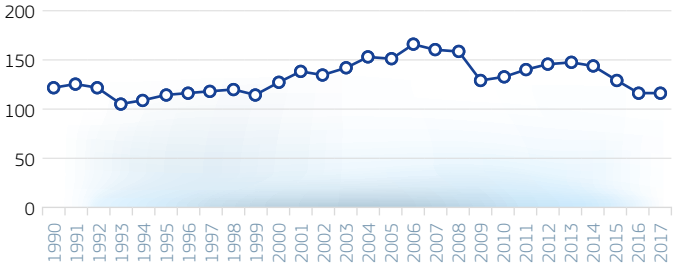
2.2.1 Imports – Solid Fossil Fuels

TOTAL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	125.4	148.8	130.9	127.7	115.4	115.4
Index 2000	100%	119%	104%	102%	92%	92%
BE	8.43	6.01	4.39	3.31	3.05	3.01
BG	2.38	2.56	1.75	0.76	0.56	0.58
CZ	1.04	1.34	2.36	2.84	2.97	3.01
DK	3.86	3.56	2.68	1.60	1.68	1.79
DE	22.22	26.58	32.59	37.48	39.67	33.80
EE	0.07	0.04	0.05	0.00	0.01	0.02
IE	1.70	1.91	0.96	1.48	1.15	1.23
EL	0.81	0.40	0.40	0.16	0.19	0.23
ES	13.35	14.83	7.85	10.95	8.09	11.15
FR	13.38	13.98	12.25	9.21	8.61	10.11
HR	0.48	0.62	0.70	0.62	0.66	0.40
IT	13.23	16.53	14.00	12.58	10.96	9.59
CY	0.03	0.04	0.01	0.00	0.00	0.01
LV	0.06	0.08	0.11	0.04	0.04	0.04
LT	0.08	0.17	0.19	0.15	0.15	0.18
LU	0.11	0.08	0.07	0.05	0.05	0.05
HU	1.21	1.46	1.41	1.11	1.08	1.26
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	8.13	8.46	7.76	10.70	10.23	9.41
AT	3.07	4.05	3.38	2.82	2.89	3.11
PL	1.02	2.15	8.27	5.06	5.04	7.88
PT	3.97	3.23	1.63	3.21	2.91	3.41
RO	1.92	2.93	1.22	1.05	1.03	0.99
SI	0.25	0.33	0.28	0.20	0.20	0.20
SK	3.47	3.90	3.22	2.82	2.74	3.02
FI	3.56	3.36	3.99	2.59	2.79	2.70
SE	2.36	2.48	2.46	1.98	2.22	1.96
UK	15.23	27.76	16.92	14.95	6.41	6.23

IMPORTS – SOLID FOSSIL FUELS – TOTAL – 1990-2017 (Mtoe)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

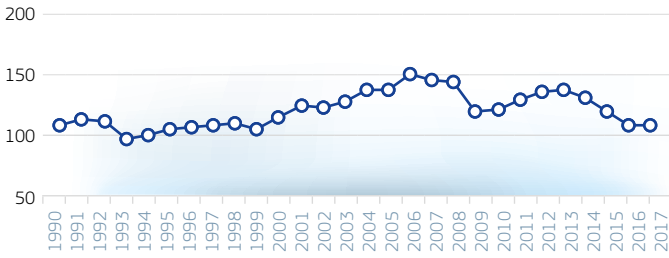
2.2.1 Imports – Solid Fossil Fuels

HARD COAL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	114.2	138.4	120.9	119.0	107.4	107.7
Index 2000	100 %	121 %	106 %	104 %	94 %	94 %
BE	7.46	5.70	4.09	2.78	2.46	2.42
BG	2.25	2.49	1.70	0.70	0.50	0.54
CZ	0.63	0.76	1.41	1.96	2.22	2.43
DK	3.82	3.54	2.67	1.59	1.67	1.79
DE	17.39	23.93	29.33	35.35	37.91	32.13
EE	0.06	0.04	0.05	0.00	0.01	0.02
IE	1.68	1.88	0.95	1.47	1.15	1.22
EL	0.81	0.40	0.40	0.16	0.19	0.23
ES	13.25	14.74	7.71	10.73	7.97	10.98
FR	12.33	12.85	11.30	8.79	8.26	9.69
HR	0.44	0.57	0.64	0.58	0.63	0.35
IT	12.87	15.94	13.81	11.92	10.24	9.13
CY	0.03	0.04	0.01	0.00	0.00	0.01
LV	0.05	0.07	0.11	0.04	0.04	0.04
LT	0.01	0.00	0.11	0.14	0.13	0.16
LU	0.10	0.07	0.06	0.04	0.05	0.04
HU	0.88	1.00	1.28	0.97	0.97	1.09
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	7.74	8.19	7.52	10.63	10.14	9.30
AT	2.32	3.00	2.45	2.10	2.26	2.43
PL	1.01	2.05	8.16	4.91	4.88	7.65
PT	3.97	3.22	1.63	3.20	2.90	3.40
RO	1.65	2.05	0.14	0.08	0.10	0.12
SI	0.01	0.03	0.02	0.01	0.01	0.01
SK	3.15	3.48	2.57	2.53	2.46	2.64
FI	3.21	3.01	3.68	2.28	2.56	2.53
SE	2.14	2.22	2.29	1.92	2.16	1.89
UK	14.90	27.11	16.84	14.14	5.52	5.52

IMPORTS – SOLID FOSSIL FUELS – HARD COAL – 1990-2017 (Mtoe)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.1 Imports – Solid Fossil Fuels

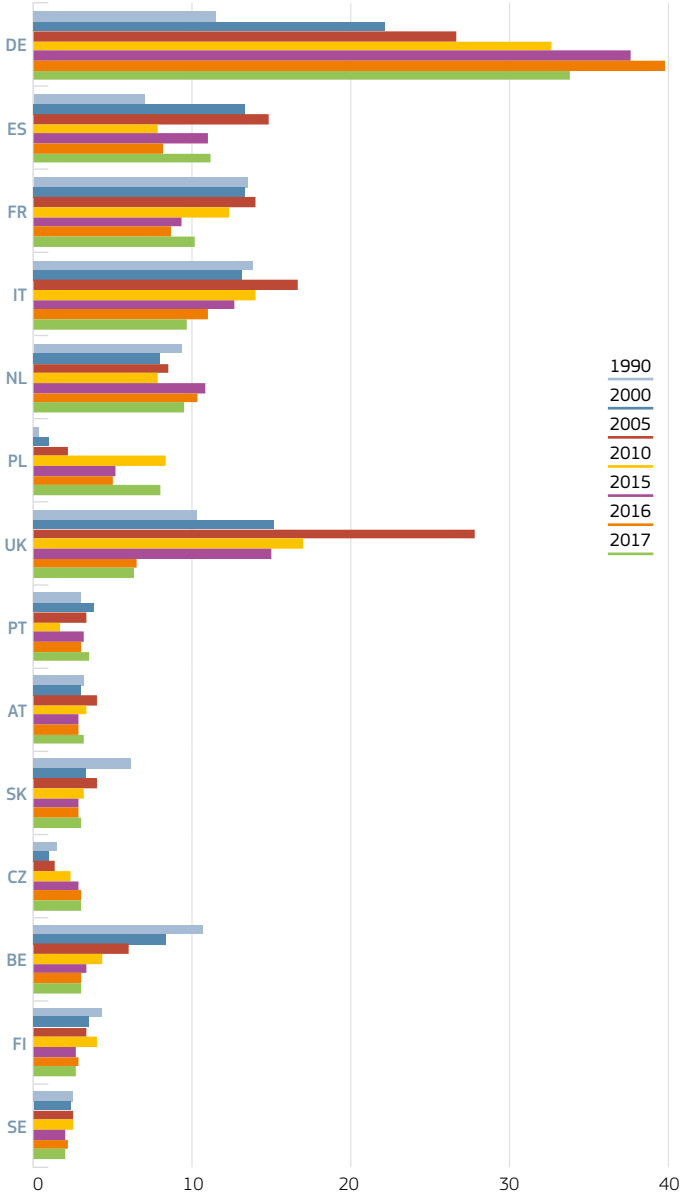
RANKING

Mtoe and %	2000			2017		
Top 10 Ranking	MS	Imports	EU-28 Share	MS	Imports	EU-28 Share
Solid Fossil Fuels						
1	DE	22.2	17.7 %	DE	33.8	29.3 %
2	UK	15.2	12.1 %	ES	11.2	9.7 %
3	FR	13.4	10.7 %	FR	10.1	8.8 %
4	ES	13.3	10.6 %	IT	9.6	8.3 %
5	IT	13.2	10.5 %	NL	9.4	8.2 %
6	BE	8.4	6.7 %	PL	7.9	6.8 %
7	NL	8.1	6.5 %	UK	6.2	5.4 %
8	PT	4.0	3.2 %	PT	3.4	3.0 %
9	DK	3.9	3.1 %	AT	3.1	2.7 %
10	FI	3.6	2.8 %	SK	3.0	2.6 %
Top 5 Total		77.4	61.7 %		74.1	64.2 %
Total EU-28		125.4	100.0 %		115.4	100.0 %
Of which: Hard Coal						
1	DE	17.4	15.2 %	DE	32.1	29.8 %
2	UK	14.9	13.0 %	ES	11.0	10.2 %
3	ES	13.3	11.6 %	FR	9.7	9.0 %
4	IT	12.9	11.3 %	NL	9.3	8.6 %
5	FR	12.3	10.8 %	IT	9.1	8.5 %
6	NL	7.7	6.8 %	PL	7.7	7.1 %
7	BE	7.5	6.5 %	UK	5.5	5.1 %
8	PT	4.0	3.5 %	PT	3.4	3.2 %
9	DK	3.8	3.3 %	SK	2.6	2.4 %
10	FI	3.2	2.8 %	FI	2.5	2.3 %
Top 5 Total		70.7	62.0 %		71.2	66.1 %
Total EU-28		114.2	100.0 %		107.7	100.0 %

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.1 Imports – Solid Fossil Fuels

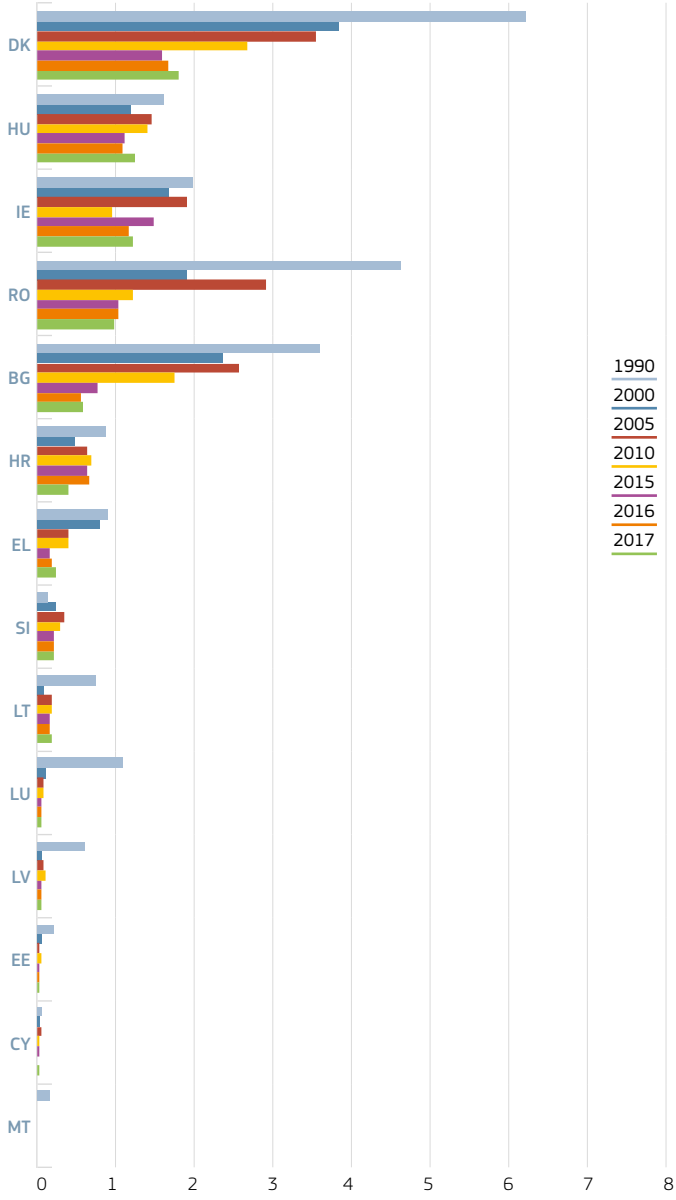
BY MEMBER STATE – TOP 14 IMPORTERS
1990–2017 (Mtoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.1 Imports – Solid Fossil Fuels

BY MEMBER STATE – LEAST 14 IMPORTERS
1990-2017 (Mtoe)



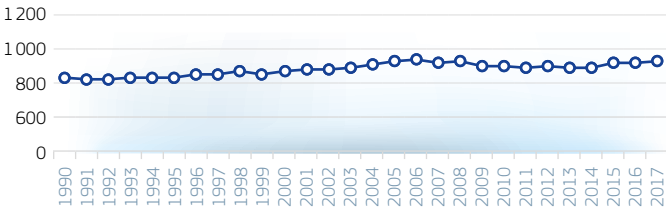
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.2 Imports – Oil and Petroleum Products

TOTAL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	870.2	961.4	920.1	943.8	950.3	968.5
Index 2000	100 %	110 %	106 %	108 %	109 %	111 %
BE	52.91	58.44	56.76	59.85	58.81	63.46
BG	6.10	7.85	7.76	8.99	9.08	9.59
CZ	8.57	10.96	10.61	11.17	10.30	11.79
DK	9.93	8.79	9.52	13.99	13.17	10.63
DE	148.18	150.88	130.79	130.77	132.20	133.91
EE	0.93	1.16	1.16	1.68	1.82	1.89
IE	9.63	10.35	9.21	9.27	9.12	9.40
EL	23.32	25.94	26.46	30.77	32.14	32.85
ES	79.21	88.65	81.34	84.78	86.57	90.54
FR	112.87	123.35	106.30	103.14	99.19	100.71
HR	4.20	5.52	4.97	4.54	4.69	5.23
IT	109.73	108.25	96.89	80.73	81.77	84.96
CY	2.54	2.81	2.93	2.46	2.61	2.65
LV	1.35	2.29	1.94	2.76	2.80	2.59
LT	5.46	9.63	10.25	11.17	11.60	11.33
LU	2.39	3.16	2.86	2.62	2.65	2.77
HU	7.00	9.11	8.53	9.33	9.22	9.74
MT	1.47	1.59	2.38	2.67	2.64	2.84
NL	104.61	125.35	146.70	156.61	156.90	153.57
AT	12.45	15.47	13.96	14.03	13.94	14.04
PL	21.78	24.96	29.22	32.54	32.62	35.11
PT	17.62	19.52	15.39	18.10	17.77	18.39
RO	6.36	9.58	8.11	9.54	10.32	11.05
SI	2.69	2.85	3.29	4.09	4.61	4.68
SK	5.56	6.82	6.85	7.57	7.56	7.58
FI	15.65	16.04	16.31	16.53	18.47	17.96
SE	26.83	28.07	28.34	28.43	31.01	29.59
UK	70.90	83.99	81.22	85.69	86.76	89.60

IMPORTS – OIL AND PETROLEUM PRODUCTS – TOTAL – 1990-2017 (Mtoe) EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

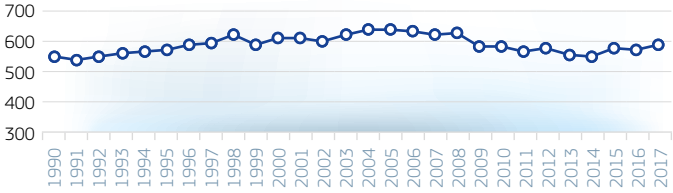
2.2.2 Imports – Oil and Petroleum Products

CRUDE OIL AND NGL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	611.4	642.5	578.8	573.9	565.8	586.2
Index 2000	100 %	105 %	95 %	94 %	93 %	96 %
BE	34.16	31.99	33.48	32.44	32.20	34.41
BG	5.31	6.14	5.52	6.17	6.29	6.97
CZ	5.65	7.76	7.83	7.22	5.39	7.91
DK	3.81	2.79	2.79	4.28	3.94	4.95
DE	104.75	115.21	94.69	92.66	92.63	92.12
EE	0.00	0.00	0.00	0.00	0.00	0.00
IE	3.01	3.34	3.11	3.72	3.27	3.29
EL	19.10	18.41	19.82	21.75	23.10	23.31
ES	58.57	60.68	53.46	65.96	65.39	67.21
FR	85.45	86.00	65.48	59.17	56.89	58.93
HR	3.96	4.05	3.60	2.37	2.56	2.87
IT	83.64	89.30	78.60	62.46	60.88	66.35
CY	1.17	0.00	0.00	0.00	0.00	0.00
LV	0.00	0.00	0.00	0.00	0.00	0.00
LT	4.92	9.08	9.20	8.71	9.42	9.92
LU	0.00	0.00	0.00	0.00	0.00	0.00
HU	5.79	6.57	5.84	6.35	6.04	5.97
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	61.06	62.48	61.05	60.29	61.79	61.23
AT	7.43	7.95	6.90	8.23	7.44	7.33
PL	18.28	18.18	23.03	26.89	24.94	25.02
PT	11.73	13.42	11.48	14.36	14.12	14.59
RO	4.81	8.56	5.76	6.51	7.37	7.68
SI	0.12	0.00	0.00	0.00	0.00	0.00
SK	5.28	5.37	5.48	5.92	5.81	5.61
FI	11.86	10.84	11.44	11.12	12.41	12.66
SE	20.83	20.24	20.00	20.25	19.83	19.19
UK	50.67	54.14	50.21	47.03	44.07	48.64

IMPORTS – OIL AND PETROLEUM PRODUCTS – CRUDE OIL AND NGL – 1990-2017 (Mtoe)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.2 Imports – Oil and Petroleum Products

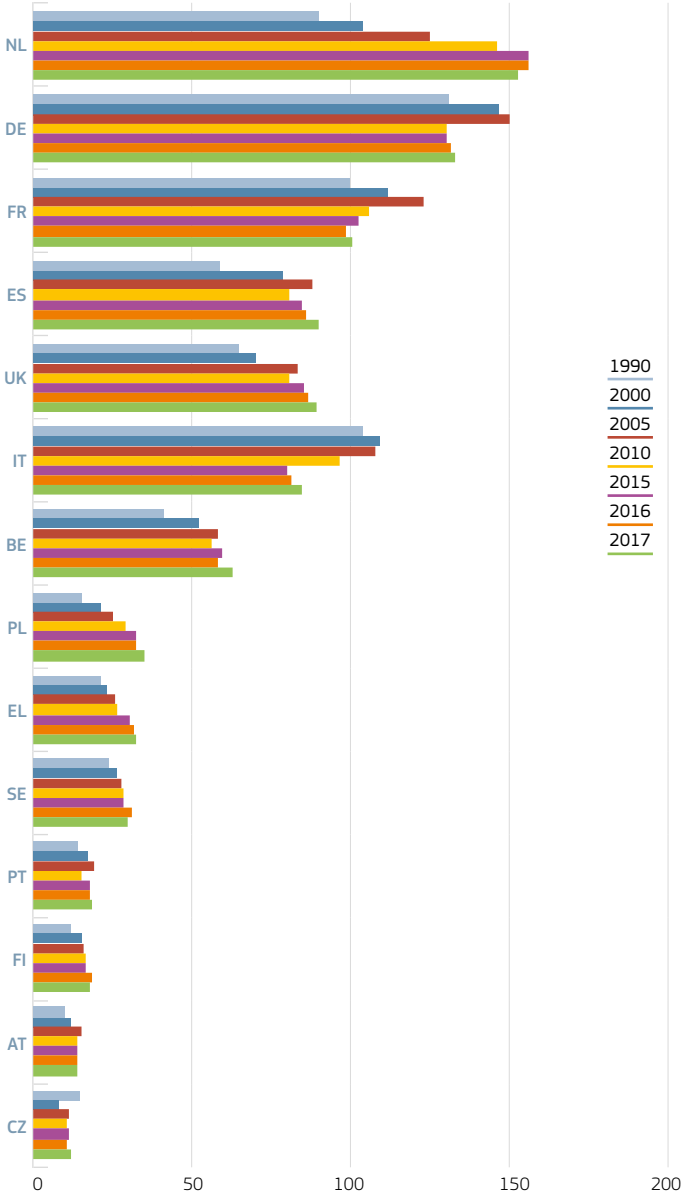
RANKING

Mtoe and %	2000			2017		
Top 10 Ranking	MS	Imports	EU-28 Share	MS	Imports	EU-28 Share
Oil and Petroleum Products						
1	DE	148.2	17.0 %	NL	153.6	15.9 %
2	FR	112.9	13.0 %	DE	133.9	13.8 %
3	IT	109.7	12.6 %	FR	100.7	10.4 %
4	NL	104.6	12.0 %	ES	90.5	9.3 %
5	ES	79.2	9.1 %	UK	89.6	9.3 %
6	UK	70.9	8.1 %	IT	85.0	8.8 %
7	BE	52.9	6.1 %	BE	63.5	6.6 %
8	SE	26.8	3.1 %	PL	35.1	3.6 %
9	EL	23.3	2.7 %	EL	32.8	3.4 %
10	PL	21.8	2.5 %	SE	29.6	3.1 %
Top 5 Total		554.6	63.7 %		568.3	58.7 %
Total		870.2	100.0 %		968.5	100.0 %
Of which: Crude Oil and NGL						
1	DE	104.8	17.1 %	DE	92.1	15.7 %
2	FR	85.4	14.0 %	ES	67.2	11.5 %
3	IT	83.6	13.7 %	IT	66.3	11.3 %
4	NL	61.1	10.0 %	NL	61.2	10.4 %
5	ES	58.6	9.6 %	FR	58.9	10.1 %
6	UK	50.7	8.3 %	UK	48.6	8.3 %
7	BE	34.2	5.6 %	BE	34.4	5.9 %
8	SE	20.8	3.4 %	PL	25.0	4.3 %
9	EL	19.1	3.1 %	EL	23.3	4.0 %
10	PL	18.3	3.0 %	SE	19.2	3.3 %
Top 5 Total		393.5	64.4 %		345.8	59.0 %
Total		611.4	100.0 %		586.2	100.0 %

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.2 Imports – Oil and Petroleum Products

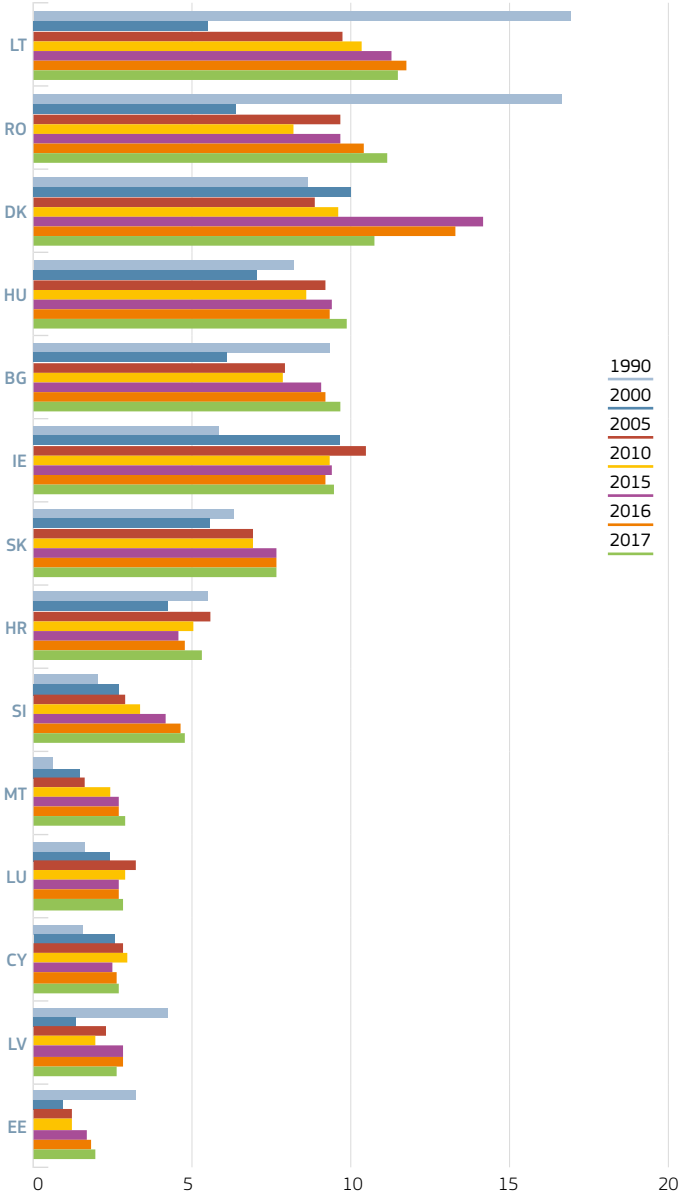
BY MEMBER STATE – TOP 14 IMPORTERS
1990-2017 (Mtoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.2 Imports – Oil and Petroleum Products

BY MEMBER STATE – LEAST 14 IMPORTERS
1990-2017 (Mtoe)



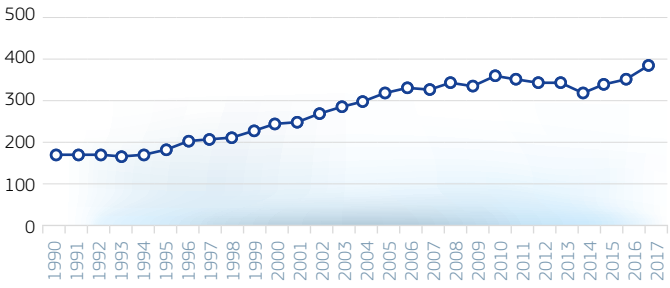
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.3 Imports – Natural Gas

TOTAL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	242.43	323.75	366.96	344.35	357.27	392.14
Index 2000	100 %	134 %	151 %	142 %	147 %	162 %
BE	13.28	14.82	19.55	15.32	14.96	14.90
BG	2.74	2.46	2.13	2.52	2.59	2.72
CZ	7.48	7.60	6.98	6.16	6.72	7.33
DK	0.00	0.00	0.14	0.59	0.61	0.46
DE	61.09	78.90	78.80	85.92	81.61	95.74
EE	0.66	0.80	0.56	0.39	0.43	0.41
IE	2.48	3.01	4.48	3.62	1.70	1.41
EL	1.69	2.33	3.23	2.67	3.46	4.23
ES	15.47	30.25	31.95	28.18	28.19	30.13
FR	36.46	41.62	42.11	39.38	41.23	43.16
HR	0.91	0.93	0.87	0.87	1.05	1.51
IT	47.05	60.16	61.72	50.18	53.47	57.04
CY	0.00	0.00	0.00	0.00	0.00	0.00
LV	1.11	1.43	0.90	1.08	0.92	1.01
LT	2.06	2.49	2.48	2.14	1.89	2.08
LU	0.67	1.18	1.20	0.77	0.71	0.69
HU	7.35	9.81	7.91	5.68	7.23	11.16
MT	0.00	0.00	0.00	0.00	0.00	0.25
NL	12.47	16.44	18.45	29.24	33.06	38.80
AT	5.32	8.04	10.19	9.77	11.86	11.54
PL	6.64	8.57	8.91	9.99	12.19	13.03
PT	2.04	3.89	4.50	4.07	4.26	5.44
RO	2.71	4.19	1.82	0.16	1.18	0.95
SI	0.82	0.93	0.86	0.66	0.70	0.73
SK	5.71	6.05	5.00	3.69	3.62	4.37
FI	3.43	3.61	3.84	2.24	2.06	1.92
SE	0.78	0.84	1.47	0.72	0.82	0.94
UK	2.01	13.42	46.92	38.34	40.76	40.18

IMPORTS – NATURAL GAS – TOTAL – 1990-2017 (Mtoe) EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.3 Imports – Natural Gas

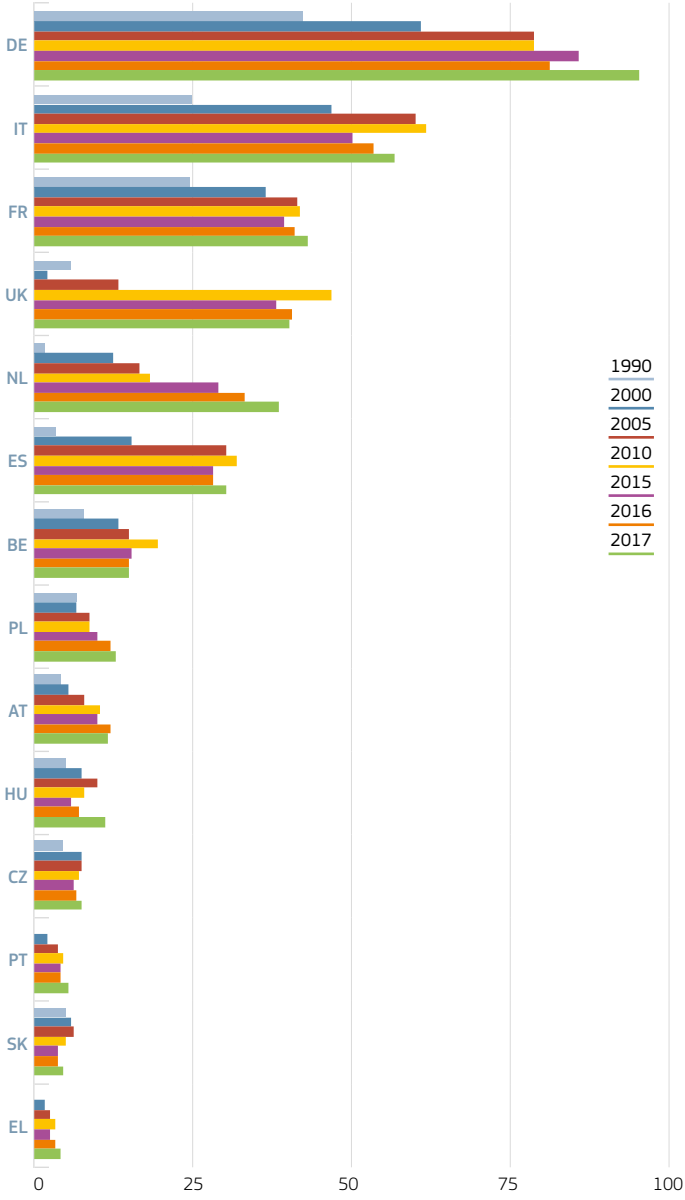
RANKING

Mtoe and %	2000			2017		
EU-28 Ranking	MS	Imports	EU-28 Share	MS	Imports	EU-28 Share
Natural Gas						
1	DE	61.1	25.2 %	DE	95.7	24.4 %
2	IT	47.0	19.4 %	IT	57.0	14.5 %
3	FR	36.5	15.0 %	FR	43.2	11.0 %
4	ES	15.5	6.4 %	UK	40.2	10.2 %
5	BE	13.3	5.5 %	NL	38.8	9.9 %
6	NL	12.5	5.1 %	ES	30.1	7.7 %
7	CZ	7.5	3.1 %	BE	14.9	3.8 %
8	HU	7.3	3.0 %	PL	13.0	3.3 %
9	PL	6.6	2.7 %	AT	11.5	2.9 %
10	SK	5.7	2.4 %	HU	11.2	2.8 %
11	AT	5.3	2.2 %	CZ	7.3	1.9 %
12	FI	3.4	1.4 %	PT	5.4	1.4 %
13	BG	2.7	1.1 %	SK	4.4	1.1 %
14	RO	2.7	1.1 %	EL	4.2	1.1 %
15	IE	2.5	1.0 %	BG	2.7	0.7 %
16	LT	2.1	0.9 %	LT	2.1	0.5 %
17	PT	2.0	0.8 %	FI	1.9	0.5 %
18	UK	2.0	0.8 %	HR	1.5	0.4 %
19	EL	1.7	0.7 %	IE	1.4	0.4 %
20	LV	1.1	0.5 %	LV	1.0	0.3 %
21	HR	0.9	0.4 %	RO	1.0	0.2 %
22	SI	0.8	0.3 %	SE	0.9	0.2 %
23	SE	0.8	0.3 %	SI	0.7	0.2 %
24	LU	0.7	0.3 %	LU	0.7	0.2 %
25	EE	0.7	0.3 %	DK	0.5	0.1 %
26	DK	0.0	0.0 %	EE	0.4	0.1 %
27	CY	0.0	0.0 %	MT	0.3	0.1 %
28	MT	0.0	0.0 %	CY	0.0	0.0 %
Top 5 Total		173.3	71.5 %		274.9	70.1 %
Total		242.4	100.0 %		392.1	100.0 %

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.3 Imports – Natural Gas

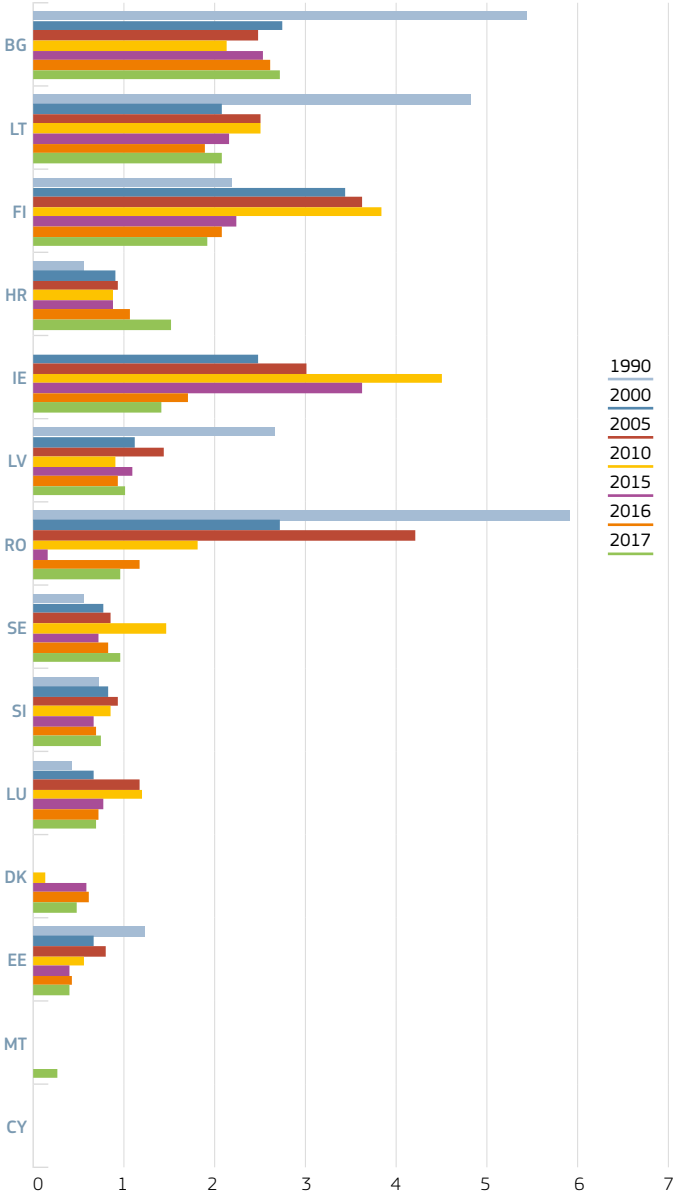
BY MEMBER STATE – TOP 14 IMPORTERS
1990-2017 (Mtoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.3 Imports – Natural Gas

BY MEMBER STATE – LEAST 14 IMPORTERS
1990-2017 (Mtoe)



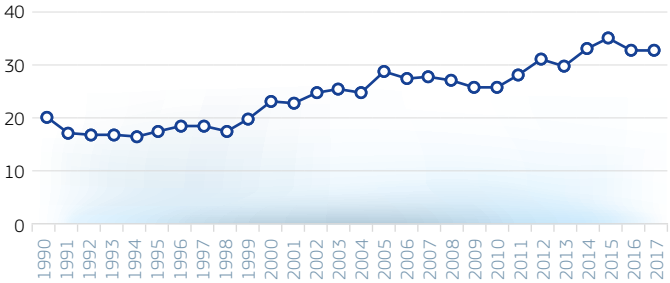
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.4 Imports – Electricity

TOTAL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	22.9	28.8	25.7	35.3	32.9	33.1
Index 2000	100 %	126 %	112 %	154 %	144 %	145 %
BE	1.00	1.23	1.07	2.04	1.26	1.22
BG	0.08	0.07	0.10	0.37	0.39	0.32
CZ	0.75	1.06	0.57	1.39	1.19	1.30
DK	0.72	1.11	0.91	1.35	1.29	1.31
DE	3.88	4.89	3.69	3.18	2.44	2.39
EE	0.03	0.03	0.09	0.47	0.31	0.20
IE	0.01	0.18	0.07	0.15	0.07	0.10
EL	0.15	0.48	0.73	0.95	0.85	0.75
ES	1.05	0.88	0.45	1.29	1.88	2.04
FR	0.32	0.69	1.67	0.86	1.71	1.82
HR	0.38	0.75	1.07	1.13	1.07	1.05
IT	3.85	4.32	3.95	4.37	3.71	3.69
CY	0.00	0.00	0.00	0.00	0.00	0.00
LV	0.18	0.25	0.34	0.45	0.42	0.35
LT	0.44	0.49	0.70	0.68	0.95	1.03
LU	0.55	0.55	0.63	0.65	0.66	0.65
HU	0.82	1.34	0.85	1.71	1.54	1.70
MT	0.00	0.00	0.00	0.09	0.13	0.08
NL	1.97	2.04	1.34	2.64	2.09	1.93
AT	1.19	1.75	1.71	2.53	2.27	2.52
PL	0.28	0.43	0.54	1.24	1.21	1.14
PT	0.40	0.83	0.50	0.69	0.40	0.47
RO	0.07	0.20	0.07	0.39	0.36	0.42
SI	0.36	0.80	0.74	0.78	0.72	0.79
SK	0.51	0.69	0.63	1.29	1.14	1.34
FI	1.05	1.54	1.35	1.85	1.90	1.91
SE	1.57	1.25	1.28	0.80	1.23	1.02
UK	1.23	0.96	0.61	1.97	1.72	1.56

IMPORTS – ELECTRICITY – TOTAL – 1990-2017 (Mtoe) EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.4 Imports – Electricity

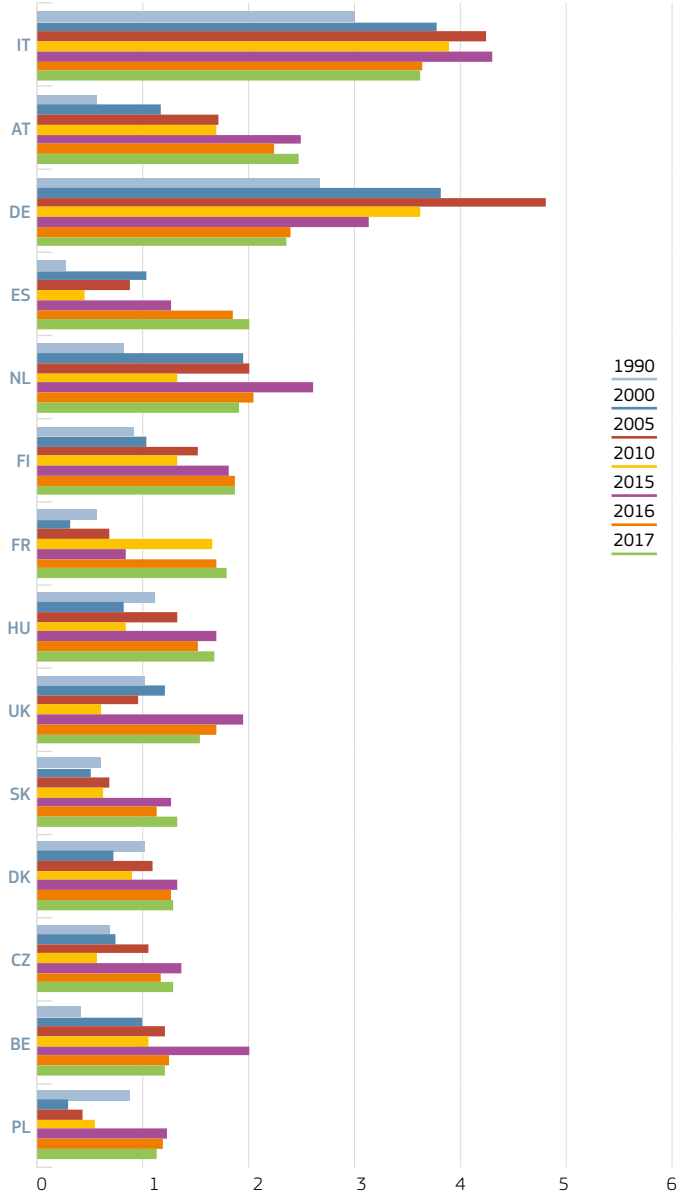
RANKING

Mtoe and %	2000			2017		
EU-28 Ranking	MS	Imports	EU-28 Share	MS	Imports	EU-28 Share
Electricity						
1	DE	3.88	17.0 %	IT	3.69	11.1 %
2	IT	3.85	16.8 %	AT	2.52	7.6 %
3	NL	1.97	8.6 %	DE	2.39	7.2 %
4	SE	1.57	6.9 %	ES	2.04	6.2 %
5	UK	1.23	5.4 %	NL	1.93	5.8 %
6	AT	1.19	5.2 %	FI	1.91	5.8 %
7	ES	1.05	4.6 %	FR	1.82	5.5 %
8	FI	1.05	4.6 %	HU	1.70	5.1 %
9	BE	1.00	4.4 %	UK	1.56	4.7 %
10	HU	0.82	3.6 %	SK	1.34	4.0 %
11	CZ	0.75	3.3 %	DK	1.31	4.0 %
12	DK	0.72	3.2 %	CZ	1.30	3.9 %
13	LU	0.55	2.4 %	BE	1.22	3.7 %
14	SK	0.51	2.2 %	PL	1.14	3.4 %
15	LT	0.44	1.9 %	HR	1.05	3.2 %
16	PT	0.40	1.8 %	LT	1.03	3.1 %
17	HR	0.38	1.6 %	SE	1.02	3.1 %
18	SI	0.36	1.6 %	SI	0.79	2.4 %
19	FR	0.32	1.4 %	EL	0.75	2.3 %
20	PL	0.28	1.2 %	LU	0.65	2.0 %
21	LV	0.18	0.8 %	PT	0.47	1.4 %
22	EL	0.15	0.6 %	RO	0.42	1.3 %
23	BG	0.08	0.4 %	LV	0.35	1.1 %
24	RO	0.07	0.3 %	BG	0.32	1.0 %
25	EE	0.03	0.1 %	EE	0.20	0.6 %
26	IE	0.01	0.1 %	IE	0.10	0.3 %
27	CY	0.00	0.0 %	MT	0.08	0.2 %
28	MT	0.00	0.0 %	CY	0.00	0.0 %
Top 5 Total		12.5	54.7 %		12.6	38.0 %
Total		22.9	100.0 %		33.1	100.0 %

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.4 Imports – Electricity

BY MEMBER STATE – TOP 14 IMPORTERS
1990-2017 (Mtoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.2.4 Imports – Electricity

BY MEMBER STATE – LEAST 14 IMPORTERS
1990–2017 (Mtoe)

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

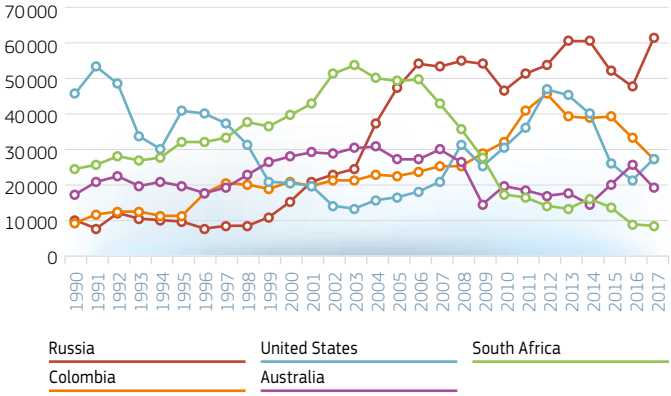
2.2.5 Imports by Country of Origin

EU-28 – HARD COAL

TOP 15 EXTRA-EU – (ORDERED BY 2017 VOLUME)

kton	2000	2005	2010	2015	2016	2017
Russia	14670	46973	46371	51934	47544	61261
Colombia	20215	21651	31731	38721	32664	26626
United States	19723	15572	29870	25637	20455	26582
Australia	27678	26892	19205	19460	25226	18546
South Africa	39222	49206	16525	12980	8151	7644
Indonesia	7242	13996	9322	7005	5189	5332
Canada	6308	6623	3595	3041	3622	3991
Not specified	5193	3356	7594	11559	7895	2790
Mozambique	107	0	0	946	1180	1931
Kazakhstan	0	932	332	1046	1538	1113
Ukraine	2058	4209	3041	817	552	513
Chile	0	0	0	98	45	370
Venezuela	3536	1988	659	337	81	232
Norway	774	1045	1016	571	455	208
China including Hong Kong	1722	520	67	95	55	136
Other extra-EU	527	151	116	214	-21	163
kton						
Extra-EU	148975	193114	169443	174460	154630	157439
Intra-EU	30066	25650	21599	14574	14124	14762
Total Intra-EU and Extra-EU	179041	218764	191042	189034	168754	172201

EU-28 – HARD COAL – IMPORTS FROM EXTRA-EU (1990-2017) TOP 5 ORDERED BY 2017 VOLUME (kton)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

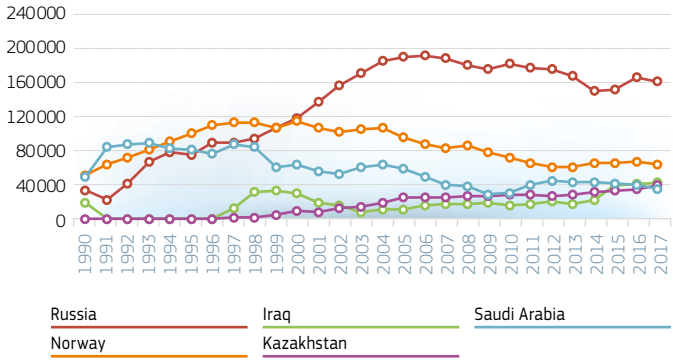
2.2.5 Imports by Country of Origin

EU-28 – CRUDE OIL AND NGL

TOP 15 EXTRA-EU – (ORDERED BY 2017 VOLUME)

kton	2000	2005	2010	2015	2016	2017
Russia	120160	191427	182844	153914	166887	163430
Norway	115801	97566	73347	66773	68136	65102
Iraq	31317	12290	16945	40350	42990	43952
Kazakhstan	9993	26349	29654	35185	35665	40188
Saudi Arabia	65089	60740	30759	41728	40516	35643
Nigeria	22530	18617	21779	44191	29676	34493
Iran	35460	35547	29671	0	14975	28414
Libya	45881	50665	53715	12816	12690	28143
Azerbaijan	3712	7255	22922	27297	23694	24201
Algeria	21129	22591	8160	24403	16236	17135
Mexico	9770	10647	6782	12980	13461	11530
United States	0	0	28	1920	4849	10395
Kuwait	9741	7618	3420	6649	7369	8819
Brazil	133	2658	4826	3009	4654	6188
Angola	3861	7065	8479	22128	13198	5525
Other extra-EU	48029	32980	37433	41681	34214	24375
kton						
Extra-EU	542607	584015	530764	535025	529208	547532
Intra-EU	62250	48062	39480	30266	28143	29828
Total Intra-EU and Extra-EU	604857	632077	570244	565291	557351	577359
Mio barrels						
Extra-EU	3978	4282	3891	3922	3880	4014
Intra-EU	456	352	289	222	206	219
Total Intra-EU and Extra-EU	4434	4634	4180	4144	4086	4233

EU-28 – CRUDE OIL AND NGL – IMPORTS FROM EXTRA-EU (1990-2017) TOP 5 ORDERED BY 2017 VOLUME (kton)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

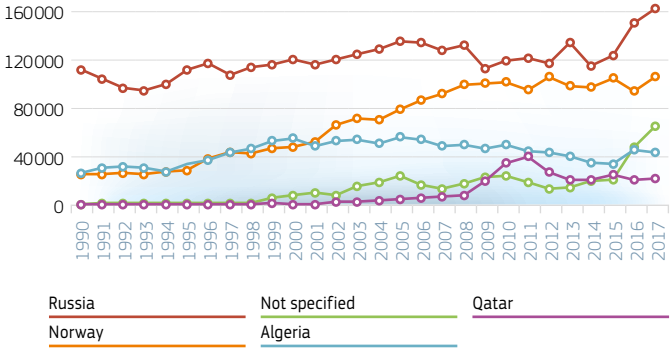
2.2.5 Imports by Country of Origin

EU-28 – NATURAL GAS

TOP 8 EXTRA-EU SUPPLIERS – (ORDERED BY 2017 VOLUME)

TJ (GCV)	2000	2005	2010	2015	2016	2017
Russia	4582197	5207617	4555369	4779615	5832610	6285659
Norway	1921076	3040082	3984437	4064455	3669894	4112605
Not specified	334765	937384	957962	808806	1851491	2385472
Algeria	2203075	2256826	1986974	1369376	1825182	1731246
Qatar	12443	195713	1383263	972668	829672	842628
Nigeria	172020	436319	576236	250982	294137	406607
Libya	33442	209499	381660	269748	184404	176820
Peru	0	0	3254	42295	76773	150904
Other extra-EU	85416	505352	437988	103945	77088	169509
Extra-EU	9344434	12788792	14267143	12661888	14641252	16261448
Intra-EU	1933308	2272266	2803992	3357170	1978991	1980742
Total Intra-EU and Extra-EU	11277742	15061058	17071135	16019058	16620242	18242190
Mio m³						
Russia	120699	136283	119665	124347	151790	163200
Norway	47879	79256	102695	105384	95085	107256
Not specified	8126	23866	24111	20792	47655	65607
Algeria	55513	57004	50360	34217	46119	43827
Qatar	309	4859	34996	24752	20930	21399
Nigeria	4385	10586	14025	6213	7268	10009
Libya	830	5445	9980	7080	4840	4641
Peru	0	0	82	1042	1903	3730
Other extra-EU	2174	12713	10919	2650	1951	4282
Extra-EU	239915	330012	366833	326476	377540	423951
Intra-EU	54625	60169	74336	88369	53246	53871
Total Intra-EU and Extra-EU	294540	390181	441169	414845	430786	477823

EU-28 – NATURAL GAS – IMPORTS FROM EXTRA-EU (1990-2017) TOP 5 BY 2017 VOLUME (Mio m³)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.3 Energy Import Dependency

2.3.1 Import Dependency – All Fuels *

(%)

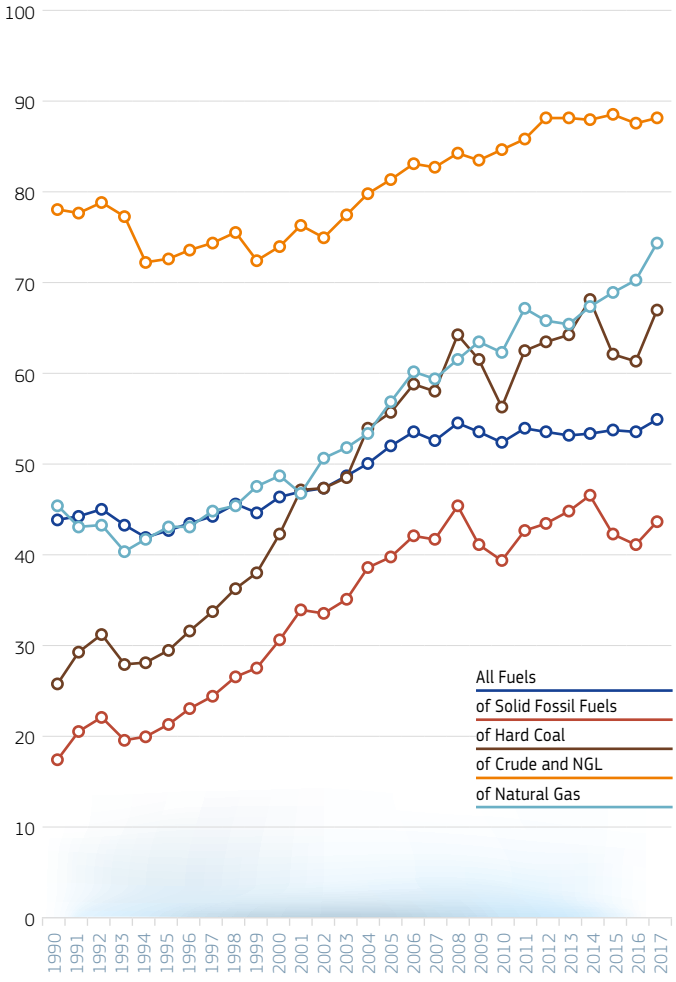
Imports from Extra-EU	2000	2005	2010	2015	2016	2017
EU-28	46.6	52.3	52.7	53.9	53.8	55.1
Index 2000	100.0	112.3	113.1	115.7	115.5	118.4
Intra and Extra-EU Imports						
BE	78.2	80.1	78.0	83.9	75.4	74.8
BG	46.4	47.3	40.2	36.5	38.6	39.5
CZ	22.7	27.8	25.3	31.9	32.6	37.2
DK	-35.9	-50.9	-16.3	13.0	13.4	11.7
DE	59.4	60.9	60.5	62.2	63.7	63.9
EE	33.8	28.2	15.3	9.6	7.9	4.1
IE	85.4	89.6	87.2	88.9	69.1	67.1
EL	69.0	68.2	68.6	71.0	72.9	71.1
ES	76.9	81.6	77.2	72.9	71.5	73.9
FR	51.2	51.7	48.7	46.0	47.4	48.6
HR	48.5	52.6	46.8	48.9	48.5	53.3
IT	86.5	83.3	82.6	77.0	77.7	77.0
CY	98.6	100.7	100.8	97.7	96.2	96.3
LV	61.0	63.8	45.5	51.2	47.2	44.1
LT	58.9	56.6	81.9	78.4	77.6	75.6
LU	99.6	97.4	97.0	95.9	96.1	95.4
HU	55.0	62.2	56.9	53.9	55.8	62.6
MT	100.2	100.0	99.0	97.3	101.1	102.9
NL	38.3	37.8	28.3	48.4	45.9	51.8
AT	65.6	72.1	63.7	60.6	62.5	64.4
PL	10.7	17.7	31.6	29.9	30.8	38.3
PT	85.3	88.6	75.2	78.2	74.0	79.9
RO	21.9	27.2	21.2	16.4	21.6	23.1
SI	52.8	52.5	49.5	49.7	49.3	50.4
SK	65.1	66.0	64.4	60.1	60.6	64.8
FI	55.6	54.7	48.9	48.2	46.0	44.0
SE	39.3	37.9	37.8	29.3	32.3	26.6
UK	-17.1	13.4	29.0	37.5	35.7	35.3

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

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

2.3.2 Import Dependency – By Fuel

EU-28 – IMPORTS FROM EXTRA-EU – 1990-2017 (%)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.3.3 Import Dependency – Solid Fossil Fuels*
(%)

Imports from Extra-EU	2000	2005	2010	2015	2016	2017
EU-28	31.0	40.1	39.6	42.7	41.5	43.9
Index 2000	100.0	129.6	127.9	137.8	133.9	141.8
Intra and Extra-EU Imports						
BE	91.2	101.3	97.5	96.9	94.6	95.4
BG	35.2	36.9	24.5	11.2	9.8	9.4
CZ	-22.0	-16.2	-15.3	-1.8	-1.3	3.0
DK	94.9	94.4	69.4	85.0	84.6	115.9
DE	25.6	31.7	40.0	45.4	49.6	45.3
EE	125.2	88.4	132.6	-6.8	70.1	87.2
IE	93.3	100.8	77.7	103.1	83.6	111.0
EL	8.5	4.1	5.1	2.8	4.4	4.8
ES	61.3	70.3	92.8	75.4	71.7	85.6
FR	86.3	94.4	101.0	98.4	93.7	101.9
HR	110.9	91.3	102.5	103.0	102.0	100.7
IT	104.6	99.4	100.8	100.2	97.5	100.2
CY	102.0	121.1	65.6	100.0	0.0	326.4
LV	84.1	97.7	106.5	85.2	85.9	88.5
LT	101.7	101.0	95.7	90.6	91.8	107.8
LU	100.0	100.0	100.0	100.0	100.0	100.0
HU	28.1	42.5	41.9	33.7	32.5	44.1
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	99.4	101.3	101.4	96.5	99.6	100.8
AT	83.9	100.0	100.0	86.5	96.0	99.8
PL	-29.0	-23.8	-5.0	-11.4	-11.7	-3.0
PT	102.9	96.3	98.3	98.5	102.3	105.6
RO	25.5	33.2	16.9	16.7	19.5	18.4
SI	18.8	21.0	19.3	19.1	17.3	17.4
SK	80.2	88.3	75.7	84.5	83.3	87.8
FI	97.6	102.0	86.3	92.4	85.7	91.6
SE	105.4	105.9	113.7	97.4	115.7	101.3
UK	39.6	72.3	50.3	59.2	49.2	59.2

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

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

2.3.4 Import Dependency – Hard Coal*

(%)

Imports from Extra-EU	2000	2005	2010	2015	2016	2017
EU-28	42.6	55.8	56.5	62.3	61.4	67.0
Index 2000	100.0	130.9	132.6	146.1	144.1	157.3
Intra and Extra-EU Imports						
BE	93.5	102.0	100.0	96.1	94.0	94.4
BG	101.0	94.0	86.0	96.1	83.6	96.7
CZ	-56.4	-49.4	-53.9	-8.6	-3.8	17.8
DK	94.8	94.3	69.3	85.0	84.6	116.0
DE	39.2	57.7	73.2	87.6	94.7	93.4
EE	116.1	96.4	118.3	24.1	85.2	93.8
IE	93.1	100.8	77.5	103.1	83.5	111.4
EL	105.8	112.4	100.5	91.5	93.7	109.3
ES	71.5	79.1	95.7	79.6	74.3	89.0
FR	87.2	92.8	100.6	97.0	92.9	100.4
HR	112.8	90.6	102.7	102.4	102.5	100.9
IT	105.7	99.7	101.4	100.5	98.0	100.2
CY	102.0	121.2	65.4	100.0	0.0	326.4
LV	82.5	96.7	106.6	85.2	85.9	88.5
LT	100.0	100.0	109.7	90.1	91.5	109.0
LU	100.0	100.0	100.0	100.0	100.0	100.0
HU	96.4	108.3	99.2	99.2	99.0	101.7
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	98.9	100.0	101.6	96.5	99.2	101.4
AT	91.6	107.1	97.4	84.2	96.6	106.1
PL	-29.9	-21.3	3.7	-2.4	-2.1	7.2
PT	103.4	96.3	98.3	98.5	102.3	105.6
RO	96.3	103.1	88.4	96.9	115.4	102.2
SI	118.2	100.0	135.3	124.2	118.2	100.7
SK	103.8	105.2	91.9	97.5	97.2	100.1
FI	97.7	102.6	85.5	89.8	83.4	90.3
SE	107.7	104.3	115.2	99.6	116.8	105.3
UK	39.4	71.6	50.5	58.0	45.0	56.1

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

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.3.5 Import Dependency – Oil and Petroleum Products*

(%)

Imports from Extra-EU	2000	2005	2010	2015	2016	2017
EU-28	75.3	82.3	84.7	89.2	87.1	86.7
Index 2000	100.0	109.2	112.4	118.4	115.6	115.1
Intra and Extra-EU Imports						
BE	100.2	100.8	101.3	103.8	98.7	97.1
BG	96.0	102.5	101.9	101.8	100.5	101.5
CZ	95.3	97.5	96.5	97.8	97.3	97.1
DK	-84.1	-104.4	-44.3	5.3	2.5	-3.9
DE	94.6	97.3	96.8	96.5	96.4	95.8
EE	101.5	98.8	95.8	101.6	101.5	115.2
IE	98.8	100.0	97.5	104.6	99.1	98.3
EL	100.2	97.7	98.6	105.5	99.6	98.0
ES	101.0	101.2	99.9	102.1	99.2	97.9
FR	99.5	99.5	98.0	98.7	97.7	99.2
HR	61.0	79.4	80.6	81.4	79.0	77.1
IT	96.1	91.8	93.6	89.4	90.9	91.5
CY	100.3	102.3	104.2	102.8	100.7	100.9
LV	94.9	102.2	94.4	102.9	109.1	100.1
LT	101.0	93.4	98.7	100.7	97.9	96.3
LU	102.1	99.4	99.3	99.3	100.0	99.7
HU	75.9	81.6	85.3	93.7	89.7	86.6
MT	100.2	100.0	99.2	97.9	101.8	104.2
NL	97.4	96.2	94.2	101.3	95.2	90.5
AT	89.1	92.1	90.4	93.8	91.8	92.2
PL	99.7	98.4	98.2	99.5	95.0	98.6
PT	99.4	102.3	97.5	101.7	98.7	100.2
RO	34.4	37.5	51.8	53.4	56.5	60.6
SI	101.5	101.2	99.2	99.6	100.3	103.3
SK	92.5	97.3	98.4	100.6	102.0	97.5
FI	104.1	99.1	92.3	109.6	97.6	96.4
SE	100.8	103.9	93.7	103.5	96.2	84.5
UK	-54.4	-3.1	14.1	36.7	34.0	34.7

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

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

2.3.6 Import Dependency – Crude and NGL*

(%)

Imports from Extra-EU	2000	2005	2010	2015	2016	2017
EU-28	73.9	81.3	84.5	88.5	87.4	88.1
Index 2000	100.0	110.0	114.4	119.7	118.3	119.2
Intra and Extra-EU Imports						
BE	100.2	99.5	99.9	100.0	99.7	100.1
BG	98.7	97.7	99.1	100.5	99.0	101.1
CZ	95.3	99.3	97.5	98.4	97.7	99.1
DK	-120.5	-141.3	-68.8	-4.9	-0.6	9.7
DE	93.8	97.3	97.3	97.1	96.7	97.4
EE	0.0	0.0	0.0	0.0	0.0	0.0
IE	89.8	98.9	101.6	108.2	100.1	91.7
EL	99.5	95.2	99.5	101.5	100.5	97.8
ES	100.6	100.1	99.3	99.5	98.7	99.9
FR	98.5	98.2	98.2	98.8	97.1	99.3
HR	72.1	78.9	82.3	79.6	76.4	79.3
IT	95.1	94.0	94.5	92.2	93.3	93.6
CY	98.5	0.0	0.0	0.0	0.0	0.0
LV	0.0	0.0	0.0	0.0	0.0	0.0
LT	94.5	95.3	99.0	99.5	99.4	99.5
LU	0.0	0.0	0.0	0.0	0.0	0.0
HU	78.5	81.4	85.3	91.4	86.2	86.0
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	96.7	96.7	97.6	98.0	98.8	97.6
AT	87.0	88.8	86.5	91.1	89.5	89.1
PL	99.1	97.3	98.4	100.5	94.5	97.2
PT	99.0	100.2	98.8	100.9	98.7	100.4
RO	43.5	61.3	56.5	62.3	65.0	66.7
SI	87.2	0.0	0.0	0.0	0.0	0.0
SK	97.6	97.7	99.9	99.3	100.7	99.5
FI	101.5	97.5	101.1	104.2	100.5	98.9
SE	100.6	100.4	99.0	100.7	100.0	97.2
UK	-47.9	-0.2	12.8	22.9	16.2	17.4

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

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.3.7 Import Dependency – Natural Gas*
(%)

Imports from Extra-EU	2000	2005	2010	2015	2016	2017
EU-28	48.9	57.1	62.5	69.0	70.4	74.3
Index 2000	100.0	116.8	127.9	141.2	144.1	152.1
Intra and Extra-EU Imports						
BE	99.3	100.5	100.3	99.3	100.6	98.4
BG	93.5	87.7	92.6	97.0	96.5	97.6
CZ	99.8	97.8	84.8	95.1	95.7	101.9
DK	-64.8	-113.9	-68.3	-48.2	-44.6	-56.2
DE	79.1	79.6	81.2	90.1	88.6	91.4
EE	100.0	100.0	100.0	100.0	100.0	100.0
IE	72.1	86.1	95.3	96.3	40.0	32.7
EL	99.1	99.1	99.9	99.9	99.2	100.5
ES	101.6	101.4	99.4	96.9	98.7	101.3
FR	100.0	99.3	92.8	98.5	99.0	98.0
HR	41.0	23.7	18.1	27.1	33.5	53.8
IT	81.1	84.7	90.5	90.4	91.8	92.3
CY	0.0	0.0	0.0	0.0	0.0	0.0
LV	101.9	105.6	61.8	98.6	82.9	102.0
LT	100.0	100.7	99.7	99.7	100.6	99.3
LU	100.0	100.0	100.0	100.0	100.0	100.0
HU	75.4	81.1	78.7	69.7	78.9	96.2
MT	0.0	0.0	0.0	0.0	0.0	105.2
NL	-49.1	-59.3	-60.4	-36.7	-32.8	-4.4
AT	80.6	88.5	75.3	72.6	85.8	90.2
PL	66.3	69.7	69.3	72.2	78.4	77.8
PT	100.3	103.8	100.4	100.4	98.6	100.4
RO	19.8	30.1	16.8	1.8	13.0	9.7
SI	99.3	99.6	99.3	99.6	99.4	99.0
SK	98.8	97.5	99.9	95.1	92.8	105.6
FI	100.0	100.0	100.0	100.0	100.0	99.1
SE	100.0	100.0	100.0	100.0	100.0	102.1
UK	-10.7	7.0	40.0	42.8	46.5	45.5

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

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

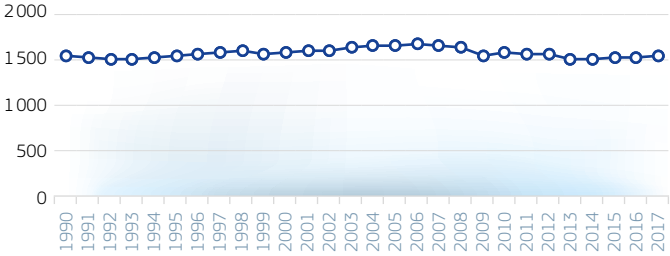
2.4 Energy Transformation

2.4.1 Transformation Input – All Fuels

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	1 584.2	1 663.9	1 584.5	1 520.0	1 510.0	1 528.4
Index 2000	100 %	105 %	100 %	96 %	95 %	96 %
BE	68.63	67.24	68.48	60.75	62.99	65.13
BG	18.61	20.99	18.78	19.68	19.45	20.11
CZ	31.82	37.02	37.45	34.65	32.36	34.93
DK	18.07	16.33	16.67	17.86	19.06	17.87
DE	292.34	313.05	290.97	280.80	282.10	280.26
EE	3.51	3.84	4.83	4.61	4.78	5.25
IE	8.59	8.85	8.53	8.55	8.70	8.68
EL	35.80	35.59	35.28	40.12	41.62	44.42
ES	115.66	127.33	122.35	133.65	131.20	136.36
FR	234.01	242.41	227.60	212.91	206.11	207.05
HR	7.71	7.88	6.78	5.40	5.99	6.09
IT	163.61	176.39	161.45	136.66	134.47	139.37
CY	2.08	1.09	1.21	0.97	1.06	1.07
LV	1.39	1.66	1.49	1.39	1.53	1.62
LT	9.28	14.58	12.28	11.59	12.44	12.59
LU	0.20	0.69	0.74	0.43	0.34	0.36
HU	19.87	21.66	23.01	18.92	18.19	18.08
MT	0.50	0.61	0.58	0.28	0.19	0.31
NL	104.43	111.74	113.01	118.04	119.57	120.39
AT	20.35	22.52	22.57	23.07	22.43	23.10
PL	72.87	72.56	79.71	83.13	82.26	82.27
PT	20.97	22.98	20.72	25.25	25.59	26.87
RO	29.11	32.20	26.03	26.06	25.54	26.10
SI	3.11	3.41	3.41	2.95	3.10	3.23
SK	16.91	18.73	17.34	17.09	16.80	16.99
FI	32.31	33.98	38.69	32.79	35.45	35.43
SE	52.05	55.51	54.86	56.92	56.99	57.07
UK	200.45	193.08	169.71	145.46	139.71	137.37

TRANSFORMATION INPUT – ALL FUELS – 1990-2017 (Mtoe)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.4.2 Transformation Input – By Fuel

	2017						
Mtoe	Transformation Input	Solid Fossil Fuels	Oil & Petroleum Products	Natural Gas	Nuclear	Renewables & Biofuels	Waste, Non-Renewable
EU-28	1 528.4	231.5	786.3	125.3	210.7	144.6	10.7
Share (%)	100.0 %	15.1 %	51.4 %	8.2 %	13.8 %	9.5 %	0.7 %
BE	65.13	3.23	43.27	3.60	11.00	2.64	0.51
BG	20.11	6.04	8.23	1.05	3.94	0.75	0.00
CZ	34.93	15.16	8.58	1.40	7.02	1.93	0.06
DK	17.87	1.45	10.89	0.76	0.00	4.35	0.40
DE	280.26	75.56	131.12	18.31	19.65	29.01	3.39
EE	5.25	0.00	0.13	0.17	0.00	0.59	0.05
IE	8.68	0.87	3.65	2.47	0.00	0.99	0.06
EL	44.42	4.60	35.76	2.61	0.00	1.43	0.00
ES	136.36	13.64	84.79	9.93	15.13	12.03	0.25
FR	207.05	10.58	67.73	7.29	103.86	15.02	1.34
HR	6.09	0.32	4.19	0.81	0.00	0.75	0.00
IT	139.37	10.22	83.57	25.23	0.00	18.58	0.89
CY	1.07	0.00	1.02	0.00	0.00	0.05	0.00
LV	1.62	0.00	0.00	0.64	0.00	0.97	0.00
LT	12.59	0.00	11.12	0.34	0.00	0.96	0.03
LU	0.36	0.00	0.00	0.07	0.00	0.10	0.02
HU	18.08	2.67	7.91	2.21	4.08	0.96	0.09
MT	0.31	0.00	0.05	0.23	0.00	0.02	0.00
NL	120.39	10.45	94.40	9.78	0.79	3.19	0.82
AT	23.10	3.70	9.37	2.44	0.00	6.22	0.41
PL	82.27	45.28	29.59	2.59	0.00	3.66	0.15
PT	26.87	3.24	16.81	3.59	0.00	2.94	0.10
RO	26.10	4.72	12.85	3.04	2.91	2.52	0.00
SI	3.23	1.09	0.01	0.12	1.49	0.48	0.01
SK	16.99	4.00	6.88	0.83	3.99	1.17	0.02
FI	35.43	3.33	18.24	1.14	5.39	5.77	0.24
SE	57.07	2.23	23.26	0.11	16.35	13.70	0.82
UK	137.37	9.16	72.93	24.47	15.12	13.79	1.04

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.4.3 Transformation Input – By Sector

Mtoe	2017 Total, All Sectors	Electricity Producers	Heat Producers	CHP Producers	Refineries, Petroleum & Sub-Products	Other Transformation Input
EU-28	1 528.4	474.4	21.5	166.0	769.4	93.3
Share (%)	100.0 %	31.0 %	1.4 %	10.9 %	50.3 %	6.1 %
BE	65.13	15.47	0.00	2.60	43.23	3.70
BG	20.11	9.55	0.25	1.35	8.06	0.81
CZ	34.93	9.45	0.72	11.50	8.53	4.60
DK	17.87	1.34	0.97	4.39	10.80	0.37
DE	280.26	92.23	4.08	28.70	129.39	25.15
EE	5.25	2.59	0.42	0.52	0.09	1.64
IE	8.68	4.46	0.00	0.30	3.62	0.26
EL	44.42	7.55	0.00	2.34	34.34	0.18
ES	136.36	46.12	0.00	4.17	81.55	4.22
FR	207.05	121.63	2.16	5.90	66.05	10.70
HR	6.09	0.89	0.05	0.89	4.13	0.10
IT	139.37	31.12	0.39	24.18	79.41	4.06
CY	1.07	1.05	0.00	0.01	0.00	0.01
LV	1.62	0.39	0.45	0.75	0.00	0.03
LT	12.59	0.24	0.61	0.52	11.09	0.06
LU	0.36	0.07	0.01	0.11	0.00	0.01
HU	18.08	4.38	0.77	3.38	7.88	1.67
MT	0.31	0.30	0.00	0.00	0.00	0.01
NL	120.39	12.28	0.40	9.02	93.77	4.93
AT	23.10	6.22	1.07	2.63	9.11	3.59
PL	82.27	2.38	2.79	35.99	29.17	11.87
PT	26.87	7.98	0.00	1.63	16.56	0.52
RO	26.10	9.42	0.46	3.02	12.56	0.60
SI	3.23	1.85	0.05	1.26	0.00	0.04
SK	16.99	1.57	0.29	5.03	6.66	3.41
FI	35.43	7.93	1.55	5.56	17.99	2.40
SE	57.07	23.49	1.44	5.69	23.15	3.28
UK	137.37	52.48	2.55	4.57	72.32	5.12

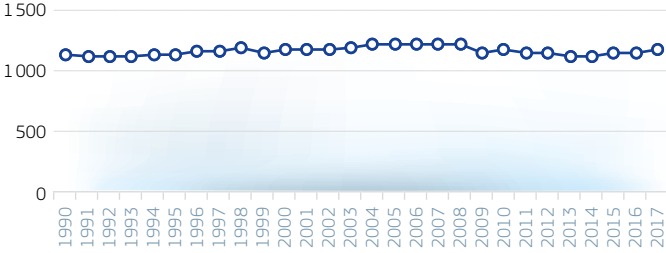
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.4.4 Transformation Output – All Fuels

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	1179.4	1228.9	1182.6	1152.9	1155.6	1175.6
Index 2000	100%	104%	100%	98%	98%	100%
BE	54.28	53.70	54.62	52.00	51.27	53.50
BG	11.62	13.30	12.01	12.91	13.02	13.34
CZ	19.91	22.89	23.27	21.58	19.61	22.63
DK	15.60	14.07	14.23	16.85	18.02	16.96
DE	210.06	227.71	209.98	207.49	210.54	211.96
EE	1.87	2.15	2.55	2.42	2.51	2.89
IE	5.62	5.89	5.98	6.47	6.39	6.52
EL	29.13	28.38	28.72	35.62	38.00	40.05
ES	87.19	96.34	96.56	105.15	104.80	107.28
FR	154.54	151.28	139.32	126.20	124.76	125.47
HR	7.00	7.06	6.13	4.85	5.35	5.48
IT	129.85	141.64	131.20	111.22	108.99	114.14
CY	1.47	0.38	0.46	0.39	0.42	0.44
LV	1.18	1.47	1.29	1.12	1.27	1.38
LT	7.38	12.36	11.86	11.46	12.33	12.59
LU	0.11	0.43	0.47	0.30	0.25	0.26
HU	14.07	15.67	17.08	13.98	13.37	13.14
MT	0.16	0.19	0.18	0.12	0.08	0.15
NL	93.36	99.32	100.58	106.61	108.16	109.60
AT	17.16	18.51	18.70	19.51	18.98	19.38
PL	49.29	49.65	57.00	60.84	60.40	60.41
PT	17.04	18.73	17.71	21.38	21.80	22.42
RO	22.32	25.96	20.62	20.65	20.63	20.83
SI	1.57	1.54	1.69	1.53	1.65	1.66
SK	12.09	13.68	12.72	12.48	12.29	12.43
FI	25.53	26.94	31.16	27.25	29.65	30.13
SE	42.33	40.66	42.84	44.06	44.23	44.09
UK	147.60	139.03	123.66	108.48	106.89	106.43

TRANSFORMATION OUTPUT – ALL FUELS – 1990-2017 (Mtoe)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.4.5 Transformation Output – By Fuel

Mtoe	2017						
	Total, All Products	Solid Fossil Fuels	Oil & Petroleum Products	Natural Gas	Renewables Biofuels	Electricity	Heat
EU-28	1 175.6	31.3	766.5	0.5	14.3	283.7	59.4
Share (%)	100.0 %	2.7 %	65.2 %	0.0 %	1.2 %	24.1 %	5.1 %
BE	53.50	0.87	43.02	0.00	0.48	7.45	0.80
BG	13.34	0.36	7.83	0.00	0.17	3.92	1.05
CZ	22.63	1.95	8.61	0.00	0.32	7.48	2.94
DK	16.96	0.00	10.70	0.12	0.22	2.67	3.24
DE	211.96	9.80	126.04	0.00	2.78	56.21	11.22
EE	2.89	0.01	1.05	0.00	0.00	1.11	0.58
IE	6.52	0.00	3.69	0.00	0.10	2.65	0.00
EL	40.05	0.00	35.07	0.00	0.17	4.75	0.05
ES	107.28	1.37	80.50	0.01	0.99	23.71	0.00
FR	125.47	2.27	65.63	0.03	3.34	48.34	4.24
HR	5.48	0.00	4.14	0.00	0.01	1.03	0.30
IT	114.14	1.20	80.03	0.01	1.07	25.44	5.58
CY	0.44	0.00	0.00	0.00	0.00	0.43	0.00
LV	1.38	0.00	0.00	0.00	0.02	0.65	0.72
LT	12.59	0.00	11.04	0.00	0.06	0.36	1.12
LU	0.26	0.00	0.00	0.01	0.00	0.19	0.07
HU	13.14	0.72	7.85	0.00	0.10	2.83	1.26
MT	0.15	0.00	0.00	0.00	0.01	0.14	0.00
NL	109.60	1.41	93.51	0.11	0.40	10.08	2.79
AT	19.38	0.96	8.84	0.00	0.26	6.13	2.12
PL	60.41	6.63	29.01	0.00	0.56	14.66	7.16
PT	22.42	0.00	16.59	0.00	0.26	5.11	0.46
RO	20.83	0.00	13.03	0.00	0.27	5.53	1.78
SI	1.66	0.00	0.00	0.00	0.04	1.40	0.23
SK	12.43	1.12	6.94	0.00	0.18	2.39	0.90
FI	30.13	0.64	18.16	0.01	0.40	5.81	4.60
SE	44.09	0.77	22.99	0.00	1.10	14.12	4.54
UK	106.43	1.16	72.21	0.21	0.95	29.09	1.66

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.4.6 Transformation Output – By Sector

	2017					
Mtoe	Total, All Sectors	Electricity Producers	Heat Producers	CHP Producers	Refineries, Petroleum & Sub-Products	Other Transformation Output
EU-28	1 175.6	219.7	17.7	101.1	763.7	70.8
Share (%)	100.0 %	18.7 %	1.5 %	8.6 %	65.0 %	6.0 %
BE	53.50	6.03	0.00	1.80	43.02	2.55
BG	13.34	3.54	0.23	1.10	7.61	0.80
CZ	22.63	3.61	0.63	6.03	8.61	3.64
DK	16.96	1.34	0.95	3.53	10.70	0.44
DE	211.96	44.19	3.03	19.37	126.04	18.81
EE	2.89	0.98	0.31	0.39	0.09	1.11
IE	6.52	2.45	0.00	0.19	3.64	0.22
EL	40.05	3.92	0.00	0.87	35.07	0.17
ES	107.28	20.75	0.00	2.75	80.50	3.08
FR	125.47	46.06	1.81	4.11	65.63	7.40
HR	5.48	0.69	0.04	0.58	4.06	0.09
IT	114.14	15.75	0.32	14.72	80.03	3.16
CY	0.44	0.43	0.00	0.01	0.00	0.00
LV	1.38	0.39	0.39	0.59	0.00	0.02
LT	12.59	0.17	0.52	0.43	11.04	0.37
LU	0.26	0.05	0.01	0.09	0.00	0.01
HU	13.14	1.66	0.70	1.65	7.82	1.30
MT	0.15	0.14	0.00	0.00	0.00	0.01
NL	109.60	6.27	0.33	6.13	93.51	3.36
AT	19.38	4.92	0.88	2.12	8.84	2.29
PL	60.41	1.86	2.45	17.44	28.42	10.20
PT	22.42	4.35	0.00	1.07	16.36	0.49
RO	20.83	4.69	0.41	2.18	12.94	0.58
SI	1.66	0.90	0.04	0.66	0.00	0.04
SK	12.43	0.81	0.24	2.20	6.58	2.58
FI	30.13	3.93	1.40	4.70	17.92	2.18
SE	44.09	12.78	1.31	4.57	22.99	2.43
UK	106.43	27.04	1.66	1.80	72.21	3.46

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

2.5 Final Energy

2.5.1 Available for Final Consumption

TOTAL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	1 173.0	1 239.2	1 208.1	1 119.5	1 141.7	1 165.9
Index 2000	100 %	106 %	103 %	95 %	97 %	99 %
BE	40.82	41.57	42.72	40.88	40.93	40.55
BG	9.69	10.52	9.25	10.07	10.06	10.28
CZ	26.40	28.13	27.76	25.88	25.86	27.83
DK	14.33	14.68	15.00	13.56	13.95	14.39
DE	234.79	234.88	229.64	219.42	222.55	228.76
EE	2.69	3.15	2.99	2.83	3.27	2.97
IE	10.37	11.12	11.31	10.75	11.24	11.00
EL	18.31	20.64	18.94	16.32	16.66	16.75
ES	85.38	101.91	91.10	79.00	81.81	85.25
FR	156.67	167.10	161.69	156.01	157.37	157.29
HR	6.59	7.83	7.71	7.00	7.03	7.31
IT	128.77	139.59	131.73	117.63	116.75	121.17
CY	1.47	1.49	1.69	1.43	1.50	1.58
LV	3.26	4.05	4.06	3.79	3.78	3.95
LT	4.25	5.34	5.42	5.90	6.05	6.44
LU	3.24	4.10	3.93	3.57	3.57	3.65
HU	17.22	20.34	18.86	18.62	19.03	19.93
MT	0.32	0.40	0.42	0.46	0.46	0.51
NL	58.81	62.11	64.82	55.14	56.87	58.12
AT	23.57	27.10	27.36	27.06	27.55	27.86
PL	57.14	61.70	70.36	65.09	70.35	74.66
PT	19.54	20.94	18.93	16.26	16.14	16.40
RO	24.12	25.91	24.80	22.79	23.08	24.36
SI	4.68	5.20	5.24	4.79	4.99	4.98
SK	11.68	11.69	11.47	10.03	10.23	11.04
FI	23.73	25.26	26.36	24.30	25.24	25.80
SE	34.91	33.68	35.32	32.31	34.52	33.99
UK	150.27	148.72	139.22	128.60	130.81	129.03

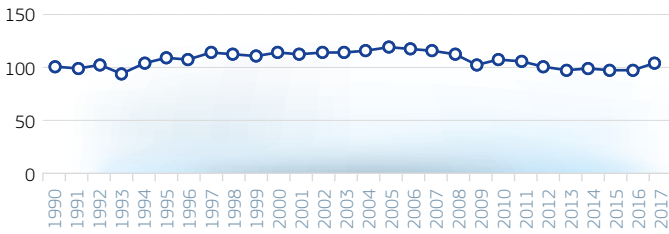
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.5.2 Final Non-Energy Consumption

TOTAL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	112.1	116.1	106.2	95.6	95.6	102.2
Index 2000	100 %	104 %	95 %	85 %	85 %	91 %
BE	7.00	7.49	7.01	7.65	7.53	7.45
BG	0.98	0.85	0.42	0.60	0.50	0.48
CZ	2.14	3.01	2.88	2.50	1.78	2.95
DK	0.30	0.29	0.26	0.25	0.25	0.25
DE	25.30	24.66	22.58	21.26	21.42	22.80
EE	0.18	0.22	0.09	0.11	0.10	0.12
IE	0.68	0.52	0.34	0.22	0.27	0.24
EL	0.73	0.77	1.11	0.70	0.59	0.82
ES	9.49	8.43	7.11	4.35	4.98	4.93
FR	16.27	16.08	13.93	13.94	13.49	14.16
HR	0.66	0.67	0.60	0.53	0.52	0.53
IT	8.43	8.61	9.56	6.61	6.31	7.91
CY	0.09	0.07	0.09	0.02	0.04	0.04
LV	0.07	0.10	0.07	0.11	0.10	0.09
LT	0.66	0.73	0.66	1.12	1.04	1.21
LU	0.05	0.03	0.03	0.03	0.04	0.03
HU	1.59	2.17	1.97	1.91	1.85	2.19
MT	0.00	0.02	0.01	0.01	0.01	0.01
NL	11.33	13.58	14.37	12.23	12.76	13.57
AT	1.72	1.59	1.81	1.76	1.85	1.65
PL	4.37	4.60	4.97	5.63	5.57	5.91
PT	2.42	2.59	1.73	1.34	1.16	1.20
RO	1.89	2.63	2.06	1.12	1.14	1.07
SI	0.24	0.31	0.21	0.13	0.13	0.14
SK	1.38	1.28	1.05	1.05	0.98	1.10
FI	1.04	1.15	1.22	1.33	1.46	1.44
SE	1.75	2.29	2.12	1.78	2.19	2.44
UK	11.30	11.35	7.90	7.36	7.55	7.48

FINAL NON-ENERGY CONSUMPTION – TOTAL – 1990-2017 (Mtoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

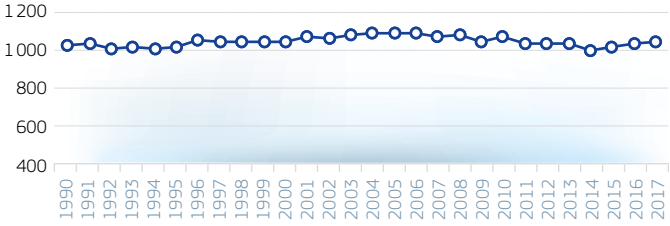
2.5.3 Final Energy Consumption

TOTAL

Mtoe	2000	2005	2010	2015	2016	2017
EU-28	1 066.1	1 123.2	1 098.6	1 024.9	1 046.3	1 060.0
Index 2000	100 %	105 %	103 %	96 %	98 %	99 %
BE	33.64	33.96	35.03	33.11	33.46	32.89
BG	8.59	9.60	8.71	9.39	9.52	9.74
CZ	23.99	25.04	24.12	23.08	23.67	24.41
DK	14.02	14.74	14.85	13.34	13.71	13.86
DE	207.17	206.12	206.43	198.39	202.53	204.60
EE	2.41	2.83	2.87	2.73	2.78	2.81
IE	10.22	11.84	11.27	10.37	10.73	10.74
EL	17.86	20.16	18.28	15.68	15.82	16.05
ES	76.32	93.82	85.16	75.96	78.01	79.40
FR	145.74	150.81	146.31	138.70	141.23	141.00
HR	5.93	7.15	7.11	6.47	6.52	6.78
IT	119.74	131.51	123.05	112.11	111.55	113.61
CY	1.37	1.53	1.64	1.41	1.48	1.54
LV	3.23	3.96	4.00	3.68	3.70	3.88
LT	3.74	4.62	4.76	4.78	5.00	5.24
LU	3.18	4.05	3.90	3.54	3.54	3.61
HU	15.64	18.16	16.88	16.91	17.41	17.98
MT	0.32	0.38	0.40	0.46	0.46	0.50
NL	47.53	48.97	50.75	44.08	44.68	44.95
AT	21.81	25.48	25.55	25.31	25.71	26.21
PL	53.56	57.48	65.24	60.78	65.03	69.14
PT	17.21	18.26	17.22	14.96	15.04	15.28
RO	21.95	23.59	22.02	21.60	21.94	22.86
SI	4.43	4.87	5.01	4.66	4.85	4.84
SK	9.93	10.40	10.37	8.94	9.23	9.90
FI	23.28	24.01	25.09	23.05	23.99	24.64
SE	33.67	32.13	32.51	31.25	32.16	32.37
UK	139.59	137.73	130.08	120.11	122.61	121.22

FINAL ENERGY CONSUMPTION – TOTAL – 1990-2017 (Mtoe)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.5.3 Final Energy Consumption

BY FUEL

	2017							
Mtoe	Oil & Petroleum Products	Natural Gas	Renewables & Biofuels	Solid Fossil Fuels	Waste, Non-Renewable	Electricity	Heat	Manufactured Gases, Peat & Products
EU-28	394.1	239.3	102.4	25.6	3.8	240.6	48.5	5.7
Share (%)	37.2%	22.6%	9.7%	2.4%	0.4%	22.7%	4.6%	0.5 %
BE	13.27	9.43	1.93	0.48	0.14	7.04	0.42	0.2
BG	3.37	1.35	1.38	0.37	0.04	2.57	0.66	0.0
CZ	6.63	5.53	2.91	1.75	0.24	4.93	2.13	0.3
DK	5.10	1.51	1.84	0.12	0.02	2.69	2.57	0.0
DE	73.66	52.77	15.87	4.55	1.13	44.62	9.81	2.2
EE	0.99	0.24	0.43	0.02	0.02	0.62	0.48	0.0
IE	5.78	1.80	0.44	0.23	0.07	2.22	0.00	0.2
EL	8.33	1.18	1.66	0.20	0.00	4.64	0.05	0.0
ES	38.81	13.49	6.04	0.65	0.01	20.17	0.00	0.2
FR	54.97	28.67	14.87	1.14	0.11	37.56	3.67	0.0
HR	2.85	1.08	1.15	0.08	0.01	1.37	0.23	0.0
IT	38.27	33.92	11.31	0.49	0.25	25.10	4.11	0.2
CY	1.00	0.00	0.12	0.00	0.02	0.39	0.00	0.0
LV	1.34	0.33	0.98	0.04	0.03	0.56	0.60	0.0
LT	2.02	0.57	0.68	0.16	0.00	0.86	0.92	0.0
LU	2.15	0.62	0.17	0.05	0.01	0.55	0.06	0.0
HU	5.35	5.71	2.08	0.28	0.08	3.31	1.04	0.1
MT	0.27	0.00	0.03	0.00	0.00	0.20	0.00	0.0
NL	14.22	17.43	1.48	0.10	0.03	9.08	2.11	0.5
AT	9.51	4.78	3.99	0.32	0.30	5.40	1.81	0.1
PL	24.13	9.19	5.82	11.27	0.73	11.68	5.82	0.5
PT	7.06	1.74	2.15	0.01	0.10	4.01	0.21	0.0
RO	7.57	5.52	3.78	0.63	0.09	3.84	1.26	0.2
SI	2.17	0.61	0.63	0.04	0.04	1.16	0.18	0.0
SK	2.64	2.75	0.60	0.41	0.19	2.22	0.67	0.4
FI	6.14	0.63	6.36	0.14	0.05	6.97	4.02	0.3
SE	7.75	0.51	8.24	0.37	0.00	10.94	4.37	0.2
UK	48.80	37.91	5.40	1.70	0.15	25.85	1.33	0.1

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

2.5.3 Final Energy Consumption

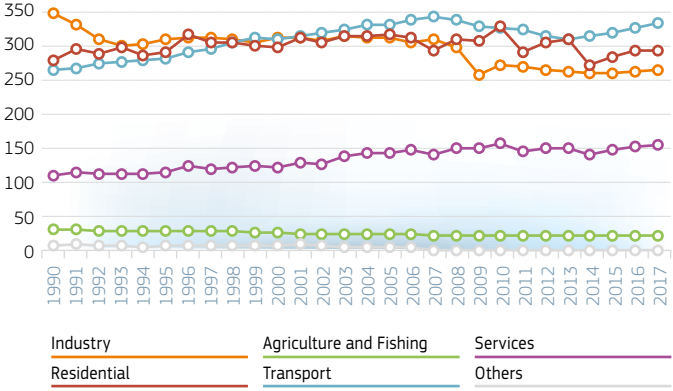
BY SECTOR

	2017					
Mtoe	Industry	Transport	Residential	Services	Agriculture & Fishing	Others
EU-28	261.0	326.9	288.0	154.0	25.8	4.3
Share (%)	24.6%	30.8%	27.2%	14.5%	2.4%	0.4%
BE	10.49	8.86	8.11	4.60	0.79	0.04
BG	2.72	3.33	2.32	1.20	0.17	0.00
CZ	6.70	6.62	7.19	3.19	0.64	0.07
DK	2.34	4.22	4.55	2.01	0.72	0.02
DE	56.27	57.24	56.55	34.45	0.00	0.09
EE	0.46	0.80	0.94	0.47	0.13	0.00
IE	2.51	4.04	2.58	1.37	0.24	0.00
EL	3.10	5.82	4.41	2.19	0.30	0.23
ES	18.97	31.72	15.44	10.41	2.65	0.20
FR	26.54	45.36	40.65	23.83	4.14	0.48
HR	1.18	2.19	2.38	0.80	0.23	0.00
IT	24.93	34.53	32.90	18.24	2.92	0.10
CY	0.23	0.68	0.34	0.23	0.05	0.02
LV	0.79	1.08	1.20	0.61	0.20	0.00
LT	1.07	1.96	1.46	0.63	0.11	0.01
LU	0.64	1.97	0.52	0.46	0.03	0.00
HU	4.35	4.53	6.30	2.16	0.61	0.03
MT	0.06	0.21	0.09	0.13	0.01	0.00
NL	13.84	10.67	9.70	6.83	3.83	0.08
AT	8.05	8.66	6.59	2.39	0.52	0.00
PL	15.84	21.43	19.94	8.05	3.88	0.00
PT	4.53	5.79	2.57	1.90	0.46	0.02
RO	6.39	6.15	7.68	1.84	0.49	0.31
SI	1.30	1.85	1.12	0.48	0.07	0.02
SK	3.45	2.77	2.11	1.43	0.14	0.00
FI	10.72	4.19	5.76	2.97	0.75	0.24
SE	10.82	8.36	7.51	4.07	0.33	1.29
UK	22.75	41.85	37.08	17.11	1.36	1.07

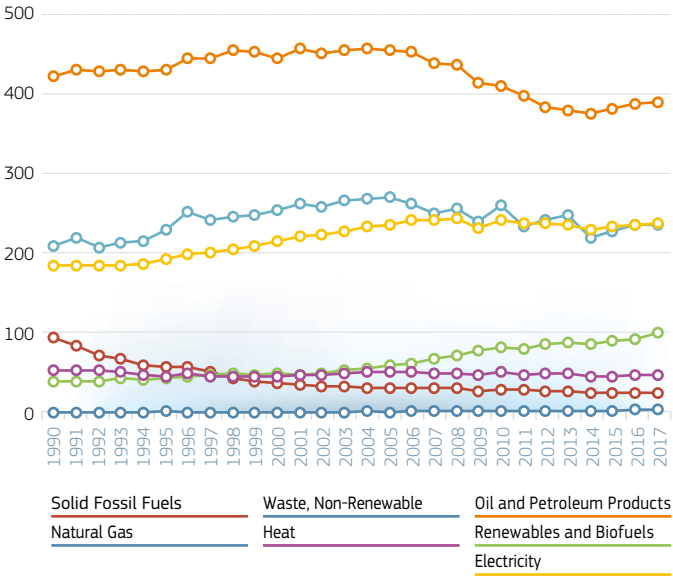
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.5.3 Final Energy Consumption

BY SECTOR – EU-28 – 1990-2017 (Mtoe)



FINAL ENERGY CONSUMPTION – BY FUEL – EU-28 – 1990-2017 (Mtoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.6 Electricity

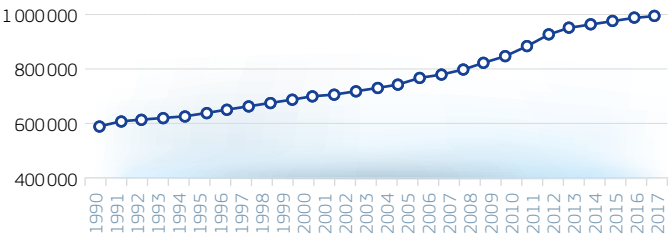
2.6.1 Installed Electricity Capacity

TOTAL

MW	2000	2005	2010	2015	2016	2017
EU-28*	691626	757903	883680	985808	993317	1010998
Index 2000	100%	110%	128%	143%	144%	146%
BE	15685	16096	18793	21166	21666	22261
BG	11085	12260	10031	10913	10739	10858
CZ	15323	17406	20073	21866	21989	22267
DK	12316	13036	13438	14002	14226	14364
DE	118884	128485	162874	203419	208500	215510
EE	2800	2559	2751	2857	2567	2527
IE	4709	6151	8034	9567	9904	10490
EL	10904	13306	15312	18942	19165	19426
ES	53922	76566	101740	106753	105948	103840
FR	114518	115730	124138	132180	133095	133101
HR	2079	3862	4115	4779	4859	4982
IT	75510	85498	106610	116964	114162	114241
CY	988	1125	1560	1756	1760	1785
LV	2092	2166	2557	2931	2927	2941
LT	5716	4556	3570	3587	3665	3326
LU	1217	1682	1712	2024	1710	1697
HU	8282	8586	8993	8634	8758	8858
MT	0	0	572	668	573	707
NL	21062	21800	26688	33866	34176	33815
AT	17802	18936	21158	24466	25216	24919
PL	30559	32257	33360	37327	38105	42850
PT	10908	13374	18932	19625	20612	20933
RO	16820	18951	19912	23830	23580	23574
SI	2614	2992	3193	3360	3536	3618
SK	7454	8257	7873	7782	7742	7671
FI	16260	16468	15554	16614	16285	17166
SE	33724	33419	36452	39691	40317	39798
UK	78393	82379	93685	96239	97535	103473

INSTALLED ELECTRICITY CAPACITY – TOTAL – 1990-2017 (MW)

EU-28



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

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.6.1 Installed Electricity Capacity

BY FUEL

	2017						
MW	Installed Electricity Capacity	Combustible Fuels	Wind	Hydro	Nuclear	Solar	Other Sources
EU-28	1010998	455115	168933	155118	120884	109014	1934
Share (%)	100.0%	45.0%	16.7%	15.3%	12.0%	10.8%	0.2%
BE	22261	8502	2806	1423	5918	3610	3
BG	10858	3785	698	3372	1967	1036	0
CZ	22267	13334	308	2265	4290	2070	0
DK	14364	7926	5522	9	0	906	0
DE	215510	95134	55718	11120	10799	42339	400
EE	2527	2208	312	7	0	0	0
IE	10490	6628	3318	529	0	16	0
EL	19426	10804	2624	3392	0	2606	0
ES	103840	46510	23100	20079	7117	7029	5
FR	133101	21907	13512	25706	63130	8610	235
HR	4982	2141	576	2205	0	60	0
IT	114241	61289	9737	22426	0	19682	1107
CY	1785	1517	158	0	0	110	0
LV	2941	1299	77	1564	0	1	0
LT	3326	1832	518	877	0	74	25
LU	1697	119	120	1331	0	128	0
HU	8858	6088	329	57	2000	344	40
MT	707	595	0	0	0	112	0
NL	33815	26151	4202	37	485	2903	37
AT	24919	6613	2887	14150	0	1269	1
PL	42850	34412	5758	2390	0	287	2
PT	20933	7975	5124	7226	0	579	29
RO	23574	11067	3030	6692	1411	1374	0
SI	3618	1332	5	1347	688	247	0
SK	7671	2645	4	2523	1940	528	31
FI	17166	8997	2044	3272	2779	74	0
SE	39798	7442	6611	16502	8999	244	0
UK	103473	56864	19835	4619	9361	12776	18

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.6.1 Installed Electricity Capacity*

RENEWABLES

	2017						
MW	Total Renewables	Hydro	Wind	Solar Thermal	Solar PV	Geothermal	Tide, Wave & Ocean
EU-28	434156	155118	168933	2306	106708	848	242
Share (%)	100.0%	35.7%	38.9%	0.5%	24.6%	0.2%	0.1%
BE	7838	1423	2806	0	3610	0	0
BG	5106	3372	698	0	1036	0	0
CZ	4642	2265	308	0	2070	0	0
DK	6438	9	5522	0	906	0	0
DE	109209	11120	55718	2	42337	32	0
EE	319	7	312	0	0	0	0
IE	3863	529	3318	0	16	0	0
EL	8622	3392	2624	0	2606	0	0
ES	50213	20079	23100	2304	4725	0	5
FR	48064	25706	13512	0	8610	16	219
HR	2841	2205	576	0	60	0	0
IT	52612	22426	9737	0	19682	767	0
CY	268	0	158	0	110	0	0
LV	1642	1564	77	0	1	0	0
LT	1469	877	518	0	74	0	0
LU	1578	1331	120	0	128	0	0
HU	733	57	329	0	344	3	0
MT	112	0	0	0	112	0	0
NL	7142	37	4202	0	2903	0	0
AT	18307	14150	2887	0	1269	1	0
PL	8436	2390	5758	0	287	0	0
PT	12959	7226	5124	0	579	29	0
RO	11096	6692	3030	0	1374	0	0
SI	1598	1347	5	0	247	0	0
SK	3055	2523	4	0	528	0	0
FI	5390	3272	2044	0	74	0	0
SE	23357	16502	6611	0	244	0	0
UK	37248	4619	19835	0	12776	0	18

* Net maximum capacity.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.6.2 Gross Electricity Generation

TOTAL

TWh	2000	2005	2010	2015	2016	2017
EU-28	3034.0	3315.2	3362.0	3239.4	3261.8	3294.3
Index 2000	100%	109%	111%	107%	108%	109%
BE	84.01	86.76	94.93	69.40	85.30	86.08
BG	40.92	44.36	46.64	49.20	45.24	45.58
CZ	73.46	82.58	85.82	83.81	83.21	86.95
DK	36.01	36.25	38.86	28.93	30.54	31.04
DE	576.54	619.34	630.67	645.07	647.23	652.04
EE	8.51	10.21	12.96	10.42	12.18	12.90
IE	23.98	25.97	28.35	28.39	30.51	30.87
EL	53.84	60.02	57.39	51.87	54.44	55.27
ES	224.47	289.09	301.37	280.70	274.67	275.64
FR	539.95	576.06	569.15	578.48	563.85	561.46
HR	11.28	13.16	14.90	11.40	12.82	11.98
IT	275.86	302.59	301.28	282.40	289.03	295.17
CY	3.37	4.38	5.32	4.53	4.89	5.00
LV	4.14	4.91	6.63	5.53	6.43	7.53
LT	11.33	14.58	5.50	4.67	4.00	3.94
LU	1.17	4.13	4.59	2.77	2.20	2.24
HU	35.19	35.76	37.37	30.30	31.82	32.79
MT	1.92	2.24	2.11	1.30	0.86	1.64
NL	89.38	99.66	119.12	110.23	115.07	117.14
AT	61.24	66.83	71.11	65.18	68.29	71.31
PL	145.18	156.63	157.58	164.83	166.57	170.40
PT	43.76	46.57	54.09	52.41	60.33	59.43
RO	51.56	59.41	60.98	66.29	65.10	64.30
SI	13.62	15.12	16.44	15.10	16.50	16.33
SK	31.16	31.44	27.82	26.80	26.93	27.58
FI	69.78	70.34	80.36	68.35	68.49	67.12
SE	145.27	158.43	148.55	162.11	156.01	164.25
UK	377.07	398.35	382.07	338.88	339.30	338.34

Source: Eurostat, May 2019
Methodology and Notes: **See Appendices**

2.6.2 Gross Electricity Generation

BY FUEL

TWh	2017						
	Gross Electricity Generation	Solid Fossil Fuels, Peat, Oil Shale & Sands	Oil & Petroleum Products	Natural Gas & Manufactured Gases	Nuclear	Renewables & Biofuel	Wastes non-RES
EU-28	3294.3	677.0	60.7	695.9	829.7	1005.6	25.4
Share (%)	100.0 %	20.6 %	1.8 %	21.1 %	25.2 %	30.5 %	0.8 %
BE	86.08	0.1	0.16	25.24	42.23	16.96	1.40
BG	45.58	20.9	0.40	1.92	15.55	6.80	0.00
CZ	86.95	41.4	0.12	6.16	28.34	10.79	0.09
DK	31.04	6.2	0.28	1.91	0.00	21.92	0.72
DE	652.04	241.9	5.57	98.58	76.32	222.34	7.29
EE	12.90	10.0	0.12	0.82	0.00	1.79	0.14
IE	30.87	5.8	0.14	15.68	0.00	9.08	0.16
EL	55.27	18.8	5.51	17.11	0.00	13.88	0.00
ES	275.64	45.1	15.77	65.26	58.04	90.67	0.77
FR	561.46	12.6	7.39	42.86	398.36	97.74	2.47
HR	11.98	1.4	0.21	3.09	0.00	7.32	0.00
IT	295.17	32.6	11.53	142.82	0.00	105.72	2.47
CY	5.00	0.0	4.57	0.00	0.00	0.44	0.00
LV	7.53	0.0	0.00	2.07	0.00	5.46	0.00
LT	3.94	0.0	0.14	0.60	0.00	3.12	0.08
LU	2.24	0.0	0.00	0.22	0.00	1.94	0.08
HU	32.79	4.9	0.09	8.00	16.10	3.47	0.20
MT	1.64	0.0	0.19	1.29	0.00	0.17	0.00
NL	117.14	31.3	1.18	62.15	3.40	17.43	1.69
AT	71.31	1.8	0.81	13.14	0.00	54.74	0.87
PL	170.40	131.2	2.02	12.31	0.00	24.60	0.31
PT	59.43	14.7	1.28	18.89	0.00	24.31	0.28
RO	64.30	16.8	0.63	10.73	11.51	24.64	0.00
SI	16.33	4.8	0.01	0.47	6.29	4.72	0.01
SK	27.58	3.0	0.44	2.22	15.08	6.83	0.03
FI	67.12	8.6	0.18	3.89	22.48	31.48	0.47
SE	164.25	0.5	0.29	0.98	65.70	95.08	1.68
UK	338.34	22.5	1.61	137.50	70.34	102.20	4.15

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.6.2 Gross Electricity Generation

RENEWABLES

	2017							
TWh	Renewables & Biofuels	Wind	Hydro	Solar	Solid & Liquid Biofuels, Renewable Waste	Biogases	Geothermal	Tide, Wave & Ocean
EU-28	1 005.6	362.4	331.3	119.4	121.8	63.4	6.7	0.5
Share (%)	100.0 %	36.0 %	32.9 %	11.9 %	12.1 %	6.3 %	0.7 %	0.1 %
BE	16.96	6.51	1.40	3.29	4.82	0.94	0.00	0.00
BG	6.80	1.50	3.49	1.40	0.18	0.22	0.00	0.00
CZ	10.79	0.59	3.04	2.19	2.33	2.64	0.00	0.00
DK	21.92	14.78	0.02	0.75	5.68	0.69	0.00	0.00
DE	222.34	105.69	26.16	39.40	17.05	33.88	0.16	0.00
EE	1.79	0.72	0.03	0.00	1.00	0.04	0.00	0.00
IE	9.08	7.44	0.90	0.01	0.53	0.20	0.00	0.00
EL	13.88	5.54	4.04	3.99	0.01	0.30	0.00	0.00
ES	90.67	49.13	21.07	14.40	5.14	0.94	0.00	0.00
FR	97.74	24.71	55.11	9.57	5.61	2.09	0.13	0.52
HR	7.32	1.20	5.51	0.08	0.22	0.31	0.00	0.00
IT	105.72	17.74	38.02	24.38	11.08	8.30	6.20	0.00
CY	0.44	0.21	0.00	0.17	0.00	0.05	0.00	0.00
LV	5.46	0.15	4.38	0.00	0.53	0.41	0.00	0.00
LT	3.12	1.36	1.18	0.07	0.38	0.13	0.00	0.00
LU	1.94	0.23	1.42	0.11	0.10	0.07	0.00	0.00
HU	3.47	0.76	0.22	0.35	1.81	0.33	0.00	0.00
MT	0.17	0.00	0.00	0.16	0.00	0.01	0.00	0.00
NL	17.43	10.57	0.06	2.20	3.68	0.92	0.00	0.00
AT	54.74	6.57	42.25	1.27	4.01	0.63	0.00	0.00
PL	24.60	14.91	3.03	0.17	5.39	1.10	0.00	0.00
PT	24.31	12.25	7.63	0.99	2.93	0.29	0.22	0.00
RO	24.64	7.41	14.85	1.86	0.46	0.07	0.00	0.00
SI	4.72	0.01	4.14	0.28	0.16	0.13	0.00	0.00
SK	6.83	0.01	4.62	0.51	1.10	0.59	0.00	0.00
FI	31.48	4.80	14.77	0.04	11.46	0.41	0.00	0.00
SE	95.08	17.61	65.17	0.23	12.07	0.01	0.00	0.00
UK	102.20	50.00	8.80	11.52	24.15	7.72	0.00	0.00

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.6.2 Gross Electricity Generation

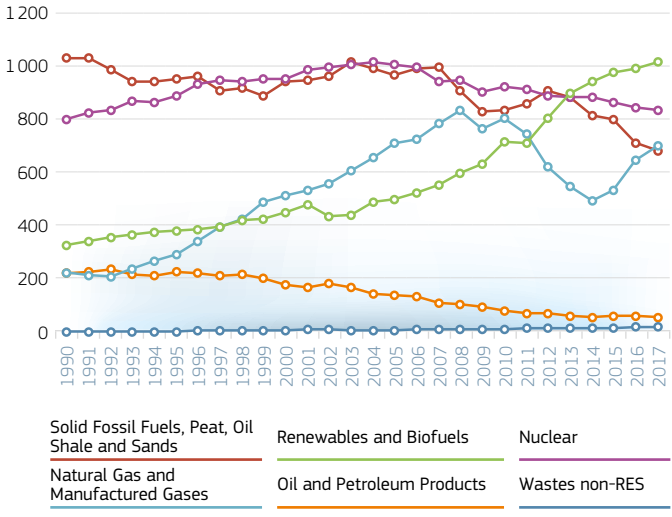
BY FUEL – EU-28

Share of Total (%)	2017					
	Solid Fossil Fuels, Peat, Oil Shale & Sands	Oil & Petroleum Products	Natural Gas & Manufactured Gases	Nuclear	Renewables & Biofuels	Others
1990	39.3	8.6	8.6	30.6	12.6	0.2
1991	38.7	8.8	8.2	31.1	12.9	0.2
1992	37.2	9.2	8.1	31.5	13.6	0.3
1993	35.5	8.3	9.1	32.8	13.9	0.3
1994	35.1	8.1	10.2	32.2	14.2	0.3
1995	34.5	8.4	10.7	32.1	13.9	0.3
1996	33.6	8.0	12.0	32.5	13.6	0.4
1997	31.6	7.5	13.8	32.8	13.9	0.4
1998	31.2	7.5	14.6	31.9	14.4	0.4
1999	29.8	6.9	16.6	31.9	14.4	0.4
2000	30.8	6.0	16.9	31.1	14.8	0.4
2001	30.2	5.6	17.0	31.4	15.3	0.5
2002	30.4	5.9	17.7	31.5	13.9	0.5
2003	31.1	5.3	18.7	30.8	13.7	0.4
2004	29.9	4.5	19.8	30.6	14.8	0.4
2005	29.0	4.3	21.2	30.1	15.0	0.4
2006	29.2	4.0	21.4	29.4	15.5	0.5
2007	29.2	3.4	23.0	27.7	16.3	0.5
2008	26.6	3.2	24.4	27.7	17.6	0.5
2009	25.5	3.1	23.6	27.8	19.5	0.6
2010	24.7	2.6	23.8	27.3	21.1	0.6
2011	25.8	2.4	22.4	27.4	21.4	0.6
2012	27.4	2.3	18.7	26.7	24.3	0.6
2013	26.8	2.0	16.6	26.8	27.2	0.6
2014	25.3	2.0	15.4	27.4	29.2	0.7
2015	24.5	2.0	16.4	26.5	29.9	0.7
2016	21.6	2.0	19.7	25.7	30.2	0.8
2017	20.6	1.8	21.1	25.2	30.5	0.8

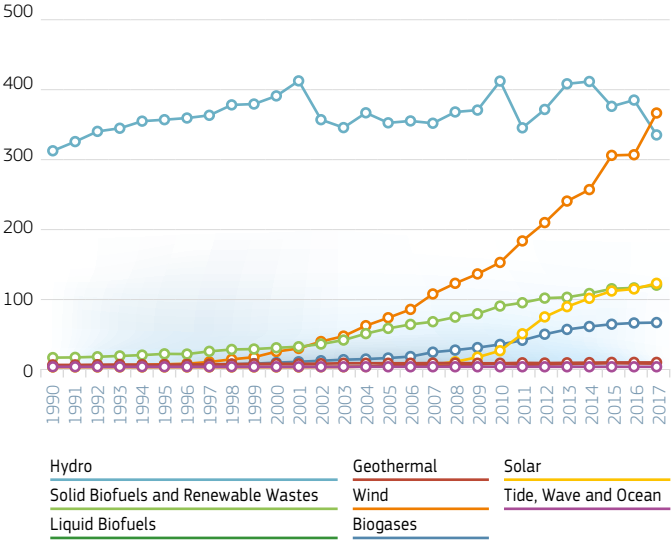
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.6.2 Gross Electricity Generation

BY FUEL – EU-28 – ALL FUELS – 1990-2017 (TWh)



GROSS ELECTRICITY GENERATION – EU-28 – RENEWABLES – 1990-2017 (TWh)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.6.3 Market Share of the Largest Electricity Producer

%	2000	2005	2010	2015	2016	2017
BE	91.1	85.0	79.1	48.5	62.6	60.7
BG						
CZ	69.2	72.0	73.0	55.4	52.4	62.2
DK	36.0	33.0	46.0	33.0	35.2	33.3
DE	34.0	31.0	28.4	32.0	33.5	32.2
EE	91.0	92.0	89.0	79.8	80.8	82.5
IE	97.0	71.0	34.0	55.0	47.0	43.0
EL	97.0	97.0	85.1	70.7	72.0	58.7
ES	42.4	35.0	24.0	24.5	25.4	22.5
FR	90.2	89.1	86.5	85.7	82.5	79.9
HR		87.0	88.0	77.8	80.7	86.1
IT	46.7	38.6	28.0	27.0	24.0	19.0
CY	99.6	100.0	100.0	100.0	100.0	100.0
LV	95.8	92.7	88.0	57.4	58.6	47.1
LT	72.8	70.3	35.4	22.7	14.3	14.2
LU			85.4	43.8	18.0	17.8
HU	41.3	38.7	42.1	53.1	52.9	51.3
MT	100.0	100.0	100.0	100.0	100.0	61.0
NL						
AT	32.6					
PL	19.5	18.5	17.4	17.4	16.0	17.7
PT	58.5	53.9	47.2	42.5	47.0	39.5
RO		36.4	33.6	25.7	28.5	23.1
SI		50.1	56.3	51.3	53.9	48.5
SK	85.1	83.6	80.9	73.1	71.3	71.4
FI	23.3	23.0	26.6	25.9	25.6	25.6
SE	49.5	47.0	42.0	40.6	42.0	42.4
UK	20.6	20.5	21.0			

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

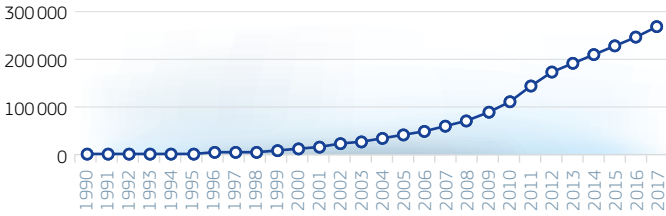
2.7 Solar and Wind Energy

2.7.1 Solar and Wind Energy – Cumulative Capacity

TOTAL

MW	2000	2005	2010	2015	2016	2017
EU-28	12886	42605	115071	238733	257618	277947
BE	14	169	1919	5307	5695	6415
BG	0	8	513	1728	1727	1734
CZ	1	23	1940	2356	2350	2378
DK	2391	3131	3809	5859	6097	6429
DE	6209	20304	44910	83825	90308	98057
EE	0	31	108	300	310	312
IE	117	493	1391	2454	2792	3334
EL	226	492	1500	4695	4974	5230
ES	2216	9970	25298	29951	30010	30129
FR	45	703	6956	17396	19213	22123
HR	0	6	79	466	539	636
IT	382	1669	9386	28038	28667	29419
CY	0	1	89	234	242	268
LV	2	26	30	68	71	78
LT	0	1	133	505	579	592
LU	14	58	73	180	242	248
HU	0	17	295	501	564	673
MT	0	0	1	75	93	112
NL	460	1275	2327	4906	6306	7105
AT	55	846	1105	3426	3826	4156
PL	4	121	1108	4994	5934	6046
PT	84	1066	3930	5384	5637	5703
RO	0	1	389	4456	4397	4404
SI	0	0	12	244	237	252
SK	0	5	22	536	536	532
FI	40	86	204	1020	1600	2118
SE	212	526	2028	5923	6588	6855
UK	414	1576	5516	23907	28086	32611

SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – TOTAL – 1990-2017 (MW) EU-28



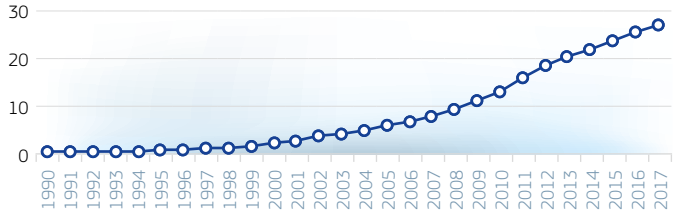
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.7.1 Solar and Wind Energy – Cumulative Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

%	2000	2005	2010	2015	2016	2017
EU-28	1.9	5.6	13.0	24.2	25.9	27.5
BE	0.09	1.05	10.21	25.07	26.29	28.82
BG	0.00	0.07	5.11	15.83	16.08	15.97
CZ	0.01	0.13	9.66	10.77	10.69	10.68
DK	19.41	24.02	28.34	41.85	42.86	44.75
DE	5.22	15.80	27.57	41.21	43.31	45.50
EE	0.00	1.21	3.93	10.50	12.08	12.34
IE	2.47	8.02	17.32	25.64	28.19	31.78
EL	2.07	3.70	9.80	24.79	25.95	26.92
ES	4.11	13.02	24.87	28.06	28.33	29.01
FR	0.04	0.61	5.60	13.16	14.44	16.62
HR	0.00	0.16	1.92	9.75	11.09	12.77
IT	0.51	1.95	8.80	23.97	25.11	25.75
CY	0.00	0.11	5.72	13.31	13.74	15.00
LV	0.10	1.20	1.17	2.33	2.41	2.65
LT	0.00	0.02	3.73	14.08	15.80	17.80
LU	1.15	3.48	4.27	8.90	14.13	14.60
HU	0.00	0.20	3.28	5.80	6.44	7.60
MT	0.00	0.00	0.17	11.23	16.24	15.90
NL	2.18	5.85	8.72	14.49	18.45	21.01
AT	0.31	4.47	5.22	14.00	15.17	16.68
PL	0.01	0.38	3.32	13.38	15.57	14.11
PT	0.77	7.97	20.76	27.43	27.35	27.25
RO	0.00	0.01	1.95	18.70	18.65	18.68
SI	0.00	0.00	0.38	7.26	6.70	6.96
SK	0.00	0.06	0.28	6.89	6.92	6.94
FI	0.25	0.52	1.31	6.14	9.82	12.34
SE	0.63	1.57	5.56	14.92	16.34	17.22
UK	0.53	1.91	5.89	24.84	28.80	31.52

SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – SHARE OF TOTAL – 1990-2017 (%) EU-28



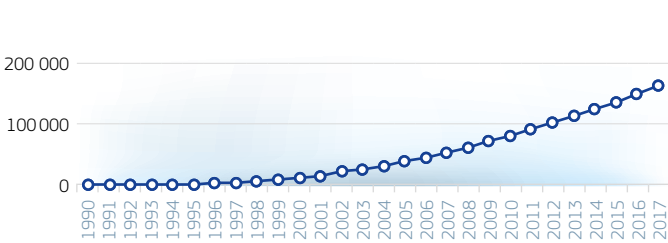
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.7.2 Wind Cumulative Installed Capacity

TOTAL

MW	2000	2005	2010	2015	2016	2017
EU-28	12709	40325	84358	141436	154273	168933
BE	14	167	912	2176	2370	2806
BG	0	8	488	699	699	698
CZ	1	22	213	281	282	308
DK	2390	3128	3802	5077	5246	5522
DE	6095	18248	26903	44580	49592	55718
EE	0	31	108	300	310	312
IE	117	493	1390	2451	2786	3318
EL	226	491	1298	2091	2370	2624
ES	2206	9918	20693	22943	22990	23100
FR	38	690	5912	10258	11511	13512
HR	0	6	79	418	483	576
IT	363	1635	5794	9137	9384	9737
CY	0	0	82	158	158	158
LV	2	26	30	68	70	77
LT	0	1	133	436	509	518
LU	14	35	44	64	120	120
HU	0	17	293	329	329	329
MT	0	0	0	0	0	0
NL	447	1224	2237	3391	4257	4202
AT	50	825	1016	2489	2730	2887
PL	4	121	1108	4886	5747	5758
PT	83	1064	3796	4937	5124	5124
RO	0	1	389	3130	3025	3030
SI	0	0	0	5	5	5
SK	0	5	3	3	3	4
FI	38	82	197	1005	1565	2044
SE	209	522	2017	5819	6435	6611
UK	412	1565	5421	14306	16174	19835

WIND CUMULATIVE INSTALLED CAPACITY – TOTAL – 1990-2017 (MW)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.7.2 Wind Cumulative Installed Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

%	2000	2005	2010	2015	2016	2017
EU-28	1.8	5.3	9.5	14.3	15.5	16.7
BE	0.1	1.0	4.9	10.3	10.9	12.6
BG	0.0	0.1	4.9	6.4	6.5	6.4
CZ	0.0	0.1	1.1	1.3	1.3	1.4
DK	19.4	24.0	28.3	36.3	36.9	38.4
DE	5.1	14.2	16.5	21.9	23.8	25.9
EE	0.0	1.2	3.9	10.5	12.1	12.3
IE	2.5	8.0	17.3	25.6	28.1	31.6
EL	2.1	3.7	8.5	11.0	12.4	13.5
ES	4.1	13.0	20.3	21.5	21.7	22.2
FR	0.0	0.6	4.8	7.8	8.6	10.2
HR	0.0	0.2	1.9	8.7	9.9	11.6
IT	0.5	1.9	5.4	7.8	8.2	8.5
CY	0.0	0.0	5.3	9.0	9.0	8.8
LV	0.1	1.2	1.2	2.3	2.4	2.6
LT	0.0	0.0	3.7	12.2	13.9	15.6
LU	1.2	2.1	2.6	3.2	7.0	7.1
HU	0.0	0.2	3.3	3.8	3.8	3.7
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	2.1	5.6	8.4	10.0	12.5	12.4
AT	0.3	4.4	4.8	10.2	10.8	11.6
PL	0.0	0.4	3.3	13.1	15.1	13.4
PT	0.8	8.0	20.1	25.2	24.9	24.5
RO	0.0	0.0	2.0	13.1	12.8	12.9
SI	0.0	0.0	0.0	0.1	0.1	0.1
SK	0.0	0.1	0.0	0.0	0.0	0.1
FI	0.2	0.5	1.3	6.0	9.6	11.9
SE	0.6	1.6	5.5	14.7	16.0	16.6
UK	0.5	1.9	5.8	14.9	16.6	19.2

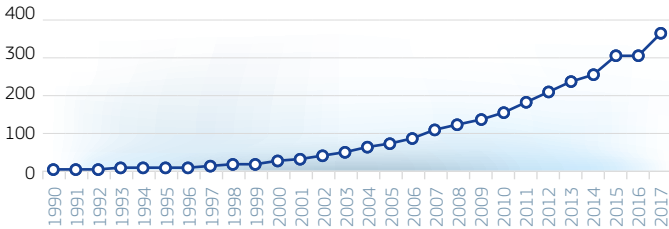
Source: Eurostat, May 2019
Methodology and Notes: See Appendices –

2.7.3 Wind Gross Electricity Production

TOTAL

TWh	2000	2005	2010	2015	2016	2017
EU-28	22.2	70.5	149.4	302.0	302.9	362.4
BE	0.0	0.2	1.3	5.6	5.4	6.5
BG	0.0	0.0	0.7	1.5	1.4	1.5
CZ	0.0	0.0	0.3	0.6	0.5	0.6
DK	4.2	6.6	7.8	14.1	12.8	14.8
DE	9.4	27.2	37.8	79.2	78.6	105.7
EE	0.0	0.1	0.3	0.7	0.6	0.7
IE	0.2	1.1	2.8	6.6	6.1	7.4
EL	0.5	1.3	2.7	4.6	5.1	5.5
ES	4.7	21.2	44.3	49.3	48.9	49.1
FR	0.0	1.0	9.9	21.3	21.5	24.7
HR	0.0	0.0	0.1	0.8	1.0	1.2
IT	0.6	2.3	9.1	14.8	17.7	17.7
CY	0.0	0.0	0.0	0.2	0.2	0.2
LV	0.0	0.0	0.0	0.1	0.1	0.2
LT	0.0	0.0	0.2	0.8	1.1	1.4
LU	0.0	0.1	0.1	0.1	0.1	0.2
HU	0.0	0.0	0.5	0.7	0.7	0.8
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.8	2.1	4.0	7.5	8.2	10.6
AT	0.1	1.3	2.1	4.8	5.2	6.6
PL	0.0	0.1	1.7	10.9	12.6	14.9
PT	0.2	1.8	9.2	11.6	12.5	12.2
RO	0.0	0.0	0.3	7.1	6.6	7.4
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	0.1	0.2	0.3	2.3	3.1	4.8
SE	0.5	0.9	3.5	16.3	15.5	17.6
UK	0.9	2.9	10.3	40.3	37.3	50.0

WIND GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2017 (TWh)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.7.4 Wind Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

%	2000	2005	2010	2015	2016	2017
EU-28	0.7	2.1	4.4	9.3	9.3	11.0
BE	0.0	0.3	1.4	8.0	6.4	7.6
BG	0.0	0.0	1.5	3.0	3.1	3.3
CZ	0.0	0.0	0.4	0.7	0.6	0.7
DK	11.8	18.2	20.1	48.8	41.9	47.6
DE	1.6	4.4	6.0	12.3	12.1	16.2
EE	0.0	0.5	2.1	6.9	4.9	5.6
IE	1.0	4.3	9.9	23.2	20.2	24.1
EL	0.8	2.1	4.7	8.9	9.5	10.0
ES	2.1	7.3	14.7	17.6	17.8	17.8
FR	0.0	0.2	1.7	3.7	3.8	4.4
HR	0.0	0.1	0.9	7.0	7.9	10.0
IT	0.2	0.8	3.0	5.3	6.1	6.0
CY	0.0	0.0	0.6	4.9	4.6	4.2
LV	0.1	1.0	0.7	2.7	2.0	2.0
LT	0.0	0.0	4.1	17.4	28.4	34.6
LU	2.1	1.3	1.2	3.7	4.6	10.5
HU	0.0	0.0	1.4	2.3	2.1	2.3
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.9	2.1	3.4	6.8	7.1	9.0
AT	0.1	2.0	2.9	7.4	7.7	9.2
PL	0.0	0.1	1.1	6.6	7.6	8.7
PT	0.4	3.8	17.0	22.1	20.7	20.6
RO	0.0	0.0	0.5	10.7	10.1	11.5
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	0.1	0.2	0.4	3.4	4.5	7.1
SE	0.3	0.6	2.3	10.1	9.9	10.7
UK	0.3	0.7	2.7	11.9	11.0	14.8

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.7.5 Wind Capacity Factor

ANNUAL AVERAGE

%	2000	2005	2010	2015	2016	2017
EU-28	21.9	21.8	22.1	26.7	24.5	26.8
BE	14.3	17.0	17.7	32.0	28.7	29.0
BG	0.0	7.2	17.5	26.0	25.5	26.9
CZ	11.1	12.1	19.7	25.5	22.0	24.0
DK	22.2	26.4	25.7	34.8	30.5	33.5
DE	19.2	18.7	17.6	22.2	19.8	23.7
EE	0.0	21.8	32.1	29.8	24.0	29.0
IE	26.2	28.2	25.3	33.5	27.6	28.0
EL	24.9	32.2	26.1	27.6	27.1	26.4
ES	26.8	26.7	26.7	26.9	26.6	26.6
FR	15.8	17.4	21.0	26.0	23.3	22.9
HR	0.0	20.8	22.0	23.8	26.2	26.1
IT	19.4	17.9	19.7	20.3	23.6	22.8
CY	0.0	19.7	4.8	17.6	18.0	16.8
LV	27.6	22.5	20.4	27.0	22.9	24.3
LT	0.0	22.2	21.1	23.2	27.9	32.9
LU	22.1	18.7	15.7	20.0	10.6	24.5
HU	0.0	7.4	22.8	26.3	26.0	28.8
MT	0.0	0.0	0.0	0.0	7.3	7.3
NL	23.2	21.1	22.3	27.8	24.0	31.4
AT	16.7	20.2	25.4	24.3	24.0	28.5
PL	15.6	14.0	18.8	27.8	27.4	32.4
PT	25.3	20.8	30.2	29.4	30.4	29.9
RO	0.0	2.8	9.8	28.2	27.2	30.6
SI	0.0	0.0	0.0	15.1	14.4	14.4
SK	0.0	15.0	25.0	25.0	25.0	18.8
FI	25.7	25.9	18.7	28.9	24.5	29.3
SE	27.3	22.4	21.6	35.1	30.1	33.3
UK	28.7	23.2	23.7	35.2	28.8	31.5

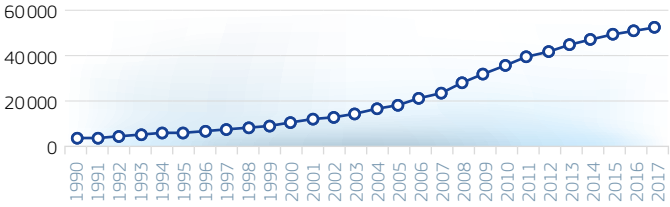
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.7.6 Solar Collectors' Surface

1 000 m²	2000	2005	2010	2015	2016	2017
EU-28	11 055	18 289	35 658	49 141	50 953	52 008
BE	41	77	371	677	721	751
BG			194	344	354	378
CZ		85	309	538	569	593
DK	243	286	480	1 016	1 369	1 542
DE	3 251	7 099	14 044	18 625	19 122	19 109
EE	0	0	0	0	0	0
IE	4	13	185	320	343	311
EL	2 941	3 047	4 100	4 390	4 477	4 596
ES	406	795	2 376	3 582	3 796	3 997
FR	513	583	1 447	2 917	3 006	3 094
HR	20	41	92	183	204	227
IT	271	680	2 415	3 724	3 891	4 051
CY		730	909	1 009	1 025	1 044
LV	0	0	0	0	0	0
LT	0	0	0	0	0	0
LU		6	29	56	60	63
HU	36	45	140	280	292	308
MT			40	70	72	72
NL	276	422	576	647	652	649
AT	2 202	3 083	4 559	5 261	5 289	5 272
PL		95	656	1 900	2 016	2 131
PT	238	289	752	1 121	1 176	1 231
RO			104	159	174	189
SI			178	239	239	239
SK		64	123	171	177	201
FI	10	16	31	50	55	60
SE	207	371	510	478	475	472
UK	396	462	1 038	1 383	1 400	1 428

SOLAR COLLECTORS' SURFACE – TOTAL – 1990-2017 (1 000 m²)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

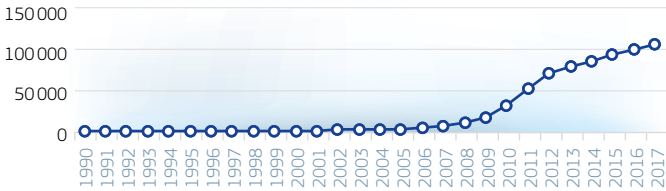
2.7.7 Solar Installed Capacity

TOTAL

MW	2000	2005	2010	2015	2016	2017
EU-28	177	2280	30713	97296	103345	109014
BE	0	2	1007	3131	3325	3610
BG	0	0	25	1029	1028	1036
CZ	0	1	1727	2075	2068	2070
DK	1	3	7	782	851	906
DE	114	2056	18007	39245	40716	42339
EE	0	0	0	0	0	0
IE	0	0	1	2	6	16
EL	0	1	202	2604	2604	2606
ES	10	52	4605	7008	7020	7029
FR	7	13	1044	7138	7702	8610
HR	0	0	0	48	56	60
IT	19	34	3592	18901	19283	19682
CY	0	1	7	76	84	110
LV	0	0	0	0	1	1
LT	0	0	0	69	70	74
LU	0	24	29	116	122	128
HU	0	0	2	172	235	344
MT	0	0	1	75	93	112
NL	13	51	90	1515	2049	2903
AT	5	21	89	937	1096	1269
PL	0	0	0	108	187	287
PT	1	2	134	447	513	579
RO	0	0	0	1326	1372	1374
SI	0	0	12	239	232	247
SK	0	0	19	533	533	528
FI	2	4	7	15	35	74
SE	3	4	11	104	153	244
UK	2	11	95	9601	11912	12776

SOLAR INSTALLED CAPACITY – TOTAL – 1990-2017 (MW)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

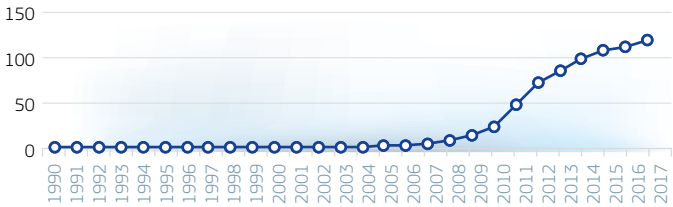
2.7.8 Solar Gross Electricity Production

TOTAL

TWh	2000	2005	2010	2015	2016	2017
EU-28	0.1	1.5	23.3	108.4	111.4	119.4
BE	0.0	0.0	0.6	3.1	3.1	3.3
BG	0.0	0.0	0.0	1.4	1.4	1.4
CZ	0.0	0.0	0.6	2.3	2.1	2.2
DK	0.0	0.0	0.0	0.6	0.7	0.8
DE	0.1	1.3	11.7	38.7	38.1	39.4
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	0.2	3.9	3.9	4.0
ES	0.0	0.0	7.2	13.9	13.6	14.4
FR	0.0	0.0	0.6	7.8	8.7	9.6
HR	0.0	0.0	0.0	0.1	0.1	0.1
IT	0.0	0.0	1.9	22.9	22.1	24.4
CY	0.0	0.0	0.0	0.1	0.1	0.2
LV	0.0	0.0	0.0	0.0	0.0	0.0
LT	0.0	0.0	0.0	0.1	0.1	0.1
LU	0.0	0.0	0.0	0.1	0.1	0.1
HU	0.0	0.0	0.0	0.1	0.2	0.3
MT	0.0	0.0	0.0	0.1	0.1	0.2
NL	0.0	0.0	0.1	1.1	1.6	2.2
AT	0.0	0.0	0.1	0.9	1.1	1.3
PL	0.0	0.0	0.0	0.1	0.1	0.2
PT	0.0	0.0	0.2	0.8	0.9	1.0
RO	0.0	0.0	0.0	2.0	1.8	1.9
SI	0.0	0.0	0.0	0.3	0.3	0.3
SK	0.0	0.0	0.0	0.5	0.5	0.5
FI	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.1	0.1	0.2
UK	0.0	0.0	0.0	7.5	10.4	11.5

SOLAR GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2017 (TWh)

EU-28



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.7.9 Solar Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

%	2000	2005	2010	2015	2016	2017
EU-28	0.0	0.0	0.7	3.3	3.4	3.6
BE	0.0	0.0	0.6	4.4	3.6	3.8
BG	0.0	0.0	0.0	2.8	3.1	3.1
CZ	0.0	0.0	0.7	2.7	2.6	2.5
DK	0.0	0.0	0.0	2.1	2.4	2.4
DE	0.0	0.2	1.9	6.0	5.9	6.0
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	0.3	7.5	7.2	7.2
ES	0.0	0.0	2.4	4.9	5.0	5.2
FR	0.0	0.0	0.1	1.3	1.5	1.7
HR	0.0	0.0	0.0	0.5	0.5	0.7
IT	0.0	0.0	0.6	8.1	7.6	8.3
CY	0.0	0.0	0.1	2.8	3.0	3.4
LV	0.0	0.0	0.0	0.0	0.0	0.0
LT	0.0	0.0	0.0	1.6	1.7	1.7
LU	0.0	0.4	0.5	3.7	4.6	4.9
HU	0.0	0.0	0.0	0.5	0.8	1.1
MT	0.0	0.0	0.0	7.3	14.8	9.4
NL	0.0	0.0	0.0	1.0	1.4	1.9
AT	0.0	0.0	0.1	1.4	1.6	1.8
PL	0.0	0.0	0.0	0.0	0.1	0.1
PT	0.0	0.0	0.4	1.5	1.4	1.7
RO	0.0	0.0	0.0	3.0	2.8	2.9
SI	0.0	0.0	0.1	1.8	1.6	1.7
SK	0.0	0.0	0.1	1.9	2.0	1.8
FI	0.0	0.0	0.0	0.0	0.0	0.1
SE	0.0	0.0	0.0	0.1	0.1	0.1
UK	0.0	0.0	0.0	2.2	3.1	3.4

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.8 CHP

2.8.1 CHP Electricity

GENERATION AND CAPACITY

	CHP Electricity Generation			CHP Electrical Capacity		
	TWh			GW		
	2015	2016	2017	2015	2016	2017
EU-28	362.9	359.7	371.7	119.7	119.9	122.0
BE	12.5	12.2	12.5	2.4	2.2	2.3
BG	2.9	3.6	3.5	1.1	1.5	1.2
CZ	11.8	8.4	8.0	4.6	9.0	8.0
DK	11.6	12.0	11.8	6.1	5.9	5.8
DE	78.8	87.9	94.4	37.1	37.2	39.6
EE	1.2	0.9	1.1	0.4	0.2	0.0
IE	2.1	2.2	2.2	0.3	0.3	0.3
EL	2.0	2.6	2.2	0.6	0.5	0.3
ES	22.7	27.5	28.8	3.5	4.2	4.6
FR	13.9	15.0	16.6	5.6	6.1	6.3
HR	0.8	1.5	2.0	0.6	0.8	0.8
IT	39.5	40.3	41.0	9.0	8.5	8.4
CY	0.0	0.0	0.0	0.0	0.0	0.0
LV	2.5	3.1	2.8	1.1	1.3	1.3
LT	1.5	1.1	1.1	1.0	0.6	0.6
LU	0.4	0.3	0.3	0.1	0.1	0.1
HU	4.1	4.8	4.6	1.6	1.5	1.5
MT	0.0	0.2	0.2	0.0	0.1	0.1
NL	29.8	30.8	31.4	9.2	9.1	9.4
AT	9.0	10.9	9.5	2.8	3.4	2.9
PL	26.5	27.6	28.4	8.6	8.7	9.2
PT	6.5	6.2	6.4	1.3	1.2	1.2
RO	5.6	5.3	5.8	1.8	1.9	1.8
SI	1.2	1.2	1.3	0.4	0.4	0.4
SK		3.0	3.5		1.0	1.7
FI	21.7	21.8	21.7	5.8	5.9	6.5
SE	13.7	9.2	9.0	4.9	3.9	3.0
UK	19.4	19.8	21.6	5.9	4.6	4.5

Source: Eurostat July 2019
Methodology and Notes: See Appendices

2.8.2 CHP Heat

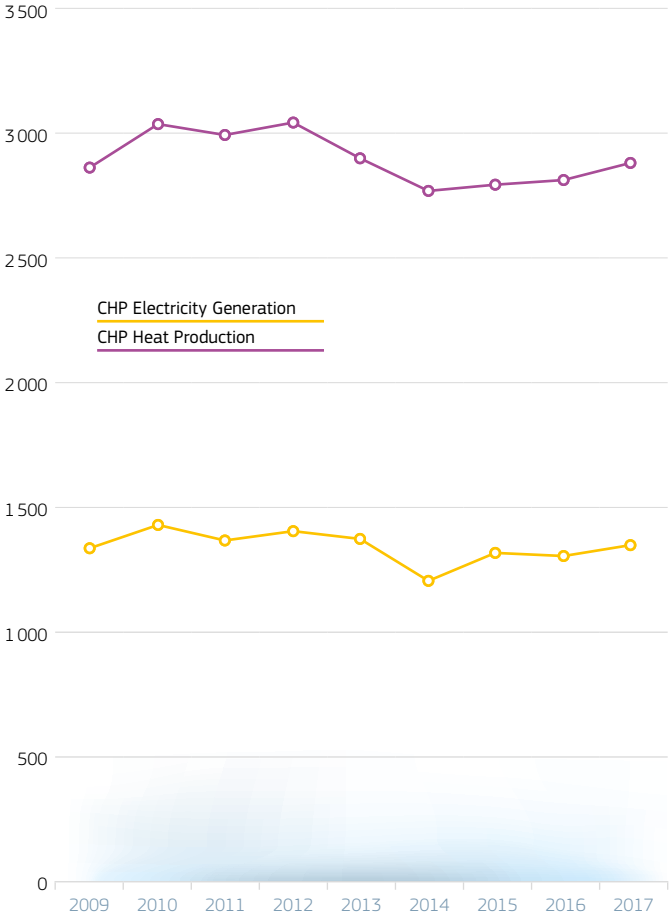
PRODUCTION AND CAPACITY

	CHP Heat Production			CHP Heat Capacity		
	PJ			GW		
	2015	2016	2017	2015	2016	2017
EU-28	2791.7	2812.5	2881.2	303.8	273.0	285.8
BE	104.4	104.4	108.7	5.1	5.0	5.1
BG	31.9	39.3	40.1	3.7	4.7	4.6
CZ	106.0	101.6	103.5	21.0	20.8	22.1
DK	93.3	94.9	94.4	9.5	8.8	8.8
DE	669.9	698.0	703.2	95.1	94.6	101.3
EE	12.5	3.3	13.6	1.3	0.7	0.5
IE	12.6	11.2	11.8	0.6	0.6	0.6
EL	10.9	18.9	14.6	0.7	1.3	0.9
ES	120.3	138.8	139.2	5.0	6.4	9.8
FR	154.9	163.9	177.6	14.1	14.9	15.3
HR	10.0	16.3	18.8	1.6	2.2	2.2
IT	213.2	219.8	219.9	14.2	14.0	13.2
CY	0.2	0.1	0.1	0.0	0.0	0.0
LV	12.4	14.5	14.2	1.2	1.2	1.2
LT	12.4	9.5	10.4	1.9	1.2	1.5
LU	2.4	2.3	2.6	0.2	0.2	0.2
HU	24.4	24.7	25.2	3.2	2.8	2.9
MT	0.0	0.1	0.1	0.0	0.0	0.0
NL	189.6	174.3	180.5	18.1	16.0	16.6
AT	105.9	114.9	116.0	8.6	8.9	9.0
PL	238.6	246.5	253.3	23.9	23.8	24.2
PT	59.3	61.7	60.0	4.3	3.8	3.7
RO	51.0	45.9	47.0	9.8	6.3	5.5
SI	10.4	10.8	11.1	0.7	0.8	0.8
SK		34.4	36.9		4.0	3.4
FI	242.4	241.6	246.5	15.2	14.6	16.9
SE	151.3	91.1	92.0	12.8	8.4	7.9
UK	124.2	129.8	139.8	7.6	7.1	7.4

Source: source: Eurostat July 2019
Methodology and Notes: See Appendices

2.8.3 CHP Electricity and Heat

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



* Data before 2009 is not consistent across the EU-28.

Source: Eurostat July 2019
Methodology and Notes: See Appendices

2.9 Heat*

2.9.1 Gross Heat Generation

TOTAL

PJ	2000	2005	2010	2015	2016	2017
EU-28	2146.8	2548.8	2644.0	2325.6	2419.6	2412.8
Index 2000	100%	119%	123%	108%	113%	112%
BE	23.2	19.5	35.6	27.8	26.7	22.2
BG	50.8	52.1	57.1	48.7	46.3	42.3
CZ	139.2	138.9	147.0	119.4	125.7	121.6
DK	115.5	125.8	149.5	126.9	131.4	131.8
DE	315.9	489.9	508.6	448.8	461.9	462.3
EE	27.0	26.8	25.5	21.2	23.9	24.3
IE	0.0	0.0	0.0	0.0	0.0	0.0
EL	1.2	2.0	1.9	2.1	2.1	2.1
ES	0.0	0.0	0.0	0.0	0.0	0.0
FR	135.5	178.3	152.9	150.3	168.3	173.7
HR	11.5	13.3	12.5	11.1	11.4	12.4
IT	0.0	193.1	205.3	216.9	223.9	233.4
CY	0.0	0.0	0.0	0.1	0.1	0.1
LV	31.9	31.1	28.7	25.5	29.0	30.0
LT	42.8	42.9	40.0	31.9	33.7	35.0
LU	0.5	3.2	3.1	2.4	2.4	2.8
HU	69.2	63.6	53.0	50.4	51.6	50.1
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	172.4	178.5	159.9	123.2	116.0	111.2
AT	47.7	59.0	82.6	83.1	87.7	88.9
PL	340.7	335.5	335.1	280.1	292.3	299.0
PT	5.6	13.7	21.1	19.5	18.8	19.1
RO	189.7	127.7	99.1	76.6	76.8	74.6
SI	9.4	10.1	9.8	8.7	9.0	9.5
SK	36.8	52.5	48.5	36.6	37.5	37.8
FI	147.4	175.4	205.7	168.7	185.7	173.8
SE	131.0	158.8	204.6	179.1	189.3	185.4
UK	102.1	57.2	57.0	66.5	68.2	69.6

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

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.9.1 Gross Heat Generation

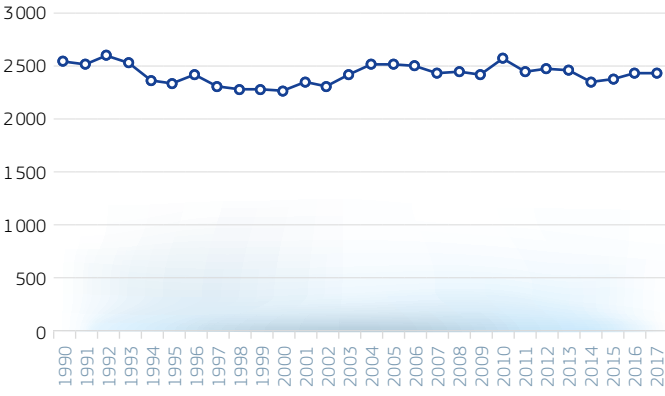
BY FUEL

PJ	2017						
	Gross Heat Generation	Solid Fossil Fuels, Peat, Oil Shale & Sands	Oil & Petroleum Products	Natural Gas & Manufactured Gases	Nuclear	Renewables & Biofuels	Wastes non-RES & Others
EU-28	2412.8	592.3	98.1	946.5	4.5	639.4	132.1
Share (%)	100.0 %	24.5 %	4.1 %	39.2 %	0.2 %	26.5 %	5.5 %
BE	22.2	0.0	0.4	18.3	0.0	1.8	1.6
BG	42.3	14.2	3.7	22.9	0.7	0.7	0.0
CZ	121.6	68.7	1.2	39.6	0.9	9.7	1.5
DK	131.8	19.2	1.2	20.6	0.0	77.2	13.5
DE	462.3	130.9	4.6	220.0	0.0	67.6	39.2
EE	24.3	2.6	0.8	7.3	0.0	12.4	1.1
IE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EL	2.1	2.1	0.0	0.0	0.0	0.0	0.0
ES	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FR	173.7	8.8	10.1	62.6	0.0	73.7	18.5
HR	12.4	0.0	0.7	9.9	0.0	1.8	0.0
IT	233.4	1.9	32.3	153.5	0.0	40.2	5.6
CY	0.1	0.0	0.0	0.0	0.0	0.1	0.0
LV	30.0	0.1	0.0	16.6	0.0	13.2	0.0
LT	35.0	0.3	0.3	9.9	0.0	23.6	0.8
LU	2.8	0.0	0.0	1.7	0.0	1.1	0.0
HU	50.1	0.9	0.2	39.4	0.8	8.0	0.8
MT	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NL	111.2	2.6	11.5	70.7	0.0	16.1	10.3
AT	88.9	3.1	4.7	33.2	0.0	41.6	6.4
PL	299.0	240.9	4.1	38.6	0.0	13.0	2.3
PT	19.1	0.0	0.0	19.1	0.0	0.0	0.0
RO	74.6	16.5	4.9	50.0	0.0	3.2	0.0
SI	9.5	5.1	0.2	2.5	0.0	1.5	0.1
SK	37.8	8.6	4.9	15.7	2.1	6.3	0.1
FI	173.8	58.5	8.3	21.7	0.0	79.4	5.8
SE	185.4	7.0	2.4	8.9	0.0	143.2	23.9
UK	69.6	0.1	1.4	63.8	0.0	3.9	0.5

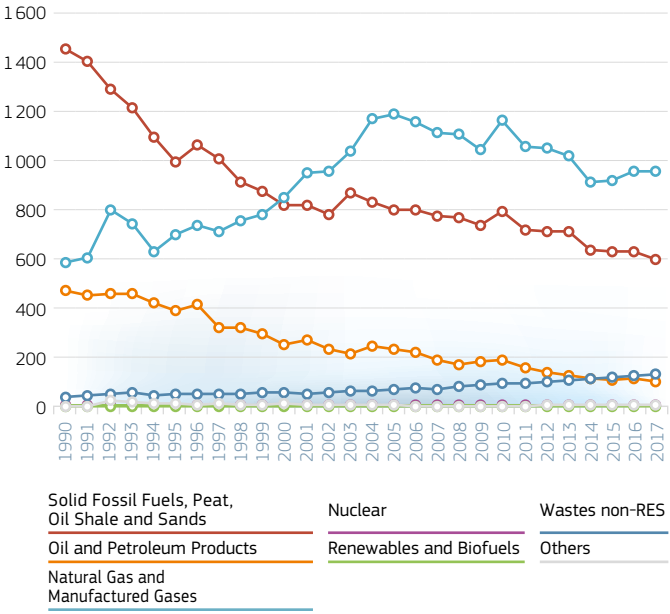
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.9.1 Gross Heat Generation

TOTAL – EU-28 – 1990-2017 (PJ)



GROSS HEAT GENERATION – BY FUEL – 1990-2017 (PJ)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

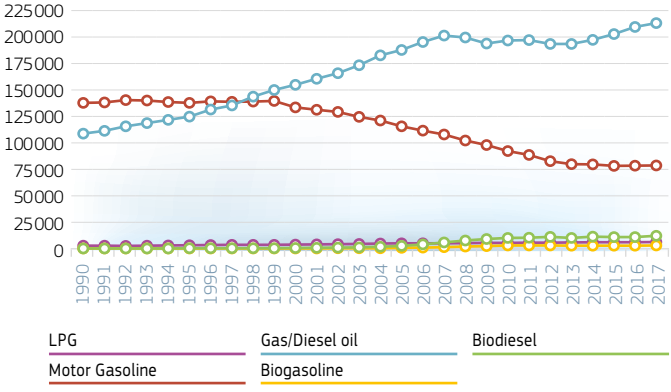
2.10 Transport

2.10.1 Fuels Final Consumption

PETROLEUM PRODUCTS AND BIOFUELS – EU-28

ktoe	Final Consumption Petroleum Products	LPG	Motor Gasoline	Gas / Diesel Oil	Final Consumption Biofuels	Biogasoline	Biodiesel
1990	254322	2710.8	136565.1	107853.4	5.7	0	6
1995	269493	3058.0	136520.8	123648.6	181.7	25	153
1996	278394	3196.2	138057.3	130254.4	266.5	39	223
1997	282454	3491.0	137570.0	134170.3	368.1	55	304
1998	291703	3575.4	137865.5	142480.6	356.3	64	283
1999	298686	3560.7	138453.3	148725.2	400.3	60	328
2000	297536	3684.7	132463.2	153516.0	619.8	59	547
2001	301034	3911.5	130143.0	159178.6	744.1	66	660
2002	304138	4180.9	128141.2	164346.6	1015.9	159	835
2003	307303	4342.7	123459.7	171831.6	1394.5	243	1141
2004	313962	4679.1	119970.1	181265.9	1902.1	306	1577
2005	313915	4824.0	114530.2	186124.4	3202.8	594	2454
2006	318188	4989.9	110619.6	193750.8	5357.5	902	3865
2007	320962	4953.3	106926.2	199747.9	7493.9	1188	5683
2008	312830	5103.6	101256.2	197962.1	9501.3	1806	7435
2009	302816	5267.3	97118.2	192326.2	11259.4	2243	8959
2010	299831	5313.1	91430.2	195146.5	12719.0	2810	9871
2011	296357	5509.5	87863.1	195582.0	13111.3	2879	10220
2012	285978	5478.0	81938.2	191792.8	13702.0	2826	10864
2013	283196	5788.6	79182.7	191917.2	12688.9	2679	10006
2014	286729	5859.1	78952.4	195675.0	13767.5	2665	11094
2015	291089	5982.4	77452.9	201102.7	13511.4	2699	10808
2016	298626	5987.3	77711.9	207890.2	13297.6	2650	10643
2017	303031	6080.0	77942.2	211512.7	14740.0	2778	11961

EU-28 – FUELS CONSUMPTION IN THE TRANSPORT SECTOR – 1990-2017 (ktoe)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.10.2 Biofuels

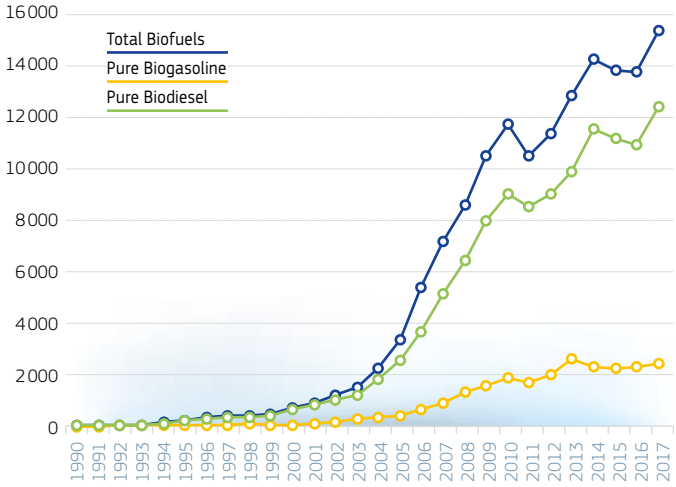
BY FUEL – EU-28

	Production			Share in Transport Fuels		
	Total Biofuels	Pure Biogasoline	Pure Biodiesel	of Biofuels in Total Transport Fuels	of Biogasoline in Motor Gasoline	of Biodiesel in Gas/Diesel Oil
	ktoe			%		
1990	6	0	6	0.0%	0.0%	0.0%
1991	7	0	7	0.0%	0.0%	0.0%
1992	19	2	15	0.0%	0.0%	0.0%
1993	46	18	24	0.0%	0.0%	0.0%
1994	131	25	93	0.0%	0.0%	0.1%
1995	219	25	185	0.1%	0.0%	0.1%
1996	309	39	265	0.1%	0.0%	0.2%
1997	396	54	333	0.1%	0.0%	0.2%
1998	381	63	308	0.1%	0.0%	0.2%
1999	442	59	371	0.1%	0.0%	0.2%
2000	710	60	635	0.2%	0.0%	0.4%
2001	886	71	791	0.2%	0.1%	0.4%
2002	1187	160	998	0.3%	0.1%	0.5%
2003	1496	263	1185	0.5%	0.2%	0.7%
2004	2190	311	1773	0.6%	0.3%	0.9%
2005	3290	382	2516	1.0%	0.5%	1.3%
2006	5294	634	3591	1.7%	0.8%	2.0%
2007	7079	871	5084	2.3%	1.1%	2.8%
2008	8477	1316	6349	2.9%	1.8%	3.6%
2009	10334	1574	7825	3.6%	2.3%	4.5%
2010	11554	1868	8874	4.1%	3.0%	4.8%
2011	10344	1645	8378	4.2%	3.2%	5.0%
2012	11167	1957	8891	4.6%	3.3%	5.4%
2013	12661	2571	9708	4.3%	3.3%	5.0%
2014	14014	2282	11381	4.6%	3.3%	5.4%
2015	13581	2192	10984	4.4%	3.4%	5.1%
2016	13553	2255	10780	4.3%	3.3%	4.9%
2017	15104	2416	12239	4.6%	3.4%	5.4%

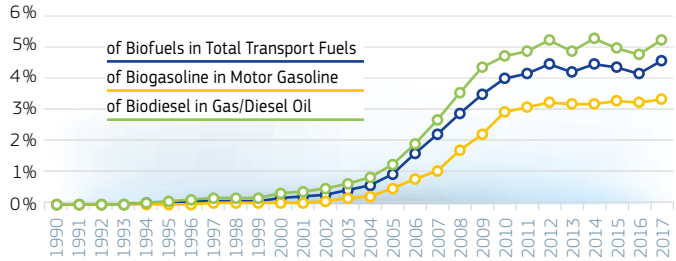
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.10.2 Biofuels

PRODUCTION BIOFUELS – EU-28 – 1990-2017 (ktoe)



BIOFUELS SHARE IN TRANSPORT FUELS – EU-28 – 1990-2017 (%)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.11 Energy Efficiency

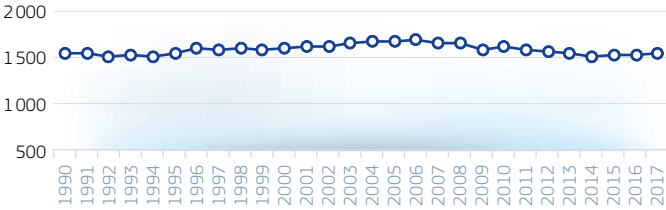
2.11.1 Primary Energy Consumption 2020-2030*

ALL FUELS

toe/M€ '2010	2000	2005	2010	2015	2016	2017
EU-28	1619	1720	1660	1537	1547	1562
Index 2000	100%	106%	103%	95%	96%	96%
BE	52	52	54	46	49	49
BG	18	19	17	18	18	18
CZ	39	43	43	40	40	40
DK	19	19	20	17	17	18
DE	317	320	312	295	298	298
EE	5	5	6	5	6	6
IE	14	15	15	14	15	14
EL	27	30	27	23	23	23
ES	115	137	123	119	119	126
FR	240	261	254	244	240	240
HR	8	9	9	8	8	8
IT	166	181	167	149	148	149
CY	2	2	3	2	2	3
LV	4	4	5	4	4	4
LT	7	8	6	6	6	6
LU	4	5	5	4	4	4
HU	24	26	25	23	24	24
MT	1	1	1	1	1	1
NL	67	70	72	64	65	65
AT	27	33	32	32	32	33
PL	85	88	97	90	95	99
PT	23	25	23	22	22	23
RO	35	36	33	31	31	32
SI	6	7	7	6	7	7
SK	16	17	17	15	15	16
FI	32	34	36	31	32	32
SE	46	49	49	45	47	46
UK	222	223	205	183	180	177

PRIMARY ENERGY CONSUMPTION 2020-2030 – ALL FUELS – 1990-2017 (toe/M€ '2010)

EU-28



* This indicator should be used also for tracking progress towards Europe 2020-2030 energy effiicency targets. This indicator is in line to the previous Eurostat methodology, which was used to calculate the targets.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

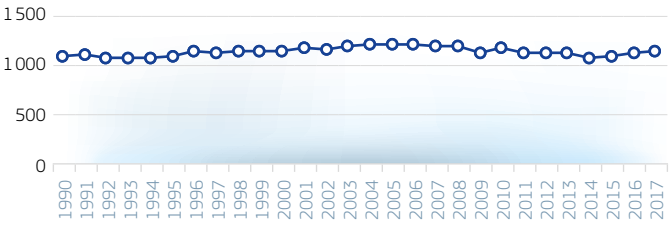
2.11.2 Final Energy Consumption 2020-2030*

ALL FUELS

toe/M€ '2010	2000	2005	2010	2015	2016	2017
EU-28	1133	1193	1163	1088	1110	1123
Index 2000	100%	105%	103%	96%	98%	99%
BE	38	37	38	36	36	36
BG	9	10	9	9	10	10
CZ	25	26	25	24	25	25
DK	15	16	16	14	14	15
DE	220	219	220	212	217	219
EE	2	3	3	3	3	3
IE	11	13	12	11	12	12
EL	19	21	19	17	17	17
ES	80	98	89	80	82	84
FR	155	160	154	147	149	149
HR	6	7	7	7	7	7
IT	125	137	129	116	116	115
CY	2	2	2	2	2	2
LV	3	4	4	4	4	4
LT	4	5	5	5	5	5
LU	4	4	4	4	4	4
HU	16	19	17	17	18	19
MT	0	0	1	1	1	1
NL	52	54	55	49	50	50
AT	24	28	28	27	28	28
PL	55	58	66	62	67	71
PT	18	19	18	16	16	17
RO	23	25	23	22	22	23
SI	4	5	5	5	5	5
SK	11	12	12	10	10	11
FI	24	25	26	24	25	25
SE	35	34	34	32	32	33
UK	153	153	143	133	134	133

FINAL ENERGY CONSUMPTION 2020-2030 – ALL FUELS – 1990-2017 (toe/M€ '2010)

EU-28



* This indicator should be used also for tracking progress towards Europe 2020-2030 energy effiicency targets. This indicator is in line to the previous Eurostat methodology, which was used to calculate the targets.

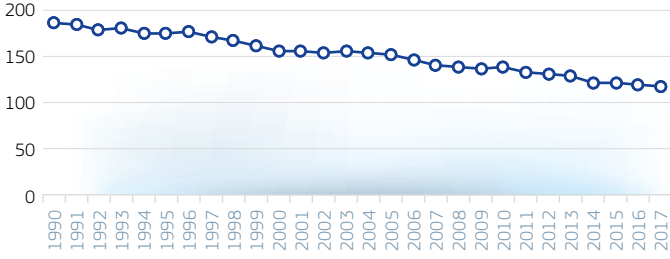
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.11.3 Energy Intensity

ALL FUELS

toe/M€ '2010	2000	2005	2010	2015	2016	2017
EU-28	159	154	142	124	122	121
Index 2000	100%	97%	89%	78%	77%	76%
BE	208	196	188	155	163	162
BG	766	628	470	454	428	426
CZ	360	328	291	249	240	239
DK	92	86	87	70	70	69
DE	146	143	131	114	112	111
EE	454	359	399	324	343	317
IE	115	95	91	59	60	55
EL	165	147	137	139	136	141
ES	150	149	128	122	119	121
FR	147	146	136	125	121	119
HR	240	224	210	190	185	186
IT	113	118	112	101	99	101
CY	187	166	152	142	147	144
LV	315	266	274	219	218	213
LT	398	338	249	207	210	210
LU	119	135	116	91	89	90
HU	312	285	269	231	230	230
MT	272	267	362	266	271	302
NL	164	166	156	133	132	129
AT	115	123	116	107	106	105
PL	364	324	281	228	233	232
PT	156	161	138	137	135	137
RO	444	353	279	220	209	206
SI	231	221	200	176	178	173
SK	423	349	262	212	207	211
FI	211	196	197	175	177	173
SE	164	157	143	122	125	123
UK	149	131	117	95	92	88

ENERGY INTENSITY – ALL FUELS – 1990-2017 (toe/M€ '2010)



Source: Eurostat, DG Economic and Financial Affairs, May 2019
Methodology and Notes: See Appendices

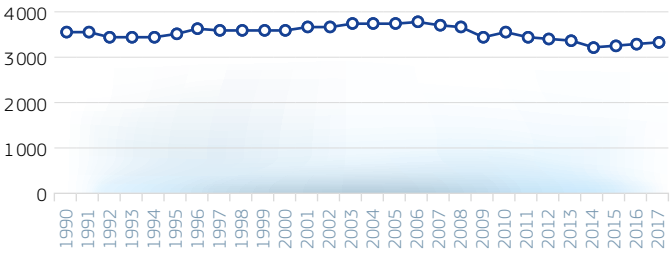
2.11.4 Energy Consumption per Capita

GROSS INLAND CONSUMPTION – ALL FUELS

kgoe/cap	2000	2005	2010	2015	2016	2017
EU-28	3554	3713	3514	3223	3232	3275
Index 2000	100%	104%	99%	91%	91%	92%
BE	5805	5653	5643	4784	5027	4989
BG	2275	2612	2408	2589	2553	2661
CZ	4016	4465	4358	4018	3973	4106
DK	3658	3663	3687	3069	3126	3167
DE	4168	4181	4090	3898	3883	3904
EE	3379	3880	4243	4128	4554	4382
IE	3804	3759	3319	3023	3149	3063
EL	2575	2815	2532	2198	2173	2250
ES	3077	3349	2806	2655	2685	2819
FR	4229	4416	4171	3914	3840	3832
HR	1877	2277	2198	2009	2044	2134
IT	3066	3273	2988	2562	2543	2633
CY	3511	3476	3365	2704	2896	2996
LV	1623	2040	2183	2205	2231	2334
LT	2051	2617	2174	2365	2452	2589
LU	8433	10411	9254	7425	7278	7343
HU	2468	2825	2655	2557	2603	2723
MT	2080	2324	2266	1721	1595	1801
NL	4934	5134	5198	4506	4578	4583
AT	3650	4171	4113	3901	3880	3924
PL	2332	2425	2671	2519	2646	2767
PT	2476	2614	2305	2215	2217	2327
RO	1637	1807	1726	1603	1607	1703
SI	3244	3667	3525	3124	3232	3282
SK	3284	3480	3286	3000	3012	3173
FI	6315	6629	6863	5936	6159	6163
SE	5384	5735	5429	4956	5143	5049
UK	3968	3902	3408	2953	2884	2817

ENERGY CONSUMPTION PER CAPITA – ALL FUELS – 1990-2017 (kgoe/cap)

EU-28



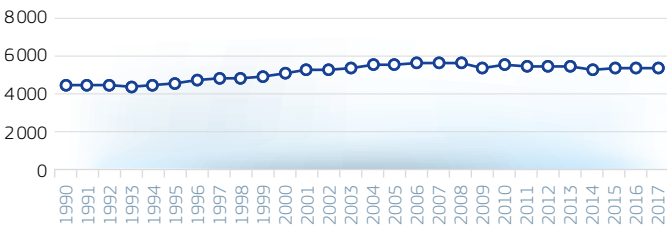
Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.11.5 Final Electricity Consumption per Capita

ALL FUELS

kWh/cap	2000	2005	2010	2015	2016	2017
EU-28	5187	5629	5640	5409	5453	5472
Index 2000	100%	109%	109%	104%	105%	105%
BE	7573	7678	7686	7271	7260	7217
BG	2961	3345	3652	3933	4040	4211
CZ	4804	5421	5183	5169	5292	5420
DK	6089	6184	5792	5451	5450	5445
DE	5884	6330	6509	6339	6296	6289
EE	3579	4445	5181	5211	5547	5486
IE	5371	5923	5588	5360	5411	5403
EL	4005	4640	4777	4677	4948	5012
ES	4657	5595	5266	4995	5007	5041
FR	6357	6735	6868	6507	6595	6539
HR	2631	3344	3686	3631	3651	3846
IT	4795	5199	5057	4729	4715	4819
CY	4339	5402	5960	4830	5186	5313
LV	1880	2547	2931	3253	3292	3325
LT	1764	2377	2652	3198	3375	3532
LU	13319	13340	13132	11056	11050	10825
HU	2880	3203	3416	3682	3779	3928
MT	4031	4614	4406	4808	4693	5066
NL	5993	6403	6501	6175	6244	6185
AT	6441	7011	7164	7115	7130	7157
PL	2563	2751	3122	3363	3499	3576
PT	3744	4414	4718	4416	4486	4524
RO	1511	1817	2036	2166	2189	2275
SI	5293	6379	5835	6199	6310	6549
SK	4077	4253	4477	4495	4605	4747
FI	14636	15420	15603	14341	14731	14726
SE	14526	14504	14048	12810	12942	12732
UK	5604	5794	5263	4681	4648	4567

FINAL ELECTRICITY CONSUMPTION PER CAPITA – ALL FUELS – 1990-2017 (kWh/cap)



Source: Eurostat, May 2019
Methodology and Notes: See Appendices

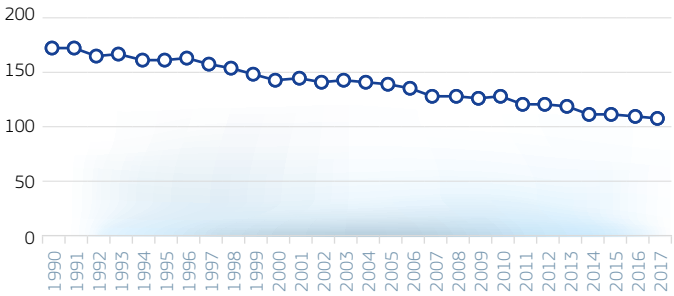
2.11.6 Primary Energy Intensity 2020-2030*

ALL FUELS

toe/M€ '2010	2000	2005	2010	2015	2016	2017
EU-28	145	140	129	113	112	110
Index 2000	100 %	97 %	89 %	78 %	77 %	76 %
BE	169	152	148	120	126	124
BG	723	597	455	435	412	412
CZ	341	306	272	233	229	222
DK	85	81	82	65	65	65
DE	134	132	121	105	104	102
EE	427	336	378	302	322	295
IE	108	91	88	58	58	53
EL	142	131	120	125	124	124
ES	133	133	114	111	108	110
FR	136	136	128	116	113	110
HR	221	208	196	178	174	175
IT	107	111	104	96	94	93
CY	167	145	138	127	129	129
LV	308	246	256	202	199	198
LT	357	304	220	172	175	171
LU	117	134	115	90	88	90
HU	292	264	249	214	213	211
MT	150	153	141	87	78	83
NL	120	117	112	96	96	93
AT	108	117	110	101	100	100
PL	345	307	267	214	219	218
PT	137	142	126	126	124	126
RO	422	329	263	212	201	199
SI	223	211	193	171	172	166
SK	390	325	247	198	194	198
FI	200	187	190	166	168	161
SE	153	145	132	110	111	108
UK	141	123	111	89	86	83

PRIMARY ENERGY INTENSITY – ALL FUELS – 1990-2017 (toe/M€ '2010)

EU-28



* Ratio between primary energy consumption 2020-2030 and GDP chain linked 2010.

Source: Eurostat, DG Economic and Financial Affairs, May 2019
Methodology and Notes: See Appendices

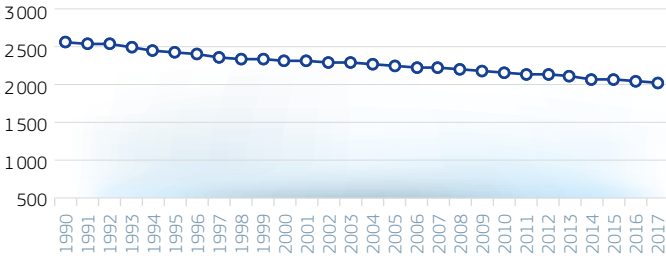
2.11.7 Greenhouse Gas (GHG) Intensity of Fuel Combustion

ALL FUELS

kg CO_2/toe	2000	2005	2010	2015	2016	2017
EU-28	2322	2245	2148	2059	2035	2011
Index 2000	100%	97%	93%	89%	88%	87%
BE	1784	1787	1614	1595	1478	1470
BG	2187	2274	2576	2439	2319	2361
CZ	2960	2649	2466	2332	2388	2278
DK	2745	2560	2406	1989	2027	1858
DE	2542	2413	2395	2424	2416	2376
EE	3163	3184	3348	2925	2918	3215
IE	2958	2958	2676	2588	2548	2509
EL	3485	3469	3306	2976	2852	2895
ES	2328	2369	2036	2063	1955	1974
FR	1539	1453	1365	1238	1268	1278
HR	2161	2200	2088	1956	1981	1957
IT	2630	2532	2367	2266	2270	2168
CY	2630	2800	2719	2655	2638	2584
LV	1892	1755	1825	1637	1650	1587
LT	1501	1486	1886	1600	1601	1538
LU	2212	2406	2311	2128	2054	2024
HU	2167	1962	1834	1720	1737	1730
MT	3135	2784	2707	2269	1968	1951
NL	2134	2067	2077	2134	2091	2046
AT	1897	1963	1734	1595	1608	1635
PL	3611	3579	3357	3326	3275	3256
PT	2394	2331	2000	2099	2055	2134
RO	2719	2653	2458	2472	2406	2259
SI	2365	2258	2262	2079	2135	2065
SK	2055	1977	1858	1736	1743	1707
FI	1646	1547	1640	1250	1284	1210
SE	1030	929	930	784	728	726
UK	2412	2381	2368	2156	2076	2041

GHG INTENSITY OF FUEL COMBUSTION – ALL FUELS – 1990-2017 (kg CO_2/toe)

EU-28



Sources: EEA_UNFCCC v_22 May 2019, Eurostat 2019
Methodology and Notes: **See Appendices**

2.12 Renewable Energy (RES) Indicators

2.12.1 Renewable Energy (RES) Shares*

OVERALL AND HEATING & COOLING

	Overall RES with Aviation Cap**				RES-H&C – Renewable Heating & Cooling			
%	2005	2010	2016	2017	2005	2010	2016	2017
EU-28	9.1	13.1	17.0	17.5	11.1	15.4	19.0	19.5
BE	2.3	5.7	8.7	9.1	3.4	6.1	8.1	8.0
BG	9.4	14.1	18.8	18.7	14.3	24.4	30.0	29.9
CZ	7.1	10.5	14.9	14.8	10.9	14.1	19.8	19.7
DK	16.0	22.2	32.6	35.8	22.8	31.0	42.2	46.6
DE	7.1	11.7	14.9	15.5	7.7	12.1	13.1	13.4
EE	17.4	24.6	28.6	29.2	32.2	43.3	51.2	51.6
IE	2.8	5.8	9.3	10.7	3.5	4.3	6.3	6.9
EL	7.0	9.8	15.1	16.3	12.8	17.9	24.6	26.6
ES	8.4	13.8	17.4	17.5	9.4	12.6	17.1	17.5
FR	9.6	12.7	15.9	16.3	12.4	16.2	21.1	21.4
HR	23.7	25.1	28.3	27.3	30.0	32.8	37.6	36.6
IT	7.6	13.0	17.4	18.3	8.2	15.6	18.9	20.1
CY	3.1	6.0	9.3	9.9	10.0	18.2	23.0	24.5
LV	32.3	30.4	37.1	39.0	42.7	40.7	51.8	54.6
LT	16.8	19.6	25.6	25.8	29.3	32.5	46.6	46.5
LU	1.4	2.9	5.4	6.4	3.6	4.8	7.3	8.1
HU	6.9	12.7	14.3	13.3	9.9	18.1	20.9	19.6
MT	0.1	1.0	6.2	7.2	1.0	7.5	16.1	19.8
NL	2.5	3.9	5.9	6.6	2.4	3.1	5.4	5.9
AT	23.7	29.9	33.0	32.6	21.9	28.7	32.2	32.1
PL	6.9	9.3	11.3	10.9	10.2	11.7	14.7	14.5
PT	19.5	24.2	28.4	28.1	32.1	33.9	35.1	34.4
RO	17.2	23.2	25.0	24.5	17.9	27.2	26.9	26.6
SI	16.0	20.4	21.3	21.6	18.9	28.1	34.0	33.3
SK	6.4	9.1	12.0	11.5	5.0	7.9	9.9	9.8
FI	28.8	32.4	39.1	41.0	39.1	44.2	53.8	54.9
SE	40.5	47.2	53.8	54.5	51.8	60.9	68.5	69.1
UK	1.3	3.7	9.2	10.2	0.8	2.7	7.0	7.5

* 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, March 2019
Methodology and Notes: See Appendices

2.12.1 Renewable Energy (RES) Shares*

ELECTRICITY AND TRANSPORT

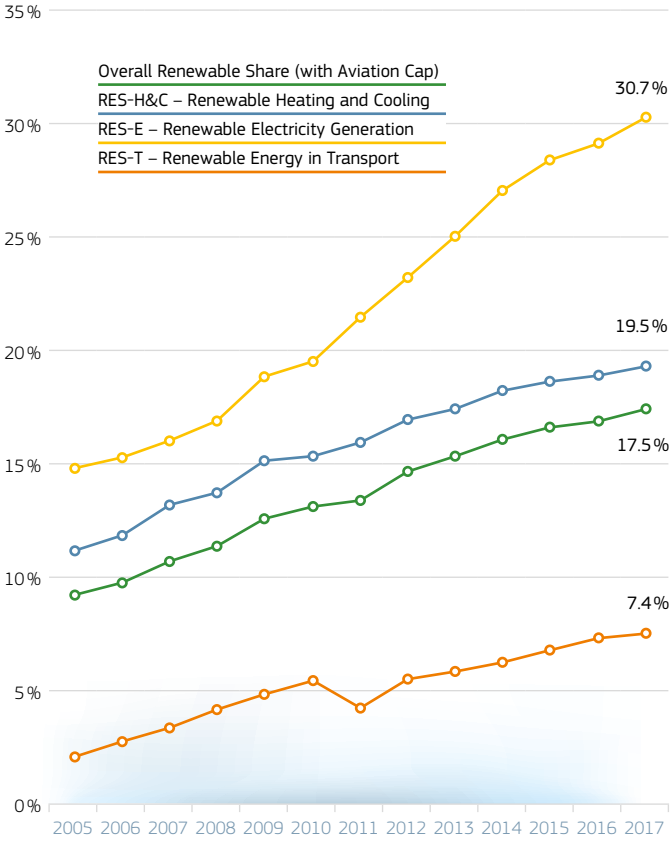
	RES-E – Electricity Generation				RES-T – Transport**			
%	2005	2010	2016	2017	2005	2010	2016	2017
EU-28	14.8	19.7	29.6	30.7	1.8	5.2	7.1	7.4
BE	2.4	7.1	15.8	17.2	0.6	4.7	6.0	6.6
BG	9.3	12.7	19.2	19.1	0.8	1.4	7.2	7.2
CZ	3.8	7.5	13.6	13.7	0.9	5.1	6.4	6.6
DK	24.7	32.7	53.9	60.4	0.4	1.2	6.8	6.9
DE	10.5	18.2	32.2	34.4	4.0	6.4	7.0	7.0
EE	1.0	10.2	15.2	17.0	0.2	0.4	0.4	0.4
IE	7.2	15.6	26.8	30.1	0.1	2.5	5.2	7.4
EL	8.2	12.3	22.7	24.5	0.1	1.9	1.6	1.8
ES	19.1	29.8	36.6	36.3	1.3	5.0	5.3	5.9
FR	13.7	14.8	19.2	19.9	2.1	6.5	8.7	9.1
HR	35.4	37.5	46.6	46.4	1.0	1.1	1.3	1.2
IT	16.3	20.1	34.0	34.1	1.1	4.7	7.4	6.5
CY	0.0	1.4	8.6	8.9		2.0	2.7	2.6
LV	43.0	42.1	51.3	54.4	2.4	4.0	2.8	2.5
LT	3.8	7.4	16.9	18.3	0.6	3.8	3.6	3.7
LU	3.2	3.8	6.7	8.1	0.2	2.1	5.9	6.4
HU	4.4	7.1	7.3	7.5	0.9	6.1	7.6	6.8
MT		0.0	5.7	6.6			5.4	6.8
NL	6.3	9.6	12.6	13.8	0.5	3.4	4.9	5.9
AT	61.9	65.6	73.3	72.2	5.1	10.7	10.6	9.7
PL	2.7	6.7	13.4	13.1	1.6	6.6	3.9	4.2
PT	27.7	40.6	54.0	54.2	0.5	5.6	7.7	7.9
RO	26.9	30.4	42.7	41.6	1.7	3.4	6.2	6.6
SI	28.7	32.2	32.1	32.4	0.8	3.1	1.6	2.7
SK	15.7	17.8	22.5	21.3	1.6	5.3	7.7	7.0
FI	26.9	27.7	32.9	35.2	0.9	4.4	9.0	18.8
SE	50.9	56.0	64.9	65.9	6.2	9.2	31.1	32.1
UK	4.1	7.5	24.6	28.1	0.5	3.3	5.0	5.1

* 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, March 2019
Methodology and Notes: **See Appendices**

2.12.1 Renewable Energy (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, March 2019
Methodology and Notes: See Appendices

2.13 Energy Prices and Taxes

2.13.1 Prices of Transport Fuels

AUTOMOTIVE DIESEL OIL – ALL TAXES INCLUDED*

Current Prices (€/litre)	2009	2010	2015	2017	2018	2019
EU-28	1.01	1.17	1.24	1.21	1.33	1.34
BE	0.95	1.14	1.16	1.25	1.42	1.44
BG	0.84	0.98	1.13	1.01	1.11	1.11
CZ	0.99	1.21	1.15	1.12	1.23	1.23
DK	1.05	1.21	1.28	1.25	1.37	1.39
DE	1.07	1.20	1.18	1.17	1.28	1.26
EE	0.91	1.10	1.08	1.17	1.31	1.32
IE	1.02	1.22	1.26	1.24	1.34	1.33
EL	0.97	1.24	1.18	1.26	1.39	1.38
ES	0.91	1.07	1.12	1.10	1.21	1.22
FR	1.00	1.14	1.15	1.23	1.44	1.45
HR			1.16	1.17	1.31	1.31
IT	1.08	1.21	1.41	1.38	1.49	1.48
CY	0.83	1.00	1.23	1.20	1.31	1.23
LV	0.92	1.06	1.06	1.05	1.19	1.20
LT	0.89	1.02	1.07	1.03	1.15	1.14
LU	0.85	0.99	1.02	0.99	1.10	1.09
HU	0.96	1.16	1.16	1.16	1.24	1.23
MT	0.96	1.04	1.27	1.18	1.20	1.23
NL	1.00	1.15	1.24	1.22	1.34	1.35
AT	0.97	1.10	1.12	1.11	1.22	1.21
PL	0.84	1.06	1.08	1.04	1.15	1.19
PT	1.00	1.15	1.19	1.24	1.35	1.37
RO	0.83	1.03	1.20	1.04	1.22	1.21
SI	1.01	1.15	1.18	1.18	1.28	1.25
SK	1.10	1.11	1.14	1.13	1.25	1.23
FI	0.99	1.13	1.31	1.30	1.40	1.42
SE	1.04	1.25	1.37	1.43	1.51	1.51
UK	1.17	1.39	1.59	1.37	1.47	1.51

* First semester 2019 (07/01/19 -24/06/19).

Sources: DG Energy, Member States, Weekly Oil Bulletin 2019
Methodology and Notes: **See Appendices**

2.13.1 Prices of Transport Fuels

EURO-SUPER 95 – ALL TAXES INCLUDED*

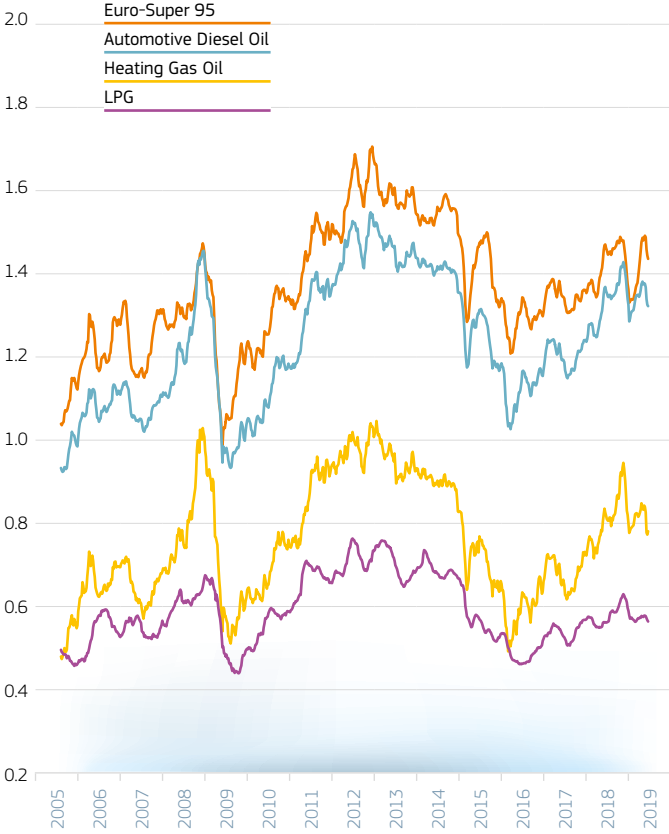
Current Prices (€/litre)	2009	2010	2015	2017	2018	2019
EU-28	1.16	1.33	1.40	1.35	1.43	1.41
BE	1.24	1.40	1.37	1.35	1.40	1.39
BG	0.88	1.02	1.10	1.03	1.10	1.06
CZ	1.03	1.25	1.15	1.15	1.25	1.23
DK	1.28	1.44	1.50	1.50	1.59	1.60
DE	1.26	1.39	1.40	1.37	1.44	1.42
EE	0.92	1.11	1.11	1.19	1.33	1.33
IE	1.11	1.30	1.37	1.36	1.44	1.38
EL	1.00	1.43	1.48	1.51	1.60	1.57
ES	1.01	1.16	1.23	1.22	1.29	1.28
FR	1.21	1.34	1.36	1.38	1.51	1.50
HR			1.26	1.27	1.36	1.33
IT	1.23	1.36	1.54	1.53	1.60	1.56
CY	0.88	1.04	1.23	1.21	1.28	1.17
LV	0.96	1.09	1.13	1.15	1.27	1.24
LT	1.02	1.18	1.16	1.13	1.22	1.18
LU	1.03	1.16	1.18	1.16	1.22	1.20
HU	1.00	1.22	1.16	1.15	1.20	1.17
MT	1.12	1.19	1.36	1.31	1.33	1.36
NL	1.35	1.49	1.56	1.55	1.62	1.64
AT	1.04	1.19	1.20	1.18	1.26	1.23
PL	0.96	1.13	1.11	1.08	1.16	1.16
PT	1.23	1.37	1.43	1.46	1.54	1.49
RO	0.84	1.06	1.20	1.05	1.19	1.15
SI	1.05	1.20	1.29	1.27	1.33	1.27
SK	1.11	1.25	1.29	1.28	1.36	1.32
FI	1.28	1.43	1.47	1.46	1.52	1.51
SE	1.12	1.34	1.41	1.46	1.50	1.49
UK	1.12	1.36	1.54	1.34	1.42	1.41

* First semester 2019 (07/01/19 -24/06/19).

Sources: DG Energy, Member States, Weekly Oil Bulletin 2019
Methodology and Notes: See Appendices

2.13.1 Prices of Transport Fuels

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



*First semester 2019 (07/01/19 -24/06/19).
All Taxes Included, weekly prices.
Incomplete EU-28 series for the period 2005-2013 due to later accesion to the EU of Bulgaria, Croatia and Romania.

Sources: DG Energy, Member States, Weekly Oil Bulletin 2019
Methodology and Notes: See Appendices

2.13.2 Fuel Prices* – Domestic Consumers

GAS – BAND D2

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

€/GJ (GCV)	2009	2010	2015	2016	2017	2018
EU-28	14.62	15.86	19.77	17.65	17.60	18.61
BE	14.33	16.78	17.24	14.83	15.32	17.36
BG	9.67	11.98	10.86	8.65	10.42	12.15
CZ	13.11	14.35	16.21	15.65	15.73	15.80
DK	23.64	26.81	24.48	23.83	24.30	25.37
DE	16.35	15.86	18.93	17.83	16.93	16.88
EE	10.07	11.14	10.68	9.10	11.46	11.80
IE	15.29	14.63	20.11	18.83	18.04	21.14
EL			20.83	18.12		18.18
ES	14.88	15.00	26.57	23.82	24.03	24.29
FR	16.20	15.98	20.35	18.79	19.31	21.19
HR	9.10	10.54	12.76	10.28	10.16	9.99
IT	14.84	21.86	25.13	23.29	24.28	26.43
CY						
LV	10.52	11.28	13.47	11.29	10.91	12.50
LT	11.29	12.59	12.12	10.76	10.98	11.24
LU	12.82	13.13	13.40	11.62	11.06	11.91
HU	13.23	15.38	9.78	9.99	10.14	9.64
MT						
NL	18.73	19.99	22.30	22.45	22.65	23.91
AT	17.23	16.71	19.75	18.71	19.40	19.48
PL	12.78	14.04	13.84	12.26	12.27	12.50
PT	16.52	17.49	27.28	22.63	22.19	21.77
RO	7.45	7.73	9.45	8.98	8.55	9.83
SI	14.96	18.68	16.91	15.64	14.76	16.02
SK	13.21	12.39	13.74	12.37	12.36	12.76
FI						
SE	26.12	29.48	32.58	31.73	31.26	33.97
UK	11.84	11.72	18.56	13.93	13.32	14.38

* All Taxes and Levies Included.
** Prices from second semester each year.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

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	2018
EU-28	16.38	17.31	21.02	20.38	20.42	21.13
BE	18.64	19.74	23.52	27.45	28.77	29.37
BG	8.18	8.30	9.57	9.38	9.83	10.05
CZ	15.33	15.49	14.08	14.21	14.88	15.86
DK	25.55	27.08	30.42	30.84	30.10	31.23
DE	22.94	24.38	29.46	29.77	30.48	30.00
EE	9.20	10.04	12.91	12.38	13.19	14.18
IE	18.55	18.75	24.54	23.38	23.55	25.39
EL	10.32	12.11	17.71	17.23	16.20	16.46
ES	16.84	18.51	23.70	22.84	21.77	24.77
FR	12.07	13.50	16.82	17.11	17.56	17.99
HR	11.64	11.53	13.12	13.31	12.36	13.21
IT	19.97	19.20	24.28	22.61	20.80	21.61
CY	16.42	20.21	18.38	16.21	18.26	21.83
LV	10.54	10.48	16.50	16.24	15.82	15.11
LT	9.26	12.16	12.43	11.71	11.07	10.97
LU	18.82	17.47	17.67	16.98	16.18	16.91
HU	16.62	15.74	11.45	11.25	11.34	11.18
MT	15.13	16.53	12.69	12.74	12.98	13.06
NL	19.06	17.89	18.46	15.92	15.56	17.07
AT	19.09	19.30	19.83	20.10	19.78	20.12
PL	12.91	13.82	14.18	13.52	14.51	13.96
PT	15.94	16.66	22.85	22.98	22.30	22.93
RO	9.79	10.52	13.19	12.33	12.89	13.17
SI	13.41	14.26	16.31	16.29	16.13	16.38
SK	15.60	16.37	15.17	15.37	14.42	14.62
FI	12.89	13.70	15.30	15.45	15.99	16.98
SE	16.46	19.58	18.74	19.62	19.93	19.90
UK	14.07	14.49	21.83	18.31	18.56	20.24

* All Taxes and Levies Included.
** Prices from second semester each year.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.13.3 Fuel Prices*– Industrial Consumers

GAS – BAND I3
10000 GJ < CONSUMPTION < 100000 GJ
2ND SEMESTER**

€/GJ (GCV)	2009	2010	2015	2016	2017	2018
EU-28	8.31	9.06	9.56	8.31	7.84	8.69
BE	8.50	8.20	7.94	7.15	6.36	6.99
BG	5.96	8.41	7.49	5.34	7.02	8.03
CZ	7.56	10.07	8.17	7.16	6.82	7.41
DK	6.85	10.72	10.19	9.01	9.30	10.67
DE	9.61	11.09	10.47	9.21	8.51	8.76
EE	6.39	7.85	7.54	6.50	7.69	9.04
IE	7.31	8.80	10.28	9.43	8.96	10.78
EL			10.00	7.85	7.64	9.32
ES	7.53	8.08	8.81	7.22	7.40	8.29
FR	8.80	9.69	10.19	10.51	9.59	10.85
HR	7.43	10.95	9.74	7.63	6.87	7.87
IT	7.83	8.34	8.87	7.58	7.02	8.13
CY						
LV	7.69	8.84	8.17	6.89	7.92	9.00
LT	7.55	9.40	6.05	6.81	9.19	10.74
LU	10.03	11.72	10.33	9.17	8.71	9.22
HU	10.06	9.93	9.38	7.63	6.84	7.91
MT						
NL	9.72	8.62	8.91	7.91	7.48	8.25
AT	9.07	9.78	10.50	9.48	9.22	9.44
PL	8.36	9.02	9.39	7.26	7.66	8.66
PT	7.22	9.28	10.52	7.68	7.52	8.21
RO	5.93	6.11	8.05	7.27	7.10	7.81
SI	9.61	11.81	10.57	9.07	8.88	9.53
SK	8.91	10.22	9.63	8.67	8.07	8.56
FI	8.00	9.13	11.73	12.21	14.79	16.28
SE	12.47	13.43	11.61	10.67	12.95	13.35
UK	6.06	6.33	9.75	6.91	6.22	7.70

* Excluding VAT and other recoverable Taxes and Levies.
** Prices from second semester each year.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

2.13.3 Fuel Prices*– Industrial Consumers

ELECTRICITY – BAND IC
500 MWh < CONSUMPTION < 2000 MWh
2ND SEMESTER**

€/100 kWh	2009	2010	2015	2016	2017	2018
EU-28	10.11	10.38	11.81	11.29	11.18	11.49
BE	10.79	10.54	10.81	11.58	10.87	11.42
BG	6.39	6.64	7.82	7.88	7.90	8.46
CZ	11.22	10.81	7.83	7.32	7.10	7.21
DK	9.20	9.61	8.99	9.36	8.46	7.88
DE	11.34	11.90	14.93	14.92	15.14	15.16
EE	6.45	7.27	9.58	8.96	8.46	9.24
IE	11.75	11.31	13.57	12.45	12.41	13.49
EL	9.36	10.26	11.50	11.15	11.90	10.59
ES	11.20	10.93	11.33	10.29	10.32	10.98
FR	6.48	7.16	9.51	9.03	9.20	8.89
HR	9.04	9.04	9.28	8.77	9.20	10.13
IT	13.70	14.43	15.97	15.56	14.49	14.34
CY	14.94	17.30	14.12	12.95	13.92	18.11
LV	8.93	9.07	11.83	12.01	11.59	10.47
LT	7.90	10.46	9.97	8.82	8.25	8.99
LU	11.58	10.24	8.93	8.58	8.03	8.46
HU	12.97	10.53	8.70	7.96	7.79	8.22
MT	12.91	18.10	14.05	13.99	13.64	13.56
NL	10.61	9.70	8.46	8.05	7.64	8.09
AT	11.62	11.28	10.47	10.04	9.97	10.11
PL	9.33	9.87	8.61	8.15	8.62	8.84
PT	9.44	9.20	11.54	11.32	11.47	11.70
RO	8.28	8.08	8.02	7.71	7.86	8.66
SI	9.62	10.05	8.70	8.32	7.84	8.66
SK	14.03	11.98	11.22	11.12	11.13	12.01
FI	6.83	6.83	7.06	6.94	6.76	7.07
SE	6.89	8.41	5.90	6.56	6.47	7.27
UK	10.12	10.00	15.20	12.78	12.46	14.23

* Excluding VAT and other recoverable Taxes and Levies.
** Prices from second semester each year.

Source: Eurostat, May 2019
Methodology and Notes: See Appendices

Socio-Economic Indicators in the EU

#3


Socio-Economic Indicators in the EU

Summary

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, July 2019
Methodology and Notes: **See Appendices**

3.2 Enterprises in the Energy Sector

3.2.1 Number of Enterprises in the Energy Sector

ENTERPRISES SURVEY – EU-28

		2015	2016	2017
B05:	Mining of Coal and Lignite	260	242	*256*
B06:	Extraction of Crude Petroleum and Natural Gas	463	417	*413*
B07.21:	Mining of Uranium and Thorium Ores		*4*	*4*
B08.92:	Extraction of Peat	1000	947	*893*
B09.1:	Support Activities for Petroleum and Natural Gas Extraction		1151	1150
C19:	Manufacture of Coke and Refined Petroleum Products	1050	1075	1065
D35:	Electricity, Gas, Steam and Air Conditioning Supply	101172	110065	106094
D35.1:	Electricity Power Generation, Transmission and Distribution	90000	100000	100000
	35.11: Production of Electricity	86842	95561	
	35.12: Transmission of Electricity			
	35.13: Distribution of Electricity	2235	2188	
	35.14: Trade of Electricity	4450	4627	
D35.2:	Manufacture of Gas; Distribution of Gaseous Fuels through Mains	2000	2000	2000
	35.21: Manufacture of Gas	400		
	35.22: Distribution of Gaseous Fuels through Mains	715	712	
	35.23: Trade of Gas through Mains	874	874	
D35.3:	Steam and Air Conditioning Supply	5379	5390	5135
	35.30: Steam & Air Conditioning Supply	5379	5390	5135
Broad Sector – no. of Enterprises Reported		103945	113901	*109875*

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), Áugust 2019
Methodology and Notes: See Appendices

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)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*228*	260	242	*256*	*322*	463	417	*413*
BE		0	0	0	0	0	0	0
BG	23	22	22	20	7	4	4	4
CZ	12	12	12	10	5	5	5	5
DK	0	0	0	0	9	12	11	19
DE	6	7	7	7	4	4	4	4
EE	0	0	0	0	1	2	2	2
IE								
EL		12		14				3
ES	48	81	77		4	19	22	19
FR	6	1	1	0	32			42
HR	1	0	0	0	4	4	5	3
IT		0	0		3	12	8	
CY	0	0	0	0	0	0	0	0
LV	0	0	0	0	1	2	2	2
LT	0	0	0	0	4	4	5	5
LU	0	0	0	0	0	0	0	0
HU	9	14	11	10	13	8	13	15
MT	0	0	0	0	0	0	0	0
NL	0	0	0	0	48	41	42	41
AT	0	0	0	0	2	2	2	2
PL	48	62	59	57	54	62	57	52
PT	0	0	0	0	0	0	0	0
RO	35	27	23	20	21	38	35	30
SI	2	1	1	1	1	1	3	3
SK					0			
FI	0	0	0	0	0	0	0	0
SE		0	0	0		0	0	2
UK	23				98	140	138	146

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: **See Appendices**

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)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*1 010*	1 000	947	*893*	*810*		1 100	1 150
BE	0	0	0					
BG	10	4	3		6	14	12	10
CZ		17	13		7	6	6	6
DK	4	2	2		35	55	57	58
DE	74	91	97	72				
EE	39	41	37	34	0	0	1	0
IE					34	35	35	37
EL	0		0			9	9	9
ES	6	7	7	7		46	43	
FR	23	39	12	9	36	54	45	38
HR	0	0	0	0	7	4	4	5
IT	12	4	4			52	49	
CY	0	0	0		0			
LV	49	91	95	84	0	2	2	1
LT	24	26	23	24	0	0	0	0
LU	0	0	0		0	0	0	0
HU	15	13	14	15	40	37	34	36
MT	0	0	0	0				
NL	7	6	5	5	116	251	256	280
AT	7	5	5	5	8	7	7	7
PL	45	32	31		90	104	109	128
PT	1	1	1	1	1	4	6	8
RO	8	5	4		91	106	109	93
SI	0	0	0	0	3	2	2	3
SK		42						
FI	463	450	417		0	0	0	0
SE	82	70	69		45	63	63	61
UK	25	19	18		270	251	237	214

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: See Appendices

3.2.1 Number of Enterprises in the Energy Sector

ENTERPRISES SURVEY

Mio EUR	Manufacture of Coke and Refined Petroleum Products (C19)				Electricity, Gas, Steam and Air Conditioning Supply (D35)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*1189*	1050	1075	1065	*52106*	101172	110065	106094
BE	22		11	12	301	851	727	816
BG	17	11	10	9	1091	1745	1704	1677
CZ	28	25	29	28	3267	10996	11026	11296
DK	5	3	5	5	1681	1745	1600	1604
DE	95	54	73	84	1722	2059	1974	2028
EE	5	5	6	4	223	230	235	236
IE					403	515	551	537
EL	7	40	41	43	10	7036	6920	6975
ES	18	14	18	17	13098	14044	14077	14787
FR	52	43	37	25	14337	27062	29687	26333
HR	17	14	15	13	234	573	670	681
IT	328	281	291		4028	10775	11523	
CY					4	58	61	70
LV	13	16	11	14	381	533	567	574
LT	6	9	5	7	253	1488	1441	1439
LU	0	0	0	0	67	80	83	73
HU	9	8	8	9	611	610	678	780
MT						3	14	11
NL	42	45	29	31	678	1130	1201	1256
AT	4	5	5	5	1878	2390	2430	2475
PL	165	176	203	195	2047	3192	3670	4313
PT	10	18	15	17	745	1209	3977	4062
RO	54	44	37	44	885	1460	1350	1206
SI	3	4	2	4	648	1530	1503	1483
SK					294	451	551	547
FI	15	17	16	14	736	907	934	936
SE	45	34	37	38	1828	4221	5910	3364
UK	170	132	120	115	651	4279	5001	5372

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: See Appendices

3.2.2 Turnover in the Energy Sector

ENTERPRISES SURVEY – EU-28

Mio EUR	2015	2016	2017
B05: Mining of Coal and Lignite	11102.3	9594.6	11078.0
B06: Extraction of Crude Petroleum and Natural Gas	118176.1	90689.2	97021.3
B07.21: Mining of Uranium and Thorium Ores			
B08.92: Extraction of Peat	1698.4	1679.3	*1600.0*
B09.1: Support Activities for Petroleum and Natural Gas Extraction	20196.9	13767.0	11489.4
C19: Manufacture of Coke and Refined Petroleum Products	422998.2	416144.2	443774.5
D35: Electricity, Gas, Steam and Air Conditioning Supply	1460000.0	1340000.0	1390000.0
D35.1: Electricity Power Generation, Transmission and Distribution	1203380.0	1102084.5	1128013.4
35.11: Production of Electricity	321171.0	295567.0	
35.12: Transmission of Electricity	73471.4	68563.9	
35.13: Distribution of Electricity	244506.9	236071.4	
35.14: Trade of Electricity	564230.8	501882.2	
D35.2: Manufacture of Gas; Distribution of Gaseous Fuels through Mains	220145.5	200806.8	
35.21: Manufacture of Gas	6230.8	10579.4	
35.22: Distribution of Gaseous Fuels through Mains	50008.1	46267.3	
35.23: Trade of Gas through Mains	163893.1	143956.9	
D35.3: Steam and Air Conditioning Supply		*36000.0*	34325.1
35.30: Steam and Air Conditioning Supply		*36000.0*	34325.1
Broad Sector – Turnover Reported	2034171.9	1871874.3	*1954963.0*

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: See Appendices

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)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*15960.0*	11102.3	9594.6	11078.0	*145432.0*	118176.1	90689.2	97021.3
BE		0.0	0.0	0.0	0.0	0.0	0.0	0.0
BG	331.1	348.8	301.0	345.0	25.5	30.4	30.4	
CZ	2811.7	1578.0	1391.8	1559.7				
DK	0.0	0.0	0.0	0.0	7049.9	3896.0	3010.9	3692.5
DE	3921.4	2161.5	1968.0	2113.2	2762.1	2978.4	2479.0	2599.6
EE	0.0	0.0	0.0	0.0				
IE								
EL		92.7		28.8				28.6
ES	595.6	235.6	187.7		79.7	126.2	225.6	621.4
FR		0.3	0.1	0.0	728.4			
HR		0.0	0.0	0.0				52.0
IT		0.0	0.0	0.0	46241.0	46394.8	39719.4	39719.4
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	68.5	38.6	29.3	29.2
LU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HU	7.0	8.6	4.3	5.1	81.1	33.2	36.5	58.6
MT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.0	0.0	0.0	0.0	34861.9	26734.8	17614.2	17170.9
AT	0.0	0.0	0.0	0.0				
PL	5974.2	5754.9		6204.5			124.0	
PT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RO	357.9	20.5	18.1	15.0	4191.4	4246.2	3657.7	4340.3
SI								
SK					0.0			
FI	0.0	0.0	0.0		0.0	0.0	0.0	
SE				0.0		0.0	0.0	
UK	1112.4				44979.9	28916.7	21299.1	25712.5

* Provisional data.
Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: **See Appendices**

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)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*1 700.0*	1 698.4	1 679.3	*1 600.0*	*14 500.0*	20 196.9	13 767.0	11 489.4
BE	0.0	0.0	0.0					
BG	0.6					0.2		
CZ		6.7	6.8		46.3			
DK						633.0		
DE	417.5	399.6	334.5	312.0				
EE	77.3	83.5	85.8	92.5	0.0	0.0		0.0
IE					73.6	10.0	12.8	4.2
EL	0.0		0.0			28.9	23.2	20.2
ES	10.5	9.9	10.0	11.0		98.6	57.8	
FR	74.2	51.9	44.1	38.9	301.7	266.1	240.3	289.8
HR	0.0	0.0	0.0	0.0				147.5
IT	11.8	4.7	5.1			2 238.1	945.4	920.4
CY	0.0	0.0	0.0		0.0			
LV	101.4	150.7	167.2		0.0			
LT	39.9	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	3.2	5.3	5.0	5.5	94.8	133.4	100.9	140.7
MT	0.0	0.0	0.0	0.0				
NL								
AT					13.6			
PL			50.5		377.7	325.5	190.7	206.2
PT								
RO	0.3	0.7	0.8		874.0	637.5	425.5	379.7
SI	0.0	0.0	0.0	0.0				
SK		12.3						
FI	554.4	472.0	214.2		0.0	0.0	0.0	
SE	30.7	29.3	25.9			83.8		135.0
UK		101.6	108.8		8 374.6	9 776.7	6 545.2	5 839.5

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: See Appendices

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)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*522200.0*	422998.2	416144.2	443774.5	*1225837.0*	1460000.0	1340000.0	1390000.0
BE	48074.1		35665.9	42643.5	43772.3	36969.2	31311.1	31244.6
BG					7279.0	8357.4	7751.6	8233.4
CZ	4558.3				37371.0	40927.3	36571.0	41956.0
DK					20377.5	21487.0	21750.9	24890.4
DE	120831.6	107407.8	97982.7	95949.5	426881.7	537677.0	491909.7	536534.9
EE	178.0	253.8		193.7	1833.5	1764.7	1772.2	2020.9
IE					7186.3	8012.8	8212.8	8660.1
EL	15339.6	14818.1	11320.4	13069.3	5942.7	19683.8	18328.2	18574.8
ES	34773.4	36051.4	30810.1	38156.4	59705.8	93787.0	83242.0	88248.3
FR	61248.1	39383.1	33732.1		109648.6	110123.2	109833.4	126595.0
HR					3684.4	4358.9	4270.5	5031.4
IT	46037.6	35595.7	31269.9	34297.5	160950.4	195056.2	168758.3	169154.3
CY					782.3	630.0	579.1	683.4
LV	0.6	7.5			2310.5	2081.6	2011.2	2070.8
LT					3279.1	2375.8	2305.3	2280.2
LU	0.0	0.0	0.0	0.0	1951.3	4646.6	3961.0	3769.9
HU	8297.8	6529.2	5860.7	6854.6	22059.2	16726.6	14392.5	15608.2
MT								
NL	37272.3	34361.9	26441.9	30283.7	41196.8	31408.8	28410.2	27085.5
AT		7225.8	6400.0	7460.7	29297.1	35906.3	33871.1	40334.9
PL	27575.0	27045.0	24091.8	30333.4	42566.6	47825.8	44374.7	46699.2
PT	6767.0	7130.6	5736.0	7168.5	17842.1	21119.1	20571.5	21317.9
RO	3272.0	3374.3	3100.0	3672.2	12077.5	13174.7	12752.0	12412.2
SI					4034.3	6075.6	5583.3	7305.1
SK					11351.0	11283.9	11486.6	12683.3
FI					14454.6	12422.2	12902.4	12860.8
SE		11224.9			28485.9	26219.6	25319.1	25358.2
UK	44763.5	40197.8	68984.1	72907.9	109515.1	148344.2	136043.3	130290.1

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: **See Appendices**

3.2.3 Number of Persons Declared as Employed in the Energy Sector

ENTERPRISES SURVEY – EU-28

	2015	2016	2017
B05: Mining of Coal and Lignite	156135	150229	129748
B06: Extraction of Crude Petroleum and Natural Gas	77025	65834	60623
B07.21: Mining of Uranium and Thorium Ores			
B08.92: Extraction of Peat	11114	9947	*9650*
B09.1: Support Activities for Petroleum and Natural Gas Extraction	56816	47988	41384
C19: Manufacture of Coke and Refined Petroleum Products	124733	129808	126499
D35: Electricity, Gas, Steam and Air Conditioning Supply	1231808	1230000	1242274
D35.1: Electricity Power Generation, Transmission and Distribution	941130	947202	953336
35.11: Production of Electricity	450642	450003	
35.12: Transmission of Electricity	57236	65320	
35.13: Distribution of Electricity	337511	331383	
35.14: Trade of Electricity	95743	100496	
D35.2: Manufacture of Gas; Distribution of Gaseous Fuels through Mains	146357		150000
35.21: Manufacture of Gas	7801		
35.22: Distribution of Gaseous Fuels through Mains	70172	67600	
35.23: Trade of Gas through Mains	68370	69670	
D35.3: Steam and Air Conditioning Supply	144321	141767	140000
35.30: Steam and Air Conditioning Supply	144321	141767	
Broad Sector – Employment Reported	1657631	1633806	1610178

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: See Appendices

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)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*236000*	156135	150229	129748	*73000*	77025	65834	60623
BE		0	0	0	0	0	0	0
BG	13269	11995	11332	10300				
CZ	24265	18716	17299	15145				
DK	0	0	0	0	566	1051	699	1049
DE	33672	17468	16729	13011	3754	3927	3679	3526
EE	0	0	0	0				
IE								
EL		316		194				61
ES	6105	1684	1690		242	368	908	995
FR	28	2	1	0	814			
HR		0	0	0		7852	63	63
IT		0	0	0	12116	12681	12899	12899
CY	0	0	0	0	0	0	0	0
LV	0	0	0	0	1	20	15	12
LT	0	0	0	0	252	212	154	149
LU	0	0	0	0	0	0	0	0
HU	111	124	97	76	75	68	134	125
MT	0	0	0	0	0	0	0	0
NL	0	0	0	0	3173	3913	3764	3252
AT	0	0	0	0				
PL	124925	96076		82036			653	
PT	0	0	0	0	0	0	0	0
RO	18011	1843	1246	953	30546	23486	20823	19752
SI								
SK					0			
FI	0	0	0		0	0	0	
SE				0		0	0	
UK	6023	2844	1420		15300	17127	16953	13540

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: **See Appendices**

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)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*11144*	11114	9947	*9650*	*47730*	56816	47988	41384
BE	0	0	0					
BG	52	55			14	25	24	
CZ		71	48		421			
DK						1587		
DE	2003	1762	1585	1599				
EE	1153	963	859	781	0	0		0
IE					35	29	28	32
EL	0		0			276	282	280
ES	48	36	39	38		191	176	
FR	248	130	123	130	110	386	411	524
HR	0	0	0	0		2273	2005	1842
IT	12	21	23			2188	1876	1824
CY	0	0	0		0			
LV	1977	2158	2157	2061	0	2	2	1
LT	1126	1149			0	0	0	0
LU	0	0	0		0	0	0	0
HU	116	97	94	89	1089	1062	877	848
MT	0	0	0	0				
NL	22	104	107	223				
AT					27			
PL			523		4082	4638	3345	2780
PT								
RO	26	25	20		6267	6771	5202	4776
SI	0	0	0	0				
SK		114						
FI	1845	1977	1436		0	0	0	
SE	306	165	162			75		62
UK	355		101		22879			

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: See Appendices

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)			
	2010	2015	2016	2017	2010	2015	2016	2017
EU-28	*152705*	124733	129808	126499	*1234450*	1231808	1230000	1242274
BE	4091		4650	4559	19193	20293	18394	18166
BG		2078	1989	2449	34191	31751	32137	31845
CZ	2747				31480	34536	34799	37095
DK					11235	13815	11373	11537
DE	19452	22302	22251	21715	221264	224669	227843	234461
EE	1406	1679		1297	5681	4949	4930	5121
IE					9117	8846	9206	9224
EL	4333	3588	3405	3608	22834	25764	30677	32581
ES	8954	8453	8918	8755	48687	39764	41022	41844
FR	15095				170194	190364	189412	239570
HR		262	5018	4616	16619	14893	15076	15218
IT	16493	11065	11006	10998	86414	89109	88287	88000
CY					2470	2130	2102	2084
LV	12	65	56	58	10907	11344	11320	10981
LT					15876	13522	12692	12185
LU	0	0	0	0	1196	1529	1611	1672
HU	6329	5691	5648	5711	25715	24601	24712	24991
MT						10		
NL	5908	5299	5416	5577	22882	27969	27721	27216
AT		1180	1217	1268	28685	29168	29340	28847
PL	13623	13495	13587	13886	162409	128183	125805	125569
PT	1971	1830	1790	1778	9496	9589	12343	12709
RO	3960	2560	2382	2091	81111	72333	70559	66385
SI		26			8207	8958	8861	8797
SK					20034	17873	17525	17364
FI					13463	13368	13847	13921
SE		2879			31115	31379	31788	32118
UK					123965	141099	134716	147788

Italics: DG Energy Estimates.

Sources: Eurostat, Structural Business Statistics Survey (SBS), August 2019
Methodology and Notes: **See Appendices**

3.3 Economy

3.3.1 GDP at Current Market Prices

Mrd EUR*	2005	2010	2015	2016	2017	2018
EU-28	11605.4	12841.5	14828.7	14958.3	15382.3	15872.3
BE	311.5	365.1	411.0	424.7	439.1	450.6
BG	23.9	38.2	45.3	48.1	51.7	54.9
CZ	109.6	156.7	168.5	176.4	191.7	207.4
DK	212.8	243.2	273.0	282.1	292.8	297.3
DE	2300.9	2580.1	3048.9	3159.8	3277.3	3386.0
EE	11.3	14.7	20.7	21.7	23.6	25.7
IE	170.2	167.7	262.5	273.2	294.1	322.5
EL	199.2	226.0	177.3	176.5	180.2	184.9
ES	930.6	1080.9	1081.2	1118.7	1166.3	1206.9
FR	1765.9	1995.3	2198.4	2228.6	2291.7	2349.0
HR	36.5	45.2	44.6	46.6	49.0	51.5
IT	1489.7	1604.5	1652.1	1689.8	1724.2	1753.9
CY	15.0	19.3	17.7	18.5	19.6	20.8
LV	13.7	17.8	24.3	25.0	27.0	29.5
LT	21.0	28.0	37.4	38.8	42.2	45.1
LU	30.0	40.2	51.6	53.3	55.3	58.1
HU	90.9	98.8	110.9	113.9	124.0	131.9
MT	5.1	6.6	9.6	10.3	11.3	12.2
NL	550.9	639.2	690.0	708.3	737.0	772.7
AT	254.1	295.9	344.3	356.2	369.9	386.1
PL	246.2	361.8	430.3	426.5	467.2	494.7
PT	158.7	179.9	179.8	186.5	194.6	201.5
RO	80.2	125.4	160.3	170.4	187.5	203.1
SI	29.2	36.3	38.9	40.4	43.0	45.9
SK	39.3	67.6	79.1	81.2	84.9	90.5
FI	164.4	187.1	210.0	216.1	223.9	232.4
SE	313.6	369.5	449.2	463.1	475.2	467.0
UK	2030.9	1850.5	2611.9	2403.4	2338.0	2390.2

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

Source: DG Economic and Financial Affairs, AMECO, July 2019
Methodology and Notes: See Appendices

3.3.2 GDP per Capita at Current Market Prices

Thousand EUR/cap*	2005	2010	2015	2016	2017	2018
EU-28	23.5	25.5	29.2	29.3	30.1	31.0
BE	29.8	33.7	36.6	37.5	38.7	39.5
BG	3.1	5.2	6.3	6.7	7.3	7.8
CZ	10.7	15.0	16.0	16.7	18.1	19.5
DK	39.3	43.9	48.2	49.4	50.9	51.4
DE	27.9	31.5	37.5	38.5	39.7	40.9
EE	8.3	11.0	15.7	16.5	17.9	19.4
IE	41.4	36.9	56.1	57.8	61.5	66.8
EL	18.2	20.3	16.3	16.4	16.7	17.2
ES	21.5	23.3	23.3	24.1	25.1	25.9
FR	28.1	30.9	33.1	33.4	34.3	35.1
HR	8.5	10.5	10.6	11.1	11.8	12.5
IT	25.7	27.1	27.2	27.9	28.5	29.0
CY	20.5	23.6	21.0	21.8	22.9	24.0
LV	6.1	8.4	12.2	12.7	13.9	15.3
LT	6.3	8.9	12.8	13.4	14.8	16.1
LU	65.1	80.0	91.6	92.5	93.6	96.6
HU	9.0	9.9	11.3	11.6	12.7	13.5
MT	12.8	15.9	21.9	23.0	24.5	25.6
NL	33.8	38.6	40.8	41.7	43.1	45.0
AT	31.0	35.4	40.1	40.9	42.2	43.8
PL	6.4	9.5	11.3	11.2	12.3	13.0
PT	15.1	17.0	17.3	18.0	18.9	19.6
RO	3.8	6.2	8.1	8.6	9.5	10.4
SI	14.6	17.7	18.8	19.6	20.8	22.2
SK	7.3	12.5	14.6	15.0	15.6	16.6
FI	31.4	35.0	38.4	39.4	40.7	42.2
SE	34.8	39.6	46.1	47.0	47.5	46.1
UK	33.7	29.6	40.3	36.8	35.5	36.1

* €1 000' per Capita.

Sources: DG Economic and Financial Affairs, AMECO, July 2019;
Eurostat, Demography and Migration, July 2019

Methodology and Notes: **See Appendices**

3.3.3 GDP at 2010 Market Prices

Mrd EUR*	2005	2010	2015	2016	2017	2018
EU-28	12270.9	12841.5	13593.3	13870.6	14211.2	14491.7
BE	340.2	365.1	384.5	390.2	396.8	402.5
BG	32.2	38.2	41.3	42.9	44.5	46.1
CZ	138.9	156.7	170.3	174.5	182.1	187.6
DK	240.6	243.2	259.3	265.5	271.5	274.8
DE	2426.5	2580.1	2807.6	2870.6	2932.5	2974.3
EE	15.0	14.7	17.7	18.3	19.2	19.9
IE	163.8	167.7	240.4	252.4	270.6	291.8
EL	229.8	226.0	184.8	184.4	187.2	191.0
ES	1025.4	1080.9	1072.9	1106.9	1139.9	1168.8
FR	1915.4	1995.3	2100.0	2124.6	2170.5	2203.5
HR	43.9	45.2	44.8	46.3	47.7	49.0
IT	1629.9	1604.5	1557.2	1574.6	1599.8	1613.9
CY	17.0	19.3	17.8	18.7	19.5	20.2
LV	18.2	17.8	21.2	21.6	22.6	23.7
LT	26.4	28.0	33.7	34.5	36.0	37.2
LU	35.6	40.2	46.1	47.2	48.0	49.5
HU	99.9	98.8	108.9	111.4	116.0	121.7
MT	6.0	6.6	8.6	9.1	9.7	10.2
NL	596.9	639.2	663.5	678.0	697.5	715.2
AT	277.3	295.9	312.3	318.6	326.7	335.7
PL	286.7	361.8	420.0	432.8	453.6	475.5
PT	174.5	179.9	172.2	175.5	180.4	184.2
RO	109.4	125.4	145.2	152.2	162.8	168.6
SI	33.3	36.3	37.0	38.1	40.0	41.8
SK	53.6	67.6	76.7	79.1	81.7	84.9
FI	179.6	187.1	187.5	192.7	197.8	203.5
SE	341.5	369.5	410.4	421.4	430.3	440.4
UK	1813.1	1850.5	2051.7	2088.4	2126.5	2156.4

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

Sources: DG Economic and Financial Affairs, AMECO, July 2019;
Eurostat, Demography and Migration, July 2019

Methodology and Notes: See Appendices

3.3.4 GDP per Capita at 2010 Market Prices

Thousand EUR/cap*	2005	2010	2015	2016	2017	2018
EU-28	24.8	25.5	26.7	27.2	27.8	28.3
BE	32.6	33.7	34.2	34.5	35.0	35.3
BG	4.2	5.2	5.7	6.0	6.3	6.5
CZ	13.6	15.0	16.2	16.5	17.2	17.7
DK	44.5	43.9	45.8	46.5	47.2	47.5
DE	29.4	31.5	34.6	34.9	35.5	35.9
EE	11.1	11.0	13.4	13.9	14.6	15.1
IE	39.8	36.9	51.4	53.4	56.6	60.4
EL	20.9	20.3	17.0	17.1	17.4	17.8
ES	23.7	23.3	23.1	23.8	24.5	25.0
FR	30.5	30.9	31.6	31.9	32.5	32.9
HR	10.2	10.5	10.6	11.1	11.5	11.9
IT	28.2	27.1	25.6	26.0	26.4	26.7
CY	23.2	23.6	21.1	22.0	22.8	23.4
LV	8.1	8.4	10.6	11.0	11.6	12.2
LT	7.9	8.9	11.5	12.0	12.6	13.2
LU	77.2	80.0	81.9	82.0	81.2	82.2
HU	9.9	9.9	11.0	11.3	11.8	12.4
MT	14.8	15.9	19.6	20.2	21.1	21.5
NL	36.6	38.6	39.3	39.9	40.8	41.6
AT	33.8	35.4	36.4	36.6	37.2	38.0
PL	7.5	9.5	11.0	11.4	11.9	12.5
PT	16.6	17.0	16.6	17.0	17.5	17.9
RO	5.1	6.2	7.3	7.7	8.3	8.6
SI	16.7	17.7	17.9	18.5	19.4	20.2
SK	10.0	12.5	14.2	14.6	15.0	15.6
FI	34.3	35.0	34.3	35.1	35.9	36.9
SE	37.9	39.6	42.1	42.8	43.0	43.5
UK	30.1	29.6	31.6	31.9	32.3	32.5

* €1 000' 2010 per Capita.

Sources: DG Economic and Financial Affairs, AMECO, July 2019;
Eurostat, Demography and Migration, July 2019

Methodology and Notes: **See Appendices**

3.4 Demography

3.4.1 Population

ON 1ST JANUARY

Thousand Inhabitants	2005	2010	2015	2016	2017	2018
EU-28	494 598.3	503 170.6	508 520.2	510 181.9	511 373.3	512 379.2
BE	10 445.9	10 839.9	11 237.3	11 311.1	11 351.7	11 398.6
BG	7 688.6	7 421.8	7 202.2	7 153.8	7 101.9	7 050.0
CZ	10 198.9	10 462.1	10 538.3	10 553.8	10 578.8	10 610.1
DK	5 411.4	5 534.7	5 659.7	5 707.3	5 748.8	5 781.2
DE	82 500.8	81 802.3	81 197.5	82 175.7	82 521.7	82 792.4
EE	1 358.9	1 333.3	1 314.9	1 315.9	1 315.6	1 319.1
IE	4 111.7	4 549.4	4 677.6	4 726.3	4 784.4	4 830.4
EL	10 969.9	11 119.3	10 858.0	10 783.7	10 768.2	10 741.2
ES	43 296.3	46 486.6	46 449.6	46 440.1	46 528.0	46 658.4
FR	62 772.9	64 658.9	66 458.2	66 638.4	66 804.1	66 926.2
HR	4 310.9	4 302.8	4 225.3	4 190.7	4 154.2	4 105.5
IT	57 874.8	59 190.1	60 795.6	60 665.6	60 589.4	60 484.0
CY	733.1	819.1	847.0	848.3	854.8	864.2
LV	2 249.7	2 120.5	1 986.1	1 969.0	1 950.1	1 934.4
LT	3 355.2	3 142.0	2 921.3	2 888.6	2 847.9	2 808.9
LU	461.2	502.1	563.0	576.2	590.7	602.0
HU	10 097.5	10 014.3	9 855.6	9 830.5	9 797.6	9 778.4
MT	402.7	414.0	439.7	450.4	460.3	475.7
NL	16 305.5	16 575.0	16 900.7	16 979.1	17 081.5	17 181.1
AT	8 201.4	8 351.6	8 584.9	8 700.5	8 772.9	8 822.3
PL	38 173.8	38 022.9	38 005.6	37 967.2	37 973.0	37 976.7
PT	10 494.7	10 573.5	10 374.8	10 341.3	10 309.6	10 291.0
RO	21 382.4	20 294.7	19 870.6	19 760.6	19 644.4	19 530.6
SI	1 997.6	2 047.0	2 062.9	2 064.2	2 065.9	2 066.9
SK	5 372.7	5 390.4	5 421.3	5 426.3	5 435.3	5 443.1
FI	5 236.6	5 351.4	5 471.8	5 487.3	5 503.3	5 513.1
SE	9 011.4	9 340.7	9 747.4	9 851.0	9 995.2	10 120.2
UK	60 182.1	62 510.2	64 853.4	65 379.0	65 844.1	66 273.6

Source: Eurostat, Demography and Migration, July 2019
Methodology and Notes: See Appendices

3.5 Employment

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

MEMBER STATES DATA – EU-28

Thousands	2010	2015	2016	2017	2018
B05: Mining of Coal and Lignite	331.2	294.5	274.1	258.9	247.6
B06: Extraction of Crude Petroleum and Natural Gas	103.8	88.9	81.4	70.0	60.7
B0892: Extraction of Peat*	*11.1*	11.1	9.9	9.7	*9.7*
B091: Support Activities for Petroleum and Natural Gas Extraction*	*47.7*	56.8	48.0	41.4	*41.4*
C19: Manufacture of Coke and refined Petroleum Products	218.7	190.0	186.5	188.6	193.6
D35: Electricity, Gas, Steam and Air Conditioning Supply	1 645.3	1 550.5	1 553.0	1 546.0	1 569.1
Broad Sector Total Employment**	2 357.9	2 191.8	2 152.9	2 114.5	*2 122.0*

* According to the Structural Business Survey (SBS), August 2019.
** 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 2019
Methodology and Notes: **See Appendices**

3.5.2 Employment Rate in all Economic Sectors

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

%	2005	2010	2015	2016	2017	2018
EU-28	63.3	64.1	65.7	66.7	67.7	68.6
BE	61.1	62.0	61.8	62.3	63.1	64.5
BG	55.8	59.8	62.9	63.4	66.9	67.7
CZ	64.8	65.0	70.2	72.0	73.6	74.8
DK	75.9	73.3	73.5	74.9	74.2	75.4
DE	65.5	71.3	74.0	74.7	75.2	75.9
EE	64.8	61.2	71.9	72.1	74.1	74.8
IE	70.4	61.0	64.8	66.4	67.7	68.6
EL	59.6	59.1	50.8	52.0	53.5	54.9
ES	63.6	58.8	57.8	59.5	61.1	62.4
FR	63.8	64.0	64.3	64.6	65.2	65.9
HR	55.0	57.4	56.0	56.9	58.9	60.6
IT	57.6	56.8	56.3	57.2	58.0	58.5
CY	68.5	68.9	62.7	63.7	65.6	68.6
LV	62.1	58.5	68.1	68.7	70.1	71.8
LT	62.9	57.6	67.2	69.4	70.4	72.4
LU	63.6	65.2	66.1	65.6	66.3	67.1
HU	56.9	54.9	63.9	66.5	68.2	69.2
MT	53.6	56.2	65.1	67.2	69.2	71.4
NL	70.6	73.9	74.1	74.8	75.8	77.2
AT	67.4	70.8	71.1	71.5	72.2	73.0
PL	52.8	58.9	62.9	64.5	66.1	67.4
PT	67.3	65.3	63.9	65.2	67.8	69.7
RO	57.6	60.2	61.4	61.6	63.9	64.8
SI	66.0	66.2	65.2	65.8	69.3	71.1
SK	57.7	58.8	62.7	64.9	66.2	67.6
FI	68.4	68.1	68.5	69.1	70.0	72.1
SE	72.3	72.1	75.5	76.2	76.9	77.5
UK	71.8	69.4	72.7	73.5	74.1	74.7

Sources: Eurostat, Labour Force Survey (LFS), July 2019
Methodology and Notes: See Appendices

3.5.3 Unemployment Rate in all Economic Sectors *

MEMBER STATES' DATA – ALL SECTORS

%	2005	2010	2015	2016	2017	2018
EU-28	9.0	9.6	9.4	8.6	7.6	6.8
BE	8.5	8.3	8.5	7.8	7.1	6.0
BG	10.1	10.3	9.2	7.6	6.2	5.2
CZ	7.9	7.3	5.1	4.0	2.9	2.2
DK	4.8	7.5	6.2	6.2	5.7	5.0
DE	11.2	7.0	4.6	4.1	3.8	3.4
EE	8.0	16.7	6.2	6.8	5.8	5.4
IE	4.6	14.6	10.0	8.4	6.7	5.8
EL	10.0	12.7	24.9	23.6	21.5	19.3
ES	9.2	19.9	22.1	19.6	17.2	15.3
FR	8.9	9.3	10.4	10.1	9.4	9.1
HR	13.0	11.8	16.1	13.4	11.0	8.4
IT	7.7	8.4	11.9	11.7	11.2	10.6
CY	5.3	6.3	15.0	13.0	11.1	8.4
LV	10.0	19.5	9.9	9.6	8.7	7.4
LT	8.3	17.8	9.1	7.9	7.1	6.2
LU	4.6	4.6	6.5	6.3	5.6	5.5
HU	7.2	11.2	6.8	5.1	4.2	3.7
MT	6.9	6.8	5.4	4.7	4.0	3.7
NL	5.9	5.0	6.9	6.0	4.9	3.8
AT	5.6	4.8	5.7	6.0	5.5	4.9
PL	17.9	9.7	7.5	6.2	4.9	3.9
PT	8.8	12.0	12.6	11.2	9.0	7.0
RO	7.1	7.0	6.8	5.9	4.9	4.2
SI	6.5	7.3	9.0	8.0	6.6	5.1
SK	16.4	14.5	11.5	9.7	8.1	6.5
FI	8.4	8.4	9.4	8.8	8.6	7.4
SE	7.7	8.6	7.4	6.9	6.7	6.3
UK	4.8	7.8	5.3	4.8	4.3	4.0

* Percentage of active population.

Sources: Eurostat, Labour Force Survey (LFS), July 2019
Methodology and Notes: **See Appendices**

Environment Indicators in the EU

#4


Environment Indicators in the EU

Summary

4.1 Gases Emissions

4.1.1 Greenhouse Gas (GHG) Emissions*

EU-28 AND MEMBER STATES – TOTAL

Million ton CO_2 equiv.	2000	2005	2010	2015	2016	2017
EU-28	5287.2	5362.0	4917.5	4470.3	4453.1	4483.1
Index 2000	100.0%	101.4%	93.0%	84.5%	84.2%	84.8%
BE	154.5	148.9	137.1	121.6	120.2	119.4
BG	59.8	64.5	61.1	62.2	59.7	62.1
CZ	151.1	149.5	141.7	129.5	131.5	130.5
DK	73.2	68.8	65.5	50.8	53.0	50.8
DE	1064.7	1016.5	967.0	931.8	937.7	936.0
EE	17.4	19.3	21.3	18.3	19.8	21.1
IE	70.3	72.0	63.4	61.7	63.9	63.8
EL	128.9	138.9	121.0	98.2	94.8	98.9
ES	397.1	452.6	370.1	351.8	342.2	357.3
FR	567.0	570.7	528.0	477.3	477.8	482.0
HR	26.1	30.3	28.4	24.6	24.8	25.5
IT	562.1	589.2	514.7	443.7	442.5	439.0
CY	9.2	10.2	10.3	9.1	9.6	10.0
LV	10.6	11.6	12.7	11.6	11.7	11.8
LT	19.6	23.0	20.9	20.5	20.5	20.7
LU	10.6	14.3	13.4	11.6	11.6	11.9
HU	73.9	76.2	65.7	61.3	61.7	64.5
MT	3.1	3.2	3.2	2.5	2.3	2.6
NL	229.8	225.8	224.1	207.5	207.6	205.8
AT	82.1	94.5	86.8	81.0	81.9	84.5
PL	396.3	404.3	413.1	392.3	401.1	416.3
PT	84.3	88.1	71.7	71.1	69.5	74.6
RO	143.6	151.7	124.4	117.2	115.2	114.8
SI	19.1	20.6	19.7	16.9	17.7	17.5
SK	49.2	51.3	46.4	41.8	42.3	43.5
FI	71.3	71.2	77.4	57.2	60.1	57.5
SE	70.4	68.6	66.4	55.7	55.5	55.5
UK	741.9	726.2	642.1	541.5	517.0	505.4

* GHG emissions without LULUCF, with indirect CO_2 and including international aviation.

Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: **See Appendices**

4.1.1 Greenhouse Gas (GHG) Emissions

EU-28 AND MEMBER STATES – FUEL COMBUSTION

Million ton CO_2 equiv.	2017								
	Fuel Combustion Activities	Energy Industries	Manufacturing Industries & Construction	Transport	Commercial/ Institutional	Residential	Agriculture/ Forestry/ Fisheries	Other Sectors	Other Combustion & Fugitive Emissions
EU-28	3 367.8	1 179.3	499.8	945.9	161.8	407.1	80.9	6.8	86.2
Share (%)	100.0 %	35.0 %	14.8 %	28.1 %	4.8 %	12.1 %	2.4 %	0.2 %	2.6 %
BE	83.3	20.2	13.5	25.8	5.5	15.2	2.3	0.1	0.7
BG	44.6	27.7	3.6	9.5	0.4	1.2	0.5	0.0	1.9
CZ	98.9	51.8	10.4	18.7	3.0	9.8	1.2	0.5	3.6
DK	33.8	11.6	4.0	13.2	0.7	2.1	1.5	0.3	0.4
DE	765.7	313.4	135.6	168.0	38.2	92.9	6.8	0.9	9.9
EE	18.5	14.7	0.6	2.4	0.1	0.3	0.3	0.1	0.0
IE	36.8	11.6	4.7	12.0	2.0	5.7	0.6	0.0	0.1
EL	70.2	39.9	5.8	17.2	0.7	4.8	0.5	0.2	1.0
ES	258.9	81.2	43.5	88.8	10.7	17.8	11.8	0.5	4.6
FR	327.3	49.6	51.4	134.7	28.7	48.1	10.6	0.0	4.0
HR	17.3	4.5	2.4	6.6	0.6	2.0	0.7	0.0	0.5
IT	345.9	104.8	51.1	99.5	23.7	51.5	7.8	0.3	7.1
CY	6.6	3.3	0.7	2.1	0.1	0.4	0.1	0.0	0.0
LV	7.2	1.5	0.7	3.3	0.4	0.6	0.5	0.0	0.2
LT	11.3	2.6	1.2	5.8	0.3	0.9	0.2	0.0	0.3
LU	8.8	0.2	1.1	5.6	0.6	1.1	0.0	0.0	0.0
HU	46.2	14.0	4.9	13.1	3.1	8.6	1.4	0.0	1.0
MT	1.6	0.7	0.0	0.6	0.2	0.0	0.0	0.0	0.0
NL	160.2	63.5	29.1	31.2	7.7	17.0	10.0	0.2	1.7
AT	56.3	11.2	11.1	24.3	1.2	7.2	0.9	0.1	0.4
PL	342.1	164.9	31.2	63.4	7.4	38.8	12.1	0.0	24.3
PT	51.2	20.8	7.6	17.1	1.2	2.0	1.2	0.0	1.3
RO	75.5	23.9	11.7	18.0	2.2	7.7	1.3	0.7	10.1
SI	14.0	4.9	1.7	5.5	0.4	0.8	0.2	0.0	0.4
SK	29.4	7.5	7.1	7.7	1.6	3.3	0.4	0.1	1.7
FI	41.0	17.6	6.9	11.5	1.0	1.4	1.4	1.1	0.2
SE	36.6	9.2	6.9	16.6	0.8	0.7	1.4	0.2	0.9
UK	378.6	102.6	51.4	123.7	19.3	65.2	4.9	1.6	10.1

Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.1.1 Greenhouse Gas (GHG) Emissions

EU-28 AND MEMBER STATES – OTHER THAN FUEL COMBUSTION

	2017					
Million ton CO_2 equiv.	GHG Emissions other than Fuel Combustion	Industrial Processes & Product Use	Agriculture	Waste & Others	Indirect CO_2	International aviation
EU-28	1 115.3	377.5	439.0	138.9	1.7	158.3
Share (%)	100.0 %	33.8 %	39.4 %	12.5 %	0.2 %	14.2 %
BE	36.1	19.7	10.1	1.5	0.0	4.8
BG	17.5	6.4	6.6	3.8	0.0	0.7
CZ	31.5	15.7	8.4	5.6	0.7	1.1
DK	17.0	2.0	10.6	1.1	0.3	2.9
DE	170.3	64.5	66.3	10.2	0.0	29.4
EE	2.5	0.6	1.4	0.3	0.0	0.2
IE	27.0	3.5	19.6	0.9	0.0	3.1
EL	28.7	12.8	7.9	4.6	0.0	3.5
ES	98.4	28.2	39.5	13.5	0.0	17.1
FR	154.7	43.9	76.2	17.2	0.0	17.4
HR	8.1	2.7	2.8	2.1	0.0	0.5
IT	93.1	32.8	30.8	18.2	0.0	11.3
CY	3.3	1.3	0.5	0.6	0.0	1.0
LV	4.5	0.7	2.8	0.6	0.0	0.4
LT	9.4	3.6	4.4	1.0	0.0	0.3
LU	3.2	0.7	0.7	0.1	0.0	1.7
HU	18.3	7.2	7.1	3.4	0.0	0.7
MT	1.0	0.3	0.1	0.2	0.0	0.4
NL	45.7	11.1	18.9	3.1	0.5	12.1
AT	28.3	17.2	7.3	1.5	0.0	2.3
PL	74.2	27.0	31.7	13.0	0.0	2.5
PT	23.4	7.8	6.9	4.7	0.2	3.9
RO	39.3	13.1	19.3	5.9	0.0	1.0
SI	3.5	1.2	1.7	0.6	0.0	0.1
SK	14.0	9.6	2.5	1.7	0.0	0.2
FI	16.5	5.9	6.5	1.9	0.1	2.1
SE	18.8	7.6	7.2	1.3	0.0	2.8
UK	126.8	30.2	41.2	20.4	0.0	34.9

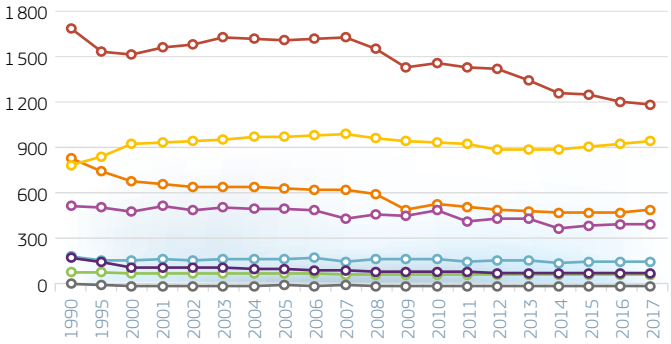
Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.1.1 Greenhouse Gas (GHG) Emissions

EU-28 – TOTAL AND FUEL COMBUSTION

Million ton CO_2 equiv.	GHG Emissions - National Total *	Fuel Combustion Activities	Energy Industries	Manufacturing Industries & Construction	Transport	Commercial/ Institutional	Residential	Agriculture/ Forestry/ Fisheries	Other Sectors	Other Combustion & Fugitive Emission
1990	5 723	4 348.7	1 675.7	836.1	793.2	201.0	527.5	98.4	23.7	193.0
1995	5 398	4 090.1	1 524.1	747.7	847.3	176.0	519.6	97.1	14.0	164.3
2000	5 287	4 020.6	1 511.2	685.0	926.9	174.6	491.6	91.0	9.9	130.3
2001	5 340	4 100.3	1 553.5	667.3	940.0	187.8	525.3	91.1	9.1	126.2
2002	5 296	4 074.8	1 570.5	647.6	951.3	178.2	504.8	88.9	9.1	124.3
2003	5 383	4 153.9	1 620.7	653.0	960.3	179.4	518.4	89.2	9.7	123.1
2004	5 391	4 144.9	1 609.2	645.0	979.6	184.3	510.8	89.8	10.8	115.4
2005	5 362	4 122.6	1 599.2	638.6	978.8	184.1	507.0	90.1	11.3	113.5
2006	5 354	4 119.7	1 610.2	628.8	986.0	190.3	497.2	86.8	10.8	109.7
2007	5 306	4 060.6	1 619.7	632.2	995.4	168.7	444.3	83.7	11.1	105.6
2008	5 191	3 981.1	1 548.1	603.8	970.7	185.6	475.4	84.3	10.2	103.1
2009	4 815	3 702.1	1 424.2	501.0	943.2	179.3	466.0	82.5	9.0	96.8
2010	4 918	3 798.1	1 450.9	533.0	937.6	187.3	499.6	84.8	8.7	96.2
2011	4 764	3 650.6	1 425.2	518.0	925.5	165.8	429.2	83.1	8.5	95.3
2012	4 699	3 606.2	1 417.9	497.0	896.0	169.9	442.2	81.5	7.5	94.2
2013	4 605	3 517.2	1 342.3	488.4	888.7	171.7	445.0	81.3	7.3	92.3
2014	4 436	3 337.9	1 258.2	481.1	896.1	151.1	374.5	80.3	7.0	89.5
2015	4 470	3 373.6	1 245.2	483.5	913.3	161.2	395.2	79.6	6.8	88.9
2016	4 453	3 354.7	1 197.9	484.0	932.5	161.2	406.1	80.6	6.7	85.7
2017	4 483	3 367.8	1 179.3	499.8	945.9	161.8	407.1	80.9	6.8	86.2

GHGs EMISSIONS – EU-28 – FUEL COMBUSTION (MILLION ton CO_2 EQUIV.)



Energy Industries
Manufacturing Industries and Construction
Transport
Commercial/Institutional
Residential
Agriculture/Forestry/Fisheries
Other Sectors
Other Combustion and Fugitive Emission

* GHG emissions without LULUCF, with indirect CO_2 and including international aviation.

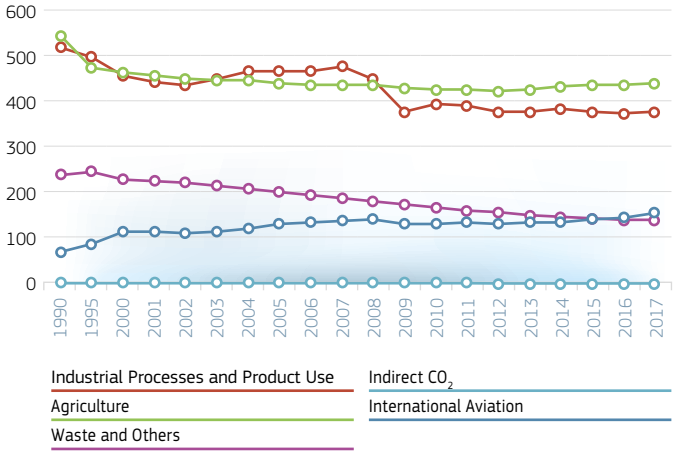
Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.1.1 Greenhouse Gas (GHG) Emissions

EU-28 – OTHER THAN FUEL COMBUSTION

Million ton CO_2 equiv.	GHG Emissions – National Total *	GHG Emissions other than Fuel cCombustion	Industrial Processes & Product Use	Agriculture	Waste & Others	Indirect CO_2	International aviation
1990	5 723	1 374.2	517.2	543.3	240.4	4.2	69.1
1995	5 398	1 307.7	498.4	472.6	247.4	3.5	85.8
2000	5 287	1 266.6	455.6	461.3	231.5	2.9	115.4
2001	5 340	1 239.4	440.4	455.0	227.4	2.7	113.8
2002	5 296	1 221.5	436.6	448.0	223.5	2.6	110.8
2003	5 383	1 229.5	450.4	444.0	217.4	2.6	115.2
2004	5 391	1 245.9	466.9	444.7	208.9	2.5	123.0
2005	5 362	1 239.4	465.8	438.0	202.0	2.5	131.1
2006	5 354	1 233.8	464.7	434.3	195.8	2.5	136.5
2007	5 306	1 245.3	476.0	436.7	189.1	2.4	141.1
2008	5 191	1 209.9	450.8	433.9	181.1	2.3	141.8
2009	4 815	1 113.0	376.8	427.8	175.1	2.1	131.1
2010	4 918	1 119.4	394.3	423.4	167.8	2.2	131.7
2011	4 764	1 113.3	389.8	423.9	162.1	2.1	135.4
2012	4 699	1 092.4	377.3	421.7	157.9	2.0	133.5
2013	4 605	1 088.3	375.3	425.2	151.2	1.8	134.7
2014	4 436	1 098.3	381.3	432.9	145.5	1.8	136.9
2015	4 470	1 096.7	376.7	433.8	143.2	1.8	141.2
2016	4 453	1 098.4	373.7	434.8	140.1	1.7	148.0
2017	4 483	1 115.3	377.5	439.0	138.9	1.7	158.3

GHGs EMISSIONS – EU-28 – OTHER THAN FUEL COMBUSTION (MILLION ton CO_2 EQUIV.)



* GHG emissions without LULUCF, with indirect CO_2 and including international aviation.

Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.1.2 CO_2 Emissions*

EU-28 AND MEMBER STATES – TOTAL

Million ton CO_2	2000	2005	2010	2015	2016	2017
EU-28	4298.1	4438.9	4073.9	3656.3	3646.0	3674.1
Index 2000	100.0 %	103.3 %	94.8 %	85.1 %	84.8 %	85.5 %
BE	131.5	129.1	118.0	104.1	102.8	102.4
BG	45.5	51.2	48.3	48.6	45.9	48.1
CZ	128.8	127.7	119.4	106.5	108.3	107.4
DK	57.4	54.7	52.0	38.1	40.1	38.0
DE	919.7	889.6	856.6	820.4	828.0	827.1
EE	15.4	17.3	19.1	16.0	17.6	18.8
IE	47.0	50.6	44.0	40.9	42.5	41.8
EL	105.5	116.5	99.9	77.8	74.4	78.3
ES	320.4	379.5	295.4	285.2	276.0	291.4
FR	430.3	442.7	405.7	358.3	359.9	363.7
HR	19.9	23.6	21.4	18.2	18.5	19.2
IT	478.2	502.9	435.2	365.4	363.8	360.2
CY	8.0	8.9	8.9	7.7	8.2	8.5
LV	7.2	8.0	8.9	7.6	7.6	7.7
LT	11.9	14.2	13.9	13.4	13.4	13.7
LU	9.7	13.4	12.5	10.7	10.6	10.9
HU	59.3	61.3	52.8	47.2	48.0	50.3
MT	2.9	2.9	2.8	2.1	1.8	2.0
NL	182.4	188.9	192.9	178.3	178.5	176.9
AT	68.0	81.4	74.3	68.9	69.6	72.2
PL	319.0	323.4	334.9	314.2	325.0	339.1
PT	68.4	72.0	55.8	55.5	53.9	58.7
RO	95.9	103.0	84.5	78.5	76.7	76.0
SI	15.5	17.0	16.4	13.7	14.5	14.3
SK	41.3	43.0	38.6	34.6	35.0	36.2
FI	58.2	58.4	65.8	46.1	49.3	46.9
SE	56.6	55.7	55.0	45.2	45.1	44.8
UK	594.5	601.9	540.9	453.0	430.8	419.5

* CO_2 emissions without LULUCF, with indirect CO_2 and including international aviation.

Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.1.2 CO_2 Emissions

EU-28 AND MEMBER STATES – FUEL COMBUSTION

Million ton CO_2	2017								
	Fuel Combustion Activities	Energy Industries	Manufacturing Industries & Construction	Transport	Commercial/ Institutional	Residential	Agriculture/ Forestry/ Fisheries	Other Sectors	Other Combustion & Fugitive Emissions
EU-28	3 253.7	1 167.3	493.7	934.9	160.4	388.8	75.2	6.6	26.5
Share (%)	100.0 %	35.9 %	15.2 %	28.7 %	4.9 %	12.0 %	2.3 %	0.2 %	0.8 %
BE	81.6	20.0	13.3	25.5	5.5	14.9	2.1	0.1	0.1
BG	42.9	27.6	3.6	9.4	0.3	0.8	0.4	0.0	0.8
CZ	93.7	51.5	10.3	18.4	3.0	8.8	1.2	0.4	0.1
DK	33.1	11.4	4.0	13.1	0.7	1.9	1.5	0.3	0.2
DE	747.9	307.9	134.4	166.2	38.1	91.8	6.4	0.8	2.4
EE	18.2	14.6	0.6	2.4	0.1	0.2	0.2	0.1	0.0
IE	36.1	11.5	4.6	11.9	2.0	5.6	0.6	0.0	0.0
EL	68.5	39.8	5.7	16.9	0.7	4.7	0.5	0.2	0.0
ES	254.0	80.5	42.4	87.8	10.6	16.8	11.7	0.5	3.8
FR	320.6	49.2	50.7	133.0	28.6	46.4	9.7	0.0	2.9
HR	16.6	4.5	2.4	6.6	0.6	1.6	0.6	0.0	0.3
IT	333.4	104.2	50.1	98.4	23.2	47.8	7.0	0.3	2.4
CY	6.6	3.3	0.7	2.1	0.1	0.4	0.1	0.0	0.0
LV	6.7	1.5	0.6	3.3	0.4	0.5	0.4	0.0	0.0
LT	10.7	2.5	1.2	5.7	0.3	0.8	0.2	0.0	0.0
LU	8.7	0.2	1.1	5.6	0.6	1.1	0.0	0.0	0.0
HU	44.3	13.9	4.9	13.0	3.1	7.9	1.4	0.0	0.1
MT	1.6	0.7	0.0	0.6	0.2	0.0	0.0	0.0	0.0
NL	157.3	63.1	29.0	30.9	7.6	16.5	9.0	0.1	1.1
AT	55.1	11.1	10.9	24.0	1.2	6.8	0.8	0.1	0.1
PL	315.9	164.0	30.8	62.5	7.3	35.7	10.9	0.0	4.7
PT	50.2	20.6	7.4	17.0	1.2	1.7	1.1	0.0	1.2
RO	64.3	23.8	11.6	17.7	2.2	6.5	1.2	0.6	0.5
SI	13.4	4.9	1.7	5.5	0.4	0.7	0.2	0.0	0.1
SK	27.2	7.4	7.1	7.6	1.6	3.1	0.4	0.1	0.0
FI	40.2	17.3	6.7	11.4	1.0	1.2	1.4	1.1	0.1
SE	35.7	8.9	6.8	16.4	0.7	0.6	1.3	0.2	0.8
UK	369.1	101.4	51.0	122.3	19.2	64.1	4.9	1.6	4.6

Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.1.2 CO_2 Emissions

EU-28 AND MEMBER STATES – OTHER THAN FUEL COMBUSTION

	2017					
Million ton CO_2	CO_2 Emissions other than Fuel Combustion	Industrial Processes & Product Use	Agriculture	Waste & Others	Indirect CO_2	International aviation
EU-28	420.4	248.3	10.4	3.2	1.7	156.9
Share (%)	100.0%	59.1%	2.5%	0.8%	0.4%	37.3%
BE	20.8	15.5	0.2	0.3	0.0	4.8
BG	5.2	4.5	0.0	0.0	0.0	0.7
CZ	13.6	11.4	0.3	0.1	0.7	1.1
DK	4.9	1.5	0.2	0.0	0.3	2.9
DE	79.2	47.1	2.9	0.0	0.0	29.1
EE	0.6	0.4	0.0	0.0	0.0	0.2
IE	5.6	2.2	0.4	0.0	0.0	3.0
EL	9.8	6.3	0.0	0.0	0.0	3.4
ES	37.3	19.8	0.6	0.0	0.0	16.9
FR	43.1	22.3	1.9	1.6	0.0	17.2
HR	2.6	2.1	0.1	0.0	0.0	0.4
IT	26.7	15.0	0.4	0.1	0.0	11.2
CY	2.0	1.0	0.0	0.0	0.0	1.0
LV	1.0	0.5	0.0	0.0	0.0	0.4
LT	3.0	2.7	0.0	0.0	0.0	0.3
LU	2.3	0.6	0.0	0.0	0.0	1.7
HU	6.0	5.1	0.2	0.0	0.0	0.7
MT	0.4	0.0	0.0	0.0	0.0	0.4
NL	19.7	7.1	0.0	0.0	0.5	12.0
AT	17.2	14.8	0.1	0.0	0.0	2.2
PL	23.1	19.1	0.9	0.6	0.0	2.5
PT	8.5	4.4	0.1	0.0	0.2	3.8
RO	11.7	10.6	0.1	0.0	0.0	1.0
SI	0.9	0.8	0.0	0.0	0.0	0.1
SK	9.0	8.7	0.1	0.0	0.0	0.2
FI	6.7	4.3	0.2	0.0	0.1	2.1
SE	9.1	6.1	0.1	0.1	0.0	2.8
UK	50.4	14.3	1.3	0.3	0.0	34.6

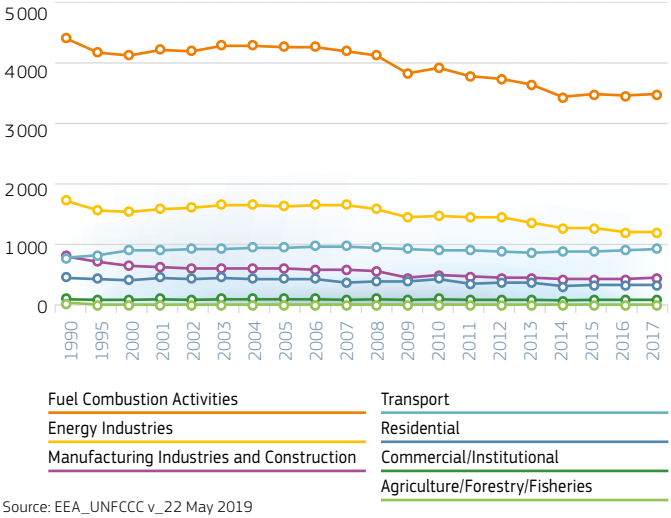
Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.1.2 CO_2 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 & Construction	Transport	Commercial/ Institutional	Residential	Agriculture/ Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emissions
1990	4542	4123.6	1666.1	829.4	778.7	198.4	504.2	93.7	23.2	29.9
1995	4305	3896.5	1514.8	741.6	830.8	174.6	499.1	92.0	13.8	29.9
2000	4298	3862.4	1501.9	678.8	911.7	173.3	474.1	86.0	9.7	26.8
2001	4367	3945.4	1543.9	660.9	925.6	186.5	507.8	86.1	8.9	25.7
2002	4342	3924.3	1560.6	641.1	937.9	176.9	488.8	84.0	8.9	26.1
2003	4437	4003.8	1610.2	646.2	947.3	178.1	501.3	84.3	9.6	26.8
2004	4454	4001.7	1598.5	638.0	966.9	183.0	494.3	84.8	10.6	25.6
2005	4439	3982.3	1588.4	631.6	966.9	182.7	489.9	85.0	11.0	26.8
2006	4449	3984.3	1598.9	622.1	974.3	188.9	479.9	81.8	10.5	27.9
2007	4403	3929.0	1608.2	625.4	984.0	167.3	426.6	78.5	10.8	28.0
2008	4305	3849.5	1536.5	597.2	959.8	184.1	456.5	78.8	10.0	26.7
2009	3957	3576.9	1413.0	495.4	933.0	177.7	446.9	77.0	8.8	25.1
2010	4074	3671.3	1439.2	527.0	927.4	185.7	479.1	79.1	8.5	25.4
2011	3933	3527.6	1413.3	512.0	915.4	164.2	411.4	77.4	8.3	25.5
2012	3872	3482.4	1405.9	491.1	886.0	168.4	422.9	75.7	7.4	25.1
2013	3785	3397.0	1330.3	482.6	878.7	170.3	425.6	75.7	7.2	26.6
2014	3618	3222.7	1246.5	475.4	886.0	149.8	357.4	74.8	6.9	26.0
2015	3656	3257.6	1233.2	477.6	902.9	159.8	377.3	74.1	6.6	26.1
2016	3646	3241.1	1186.1	478.2	921.8	159.8	388.0	75.1	6.5	25.6
2017	3674	3253.7	1167.3	493.7	934.9	160.4	388.8	75.2	6.6	26.5

CO_2 EMISSIONS – EU-28 – TOTAL AND FUEL COMBUSTION (MILLION ton CO_2)



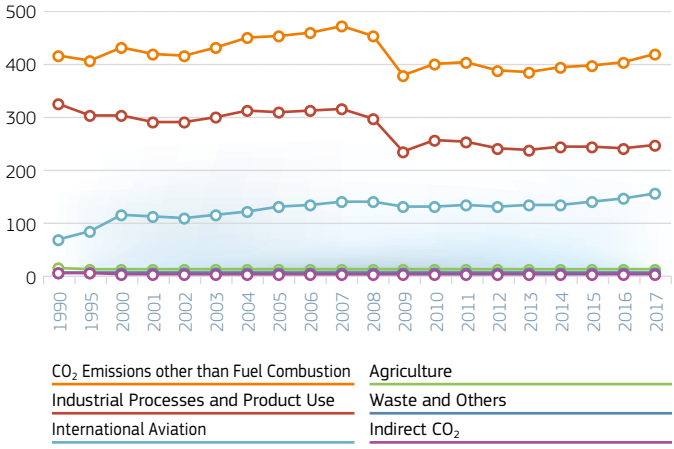
Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.1.2 CO_2 Emissions

EU-28 – OTHER THAN FUEL COMBUSTION

Million ton CO_2	CO_2 Emissions – National Total *	CO_2 Emissions other than Fuel cCombustion	Industrial Processes & Product Use	Agriculture	Waste & Others	Indirect CO_2	International aviation
1990	4541.8	418.2	325.5	14.7	5.2	4.2	68.5
1995	4304.9	408.4	304.5	10.7	4.7	3.5	85.0
2000	4298.1	435.7	304.9	10.2	3.4	2.9	114.4
2001	4367.4	422.0	293.2	9.8	3.5	2.7	112.8
2002	4342.4	418.1	292.1	9.8	3.7	2.6	109.8
2003	4437.1	433.3	302.2	10.4	4.0	2.6	114.2
2004	4454.3	452.7	314.4	10.3	3.7	2.5	121.9
2005	4438.9	456.6	310.5	9.9	3.8	2.5	129.9
2006	4448.8	464.5	313.4	9.6	3.8	2.5	135.3
2007	4403.0	474.0	318.3	9.7	3.8	2.4	139.9
2008	4304.8	455.3	299.2	9.6	3.7	2.3	140.5
2009	3957.1	380.2	234.9	9.6	3.6	2.1	130.0
2010	4073.9	402.6	257.0	9.3	3.7	2.2	130.5
2011	3932.7	405.1	255.7	9.7	3.5	2.1	134.2
2012	3871.8	389.5	242.1	9.6	3.5	2.0	132.3
2013	3785.4	388.5	239.8	10.0	3.3	1.8	133.5
2014	3618.1	395.4	244.2	10.5	3.4	1.8	135.7
2015	3656.3	398.6	243.6	10.3	3.0	1.8	140.0
2016	3646.0	404.8	242.7	10.6	3.1	1.7	146.7
2017	3674.1	420.4	248.3	10.4	3.2	1.7	156.9

CO_2 EMISSIONS – EU-28 – OTHER THAN FUEL COMBUSTION (MILLION ton CO_2)



* CO_2 emissions without LULUCF, with indirect CO_2 and including international aviation.

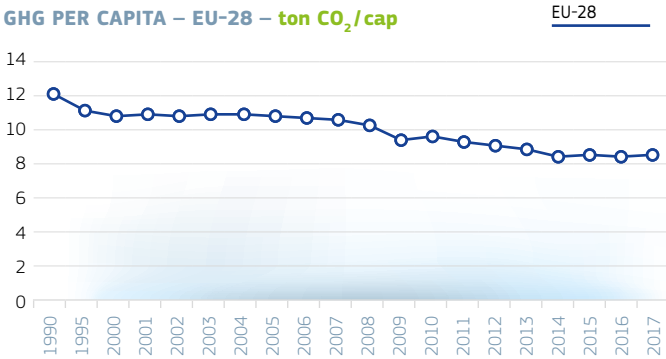
Source: EEA_UNFCCC v_22 May 2019
Methodology and Notes: See Appendices

4.2 Main Emissions Indicators

4.2.1 Greenhouse Gas (GHG) Emissions per Capita

ton CO_2/cap	2000	2005	2010	2015	2016	2017
EU-28	10.9	10.8	9.8	8.8	8.7	8.8
Index 2000	100.0%	99.9%	90.1%	81.0%	80.4%	80.8%
BE	15.1	14.3	12.7	10.8	10.6	10.5
BG	7.3	8.4	8.2	8.6	8.3	8.7
CZ	14.7	14.7	13.5	12.3	12.5	12.3
DK	13.7	12.7	11.8	9.0	9.3	8.8
DE	13.0	12.3	11.8	11.5	11.4	11.3
EE	12.4	14.2	16.0	13.9	15.0	16.0
IE	18.6	17.5	13.9	13.2	13.5	13.3
EL	12.0	12.7	10.9	9.0	8.8	9.2
ES	9.8	10.5	8.0	7.6	7.4	7.7
FR	9.4	9.1	8.2	7.2	7.2	7.2
HR	5.8	7.0	6.6	5.8	5.9	6.1
IT	9.9	10.2	8.7	7.3	7.3	7.2
CY	13.4	13.9	12.6	10.7	11.3	11.6
LV	4.4	5.2	6.0	5.8	5.9	6.0
LT	5.6	6.9	6.6	7.0	7.1	7.3
LU	24.5	31.0	26.8	20.7	20.0	20.2
HU	7.2	7.5	6.6	6.2	6.3	6.6
MT	8.0	7.9	7.8	5.8	5.0	5.6
NL	14.5	13.8	13.5	12.3	12.2	12.0
AT	10.3	11.5	10.4	9.4	9.4	9.6
PL	10.4	10.6	10.9	10.3	10.6	11.0
PT	8.2	8.4	6.8	6.9	6.7	7.2
RO	6.4	7.1	6.1	5.9	5.8	5.8
SI	9.6	10.3	9.6	8.2	8.6	8.5
SK	9.1	9.5	8.6	7.7	7.8	8.0
FI	13.8	13.6	14.5	10.4	10.9	10.4
SE	7.9	7.6	7.1	5.7	5.6	5.5
UK	12.6	12.1	10.3	8.3	7.9	7.7

GHG PER CAPITA – EU-28 – ton CO_2/cap

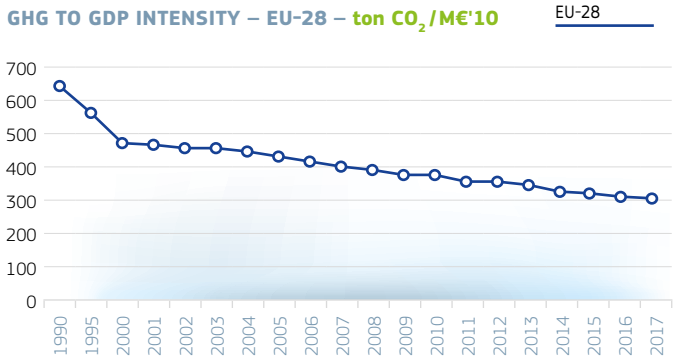


Source: EEA_UNFCCC v_22 May 2019, Eurostat 2019
Methodology and Notes: See Appendices

4.2.2 Greenhouse Gas (GHG) Emissions to GDP Intensity

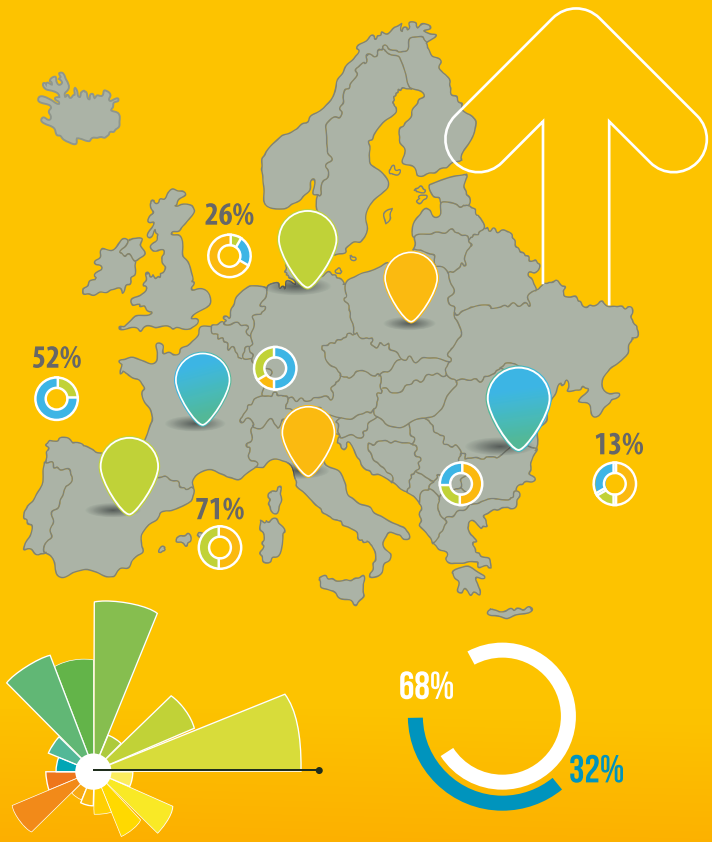
ton CO_2/M€'10	2000	2005	2010	2015	2016	2017
EU-28	473.9	437.0	382.9	328.9	321.0	315.5
Index 2000	100.0 %	92.2 %	80.8 %	69.4 %	67.7 %	66.6 %
BE	496.8	437.7	375.6	316.2	308.1	300.9
BG	2 450.1	2 003.9	1 597.0	1 508.1	1 392.4	1 394.2
CZ	1 317.3	1 076.3	904.0	760.1	753.4	716.5
DK	324.8	286.0	269.2	195.9	199.7	187.2
DE	451.4	418.9	374.8	331.9	326.7	319.2
EE	1 634.2	1 287.9	1 448.4	1 035.5	1 084.1	1 099.5
IE	555.0	439.5	378.2	256.8	253.1	235.8
EL	678.7	604.5	535.5	531.6	514.1	528.2
ES	457.6	441.4	342.4	327.9	309.2	313.4
FR	321.8	298.0	264.6	227.3	224.9	222.1
HR	738.7	689.9	628.6	549.7	534.3	534.0
IT	361.4	361.5	320.8	284.9	281.0	274.4
CY	659.4	597.0	533.4	507.9	514.8	510.7
LV	861.8	635.9	711.5	548.6	540.3	520.5
LT	1 068.4	869.6	744.8	606.3	593.0	576.7
LU	345.1	401.7	334.8	252.6	244.6	248.8
HU	913.8	762.2	664.5	563.2	554.5	556.1
MT	574.0	532.2	487.3	294.5	249.3	265.6
NL	411.6	378.2	350.6	312.7	306.2	295.1
AT	323.3	340.9	293.4	259.6	257.2	258.7
PL	1 609.3	1 410.4	1 141.8	934.2	926.8	917.7
PT	504.5	505.0	398.3	412.7	395.9	413.5
RO	1 735.6	1 386.6	992.0	807.1	756.7	705.2
SI	686.5	618.5	543.4	456.8	465.5	438.5
SK	1 175.4	956.9	687.0	544.6	534.7	532.5
FI	451.1	396.4	413.5	304.9	311.8	290.7
SE	234.8	200.7	179.8	135.6	131.7	128.9
UK	470.5	400.5	347.0	263.9	247.5	237.7

GHG TO GDP INTENSITY – EU-28 – ton CO_2/M€'10



Source: EEA_UNFCCC v_22 May 2019, Eurostat 2019
Methodology and Notes: See Appendices

Country Profiles



#5

Country Profiles

Summary

Sources: ESTAT – Database – May 2019; EEA – UNFCCC Database – June 2019; ECFIN – AMECO Database – May 2019; ESTAT – SHARES – March 2019; ESTAT – CHP Survey, data 2016 – March 2019; ESTAT – Market Survey – May 2019

5.0 European Union 28

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**950.0**	**908.8**	**840.0**	**773.7**	**760.2**	**759.8**
Solid Fossil Fuels	209.6	189.9	158.2	139.4	127.6	124.9
of which Hard Coal	119.4	99.3	74.3	57.7	51.1	46.3
of which Brown Coal	90.2	90.6	83.8	81.7	76.5	78.6
Oil and Petroleum Products	177.3	135.6	99.4	76.5	75.7	74.5
of which Crude Oil	174.0	131.3	96.4	73.4	72.5	71.2
Natural Gas	209.8	190.5	159.3	107.3	107.3	103.1
Nuclear	244.0	257.8	234.6	220.1	213.5	210.7
Renewables and Biofuels	98.3	120.6	170.6	211.4	216.7	226.6
Wastes, Non-Renewable	6.1	7.9	11.0	13.0	14.2	14.2
Net Imports	**826.0**	**985.9**	**957.6**	**905.8**	**910.7**	**947.8**
Solid Fossil Fuels	97.7	125.2	109.8	110.3	98.2	100.4
of which Hard Coal	93.4	121.5	108.3	109.6	98.4	100.7
Oil and Petroleum Products	532.2	603.6	561.3	540.9	535.0	543.3
of which Crude Oil and NGL	499.7	569.9	527.2	534.2	525.5	541.2
Natural gas	193.5	254.1	279.7	247.0	269.4	296.1
Renewables and Biofuels	0.3	1.6	6.0	5.9	6.1	6.6
Electricity	2.0	1.3	0.7	1.2	1.6	0.9
Gross Inland Consumption	**1 731.5**	**1 836.5**	**1 768.2**	**1 638.7**	**1 648.9**	**1 674.9**
Solid Fossil Fuels	315.5	312.0	276.9	258.4	236.8	228.4
of which Hard Coal	219.3	217.8	191.7	176.0	160.2	150.3
of which Brown Coal	91.9	92.5	84.9	82.6	77.6	79.2
Oil and Petroleum Products	664.0	684.2	613.5	564.2	570.1	582.1
of which Crude and NGL	676.2	701.2	623.8	603.9	601.0	614.4
Natural Gas	396.0	445.1	447.6	357.9	382.7	398.4
Nuclear	244.0	257.8	234.6	220.1	213.5	210.7
Renewables and Biofuels	98.6	122.2	176.7	217.4	222.9	233.5
Electricity	2.0	1.3	0.7	1.2	1.6	0.9
Waste, Non-Renewable	6.1	7.9	11.0	13.4	14.6	14.6
Available for Final Consumption	**1 173.0**	**1 239.2**	**1 208.1**	**1 119.5**	**1 141.7**	**1 165.9**
Final Non-Energy Consumption	**112.1**	**116.1**	**106.2**	**95.6**	**95.6**	**102.2**
Final Energy Consumption	**1 066.1**	**1 123.2**	**1 098.6**	**1 024.9**	**1 046.3**	**1 060.0**
by Fuel/Product						
Solid Fossil Fuels	37.2	31.0	29.6	25.7	25.6	25.6
Oil and Petroleum Products	450.2	458.8	414.7	385.6	391.3	394.1
Natural Gas	256.5	272.6	264.2	229.5	238.1	239.3
Renewables and Biofuels	49.1	59.7	84.1	91.8	94.4	102.4
Solid Biofuels and Renewable Waste	47.2	54.3	65.8	67.5	69.2	70.6
Solar Thermal	0.4	0.7	1.5	2.1	2.1	2.3
Geothermal	0.4	0.4	0.4	0.5	0.5	0.6
Liquid Biofuels	0.6	3.3	13.1	13.8	13.6	15.0
Biogases	0.4	0.6	1.4	2.6	2.9	3.0
Waste, Non-Renewable	1.0	1.5	2.7	3.4	3.8	3.8
Electricity	217.3	239.4	244.0	236.5	239.2	240.6
Heat	45.3	52.6	53.0	46.3	48.1	48.5
by Sector						
Industry	305.6	305.4	267.9	254.5	257.1	261.0
Transport	305.0	325.3	320.4	313.3	320.8	326.9
Residential	291.3	310.1	321.9	278.6	287.6	288.0
Services	121.8	144.0	157.3	148.7	151.1	154.0
Agriculture and Fishing	29.6	29.0	26.3	25.0	25.3	25.8
Others	12.8	9.3	4.7	4.7	4.4	4.3

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**691.6**	**757.9**	**883.7**	**985.8**	**993.3**	**1011.0**
Combustible Fuels	401.3	435.1	487.7	470.5	457.2	455.1
Nuclear	137.3	135.0	131.7	122.0	122.1	120.9
Hydro	139.0	143.4	147.3	152.7	154.5	155.1
Wind	12.7	40.3	84.4	141.4	154.3	168.9
Solar	0.2	2.3	30.7	97.3	103.3	109.0
Geothermal	0.6	0.7	0.8	0.8	0.8	0.8
Tide, Wave and Ocean	0.2	0.2	0.2	0.2	0.2	0.2
Gross Electricity Generation, by Fuel (TWh)	**3034.0**	**3315.2**	**3362.0**	**3239.4**	**3261.8**	**3294.3**
Solid Fossil Fuels, Peat & Products, Oil Shale	933.9	960.3	829.2	794.8	704.9	677.0
Oil and Petroleum Products	181.3	142.8	86.9	65.4	63.9	60.7
Natural Gas	513.1	704.0	799.4	531.1	643.6	695.9
Nuclear	945.0	997.7	916.6	857.0	839.7	829.7
Renewables and Biofuels	448.6	496.0	710.8	967.8	983.7	1005.6
Wastes non-RES	12.1	14.4	19.0	23.2	25.9	25.4
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			107.6	119.7	119.9	122.0
CHP Electricity Generation (TWh)			394.6	362.9	359.7	371.7
CHP in Total Electricity Generation (%)			11.8	11.2	11.0	11.3
CHP Heat Production (PJ)			3038.4	2791.7	2812.5	2881.2
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	297536	313915	299831	291089	298626	303031
of which LPG	3685	4824	5313	5982	5987	6080
of which Motor Gasoline	132463	114530	91430	77453	77712	77942
of which Gas/Diesel Oil	153516	186124	195146	201103	207890	211513
Final Consumption Biofuels	620	3203	12719	13511	13298	14740
Pure and Blended Biogasoline	59	594	2810	2699	2650	2778
Pure and Blended Biodiesel	547	2454	9871	10808	10643	11961
Main Energy Indicators						
Primary Energy Consumption 2020-2030	1619.4	1720.0	1660.2	1537.5	1546.9	1561.6
Final Energy Consumption 2020-2030	1133.2	1192.8	1163.1	1088.3	1110.1	1122.8
Primary Energy Intensity 2020-2030 (toe/M€'10)	145	140	129	113	112	110
Energy Intensity GAE/GDP2010 (toe/M€'10)	159	154	142	124	122	121
Energy per Capita - GIC/pop (kgoe/cap)	3554	3713	3514	3223	3232	3275
Final Electricity per Capita (KWh/cap)	5187	5629	5640	5409	5453	5472
Import Dependency (%)	**46.6**	**52.3**	**52.7**	**53.9**	**53.8**	**55.1**
of Solid Fossil Fuels	31.0	40.1	39.6	42.7	41.5	43.9
of Hard Coal	42.6	55.8	56.5	62.3	61.4	67.0
of Oil and Petroleum Products	75.3	82.3	84.7	89.2	87.1	86.7
of Crude and NGL	73.9	81.3	84.5	88.5	87.4	88.1
of Natural Gas	48.9	57.1	62.5	69.0	70.4	74.3
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)			9.1	13.1	16.7	17.0	17.5
RE-T – Transport			1.8	5.2	6.6	7.1	7.4
RES-E – Electricity Generation			14.8	19.7	28.8	29.6	30.7
RES-H&C – Heating and Cooling			11.1	15.4	18.8	19.0	19.5
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	4298.1	4438.9	4073.9	3656.3	3646.0	3674.1
GHG Emissions – National total*	5287.2	5362.0	4917.5	4470.3	4453.1	4483.1
Main Emissions Indicators						
GHG National Total Emissions/index 1990	92.4	93.7	85.9	78.1	77.8	78.3
Total GHG per Capita (t CO_2 eq./cap)	10.9	10.8	9.8	8.8	8.7	8.8

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.1 Belgium

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**13.6**	**13.7**	**15.5**	**10.6**	**15.2**	**14.9**
Solid Fossil Fuels	0.2	0.1	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.2	0.1	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	12.4	12.3	12.5	6.8	11.3	11.0
Renewables and Biofuels	0.5	0.9	2.3	3.0	3.1	3.2
Wastes, Non-Renewable	0.4	0.5	0.7	0.7	0.7	0.7
Net Imports	**50.6**	**53.4**	**53.6**	**50.0**	**47.9**	**48.0**
Solid Fossil Fuels	7.3	5.2	3.7	3.3	3.0	2.9
of which Hard Coal	6.6	5.0	3.7	2.7	2.4	2.4
Oil and Petroleum Products	29.6	32.5	32.5	30.4	29.2	29.4
of which Crude Oil and NGL	34.2	32.0	33.5	32.4	32.2	34.4
Natural gas	13.3	14.8	16.8	13.9	14.4	14.3
Renewables and Biofuels	0.1	0.3	0.6	0.7	0.9	0.9
Electricity	0.4	0.5	0.0	1.8	0.5	0.5
Gross Inland Consumption	**59.4**	**59.0**	**61.2**	**53.8**	**56.9**	**56.6**
Solid Fossil Fuels	8.0	5.2	3.8	3.4	3.2	3.1
of which Hard Coal	7.0	4.9	3.7	2.8	2.6	2.5
of which Brown Coal	0.2	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	24.2	24.7	24.5	23.4	22.9	22.8
of which Crude and NGL	34.1	32.1	33.5	32.4	32.3	34.4
Natural Gas	13.4	14.7	16.7	14.0	14.3	14.5
Nuclear	12.4	12.3	12.5	6.8	11.3	11.0
Renewables and Biofuels	0.6	1.2	2.9	3.7	4.0	4.1
Electricity	0.4	0.5	0.0	1.8	0.5	0.5
Waste, Non-Renewable	0.4	0.5	0.7	0.7	0.7	0.7
Available for Final Consumption	**40.8**	**41.6**	**42.7**	**40.9**	**40.9**	**40.6**
Final Non-Energy Consumption	**7.0**	**7.5**	**7.0**	**7.6**	**7.5**	**7.5**
Final Energy Consumption	**33.6**	**34.0**	**35.0**	**33.1**	**33.5**	**32.9**
by Fuel/Product						
Solid Fossil Fuels	0.9	0.6	0.5	0.5	0.5	0.5
Oil and Petroleum Products	15.1	15.3	14.8	14.1	13.8	13.3
Natural Gas	9.3	9.4	10.0	8.9	9.4	9.4
Renewables and Biofuels	0.4	0.6	1.5	1.6	1.9	1.9
Solid Biofuels and Renewable Waste	0.4	0.6	1.1	1.2	1.3	1.3
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.4	0.3	0.4	0.5
Biogases	0.0	0.0	0.0	0.1	0.1	0.1
Waste, Non-Renewable	0.1	0.1	0.1	0.2	0.2	0.1
Electricity	6.7	6.9	7.2	7.0	7.1	7.0
Heat	0.5	0.4	0.6	0.5	0.5	0.4
by Sector						
Industry	11.6	10.3	10.8	10.6	10.7	10.5
Transport	8.2	8.7	9.0	8.9	9.0	8.9
Residential	9.5	10.0	9.5	8.3	8.3	8.1
Services	3.5	4.1	4.9	4.6	4.7	4.6
Agriculture and Fishing	0.8	0.8	0.8	0.7	0.8	0.8
Others	0.1	0.1	0.1	0.0	0.0	0.0

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**15.7**	**16.1**	**18.8**	**21.2**	**21.7**	**22.3**
Combustible Fuels	8.5	8.7	9.5	8.5	8.6	8.5
Nuclear	5.7	5.8	5.9	5.9	5.9	5.9
Hydro	1.4	1.4	1.4	1.4	1.4	1.4
Wind	0.0	0.2	0.9	2.2	2.4	2.8
Solar	0.0	0.0	1.0	3.1	3.3	3.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**84.0**	**86.8**	**94.9**	**69.4**	**85.3**	**86.1**
Solid Fossil Fuels, Peat & Products, Oil Shale	12.9	8.2	4.2	2.2	0.4	0.1
Oil and Petroleum Products	0.8	1.7	0.4	0.2	0.2	0.2
Natural Gas	19.1	25.1	33.2	24.1	24.4	25.2
Nuclear	48.2	47.6	47.9	26.1	43.5	42.2
Renewables and Biofuels	2.3	3.4	7.9	15.6	15.5	17.0
Wastes non-RES	0.8	0.7	1.4	1.3	1.4	1.4
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			2.6	2.4	2.2	2.3
CHP Electricity Generation (TWh)			15.2	12.5	12.2	12.5
CHP in Total Electricity Generation (%)			16.0	17.7	14.2	14.4
CHP Heat Production (PJ)				104.4	104.4	108.7
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	8051	8536	8374	8475	8389	8197
of which LPG	98	84	53	64	65	59
of which Motor Gasoline	2323	1847	1235	1324	1432	1432
of which Gas/Diesel Oil	5486	6534	7072	7081	6885	6700
Final Consumption Biofuels	0	0	365	261	441	479
Pure and Blended Biogasoline	0	0	57	41	43	97
Pure and Blended Biodiesel	0	0	309	221	398	382
Main Energy Indicators						
Primary Energy Consumption 2020-2030	52.4	51.6	54.1	46.1	49.3	49.1
Final Energy Consumption 2020-2030	37.7	36.6	37.7	35.9	36.5	36.1
Primary Energy Intensity 2020-2030 (toe/M€'10)	169	152	148	120	126	124
Energy Intensity GAE/GDP2010 (toe/M€'10)	208	196	188	155	163	162
Energy per Capita - GIC/pop (kgoe/cap)	5805	5653	5643	4784	5027	4989
Final Electricity per Capita (KWh/cap)	7573	7678	7686	7271	7260	7217
Import Dependency (%)	**78.2**	**80.1**	**78.0**	**83.9**	**75.4**	**74.8**
of Solid Fossil Fuels	91.2	101.3	97.5	96.9	94.6	95.4
of Hard Coal	93.5	102.0	100.0	96.1	94.0	94.4
of Oil and Petroleum Products	100.2	100.8	101.3	103.8	98.7	97.1
of Crude and NGL	100.2	99.5	99.9	100.0	99.7	100.1
of Natural Gas	99.3	100.5	100.3	99.3	100.6	98.4
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		2.3	5.6	7.9	8.6	9.1
RE-T – Transport		0.6	4.7	3.9	6.0	6.6
RES-E – Electricity Generation		2.4	7.1	15.5	15.8	17.2
RES-H&C – Heating and Cooling		3.4	6.1	7.7	8.1	8.0
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	131.5	129.1	118.0	104.1	102.8	102.4
GHG Emissions – National total*	154.5	148.9	137.1	121.6	120.2	119.4
Main Emissions Indicators						
GHG National Total Emissions/index 1990	103.2	99.4	91.6	81.2	80.3	79.7
Total GHG per Capita (t CO_2 eq./cap)	15.1	14.3	12.7	10.8	10.6	10.5

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.2 Bulgaria

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**9.9**	**10.6**	**10.4**	**12.0**	**11.3**	**11.7**
Solid Fossil Fuels	4.3	4.2	4.9	5.9	5.1	5.7
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	4.2	4.2	4.9	5.8	5.1	5.7
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.4	0.1	0.1	0.1	0.1
Nuclear	4.7	4.9	3.8	3.9	4.0	3.9
Renewables and Biofuels	0.8	1.1	1.5	2.1	2.0	1.9
Wastes, Non-Renewable	0.0	0.1	0.0	0.0	0.0	0.0
Net Imports	**8.7**	**9.6**	**7.2**	**6.8**	**7.1**	**7.5**
Solid Fossil Fuels	2.3	2.6	1.7	0.7	0.6	0.6
of which Hard Coal	2.2	2.5	1.7	0.7	0.5	0.5
Oil and Petroleum Products	4.1	5.2	4.2	4.5	4.5	4.7
of which Crude Oil and NGL	5.3	6.1	5.5	6.2	6.3	7.0
Natural gas	2.7	2.5	2.1	2.5	2.6	2.7
Renewables and Biofuels	0.0	0.0	-0.1	0.0	0.0	0.0
Electricity	-0.4	-0.7	-0.7	-0.9	-0.5	-0.5
Gross Inland Consumption	**18.6**	**20.1**	**17.9**	**18.6**	**18.3**	**18.9**
Solid Fossil Fuels	6.4	6.9	6.9	6.6	5.7	6.1
of which Hard Coal	2.2	2.6	1.9	0.7	0.6	0.6
of which Brown Coal	4.2	4.2	4.9	5.8	5.0	5.6
Oil and Petroleum Products	4.2	5.0	4.0	4.3	4.4	4.6
of which Crude and NGL	5.4	6.3	5.6	6.1	6.4	6.9
Natural Gas	2.9	2.8	2.3	2.6	2.7	2.8
Nuclear	4.7	4.9	3.8	3.9	4.0	3.9
Renewables and Biofuels	0.8	1.1	1.5	2.1	2.0	2.0
Electricity	-0.4	-0.7	-0.7	-0.9	-0.5	-0.5
Waste, Non-Renewable	0.0	0.1	0.0	0.0	0.0	0.0
Available for Final Consumption	**9.7**	**10.5**	**9.3**	**10.1**	**10.1**	**10.3**
Final Non-Energy Consumption	**1.0**	**0.8**	**0.4**	**0.6**	**0.5**	**0.5**
Final Energy Consumption	**8.6**	**9.6**	**8.7**	**9.4**	**9.5**	**9.7**
by Fuel/Product						
Solid Fossil Fuels	0.6	0.7	0.4	0.3	0.3	0.4
Oil and Petroleum Products	3.0	3.5	3.0	3.2	3.2	3.4
Natural Gas	1.4	1.4	1.1	1.3	1.3	1.4
Renewables and Biofuels	0.5	0.7	1.0	1.3	1.3	1.4
Solid Biofuels and Renewable Waste	0.5	0.7	0.9	1.0	1.0	1.1
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.1	0.2	0.2
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.1	0.0	0.0	0.0	0.0
Electricity	2.1	2.2	2.3	2.4	2.5	2.6
Heat	0.9	0.9	1.0	0.8	0.8	0.7
by Sector						
Industry	3.6	3.6	2.6	2.7	2.6	2.7
Transport	1.9	2.7	2.7	3.2	3.3	3.3
Residential	2.1	2.1	2.2	2.2	2.3	2.3
Services	0.7	0.8	1.0	1.1	1.2	1.2
Agriculture and Fishing	0.3	0.3	0.2	0.2	0.2	0.2
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**11.1**	**12.3**	**10.0**	**10.9**	**10.7**	**10.9**
Combustible Fuels	5.7	6.7	4.6	4.0	3.8	3.8
Nuclear	3.5	2.7	1.9	2.0	2.0	2.0
Hydro	1.9	2.8	3.0	3.2	3.2	3.4
Wind	0.0	0.0	0.5	0.7	0.7	0.7
Solar	0.0	0.0	0.0	1.0	1.0	1.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**40.9**	**44.4**	**46.6**	**49.2**	**45.2**	**45.6**
Solid Fossil Fuels, Peat & Products, Oil Shale	16.9	18.5	22.6	22.5	19.4	20.9
Oil and Petroleum Products	0.7	0.6	0.4	0.2	0.3	0.4
Natural Gas	2.2	1.9	2.0	1.9	2.1	1.9
Nuclear	18.2	18.7	15.2	15.4	15.8	15.5
Renewables and Biofuels	3.0	4.7	6.4	9.3	7.7	6.8
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			1.0	1.1	1.5	1.2
CHP Electricity Generation (TWh)			3.7	2.9	3.6	3.5
CHP in Total Electricity Generation (%)			8.0	6.0	8.0	7.7
CHP Heat Production (PJ)			40.4	31.9	39.3	40.1
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1722	2439	2440	2811	2856	2881
of which LPG	223	434	374	463	496	479
of which Motor Gasoline	697	571	611	520	492	505
of which Gas/Diesel Oil	781	1419	1441	1815	1849	1876
Final Consumption Biofuels	0	0	13	146	163	166
Pure and Blended Biogasoline	0	0	0	32	33	27
Pure and Blended Biodiesel	0	0	10	114	130	140
Main Energy Indicators						
Primary Energy Consumption 2020-2030	17.7	19.2	17.4	18.0	17.7	18.3
Final Energy Consumption 2020-2030	9.1	10.1	8.8	9.5	9.6	9.9
Primary Energy Intensity 2020-2030 (toe/M€'10)	723	597	455	435	412	412
Energy Intensity GAE/GDP2010 (toe/M€'10)	766	628	470	454	428	426
Energy per Capita - GIC/pop (kgoe/cap)	2275	2612	2408	2589	2553	2661
Final Electricity per Capita (KWh/cap)	2961	3345	3652	3933	4040	4211
Import Dependency (%)	**46.4**	**47.3**	**40.2**	**36.5**	**38.6**	**39.5**
of Solid Fossil Fuels	35.2	36.9	24.5	11.2	9.8	9.4
of Hard Coal	101.0	94.0	86.0	96.1	83.6	96.7
of Oil and Petroleum Products	96.0	102.5	101.9	101.8	100.5	101.5
of Crude and NGL	98.7	97.7	99.1	100.5	99.0	101.1
of Natural Gas	93.5	87.7	92.6	97.0	96.5	97.6
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		9.4	14.1	18.2	18.8	18.7
RE-T – Transport		0.8	1.4	6.4	7.2	7.2
RES-E – Electricity Generation		9.3	12.7	19.1	19.2	19.1
RES-H&C – Heating and Cooling		14.3	24.4	28.6	30.0	29.9
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	45.5	51.2	48.3	48.6	45.9	48.1
GHG Emissions – National total*	59.8	64.5	61.1	62.2	59.7	62.1
Main Emissions Indicators						
GHG National Total Emissions/index 1990	58.3	62.9	59.5	60.7	58.2	60.5
Total GHG per Capita (t CO_2 eq./cap)	7.3	8.4	8.2	8.6	8.3	8.7

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.3 Czechia

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**30.8**	**33.2**	**32.1**	**29.0**	**27.5**	**27.5**
Solid Fossil Fuels	25.0	23.6	20.8	16.9	16.1	15.3
of which Hard Coal	9.4	8.4	7.5	5.4	4.6	3.6
of which Brown Coal	15.6	15.2	13.3	11.5	11.5	11.7
Oil and Petroleum Products	0.4	0.6	0.3	0.2	0.2	0.2
of which Crude Oil	0.2	0.3	0.2	0.1	0.1	0.1
Natural Gas	0.2	0.2	0.2	0.2	0.2	0.2
Nuclear	3.5	6.5	7.3	7.0	6.3	7.0
Renewables and Biofuels	1.6	2.3	3.3	4.4	4.4	4.4
Wastes, Non-Renewable	0.1	0.2	0.2	0.3	0.3	0.3
Net Imports	**9.4**	**12.7**	**11.5**	**13.5**	**13.7**	**16.2**
Solid Fossil Fuels	-4.7	-3.3	-2.9	-0.3	-0.2	0.5
of which Hard Coal	-3.5	-2.8	-2.7	-0.4	-0.2	0.8
Oil and Petroleum Products	7.5	9.7	9.0	8.7	8.1	9.4
of which Crude Oil and NGL	5.5	7.7	7.8	7.2	5.4	7.9
Natural gas	7.5	7.5	6.8	6.2	6.7	7.3
Renewables and Biofuels	0.0	-0.2	-0.1	0.0	0.0	0.1
Electricity	-0.9	-1.1	-1.3	-1.1	-0.9	-1.1
Gross Inland Consumption	**41.3**	**45.5**	**45.6**	**42.3**	**41.9**	**43.4**
Solid Fossil Fuels	21.6	20.2	18.8	16.4	16.6	15.8
of which Hard Coal	6.2	5.6	5.1	4.9	4.9	4.4
of which Brown Coal	15.6	14.8	13.5	11.2	11.3	11.4
Oil and Petroleum Products	7.9	10.0	9.3	8.9	8.3	9.7
of which Crude and NGL	5.8	7.8	8.0	7.3	5.5	8.0
Natural Gas	7.5	7.7	8.1	6.5	7.0	7.2
Nuclear	3.5	6.5	7.3	7.0	6.3	7.0
Renewables and Biofuels	1.6	2.1	3.2	4.4	4.4	4.5
Electricity	-0.9	-1.1	-1.3	-1.1	-0.9	-1.1
Waste, Non-Renewable	0.1	0.2	0.2	0.3	0.3	0.3
Available for Final Consumption	**26.4**	**28.1**	**27.8**	**25.9**	**25.9**	**27.8**
Final Non-Energy Consumption	**2.1**	**3.0**	**2.9**	**2.5**	**1.8**	**2.9**
Final Energy Consumption	**24.0**	**25.0**	**24.1**	**23.1**	**23.7**	**24.4**
by Fuel/Product						
Solid Fossil Fuels	4.2	2.9	1.9	1.6	1.6	1.7
Oil and Petroleum Products	5.2	6.5	6.3	6.4	6.5	6.6
Natural Gas	5.9	6.2	6.1	5.0	5.3	5.5
Renewables and Biofuels	1.2	1.7	2.3	2.8	2.9	2.9
Solid Biofuels and Renewable Waste	1.1	1.6	2.0	2.3	2.3	2.3
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.1	0.0	0.2	0.3	0.3	0.3
Biogases	0.0	0.0	0.1	0.1	0.2	0.2
Waste, Non-Renewable	0.1	0.1	0.2	0.2	0.2	0.2
Electricity	4.2	4.8	4.7	4.7	4.8	4.9
Heat	2.6	2.5	2.4	2.0	2.1	2.1
by Sector						
Industry	9.2	8.7	6.9	6.5	6.4	6.7
Transport	4.2	5.8	5.9	6.2	6.4	6.6
Residential	6.4	6.7	7.4	6.8	7.1	7.2
Services	3.0	3.1	3.3	3.0	3.1	3.2
Agriculture and Fishing	0.7	0.5	0.5	0.6	0.6	0.6
Others	0.5	0.3	0.1	0.1	0.0	0.1

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**15.3**	**17.4**	**20.1**	**21.9**	**22.0**	**22.3**
Combustible Fuels	11.5	11.5	12.0	13.0	13.1	13.3
Nuclear	1.8	3.8	3.9	4.3	4.3	4.3
Hydro	2.1	2.2	2.2	2.3	2.3	2.3
Wind	0.0	0.0	0.2	0.3	0.3	0.3
Solar	0.0	0.0	1.7	2.1	2.1	2.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**73.5**	**82.6**	**85.8**	**83.8**	**83.2**	**86.9**
Solid Fossil Fuels, Peat & Products, Oil Shale	52.8	49.5	46.9	41.1	42.0	41.4
Oil and Petroleum Products	0.4	0.3	0.2	0.1	0.1	0.1
Natural Gas	3.9	4.2	4.2	5.0	6.4	6.2
Nuclear	13.6	24.7	28.0	26.8	24.1	28.3
Renewables and Biofuels	2.8	3.8	6.5	10.7	10.6	10.8
Wastes non-RES	0.0	0.0	0.0	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			4.8	4.6	9.0	8.0
CHP Electricity Generation (TWh)			12.2	11.8	8.4	8.0
CHP in Total Electricity Generation (%)			14.2	14.0	10.1	9.2
CHP Heat Production (PJ)			135.7	106.0	101.6	103.5
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	3915	5551	5470	5693	5920	6086
of which LPG	68	74	81	104	104	100
of which Motor Gasoline	1922	2125	1868	1570	1617	1600
of which Gas/Diesel Oil	1886	3322	3492	3981	4156	4332
Final Consumption Biofuels	62	3	231	297	301	314
Pure and Blended Biogasoline	0	0	58	63	48	59
Pure and Blended Biodiesel	62	3	173	233	253	255
Main Energy Indicators						
Primary Energy Consumption 2020-2030	39.1	42.5	42.7	39.8	40.0	40.4
Final Energy Consumption 2020-2030	25.1	26.3	25.3	24.2	24.8	25.5
Primary Energy Intensity 2020-2030 (toe/M€'10)	341	306	272	233	229	222
Energy Intensity GAE/GDP2010 (toe/M€'10)	360	328	291	249	240	239
Energy per Capita - GIC/pop (kgoe/cap)	4016	4465	4358	4018	3973	4106
Final Electricity per Capita (KWh/cap)	4804	5421	5183	5169	5292	5420
Import Dependency (%)	**22.7**	**27.8**	**25.3**	**31.9**	**32.6**	**37.2**
of Solid Fossil Fuels	-22.0	-16.2	-15.3	-1.8	-1.3	3.0
of Hard Coal	-56.4	-49.4	-53.9	-8.6	-3.8	17.8
of Oil and Petroleum Products	95.3	97.5	96.5	97.8	97.3	97.1
of Crude and NGL	95.3	99.3	97.5	98.4	97.7	99.1
of Natural Gas	99.8	97.8	84.8	95.1	95.7	101.9
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		7.1	10.5	15.0	14.9	14.8
RE-T – Transport		0.9	5.1	6.5	6.4	6.6
RES-E – Electricity Generation		3.8	7.5	14.1	13.6	13.7
RES-H&C – Heating and Cooling		10.9	14.1	19.7	19.8	19.7
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	128.8	127.7	119.4	106.5	108.3	107.4
GHG Emissions – National total*	151.1	149.5	141.7	129.5	131.5	130.5
Main Emissions Indicators						
GHG National Total Emissions/index 1990	75.6	74.9	70.9	64.8	65.8	65.3
Total GHG per Capita (t CO_2 eq./cap)	14.7	14.7	13.5	12.3	12.5	12.3

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.4 Denmark

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**27.8**	**31.4**	**23.5**	**16.3**	**15.4**	**15.9**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	18.3	19.0	12.5	7.9	7.1	6.9
of which Crude Oil	18.3	19.0	12.5	7.9	7.1	6.9
Natural Gas	7.4	9.4	7.3	4.1	4.1	4.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.8	2.6	3.2	3.8	3.9	4.2
Wastes, Non-Renewable	0.3	0.4	0.4	0.4	0.4	0.4
Net Imports	**-7.5**	**-10.5**	**-3.4**	**2.4**	**2.5**	**2.2**
Solid Fossil Fuels	3.8	3.5	2.6	1.5	1.7	1.8
of which Hard Coal	3.8	3.5	2.6	1.5	1.7	1.8
Oil and Petroleum Products	-8.5	-9.4	-3.8	0.4	0.2	-0.3
of which Crude Oil and NGL	-10.0	-11.2	-5.1	-0.4	0.0	0.7
Natural gas	-2.9	-5.0	-3.0	-1.4	-1.3	-1.5
Renewables and Biofuels	0.1	0.3	0.8	1.2	1.4	1.8
Electricity	0.1	0.1	-0.1	0.5	0.4	0.4
Gross Inland Consumption	**19.5**	**19.8**	**20.4**	**17.4**	**17.8**	**18.2**
Solid Fossil Fuels	4.0	3.7	3.8	1.8	2.0	1.5
of which Hard Coal	4.0	3.7	3.8	1.8	2.0	1.5
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	8.8	8.3	7.8	6.7	6.8	7.1
of which Crude and NGL	8.3	7.9	7.4	7.5	7.1	7.7
Natural Gas	4.4	4.4	4.4	2.9	2.9	2.7
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.9	2.9	4.0	5.1	5.3	6.0
Electricity	0.1	0.1	-0.1	0.5	0.4	0.4
Waste, Non-Renewable	0.3	0.4	0.4	0.4	0.4	0.4
Available for Final Consumption	**14.3**	**14.7**	**15.0**	**13.6**	**14.0**	**14.4**
Final Non-Energy Consumption	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.2**
Final Energy Consumption	**14.0**	**14.7**	**14.8**	**13.3**	**13.7**	**13.9**
by Fuel/Product						
Solid Fossil Fuels	0.3	0.3	0.1	0.1	0.1	0.1
Oil and Petroleum Products	6.3	6.4	5.9	5.0	5.1	5.1
Natural Gas	1.7	1.7	1.7	1.4	1.5	1.5
Renewables and Biofuels	0.7	1.0	1.4	1.7	1.8	1.8
Solid Biofuels and Renewable Waste	0.6	0.9	1.2	1.2	1.3	1.3
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.2	0.2	0.2
Biogases	0.0	0.0	0.0	0.0	0.1	0.1
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	2.8	2.9	2.8	2.7	2.7	2.7
Heat	2.3	2.4	2.8	2.5	2.6	2.6
by Sector						
Industry	2.9	2.9	2.4	2.2	2.2	2.3
Transport	4.0	4.5	4.4	4.1	4.1	4.2
Residential	4.2	4.5	5.0	4.4	4.6	4.5
Services	1.8	2.0	2.1	1.9	2.0	2.0
Agriculture and Fishing	1.0	0.9	0.9	0.8	0.8	0.7
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**12.3**	**13.0**	**13.4**	**14.0**	**14.2**	**14.4**
Combustible Fuels	9.9	9.9	9.6	8.1	8.1	7.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	2.4	3.1	3.8	5.1	5.2	5.5
Solar	0.0	0.0	0.0	0.8	0.9	0.9
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**36.0**	**36.2**	**38.9**	**28.9**	**30.5**	**31.0**
Solid Fossil Fuels, Peat & Products, Oil Shale	16.7	15.5	17.0	7.1	8.9	6.2
Oil and Petroleum Products	4.4	1.4	0.8	0.3	0.3	0.3
Natural Gas	8.8	8.8	7.9	1.8	2.2	1.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	5.6	9.8	12.4	18.9	18.5	21.9
Wastes non-RES	0.6	0.8	0.7	0.8	0.7	0.7
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			5.8	6.1	5.9	5.8
CHP Electricity Generation (TWh)			19.1	11.6	12.0	11.8
CHP in Total Electricity Generation (%)			49.2	40.0	39.4	38.1
CHP Heat Production (PJ)			124.7	93.3	94.9	94.4
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	4007	4437	4308	3803	3886	3963
of which LPG	10	8	0	0	0	0
of which Motor Gasoline	2019	1922	1574	1317	1306	1312
of which Gas/Diesel Oil	1863	2372	2649	2437	2532	2589
Final Consumption Biofuels	0	0	27	214	217	215
Pure and Blended Biogasoline	0	0	27	0	0	0
Pure and Blended Biodiesel	0	0	0	214	217	215
Main Energy Indicators						
Primary Energy Consumption 2020-2030	19.1	19.4	20.0	16.9	17.4	17.7
Final Energy Consumption 2020-2030	14.7	15.5	15.5	14.0	14.4	14.6
Primary Energy Intensity 2020-2030 (toe/M€'10)	85	81	82	65	65	65
Energy Intensity GAE/GDP2010 (toe/M€'10)	92	86	87	70	70	69
Energy per Capita - GIC/pop (kgoe/cap)	3658	3663	3687	3069	3126	3167
Final Electricity per Capita (KWh/cap)	6089	6184	5792	5451	5450	5445
Import Dependency (%)	**-35.9**	**-50.9**	**-16.3**	**13.0**	**13.4**	**11.7**
of Solid Fossil Fuels	94.9	94.4	69.4	85.0	84.6	115.9
of Hard Coal	94.8	94.3	69.3	85.0	84.6	116.0
of Oil and Petroleum Products	-84.1	-104.4	-44.3	5.3	2.5	-3.9
of Crude and NGL	-120.5	-141.3	-68.8	-4.9	-0.6	9.7
of Natural Gas	-64.8	-113.9	-68.3	-48.2	-44.6	-56.2
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		16.0	22.1	31.4	32.6	35.8
RE-T – Transport		0.4	1.2	6.7	6.8	6.8
RES-E – Electricity Generation		24.6	32.7	51.4	53.9	60.4
RES-H&C – Heating and Cooling		22.8	31.0	40.7	42.2	46.5
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	57.4	54.7	52.0	38.1	40.1	38.0
GHG Emissions – National total*	73.2	68.8	65.5	50.8	53.0	50.8
Main Emissions Indicators						
GHG National Total Emissions/index 1990	101.5	95.5	90.8	70.5	73.5	70.5
Total GHG per Capita (t CO_2 eq./cap)	13.7	12.7	11.8	9.0	9.3	8.8

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.5 Germany

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**135.5**	**137.0**	**128.9**	**120.1**	**116.2**	**116.3**
Solid Fossil Fuels	60.6	56.5	45.9	43.0	39.7	39.4
of which Hard Coal	24.2	18.0	9.2	4.6	2.8	2.7
of which Brown Coal	36.4	38.4	36.7	38.4	36.9	36.8
Oil and Petroleum Products	4.6	5.5	4.1	4.0	4.1	4.0
of which Crude Oil	3.2	3.6	2.5	2.5	2.4	2.3
Natural Gas	15.8	14.3	11.1	6.3	6.6	6.0
Nuclear	43.8	42.1	36.2	23.6	21.8	19.7
Renewables and Biofuels	9.0	16.9	27.7	38.9	39.5	42.6
Wastes, Non-Renewable	1.7	1.8	3.9	4.3	4.5	4.5
Net Imports	**204.9**	**211.5**	**204.1**	**198.5**	**205.1**	**207.4**
Solid Fossil Fuels	21.7	26.0	31.6	36.1	38.3	32.3
of which Hard Coal	17.2	23.8	29.1	35.2	37.7	32.0
Oil and Petroleum Products	126.1	123.7	112.2	108.4	109.5	110.7
of which Crude Oil and NGL	101.5	114.5	94.0	92.3	92.5	92.1
Natural gas	56.9	61.9	61.6	58.7	62.3	68.8
Renewables and Biofuels	0.0	0.4	-0.1	-0.5	-0.6	0.1
Electricity	0.3	-0.4	-1.3	-4.2	-4.3	-4.5
Gross Inland Consumption	**342.4**	**344.9**	**334.6**	**316.5**	**319.1**	**322.2**
Solid Fossil Fuels	84.8	81.8	79.1	79.4	77.1	71.3
of which Hard Coal	43.8	41.2	39.8	40.2	39.8	34.2
of which Brown Coal	37.2	38.4	36.7	38.1	36.8	36.8
Oil and Petroleum Products	131.1	124.6	113.2	109.9	110.8	113.2
of which Crude and NGL	108.2	117.7	96.6	95.1	95.7	94.6
Natural Gas	71.9	77.8	75.9	65.2	70.3	75.3
Nuclear	43.8	42.1	36.2	23.6	21.8	19.7
Renewables and Biofuels	9.0	17.2	27.6	38.4	38.9	42.7
Electricity	0.3	-0.4	-1.3	-4.2	-4.3	-4.5
Waste, Non-Renewable	1.7	1.8	3.9	4.3	4.5	4.5
Available for Final Consumption	**234.8**	**234.9**	**229.6**	**219.4**	**222.5**	**228.8**
Final Non-Energy Consumption	**25.3**	**24.7**	**22.6**	**21.3**	**21.4**	**22.8**
Final Energy Consumption	**207.2**	**206.1**	**206.4**	**198.4**	**202.5**	**204.6**
by Fuel/Product						
Solid Fossil Fuels	5.6	4.0	4.4	4.7	4.6	4.5
Oil and Petroleum Products	92.3	82.2	74.9	73.0	73.6	73.7
Natural Gas	53.0	52.6	54.0	49.3	52.4	52.8
Renewables and Biofuels	4.8	8.8	12.7	14.0	14.3	15.9
Solid Biofuels and Renewable Waste	4.4	6.4	8.2	9.1	9.3	9.8
Solar Thermal	0.1	0.3	0.5	0.7	0.7	0.7
Geothermal	0.0	0.0	0.1	0.1	0.1	0.1
Liquid Biofuels	0.2	1.9	3.2	2.7	2.7	2.7
Biogases	0.1	0.2	0.8	1.5	1.5	1.5
Waste, Non-Renewable	0.0	0.3	1.0	1.0	1.1	1.1
Electricity	41.6	44.9	45.8	44.3	44.5	44.6
Heat	6.8	10.8	11.3	9.6	9.8	9.8
by Sector						
Industry	51.4	54.2	55.3	55.2	55.8	56.3
Transport	60.0	54.9	53.2	55.2	56.6	57.2
Residential	65.3	63.5	62.5	53.2	56.0	56.6
Services	25.8	33.2	35.4	34.7	34.0	34.5
Agriculture and Fishing	0.3	0.0	0.0	0.0	0.0	0.0
Others	4.3	0.3	0.2	0.1	0.1	0.1

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**118.9**	**128.5**	**162.9**	**203.4**	**208.5**	**215.5**
Combustible Fuels	80.8	76.4	85.8	97.0	95.7	95.1
Nuclear	22.4	20.4	20.5	10.8	10.8	10.8
Hydro	9.5	10.9	11.2	11.4	11.3	11.1
Wind	6.1	18.2	26.9	44.6	49.6	55.7
Solar	0.1	2.1	18.0	39.2	40.7	42.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**576.5**	**619.3**	**630.7**	**645.1**	**647.2**	**652.0**
Solid Fossil Fuels, Peat & Products, Oil Shale	296.7	288.1	262.9	272.2	261.7	241.9
Oil and Petroleum Products	48	12.0	8.7	6.2	5.8	5.6
Natural Gas	60.0	83.6	100.9	74.5	93.7	98.6
Nuclear	169.6	163.1	140.6	91.8	84.6	76.3
Renewables and Biofuels	39.7	69.3	111.2	193.3	193.9	222.3
Wastes non-RES	5.8	3.3	6.4	7.1	7.3	7.3
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			24.6	37.1	37.2	39.6
CHP Electricity Generation (TWh)			83.2	78.8	87.9	94.4
CHP in Total Electricity Generation (%)			13.2	12.2	13.5	14.4
CHP Heat Production (PJ)			675.8	669.9	698.0	703.2
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	58362	51045	48714	51194	52530	53158
of which LPG	71	122	619	594	536	497
of which Motor Gasoline	30241	23722	18859	16926	16938	17187
of which Gas/Diesel Oil	27110	26364	28449	32944	34278	34801
Final Consumption Biofuels	236	1859	2884	2537	2539	2561
Pure and Blended Biogasoline	0	153	749	744	745	733
Pure and Blended Biodiesel	222	1552	2104	1792	1792	1827
Main Energy Indicators						
Primary Energy Consumption 2020-2030	317.1	320.3	312.0	295.3	297.7	298.3
Final Energy Consumption 2020-2030	220.2	218.7	220.0	212.0	216.7	218.7
Primary Energy Intensity 2020-2030 (toe/M€'10)	134	132	121	105	104	102
Energy Intensity GAE/GDP2010 (toe/M€'10)	146	143	131	114	112	111
Energy per Capita - GIC/pop (kgoe/cap)	4168	4181	4090	3898	3883	3904
Final Electricity per Capita (KWh/cap)	5884	6330	6509	6339	6296	6289
Import Dependency (%)	**59.4**	**60.9**	**60.5**	**62.2**	**63.7**	**63.9**
of Solid Fossil Fuels	25.6	31.7	40.0	45.4	49.6	45.3
of Hard Coal	39.2	57.7	73.2	87.6	94.7	93.4
of Oil and Petroleum Products	94.6	97.3	96.8	96.5	96.4	95.8
of Crude and NGL	93.8	97.3	97.3	97.1	96.7	97.4
of Natural Gas	79.1	79.6	81.2	90.1	88.6	91.4
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)			7.1	11.7	14.9	14.9	15.5
RE-T – Transport			4.0	6.4	6.6	7.0	7.0
RES-E – Electricity Generation			10.5	18.2	30.8	32.2	34.4
RES-H&C – Heating and Cooling			7.7	12.1	13.5	13.1	13.4
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	919.7	889.6	856.6	820.4	828.0	827.1
GHG Emissions – National total*	1064.7	1016.5	967.0	931.8	937.7	936.0
Main Emissions Indicators						
GHG National Total Emissions/index 1990	84.3	80.5	76.5	73.8	74.2	74.1
Total GHG per Capita (t CO_2 eq./cap)	13.0	12.3	11.8	11.5	11.4	11.3

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.6 Estonia

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**3.2**	**3.9**	**4.9**	**5.6**	**5.2**	**5.8**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.5	0.7	1.0	1.3	1.5	1.6
Wastes, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Net Imports	**1.6**	**1.5**	**0.9**	**0.6**	**0.5**	**0.2**
Solid Fossil Fuels	0.1	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.1	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.8	0.9	0.8	0.6	0.7	0.6
of which Crude Oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	0.8	0.6	0.4	0.4	0.4
Renewables and Biofuels	0.0	-0.1	-0.2	-0.4	-0.5	-0.5
Electricity	-0.1	-0.1	-0.3	-0.1	-0.2	-0.2
Gross Inland Consumption	**4.7**	**5.3**	**5.7**	**5.4**	**6.0**	**5.8**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.1	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.7	0.8	0.6	0.3	0.5	0.2
of which Crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.7	0.8	0.6	0.4	0.4	0.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.5	0.6	0.8	0.9	1.0	1.1
Electricity	-0.1	-0.1	-0.3	-0.1	-0.2	-0.2
Waste, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Available for Final Consumption	**2.7**	**3.2**	**3.0**	**2.8**	**3.3**	**3.0**
Final Non-Energy Consumption	**0.2**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**
Final Energy Consumption	**2.4**	**2.8**	**2.9**	**2.7**	**2.8**	**2.8**
by Fuel/Product						
Solid Fossil Fuels	0.1	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.7	0.9	0.9	1.0	1.0	1.0
Natural Gas	0.2	0.3	0.2	0.2	0.3	0.2
Renewables and Biofuels	0.4	0.4	0.6	0.5	0.4	0.4
Solid Biofuels and Renewable Waste	0.4	0.4	0.5	0.5	0.4	0.4
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.4	0.5	0.6	0.6	0.6	0.6
Heat	0.5	0.5	0.5	0.4	0.5	0.5
by Sector						
Industry	0.6	0.7	0.6	0.5	0.5	0.5
Transport	0.6	0.7	0.7	0.8	0.8	0.8
Residential	0.9	0.9	1.0	0.9	0.9	0.9
Services	0.3	0.4	0.4	0.5	0.5	0.5
Agriculture and Fishing	0.1	0.1	0.1	0.1	0.1	0.1
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**2.8**	**2.6**	**2.8**	**2.9**	**2.6**	**2.5**
Combustible Fuels	2.8	2.5	2.6	2.6	2.3	2.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.0	0.0	0.1	0.3	0.3	0.3
Solar	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**8.5**	**10.2**	**13.0**	**10.4**	**12.2**	**12.9**
Solid Fossil Fuels, Peat & Products, Oil Shale	7.7	9.3	11.2	8.0	9.7	10.0
Oil and Petroleum Products	0.1	0.0	0.0	0.1	0.3	0.1
Natural Gas	0.8	0.8	0.7	0.6	0.6	0.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.1	1.0	1.5	1.5	1.8
Wastes non-RES	0.0	0.0	0.0	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.4	0.4	0.2	0.0
CHP Electricity Generation (TWh)			1.3	1.2	0.9	1.1
CHP in Total Electricity Generation (%)			10.3	11.9	7.7	8.4
CHP Heat Production (PJ)			12.3	12.5	3.3	13.6
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	554	716	741	745	766	793
of which LPG	0	0	0	0	5	8
of which Motor Gasoline	295	305	289	241	254	267
of which Gas/Diesel Oil	258	409	451	503	505	517
Final Consumption Biofuels	0	0	0	3	3	1
Pure and Blended Biogasoline	0	0	0	3	3	1
Pure and Blended Biodiesel	0	0	0	0	0	0
Main Energy Indicators						
Primary Energy Consumption 2020-2030	4.6	5.1	5.6	5.3	5.9	5.6
Final Energy Consumption 2020-2030	2.4	2.9	2.9	2.8	2.8	2.9
Primary Energy Intensity 2020-2030 (toe/M€'10)	427	336	378	302	322	295
Energy Intensity GAE/GDP2010 (toe/M€'10)	454	359	399	324	343	317
Energy per Capita - GIC/pop (kgoe/cap)	3379	3880	4243	4128	4554	4382
Final Electricity per Capita (KWh/cap)	3579	4445	5181	5211	5547	5486
Import Dependency (%)	**33.8**	**28.2**	**15.3**	**9.6**	**7.9**	**4.1**
of Solid Fossil Fuels	125.2	88.4	132.6	-6.8	70.1	87.2
of Hard Coal	116.1	96.4	118.3	24.1	85.2	93.8
of Oil and Petroleum Products	101.5	98.8	95.8	101.6	101.5	115.2
of Crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
of Natural Gas	100.0	100.0	100.0	100.0	100.0	100.0
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		17.4	24.6	28.4	28.6	29.2
RE-T – Transport		0.2	0.4	0.4	0.4	0.4
RES-E – Electricity Generation		1.0	10.2	14.9	15.2	17.0
RES-H&C – Heating and Cooling		32.2	43.3	49.6	51.2	51.6
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	15.4	17.3	19.1	16.0	17.6	18.8
GHG Emissions – National total*	17.4	19.3	21.3	18.3	19.8	21.1
Main Emissions Indicators						
GHG National Total Emissions/index 1990	43.0	47.7	52.6	45.1	48.9	52.0
Total GHG per Capita (t CO_2 eq./cap)	12.4	14.2	16.0	13.9	15.0	16.0

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.7 Ireland

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**2.2**	**1.7**	**1.9**	**1.9**	**4.2**	**4.9**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	1.0	0.5	0.2	0.1	2.5	2.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.2	0.4	0.6	1.0	1.0	1.1
Wastes, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Net Imports	**12.4**	**14.0**	**13.2**	**12.7**	**10.4**	**9.9**
Solid Fossil Fuels	1.7	1.9	1.0	1.5	1.1	1.2
of which Hard Coal	1.7	1.9	0.9	1.5	1.1	1.2
Oil and Petroleum Products	8.2	8.9	7.7	7.5	7.5	7.2
of which Crude Oil and NGL	3.0	3.3	3.0	3.7	3.3	3.0
Natural gas	2.5	3.0	4.5	3.6	1.7	1.4
Renewables and Biofuels	0.0	0.0	0.0	0.1	0.1	0.2
Electricity	0.0	0.2	0.0	0.1	-0.1	-0.1
Gross Inland Consumption	**14.4**	**15.5**	**15.1**	**14.1**	**14.9**	**14.7**
Solid Fossil Fuels	1.8	1.9	1.2	1.4	1.4	1.1
of which Hard Coal	1.8	1.9	1.2	1.4	1.4	1.1
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	8.2	8.8	7.8	7.0	7.4	7.2
of which Crude and NGL	3.4	3.4	3.0	3.4	3.3	3.3
Natural Gas	3.4	3.5	4.7	3.8	4.2	4.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.2	0.4	0.7	1.1	1.1	1.3
Electricity	0.0	0.2	0.0	0.1	-0.1	-0.1
Waste, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Available for Final Consumption	**10.4**	**11.1**	**11.3**	**10.7**	**11.2**	**11.0**
Final Non-Energy Consumption	**0.7**	**0.5**	**0.3**	**0.2**	**0.3**	**0.2**
Final Energy Consumption	**10.2**	**11.8**	**11.3**	**10.4**	**10.7**	**10.7**
by Fuel/Product						
Solid Fossil Fuels	0.4	0.5	0.3	0.3	0.3	0.2
Oil and Petroleum Products	6.5	7.5	6.6	5.6	5.9	5.8
Natural Gas	1.2	1.4	1.6	1.7	1.8	1.8
Renewables and Biofuels	0.1	0.2	0.3	0.3	0.4	0.4
Solid Biofuels and Renewable Waste	0.1	0.2	0.2	0.2	0.2	0.2
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.1	0.1	0.1	0.2
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.1
Electricity	1.7	2.1	2.2	2.2	2.2	2.2
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	2.5	2.6	2.1	2.4	2.4	2.5
Transport	3.5	4.3	4.0	3.8	4.1	4.0
Residential	2.5	2.9	3.3	2.7	2.7	2.6
Services	1.3	1.6	1.5	1.3	1.3	1.4
Agriculture and Fishing	0.4	0.4	0.3	0.2	0.2	0.2
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**4.7**	**6.2**	**8.0**	**9.6**	**9.9**	**10.5**
Combustible Fuels	4.1	5.1	6.4	6.6	6.6	6.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.5	0.5	0.2	0.5	0.5	0.5
Wind	0.1	0.5	1.4	2.5	2.8	3.3
Solar	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**24.0**	**26.0**	**28.4**	**28.4**	**30.5**	**30.9**
Solid Fossil Fuels, Peat & Products, Oil Shale	8.6	8.8	5.7	7.4	7.0	5.8
Oil and Petroleum Products	4.6	3.3	0.6	0.4	0.3	0.1
Natural Gas	9.3	11.6	18.1	12.4	15.3	15.7
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.5	2.2	3.9	8.1	7.8	9.1
Wastes non-RES	0.0	0.0	0.0	0.1	0.1	0.2
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.3	0.3	0.3	0.3
CHP Electricity Generation (TWh)			1.9	2.1	2.2	2.2
CHP in Total Electricity Generation (%)			6.7	7.5	7.1	7.0
CHP Heat Production (PJ)			12.0	12.6	11.2	11.8
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	3509	4309	3939	3693	3960	3863
of which LPG	6	6	1	2	2	1
of which Motor Gasoline	1590	1823	1527	1020	1003	905
of which Gas/Diesel Oil	1856	2417	2365	2665	2951	2954
Final Consumption Biofuels	0	1	93	88	118	175
Pure and Blended Biogasoline	0	0	30	24	32	44
Pure and Blended Biodiesel	0	1	63	64	86	131
Main Energy Indicators						
Primary Energy Consumption 2020-2030	13.7	14.9	14.8	13.9	14.6	14.4
Final Energy Consumption 2020-2030	10.8	12.7	12.0	11.2	11.6	11.8
Primary Energy Intensity 2020-2030 (toe/M€'10)	108	91	88	58	58	53
Energy Intensity GAE/GDP2010 (toe/M€'10)	115	95	91	59	60	55
Energy per Capita - GIC/pop (kgoe/cap)	3804	3759	3319	3023	3149	3063
Final Electricity per Capita (KWh/cap)	5371	5923	5588	5360	5411	5403
Import Dependency (%)	**85.4**	**89.6**	**87.2**	**88.9**	**69.1**	**67.1**
of Solid Fossil Fuels	93.3	100.8	77.7	103.1	83.6	111.0
of Hard Coal	93.1	100.8	77.5	103.1	83.5	111.4
of Oil and Petroleum Products	98.8	100.0	97.5	104.6	99.1	98.3
of Crude and NGL	89.8	98.9	101.6	108.2	100.1	91.7
of Natural Gas	72.1	86.1	95.3	96.3	40.0	32.7
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		2.8	5.8	9.1	9.3	10.7
RE-T – Transport		0.1	2.5	5.9	5.2	7.4
RES-E – Electricity Generation		7.2	15.6	25.5	26.8	30.1
RES-H&C – Heating and Cooling		3.4	4.3	6.3	6.3	6.9
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	47.0	50.6	44.0	40.9	42.5	41.8
GHG Emissions – National total*	70.3	72.0	63.4	61.7	63.9	63.8
Main Emissions Indicators						
GHG National Total Emissions/index 1990	124.4	127.5	112.3	109.3	113.1	112.9
Total GHG per Capita (t CO_2 eq./cap)	18.6	17.5	13.9	13.2	13.5	13.3

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.8 Greece

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**10.0**	**10.3**	**9.4**	**8.5**	**6.8**	**7.5**
Solid Fossil Fuels	8.2	8.5	7.3	5.7	4.0	4.6
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	8.2	8.5	7.3	5.7	4.0	4.6
Oil and Petroleum Products	0.3	0.1	0.1	0.1	0.2	0.2
of which Crude Oil	0.3	0.1	0.1	0.1	0.2	0.1
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.4	1.6	2.0	2.6	2.5	2.8
Wastes, Non-Renewable	0.1	0.0	0.0	0.1	0.1	0.0
Net Imports	**21.6**	**23.0**	**21.2**	**18.2**	**18.3**	**18.7**
Solid Fossil Fuels	0.8	0.4	0.4	0.2	0.2	0.2
of which Hard Coal	0.8	0.4	0.4	0.2	0.2	0.2
Oil and Petroleum Products	19.2	20.0	16.9	14.4	13.8	13.6
of which Crude Oil and NGL	19.1	17.5	19.0	21.7	22.9	23.1
Natural gas	1.7	2.3	3.2	2.7	3.5	4.2
Renewables and Biofuels	0.0	0.0	0.2	0.1	0.1	0.1
Electricity	0.0	0.3	0.5	0.8	0.8	0.5
Gross Inland Consumption	**27.7**	**30.9**	**28.2**	**23.9**	**23.4**	**24.2**
Solid Fossil Fuels	9.0	9.0	7.9	5.6	4.4	4.8
of which Hard Coal	0.7	0.3	0.4	0.2	0.2	0.2
of which Brown Coal	8.3	8.6	7.5	5.4	4.2	4.6
Oil and Petroleum Products	15.5	17.6	14.4	11.9	12.1	11.8
of which Crude and NGL	19.2	18.4	19.1	21.4	22.8	23.7
Natural Gas	1.7	2.4	3.2	2.7	3.5	4.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.4	1.6	2.1	2.8	2.6	2.9
Electricity	0.0	0.3	0.5	0.8	0.8	0.5
Waste, Non-Renewable	0.1	0.0	0.0	0.1	0.1	0.0
Available for Final Consumption	**18.3**	**20.6**	**18.9**	**16.3**	**16.7**	**16.7**
Final Non-Energy Consumption	**0.7**	**0.8**	**1.1**	**0.7**	**0.6**	**0.8**
Final Energy Consumption	**17.9**	**20.2**	**18.3**	**15.7**	**15.8**	**16.1**
by Fuel/Product						
Solid Fossil Fuels	0.9	0.4	0.3	0.2	0.2	0.2
Oil and Petroleum Products	11.9	13.6	11.4	8.6	8.6	8.3
Natural Gas	0.3	0.6	0.8	1.0	1.0	1.2
Renewables and Biofuels	1.0	1.1	1.2	1.4	1.3	1.7
Solid Biofuels and Renewable Waste	0.9	1.0	0.9	1.1	0.9	0.9
Solar Thermal	0.1	0.1	0.2	0.2	0.2	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.1	0.2	0.2	0.2
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.1	0.0	0.0
Electricity	3.7	4.4	4.6	4.4	4.6	4.6
Heat	0.0	0.0	0.0	0.0	0.1	0.1
by Sector						
Industry	4.5	4.2	3.5	3.1	3.1	3.1
Transport	6.5	7.4	7.4	5.8	5.9	5.8
Residential	4.5	5.5	4.6	4.4	4.3	4.4
Services	1.3	1.9	2.0	1.9	2.0	2.2
Agriculture and Fishing	1.1	1.2	0.8	0.3	0.3	0.3
Others	0.0	0.0	0.0	0.3	0.2	0.2

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**10.9**	**13.3**	**15.3**	**18.9**	**19.2**	**19.4**
Combustible Fuels	7.6	9.7	10.6	10.9	10.8	10.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	3.1	3.1	3.2	3.4	3.4	3.4
Wind	0.2	0.5	1.3	2.1	2.4	2.6
Solar	0.0	0.0	0.2	2.6	2.6	2.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**53.8**	**60.0**	**57.4**	**51.9**	**54.4**	**55.3**
Solid Fossil Fuels, Peat & Products, Oil Shale	34.3	35.5	30.8	22.1	18.9	18.8
Oil and Petroleum Products	8.9	9.2	6.1	5.7	5.6	5.5
Natural Gas	5.9	8.2	9.8	9.1	14.9	17.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	4.6	7.0	10.5	14.9	14.9	13.9
Wastes non-RES	0.2	0.1	0.1	0.1	0.2	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.6	0.6	0.5	0.3
CHP Electricity Generation (TWh)			2.5	2.0	2.6	2.2
CHP in Total Electricity Generation (%)			4.3	3.9	4.8	3.9
CHP Heat Production (PJ)			12.7	10.9	18.9	14.6
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	6438	7343	7322	5563	5713	5621
of which LPG	17	12	46	257	261	246
of which Motor Gasoline	3418	4114	3867	2574	2537	2451
of which Gas/Diesel Oil	2252	2489	2730	2254	2419	2415
Final Consumption Biofuels	0	0	91	142	149	166
Pure and Blended Biogasoline	0	0	0	0	0	0
Pure and Blended Biodiesel	0	0	91	142	149	166
Main Energy Indicators						
Primary Energy Consumption 2020-2030	27.0	30.1	27.1	23.2	22.8	23.1
Final Energy Consumption 2020-2030	18.7	21.0	19.0	16.5	16.7	16.8
Primary Energy Intensity 2020-2030 (toe/M€'10)	142	131	120	125	124	124
Energy Intensity GAE/GDP2010 (toe/M€'10)	165	147	137	139	136	141
Energy per Capita - GIC/pop (kgoe/cap)	2575	2815	2532	2198	2173	2250
Final Electricity per Capita (KWh/cap)	4005	4640	4777	4677	4948	5012
Import Dependency (%)	**69.0**	**68.2**	**68.6**	**71.0**	**72.9**	**71.1**
of Solid Fossil Fuels	8.5	4.1	5.1	2.8	4.4	4.8
of Hard Coal	105.8	112.4	100.5	91.5	93.7	109.3
of Oil and Petroleum Products	100.2	97.7	98.6	105.5	99.6	98.0
of Crude and NGL	99.5	95.2	99.5	101.5	100.5	97.8
of Natural Gas	99.1	99.1	99.9	99.9	99.2	100.5
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		7.0	9.8	15.4	15.1	16.3
RE-T – Transport		0.1	1.9	1.1	1.6	1.8
RES-E – Electricity Generation		8.2	12.3	22.1	22.7	24.5
RES-H&C – Heating and Cooling		12.8	17.9	25.8	24.6	26.6
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	105.5	116.5	99.9	77.8	74.4	78.3
GHG Emissions – National total*	128.9	138.9	121.0	98.2	94.8	98.9
Main Emissions Indicators						
GHG National Total Emissions/index 1990	122.1	131.5	114.6	93.0	89.8	93.6
Total GHG per Capita (t CO_2 eq./cap)	12.0	12.7	10.9	9.0	8.8	9.2

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.9 Spain

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**31.4**	**30.0**	**34.4**	**34.0**	**34.6**	**34.2**
Solid Fossil Fuels	8.0	6.3	3.3	1.2	0.7	1.1
of which Hard Coal	5.4	4.1	2.5	0.8	0.5	0.5
of which Brown Coal	2.6	2.1	0.8	0.4	0.2	0.6
Oil and Petroleum Products	0.2	0.2	0.1	0.2	0.1	0.1
of which Crude Oil	0.2	0.2	0.1	0.2	0.1	0.1
Natural Gas	0.1	0.1	0.0	0.1	0.0	0.0
Nuclear	16.0	14.8	16.1	14.9	15.3	15.1
Renewables and Biofuels	6.8	8.4	14.6	17.3	18.2	17.6
Wastes, Non-Renewable	0.2	0.2	0.2	0.3	0.2	0.3
Net Imports	**100.4**	**124.8**	**107.1**	**95.4**	**94.5**	**101.9**
Solid Fossil Fuels	12.8	14.4	6.8	10.2	7.7	10.9
of which Hard Coal	13.3	14.7	6.9	10.1	7.7	10.8
Oil and Petroleum Products	71.7	80.2	69.7	61.8	61.8	63.2
of which Crude Oil and NGL	58.6	60.7	53.5	66.0	65.4	67.2
Natural gas	15.5	30.2	30.9	23.8	24.7	27.6
Renewables and Biofuels	0.0	0.0	0.4	-0.4	-0.4	-0.6
Electricity	0.4	-0.1	-0.7	0.0	0.7	0.8
Gross Inland Consumption	**124.5**	**145.0**	**130.4**	**123.3**	**124.7**	**131.1**
Solid Fossil Fuels	20.9	20.5	7.3	13.6	10.8	12.7
of which Hard Coal	18.5	18.6	7.2	12.7	10.4	12.2
of which Brown Coal	2.8	2.3	0.2	0.7	0.4	0.6
Oil and Petroleum Products	64.9	71.3	61.4	53.0	54.7	57.9
of which Crude and NGL	58.2	60.6	53.8	66.3	66.2	67.3
Natural Gas	15.2	29.8	31.1	24.5	25.0	27.3
Nuclear	16.0	14.8	16.1	14.9	15.3	15.1
Renewables and Biofuels	6.8	8.4	15.0	17.0	17.9	17.1
Electricity	0.4	-0.1	-0.7	0.0	0.7	0.8
Waste, Non-Renewable	0.2	0.2	0.2	0.3	0.2	0.3
Available for Final Consumption	**85.4**	**101.9**	**91.1**	**79.0**	**81.8**	**85.2**
Final Non-Energy Consumption	**9.5**	**8.4**	**7.1**	**4.3**	**5.0**	**4.9**
Final Energy Consumption	**76.3**	**93.8**	**85.2**	**76.0**	**78.0**	**79.4**
by Fuel/Product						
Solid Fossil Fuels	0.8	0.8	0.5	0.4	0.6	0.6
Oil and Petroleum Products	43.7	50.5	43.9	36.7	38.0	38.8
Natural Gas	11.8	17.7	14.3	13.1	13.4	13.5
Renewables and Biofuels	3.4	3.8	5.0	5.5	5.7	6.0
Solid Biofuels and Renewable Waste	3.3	3.4	3.7	4.0	4.0	4.1
Solar Thermal	0.0	0.1	0.2	0.3	0.3	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.1	0.2	1.1	0.8	0.9	1.0
Biogases	0.0	0.0	0.1	0.1	0.1	0.1
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	16.2	20.8	21.0	20.0	20.0	20.2
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	24.5	30.1	20.8	18.2	18.4	19.0
Transport	30.5	36.8	33.9	29.5	30.6	31.7
Residential	12.1	15.2	17.0	15.0	15.2	15.4
Services	6.7	8.4	9.8	10.3	10.9	10.4
Agriculture and Fishing	2.6	3.1	2.2	2.5	2.7	2.6
Others	0.0	0.2	1.5	0.5	0.2	0.2

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**53.9**	**76.6**	**101.7**	**106.8**	**105.9**	**103.8**
Combustible Fuels	26.2	40.8	50.5	49.4	48.5	46.5
Nuclear	7.5	7.6	7.5	7.4	7.4	7.1
Hydro	18.0	18.2	18.5	20.1	20.1	20.1
Wind	2.2	9.9	20.7	22.9	23.0	23.1
Solar	0.0	0.1	4.6	7.0	7.0	7.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**224.5**	**289.1**	**301.4**	**280.7**	**274.7**	**275.6**
Solid Fossil Fuels, Peat & Products, Oil Shale	79.1	79.1	25.3	51.4	36.4	45.1
Oil and Petroleum Products	22.6	24.4	16.6	17.2	16.9	15.8
Natural Gas	21.9	80.7	95.8	53.8	53.8	65.3
Nuclear	62.2	57.5	62.0	57.2	58.6	58.0
Renewables and Biofuels	38.0	46.9	101.0	100.3	108.1	90.7
Wastes non-RES	0.6	0.5	0.7	0.8	0.7	0.8
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			3.4	3.5	4.2	4.6
CHP Electricity Generation (TWh)			22.4	22.7	27.5	28.8
CHP in Total Electricity Generation (%)			7.4	8.1	10.0	10.4
CHP Heat Production (PJ)			153.3	120.3	138.8	139.2
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	30053	36144	32407	27979	29017	29935
of which LPG	85	51	21	49	53	58
of which Motor Gasoline	9019	7682	5620	4561	4768	4871
of which Gas/Diesel Oil	18903	26037	24228	21433	21982	22352
Final Consumption Biofuels	52	219	1099	756	836	960
Pure and Blended Biogasoline	0	114	232	190	134	138
Pure and Blended Biodiesel	52	104	867	565	702	822
Main Energy Indicators						
Primary Energy Consumption 2020-2030	115.0	136.6	123.3	118.6	119.2	125.6
Final Energy Consumption 2020-2030	80.0	98.1	89.1	80.4	82.5	84.3
Primary Energy Intensity 2020-2030 (toe/M€'10)	133	133	114	111	108	110
Energy Intensity GAE/GDP2010 (toe/M€'10)	150	149	128	122	119	121
Energy per Capita - GIC/pop (kgoe/cap)	3077	3349	2806	2655	2685	2819
Final Electricity per Capita (KWh/cap)	4657	5595	5266	4995	5007	5041
Import Dependency (%)	**76.9**	**81.6**	**77.2**	**72.9**	**71.5**	**73.9**
of Solid Fossil Fuels	61.3	70.3	92.8	75.4	71.7	85.6
of Hard Coal	71.5	79.1	95.7	79.6	74.3	89.0
of Oil and Petroleum Products	101.0	101.2	99.9	102.1	99.2	97.9
of Crude and NGL	100.6	100.1	99.3	99.5	98.7	99.9
of Natural Gas	101.6	101.4	99.4	96.9	98.7	101.3
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		8.4	13.8	16.2	17.4	17.5
RE-T – Transport		1.3	5.0	1.3	5.3	5.9
RES-E – Electricity Generation		19.1	29.8	37.0	36.6	36.3
RES-H&C – Heating and Cooling		9.4	12.6	17.0	17.1	17.5
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	320.4	379.5	295.4	285.2	276.0	291.4
GHG Emissions – National total*	397.1	452.6	370.1	351.8	342.2	357.3
Main Emissions Indicators						
GHG National Total Emissions/index 1990	135.4	154.3	126.2	120.0	116.7	121.8
Total GHG per Capita (t CO_2 eq./cap)	9.8	10.5	8.0	7.6	7.4	7.7

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.10 France

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**129.7**	**136.3**	**137.0**	**140.7**	**133.7**	**132.2**
Solid Fossil Fuels	2.5	0.4	0.2	0.0	0.0	0.0
of which Hard Coal	2.4	0.4	0.2	0.0	0.0	0.0
of which Brown Coal	0.1	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	2.0	1.5	1.1	1.1	1.0	1.0
of which Crude Oil	1.7	1.3	0.9	0.9	0.8	0.8
Natural Gas	1.5	0.9	0.6	0.0	0.0	0.0
Nuclear	107.1	116.5	111.6	114.0	105.1	103.9
Renewables and Biofuels	15.7	16.0	22.2	24.2	26.1	25.9
Wastes, Non-Renewable	0.9	1.1	1.3	1.4	1.5	1.5
Net Imports	**132.7**	**144.6**	**132.3**	**120.4**	**121.9**	**125.2**
Solid Fossil Fuels	12.8	13.4	12.1	9.2	8.5	10.1
of which Hard Coal	12.3	12.7	11.2	8.8	8.3	9.7
Oil and Petroleum Products	90.0	95.8	83.2	81.8	78.3	80.1
of which Crude Oil and NGL	85.4	86.0	65.5	59.1	56.9	58.9
Natural gas	35.8	40.7	39.6	34.5	37.9	37.7
Renewables and Biofuels	0.0	-0.1	0.2	0.4	0.7	0.7
Electricity	-6.0	-5.2	-2.6	-5.5	-3.6	-3.4
Gross Inland Consumption	**256.1**	**277.2**	**269.7**	**260.1**	**255.9**	**256.0**
Solid Fossil Fuels	14.9	14.2	12.0	9.3	9.1	9.9
of which Hard Coal	14.1	13.6	11.1	9.1	8.9	9.6
of which Brown Coal	0.1	0.0	0.0	0.1	0.0	0.0
Oil and Petroleum Products	87.6	93.7	82.6	81.2	78.7	79.1
of which Crude and NGL	86.8	87.6	66.7	59.9	58.6	59.3
Natural Gas	35.8	41.0	42.6	35.0	38.3	38.5
Nuclear	107.1	116.5	111.6	114.0	105.1	103.9
Renewables and Biofuels	15.7	15.9	22.3	24.6	26.8	26.6
Electricity	-6.0	-5.2	-2.6	-5.5	-3.6	-3.4
Waste, Non-Renewable	0.9	1.1	1.3	1.4	1.5	1.5
Available for Final Consumption	**156.7**	**167.1**	**161.7**	**156.0**	**157.4**	**157.3**
Final Non-Energy Consumption	**16.3**	**16.1**	**13.9**	**13.9**	**13.5**	**14.2**
Final Energy Consumption	**145.7**	**150.8**	**146.3**	**138.7**	**141.2**	**141.0**
by Fuel/Product						
Solid Fossil Fuels	2.3	2.0	1.8	1.1	1.1	1.1
Oil and Petroleum Products	68.2	65.5	58.4	56.0	55.0	55.0
Natural Gas	29.8	33.3	32.0	27.7	29.1	28.7
Renewables and Biofuels	8.9	9.4	12.9	13.7	14.7	14.9
Solid Biofuels and Renewable Waste	8.4	8.5	9.1	8.5	9.1	8.8
Solar Thermal	0.0	0.0	0.1	0.2	0.2	0.2
Geothermal	0.1	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.3	0.6	2.4	3.0	3.1	3.3
Biogases	0.1	0.1	0.1	0.2	0.2	0.3
Waste, Non-Renewable	0.2	0.1	0.1	0.1	0.1	0.1
Electricity	33.1	36.4	38.2	37.2	37.8	37.6
Heat	3.2	4.2	2.8	2.9	3.3	3.7
by Sector						
Industry	32.9	32.5	27.7	26.1	26.8	26.5
Transport	45.2	44.4	43.6	44.9	45.0	45.4
Residential	40.6	43.0	45.4	39.2	41.3	40.6
Services	18.7	21.0	24.1	23.2	23.5	23.8
Agriculture and Fishing	4.3	4.7	4.5	4.6	4.1	4.1
Others	4.1	5.3	1.0	0.7	0.5	0.5

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**114.5**	**115.7**	**124.1**	**132.2**	**133.1**	**133.1**
Combustible Fuels	25.9	26.4	28.4	25.9	24.9	21.9
Nuclear	63.2	63.3	63.1	63.1	63.1	63.1
Hydro	25.2	25.1	25.4	25.6	25.6	25.7
Wind	0.0	0.7	5.9	10.3	11.5	13.5
Solar	0.0	0.0	1.0	7.1	7.7	8.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.2	0.2	0.2	0.2	0.2	0.2
Gross Electricity Generation, by Fuel (TWh)	**540.0**	**576.1**	**569.2**	**578.5**	**563.9**	**561.5**
Solid Fossil Fuels, Peat & Products, Oil Shale	27.0	27.5	23.4	11.9	10.3	12.6
Oil and Petroleum Products	7.2	7.9	5.5	6.7	6.9	7.4
Natural Gas	15.4	26.3	26.7	23.8	37.0	42.9
Nuclear	415.2	451.5	428.5	437.4	403.2	398.4
Renewables and Biofuels	74.2	61.2	83.0	96.4	104.0	97.7
Wastes non-RES	1.1	1.7	2.0	2.3	2.4	2.5
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			4.6	5.6	6.1	6.3
CHP Electricity Generation (TWh)			15.7	13.9	15.0	16.6
CHP in Total Electricity Generation (%)			2.8	2.5	2.7	3.0
CHP Heat Production (PJ)			173.9	154.9	163.9	177.6
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	44093	42923	40254	40902	40903	40998
of which LPG	245	153	126	89	79	70
of which Motor Gasoline	14459	11198	7713	7048	7207	7441
of which Gas/Diesel Oil	28237	30600	31532	32917	32779	32641
Final Consumption Biofuels	254	585	2420	2996	3106	3335
Pure and Blended Biogasoline	59	101	399	432	476	537
Pure and Blended Biodiesel	195	484	2021	2564	2630	2798
Main Energy Indicators						
Primary Energy Consumption 2020-2030	239.8	260.9	254.4	244.3	240.2	239.5
Final Energy Consumption 2020-2030	155.4	160.2	154.0	146.7	148.7	148.9
Primary Energy Intensity 2020-2030 (toe/M€'10)	136	136	128	116	113	110
Energy Intensity GAE/GDP2010 (toe/M€'10)	147	146	136	125	121	119
Energy per Capita - GIC/pop (kgoe/cap)	4229	4416	4171	3914	3840	3832
Final Electricity per Capita (KWh/cap)	6357	6735	6868	6507	6595	6539
Import Dependency (%)	**51.2**	**51.7**	**48.7**	**46.0**	**47.4**	**48.6**
of Solid Fossil Fuels	86.3	94.4	101.0	98.4	93.7	101.9
of Hard Coal	87.2	92.8	100.6	97.0	92.9	100.4
of Oil and Petroleum Products	99.5	99.5	98.0	98.7	97.7	99.2
of Crude and NGL	98.5	98.2	98.2	98.8	97.1	99.3
of Natural Gas	100.0	99.3	92.8	98.5	99.0	98.0
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)			9.6	12.7	15.2	15.9	16.3
RE-T – Transport			2.1	6.5	8.4	8.7	9.1
RES-E – Electricity Generation			13.7	14.8	18.8	19.2	19.9
RES-H&C – Heating and Cooling			12.4	16.2	19.9	21.1	21.3
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	430.3	442.7	405.7	358.3	359.9	363.7
GHG Emissions – National total*	567.0	570.7	528.0	477.3	477.8	482.0
Main Emissions Indicators						
GHG National Total Emissions/index 1990	101.9	102.5	94.9	85.7	85.8	86.6
Total GHG per Capita (t CO_2 eq./cap)	9.4	9.1	8.2	7.2	7.2	7.2

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.11 Croatia

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**4.3**	**4.8**	**5.2**	**4.4**	**4.4**	**4.2**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	1.3	1.0	0.8	0.7	0.8	0.8
of which Crude Oil	1.3	1.0	0.8	0.7	0.8	0.8
Natural Gas	1.4	1.9	2.2	1.5	1.4	1.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.6	1.9	2.2	2.2	2.3	2.2
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**4.1**	**5.2**	**4.4**	**4.2**	**4.2**	**4.7**
Solid Fossil Fuels	0.5	0.6	0.7	0.6	0.7	0.4
of which Hard Coal	0.4	0.6	0.6	0.6	0.6	0.4
Oil and Petroleum Products	2.4	3.6	3.0	2.6	2.6	2.7
of which Crude Oil and NGL	3.9	4.0	3.6	2.4	2.6	2.9
Natural gas	0.9	0.6	0.5	0.6	0.7	1.3
Renewables and Biofuels	0.0	0.0	-0.1	-0.3	-0.3	-0.3
Electricity	0.3	0.4	0.3	0.6	0.5	0.6
Gross Inland Consumption	**8.4**	**9.8**	**9.5**	**8.5**	**8.6**	**8.9**
Solid Fossil Fuels	0.4	0.7	0.7	0.6	0.7	0.4
of which Hard Coal	0.4	0.6	0.6	0.6	0.6	0.4
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	4.0	4.5	3.7	3.2	3.3	3.5
of which Crude and NGL	5.5	5.1	4.4	3.0	3.4	3.6
Natural Gas	2.2	2.4	2.6	2.1	2.2	2.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.6	1.9	2.1	2.0	2.0	1.9
Electricity	0.3	0.4	0.3	0.6	0.5	0.6
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for Final Consumption	**6.6**	**7.8**	**7.7**	**7.0**	**7.0**	**7.3**
Final Non-Energy Consumption	**0.7**	**0.7**	**0.6**	**0.5**	**0.5**	**0.5**
Final Energy Consumption	**5.9**	**7.2**	**7.1**	**6.5**	**6.5**	**6.8**
by Fuel/Product						
Solid Fossil Fuels	0.1	0.1	0.2	0.1	0.1	0.1
Oil and Petroleum Products	2.6	3.0	2.8	2.6	2.7	2.8
Natural Gas	1.0	1.2	1.3	1.0	1.0	1.1
Renewables and Biofuels	1.0	1.2	1.3	1.2	1.2	1.2
Solid Biofuels and Renewable Waste	1.0	1.2	1.2	1.2	1.2	1.1
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	1.0	1.2	1.4	1.3	1.3	1.4
Heat	0.2	0.3	0.2	0.2	0.2	0.2
by Sector						
Industry	1.4	1.6	1.4	1.1	1.1	1.2
Transport	1.5	1.8	2.0	2.0	2.0	2.2
Residential	2.3	2.8	2.8	2.4	2.4	2.4
Services	0.5	0.7	0.8	0.7	0.8	0.8
Agriculture and Fishing	0.3	0.2	0.2	0.2	0.2	0.2
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**2.1**	**3.9**	**4.1**	**4.8**	**4.9**	**5.0**
Combustible Fuels	0.0	1.8	1.9	2.1	2.1	2.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	2.1	2.1	2.1	2.2	2.2	2.2
Wind	0.0	0.0	0.1	0.4	0.5	0.6
Solar	0.0	0.0	0.0	0.0	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**11.3**	**13.2**	**14.9**	**11.4**	**12.8**	**12.0**
Solid Fossil Fuels, Peat & Products, Oil Shale	1.6	2.3	2.4	2.3	2.6	1.4
Oil and Petroleum Products	1.7	1.9	0.6	0.2	0.1	0.2
Natural Gas	1.6	1.8	2.6	1.2	1.6	3.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	6.5	7.2	9.4	7.7	8.6	7.3
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.7	0.6	0.8	0.8
CHP Electricity Generation (TWh)			2.0	0.8	1.5	2.0
CHP in Total Electricity Generation (%)			15.8	7.1	11.5	16.7
CHP Heat Production (PJ)			14.9	10.0	16.3	18.8
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1459	1815	1943	1942	2013	2161
of which LPG	11	25	66	75	80	79
of which Motor Gasoline	815	739	678	554	557	535
of which Gas/Diesel Oil	623	1038	1186	1303	1366	1537
Final Consumption Biofuels	0	0	3	24	1	0
Pure and Blended Biogasoline	0	0	0	0	0	0
Pure and Blended Biodiesel	0	0	3	24	1	0
Main Energy Indicators						
Primary Energy Consumption 2020-2030	7.8	9.1	8.9	8.0	8.0	8.3
Final Energy Consumption 2020-2030	6.0	7.2	7.2	6.6	6.6	6.9
Primary Energy Intensity 2020-2030 (toe/M€'10)	221	208	196	178	174	175
Energy Intensity GAE/GDP2010 (toe/M€'10)	240	224	210	190	185	186
Energy per Capita - GIC/pop (kgoe/cap)	1877	2277	2198	2009	2044	2134
Final Electricity per Capita (KWh/cap)	2631	3344	3686	3631	3651	3846
Import Dependency (%)	**48.5**	**52.6**	**46.8**	**48.9**	**48.5**	**53.3**
of Solid Fossil Fuels	110.9	91.3	102.5	103.0	102.0	100.7
of Hard Coal	112.8	90.6	102.7	102.4	102.5	100.9
of Oil and Petroleum Products	61.0	79.4	80.6	81.4	79.0	77.1
of Crude and NGL	72.1	78.9	82.3	79.6	76.4	79.3
of Natural Gas	41.0	23.7	18.1	27.1	33.5	53.8
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		23.7	25.1	29.0	28.3	27.3
RE-T – Transport		1.0	1.1	3.6	1.3	1.2
RES-E – Electricity Generation		35.4	37.5	45.4	46.6	46.4
RES-H&C – Heating and Cooling		30.0	32.8	38.5	37.6	36.5
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	19.9	23.6	21.4	18.2	18.5	19.2
GHG Emissions – National total*	26.1	30.3	28.4	24.6	24.8	25.5
Main Emissions Indicators						
GHG National Total Emissions/index 1990	80.5	93.6	87.7	76.0	76.5	78.7
Total GHG per Capita (t CO_2 eq./cap)	5.8	7.0	6.6	5.8	5.9	6.1

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.12 Italy

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**28.3**	**30.3**	**32.9**	**36.1**	**33.5**	**36.7**
Solid Fossil Fuels	0.0	0.1	0.1	0.1	0.0	0.0
of which Hard Coal	0.0	0.1	0.1	0.1	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	4.9	6.3	5.6	5.8	4.0	4.5
of which Crude Oil	4.6	6.1	5.1	5.5	3.7	4.1
Natural Gas	13.6	9.9	6.9	5.5	4.7	4.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	9.6	13.3	19.4	23.6	23.6	26.5
Wastes, Non-Renewable	0.3	0.7	1.0	1.1	1.2	1.1
Net Imports	**152.4**	**159.8**	**148.5**	**121.4**	**121.5**	**124.6**
Solid Fossil Fuels	13.1	16.4	13.8	12.3	10.7	9.4
of which Hard Coal	12.9	15.9	13.8	11.9	10.2	9.1
Oil and Petroleum Products	88.0	78.5	66.8	52.4	51.9	52.8
of which Crude Oil and NGL	83.6	88.5	78.2	61.7	60.3	65.7
Natural gas	47.0	59.8	61.6	50.0	53.3	56.8
Renewables and Biofuels	0.5	0.8	2.5	2.7	2.5	2.3
Electricity	3.8	4.2	3.8	4.0	3.2	3.2
Gross Inland Consumption	**174.5**	**189.4**	**176.8**	**155.7**	**154.3**	**159.5**
Solid Fossil Fuels	12.6	16.5	13.7	12.3	11.0	9.3
of which Hard Coal	12.2	16.0	13.6	11.8	10.4	9.1
of which Brown Coal	0.0	0.0	0.2	0.2	0.1	0.0
Oil and Petroleum Products	89.9	83.3	68.4	56.7	54.8	55.4
of which Crude and NGL	87.9	94.1	82.8	67.0	64.6	70.1
Natural Gas	57.9	70.7	68.1	55.3	58.1	61.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	10.1	14.1	21.9	26.3	26.0	28.8
Electricity	3.8	4.2	3.8	4.0	3.2	3.2
Waste, Non-Renewable	0.3	0.7	1.0	1.1	1.2	1.1
Available for Final Consumption	**128.8**	**139.6**	**131.7**	**117.6**	**116.8**	**121.2**
Final Non-Energy Consumption	**8.4**	**8.6**	**9.6**	**6.6**	**6.3**	**7.9**
Final Energy Consumption	**119.7**	**131.5**	**123.1**	**112.1**	**111.6**	**113.6**
by Fuel/Product						
Solid Fossil Fuels	1.5	1.3	0.6	0.5	0.7	0.5
Oil and Petroleum Products	55.0	56.0	45.6	41.2	40.5	38.3
Natural Gas	37.6	40.6	38.5	33.0	33.2	33.9
Renewables and Biofuels	1.7	4.5	9.1	8.4	8.0	11.3
Solid Biofuels and Renewable Waste	1.5	4.1	7.4	6.8	6.6	7.2
Solar Thermal	0.0	0.0	0.1	0.2	0.2	0.2
Geothermal	0.2	0.2	0.1	0.1	0.1	0.1
Liquid Biofuels	0.0	0.2	1.4	1.2	1.0	1.1
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.1	0.1	0.2	0.3	0.3	0.2
Electricity	23.5	25.9	25.7	24.7	24.6	25.1
Heat	0.0	3.1	3.3	3.9	4.0	4.1
by Sector						
Industry	37.6	37.2	29.0	24.9	25.1	24.9
Transport	39.7	41.8	38.6	36.4	35.8	34.5
Residential	27.6	33.9	35.4	32.5	32.2	32.9
Services	11.5	15.1	17.0	15.4	15.4	18.2
Agriculture and Fishing	3.2	3.3	2.9	2.9	2.9	2.9
Others	0.2	0.2	0.2	0.1	0.2	0.1

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**75.5**	**85.5**	**106.6**	**117.0**	**114.2**	**114.2**
Combustible Fuels	54.0	61.9	74.7	65.6	62.1	61.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	20.3	21.0	21.5	22.2	22.3	22.4
Wind	0.4	1.6	5.8	9.1	9.4	9.7
Solar	0.0	0.0	3.6	18.9	19.3	19.7
Geothermal	0.6	0.7	0.7	0.8	0.8	0.8
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**275.9**	**302.6**	**301.3**	**282.4**	**289.0**	**295.2**
Solid Fossil Fuels, Peat & Products, Oil Shale	26.3	43.6	39.7	43.2	35.6	32.6
Oil and Petroleum Products	85.9	47.1	21.7	13.4	12.1	11.5
Natural Gas	105.6	155.1	157.4	113.0	128.9	142.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	57.6	55.3	80.3	110.3	109.8	105.7
Wastes non-RES	0.5	1.5	2.1	2.4	2.5	2.5
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			7.4	9.0	8.5	8.4
CHP Electricity Generation (TWh)			34.7	39.5	40.3	41.0
CHP in Total Electricity Generation (%)			11.5	14.0	13.9	13.8
CHP Heat Production (PJ)			202.5	213.2	219.8	219.9
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	38633	40430	35534	33187	32708	31421
of which LPG	1562	1131	1334	1817	1756	1832
of which Motor Gasoline	17556	14175	10276	8192	7650	7433
of which Gas/Diesel Oil	18415	23793	22703	22090	22136	20987
Final Consumption Biofuels	0	177	1419	1167	1041	1062
Pure and Blended Biogasoline	0	0	122	25	33	33
Pure and Blended Biodiesel	0	177	1297	1142	1008	1029
Main Energy Indicators						
Primary Energy Consumption 2020-2030	166.1	180.8	167.3	149.1	148.0	148.9
Final Energy Consumption 2020-2030	124.8	137.2	128.5	116.2	115.9	115.2
Primary Energy Intensity 2020-2030 (toe/M€'10)	107	111	104	96	94	93
Energy Intensity GAE/GDP2010 (toe/M€'10)	113	118	112	101	99	101
Energy per Capita - GIC/pop (kgoe/cap)	3066	3273	2988	2562	2543	2633
Final Electricity per Capita (KWh/cap)	4795	5199	5057	4729	4715	4819
Import Dependency (%)	**86.5**	**83.3**	**82.6**	**77.0**	**77.7**	**77.0**
of Solid Fossil Fuels	104.6	99.4	100.8	100.2	97.5	100.2
of Hard Coal	105.7	99.7	101.4	100.5	98.0	100.2
of Oil and Petroleum Products	96.1	91.8	93.6	89.4	90.9	91.5
of Crude and NGL	95.1	94.0	94.5	92.2	93.3	93.6
of Natural Gas	81.1	84.7	90.5	90.4	91.8	92.3
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		7.5	13.0	17.5	17.4	18.3
RE-T – Transport		1.0	4.7	6.5	7.4	6.5
RES-E – Electricity Generation		16.3	20.1	33.5	34.0	34.1
RES-H&C – Heating and Cooling		8.2	15.6	19.3	18.9	20.1
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	478.2	502.9	435.2	365.4	363.8	360.2
GHG Emissions – National total*	562.1	589.2	514.7	443.7	442.5	439.0
Main Emissions Indicators						
GHG National Total Emissions/index 1990	107.7	112.9	98.6	85.0	84.8	84.1
Total GHG per Capita (t CO_2 eq./cap)	9.9	10.2	8.7	7.3	7.3	7.2

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.13 Cyprus

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.0	0.1	0.1	0.1	0.1
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**2.6**	**2.9**	**3.0**	**2.5**	**2.6**	**2.7**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	2.5	2.8	2.9	2.4	2.6	2.6
of which Crude Oil and NGL	1.2	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.0	0.0	0.0	0.0	0.0	0.0
Gross Inland Consumption	**2.4**	**2.5**	**2.8**	**2.3**	**2.5**	**2.6**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	2.3	2.5	2.6	2.1	2.3	2.4
of which Crude and NGL	1.2	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.1	0.1	0.1	0.2	0.2
Electricity	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for Final Consumption	**1.5**	**1.5**	**1.7**	**1.4**	**1.5**	**1.6**
Final Non-Energy Consumption	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**
Final Energy Consumption	**1.4**	**1.5**	**1.6**	**1.4**	**1.5**	**1.5**
by Fuel/Product						
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	1.0	1.1	1.1	0.9	1.0	1.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.1	0.1	0.1	0.1	0.1
Solid Biofuels and Renewable Waste	0.0	0.0	0.0	0.0	0.0	0.0
Solar Thermal	0.0	0.0	0.1	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.3	0.3	0.4	0.4	0.4	0.4
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	0.4	0.3	0.2	0.2	0.2	0.2
Transport	0.6	0.7	0.8	0.6	0.7	0.7
Residential	0.2	0.3	0.3	0.3	0.3	0.3
Services	0.1	0.2	0.2	0.2	0.2	0.2
Agriculture and Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.1	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**1.0**	**1.1**	**1.6**	**1.8**	**1.8**	**1.8**
Combustible Fuels	1.0	1.1	1.5	1.5	1.5	1.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.0	0.0	0.1	0.2	0.2	0.2
Solar	0.0	0.0	0.0	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**3.4**	**4.4**	**5.3**	**4.5**	**4.9**	**5.0**
Solid Fossil Fuels, Peat & Products, Oil Shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	3.4	4.4	5.2	4.1	4.5	4.6
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.0	0.1	0.4	0.4	0.4
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.0	0.0	0.0	0.0
CHP Electricity Generation (TWh)			0.1	0.0	0.0	0.0
CHP in Total Electricity Generation (%)			1.0	0.1	0.6	0.6
CHP Heat Production (PJ)			0.1	0.2	0.1	0.1
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	577	676	750	612	645	668
of which LPG	0	0	0	0	0	0
of which Motor Gasoline	218	321	413	365	375	371
of which Gas/Diesel Oil	359	355	338	247	271	297
Final Consumption Biofuels	0	0	15	10	9	9
Pure and Blended Biogasoline	0	0	0	0	0	0
Pure and Blended Biodiesel	0	0	15	10	9	9
Main Energy Indicators						
Primary Energy Consumption 2020-2030	2.3	2.5	2.7	2.3	2.4	2.5
Final Energy Consumption 2020-2030	1.6	1.8	1.9	1.7	1.8	1.9
Primary Energy Intensity 2020-2030 (toe/M€'10)	167	145	138	127	129	129
Energy Intensity GAE/GDP2010 (toe/M€'10)	187	166	152	142	147	144
Energy per Capita - GIC/pop (kgoe/cap)	3511	3476	3365	2704	2896	2996
Final Electricity per Capita (KWh/cap)	4339	5402	5960	4830	5186	5313
Import Dependency (%)	**98.6**	**100.7**	**100.8**	**97.7**	**96.2**	**96.3**
of Solid Fossil Fuels	102.0	121.1	65.6	100.0	0.0	326.4
of Hard Coal	102.0	121.2	65.4	100.0	0.0	326.4
of Oil and Petroleum Products	100.3	102.3	104.2	102.8	100.7	100.9
of Crude and NGL	98.5	0.0	0.0	0.0	0.0	0.0
of Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		3.1	6.0	9.4	9.3	9.9
RE-T – Transport			2.0	2.5	2.7	2.6
RES-E – Electricity Generation		0.0	1.4	8.4	8.6	8.9
RES-H&C – Heating and Cooling		10.0	18.2	22.5	23.0	24.5
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	8.0	8.9	8.9	7.7	8.2	8.5
GHG Emissions – National total*	9.2	10.2	10.3	9.1	9.6	10.0
Main Emissions Indicators						
GHG National Total Emissions/index 1990	144.2	159.1	161.0	141.7	150.6	155.7
Total GHG per Capita (t CO_2 eq./cap)	13.4	13.9	12.6	10.7	11.3	11.6

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.14 Latvia

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**1.4**	**1.9**	**2.0**	**2.3**	**2.5**	**2.6**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.4	1.9	2.0	2.3	2.4	2.6
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**2.4**	**3.1**	**2.2**	**2.4**	**2.2**	**2.1**
Solid Fossil Fuels	0.1	0.1	0.1	0.0	0.0	0.0
of which Hard Coal	0.1	0.1	0.1	0.0	0.0	0.0
Oil and Petroleum Products	1.2	1.8	1.7	1.8	2.0	1.8
of which Crude Oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	1.1	1.4	0.9	1.1	0.9	1.0
Renewables and Biofuels	-0.2	-0.4	-0.6	-0.7	-0.8	-0.8
Electricity	0.2	0.2	0.1	0.2	0.1	0.0
Gross Inland Consumption	**3.9**	**4.6**	**4.6**	**4.4**	**4.4**	**4.6**
Solid Fossil Fuels	0.1	0.1	0.1	0.0	0.0	0.0
of which Hard Coal	0.1	0.1	0.1	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	1.3	1.5	1.5	1.5	1.5	1.6
of which Crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	1.1	1.4	1.5	1.1	1.1	1.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	1.2	1.5	1.4	1.5	1.6	1.9
Electricity	0.2	0.2	0.1	0.2	0.1	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.1	0.0	0.0
Available for Final Consumption	**3.3**	**4.0**	**4.1**	**3.8**	**3.8**	**3.9**
Final Non-Energy Consumption	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Final Energy Consumption	**3.2**	**4.0**	**4.0**	**3.7**	**3.7**	**3.9**
by Fuel/Product						
Solid Fossil Fuels	0.1	0.1	0.1	0.0	0.0	0.0
Oil and Petroleum Products	1.0	1.3	1.3	1.3	1.3	1.3
Natural Gas	0.3	0.5	0.5	0.3	0.3	0.3
Renewables and Biofuels	0.8	1.0	0.9	0.9	0.9	1.0
Solid Biofuels and Renewable Waste	0.8	1.0	0.9	0.9	0.9	1.0
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.1	0.0	0.0
Electricity	0.4	0.5	0.5	0.6	0.6	0.6
Heat	0.6	0.6	0.6	0.5	0.6	0.6
by Sector						
Industry	0.6	0.7	0.8	0.8	0.7	0.8
Transport	0.7	1.0	1.1	1.0	1.0	1.1
Residential	1.3	1.5	1.4	1.1	1.1	1.2
Services	0.5	0.6	0.6	0.6	0.6	0.6
Agriculture and Fishing	0.1	0.2	0.2	0.2	0.2	0.2
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**2.1**	**2.2**	**2.6**	**2.9**	**2.9**	**2.9**
Combustible Fuels	0.6	0.6	1.0	1.3	1.3	1.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	1.5	1.5	1.6	1.6	1.6	1.6
Wind	0.0	0.0	0.0	0.1	0.1	0.1
Solar	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**4.1**	**4.9**	**6.6**	**5.5**	**6.4**	**7.5**
Solid Fossil Fuels, Peat & Products, Oil Shale	0.1	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.1	0.0	0.0	0.0	0.0	0.0
Natural Gas	1.1	1.5	3.0	2.8	2.9	2.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	2.8	3.4	3.6	2.8	3.5	5.5
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.9	1.1	1.3	1.3
CHP Electricity Generation (TWh)			3.0	2.5	3.1	2.8
CHP in Total Electricity Generation (%)			45.0	44.7	48.5	37.7
CHP Heat Production (PJ)			10.4	12.4	14.5	14.2
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	707	991	1 046	1 006	1 014	1 063
of which LPG	21	26	24	64	62	58
of which Motor Gasoline	347	352	294	205	200	192
of which Gas/Diesel Oil	340	613	728	737	752	811
Final Consumption Biofuels	0	3	27	23	11	9
Pure and Blended Biogasoline	0	0	8	8	8	8
Pure and Blended Biodiesel	0	3	19	15	3	1
Main Energy Indicators						
Primary Energy Consumption 2020-2030	3.8	4.5	4.6	4.3	4.3	4.5
Final Energy Consumption 2020-2030	3.3	4.0	4.1	3.8	3.8	4.0
Primary Energy Intensity 2020-2030 (toe/M€'10)	308	246	256	202	199	198
Energy Intensity GAE/GDP2010 (toe/M€'10)	315	266	274	219	218	213
Energy per Capita - GIC/pop (kgoe/cap)	1 623	2 040	2 183	2 205	2 231	2 334
Final Electricity per Capita (KWh/cap)	1 880	2 547	2 931	3 253	3 292	3 325
Import Dependency (%)	**61.0**	**63.8**	**45.5**	**51.2**	**47.2**	**44.1**
of Solid Fossil Fuels	84.1	97.7	106.5	85.2	85.9	88.5
of Hard Coal	82.5	96.7	106.6	85.2	85.9	88.5
of Oil and Petroleum Products	94.9	102.2	94.4	102.9	109.1	100.1
of Crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
of Natural Gas	101.9	105.6	61.8	98.6	82.9	102.0
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)			32.3	30.4	37.5	37.1	39.0
RE-T – Transport			2.4	4.0	3.9	2.8	2.5
RES-E – Electricity Generation			43.0	42.1	52.2	51.3	54.4
RES-H&C – Heating and Cooling			42.7	40.7	51.7	51.8	54.6
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	7.2	8.0	8.9	7.6	7.6	7.7
GHG Emissions – National total*	10.6	11.6	12.7	11.6	11.7	11.8
Main Emissions Indicators						
GHG National Total Emissions/index 1990	39.9	43.7	47.7	43.7	44.0	44.3
Total GHG per Capita (t CO_2 eq./cap)	4.4	5.2	6.0	5.8	5.9	6.0

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.15 Lithuania

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**3.4**	**3.9**	**1.3**	**1.6**	**1.6**	**1.8**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.3	0.2	0.1	0.1	0.1	0.1
of which Crude Oil	0.3	0.2	0.1	0.1	0.1	0.1
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	2.3	2.8	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.7	0.9	1.2	1.5	1.5	1.7
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**4.3**	**5.0**	**5.7**	**5.5**	**5.6**	**5.7**
Solid Fossil Fuels	0.1	0.2	0.2	0.1	0.1	0.2
of which Hard Coal	0.0	0.0	0.1	0.1	0.1	0.2
Oil and Petroleum Products	2.3	2.6	2.7	2.7	2.9	3.0
of which Crude Oil and NGL	4.6	8.9	9.1	8.7	9.4	9.9
Natural gas	2.1	2.5	2.5	2.1	1.9	1.9
Renewables and Biofuels	0.0	0.0	-0.1	-0.1	0.0	-0.1
Electricity	-0.1	-0.3	0.5	0.6	0.7	0.7
Gross Inland Consumption	**7.2**	**8.8**	**6.8**	**6.9**	**7.1**	**7.4**
Solid Fossil Fuels	0.1	0.2	0.2	0.2	0.2	0.2
of which Hard Coal	0.0	0.0	0.1	0.2	0.1	0.1
of which Brown Coal	0.1	0.2	0.1	0.0	0.0	0.0
Oil and Petroleum Products	2.2	2.7	2.6	2.6	2.8	2.9
of which Crude and NGL	4.9	9.4	9.2	8.7	9.4	9.9
Natural Gas	2.1	2.5	2.5	2.1	1.8	1.9
Nuclear	2.3	2.8	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.7	0.9	1.1	1.4	1.5	1.6
Electricity	-0.1	-0.3	0.5	0.6	0.7	0.7
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for Final Consumption	**4.3**	**5.3**	**5.4**	**5.9**	**6.0**	**6.4**
Final Non-Energy Consumption	**0.7**	**0.7**	**0.7**	**1.1**	**1.0**	**1.2**
Final Energy Consumption	**3.7**	**4.6**	**4.8**	**4.8**	**5.0**	**5.2**
by Fuel/Product						
Solid Fossil Fuels	0.1	0.2	0.2	0.2	0.2	0.2
Oil and Petroleum Products	1.3	1.6	1.6	1.8	1.9	2.0
Natural Gas	0.4	0.6	0.6	0.5	0.6	0.6
Renewables and Biofuels	0.6	0.7	0.7	0.7	0.7	0.7
Solid Biofuels and Renewable Waste	0.6	0.7	0.7	0.6	0.6	0.6
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.1	0.1	0.1
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.5	0.7	0.7	0.8	0.8	0.9
Heat	0.8	0.9	0.9	0.8	0.8	0.9
by Sector						
Industry	0.8	1.1	0.9	1.0	1.0	1.1
Transport	1.0	1.4	1.5	1.8	1.9	2.0
Residential	1.4	1.5	1.6	1.4	1.4	1.5
Services	0.5	0.6	0.6	0.6	0.6	0.6
Agriculture and Fishing	0.1	0.1	0.1	0.1	0.1	0.1
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**5.7**	**4.6**	**3.6**	**3.6**	**3.7**	**3.3**
Combustible Fuels	2.5	2.5	2.5	2.2	2.2	1.8
Nuclear	2.4	1.2	0.0	0.0	0.0	0.0
Hydro	0.9	0.9	0.9	0.9	0.9	0.9
Wind	0.0	0.0	0.1	0.4	0.5	0.5
Solar	0.0	0.0	0.0	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**11.3**	**14.6**	**5.5**	**4.7**	**4.0**	**3.9**
Solid Fossil Fuels, Peat & Products, Oil Shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.7	0.4	0.6	0.3	0.2	0.1
Natural Gas	1.6	3.0	3.2	2.0	1.0	0.6
Nuclear	8.4	10.3	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.6	0.8	1.7	2.4	2.7	3.1
Wastes non-RES	0.0	0.0	0.0	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			1.1	1.0	0.6	0.6
CHP Electricity Generation (TWh)			2.0	1.5	1.1	1.1
CHP in Total Electricity Generation (%)			34.6	31.3	25.9	26.2
CHP Heat Production (PJ)			19.3	12.4	9.5	10.4
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1026	1359	1421	1647	1770	1861
of which LPG	120	229	174	133	126	116
of which Motor Gasoline	390	351	296	200	216	214
of which Gas/Diesel Oil	513	779	951	1313	1429	1530
Final Consumption Biofuels	0	3	45	68	57	61
Pure and Blended Biogasoline	0	1	10	10	6	7
Pure and Blended Biodiesel	0	3	34	58	50	54
Main Energy Indicators						
Primary Energy Consumption 2020-2030	6.5	8.0	6.2	5.8	6.0	6.2
Final Energy Consumption 2020-2030	3.8	4.7	4.8	4.9	5.1	5.3
Primary Energy Intensity 2020-2030 (toe/M€'10)	357	304	220	172	175	171
Energy Intensity GAE/GDP2010 (toe/M€'10)	398	338	249	207	210	210
Energy per Capita - GIC/pop (kgoe/cap)	2051	2617	2174	2365	2452	2589
Final Electricity per Capita (KWh/cap)	1764	2377	2652	3198	3375	3532
Import Dependency (%)	**58.9**	**56.6**	**81.9**	**78.4**	**77.6**	**75.6**
of Solid Fossil Fuels	101.7	101.0	95.7	90.6	91.8	107.8
of Hard Coal	100.0	100.0	109.7	90.1	91.5	109.0
of Oil and Petroleum Products	101.0	93.4	98.7	100.7	97.9	96.3
of Crude and NGL	94.5	95.3	99.0	99.5	99.4	99.5
of Natural Gas	100.0	100.7	99.7	99.7	100.6	99.3
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		16.8	19.6	25.8	25.6	25.8
RE-T – Transport		0.6	3.8	4.6	3.6	3.7
RES-E – Electricity Generation		3.8	7.4	15.5	16.9	18.3
RES-H&C – Heating and Cooling		29.3	32.5	46.1	46.6	46.5
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	11.9	14.2	13.9	13.4	13.4	13.7
GHG Emissions – National total*	19.6	23.0	20.9	20.5	20.5	20.7
Main Emissions Indicators						
GHG National Total Emissions/index 1990	40.3	47.3	42.9	42.1	42.1	42.7
Total GHG per Capita (t CO_2 eq./cap)	5.6	6.9	6.6	7.0	7.1	7.3

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.16 Luxembourg

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.1	0.1	0.1	0.1	0.2
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**3.6**	**4.7**	**4.5**	**4.0**	**4.0**	**4.1**
Solid Fossil Fuels	0.1	0.1	0.1	0.0	0.1	0.0
of which Hard Coal	0.1	0.1	0.1	0.0	0.0	0.0
Oil and Petroleum Products	2.4	3.1	2.9	2.6	2.6	2.7
of which Crude Oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	1.2	1.2	0.8	0.7	0.7
Renewables and Biofuels	0.0	0.0	0.0	0.1	0.1	0.1
Electricity	0.5	0.3	0.3	0.5	0.5	0.5
Gross Inland Consumption	**3.7**	**4.8**	**4.6**	**4.2**	**4.2**	**4.3**
Solid Fossil Fuels	0.1	0.1	0.1	0.0	0.1	0.0
of which Hard Coal	0.1	0.1	0.1	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	2.3	3.2	2.9	2.6	2.6	2.8
of which Crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.7	1.2	1.2	0.8	0.7	0.7
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.1	0.1	0.2	0.2	0.3
Electricity	0.5	0.3	0.3	0.5	0.5	0.5
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for Final Consumption	**3.2**	**4.1**	**3.9**	**3.6**	**3.6**	**3.6**
Final Non-Energy Consumption	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Final Energy Consumption	**3.2**	**4.0**	**3.9**	**3.5**	**3.5**	**3.6**
by Fuel/Product						
Solid Fossil Fuels	0.1	0.1	0.1	0.0	0.1	0.0
Oil and Petroleum Products	1.9	2.7	2.4	2.1	2.1	2.1
Natural Gas	0.6	0.6	0.7	0.6	0.6	0.6
Renewables and Biofuels	0.0	0.0	0.1	0.1	0.1	0.2
Solid Biofuels and Renewable Waste	0.0	0.0	0.0	0.0	0.0	0.0
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.1	0.1	0.1
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.5	0.5	0.6	0.5	0.5	0.5
Heat	0.0	0.1	0.1	0.1	0.1	0.1
by Sector						
Industry	0.7	0.8	0.8	0.6	0.7	0.6
Transport	1.6	2.3	2.2	2.0	1.9	2.0
Residential	0.5	0.5	0.5	0.5	0.5	0.5
Services	0.4	0.4	0.4	0.4	0.4	0.5
Agriculture and Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**1.2**	**1.7**	**1.7**	**2.0**	**1.7**	**1.7**
Combustible Fuels	0.1	0.5	0.5	0.5	0.1	0.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	1.1	1.1	1.1	1.3	1.3	1.3
Wind	0.0	0.0	0.0	0.1	0.1	0.1
Solar	0.0	0.0	0.0	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**1.2**	**4.1**	**4.6**	**2.8**	**2.2**	**2.2**
Solid Fossil Fuels, Peat & Products, Oil Shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.2	3.1	2.9	0.8	0.3	0.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.9	1.0	1.6	1.9	1.9	1.9
Wastes non-RES	0.0	0.0	0.0	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.1	0.1	0.1	0.1
CHP Electricity Generation (TWh)			0.4	0.4	0.3	0.3
CHP in Total Electricity Generation (%)			9.6	12.7	15.7	15.5
CHP Heat Production (PJ)			3.2	2.4	2.3	2.6
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1588	2341	2124	1863	1807	1843
of which LPG	2	2	1	1	1	1
of which Motor Gasoline	595	514	362	293	285	301
of which Gas/Diesel Oil	990	1824	1760	1570	1521	1542
Final Consumption Biofuels	0	1	42	83	89	113
Pure and Blended Biogasoline	0	0	1	7	9	7
Pure and Blended Biodiesel	0	0	41	76	81	107
Main Energy Indicators						
Primary Energy Consumption 2020-2030	3.6	4.8	4.6	4.1	4.2	4.3
Final Energy Consumption 2020-2030	3.5	4.5	4.3	4.0	4.0	4.2
Primary Energy Intensity 2020-2030 (toe/M€'10)	117	134	115	90	88	90
Energy Intensity GAE/GDP2010 (toe/M€'10)	119	135	116	91	89	90
Energy per Capita - GIC/pop (kgoe/cap)	8433	10411	9254	7425	7278	7343
Final Electricity per Capita (KWh/cap)	13319	13340	13132	11056	11050	10825
Import Dependency (%)	**99.6**	**97.4**	**97.0**	**95.9**	**96.1**	**95.4**
of Solid Fossil 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 Oil and Petroleum Products	102.1	99.4	99.3	99.3	100.0	99.7
of Crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
of Natural Gas	100.0	100.0	100.0	100.0	100.0	100.0
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		1.4	2.9	5.1	5.4	6.4
RE-T – Transport		0.1	2.1	6.7	5.9	6.4
RES-E – Electricity Generation		3.2	3.8	6.2	6.7	8.1
RES-H&C – Heating and Cooling		3.6	4.7	7.1	7.3	8.1
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	9.7	13.4	12.5	10.7	10.6	10.9
GHG Emissions – National total*	10.6	14.3	13.4	11.6	11.6	11.9
Main Emissions Indicators						
GHG National Total Emissions/index 1990	80.8	108.8	102.3	88.6	87.9	90.8
Total GHG per Capita (t CO_2 eq./cap)	24.5	31.0	26.8	20.7	20.0	20.2

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.17 Hungary

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**11.6**	**10.9**	**11.7**	**11.1**	**11.3**	**11.1**
Solid Fossil Fuels	2.9	1.7	1.6	1.5	1.5	1.3
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	2.9	1.7	1.6	1.5	1.5	1.3
Oil and Petroleum Products	1.7	1.5	1.1	0.9	1.0	1.0
of which Crude Oil	1.7	1.4	1.1	0.9	1.0	1.0
Natural Gas	2.5	2.3	2.2	1.4	1.4	1.4
Nuclear	3.7	3.6	4.0	4.0	4.1	4.1
Renewables and Biofuels	0.8	1.7	2.7	3.2	3.2	3.2
Wastes, Non-Renewable	0.0	0.1	0.1	0.1	0.1	0.1
Net Imports	**13.9**	**17.7**	**15.1**	**13.6**	**14.3**	**16.7**
Solid Fossil Fuels	1.1	1.3	1.1	0.8	0.7	1.0
of which Hard Coal	0.9	1.0	1.3	1.0	1.0	1.1
Oil and Petroleum Products	5.2	6.1	5.8	6.6	6.3	6.6
of which Crude Oil and NGL	5.8	6.2	5.8	6.2	5.9	5.8
Natural gas	7.3	9.8	7.7	5.2	6.3	8.2
Renewables and Biofuels	0.0	0.0	0.0	-0.2	-0.2	-0.2
Electricity	0.3	0.5	0.4	1.2	1.1	1.1
Gross Inland Consumption	**25.2**	**28.5**	**26.6**	**25.2**	**25.6**	**26.7**
Solid Fossil Fuels	3.8	3.1	2.7	2.4	2.2	2.2
of which Hard Coal	0.9	0.9	1.3	1.0	1.0	1.1
of which Brown Coal	3.0	2.1	1.7	1.6	1.5	1.4
Oil and Petroleum Products	6.9	7.5	6.8	7.0	7.0	7.6
of which Crude and NGL	7.4	7.6	6.8	6.8	6.9	6.7
Natural Gas	9.7	12.1	9.8	7.5	8.0	8.5
Nuclear	3.7	3.6	4.0	4.0	4.1	4.1
Renewables and Biofuels	0.8	1.7	2.8	3.0	3.0	3.0
Electricity	0.3	0.5	0.4	1.2	1.1	1.1
Waste, Non-Renewable	0.0	0.1	0.1	0.1	0.2	0.2
Available for Final Consumption	**17.2**	**20.3**	**18.9**	**18.6**	**19.0**	**19.9**
Final Non-Energy Consumption	**1.6**	**2.2**	**2.0**	**1.9**	**1.8**	**2.2**
Final Energy Consumption	**15.6**	**18.2**	**16.9**	**16.9**	**17.4**	**18.0**
by Fuel/Product						
Solid Fossil Fuels	0.4	0.5	0.2	0.2	0.2	0.3
Oil and Petroleum Products	4.0	4.6	4.4	5.0	5.1	5.3
Natural Gas	6.4	7.7	6.1	5.3	5.5	5.7
Renewables and Biofuels	0.8	1.2	2.0	2.2	2.2	2.1
Solid Biofuels and Renewable Waste	0.7	1.1	1.7	1.9	1.9	1.8
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.1	0.1	0.1	0.1	0.1	0.1
Liquid Biofuels	0.0	0.0	0.2	0.2	0.2	0.1
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Electricity	2.5	2.8	2.9	3.1	3.2	3.3
Heat	1.4	1.3	1.1	1.0	1.1	1.0
by Sector						
Industry	3.3	3.1	2.6	3.9	4.0	4.3
Transport	3.1	4.0	4.1	4.2	4.3	4.5
Residential	5.6	7.0	6.6	6.0	6.2	6.3
Services	3.0	3.5	3.0	2.2	2.2	2.2
Agriculture and Fishing	0.7	0.6	0.5	0.6	0.6	0.6
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**8.3**	**8.6**	**9.0**	**8.6**	**8.8**	**8.9**
Combustible Fuels	6.4	6.7	6.6	6.1	6.1	6.1
Nuclear	1.9	1.9	2.0	2.0	2.0	2.0
Hydro	0.0	0.0	0.1	0.1	0.1	0.1
Wind	0.0	0.0	0.3	0.3	0.3	0.3
Solar	0.0	0.0	0.0	0.2	0.2	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**35.2**	**35.8**	**37.4**	**30.3**	**31.8**	**32.8**
Solid Fossil Fuels, Peat & Products, Oil Shale	9.6	7.0	6.2	5.8	5.6	4.9
Oil and Petroleum Products	4.4	0.5	0.5	0.1	0.1	0.1
Natural Gas	6.7	12.5	11.7	5.2	6.6	8.0
Nuclear	14.2	13.8	15.8	15.8	16.1	16.1
Renewables and Biofuels	0.2	1.9	3.0	3.2	3.3	3.5
Wastes non-RES	0.1	0.1	0.2	0.1	0.2	0.2
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			1.9	1.6	1.5	1.5
CHP Electricity Generation (TWh)			7.3	4.1	4.8	4.6
CHP in Total Electricity Generation (%)			19.6	13.5	15.1	14.1
CHP Heat Production (PJ)			42.2	24.4	24.7	25.2
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	2971	3932	3791	3873	4006	4207
of which LPG	0	33	29	30	28	26
of which Motor Gasoline	1414	1568	1348	1283	1388	1366
of which Gas/Diesel Oil	1557	2328	2414	2559	2590	2815
Final Consumption Biofuels	0	3	175	175	187	148
Pure and Blended Biogasoline	0	3	57	43	44	40
Pure and Blended Biodiesel	0	0	118	133	143	108
Main Energy Indicators						
Primary Energy Consumption 2020-2030	23.6	26.4	24.6	23.3	23.7	24.5
Final Energy Consumption 2020-2030	16.2	18.7	17.5	17.4	17.8	18.5
Primary Energy Intensity 2020-2030 (toe/M€'10)	292	264	249	214	213	211
Energy Intensity GAE/GDP2010 (toe/M€'10)	312	285	269	231	230	230
Energy per Capita - GIC/pop (kgoe/cap)	2468	2825	2655	2557	2603	2723
Final Electricity per Capita (KWh/cap)	2880	3203	3416	3682	3779	3928
Import Dependency (%)	**55.0**	**62.2**	**56.9**	**53.9**	**55.8**	**62.6**
of Solid Fossil Fuels	28.1	42.5	41.9	33.7	32.5	44.1
of Hard Coal	96.4	108.3	99.2	99.2	99.0	101.7
of Oil and Petroleum Products	75.9	81.6	85.3	93.7	89.7	86.6
of Crude and NGL	78.5	81.4	85.3	91.4	86.2	86.0
of Natural Gas	75.4	81.1	78.7	69.7	78.9	96.2
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		6.9	12.7	14.4	14.3	13.3
RE-T – Transport		0.9	6.1	7.1	7.6	6.8
RES-E – Electricity Generation		4.4	7.1	7.3	7.3	7.5
RES-H&C – Heating and Cooling		9.9	18.1	21.2	20.9	19.6
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	59.3	61.3	52.8	47.2	48.0	50.3
GHG Emissions – National total*	73.9	76.2	65.7	61.3	61.7	64.5
Main Emissions Indicators						
GHG National Total Emissions/index 1990	78.5	80.9	69.7	65.1	65.6	68.5
Total GHG per Capita (t CO_2 eq./cap)	7.2	7.5	6.6	6.2	6.3	6.6

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.18 Malta

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**1.5**	**1.6**	**2.4**	**2.2**	**2.5**	**3.0**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	1.5	1.6	2.4	2.1	2.4	2.7
of which Crude Oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.3
Renewables and Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.0	0.0	0.0	0.1	0.1	0.1
Gross Inland Consumption	**0.8**	**0.9**	**0.9**	**0.8**	**0.7**	**0.8**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.8	0.9	0.9	0.6	0.6	0.5
of which Crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.0	0.0	0.0	0.1	0.1	0.1
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for Final Consumption	**0.3**	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**
Final Non-Energy Consumption	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Final Energy Consumption	**0.3**	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**
by Fuel/Product						
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.2	0.2	0.2	0.3	0.3	0.3
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Solid Biofuels and Renewable Waste	0.0	0.0	0.0	0.0	0.0	0.0
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.1	0.2	0.2	0.2	0.2	0.2
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	0.0	0.1	0.0	0.0	0.0	0.1
Transport	0.2	0.2	0.2	0.2	0.2	0.2
Residential	0.1	0.1	0.1	0.1	0.1	0.1
Services	0.0	0.1	0.1	0.1	0.1	0.1
Agriculture and Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**0.0**	**0.0**	**0.6**	**0.7**	**0.6**	**0.7**
Combustible Fuels	0.0	0.0	0.6	0.6	0.5	0.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.0	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**1.9**	**2.2**	**2.1**	**1.3**	**0.9**	**1.6**
Solid Fossil Fuels, Peat & Products, Oil Shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	1.9	2.2	2.1	1.2	0.7	0.2
Natural Gas	0.0	0.0	0.0	0.0	0.0	1.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	0.0	0.0	0.0	0.1	0.1	0.2
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.0	0.0	0.1	0.1
CHP Electricity Generation (TWh)			0.0	0.0	0.2	0.2
CHP in Total Electricity Generation (%)			0.0	0.0	28.3	12.6
CHP Heat Production (PJ)			0.0	0.0	0.1	0.1
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	153	165	185	192	191	200
of which LPG	0	0	0	0	0	1
of which Motor Gasoline	75	67	74	77	78	79
of which Gas/Diesel Oil	78	94	108	111	110	119
Final Consumption Biofuels	0	0	1	5	6	9
Pure and Blended Biogasoline	0	0	0	0	0	0
Pure and Blended Biodiesel	0	0	1	5	6	9
Main Energy Indicators						
Primary Energy Consumption 2020-2030	0.8	0.9	0.9	0.8	0.7	0.8
Final Energy Consumption 2020-2030	0.4	0.5	0.5	0.6	0.6	0.6
Primary Energy Intensity 2020-2030 (toe/M€'10)	150	153	141	87	78	83
Energy Intensity GAE/GDP2010 (toe/M€'10)	272	267	362	266	271	302
Energy per Capita - GIC/pop (kgoe/cap)	2080	2324	2266	1721	1595	1801
Final Electricity per Capita (KWh/cap)	4031	4614	4406	4808	4693	5066
Import Dependency (%)	**100.2**	**100.0**	**99.0**	**97.3**	**101.1**	**102.9**
of Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of Oil and Petroleum Products	100.2	100.0	99.2	97.9	101.8	104.2
of Crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
of Natural Gas	0.0	0.0	0.0	0.0	0.0	105.2
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		0.1	1.0	5.2	6.2	7.2
RE-T – Transport				4.8	5.4	6.8
RES-E – Electricity Generation			0.0	4.3	5.7	6.6
RES-H&C – Heating and Cooling		1.0	7.5	14.8	16.1	19.8
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	2.9	2.9	2.8	2.1	1.8	2.0
GHG Emissions – National total*	3.1	3.2	3.2	2.5	2.3	2.6
Main Emissions Indicators						
GHG National Total Emissions/index 1990	134.5	138.1	139.7	110.4	98.8	112.2
Total GHG per Capita (t CO_2 eq./cap)	8.0	7.9	7.8	5.8	5.0	5.6

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.19 The Netherlands

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**58.8**	**62.7**	**71.4**	**48.4**	**46.5**	**42.2**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	3.0	2.8	2.0	2.5	2.0	1.9
of which Crude Oil	2.4	2.3	1.5	1.8	1.3	1.2
Natural Gas	52.8	56.2	64.7	39.4	38.1	33.2
Nuclear	1.0	1.0	0.9	0.9	0.9	0.8
Renewables and Biofuels	1.5	2.0	3.1	4.9	4.9	5.6
Wastes, Non-Renewable	0.6	0.7	0.7	0.6	0.7	0.7
Net Imports	**35.0**	**37.5**	**28.3**	**42.7**	**41.1**	**46.6**
Solid Fossil Fuels	7.7	8.2	7.6	10.5	10.1	9.2
of which Hard Coal	7.7	8.2	7.5	10.6	10.1	9.3
Oil and Petroleum Products	42.9	48.4	44.5	42.8	41.2	39.5
of which Crude Oil and NGL	60.7	61.4	60.4	60.0	61.4	60.7
Natural gas	-17.2	-20.9	-24.2	-10.5	-9.9	-1.4
Renewables and Biofuels	-0.1	0.3	0.1	-1.1	-1.0	-1.2
Electricity	1.6	1.6	0.2	0.8	0.4	0.3
Gross Inland Consumption	**78.3**	**83.7**	**86.2**	**76.2**	**77.7**	**78.3**
Solid Fossil Fuels	7.8	8.1	7.5	10.9	10.1	9.1
of which Hard Coal	7.8	8.2	7.4	11.0	10.2	9.2
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	30.9	34.7	33.4	30.4	31.5	32.0
of which Crude and NGL	62.8	63.5	61.9	61.2	62.1	62.2
Natural Gas	35.0	35.3	40.1	28.6	30.0	30.9
Nuclear	1.0	1.0	0.9	0.9	0.9	0.8
Renewables and Biofuels	1.4	2.3	3.3	3.8	3.9	4.3
Electricity	1.6	1.6	0.2	0.8	0.4	0.3
Waste, Non-Renewable	0.6	0.7	0.7	0.8	0.9	0.9
Available for Final Consumption	**58.8**	**62.1**	**64.8**	**55.1**	**56.9**	**58.1**
Final Non-Energy Consumption	**11.3**	**13.6**	**14.4**	**12.2**	**12.8**	**13.6**
Final Energy Consumption	**47.5**	**49.0**	**50.8**	**44.1**	**44.7**	**45.0**
by Fuel/Product						
Solid Fossil Fuels	0.1	0.1	0.1	0.1	0.1	0.1
Oil and Petroleum Products	14.0	14.9	15.3	13.7	14.0	14.2
Natural Gas	20.7	20.0	21.6	17.2	17.4	17.4
Renewables and Biofuels	0.5	0.6	1.0	1.4	1.3	1.5
Solid Biofuels and Renewable Waste	0.4	0.5	0.6	0.7	0.7	0.8
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.1	0.1	0.1
Liquid Biofuels	0.0	0.0	0.2	0.3	0.3	0.3
Biogases	0.1	0.1	0.1	0.1	0.1	0.1
Waste, Non-Renewable	0.0	0.0	0.1	0.0	0.0	0.0
Electricity	8.2	9.0	9.3	9.0	9.1	9.1
Heat	3.7	3.8	3.0	2.2	2.2	2.1
by Sector						
Industry	15.2	15.6	14.4	13.4	13.8	13.8
Transport	10.6	11.4	11.7	10.4	10.4	10.7
Residential	10.8	10.7	12.5	9.6	9.9	9.7
Services	6.2	6.9	7.8	6.8	6.7	6.8
Agriculture and Fishing	4.5	4.2	4.2	3.8	3.8	3.8
Others	0.1	0.1	0.1	0.1	0.1	0.1

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**21.1**	**21.8**	**26.7**	**33.9**	**34.2**	**33.8**
Combustible Fuels	20.1	20.0	23.7	28.4	27.3	26.2
Nuclear	0.4	0.4	0.5	0.5	0.5	0.5
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.4	1.2	2.2	3.4	4.3	4.2
Solar	0.0	0.1	0.1	1.5	2.0	2.9
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**89.4**	**99.7**	**119.1**	**110.2**	**115.1**	**117.1**
Solid Fossil Fuels, Peat & Products, Oil Shale	24.3	23.5	22.6	39.4	36.7	31.3
Oil and Petroleum Products	2.6	2.3	1.3	1.3	1.3	1.2
Natural Gas	54.4	61.0	78.5	50.1	56.6	62.2
Nuclear	3.9	4.0	4.0	4.1	4.0	3.4
Renewables and Biofuels	3.0	7.4	11.2	13.7	14.8	17.4
Wastes non-RES	1.2	1.4	1.6	1.6	1.7	1.7
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			9.3	9.2	9.1	9.4
CHP Electricity Generation (TWh)			39.2	29.8	30.8	31.4
CHP in Total Electricity Generation (%)			33.2	27.1	26.7	26.8
CHP Heat Production (PJ)			233.6	189.6	174.3	180.5
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	10501	11239	11268	9897	9947	10155
of which LPG	602	448	343	192	181	163
of which Motor Gasoline	3964	4039	4048	3783	3906	4036
of which Gas/Diesel Oil	5916	6738	6863	5911	5849	5946
Final Consumption Biofuels	0	0	229	298	240	307
Pure and Blended Biogasoline	0	0	134	142	121	129
Pure and Blended Biodiesel	0	0	95	156	119	178
Main Energy Indicators						
Primary Energy Consumption 2020-2030	66.9	70.1	71.7	63.8	64.8	64.5
Final Energy Consumption 2020-2030	52.1	54.1	55.3	49.2	49.9	50.3
Primary Energy Intensity 2020-2030 (toe/M€'10)	120	117	112	96	96	93
Energy Intensity GAE/GDP2010 (toe/M€'10)	164	166	156	133	132	129
Energy per Capita - GIC/pop (kgoe/cap)	4934	5134	5198	4506	4578	4583
Final Electricity per Capita (KWh/cap)	5993	6403	6501	6175	6244	6185
Import Dependency (%)	**38.3**	**37.8**	**28.3**	**48.4**	**45.9**	**51.8**
of Solid Fossil Fuels	99.4	101.3	101.4	96.5	99.6	100.8
of Hard Coal	98.9	100.0	101.6	96.5	99.2	101.4
of Oil and Petroleum Products	97.4	96.2	94.2	101.3	95.2	90.5
of Crude and NGL	96.7	96.7	97.6	98.0	98.8	97.6
of Natural Gas	-49.1	-59.3	-60.4	-36.7	-32.8	-4.4
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		2.5	3.9	5.7	5.9	6.6
RE-T – Transport		0.5	3.3	5.4	4.9	5.9
RES-E – Electricity Generation		6.3	9.6	11.0	12.5	13.8
RES-H&C – Heating and Cooling		2.4	3.1	5.4	5.4	5.9
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	182.4	188.9	192.9	178.3	178.5	176.9
GHG Emissions – National total*	229.8	225.8	224.1	207.5	207.6	205.8
Main Emissions Indicators						
GHG National Total Emissions/index 1990	101.5	99.7	99.0	91.7	91.7	90.9
Total GHG per Capita (t CO_2 eq./cap)	14.5	13.8	13.5	12.3	12.2	12.0

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.20 Austria

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**9.8**	**9.7**	**11.7**	**12.1**	**12.3**	**12.3**
Solid Fossil Fuels	0.3	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.3	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	1.1	0.9	1.1	0.9	0.8	0.7
of which Crude Oil	1.1	0.9	1.1	0.9	0.8	0.7
Natural Gas	1.5	1.3	1.4	1.0	1.0	1.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	6.6	7.0	8.6	9.4	9.8	9.8
Wastes, Non-Renewable	0.3	0.4	0.6	0.7	0.8	0.7
Net Imports	**19.2**	**24.7**	**21.9**	**20.3**	**21.1**	**22.2**
Solid Fossil Fuels	3.0	4.0	3.4	2.8	2.9	3.1
of which Hard Coal	2.3	3.0	2.4	2.1	2.3	2.4
Oil and Petroleum Products	11.0	13.3	11.8	11.3	11.3	11.4
of which Crude Oil and NGL	7.4	8.0	6.9	8.2	7.4	7.3
Natural gas	5.3	7.2	6.1	5.0	6.1	7.0
Renewables and Biofuels	0.0	0.0	0.4	0.4	0.3	0.2
Electricity	-0.1	0.2	0.2	0.9	0.6	0.6
Gross Inland Consumption	**29.2**	**34.2**	**34.3**	**33.5**	**33.8**	**34.4**
Solid Fossil Fuels	3.6	4.0	3.4	3.2	3.0	3.1
of which Hard Coal	2.5	2.8	2.5	2.5	2.3	2.3
of which Brown Coal	0.3	0.3	0.0	0.0	0.0	0.0
Oil and Petroleum Products	12.3	14.4	13.0	12.0	12.3	12.3
of which Crude and NGL	8.5	9.0	8.0	9.0	8.3	8.2
Natural Gas	6.6	8.1	8.1	6.9	7.1	7.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	6.6	7.0	9.0	9.8	10.0	9.9
Electricity	-0.1	0.2	0.2	0.9	0.6	0.6
Waste, Non-Renewable	0.3	0.4	0.6	0.7	0.8	0.7
Available for Final Consumption	**23.6**	**27.1**	**27.4**	**27.1**	**27.6**	**27.9**
Final Non-Energy Consumption	**1.7**	**1.6**	**1.8**	**1.8**	**1.8**	**1.7**
Final Energy Consumption	**21.8**	**25.5**	**25.6**	**25.3**	**25.7**	**26.2**
by Fuel/Product						
Solid Fossil Fuels	0.7	0.5	0.4	0.3	0.3	0.3
Oil and Petroleum Products	9.0	11.2	9.7	9.1	9.3	9.5
Natural Gas	4.0	4.6	4.7	4.5	4.6	4.8
Renewables and Biofuels	2.4	2.8	3.6	4.0	4.0	4.0
Solid Biofuels and Renewable Waste	2.3	2.5	2.8	2.9	3.0	3.0
Solar Thermal	0.1	0.1	0.2	0.2	0.2	0.2
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.1	0.5	0.7	0.6	0.5
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.1	0.2	0.2	0.3	0.3	0.3
Electricity	4.4	4.9	5.1	5.3	5.3	5.4
Heat	1.0	1.2	1.7	1.7	1.8	1.8
by Sector						
Industry	6.0	7.2	7.5	7.6	7.8	8.1
Transport	6.4	8.4	8.2	8.4	8.5	8.7
Residential	6.3	6.4	6.6	6.3	6.5	6.6
Services	2.6	3.0	2.8	2.4	2.3	2.4
Agriculture and Fishing	0.5	0.5	0.5	0.5	0.5	0.5
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**17.8**	**18.9**	**21.2**	**24.5**	**25.2**	**24.9**
Combustible Fuels	6.1	6.5	7.3	7.7	7.3	6.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	11.6	11.6	12.7	13.4	14.1	14.1
Wind	0.1	0.8	1.0	2.5	2.7	2.9
Solar	0.0	0.0	0.1	0.9	1.1	1.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**61.2**	**66.8**	**71.1**	**65.2**	**68.3**	**71.3**
Solid Fossil Fuels, Peat & Products, Oil Shale	5.7	7.2	4.9	2.9	2.0	1.8
Oil and Petroleum Products	1.7	1.6	1.3	0.9	1.0	0.8
Natural Gas	8.9	14.3	16.1	9.8	10.4	13.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	44.8	43.2	48.2	50.8	54.0	54.7
Wastes non-RES	0.1	0.4	0.6	0.8	0.9	0.9
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			3.2	2.8	3.4	2.9
CHP Electricity Generation (TWh)			11.0	9.0	10.9	9.5
CHP in Total Electricity Generation (%)			15.4	13.8	16.0	13.4
CHP Heat Production (PJ)			110.6	105.9	114.9	116.0
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	5960	7892	7181	7237	7437	7621
of which LPG	16	22	21	14	12	12
of which Motor Gasoline	2016	2137	1767	1542	1524	1507
of which Gas/Diesel Oil	3892	5693	5351	5637	5858	6060
Final Consumption Biofuels	16	74	496	652	540	468
Pure and Blended Biogasoline	0	0	78	60	57	56
Pure and Blended Biodiesel	16	74	418	592	483	412
Main Energy Indicators						
Primary Energy Consumption 2020-2030	27.5	32.6	32.4	31.5	31.7	32.5
Final Energy Consumption 2020-2030	23.7	27.7	27.7	27.4	27.8	28.4
Primary Energy Intensity 2020-2030 (toe/M€'10)	108	117	110	101	100	100
Energy Intensity GAE/GDP2010 (toe/M€'10)	115	123	116	107	106	105
Energy per Capita - GIC/pop (kgoe/cap)	3650	4171	4113	3901	3880	3924
Final Electricity per Capita (KWh/cap)	6441	7011	7164	7115	7130	7157
Import Dependency (%)	**65.6**	**72.1**	**63.7**	**60.6**	**62.5**	**64.4**
of Solid Fossil Fuels	83.9	100.0	100.0	86.5	96.0	99.8
of Hard Coal	91.6	107.1	97.4	84.2	96.6	106.1
of Oil and Petroleum Products	89.1	92.1	90.4	93.8	91.8	92.2
of Crude and NGL	87.0	88.8	86.5	91.1	89.5	89.1
of Natural Gas	80.6	88.5	75.3	72.6	85.8	90.2
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		23.7	29.9	32.8	33.0	32.6
RE-T – Transport		5.1	10.7	11.4	10.6	9.7
RES-E – Electricity Generation		61.9	65.6	70.6	73.3	72.2
RES-H&C – Heating and Cooling		21.9	28.7	32.0	32.2	32.1
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	68.0	81.4	74.3	68.9	69.6	72.2
GHG Emissions – National total*	82.1	94.5	86.8	81.0	81.9	84.5
Main Emissions Indicators						
GHG National Total Emissions/index 1990	103.2	118.8	109.1	101.9	103.0	106.2
Total GHG per Capita (t CO_2 eq./cap)	10.3	11.5	10.4	9.4	9.4	9.6

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.21 Poland

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**79.4**	**78.4**	**67.2**	**68.0**	**66.8**	**64.4**
Solid Fossil Fuels	71.3	68.9	55.4	53.9	52.3	49.8
of which Hard Coal	59.2	56.2	43.9	41.6	40.7	37.7
of which Brown Coal	12.1	12.7	11.6	12.3	11.7	12.2
Oil and Petroleum Products	0.9	1.0	0.8	1.0	1.1	1.0
of which Crude Oil	0.7	0.9	0.7	0.9	1.0	1.0
Natural Gas	3.3	3.9	3.7	3.7	3.6	3.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	3.8	4.5	6.9	8.9	9.1	9.1
Wastes, Non-Renewable	0.1	0.2	0.4	0.5	0.7	0.9
Net Imports	**9.6**	**16.5**	**32.1**	**28.7**	**31.0**	**40.4**
Solid Fossil Fuels	-16.3	-13.0	-2.7	-5.5	-5.8	-1.5
of which Hard Coal	-13.8	-9.7	1.8	-1.0	-0.9	3.0
Oil and Petroleum Products	19.9	22.0	25.7	24.1	25.4	29.8
of which Crude Oil and NGL	18.1	18.0	22.8	26.6	24.7	24.8
Natural gas	6.6	8.5	8.9	9.9	11.5	12.0
Renewables and Biofuels	0.0	-0.1	0.4	0.1	-0.2	-0.2
Electricity	-0.5	-1.0	-0.1	0.0	0.2	0.2
Gross Inland Consumption	**89.2**	**92.6**	**101.6**	**95.7**	**100.5**	**105.1**
Solid Fossil Fuels	56.3	54.7	55.2	48.4	49.5	49.7
of which Hard Coal	46.3	45.5	48.5	40.7	42.7	41.9
of which Brown Coal	12.1	12.7	11.6	12.3	11.7	12.2
Oil and Petroleum Products	19.6	22.0	26.0	24.1	26.6	30.0
of which Crude and NGL	18.3	18.5	23.2	26.5	26.2	25.5
Natural Gas	10.0	12.2	12.8	13.8	14.6	15.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	3.8	4.5	7.3	9.0	8.8	8.9
Electricity	-0.5	-1.0	-0.1	0.0	0.2	0.2
Waste, Non-Renewable	0.1	0.2	0.4	0.5	0.7	0.9
Available for Final Consumption	**57.1**	**61.7**	**70.4**	**65.1**	**70.4**	**74.7**
Final Non-Energy Consumption	**4.4**	**4.6**	**5.0**	**5.6**	**5.6**	**5.9**
Final Energy Consumption	**53.6**	**57.5**	**65.2**	**60.8**	**65.0**	**69.1**
by Fuel/Product						
Solid Fossil Fuels	11.9	11.5	13.2	10.7	11.1	11.3
Oil and Petroleum Products	15.2	17.6	20.2	18.6	20.9	24.1
Natural Gas	6.3	7.9	8.9	8.5	9.2	9.2
Renewables and Biofuels	3.5	3.9	5.3	5.5	5.6	5.8
Solid Biofuels and Renewable Waste	3.5	3.8	4.3	4.6	4.9	5.0
Solar Thermal	0.0	0.0	0.0	0.0	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.9	0.7	0.5	0.6
Biogases	0.0	0.0	0.0	0.1	0.1	0.1
Waste, Non-Renewable	0.1	0.1	0.4	0.5	0.6	0.7
Electricity	8.4	9.0	10.2	11.0	11.4	11.7
Heat	6.9	6.6	6.5	5.5	5.7	5.8
by Sector						
Industry	17.1	14.6	13.5	14.1	14.7	15.8
Transport	9.6	12.2	17.2	16.6	18.6	21.4
Residential	17.2	19.5	22.0	18.9	19.8	19.9
Services	5.0	6.7	8.8	7.8	8.5	8.0
Agriculture and Fishing	4.6	4.4	3.7	3.3	3.5	3.9
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**30.6**	**32.3**	**33.4**	**37.3**	**38.1**	**42.8**
Combustible Fuels	28.4	29.8	29.9	30.0	29.8	34.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	2.2	2.3	2.3	2.4	2.4	2.4
Wind	0.0	0.1	1.1	4.9	5.7	5.8
Solar	0.0	0.0	0.0	0.1	0.2	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**145.2**	**156.6**	**157.6**	**164.8**	**166.6**	**170.4**
Solid Fossil Fuels, Peat & Products, Oil Shale	135.9	141.9	136.5	130.5	130.3	131.2
Oil and Petroleum Products	1.9	2.8	2.9	2.1	2.3	2.0
Natural Gas	3.0	6.5	6.7	8.8	10.4	12.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	4.3	5.4	11.5	23.3	23.3	24.6
Wastes non-RES	0.1	0.0	0.0	0.1	0.2	0.3
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			8.7	8.6	8.7	9.2
CHP Electricity Generation (TWh)			27.7	26.5	27.6	28.4
CHP in Total Electricity Generation (%)			17.6	16.1	16.6	16.7
CHP Heat Production (PJ)			277.1	238.6	246.5	253.3
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	91 35	11 597	15 811	15 281	17 434	20 158
of which LPG	480	1 750	1 824	1 791	1 896	2 012
of which Motor Gasoline	5 248	4 173	4 243	3 654	3 860	4 219
of which Gas/Diesel Oil	3 404	5 670	9 740	9 817	11 654	13 900
Final Consumption Biofuels	0	46	867	653	457	605
Pure and Blended Biogasoline	0	34	170	153	168	176
Pure and Blended Biodiesel	0	12	698	500	290	429
Main Energy Indicators						
Primary Energy Consumption 2020-2030	84.9	88.0	96.6	90.1	94.8	99.1
Final Energy Consumption 2020-2030	55.1	58.5	66.3	62.3	66.6	70.9
Primary Energy Intensity 2020-2030 (toe/M€'10)	345	307	267	214	219	218
Energy Intensity GAE/GDP2010 (toe/M€'10)	364	324	281	228	233	232
Energy per Capita - GIC/pop (kgoe/cap)	2 332	2 425	2 671	2 519	2 646	2 767
Final Electricity per Capita (KWh/cap)	2 563	2 751	3 122	3 363	3 499	3 576
Import Dependency (%)	**10.7**	**17.7**	**31.6**	**29.9**	**30.8**	**38.3**
of Solid Fossil Fuels	-29.0	-23.8	-5.0	-11.4	-11.7	-3.0
of Hard Coal	-29.9	-21.3	3.7	-2.4	-2.1	7.2
of Oil and Petroleum Products	99.7	98.4	98.2	99.5	95.0	98.6
of Crude and NGL	99.1	97.3	98.4	100.5	94.5	97.2
of Natural Gas	66.3	69.7	69.3	72.2	78.4	77.8
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		6.9	9.3	11.7	11.3	10.9
RE-T – Transport		1.6	6.6	5.6	3.9	4.2
RES-E – Electricity Generation		2.7	6.6	13.4	13.4	13.1
RES-H&C – Heating and Cooling		10.2	11.7	14.5	14.7	14.5
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	319.0	323.4	334.9	314.2	325.0	339.1
GHG Emissions – National total*	396.3	404.3	413.1	392.3	401.1	416.3
Main Emissions Indicators						
GHG National Total Emissions/index 1990	83.4	85.1	87.0	82.6	84.5	87.6
Total GHG per Capita (t CO_2 eq./cap)	10.4	10.6	10.9	10.3	10.6	11.0

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.22 Portugal

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**3.8**	**3.6**	**5.8**	**5.3**	**6.0**	**5.2**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	3.8	3.5	5.6	5.2	5.8	5.1
Wastes, Non-Renewable	0.1	0.1	0.2	0.1	0.2	0.2
Net Imports	**22.2**	**24.8**	**18.7**	**18.5**	**17.5**	**19.8**
Solid Fossil Fuels	3.9	3.2	1.6	3.2	2.9	3.4
of which Hard Coal	4.0	3.2	1.6	3.2	2.9	3.4
Oil and Petroleum Products	16.2	17.1	12.5	11.2	11.0	11.3
of which Crude Oil and NGL	11.7	13.4	11.5	14.4	14.1	14.6
Natural gas	2.0	3.9	4.5	4.1	4.3	5.4
Renewables and Biofuels	0.0	0.0	-0.2	-0.2	-0.2	-0.2
Electricity	0.1	0.6	0.2	0.2	-0.4	-0.2
Gross Inland Consumption	**25.4**	**27.4**	**24.4**	**23.0**	**22.9**	**24.0**
Solid Fossil Fuels	3.8	3.3	1.7	3.3	2.8	3.2
of which Hard Coal	3.8	3.3	1.7	3.3	2.8	3.2
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	15.6	16.1	12.4	10.4	10.4	10.5
of which Crude and NGL	11.8	13.4	11.6	14.2	14.3	14.5
Natural Gas	2.0	3.8	4.5	4.1	4.3	5.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	3.8	3.5	5.5	5.0	5.6	4.8
Electricity	0.1	0.6	0.2	0.2	-0.4	-0.2
Waste, Non-Renewable	0.1	0.1	0.2	0.2	0.2	0.2
Available for Final Consumption	**19.5**	**20.9**	**18.9**	**16.3**	**16.1**	**16.4**
Final Non-Energy Consumption	**2.4**	**2.6**	**1.7**	**1.3**	**1.2**	**1.2**
Final Energy Consumption	**17.2**	**18.3**	**17.2**	**15.0**	**15.0**	**15.3**
by Fuel/Product						
Solid Fossil Fuels	0.4	0.0	0.1	0.0	0.0	0.0
Oil and Petroleum Products	10.1	10.1	8.4	6.9	6.9	7.1
Natural Gas	0.8	1.3	1.6	1.6	1.6	1.7
Renewables and Biofuels	2.4	2.5	2.5	2.2	2.2	2.2
Solid Biofuels and Renewable Waste	2.4	2.5	2.2	1.7	1.8	1.8
Solar Thermal	0.0	0.0	0.0	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.3	0.3	0.3	0.3
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.1	0.1	0.1	0.1
Electricity	3.3	4.0	4.3	3.9	4.0	4.0
Heat	0.1	0.3	0.3	0.2	0.2	0.2
by Sector						
Industry	6.3	5.8	5.5	4.4	4.4	4.5
Transport	6.0	6.4	6.4	5.6	5.7	5.8
Residential	2.8	3.2	3.0	2.5	2.6	2.6
Services	1.4	2.2	1.9	2.0	1.9	1.9
Agriculture and Fishing	0.7	0.6	0.5	0.4	0.4	0.5
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**10.9**	**13.4**	**18.9**	**19.6**	**20.6**	**20.9**
Combustible Fuels	6.3	7.3	9.9	8.0	8.0	8.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	4.5	5.0	5.1	6.2	7.0	7.2
Wind	0.1	1.1	3.8	4.9	5.1	5.1
Solar	0.0	0.0	0.1	0.4	0.5	0.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**43.8**	**46.6**	**54.1**	**52.4**	**60.3**	**59.4**
Solid Fossil Fuels, Peat & Products, Oil Shale	14.6	15.2	7.1	14.7	12.6	14.7
Oil and Petroleum Products	8.4	8.8	3.0	1.3	1.3	1.3
Natural Gas	7.2	13.6	14.9	10.6	12.6	18.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and Biofuels	13.3	8.6	28.8	25.5	33.5	24.3
Wastes non-RES	0.3	0.3	0.3	0.3	0.3	0.3
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			1.3	1.3	1.2	1.2
CHP Electricity Generation (TWh)			6.4	6.5	6.2	6.4
CHP in Total Electricity Generation (%)			11.8	12.3	10.4	10.8
CHP Heat Production (PJ)			67.2	59.3	61.7	60.0
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	5932	6382	6062	5199	5374	5495
of which LPG	23	25	32	40	41	48
of which Motor Gasoline	2272	1935	1450	1099	1082	1080
of which Gas/Diesel Oil	3523	4286	4366	3886	4040	4139
Final Consumption Biofuels	0	0	309	328	265	242
Pure and Blended Biogasoline	0	0	0	22	26	3
Pure and Blended Biodiesel	0	0	305	302	237	239
Main Energy Indicators						
Primary Energy Consumption 2020-2030	23.0	24.9	22.6	21.6	21.8	22.8
Final Energy Consumption 2020-2030	18.0	19.0	18.1	16.0	16.2	16.6
Primary Energy Intensity 2020-2030 (toe/M€'10)	137	142	126	126	124	126
Energy Intensity GAE/GDP2010 (toe/M€'10)	156	161	138	137	135	137
Energy per Capita - GIC/pop (kgoe/cap)	2476	2614	2305	2215	2217	2327
Final Electricity per Capita (KWh/cap)	3744	4414	4718	4416	4486	4524
Import Dependency (%)	**85.3**	**88.6**	**75.2**	**78.2**	**74.0**	**79.9**
of Solid Fossil Fuels	102.9	96.3	98.3	98.5	102.3	105.6
of Hard Coal	103.4	96.3	98.3	98.5	102.3	105.6
of Oil and Petroleum Products	99.4	102.3	97.5	101.7	98.7	100.2
of Crude and NGL	99.0	100.2	98.8	100.9	98.7	100.4
of Natural Gas	100.3	103.8	100.4	100.4	98.6	100.4
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		19.5	24.2	28.0	28.4	28.1
RE-T – Transport		0.5	5.5	7.4	7.7	7.9
RES-E – Electricity Generation		27.7	40.6	52.6	54.0	54.2
RES-H&C – Heating and Cooling		32.1	33.9	33.5	35.1	34.4
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	68.4	72.0	55.8	55.5	53.9	58.7
GHG Emissions – National total*	84.3	88.1	71.7	71.1	69.5	74.6
Main Emissions Indicators						
GHG National Total Emissions/index 1990	138.8	145.0	117.9	117.0	114.4	122.8
Total GHG per Capita (t CO_2 eq./cap)	8.2	8.4	6.8	6.9	6.7	7.2

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.23 Romania

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**28.5**	**28.0**	**27.4**	**26.4**	**24.8**	**25.5**
Solid Fossil Fuels	5.6	5.8	5.9	4.7	4.2	4.5
of which Hard Coal	0.2	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	5.4	5.8	5.9	4.7	4.2	4.5
Oil and Petroleum Products	6.4	6.0	4.3	4.0	3.8	3.6
of which Crude Oil	6.4	5.4	4.3	4.0	3.8	3.6
Natural Gas	11.0	9.7	8.6	8.8	7.8	8.5
Nuclear	1.4	1.4	2.9	2.9	2.8	2.9
Renewables and Biofuels	4.0	5.0	5.7	5.9	6.1	5.8
Wastes, Non-Renewable	0.1	0.1	0.0	0.1	0.1	0.1
Net Imports	**8.0**	**10.5**	**7.4**	**5.2**	**6.9**	**7.7**
Solid Fossil Fuels	1.9	2.9	1.2	1.0	1.0	1.0
of which Hard Coal	1.6	2.1	0.1	0.1	0.1	0.1
Oil and Petroleum Products	3.5	3.7	4.5	4.6	5.0	5.9
of which Crude Oil and NGL	4.8	8.6	5.7	6.5	7.3	7.6
Natural gas	2.7	4.2	1.8	0.2	1.2	0.9
Renewables and Biofuels	0.0	0.0	0.1	0.0	0.1	0.2
Electricity	-0.1	-0.2	-0.2	-0.6	-0.4	-0.2
Gross Inland Consumption	**36.8**	**38.6**	**35.0**	**31.9**	**31.8**	**33.4**
Solid Fossil Fuels	7.5	8.8	6.9	5.9	5.3	5.4
of which Hard Coal	1.7	2.0	0.1	0.1	0.1	0.1
of which Brown Coal	5.5	6.4	6.2	5.3	4.7	4.8
Oil and Petroleum Products	10.1	9.7	8.7	8.6	8.8	9.6
of which Crude and NGL	11.1	14.0	10.1	10.4	11.3	11.4
Natural Gas	13.7	13.9	10.8	8.9	9.0	9.6
Nuclear	1.4	1.4	2.9	2.9	2.8	2.9
Renewables and Biofuels	4.0	4.9	5.9	6.0	6.2	6.0
Electricity	-0.1	-0.2	-0.2	-0.6	-0.4	-0.2
Waste, Non-Renewable	0.1	0.1	0.0	0.1	0.1	0.1
Available for Final Consumption	**24.1**	**25.9**	**24.8**	**22.8**	**23.1**	**24.4**
Final Non-Energy Consumption	**1.9**	**2.6**	**2.1**	**1.1**	**1.1**	**1.1**
Final Energy Consumption	**21.9**	**23.6**	**22.0**	**21.6**	**21.9**	**22.9**
by Fuel/Product						
Solid Fossil Fuels	0.3	0.6	0.5	0.8	0.7	0.6
Oil and Petroleum Products	5.4	6.5	6.0	6.8	7.1	7.6
Natural Gas	6.5	7.2	6.0	5.3	5.2	5.5
Renewables and Biofuels	2.7	3.2	4.0	3.5	3.7	3.8
Solid Biofuels and Renewable Waste	2.7	3.2	3.9	3.3	3.4	3.4
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.1	0.2	0.3	0.3
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.1	0.1	0.0	0.1	0.1	0.1
Electricity	2.9	3.3	3.6	3.7	3.7	3.8
Heat	3.6	2.1	1.6	1.3	1.3	1.3
by Sector						
Industry	8.6	9.0	6.5	6.4	6.3	6.4
Transport	3.3	4.2	4.9	5.3	5.7	6.1
Residential	8.4	8.0	8.1	7.4	7.4	7.7
Services	0.7	1.7	1.9	1.8	1.8	1.8
Agriculture and Fishing	0.4	0.2	0.4	0.5	0.5	0.5
Others	0.5	0.6	0.2	0.2	0.3	0.3

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**16.8**	**19.0**	**19.9**	**23.8**	**23.6**	**23.6**
Combustible Fuels	10.0	12.0	11.6	11.2	11.0	11.1
Nuclear	0.7	0.7	1.4	1.4	1.4	1.4
Hydro	6.1	6.3	6.5	6.7	6.7	6.7
Wind	0.0	0.0	0.4	3.1	3.0	3.0
Solar	0.0	0.0	0.0	1.3	1.4	1.4
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**51.6**	**59.4**	**61.0**	**66.3**	**65.1**	**64.3**
Solid Fossil Fuels, Peat & Products, Oil Shale	18.9	21.9	20.7	18.1	15.9	16.8
Oil and Petroleum Products	3.4	1.9	0.7	0.5	0.7	0.6
Natural Gas	9.0	9.8	7.3	9.5	9.8	10.7
Nuclear	5.5	5.6	11.6	11.6	11.3	11.5
Renewables and Biofuels	14.8	20.2	20.7	26.6	27.5	24.6
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			4.6	1.8	1.9	1.8
CHP Electricity Generation (TWh)			6.5	5.6	5.3	5.8
CHP in Total Electricity Generation (%)			10.8	8.4	8.1	9.0
CHP Heat Production (PJ)			69.0	51.0	45.9	47.0
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	3134	3983	4723	5041	5390	5758
of which LPG	0	55	20	63	75	90
of which Motor Gasoline	1304	1600	1412	1269	1326	1333
of which Gas/Diesel Oil	1760	2304	3180	3676	3961	4285
Final Consumption Biofuels	0	0	98	202	257	297
Pure and Blended Biogasoline	0	0	47	61	81	91
Pure and Blended Biodiesel	0	0	51	141	176	206
Main Energy Indicators						
Primary Energy Consumption 2020-2030	34.9	36.0	33.0	30.7	30.6	32.4
Final Energy Consumption 2020-2030	22.7	24.6	22.5	21.8	22.2	23.2
Primary Energy Intensity 2020-2030 (toe/M€'10)	422	329	263	212	201	199
Energy Intensity GAE/GDP2010 (toe/M€'10)	444	353	279	220	209	206
Energy per Capita - GIC/pop (kgoe/cap)	1637	1807	1726	1603	1607	1703
Final Electricity per Capita (KWh/cap)	1511	1817	2036	2166	2189	2275
Import Dependency (%)	**21.9**	**27.2**	**21.2**	**16.4**	**21.6**	**23.1**
of Solid Fossil Fuels	25.5	33.2	16.9	16.7	19.5	18.4
of Hard Coal	96.3	103.1	88.4	96.9	115.4	102.2
of Oil and Petroleum Products	34.4	37.5	51.8	53.4	56.5	60.6
of Crude and NGL	43.5	61.3	56.5	62.3	65.0	66.7
of Natural Gas	19.8	30.1	16.8	1.8	13.0	9.7
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		17.2	23.1	24.8	25.0	24.5
RE-T – Transport		1.6	3.4	5.5	6.2	6.6
RES-E – Electricity Generation		26.9	30.4	43.2	42.7	41.6
RES-H&C – Heating and Cooling		17.9	27.2	25.9	26.9	26.6
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	95.9	103.0	84.5	78.5	76.7	76.0
GHG Emissions – National total*	143.6	151.7	124.4	117.2	115.2	114.8
Main Emissions Indicators						
GHG National Total Emissions/index 1990	57.7	61.0	50.0	47.1	46.3	46.1
Total GHG per Capita (t CO_2 eq./cap)	6.4	7.1	6.1	5.9	5.8	5.8

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.24 Slovenia

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**3.1**	**3.5**	**3.7**	**3.3**	**3.4**	**3.5**
Solid Fossil Fuels	1.1	1.2	1.2	0.9	0.9	0.9
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	1.1	1.2	1.2	0.9	0.9	0.9
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	1.2	1.5	1.3	1.3	1.3	1.5
Renewables and Biofuels	0.8	0.8	1.1	1.0	1.1	1.0
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.1
Net Imports	**3.4**	**3.9**	**3.6**	**3.2**	**3.3**	**3.5**
Solid Fossil Fuels	0.2	0.3	0.3	0.2	0.2	0.2
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	2.5	2.6	2.6	2.3	2.5	2.6
of which Crude Oil and NGL	0.1	0.0	0.0	0.0	0.0	0.0
Natural gas	0.8	0.9	0.9	0.7	0.7	0.7
Renewables and Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	-0.1	0.0	-0.2	0.0	-0.1	0.0
Gross Inland Consumption	**6.4**	**7.3**	**7.2**	**6.4**	**6.7**	**6.8**
Solid Fossil Fuels	1.3	1.5	1.5	1.1	1.1	1.1
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	1.2	1.5	1.4	1.0	1.1	1.1
Oil and Petroleum Products	2.4	2.6	2.6	2.3	2.4	2.3
of which Crude and NGL	0.1	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.8	0.9	0.9	0.7	0.7	0.7
Nuclear	1.2	1.5	1.3	1.3	1.3	1.5
Renewables and Biofuels	0.8	0.8	1.1	1.1	1.1	1.1
Electricity	-0.1	0.0	-0.2	0.0	-0.1	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.1
Available for Final Consumption	**4.7**	**5.2**	**5.2**	**4.8**	**5.0**	**5.0**
Final Non-Energy Consumption	**0.2**	**0.3**	**0.2**	**0.1**	**0.1**	**0.1**
Final Energy Consumption	**4.4**	**4.9**	**5.0**	**4.7**	**4.9**	**4.8**
by Fuel/Product						
Solid Fossil Fuels	0.1	0.1	0.0	0.0	0.0	0.0
Oil and Petroleum Products	2.2	2.4	2.4	2.1	2.3	2.2
Natural Gas	0.6	0.7	0.6	0.6	0.6	0.6
Renewables and Biofuels	0.4	0.4	0.7	0.6	0.6	0.6
Solid Biofuels and Renewable Waste	0.4	0.4	0.6	0.5	0.6	0.5
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.9	1.1	1.0	1.1	1.1	1.2
Heat	0.2	0.2	0.2	0.2	0.2	0.2
by Sector						
Industry	1.4	1.6	1.3	1.2	1.2	1.3
Transport	1.2	1.5	1.8	1.8	1.9	1.8
Residential	1.1	1.2	1.3	1.1	1.1	1.1
Services	0.5	0.5	0.5	0.5	0.5	0.5
Agriculture and Fishing	0.1	0.1	0.1	0.1	0.1	0.1
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**2.6**	**3.0**	**3.2**	**3.4**	**3.5**	**3.6**
Combustible Fuels	1.1	1.4	1.3	1.1	1.3	1.3
Nuclear	0.7	0.7	0.7	0.7	0.7	0.7
Hydro	0.8	1.0	1.3	1.3	1.3	1.3
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.0	0.2	0.2	0.2
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**13.6**	**15.1**	**16.4**	**15.1**	**16.5**	**16.3**
Solid Fossil Fuels, Peat & Products, Oil Shale	4.6	5.3	5.3	4.4	5.0	4.8
Oil and Petroleum Products	0.1	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.3	0.3	0.5	0.4	0.4	0.5
Nuclear	4.8	5.9	5.7	5.6	5.7	6.3
Renewables and Biofuels	3.9	3.6	4.9	4.6	5.3	4.7
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			0.3	0.4	0.4	0.4
CHP Electricity Generation (TWh)			1.1	1.2	1.2	1.3
CHP in Total Electricity Generation (%)			6.9	7.7	7.3	7.7
CHP Heat Production (PJ)			11.6	10.4	10.8	11.1
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1 201	1 446	1 718	1 728	1 847	1 782
of which LPG	0	0	5	14	15	15
of which Motor Gasoline	849	689	600	437	434	417
of which Gas/Diesel Oil	351	756	1 111	1 276	1 397	1 349
Final Consumption Biofuels	0	0	46	29	18	43
Pure and Blended Biogasoline	0	0	4	7	4	9
Pure and Blended Biodiesel	0	0	41	23	14	35
Main Energy Indicators						
Primary Energy Consumption 2020-2030	6.2	7.0	7.0	6.3	6.5	6.6
Final Energy Consumption 2020-2030	4.5	4.9	5.0	4.7	4.9	4.9
Primary Energy Intensity 2020-2030 (toe/M€'10)	223	211	193	171	172	166
Energy Intensity GAE/GDP2010 (toe/M€'10)	231	221	200	176	178	173
Energy per Capita - GIC/pop (kgoe/cap)	3 244	3 667	3 525	3 124	3 232	3 282
Final Electricity per Capita (KWh/cap)	5 293	6 379	5 835	6 199	6 310	6 549
Import Dependency (%)	**52.8**	**52.5**	**49.5**	**49.7**	**49.3**	**50.4**
of Solid Fossil Fuels	18.8	21.0	19.3	19.1	17.3	17.4
of Hard Coal	118.2	100.0	135.3	124.2	118.2	100.7
of Oil and Petroleum Products	101.5	101.2	99.2	99.6	100.3	103.3
of Crude and NGL	87.2	0.0	0.0	0.0	0.0	0.0
of Natural Gas	99.3	99.6	99.3	99.6	99.4	99.0
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		16.0	20.4	21.9	21.3	21.5
RE-T – Transport		0.8	3.1	2.2	1.6	2.7
RES-E – Electricity Generation		28.7	32.2	32.7	32.1	32.4
RES-H&C – Heating and Cooling		18.9	28.1	33.9	34.0	33.2
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	15.5	17.0	16.4	13.7	14.5	14.3
GHG Emissions – National total*	19.1	20.6	19.7	16.9	17.7	17.5
Main Emissions Indicators						
GHG National Total Emissions/index 1990	102.4	110.1	105.4	90.4	94.9	93.8
Total GHG per Capita (t CO_2 eq./cap)	9.6	10.3	9.6	8.2	8.6	8.5

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.25 Slovakia

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**6.3**	**6.4**	**6.0**	**6.4**	**6.2**	**6.4**
Solid Fossil Fuels	1.0	0.6	0.6	0.5	0.5	0.4
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	1.0	0.6	0.6	0.5	0.5	0.4
Oil and Petroleum Products	0.1	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.1	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.1	0.1	0.1	0.1	0.1	0.1
Nuclear	4.3	4.7	3.9	4.0	3.9	4.0
Renewables and Biofuels	0.5	0.9	1.4	1.6	1.6	1.6
Wastes, Non-Renewable	0.3	0.1	0.0	0.2	0.2	0.2
Net Imports	**11.5**	**12.3**	**11.4**	**9.8**	**9.9**	**11.2**
Solid Fossil Fuels	3.4	3.7	3.0	2.8	2.7	3.0
of which Hard Coal	3.1	3.5	2.6	2.5	2.5	2.6
Oil and Petroleum Products	2.6	3.2	3.4	3.1	3.4	3.6
of which Crude Oil and NGL	5.3	5.3	5.5	5.9	5.8	5.5
Natural gas	5.7	5.7	5.0	3.7	3.6	4.4
Renewables and Biofuels	0.0	0.0	-0.1	0.0	0.0	0.0
Electricity	-0.2	-0.3	0.1	0.2	0.2	0.3
Gross Inland Consumption	**17.7**	**18.7**	**17.7**	**16.3**	**16.3**	**17.2**
Solid Fossil Fuels	4.3	4.2	3.9	3.3	3.2	3.4
of which Hard Coal	3.0	3.3	2.8	2.6	2.5	2.6
of which Brown Coal	1.2	0.9	0.8	0.7	0.6	0.6
Oil and Petroleum Products	2.9	3.3	3.5	3.1	3.3	3.7
of which Crude and NGL	5.4	5.5	5.5	6.0	5.8	5.6
Natural Gas	5.8	5.9	5.0	3.9	3.9	4.1
Nuclear	4.3	4.7	3.9	4.0	3.9	4.0
Renewables and Biofuels	0.5	0.8	1.3	1.6	1.6	1.6
Electricity	-0.2	-0.3	0.1	0.2	0.2	0.3
Waste, Non-Renewable	0.3	0.1	0.0	0.2	0.2	0.2
Available for Final Consumption	**11.7**	**11.7**	**11.5**	**10.0**	**10.2**	**11.0**
Final Non-Energy Consumption	**1.4**	**1.3**	**1.1**	**1.0**	**1.0**	**1.1**
Final Energy Consumption	**9.9**	**10.4**	**10.4**	**8.9**	**9.2**	**9.9**
by Fuel/Product						
Solid Fossil Fuels	0.9	0.6	0.7	0.4	0.4	0.4
Oil and Petroleum Products	1.7	2.1	2.3	2.1	2.3	2.6
Natural Gas	4.2	3.9	3.5	2.5	2.6	2.7
Renewables and Biofuels	0.1	0.3	0.5	0.6	0.6	0.6
Solid Biofuels and Renewable Waste	0.1	0.3	0.4	0.4	0.4	0.4
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.1	0.1	0.1	0.1
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.2	0.0	0.0	0.2	0.2	0.2
Electricity	1.9	2.0	2.1	2.1	2.1	2.2
Heat	0.6	1.0	0.9	0.6	0.7	0.7
by Sector						
Industry	3.5	3.6	3.2	3.3	3.3	3.5
Transport	1.4	2.4	2.6	2.2	2.4	2.8
Residential	2.6	2.5	2.3	2.0	2.0	2.1
Services	2.2	1.8	2.1	1.3	1.3	1.4
Agriculture and Fishing	0.2	0.2	0.1	0.2	0.1	0.1
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**7.5**	**8.3**	**7.9**	**7.8**	**7.7**	**7.7**
Combustible Fuels	2.4	3.1	3.5	2.8	2.7	2.6
Nuclear	2.6	2.6	1.8	1.9	1.9	1.9
Hydro	2.4	2.5	2.5	2.5	2.5	2.5
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.0	0.5	0.5	0.5
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**31.2**	**31.4**	**27.8**	**26.8**	**26.9**	**27.6**
Solid Fossil Fuels, Peat & Products, Oil Shale	5.6	5.5	3.6	2.8	2.8	3.0
Oil and Petroleum Products	0.2	0.7	0.6	0.4	0.5	0.4
Natural Gas	3.9	2.6	2.7	2.1	2.0	2.2
Nuclear	16.5	17.7	14.6	15.1	14.8	15.1
Renewables and Biofuels	5.0	4.8	6.3	6.3	6.9	6.8
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			2.8	3.7	1.0	1.7
CHP Electricity Generation (TWh)			4.4	21.1	3.0	3.5
CHP in Total Electricity Generation (%)			15.9	78.5	11.1	12.5
CHP Heat Production (PJ)			20.1	27.3	34.4	36.9
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	1347	1694	2055	1881	2091	2422
of which LPG	0	1	2	37	36	34
of which Motor Gasoline	605	667	600	577	609	609
of which Gas/Diesel Oil	742	1014	1453	1267	1446	1779
Final Consumption Biofuels	0	11	98	144	145	149
Pure and Blended Biogasoline	0	0	24	23	16	20
Pure and Blended Biodiesel	0	11	74	121	129	130
Main Energy Indicators						
Primary Energy Consumption 2020-2030	16.4	17.4	16.7	15.2	15.4	16.1
Final Energy Consumption 2020-2030	11.0	11.6	11.5	10.1	10.4	11.1
Primary Energy Intensity 2020-2030 (toe/M€'10)	390	325	247	198	194	198
Energy Intensity GAE/GDP2010 (toe/M€'10)	423	349	262	212	207	211
Energy per Capita - GIC/pop (kgoe/cap)	3284	3480	3286	3000	3012	3173
Final Electricity per Capita (KWh/cap)	4077	4253	4477	4495	4605	4747
Import Dependency (%)	**65.1**	**66.0**	**64.4**	**60.1**	**60.6**	**64.8**
of Solid Fossil Fuels	80.2	88.3	75.7	84.5	83.3	87.8
of Hard Coal	103.8	105.2	91.9	97.5	97.2	100.1
of Oil and Petroleum Products	92.5	97.3	98.4	100.6	102.0	97.5
of Crude and NGL	97.6	97.7	99.9	99.3	100.7	99.5
of Natural Gas	98.8	97.5	99.9	95.1	92.8	105.6
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		6.4	9.1	12.9	12.0	11.5
RE-T – Transport		1.6	5.3	8.5	7.7	7.0
RES-E – Electricity Generation		15.7	17.8	22.7	22.5	21.3
RES-H&C – Heating and Cooling		5.0	7.9	10.8	9.9	9.8
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	41.3	43.0	38.6	34.6	35.0	36.2
GHG Emissions – National total*	49.2	51.3	46.4	41.8	42.3	43.5
Main Emissions Indicators						
GHG National Total Emissions/index 1990	67.1	69.8	63.2	56.9	57.6	59.2
Total GHG per Capita (t CO_2 eq./cap)	9.1	9.5	8.6	7.7	7.8	8.0

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.26 Finland

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**14.8**	**16.6**	**17.0**	**17.1**	**17.1**	**18.1**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.1	0.2	0.1	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	5.8	6.0	5.6	5.6	5.6	5.4
Renewables and Biofuels	7.8	8.2	9.4	10.4	10.5	11.7
Wastes, Non-Renewable	0.1	0.1	0.1	0.2	0.3	0.3
Net Imports	**18.6**	**19.3**	**18.1**	**15.8**	**15.7**	**15.1**
Solid Fossil Fuels	3.5	3.3	4.0	2.5	2.7	2.6
of which Hard Coal	3.2	3.0	3.7	2.3	2.6	2.5
Oil and Petroleum Products	10.6	10.9	9.5	9.6	9.2	8.7
of which Crude Oil and NGL	11.9	10.8	11.4	11.1	12.4	12.7
Natural gas	3.4	3.6	3.8	2.2	2.1	1.9
Renewables and Biofuels	0.0	-0.1	-0.1	0.1	0.1	0.1
Electricity	1.0	1.5	0.9	1.4	1.6	1.8
Gross Inland Consumption	**32.7**	**34.7**	**36.7**	**32.5**	**33.8**	**33.9**
Solid Fossil Fuels	3.6	3.3	4.6	2.7	3.2	2.8
of which Hard Coal	3.3	2.9	4.3	2.5	3.1	2.8
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	9.5	10.5	10.0	8.4	9.1	8.7
of which Crude and NGL	11.7	11.1	11.3	10.7	12.4	12.8
Natural Gas	3.4	3.6	3.8	2.2	2.1	1.9
Nuclear	5.8	6.0	5.6	5.6	5.6	5.4
Renewables and Biofuels	7.8	8.1	9.4	10.5	10.6	11.8
Electricity	1.0	1.5	0.9	1.4	1.6	1.8
Waste, Non-Renewable	0.1	0.1	0.1	0.2	0.3	0.3
Available for Final Consumption	**23.7**	**25.3**	**26.4**	**24.3**	**25.2**	**25.8**
Final Non-Energy Consumption	**1.0**	**1.2**	**1.2**	**1.3**	**1.5**	**1.4**
Final Energy Consumption	**23.3**	**24.0**	**25.1**	**23.1**	**24.0**	**24.6**
by Fuel/Product						
Solid Fossil Fuels	0.3	0.3	0.2	0.1	0.1	0.1
Oil and Petroleum Products	7.2	7.4	6.9	6.0	6.4	6.1
Natural Gas	0.9	0.8	0.8	0.6	0.6	0.6
Renewables and Biofuels	4.5	4.2	4.9	5.4	5.4	6.4
Solid Biofuels and Renewable Waste	4.5	4.2	4.7	4.9	5.2	5.4
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.0	0.2	0.5	0.2	0.4
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.1	0.1
Electricity	6.5	6.9	7.2	6.7	7.0	7.0
Heat	3.3	3.8	4.6	3.8	4.1	4.0
by Sector						
Industry	11.5	11.1	10.7	10.2	10.5	10.7
Transport	3.9	4.2	4.3	4.1	4.2	4.2
Residential	4.5	5.0	5.9	5.0	5.3	5.8
Services	2.3	2.6	3.1	2.7	2.9	3.0
Agriculture and Fishing	0.8	0.8	0.8	0.7	0.8	0.7
Others	0.3	0.3	0.3	0.3	0.3	0.2

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**16.3**	**16.5**	**15.6**	**16.6**	**16.3**	**17.2**
Combustible Fuels	10.7	10.7	9.5	9.6	8.7	9.0
Nuclear	2.6	2.7	2.7	2.8	2.8	2.8
Hydro	2.9	3.0	3.2	3.2	3.2	3.3
Wind	0.0	0.1	0.2	1.0	1.6	2.0
Solar	0.0	0.0	0.0	0.0	0.0	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**69.8**	**70.3**	**80.4**	**68.3**	**68.5**	**67.1**
Solid Fossil Fuels, Peat & Products, Oil Shale	12.5	11.0	20.8	8.2	9.9	8.6
Oil and Petroleum Products	0.6	0.5	0.5	0.2	0.2	0.2
Natural Gas	10.8	11.9	11.8	5.8	4.4	3.9
Nuclear	22.5	23.3	22.8	23.2	23.2	22.5
Renewables and Biofuels	23.4	23.5	24.2	30.5	30.4	31.5
Wastes non-RES	0.1	0.2	0.2	0.4	0.4	0.5
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			6.2	5.8	5.9	6.5
CHP Electricity Generation (TWh)			29.2	21.7	21.8	21.7
CHP in Total Electricity Generation (%)			36.2	31.7	31.8	32.1
CHP Heat Production (PJ)			272.8	242.4	241.6	246.5
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	3872	4147	4086	3540	3931	3728
of which LPG	0	0	0	0	0	0
of which Motor Gasoline	1748	1835	1531	1361	1355	1302
of which Gas/Diesel Oil	1947	2167	2435	2107	2504	2351
Final Consumption Biofuels	0	0	140	498	177	391
Pure and Blended Biogasoline	0	0	78	66	68	81
Pure and Blended Biodiesel	0	0	63	432	110	310
Main Energy Indicators						
Primary Energy Consumption 2020-2030	31.6	33.6	35.5	31.2	32.3	31.9
Final Energy Consumption 2020-2030	24.4	25.2	26.3	24.2	25.2	25.3
Primary Energy Intensity 2020-2030 (toe/M€'10)	200	187	190	166	168	161
Energy Intensity GAE/GDP2010 (toe/M€'10)	211	196	197	175	177	173
Energy per Capita - GIC/pop (kgoe/cap)	6315	6629	6863	5936	6159	6163
Final Electricity per Capita (KWh/cap)	14636	15420	15603	14341	14731	14726
Import Dependency (%)	**55.6**	**54.7**	**48.9**	**48.2**	**46.0**	**44.0**
of Solid Fossil Fuels	97.6	102.0	86.3	92.4	85.7	91.6
of Hard Coal	97.7	102.6	85.5	89.8	83.4	90.3
of Oil and Petroleum Products	104.1	99.1	92.3	109.6	97.6	96.4
of Crude and NGL	101.5	97.5	101.1	104.2	100.5	98.9
of Natural Gas	100.0	100.0	100.0	100.0	100.0	99.1
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		28.8	32.4	39.3	39.0	41.0
RE-T – Transport		0.9	4.4	24.8	9.0	18.8
RES-E – Electricity Generation		26.9	27.7	32.5	32.9	35.2
RES-H&C – Heating and Cooling		39.1	44.2	52.6	53.7	54.8
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	58.2	58.4	65.8	46.1	49.3	46.9
GHG Emissions – National total*	71.3	71.2	77.4	57.2	60.1	57.5
Main Emissions Indicators						
GHG National Total Emissions/index 1990	98.6	98.5	107.0	79.0	83.1	79.5
Total GHG per Capita (t CO_2 eq./cap)	13.8	13.6	14.5	10.4	10.9	10.4

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.27 Sweden

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**30.0**	**34.1**	**32.0**	**35.9**	**35.4**	**36.6**
Solid Fossil Fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which Hard Coal	0.0	0.0	0.0	0.0	0.0	0.0
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	0.0	0.0	0.0	0.0	0.0	0.0
of which Crude Oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	14.8	18.7	14.5	15.5	15.7	16.4
Renewables and Biofuels	14.7	14.7	16.8	19.7	18.9	19.4
Wastes, Non-Renewable	0.3	0.5	0.5	0.6	0.7	0.7
Net Imports	**19.3**	**20.3**	**19.9**	**14.7**	**17.0**	**14.0**
Solid Fossil Fuels	2.3	2.5	2.4	1.9	2.2	1.9
of which Hard Coal	2.1	2.2	2.3	1.9	2.2	1.9
Oil and Petroleum Products	15.7	17.4	15.5	13.0	13.9	11.3
of which Crude Oil and NGL	20.8	20.2	20.0	20.3	19.8	19.2
Natural gas	0.8	0.8	1.5	0.7	0.8	0.9
Renewables and Biofuels	0.0	0.1	0.2	0.9	1.0	1.4
Electricity	0.4	-0.6	0.2	-1.9	-1.0	-1.6
Gross Inland Consumption	**47.7**	**51.7**	**50.7**	**48.3**	**50.7**	**50.5**
Solid Fossil Fuels	2.2	2.3	2.1	2.0	1.9	1.9
of which Hard Coal	2.0	2.1	2.0	1.9	1.8	1.8
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	14.2	14.8	14.6	10.7	12.5	11.0
of which Crude and NGL	20.7	20.1	20.2	20.1	19.8	19.7
Natural Gas	0.8	0.8	1.5	0.7	0.8	0.9
Nuclear	14.8	18.7	14.5	15.5	15.7	16.4
Renewables and Biofuels	14.7	14.9	17.0	20.5	19.9	20.9
Electricity	0.4	-0.6	0.2	-1.9	-1.0	-1.6
Waste, Non-Renewable	0.3	0.5	0.5	0.6	0.8	0.8
Available for Final Consumption	**34.9**	**33.7**	**35.3**	**32.3**	**34.5**	**34.0**
Final Non-Energy Consumption	**1.7**	**2.3**	**2.1**	**1.8**	**2.2**	**2.4**
Final Energy Consumption	**33.7**	**32.1**	**32.5**	**31.2**	**32.2**	**32.4**
by Fuel/Product						
Solid Fossil Fuels	0.5	0.4	0.4	0.4	0.4	0.4
Oil and Petroleum Products	12.6	10.8	9.3	7.8	8.0	7.7
Natural Gas	0.4	0.5	0.6	0.6	0.5	0.5
Renewables and Biofuels	5.3	4.7	5.6	7.4	7.8	8.2
Solid Biofuels and Renewable Waste	5.3	4.6	5.2	5.4	5.4	5.3
Solar Thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.2	0.3	0.8	1.0	1.5
Biogases	0.0	0.0	0.1	0.1	0.1	0.1
Waste, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	11.1	11.2	11.3	10.7	11.0	10.9
Heat	3.6	4.2	5.1	4.2	4.4	4.4
by Sector						
Industry	13.7	11.8	11.4	10.9	10.8	10.8
Transport	7.5	8.0	7.8	7.7	8.0	8.4
Residential	7.3	7.3	8.0	7.2	7.5	7.5
Services	4.4	4.3	4.6	4.0	4.3	4.1
Agriculture and Fishing	0.8	0.8	0.7	0.4	0.3	0.3
Others	0.0	0.0	0.0	1.1	1.3	1.3

Methodology, Sources and Notes: See Appendices

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**33.7**	**33.4**	**36.5**	**39.7**	**40.3**	**39.8**
Combustible Fuels	7.5	7.1	8.7	7.8	7.5	7.4
Nuclear	9.5	9.5	9.0	9.7	9.8	9.0
Hydro	16.5	16.3	16.7	16.3	16.5	16.5
Wind	0.2	0.5	2.0	5.8	6.4	6.6
Solar	0.0	0.0	0.0	0.1	0.2	0.2
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**145.3**	**158.4**	**148.5**	**162.1**	**156.0**	**164.3**
Solid Fossil Fuels, Peat & Products, Oil Shale	1.7	1.2	1.8	0.6	0.5	0.5
Oil and Petroleum Products	1.5	1.4	1.8	0.3	0.4	0.3
Natural Gas	1.3	1.3	3.8	1.1	1.2	1.0
Nuclear	57.3	72.4	57.8	56.3	63.1	65.7
Renewables and Biofuels	83.2	81.3	82.2	102.6	89.2	95.1
Wastes non-RES	0.2	0.9	1.2	1.2	1.6	1.7
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			5.1	4.9	3.9	3.0
CHP Electricity Generation (TWh)			18.5	13.7	9.2	9.0
CHP in Total Electricity Generation (%)			12.5	8.4	5.9	5.5
CHP Heat Production (PJ)			187.2	151.3	91.1	92.0
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	7168	7544	7239	6547	6655	6497
of which LPG	0	0	0	0	0	0
of which Motor Gasoline	4208	4086	3276	2534	2530	2425
of which Gas/Diesel Oil	2677	3161	3661	3857	3939	3885
Final Consumption Biofuels	0	151	336	779	976	1520
Pure and Blended Biogasoline	0	146	204	139	109	99
Pure and Blended Biodiesel	0	5	131	640	867	1421
Main Energy Indicators						
Primary Energy Consumption 2020-2030	46.0	49.4	48.6	45.1	46.9	46.5
Final Energy Consumption 2020-2030	35.0	33.7	34.0	31.5	32.4	32.6
Primary Energy Intensity 2020-2030 (toe/M€'10)	153	145	132	110	111	108
Energy Intensity GAE/GDP2010 (toe/M€'10)	164	157	143	122	125	123
Energy per Capita - GIC/pop (kgoe/cap)	5384	5735	5429	4956	5143	5049
Final Electricity per Capita (KWh/cap)	14526	14504	14048	12810	12942	12732
Import Dependency (%)	**39.3**	**37.9**	**37.8**	**29.3**	**32.3**	**26.6**
of Solid Fossil Fuels	105.4	105.9	113.7	97.4	115.7	101.3
of Hard Coal	107.7	104.3	115.2	99.6	116.8	105.3
of Oil and Petroleum Products	100.8	103.9	93.7	103.5	96.2	84.5
of Crude and NGL	100.6	100.4	99.0	100.7	100.0	97.2
of Natural Gas	100.0	100.0	100.0	100.0	100.0	102.1
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		40.5	47.2	53.6	53.8	54.5
RE-T – Transport		6.2	9.2	25.1	31.1	32.1
RES-E – Electricity Generation		50.9	56.0	65.8	64.9	65.9
RES-H&C – Heating and Cooling		51.8	60.9	68.6	68.5	69.1
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	56.6	55.7	55.0	45.2	45.1	44.8
GHG Emissions – National total*	70.4	68.6	66.4	55.7	55.5	55.5
Main Emissions Indicators						
GHG National Total Emissions/index 1990	96.9	94.3	91.4	76.6	76.4	76.3
Total GHG per Capita (t CO_2 eq./cap)	7.9	7.6	7.1	5.7	5.6	5.5

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

5.28 United Kingdom

Mtoe, unless otherwise stated	2000	2005	2010	2015	2016	2017
Production	**272.3**	**205.5**	**146.4**	**116.4**	**118.0**	**118.1**
Solid Fossil Fuels	18.7	12.1	10.9	5.1	2.5	1.8
of which Hard Coal	18.7	12.1	10.9	5.1	2.5	1.8
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	131.7	88.8	65.4	47.0	49.3	48.3
of which Crude Oil	131.6	88.5	65.4	47.0	49.3	48.3
Natural Gas	97.6	79.4	49.8	35.0	35.9	36.0
Nuclear	21.9	21.1	13.9	15.5	15.4	15.1
Renewables and Biofuels	2.3	3.5	5.8	12.8	13.6	15.6
Wastes, Non-Renewable	0.2	0.7	0.5	1.0	1.3	1.2
Net Imports	**-40.3**	**31.7**	**62.6**	**72.8**	**68.2**	**66.4**
Solid Fossil Fuels	14.5	27.3	16.0	14.6	6.1	5.9
of which Hard Coal	14.4	26.7	16.3	13.9	5.2	5.2
Oil and Petroleum Products	-46.7	-2.7	10.9	27.0	25.4	25.8
of which Crude Oil and NGL	-43.0	-0.2	9.6	14.0	9.5	10.3
Natural gas	-9.3	6.0	33.9	26.5	32.3	30.9
Renewables and Biofuels	0.0	0.4	1.6	2.9	2.9	2.6
Electricity	1.2	0.7	0.2	1.8	1.5	1.3
Gross Inland Consumption	**233.3**	**234.8**	**213.0**	**191.5**	**188.6**	**185.5**
Solid Fossil Fuels	36.5	37.7	31.9	24.7	12.3	9.9
of which Hard Coal	36.6	37.3	32.3	23.9	11.6	9.2
of which Brown Coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Petroleum Products	83.7	85.3	74.3	71.0	71.9	71.9
of which Crude and NGL	89.8	88.1	75.3	61.0	58.8	59.0
Natural Gas	87.4	85.5	84.8	61.9	69.5	67.8
Nuclear	21.9	21.1	13.9	15.5	15.4	15.1
Renewables and Biofuels	2.3	3.9	7.4	15.7	16.5	18.2
Electricity	1.2	0.7	0.2	1.8	1.5	1.3
Waste, Non-Renewable	0.2	0.7	0.5	1.0	1.3	1.2
Available for Final Consumption	**150.3**	**148.7**	**139.2**	**128.6**	**130.8**	**129.0**
Final Non-Energy Consumption	**11.3**	**11.4**	**7.9**	**7.4**	**7.5**	**7.5**
Final Energy Consumption	**139.6**	**137.7**	**130.1**	**120.1**	**122.6**	**121.2**
by Fuel/Product						
Solid Fossil Fuels	3.7	2.5	2.4	2.3	1.9	1.7
Oil and Petroleum Products	52.8	53.4	48.6	47.8	48.8	48.8
Natural Gas	51.4	49.8	46.5	37.7	39.0	37.9
Renewables and Biofuels	0.6	0.6	2.8	4.7	5.3	5.4
Solid Biofuels and Renewable Waste	0.5	0.4	1.6	2.5	2.8	3.0
Solar Thermal	0.0	0.0	0.0	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid Biofuels	0.0	0.1	1.2	0.9	0.9	0.9
Biogases	0.1	0.1	0.1	0.1	0.3	0.3
Waste, Non-Renewable	0.0	0.1	0.1	0.1	0.1	0.1
Electricity	28.3	30.0	28.3	26.1	26.1	25.9
Heat	2.4	1.3	1.3	1.3	1.3	1.3
by Sector						
Industry	33.9	30.5	25.6	22.9	22.5	22.7
Transport	42.2	43.3	40.4	40.9	41.8	41.9
Residential	43.1	44.2	45.5	37.3	38.5	37.1
Services	16.9	16.8	16.5	16.9	17.5	17.1
Agriculture and Fishing	1.2	0.9	1.0	1.2	1.3	1.4
Others	2.4	2.0	1.0	1.0	1.1	1.1

Methodology, Sources and Notes: **See Appendices**

	2000	2005	2010	2015	2016	2017
Installed Electricity Capacity (GW)	**78.4**	**82.4**	**93.7**	**96.2**	**97.5**	**103.5**
Combustible Fuels	61.2	64.7	72.9	58.3	55.4	56.9
Nuclear	12.5	11.9	10.9	9.5	9.5	9.4
Hydro	4.3	4.3	4.4	4.5	4.6	4.6
Wind	0.4	1.6	5.4	14.3	16.2	19.8
Solar	0.0	0.0	0.1	9.6	11.9	12.8
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel (TWh)	**377.1**	**398.4**	**382.1**	**338.9**	**339.3**	**338.3**
Solid Fossil Fuels, Peat & Products, Oil Shale	120.0	134.6	107.6	75.9	30.7	22.5
Oil and Petroleum Products	8.4	5.3	4.8	2.0	1.9	1.6
Natural Gas	150.4	154.3	176.8	101.0	144.1	137.5
Nuclear	85.1	81.6	62.1	70.3	71.7	70.3
Renewables and Biofuels	12.7	19.9	29.3	86.1	86.1	102.2
Wastes non-RES	0.5	2.6	1.4	3.6	4.8	4.2
Cogeneration Heat and Power						
CHP Electrical Capacity (GW)			6.1	5.9	4.6	4.5
CHP Electricity Generation (TWh)			23.6	19.4	19.8	21.6
CHP in Total Electricity Generation (%)			6.2	5.7	5.8	6.4
CHP Heat Production (PJ)			155.5	124.2	129.8	139.8
Transport Fuels (ktoe)						
Final Consumption Petroleum Products	41468	42839	38924	39559	40428	40496
of which LPG	25	135	116	90	78	74
of which Motor Gasoline	22858	19975	15598	12926	12784	12553
of which Gas/Diesel Oil	17795	21547	22392	25710	26730	27004
Final Consumption Biofuels	0	69	1151	933	946	934
Pure and Blended Biogasoline	0	43	321	404	386	383
Pure and Blended Biodiesel	0	26	830	529	560	551
Main Energy Indicators						
Primary Energy Consumption 2020-2030	222.0	223.5	205.1	183.0	179.8	176.8
Final Energy Consumption 2020-2030	153.3	153.0	143.1	132.6	134.4	133.3
Primary Energy Intensity 2020-2030 (toe/M€'10)	141	123	111	89	86	83
Energy Intensity GAE/GDP2010 (toe/M€'10)	149	131	117	95	92	88
Energy per Capita - GIC/pop (kgoe/cap)	3968	3902	3408	2953	2884	2817
Final Electricity per Capita (KWh/cap)	5604	5794	5263	4681	4648	4567
Import Dependency (%)	**-17.1**	**13.4**	**29.0**	**37.5**	**35.7**	**35.3**
of Solid Fossil Fuels	39.6	72.3	50.3	59.2	49.2	59.2
of Hard Coal	39.4	71.6	50.5	58.0	45.0	56.1
of Oil and Petroleum Products	-54.4	-3.1	14.1	36.7	34.0	34.7
of Crude and NGL	-47.9	-0.2	12.8	22.9	16.2	17.4
of Natural Gas	-10.7	7.0	40.0	42.8	46.5	45.5
Renewable in Gross Final Energy (%)						
Overall RES (with aviation cap)		1.3	3.7	8.4	9.2	10.2
RE-T – Transport		0.5	3.3	4.5	5.0	5.1
RES-E – Electricity Generation		4.1	7.5	22.3	24.6	28.1
RES-H&C – Heating and Cooling		0.8	2.6	6.1	7.0	7.5
Gases Emissions (Mio ton CO_2)						
CO_2 Emissions – National total*	594.5	601.9	540.9	453.0	430.8	419.5
GHG Emissions – National total*	741.9	726.2	642.1	541.5	517.0	505.4
Main Emissions Indicators						
GHG National Total Emissions/index 1990	91.6	89.7	79.3	66.9	63.8	62.4
Total GHG per Capita (t CO_2 eq./cap)	12.6	12.1	10.3	8.3	7.9	7.7

* Total emissions without LULUCF, with ind. CO_2, including international aviation, excl. international maritime transport.

Appendices

#6


Appendices

Summary

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
BE	Belgium	Belgique/België	1	BE
BG	Bulgaria	Bulgaria*	2	BG
CZ	Czechia	Česko	3	CZ
DK	Denmark	Danmark	4	DK
DE	Germany	Deutschland	5	DE
EE	Estonia	Eesti	6	EE
IE	Ireland	Éire/Ireland	7	IE
EL	Greece	Elláda*	8	GR
ES	Spain	España	9	ES
FR	France	France	10	FR
HR	Croatia	Hrvatska	11	HR
IT	Italy	Italia	12	IT
CY	Cyprus	Kýpros*	13	CY
LV	Latvia	Latvija	14	LV
LT	Lithuania	Lietuva	15	LT
LU	Luxembourg	Luxembourg	16	LU
HU	Hungary	Magyarország	17	HU
MT	Malta	Malta	18	MT
NL	Netherlands	Nederland	19	NL
AT	Austria	Österreich	20	AT
PL	Poland	Polska	21	PL
PT	Portugal	Portugal	22	PT
RO	Romania	România	23	RO
SI	Slovenia	Slovenija	24	SI
SK	Slovakia	Slovensko	25	SK
FI	Finland	Suomi/Finland	26	FI
SE	Sweden	Sverige	27	SE
UK	United Kingdom	United Kingdom	28	GB

* Latin translitteration.

Interinstitutional Style Guide (ISG): http://publications.europa.eu/code/
Eurostat Website: http://ec.europa.eu/eurostat/
ISO 3166 Country Codes Maintenance Agency: https://www.iso.org/iso-3166-country-codes.html

Appendix 2 – Main Energy Flows in Eurostat Energy Balances – EN

ESTAT Energy Database – EN	
Code	**Dissemination Label**
PPRD	Primary production
RCV_RCY	Recovered and recycled products
IMP	Imports
EXP	Exports
STK_CHG	Change in stock
NRGSUP	Total energy supply
INTMARB	International maritime bunkers
GIC	Gross inland consumption
INTAVI	International aviation
GAE	Gross available energy
INTMARB	International maritime bunkers
TI_E	Transformation input
TO	Transformation output
NRG_E	Energy sector
DL	Distribution losses
AFC	Available for final consumption
FC_NE	Final non-energy consumption
FC_E	Final energy consumption
FC_IND_E	Final energy consumption – Industry
FC_IND_IS_E	Iron and steel
FC_IND_CPC_E	Chemical and petrochemical
FC_IND_NFM_E	Non-ferrous metals
FC_IND_NMM_E	Non-metallic minerals
FC_IND_TE_E	Transport equipment
FC_IND_MAC_E	Machinery
FC_IND_MQ_E	Mining and quarrying
FC_IND_FBT_E	Food, beverages and tobacco
FC_IND_PPP_E	Paper, pulp and printing
FC_IND_WP_E	Wood and wood products
FC_IND_CON_E	Construction
FC_IND_TL_E	Textile and leather
FC_IND_NSP_E	Not elsewhere specified (industry)
FC_TRA_E	Transport
FC_TRA_RAIL_E	Rail
FC_TRA_ROAD_E	Road
FC_TRA_DAVI_E	Domestic aviation
FC_TRA_DNAVI_E	Domestic navigation
FC_TRA_PIPE_E	Pipeline transport
FC_TRA_NSP_E	Not elsewhere specified (transport)
FC_OTH_E	Other
FC_OTH_CP_E	Commercial and public services
FC_OTH_HH_E	Households
FC_OTH_AF_E	Agriculture and forestry
FC_OTH_FISH_E	Fishing
FC_OTH_NSP_E	Not elsewhere specified (other)
STATDIFF	Statistical differences

Source: Energy Balance Guide: https://ec.europa.eu/eurostat/web/energy/data/energy-balances

Appendix 3 – Main Energy Products in Eurostat Energy Balances – EN

ESTAT Energy Database – EN	
Code	**Dissemination label**
C0000X0350-0370	Solid fossil fuels
C0110	Anthracite
C0121	Coking coal
C0129	Other bituminous coal
C0210	Sub-bituminous coal
C0220	Lignite
C0320	Patent fuels
C0311	Coke oven coke
C0312	Gas coke
C0340	Coal tar
C0330	Brown coal briquettes
C0350-0370	Manufactured gases
C0360	Gas works gas
C0350	Coke oven gas
C0371	Blast furnace gas
C0379	Other recovered gases
P1000	Peat and peat products
P1100	Peat
P1200	Peat products
S2000	Oil shale and oil sands
04000XBIO	Oil and petroleum products
04100_TOT	Crude oil
04200	Natural gas liquids
04300	Refinery feedstocks
04400X4410	Additives and oxygenates (excluding biofuel portion)
04500	Other hydrocarbons
04610	Refinery gas
04620	Ethane
04630	Liquefied petroleum gas
04652XR5210B	Motor gasoline (excluding biofuel portion)
04651	Aviation gasoline
04653	Gasoline-type jet fuel
04661XR5230B	Kerosene-type jet fuel (excluding biofuel portion)
04669	Other kerosene
04640	Naphtha
04671XR5220B	Gas oil and diesel oil (excluding biofuel portion)
04680	Fuel oil
04691	White spirit and special boiling point industrial spirits
04692	Lubricants
04695	Bitumen
04694	Petroleum coke
04693	Paraffin waxes
04699	Other oil products n.e.c.

Code	Dissemination label
G3000	Natural gas
RA000	Renewables and biofuels
RA100	Hydro power
RA500	Tide, wave and ocean
RA300	Wind power
RA420	Solar photovoltaic
RA410	Solar thermal
RA200	Geothermal
R5110-5150_W6000RI	Primary solid biofuels
R5160	Charcoal
R5300	Biogases
W6210	Renewable municipal waste
R5210P	Pure biogasoline
R5210B	Blended biogasoline
R5220P	Pure biodiesels
R5220B	Blended biodiesels
R5230P	Pure bio jet kerosene
R5230B	Blended bio jet kerosene
R5290	Other liquid biofuels
RA600	Ambient heat (heat pumps)
W6100_6220	Non-renewable waste
W6100	Industrial waste (non-renewable)
W6220	Non-renewable municipal waste
N900H	Nuclear heat
H8000	Heat
E7000	Electricity

Source: Energy Balance Guide https://ec.europa.eu/eurostat/web/energy/data/energy-balances

Appendix 4 – 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 and 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
M€ '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 5 – Conversion Factors

ENERGY

FROM: \ TO:	TJ	Mtoe	GWh
	Multiply by		
Terajoule (TJ)	1	1/41 868	/3.6
Million ton of oil equivalent (Mtoe)	X 41 868	1	X 11 630
Gigawatt-hour (GWh)	X 3.6	/11 630	1

VOLUME

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

MASS

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

Appendix 6 – Average Calorific Values*

Product	Net calorific value (TJ/kt)
Anthracite	26.7
Coking coal	28.2
Other bituminous coal	25.8
Sub-bituminous coal	18.9
Lignite	11.9
Patent fuels	20.7
Coke oven coke	28.2
Gas coke	28.2
Coal tar	28.0
Brown coal briquettes**	19.0
Peat	9.76
Peat products*	16.0
Oil shale and oil sands	8.9
Crude oil	42.3
Natural gas liquids	44.2
Refinery feedstocks	43.0
Additives and oxygenates**	42.5
Other hydrocarbons (w/o bio)**	42.5
Refinery gas	49.5
Ethane	46.4
Liquefied petroleum gases	47.3
Motor gasoline (w/o bio)	44.3
Aviation gasoline**	44.3
Gasoline-type jet fuel**	44.3
Kerosene-type jet fuel**	44.1
Other kerosene	43.8
Naphtha	44.5
Gas oil and diesel oil (w/o bio)	43.0
(Residual) Fuel oil	40.4
White spirit and SPB	40.2
Lubricants	40.2
Bitumen	40.2
Petroleum coke	32.5
Paraffin waxes	40.2
Other oil products	40.2
Charcoal	29.5
Pure biogasoline	27.0
Blended biogasoline	27.0
Pure biodiesels	27.0
Blended biodiesels	27.0
Pure bio jet kerosene**	44.0
Blended bio jet kerosene**	44.0
Other liquid biofuels	27.4

* If no calorific values are provided by a reporting country, Eurostat uses the net calorific values enacted in Commission Regulation (EU) No 601/2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council.

** Eurostat estimates for products not covered by the Commission Regulation (EU) No 601/2012. These estimates take into account the Commission Decision 2007/589/EC establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council.

Appendix Glossary

Appendix 7 – Glossary

In parenthesis are the codes for energy products and energy flows and indicators from the EUROSTAT Energy database/EUROBASE as of June 2019. More extensive explanations is available on Eurostat website at: https://ec.europa.eu/eurostat/web/energy/data/energy-balances

ALL FUELS

'All fuel' (WHICH corresponds to the code 'Total'), covers all energy products. These consist of solid fossil fuels (including hard coal and derivatives, brown coal and derivatives, peat and derivatives, oil shale and oil sands, oil and petroleum products (such as LPG, refinery gas, motor spirit, kerosene, gas/diesel oil, residual fuel oil), natural gas, manufactured gases, renewable and biofuels (such as hydro power, wind energy, biomass, wastes, geothermal energy, ambient heat for heat pumps), electrical energy, heat energy and nuclear heat.

AMBIENT HEAT (HEAT PUMPS)

It is the ambient heat (RA600) captured by heat pumps as a fuel. It is included at the renewable energy category and can either be used to produced heat for sale (input in transformation for heat production) or used directly by end-users (final energy consumption). The ambient heat captured by heat pumps is included in Eurostat's energy balances as of January 2019 edition.

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: ELECTRICITY AND HEAT GENERATION

Autoproducers are plants which generate electricity and/or heat for their own use.

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: total energy supply (NRGSUP) + transformation output (TO) - transformation input (TI_E) - consumption of the energy sector (NRG_E) - distribution losses (DL).

BIOFUELS

Biofuels are fuels derived directly or indirectly from biomass. Biofuels used for non-energy purposes are excluded from the scope of energy statistics. Biofuels can be split up into three categories: Solid biofuels, liquid biofuels and biogases. Liquid or gaseous fuels used primarily for transport, produced from biomass and renewable waste. The liquid biofuels groups pure biogasoline (R5210P), blended biogasoline (R5210B), pure biodiesel

(R5220P), blended biodiesel (R5220B), pure bio jet kerosene (R5230P), blended bio jet kerosene (R5230B) and other liquid biofuels (R5290).

BIOFUELS AND RES WASTE

Biofuels and RES municipal wastes (W6210), covers organic, non-fossil material of biological origin, which may be used for heat production or electricity generation. They comprise primary solid biofuels such as wood and wood waste (R5110-5150_W6000RI), biogases (R5300), renewable municipal waste (W6210), charcoal (R5160) and biofuels such as: pure gasoline (R5210P), blended gasoline (R5210B), pure biodiesel (R5220P), blended biodiesel (R5220B), pure bio jet kerosene (R5230P), blended bio jet kerosene (R5230B) and other liquid biofuels (R5290).
The non-renewable part of municipal waste (W6220) and the industrial waste (W6100) are included in non-renewable waste (W6100_6220).

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 8000 hours a year (i.e. 24 hours per day for about 11 months, assuming one month per year for annual maintenance). It is equal to the total annual energy production, divided by the cumulative capacity converted to average statistical year base.

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.

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 into electricity level (i.e. in gross electricity generation).

ENERGY AVAILABLE FOR FINAL CONSUMPTION

Energy available for final consumption, [AFC], covers the energy placed at the disposal of final users. This code is calculated as follows: total energy supply [NGSUP] + transformation output [TO] - transformation input [TI] - consumption of the energy sector [NRG_E] - distribution losses [DL]. It includes final non-energy consumption [FC_NE] and Final energy consumption [FC_E].

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: net imports (as imports – exports, i.e. [IMP]-[EXP])/(gross inland consumption [GIC] +international maritime bunkers [INTMARB]).

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 available energy [GAE] to Gross Domestic Product [GDP].

ENERGY MIX

The energy mix is the proportion of main sources in gross inland consumption (excluding electricity and heat).

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. The Eurobase is available at: https://ec.europa.eu/eurostat/data/database

FINAL ENERGY CONSUMPTION (FEC)

Final energy consumption covers energy supplied to the final consumer's sectors for all energy uses [FC_E]. It excludes deliveries to the energy transformation sector and to the energy industries themselves. It is the sum of final energy consumption by industry [FC_IND_E], transport [FC_TRA_E], household [FC_OTH_HH_E], commercial & public services [FC_OTH_CP_E], agriculture & forestry [FC_OTH_AF_E], fishing [FC_OTH_FISH_E] and other unspecified [FC_OTH_NSP_E].

FINAL ENERGY CONSUMPTION 2020-2030

In order to allow comparison with Europe 2020 targets established prior to the actual methodology of energy balance, this Eurostat indicator [FEC 2020-2030] estimates Final energy consumption to that calculated under the old methodology – the methodology in place at the time of establishing the Directive 2012/27/EU and Europe 2020 energy efficiency targets. This indicator should be used also for tracking progress towards Europe 2030 energy efficiency targets.

FINAL ENERGY CONSUMPTION – TRANSPORT

Final energy consumption – transport [FC_TRA_E], covers the consumption in all types of transportation, i.e., rail, road, domestic aviation, domestic navigation, pipeline transport and transport consumption not elsewhere specified.

FINAL NON-ENERGY CONSUMPTION

Final non-energy consumption covers the use of energy products for non-energy purposes [FC_NE].

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 – GREENHOUSE GAS

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 fluorocarbons, perfluorocarbons and sulphur hexafluoride.

GHG INTENSITY OF THE ENERGY CONSUMPTION

GHG Intensity of the Energy Consumption [kg CO2 eq./toe] represents the average emission rate of greenhouse gas (GHG) emissions from fuel combustion activities of an economy relative to its gross inland consumption.

GHG GDP INTENSITY

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

GROSS AVAILABLE ENERGY

Gross available energy [GAE] represents the quantity of energy necessary to satisfy all energy demand of entities operating under the authorities of the geographical entity under consideration. Gross available energy is defined by the formula: primary production [PPRD] + Recovered & Recycled Products [RCV_RCY] + Imports [IMP] – Exports [EXP] + Stock changes [STK_CHG].

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 ENERGY CONSUMPTION

Gross final consumption of energy means the energy commodities delivered for energy purposes to industry, transport, households and services (including public services), agriculture, forestry and fisheries, including the consumption of electricity and heat by the energy branch for electricity and heat production and including losses of electricity and heat in distribution and transmission. 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

Gross inland consumption [GIC] represents the quantity of energy necessary to satisfy inland consumption of the geographical entity under consideration, i.e. the Total Energy Supply [NRGSUP], plus the international aviation [INTAVI]. It is also calculated using the following formula: gross available energy [GAE] – International maritime bunkers [INTMARB]. Gross inland consumption is calculated to ensure continuity and transition from the old Eurostat energy balance into the new Eurostat energy balance methodology.

GROSS INLAND CONSUMPTION 2020-2030

This indicator [GIC 20202-2030] estimates Gross inland consumption to that calculated under the old methodology – the methodology in place at the time of establishing the Europe 2020 targets. This indicator should be used also for tracking progress towards Europe 2030 targets.

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 households 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 1 000 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:	to the next:
	multiply by 1 000 000	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.

MANUFACTURED GASES

Manufactured gases [C0350-0370] covers coke oven gas [4210], blast furnace gas [4220], gas work gas [4230], and other recovered gas [4240].

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 [IMP] and exports [EXP].

NET ELECTRICITY GENERATION

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

OIL AND PETROLEUM PRODUCTS

Oil and petroleum products [04000XBIO] include crude oil [04100_TOT], natural gas liquids [04200], refinery feedstocks [04300], additives and oxygenates (excl biofuel portion) [04400X4410], other hydrocarbons [04500] and the oil products such as LPG [04630], refinery gas [04620], ethane [04620], motor gasoline [04652XR5210B], aviation gasoline [04651], gasoline-type jet fuel [04653], kerosene-type jet fuels [04661XR5230B], other kerosene [04669], naphtha [04640], gas/diesel oil [04671XR5220B], fuel oil [4680], white spirit [04691], lubricants [04692], bitumen [04695], petroleum coke [04694], paraffin waxes [04693] and other oil products [04699].

PRIMARY ENERGY CONSUMPTION

Primary energy consumption corresponds to the Gross Inland consumption minus the energy included in the final non-energy consumption.

PRIMARY ENERGY CONSUMPTION 2020-2030

This indicator [PEC 2020-2030] reflects on the definition given in Article 2 of the Directive 2012/27/EU as well as the methodology of energy balances in place at the time of establishing the Directive and Europe 2020 energy efficiency targets. This indicator should be used also for tracking progress towards Europe energy efficiency 2030 targets. This is an aggregate with the following arithmetic definition: [PEC 20202-2030] = [GIC 2020-2030] – Final non-energy consumption [FC_NE].

PRIMARY ENERGY INTENSITY 2020-2030

Primary energy intensity 2020-2030 gives an indication of the effectiveness with which primary energy consumption produces added value. It is defined as the ratio of Primary Energy Consumption 2020-2030 to Gross Domestic Product.

PRIMARY ENERGY PRODUCTION – INDIGENOUS PRODUCTION

Primary production [PPRD] is 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. In general for solid fossil fuels and peat, 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. For oil and petroleum products,

production includes only marketable production, and excludes any quantities returned to formation. For natural gas, the production includes all quantities used within the natural gas industry, in gas extraction, pipeline systems and processing plants. For nuclear, the 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. For renewables generating electricity (hydro, wind, solar thermal-electric and photovoltaic) production is calculated on the basis of the gross electricity generated and a conversion factor of 3600 kJ/kWh. For geothermal, 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. 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 bioliquids, 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

RENEWABLES AND BIOFUELS (RES):

Renewables and biofuels [RA000] cover hydro power [RA100], tide, wave and ocean power [RA500], wind power [RA300], solar photovoltaic [RA420] and solar thermal [RA410], geothermal [RA200], renewable municipal waste [W6210], ambient heat [RA600] and biofuels such as: primary solid biofuels [R5110-5150_W6000RI], charcoal [R5160], pure biogasoline [R5210P], blended biogasoline [R5210B], pure biodiesels [R5220P], blended biodiesels [R5220B], pure bio jet kerosene [R5230P], blended bio jet kerosene [R5230B] and other liquid biofuels [R5290].

SOLAR ENERGY

Solar energy is solar radiation exploited for hot water production - solar thermal [RA410] and electricity generation – solar photovoltaic [RA420]. This energy production, is the heat available to the heat transfer medium, i.e. the incident solar energy less the optical and collectors' losses.

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.

SOLID FOSSIL FUELS

Solid fossil fuels [C0000X0350-0370] category of energy products includes Hard coal [C0100] (further including Anthracite [C0110], Coking coal [C0121] and Other bituminous coal [C0129]), Brown coal [C0200] (further including Sub-bituminous coal [C0210] and Lignite [C220]) and Coal products [C0300] (further including Patent fuel [C0320], Coke oven coke [C0311], Gas coke [C0312], Coal tar [C0340] and Brown coal briquettes [C0330]). Quantities of fuels extracted or produced, calculated after any operation for removal of inert matter.

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.

TOTAL ENERGY SUPPLY

Total energy supply [NRGSUP] is one of the most important aggregate of energy balance and represents the quantity of energy necessary to satisfy inland consumption (inland fuel deliveries) of the geographical entity under consideration.
Total energy supply is the sum of Primary production [PPRD], Recovered & recycled products [RCV_RCY], Imports [IMP] from which are subtracted: Exports [EXP], Stock changes [STK_CHG], International maritime bunkers [INTMARB] and international aviation [INTAVI].
Total Energy Supply is also equivalent to Gross Inland Consumption [GIC] minus International Aviation [INTAVI].

TOTAL PRIMARY ENERGY SUPPLY

Total primary energy supply [TPES] is an IEA energy flow, defined as the quantity of energy necessary to satisfy inland consumption of the geographical entity under consideration. It is equal to the indigenous production + imports – exports - international marine bunkers - international aviation bunkers +/- stock changes. It corresponds to the Eurostat's Total energy supply [NRGSUP].

TRANSFORMATION INPUT

Transformation input [TI_E] covers all inputs into the transformation plants destined to be converted into derived products. Transformation is only recorded when the energy products are physically or chemically modified to produce other energy products, electricity and/or heat. Quantities of fuels used for heating, operation of equipment and in general in support of the transformation are not included in Transformation input but in Energy sector [NRG_E].

Transformation Input is the sum of the inputs for electricity & heat generation plants [TI_EHG_E], coke ovens [TI_CO_E], blast furnaces [TI_BF_E], gas works [TI_GW_E], refineries & petrochemical industry [TI_RPI_E], patent fuel plants [TI_PF_E], BKB & PB plants [TI_BKBPB_E], coal liquefaction plants [TI_CL_E], for blended natural gas [TI_BNG_E], liquid biofuels blended [TI_LBB_E], charcoal production plants [TI_CPP_E], gas-TI-liquids plants [TI_GTL_E] and others not elsewhere specified [TI_NSP_E].

TRANSFORMATION OUTPUT

Transformation output [TO_E] is the result of the transformation process of energy products. This output covers production of derived products (secondary products, by-products and co-products). Transformation output refers always to gross production of derived products, i.e. the products used for the own consumption of the transformation plants are included in the transformation output and their use is reported in the Energy sector. TransformaTOon output is the sum of the output from electricity & heat generaTOon plants [TO_EHG_E], coke ovens [TO_CO_E], blast furnaces [TO_BF_E], gas works [TO_GW_E], refineries & petrochemical industry [TO_RPI_E], patent fuel plants [TO_PF_E], BKB & PB plants [TO_BKBPB_E], coal liquefaction plants [TO_CL_E], for blended natural gas [TO_BNG_E], liquid biofuels blended [TO_LBB_E], charcoal production plants [TO_CPP_E], gas-TO-liquids plants [TO_GTL_E] and others not elsewhere specified [TO_NSP_E].

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 8 – Notes

APPENDIX 8.1

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

Total Energy Supply according to 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. Auto-producers heat, used by the undertaking for their own processes, is excluded.

1.1.10, PAGE 19

CO_2 Intensity refers to CO_2 emissions activity intensity, measured by its energy gross inland consumption.

1.3.1, PAGE 27

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

APPENDIX 8.2

2.1.1, PAGES 35-37

Production comprises primary production [PPRD] and products recovered & recycled [RCV_RCY].

2.1.2, PAGES 38-40

Net imports correspond to the difference between imports [IMP] and exports [EXP].

2.1.4, PAGES 42-45

Gross inland consumption [GIC] represents the quantity of energy necessary to satisfy inland consumption of the geographical entity under consideration, including the international aviation [INTAVI]. This aggregate is calculated to ensure continuity and transition from the old Eurostat energy balance into the new Eurostat energy balance.

2.2.1, PAGES 47-51

Solid fossil fuels – see glossary

2.2.2, PAGES 52-56

Total oil and petroleum products – see glossary. Crude oil and NGL is a subgroup containing only crude oil [O4100_TOT] and natural gas liquids [O4200] codes.

2.3, PAGES 68-74

See glossary energy import dependency.
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 81

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

2.5.2, PAGE 82

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

2.5.3, PAGES 83-86

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

2.6.1, PAGES 87-89

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 90-94

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 96-97

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 98-105

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 100-101

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 105

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

2.8, PAGES 107-109

The data collection for CHP generation is not based in the annual Heat survey, but instead on a specific survey in accordance with the Energy Efficiency Directive 2018/2002/EU. Differences can appear between the two datasets.

2.9, PAGES 110-112

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 113-115

The tables include the total final energy consumption of petroleum products, and two of its main products: motor gasoline [O4652XR5210B], and Gas oil and diesel oil [O4671XR5220B], and the total final energy consumption of biofuels with its two main products: biogasoline [R5210] and biodiesel [R5220].

2.11.1, PAGE 116

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 119

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

2.13, PAGES 126-132

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 by the Member States to DG ENERGY as those being the most frequently encountered for the specific categories of sales. The prices 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 8.3

3.1.1, PAGE 134

Energy activities sector in its broad and narrow definition as defined by EUROSTAT/NACE and UN/SIC nomenclatures (sector D35 according to NACE codes).

3.2, PAGES 135-146

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.

3.3, PAGES 147-150

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.

3.5, PAGES 152-154

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.

APPENDIX 8.4

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...). 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.

APPENDIX 8.5

For products see appendix 3 and the glossary from appendix 7. For energy flows see appendix 2 and the glossary from appendix 7. For abbreviations, conversion factors and units see the explanations provided in appendices 6 and 7.

Notes

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