



European
Commission

EU energy

in figures



STATISTICAL
POCKETBOOK
2023

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: Eurostat and other European Commission's services, the European Environment Agency, the International Energy Agency.

The publication comprises five parts:

- Part 1. Overview of main data on World and European Union energy
- Part 2. Main energy statistics and indicators for the European Union and its Member States
- Part 3. Socio-economic indicators in the European Union
- Part 4. Greenhouse gas emissions in the European Union
- Part 5. Country profiles – main statistics and indicators for the European Union and its Member States

The indicators are calculated using the methodology established by the European Commission – DG Energy and aligned to Eurostat and international statistics approaches.

The appendices include a glossary and methodological notes.

This publication comprises the most recently available data at the time of release. Corrections and updates will be released periodically in the energy statistical datasheets at:

https://energy.ec.europa.eu/data-and-analysis/eu-energy-statistical-pocket-book-and-country-datasheets_en

Recommended sources of data:

European Commission websites:

DG Energy

Pocketbook and energy statistical datasheets:

https://energy.ec.europa.eu/data-and-analysis/eu-energy-statistical-pocket-book-and-country-datasheets_en

Energy data & analysis: https://energy.ec.europa.eu/data-and-analysis_en

Eurostat

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

DG Economic and Financial Affairs

AMECO: https://economy-finance.ec.europa.eu/economic-research-and-databases/economic-databases/macro-economic-database-ameco_en

DG Climate Action

Climate strategies, targets and progress reports:

https://ec.europa.eu/clima/eu-action/climate-strategies-targets_en

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/>

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Overview



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Overview

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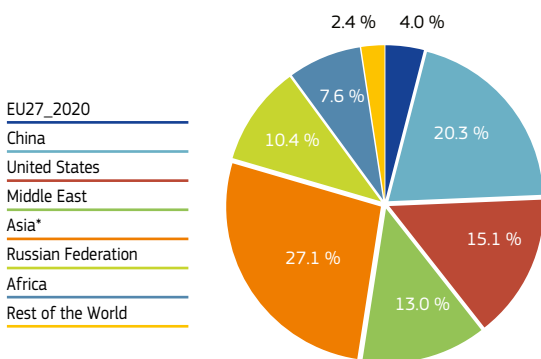
1.1 Energy in the World (Overview)

1.1.1 World Energy Production by Region

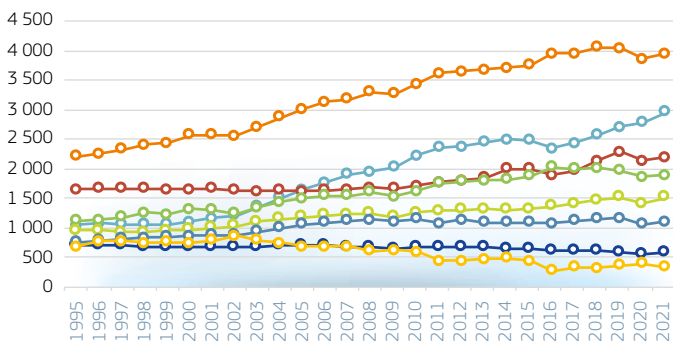
Mtoe

	2000	2010	2015	2019	2020	2021
EU27_2020	679	697	654	610	564	588
China	1 124	2 235	2 504	2 720	2 798	2 983
United States	1 666	1 723	2 019	2 306	2 157	2 214
Middle East	1 328	1 632	1 896	1 978	1 882	1 911
Asia*	2 586	3 451	3 767	4 060	3 878	3 975
Russian Federation	978	1 280	1 334	1 530	1 430	1 530
Africa	881	1 161	1 104	1 177	1 076	1 119
Rest of the World	762	601	450	373	405	354
World	10 004	12 781	13 728	14 754	14 189	14 673

TOTAL 2021 = 14673 Mtoe



World Energy Production by Region (Mtoe)



* non OECD and OECD Asia, excluding China

Source: IEA statistics, August 2023

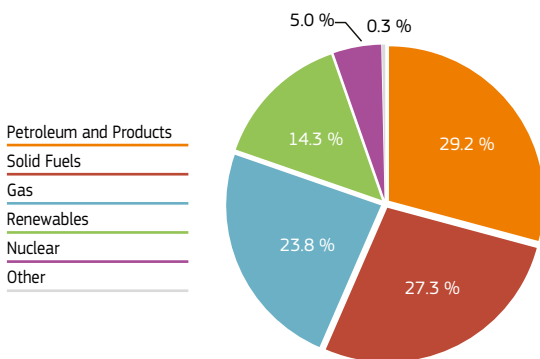
Methodology and Notes: [see appendices](#)

1.1.2 World Energy Production by Fuel

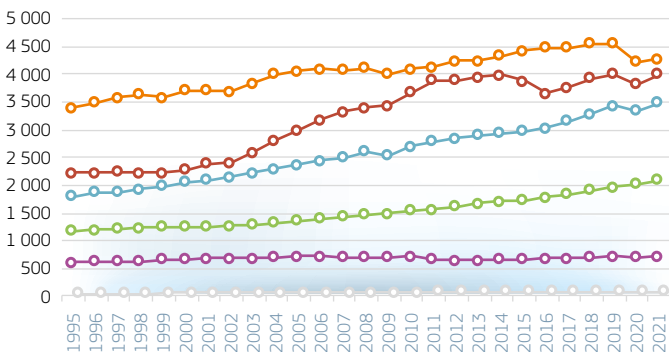
Mtoe

	2000	2010	2015	2019	2020	2021
Petroleum and Products	3711	4104	4433	4550	4232	4284
Solid Fuels	2279	3669	3872	4006	3829	4007
Gas	2060	2710	2974	3442	3353	3495
Renewables	1257	1544	1738	1978	2028	2105
Nuclear	675	719	670	728	698	732
Other	22	34	41	50	49	50
Total	10004	12781	13728	14754	14189	14673

TOTAL 2021 = 14673 Mtoe



Mtoe



Source: IEA statistics, August 2023

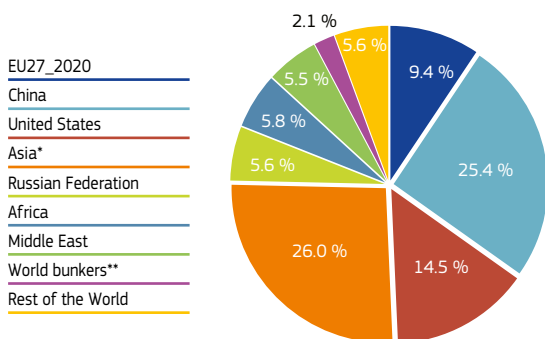
Methodology and Notes: [see appendices](#)

1.1.3 World Total Energy Supply by Region

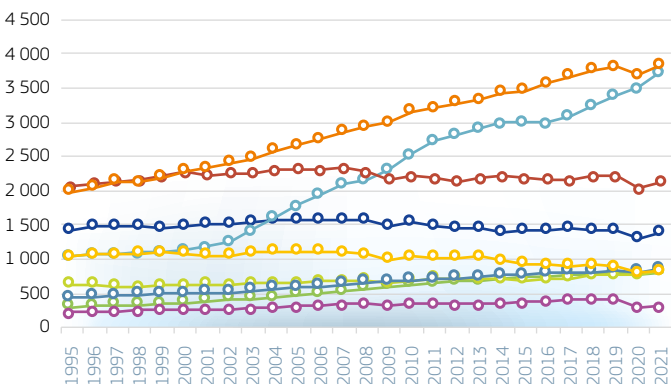
Mtoe

	2000	2010	2015	2019	2020	2021
EU27_2020	1471	1527	1409	1407	1310	1388
China	1147	2550	3013	3403	3514	3751
United States	2273	2216	2184	2212	2035	2139
Asia*	2293	3158	3463	3809	3685	3845
Russian Federation	619	693	692	773	761	833
Africa	495	685	773	838	818	853
Middle East	363	626	738	798	787	806
World bunkers**	274	359	381	425	298	315
Rest of the World	1090	1036	937	880	795	831
World	10026	12850	13591	14544	14004	14759

TOTAL 2021 = 14759 Mtoe



World Total Energy Supply by Region (Mtoe)



* non OECD and OECD Asia, excluding China

** International aviation and international navigation

Source: IEA statistics, August 2023

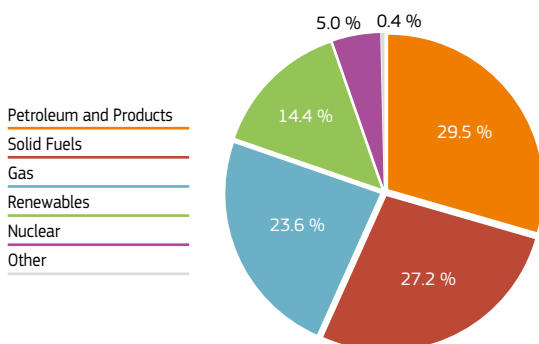
Methodology and Notes: [see appendices](#)

1.1.4 World Total Energy Supply by Fuel

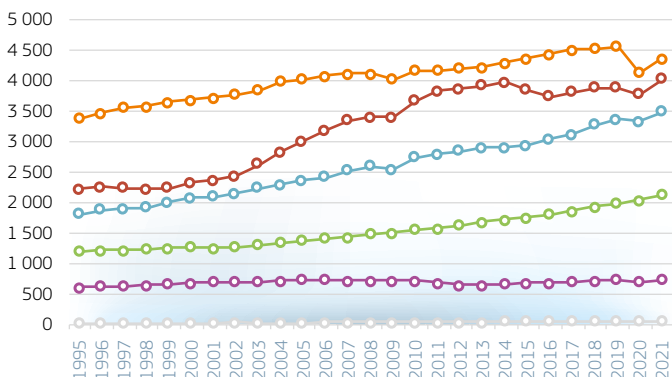
Mtoe

	2000	2010	2015	2019	2020	2021
Petroleum and Products	3684	4155	4362	4551	4129	4352
Solid Fuels	2318	3662	3846	3870	3762	4016
Gas	2068	2734	2926	3356	3322	3487
Renewables	1258	1547	1744	1987	2041	2119
*Hydro	225	296	335	364	374	369
*Geothermal	52	62	77	101	107	111
*Solar/Wind/Other	8	48	127	222	250	291
*Biofuels and Waste	994	1173	1244	1348	1358	1397
Nuclear	675	719	670	728	698	732
Other	23	34	43	51	51	52
Total	10026	12850	13591	14544	14004	14759

TOTAL 2021 = 14759 Mtoe



Mtoe



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

Source: IEA statistics, August 2023

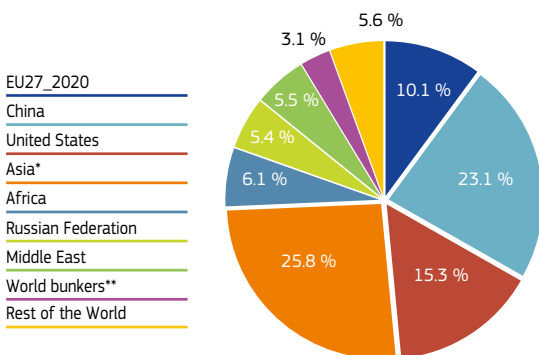
Methodology and Notes: [see appendices](#)

1.1.5 World Total Final Consumption by Region

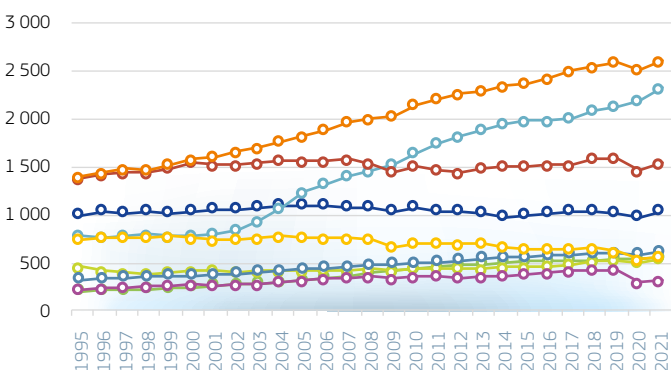
Mtoe

	2000	2010	2015	2019	2020	2021
EU27_2020	1027	1070	993	1017	963	1023
China	791	1652	1979	2129	2188	2324
United States	1546	1513	1508	1585	1458	1540
Asia*	1584	2148	2376	2589	2517	2605
Africa	366	495	561	599	589	614
Russian Federation	418	447	453	521	509	545
Middle East	249	436	512	548	537	553
World bunkers**	274	359	381	425	298	315
Rest of the World	758	710	646	612	539	563
World	7012	8829	9410	10026	9598	10082

TOTAL 2021 = 10082 Mtoe



World Total Final Consumption by Region (Mtoe)



* non OECD and OECD Asia, excluding China

** International aviation and international navigation

Source: IEA statistics, August 2023

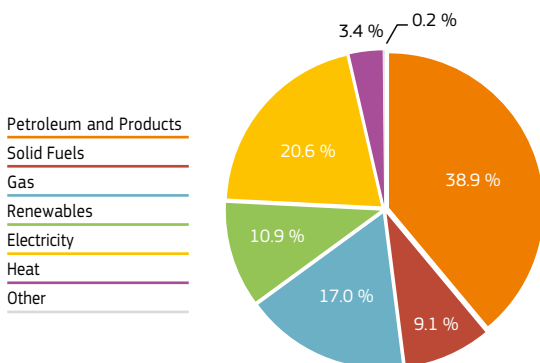
Methodology and Notes: [see appendices](#)

1.1.6 World Total Final Consumption by Fuel

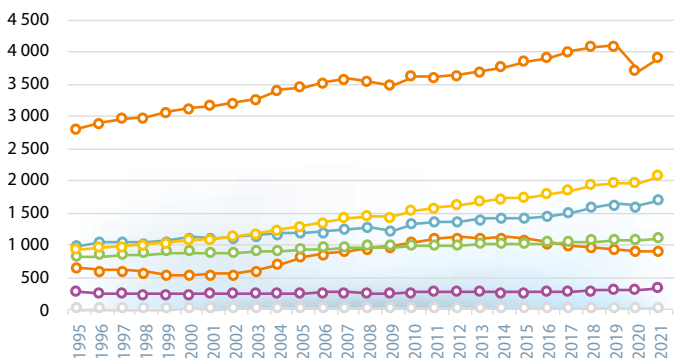
Mtoe

	2000	2010	2015	2019	2020	2021
Petroleum and Products	3 130	3 621	3 855	4 093	3 707	3 926
Solid Fuels	542	1 061	1 095	939	918	913
Gas	1 120	1 344	1 420	1 640	1 612	1 710
Renewables	878	982	1 016	1 070	1 074	1 094
Electricity	1 087	1 538	1 741	1 963	1 963	2 077
Heat	248	275	272	306	309	347
Other	7	9	11	15	15	15
Total	7 012	8 829	9 410	10 026	9 598	10 082

TOTAL 2021 = 10082 Mtoe



World Total Final Consumption by Fuel (Mtoe)



Source: IEA statistics, August 2023

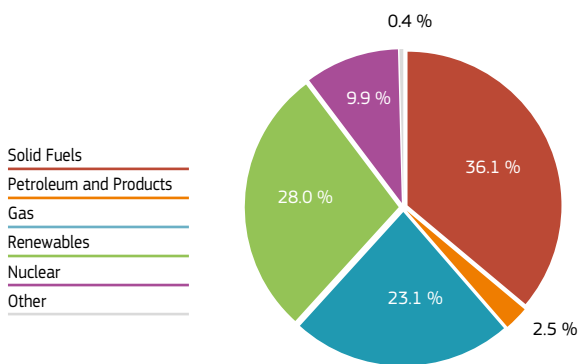
Methodology and Notes: [see appendices](#)

1.1.7 World Electricity Generation by Fuel

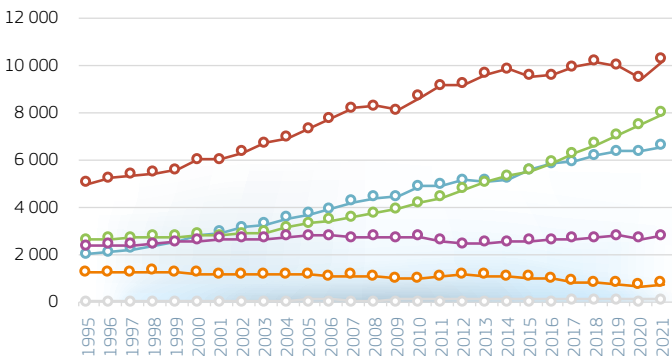
TWh

	2000	2010	2015	2019	2020	2021
Solid Fuels	5995	8674	9542	9954	9471	10252
Petroleum and Products	1184	963	1024	724	665	723
Gas	2772	4856	5553	6344	6344	6556
Renewables	2827	4200	5510	7035	7493	7948
*Hydro	2611	3447	3893	4237	4346	4293
*Solar/Wind/Other	54	408	1123	2173	2472	2935
*Biofuels and Waste	163	362	507	651	685	735
*Geothermal	52	68	81	92	95	96
Nuclear	2591	2756	2570	2790	2676	2808
Other	54	89	98	123	109	114
Total	15 423	21 538	24 297	26 969	26 759	28 402

TOTAL 2021 = 28402 TWh



TWh



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

Source: IEA statistics, August 2023

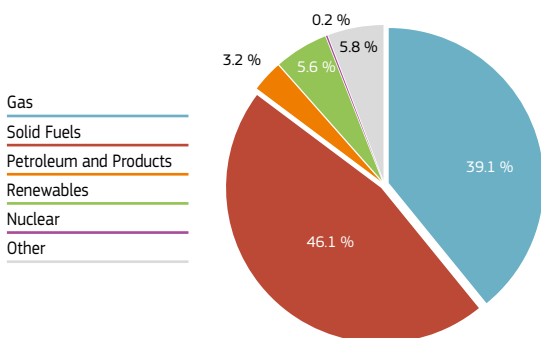
Methodology and Notes: [see appendices](#)

1.1.8 World Heat Generation by Fuel

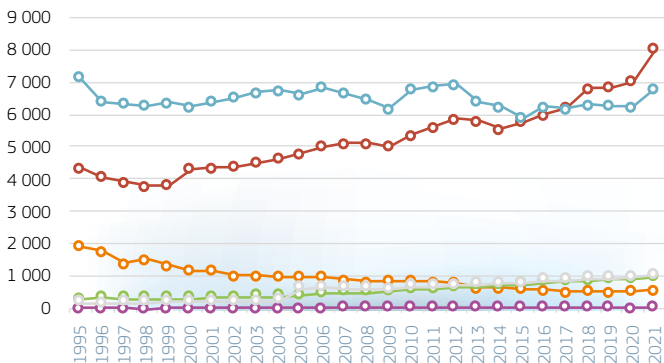
PJ

	2000	2010	2015	2019	2020	2021
Gas	6240	6776	5895	6284	6237	6812
Solid Fuels	4332	5367	5774	6852	7039	8023
Petroleum and Products	1160	845	593	508	546	565
Renewables	298	586	728	879	879	968
*Geothermal	18	31	42	51	49	50
*Solar/Wind/Other	16	363	394	457	458	500
*Biofuels and Waste	417	778	952	1171	1206	1316
Nuclear	19	27	26	26	25	26
Other	208	657	766	933	939	1011
Total	12257	14259	13781	15482	15665	17406

TOTAL 2021 = 17406 PJ



PJ



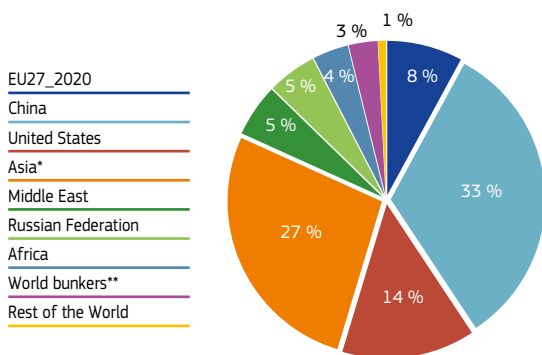
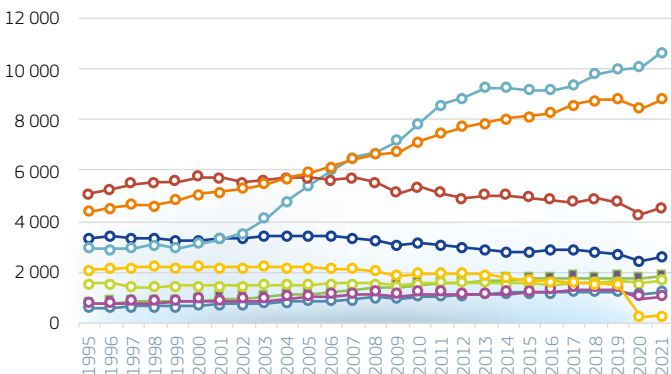
* Partial disaggregation of the Renewables group. Waste also includes non-RES wastes

Source: IEA statistics, August 2023

Methodology and Notes: [see appendices](#)

1.1.9 World CO₂ Emissions by RegionMT CO₂

	2000	2010	2015	2019	2020	2021
EU27_2020	3269	3138	2827	2655	2398	2579
China	3138	7872	9178	9992	10088	10683
United States	5730	5352	4929	4745	4258	4549
Asia*	5050	7148	8138	8844	8455	8832
Middle East	882	1478	1716	1790	1745	1798
Russian Federation	1474	1529	1533	1640	1560	1678
Africa	661	1023	1171	1247	1144	1218
World bunkers**	859	1129	1199	1319	932	985
Rest of the World	2204	1947	1688	1516	228	264
World	23266	30616	32378	32349	30807	32587

TOTAL 2021 = 32587 Mt CO₂World CO₂ Emissions by Region (Mt CO₂)

* non OECD and OECD Asia, excluding China

** International aviation and international navigation

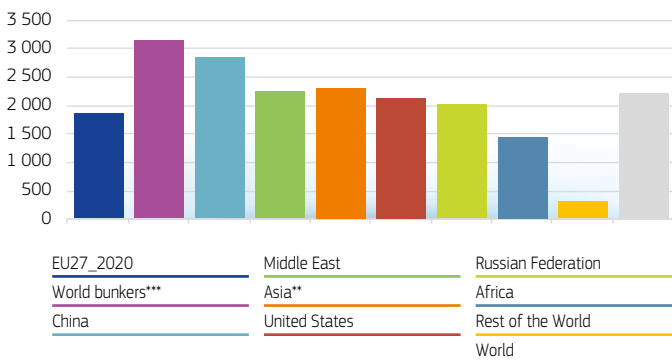
Source: IEA, May 2023, estimates of world CO₂ emissions from fuel combustionMethodology and Notes: [see appendices](#)

1.1.10 World CO₂ Intensity by Region

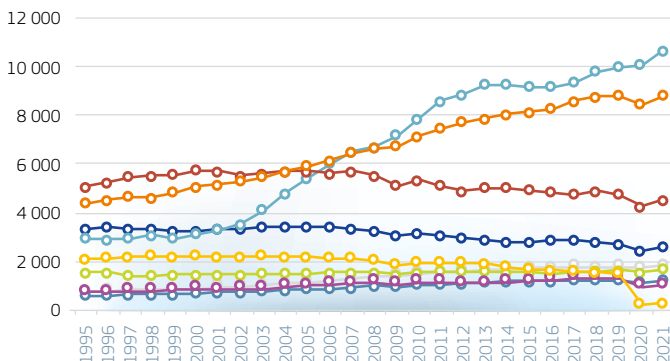
KG CO₂ PER TOE

	2000	2010	2015	2019	2020	2021
EU27_2020	2222	2055	2007	1887	1830	1859
World bunkers***	3134	3148	3147	3101	3132	3133
China	2735	3087	3046	2936	2871	2848
Middle East	2431	2363	2326	2244	2217	2231
Asia**	2202	2263	2350	2322	2295	2297
United States	2521	2415	2256	2145	2092	2127
Russian Federation	2380	2206	2215	2123	2049	2013
Africa	1336	1493	1514	1489	1398	1428
Rest of the World	2022	1878	1800	1723	286	318
World	2321	2383	2382	2224	2200	2208

WORLD AVERAGE 2021= 2208 Kg CO₂ per toe



Kg CO₂ per toe



* CO₂ Emissions from Fuel Combustion per Unit of Total Energy Supply

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

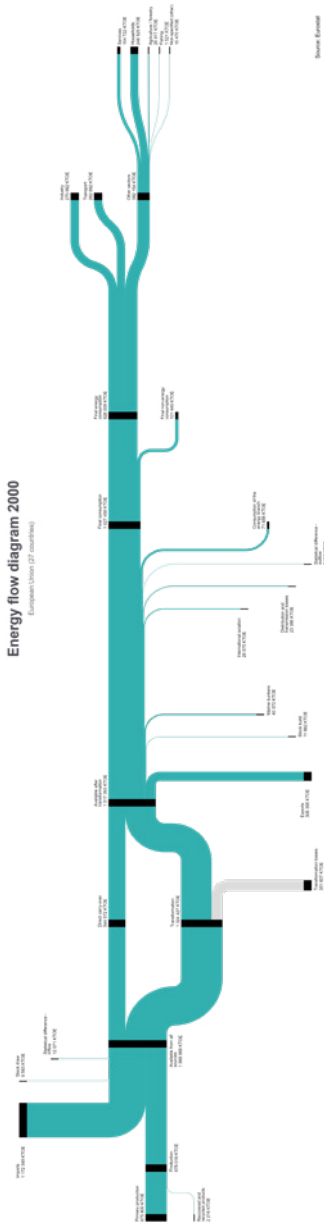
*** International aviation and international navigation

Source: IEA statistics, August 2023

Methodology and Notes: [see appendices](#)

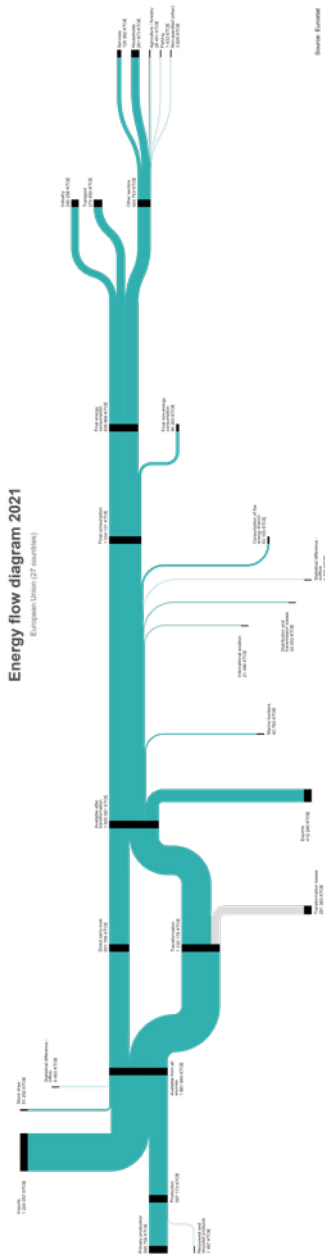
1.2 Energy in the EU (Overview)

1.2.1 Energy Flow - 2000



source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

1.2.2 Energy Flow - 2021



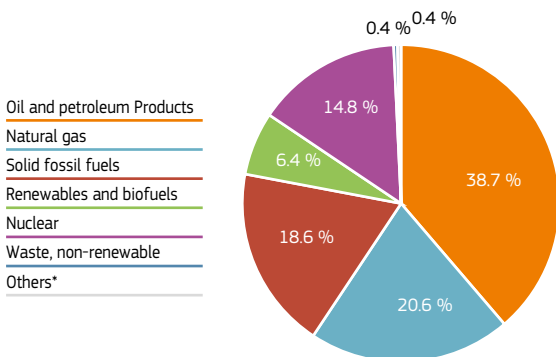
source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

1.2.3 Gross Inland Consumption

ENERGY MIX (%) – PRIMARY PRODUCTS ONLY

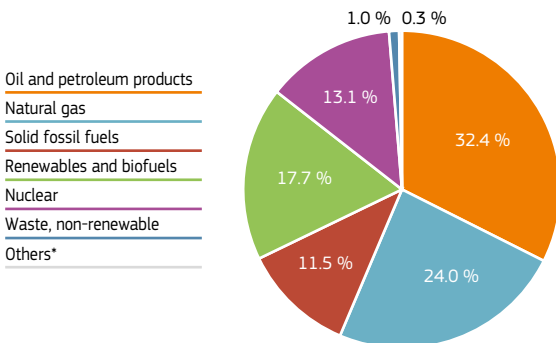
TOTAL PRIMARY PRODUCTS 2000: 1 497.4 Mtoe

(Total Primary and secondary products 2000: 1 498.2 Mtoe)



TOTAL PRIMARY PRODUCTS 2021: 1 423.4 Mtoe

(Total Primary and secondary products 2021: 1 421.6 Mtoe)



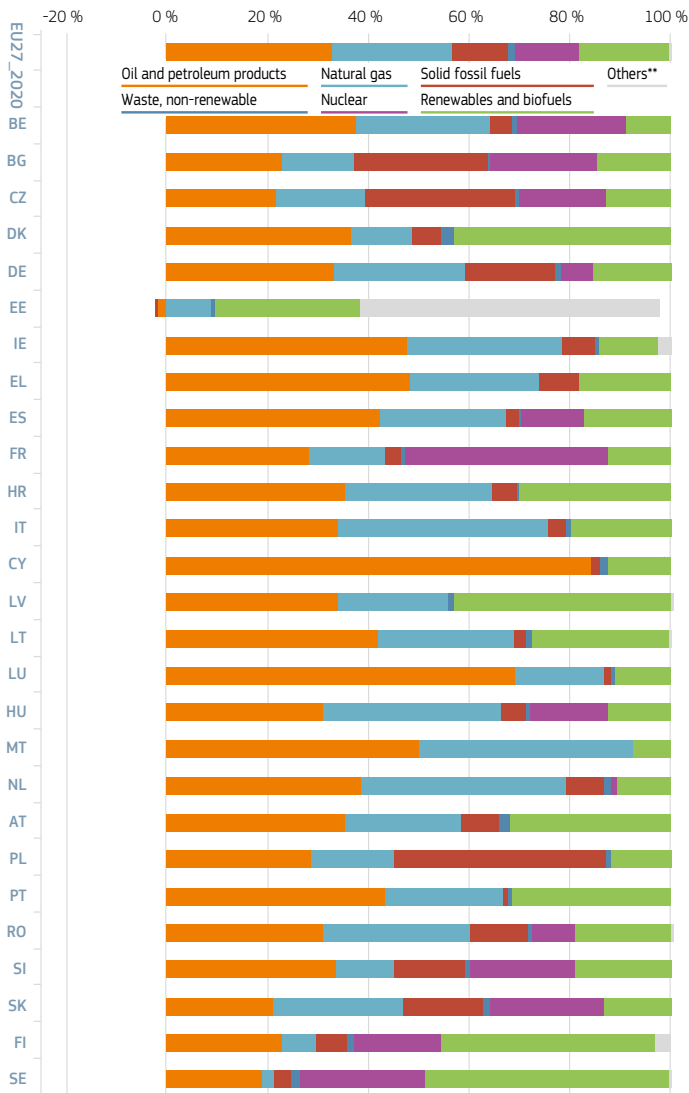
*Others = manufactured gases, peat and peat products, oil shale and oil sands

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

1.2.3 Gross Inland Consumption

ENERGY MIX* – 2021 (%)



*Primary Products Only

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

source: Eurostat April 2023

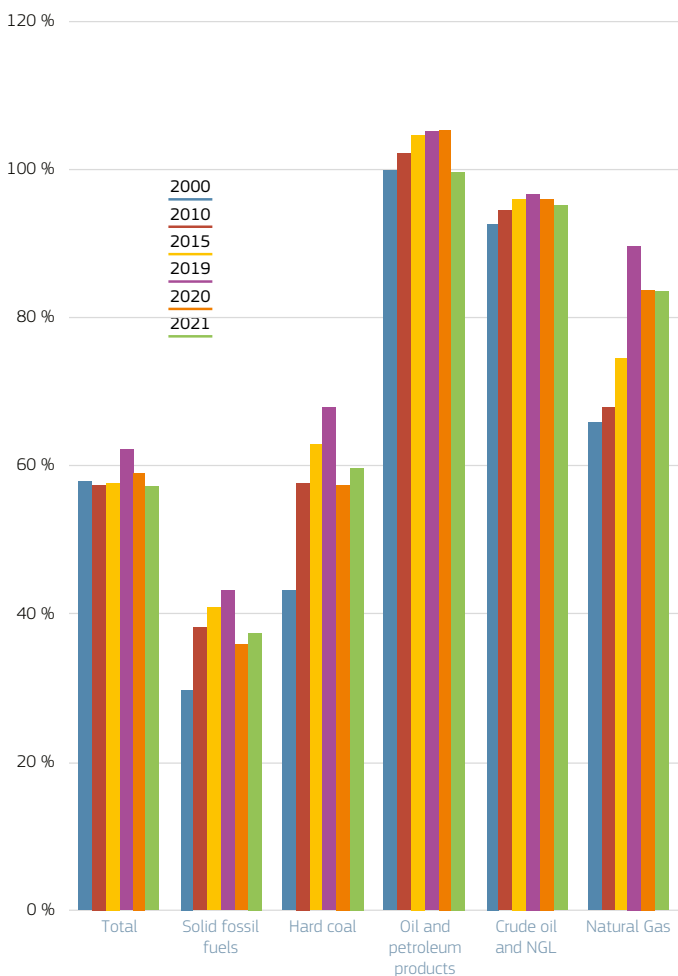
Methodology and Notes: [see appendices](#)

1.2.4 Energy Import Dependency

BY FUEL – (%)

	2000	2010	2015	2019	2020	2021
Total	57.8%	57.4%	57.6%	62.3%	59.1%	57.1%
Solid fossil fuels	29.8%	38.2%	41.0%	43.3%	35.8%	37.5%
of which Hard Coal	43.2%	57.7%	63.0%	67.9%	57.4%	59.7%
Oil and petroleum products	99.8%	102.1%	104.7%	105.0%	105.3%	99.7%
of which Crude and NGL	92.5%	94.4%	95.9%	96.6%	96.1%	95.1%
Natural Gas	65.7%	67.8%	74.5%	89.7%	83.6%	83.5%

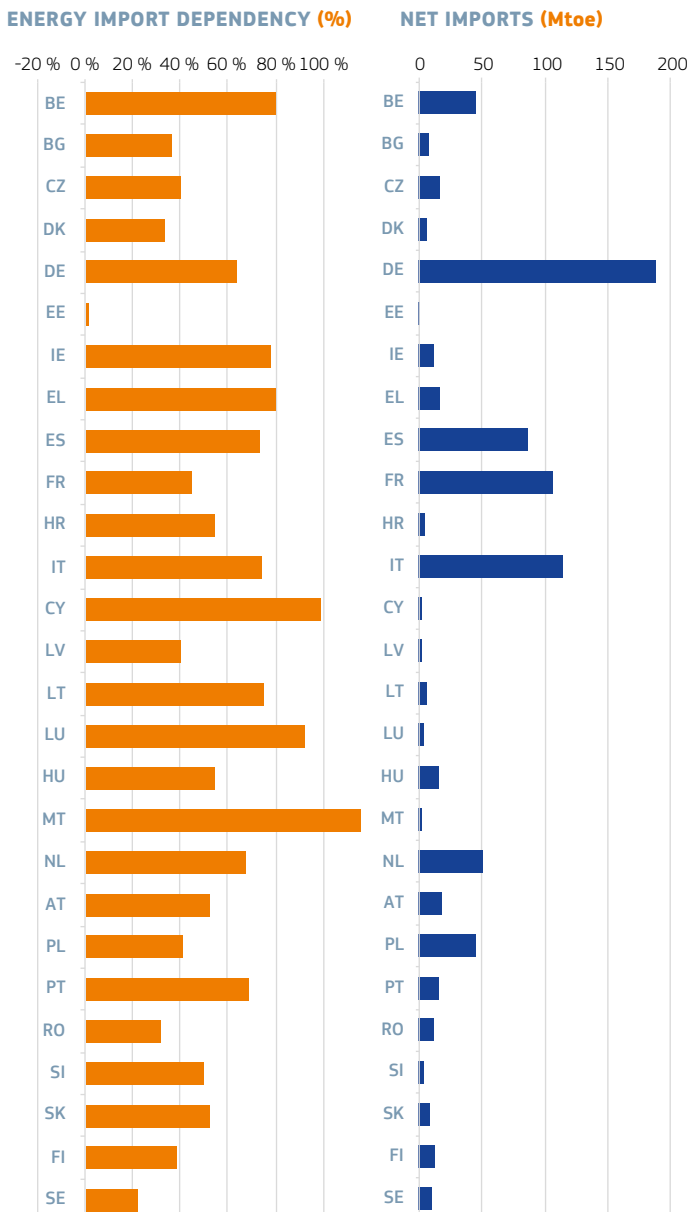
BY FUEL 2000 - 2021 (%)



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

1.2.5 Energy Import Dependency - Net Imports 2021

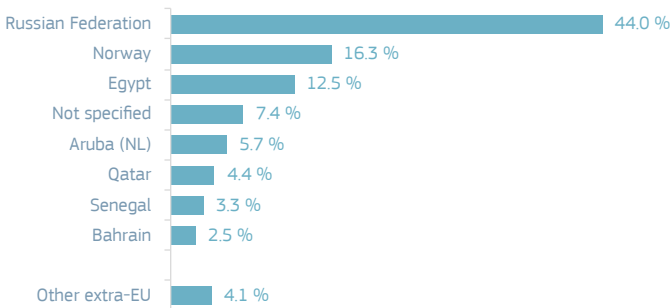


source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

1.2.6 Imports by Country of Origin

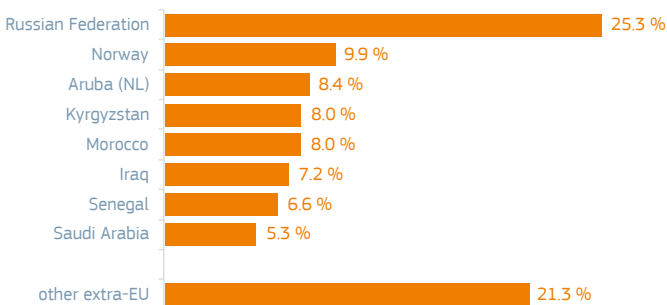
EU27_2020 IMPORTS* OF NATURAL GAS - 2021

Total extra-EU = 13 486 870.4 TJ-GCV (349.1 bn m³)



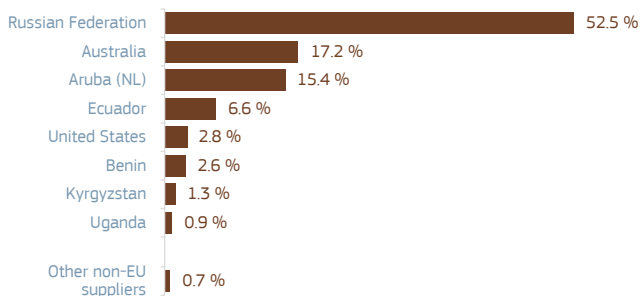
EU27_2020 IMPORTS* OF CRUDE OIL AND NGL - 2021

Total extra-EU = 447 795.4 kton



EU27_2020 imports* of hard coal - 2021

Total Extra-EU = 941 73.3 kton



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

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

1.3 EU Targets

1.3.1 Renewable Energy Targets

% EU27_2020	2021 Renewable energy shares						
	RE transport 2021	RE electricity 2021	RE Heating and cooling 2021	Overall RE Share 2021	Indicative 2017-2018	2020 RE target	2030 RE Target
EU27_2020	9.1%	37.6%	22.9%	21.8%	n.a.	20%	32%
BE	10.3%	26.0%	9.2%	13.0%	9.2%	13.0%	
BG	7.6%	18.8%	25.6%	17.0%	13.7%	16.0%	
CZ	7.5%	14.5%	24.2%	17.7%	10.6%	13.0%	
DK	10.5%	62.6%	41.5%	34.7%	25.5%	30.0%	
DE	8.0%	43.7%	15.4%	19.2%	13.7%	18.0%	
EE	11.2%	29.3%	61.3%	38.0%	22.6%	25.0%	
IE	4.3%	36.4%	5.2%	12.5%	11.5%	16.0%	
EL	4.3%	35.9%	31.1%	21.9%	14.1%	18.0%	
ES	9.2%	46.0%	17.4%	20.7%	16.0%	20.0%	
FR	8.2%	25.0%	24.2%	19.3%	18.6%	23.0%	
HR	7.0%	53.5%	38.0%	31.3%	17.4%	20.0%	
IT	10.0%	36.0%	19.7%	19.0%	12.9%	17.0%	
CY	7.2%	14.8%	41.3%	18.4%	9.5%	13.0%	
LV	6.4%	51.4%	57.4%	42.1%	37.4%	40.0%	
LT	6.5%	21.3%	48.6%	28.2%	20.2%	23.0%	
LU	8.0%	14.2%	12.9%	11.7%	7.5%	11.0%	
HU	6.2%	13.7%	17.9%	14.1%	10.0%	13.0%	
MT	10.6%	9.7%	31.4%	12.2%	6.5%	10.0%	
NL	9.0%	33.4%	7.8%	13.0%	9.9%	14.0%	
AT	9.4%	76.2%	35.5%	36.4%	30.3%	34.0%	
PL	5.7%	17.2%	21.0%	15.6%	12.3%	15.0%	
PT	8.6%	58.4%	42.7%	34.0%	27.3%	31.0%	
RO	7.7%	42.5%	24.5%	23.6%	21.8%	24.0%	
SI	10.6%	35.0%	35.2%	25.0%	21.9%	25.0%	
SK	8.8%	22.4%	19.5%	17.4%	11.4%	14.0%	
FI	20.7%	39.5%	52.6%	43.1%	34.7%	38.0%	
SE	30.4%	75.7%	68.6%	62.6%	45.8%	49.0%	

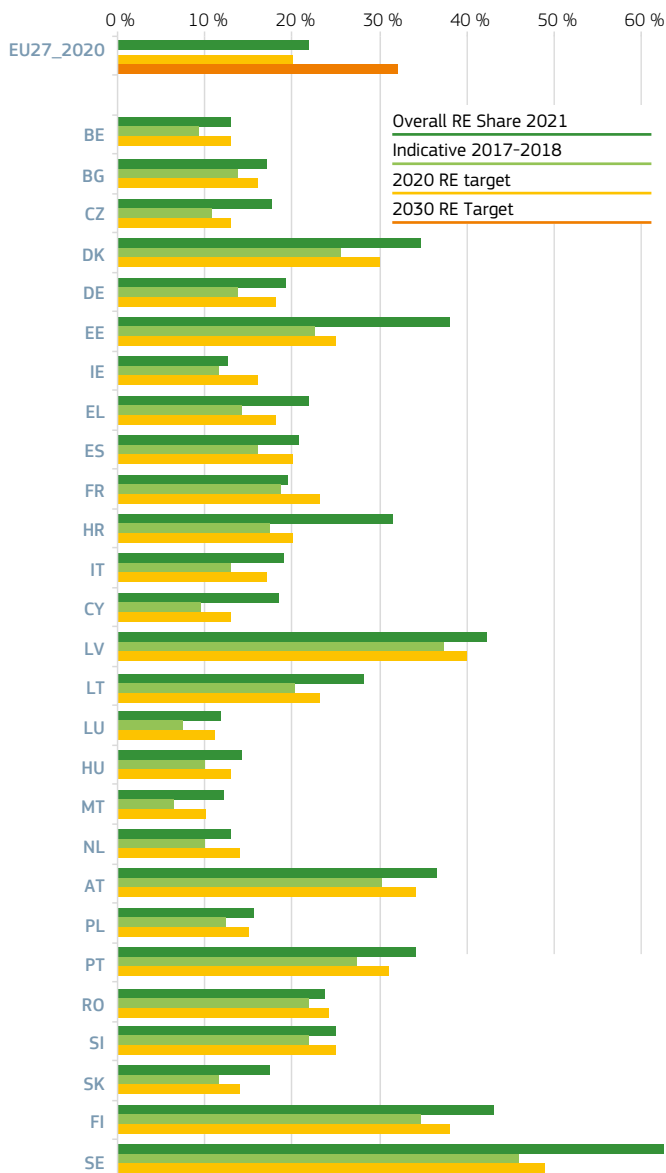
* in % of the Gross Final Energy Consumption

source: Eurostat-RES SHARES March 2023

Methodology and Notes: [see appendices](#)

1.3.1 Renewable Energy Targets

RENEWABLE ENERGY SHARES AND TARGETS* (%)



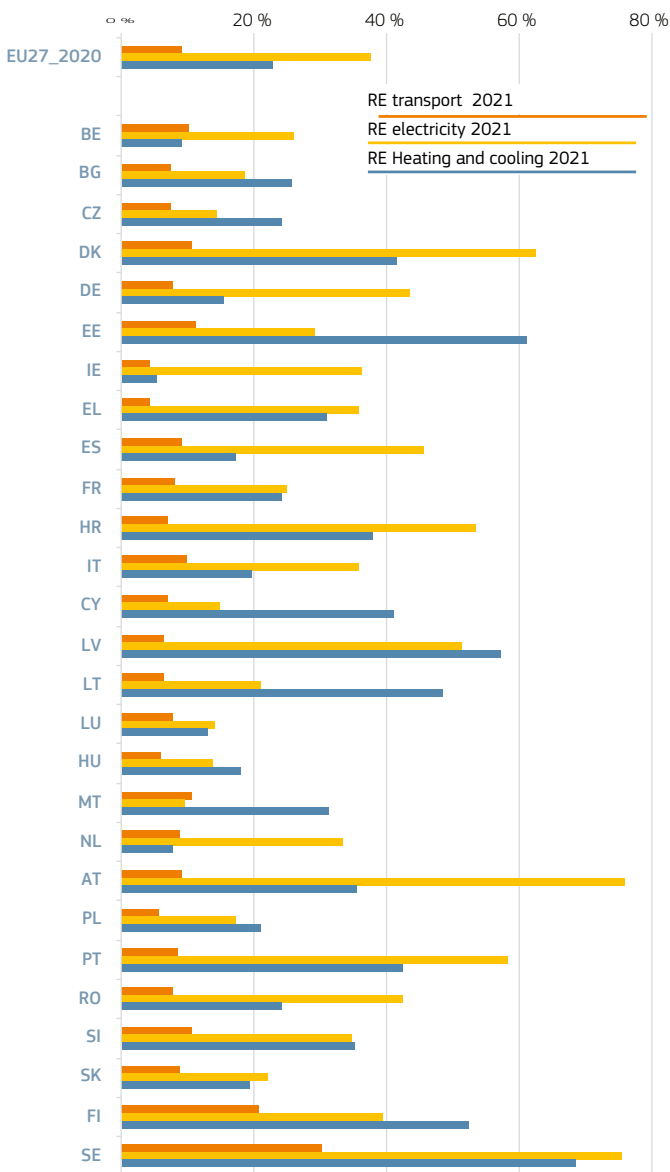
* in Gross Final Energy Consumption

source: Eurostat-RES SHARES March 2023

Methodology and Notes: [see appendices](#)

1.3.1 Renewable Energy Shares

RES SHARES IN HEATING AND COOLING, ELECTRICITY, AND TRANSPORT 2021 (%)



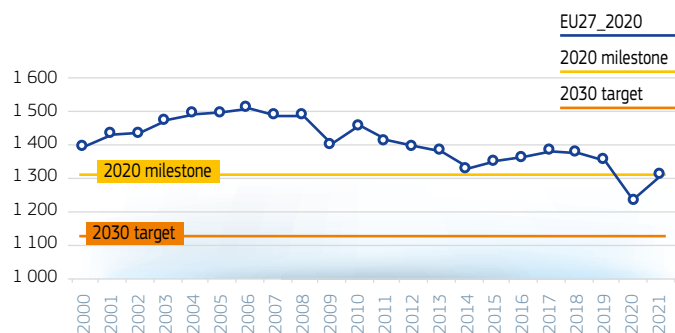
* in Gross Final Energy Consumption
 source: Eurostat-RES SHARES March 2023
 Methodology and Notes: [see appendices](#)

1.3.2 Energy efficiency targets

PRIMARY ENERGY CONSUMPTION 2020-2030 MILESTONES AND TARGETS (Mtoe)

	2010	2015	2019	2020	2021	2020 MILESTONE & TARGET	2030 TARGET
EU27_2020	1457.6	1352.7	1354.1	1235.8	1311.1	1312*	1128
BE	53.4	45.7	48.4	43.9	48.8		
BG	17.4	18.0	18.2	17.2	18.6		
CZ	42.5	39.4	39.7	37.6	39.6		
DK	19.9	16.8	16.9	15.5	16.4		
DE	315.2	295.9	285.2	262.2	268.7		
EE	5.8	4.8	4.8	4.3	4.5		
IE	14.7	14.0	14.7	13.5	13.9		
EL	27.2	23.4	22.3	19.2	20.3		
ES	123.0	118.2	120.6	105.0	112.1		
FR	254.5	244.3	235.1	208.0	224.8		
HR	8.9	8.0	8.2	7.8	8.3		
IT	167.3	149.1	145.9	132.3	145.3		
CY	2.7	2.3	2.5	2.2	2.3		
LV	4.6	4.3	4.6	4.3	4.5		
LT	6.2	5.8	6.3	6.2	6.6		
LU	4.6	4.1	4.5	3.9	4.2		
HU	24.6	23.3	24.6	23.9	24.9		
MT	0.9	0.8	0.9	0.7	0.8		
NL	71.7	64.0	63.6	58.5	60.8		
AT	32.9	31.7	32.3	29.8	31.6		
PL	96.6	90.1	100.2	96.9	104.0		
PT	22.7	21.6	22.1	19.5	19.5		
RO	32.9	30.7	32.1	30.9	33.1		
SI	7.0	6.3	6.5	6.1	6.3		
SK	16.7	15.2	16.0	15.2	16.4		
FI	35.4	31.2	32.1	29.9	31.5		
SE	48.3	43.8	45.8	41.3	43.5		

EU27_2020: PRIMARY ENERGY CONSUMPTION 2020-2030 (Mtoe)



*milestone for EU27_2020, based on the target for EU28

source: Eurostat April 2023

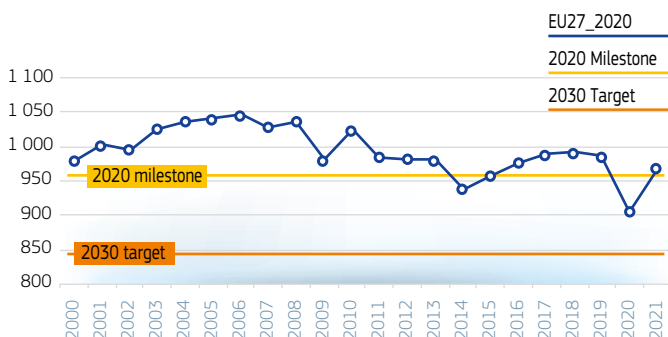
Methodology and Notes: [see appendices](#)

1.3.2 Energy efficiency targets

FINAL ENERGY CONSUMPTION 2020-2030 MILESTONES AND TARGETS (Mtoe)

	2010	2015	2019	2020	2021	2020 MILESTONE & TARGET	2030 TARGET
EU27_2020	1024.5	957.9	986.0	906.3	968.4	959*	846
BE	38.2	36.0	35.8	33.2	35.9		
BG	8.8	9.5	9.9	9.5	10.2		
CZ	25.3	24.2	25.3	24.5	26.2		
DK	15.5	14.2	14.3	13.1	13.8		
DE	223.0	212.7	214.7	202.3	209.9		
EE	2.9	2.8	2.9	2.8	2.8		
IE	11.9	11.3	12.4	11.2	11.4		
EL	19.1	16.6	16.2	14.4	15.2		
ES	89.6	80.5	86.5	73.8	80.3		
FR	154.0	148.0	145.1	129.7	143.6		
HR	7.2	6.6	6.9	6.5	7.0		
IT	128.5	116.2	115.4	102.7	113.3		
CY	1.9	1.7	1.9	1.6	1.7		
LV	4.1	3.8	4.1	3.9	4.1		
LT	4.8	4.9	5.6	5.3	5.7		
LU	4.3	4.0	4.4	3.8	4.1		
HU	17.5	17.4	18.6	18.0	19.1		
MT	0.5	0.6	0.7	0.5	0.6		
NL	55.6	48.6	49.4	45.0	46.9		
AT	28.0	27.5	28.3	26.1	27.8		
PL	66.3	62.3	73.7	71.1	75.2		
PT	18.1	16.0	17.1	15.0	15.7		
RO	22.5	21.8	23.9	23.5	25.4		
SI	5.1	4.7	4.9	4.4	4.7		
SK	11.5	10.1	11.2	10.4	11.6		
FI	26.2	24.2	25.5	23.4	24.9		
SE	34.0	31.8	31.6	30.5	31.7		

EU27_2020: FINAL ENERGY CONSUMPTION 2020-2030 (Mtoe)



*milestone for EU27_2020, based on the target for EU28

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

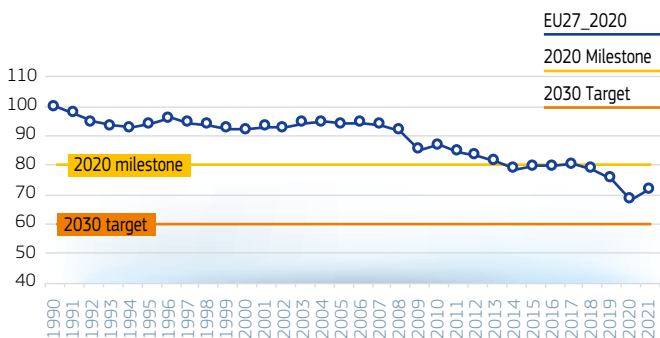
1.3.3 Greenhouse gas (GHG) Emissions Milestones and Targets

GHG EMISSIONS MILESTONES AND TARGETS

INDEX 100=1990

	1990	2000	2015	2020	2021	2020 GHG MILESTONE & TARGET	2030 GHG TARGET
EU27_2020	100	92.2	79.7	68.3	72.0	80*	60
BE	100	103.1	82.8	74.4	77.5		
BG	100	57.9	61.2	48.6	54.6		
CZ	100	75.9	64.7	56.6	59.3		
DK	100	101.5	71.4	59.8	61.6		
DE	100	83.9	72.9	58.9	61.6		
EE	100	43.4	44.9	28.4	31.6		
IE	100	126.1	113.3	106.2	111.8		
EL	100	121.3	92.8	72.1	75.2		
ES	100	134.3	119.1	95.3	101.6		
FR	100	99.1	102.4	94.6	90.2		
HR	100	80.9	78.1	75.3	77.4		
IT	100	108.0	86.6	73.9	80.4		
CY	100	144.7	143.8	139.7	145.9		
LV	100	39.1	42.2	40.6	41.8		
LT	100	40.4	42.1	41.9	42.2		
LU	100	99.9	108.9	102.5	101.0		
HU	100	79.7	65.7	66.3	67.6		
MT	100	101.0	116.8	116.4	116.8		
NL	100	101.1	90.6	75.4	77.0		
AT	100	103.0	101.4	93.8	98.5		
PL	100	83.1	81.1	78.5	84.6		
PT	100	138.5	117.0	97.8	95.8		
RO	100	55.3	45.7	43.5	44.8		
SI	100	100.0	90.1	84.9	85.6		
SK	100	66.4	55.6	50.5	55.9		
FI	100	98.7	78.9	67.4	67.4		
SE	100	96.5	76.6	64.7	67.0		

EU27_2020: GHG EMISSIONS (index100=1990) 1990 - 2021



*milestone for EU27_2020, based on the target for EU28

Source: EEA, June 2023, Eurostat 2023

source: Eurostat April 2023

2

Energy in the EU



2 Energy in the EU

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2.1 Energy Supply

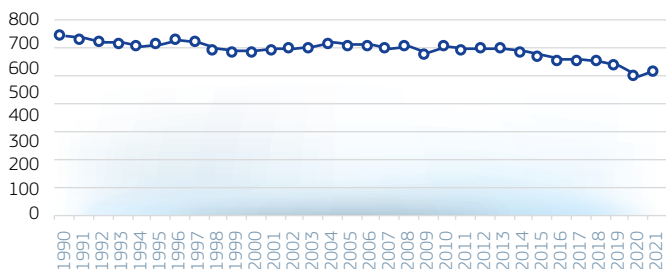
2.1.1 Production*

ALL FUELS

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	675.9	695.4	657.2	617.6	573.0	597.6
Index2000	100%	103%	97%	91%	85%	88%
BE	13.40	15.03	10.30	15.18	13.33	17.37
BG	9.86	10.45	12.03	11.69	10.83	12.13
CZ	30.81	31.86	28.55	26.60	23.51	24.38
DK	27.82	23.36	16.16	12.49	9.53	9.57
DE	135.24	131.67	120.55	105.28	97.90	102.96
EE	3.38	5.05	4.89	5.09	4.39	4.41
IE	2.16	1.83	1.96	4.16	3.55	3.03
EL	10.04	9.49	8.53	6.37	4.95	5.19
ES	31.32	34.55	34.12	34.67	35.42	36.27
FR	129.12	136.74	140.80	134.13	122.61	130.81
HR	4.26	5.17	4.41	3.90	3.73	3.96
IT	28.17	32.94	36.10	36.91	37.48	36.68
CY	0.04	0.09	0.13	0.21	0.22	0.24
LV	1.41	1.98	2.34	2.83	2.71	2.71
LT	3.49	1.56	1.86	2.04	2.03	2.24
LU	0.06	0.12	0.15	0.24	0.31	0.31
HU	11.61	11.71	11.10	10.79	10.59	10.65
MT	0.00	0.00	0.02	0.04	0.04	0.04
NL	58.45	71.12	48.22	33.10	27.49	26.62
AT	9.80	12.12	12.23	12.42	12.41	12.56
PL	78.63	66.83	67.76	62.14	57.98	60.11
PT	3.85	5.80	5.91	6.55	6.80	6.95
RO	28.53	27.37	26.37	24.53	22.36	22.97
SI	3.20	3.69	3.32	3.38	3.52	3.28
SK	6.28	6.01	6.39	6.94	6.75	6.95
FI	14.91	17.08	17.21	18.95	18.05	19.50
SE	30.01	31.76	35.82	37.02	34.47	35.70

PRODUCTION – ALL FUELS – 1990-2021

EU27_2020



* Primary production, recycled and recovered products

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.1.1 Production*

BY FUEL

Mtoe	2021						
	Nuclear	Solid fossil fuels	Renewables and biofuels	Natural gas	Oil and petroleum products	Wastes, Non-Renewable	Peat, oil shale and oil sands
EU27_2020	186.7	91.0	244.0	38.0	20.1	13.9	2.9
Share (%)	31.2%	15.2%	40.8%	6.4%	3.4%	2.3%	0.5%
BE	12.22	0.00	4.17	0.00	0.00	0.66	0.00
BG	4.29	4.70	2.96	0.03	0.00	0.07	0.01
CZ	7.64	10.48	5.62	0.17	0.09	0.37	0.00
DK	0.00	0.00	4.60	1.26	3.32	0.38	0.00
DE	17.77	27.54	46.59	3.87	2.98	4.22	0.00
EE	0.00	0.00	1.94	0.00	0.00	0.03	2.43
IE	0.00	0.00	1.50	1.26	0.00	0.14	0.13
EL	0.00	1.44	3.68	0.00	0.06	0.01	0.00
ES	14.73	0.00	20.99	0.03	0.01	0.52	0.00
FR	98.86	0.00	29.39	0.02	0.81	1.73	0.00
HR	0.00	0.00	2.65	0.62	0.63	0.05	0.00
IT	0.00	0.00	27.70	2.61	5.23	1.14	0.00
CY	0.00	0.00	0.23	0.00	0.00	0.01	0.00
LV	0.00	0.00	2.70	0.00	0.00	0.01	0.00
LT	0.00	0.00	1.87	0.00	0.03	0.09	0.00
LU	0.00	0.00	0.27	0.00	0.00	0.04	0.00
HU	4.03	0.77	3.43	1.18	1.09	0.14	0.00
MT	0.00	0.00	0.04	0.00	0.00	0.00	0.00
NL	0.89	0.00	7.96	15.52	1.15	0.80	0.00
AT	0.00	0.00	10.74	0.57	0.57	0.68	0.00
PL	0.00	42.04	12.80	3.34	0.91	0.98	0.00
PT	0.00	0.00	6.79	0.00	0.00	0.16	0.00
RO	2.87	3.01	6.12	7.43	3.23	0.32	0.00
SI	1.35	0.72	1.15	0.00	0.00	0.05	0.00
SK	4.05	0.27	2.35	0.05	0.01	0.22	0.00
FI	5.61	0.00	13.18	0.00	0.00	0.32	0.24
SE	12.34	0.00	22.53	0.00	0.00	0.77	0.06

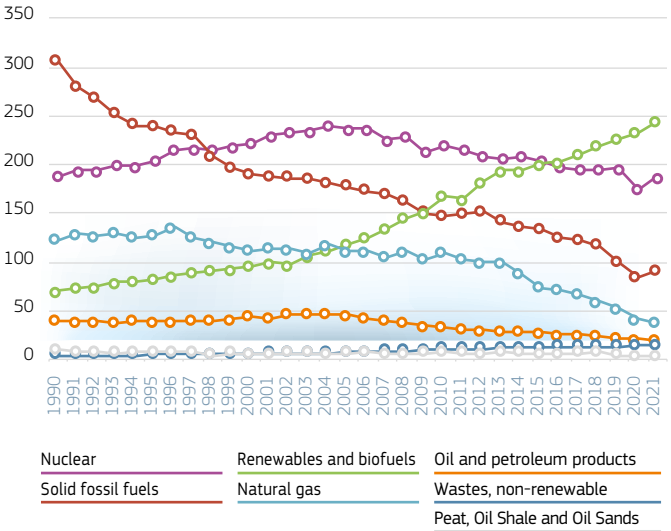
* Primary production. recycled and recovered products

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

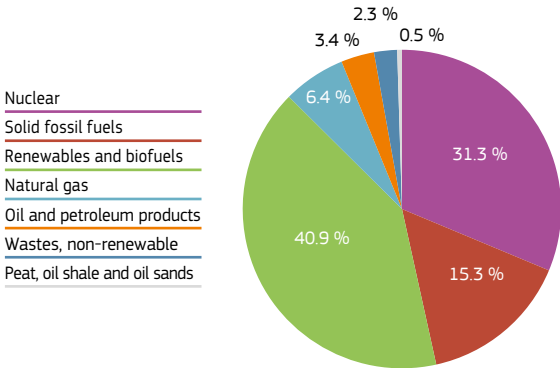
2.1.1 Production*

BY FUEL – EU27_2020 – 1990-2021 (Mtoe)



PRODUCTION* EU27_2020 IN 2021 (% TOTAL)

Total = 597.6 Mtoe



* Primary production. recycled and recovered products

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

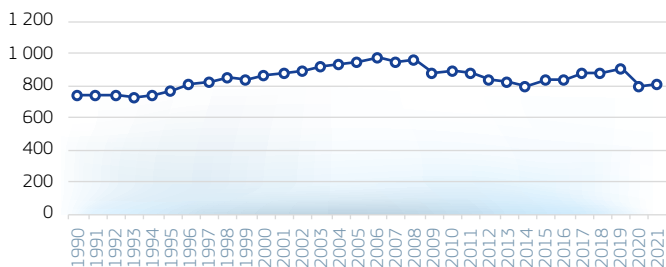
2.1.2 Net Imports

ALL FUELS

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	865.96	895.42	834.50	908.01	792.35	812.11
Index2000	100%	103%	96%	105%	92%	94%
BE	50.63	53.64	50.07	49.88	45.12	45.58
BG	8.68	7.23	6.84	7.21	6.79	7.00
CZ	9.37	11.54	13.49	17.52	15.63	17.11
DK	-7.47	-3.41	2.36	6.97	7.44	5.64
DE	204.85	204.59	199.14	207.54	182.25	188.75
EE	1.64	0.90	0.57	0.24	0.50	0.07
IE	12.41	13.30	12.79	10.38	9.90	11.14
EL	21.75	21.30	18.38	19.32	17.97	17.22
ES	99.86	106.68	94.85	100.56	80.23	87.01
FR	132.66	132.38	120.23	120.35	99.64	107.30
HR	4.10	4.43	4.15	4.95	4.46	4.75
IT	152.44	148.48	121.42	122.49	105.80	114.85
CY	2.58	2.96	2.47	2.69	2.38	2.38
LV	2.36	2.22	2.37	2.17	2.08	1.84
LT	4.30	5.71	5.48	6.01	5.85	5.96
LU	3.64	4.51	4.01	4.32	3.66	3.91
HU	13.87	15.14	13.58	18.62	14.80	14.82
MT	1.47	2.36	2.23	3.08	2.87	2.66
NL	34.99	28.28	43.70	56.35	57.05	50.07
AT	19.17	21.88	20.37	24.90	18.90	17.74
PL	9.60	32.14	28.67	48.11	44.16	44.46
PT	22.21	18.69	18.49	18.36	14.42	14.86
RO	8.04	7.49	5.33	10.07	9.10	10.86
SI	3.40	3.58	3.24	3.60	2.95	3.22
SK	11.54	11.41	9.78	11.88	9.26	9.36
FI	18.55	18.08	15.80	14.86	14.00	12.91
SE	19.29	19.91	14.69	15.56	15.14	10.63

NET IMPORTS – ALL FUELS – 1990-2021

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

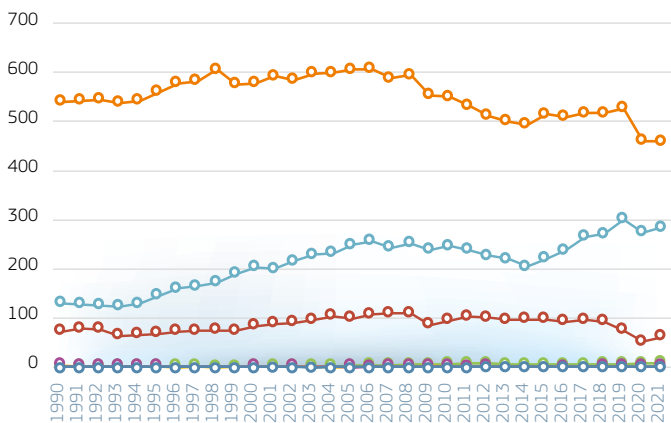
2.1.2 Net Imports

BY FUEL

Mtoe	2021					
	Net Imports	Solid fossil fuels	Oil and petroleum products	Natural gas	Renewables and biofuels	Electricity
EU27_2020	812.1	61.0	459.0	283.9	6.9	0.6
Share (%)	100%	7.5%	56.5%	35.0%	0.9%	0.1%
BE	45.58	2.40	27.68	15.22	0.96	-0.68
BG	7.00	0.55	4.53	2.73	-0.05	-0.75
CZ	17.11	1.81	9.18	7.18	-0.11	-0.95
DK	5.64	0.12	1.99	0.54	2.52	0.42
DE	188.75	25.76	94.76	69.99	-0.16	-1.60
EE	0.07	-0.01	0.10	0.42	-0.67	0.23
IE	11.14	0.97	6.78	3.11	0.14	0.14
EL	17.22	0.16	11.17	5.42	0.15	0.32
ES	87.01	3.27	54.97	29.54	-0.84	0.07
FR	107.30	6.22	67.98	35.58	1.38	-3.86
HR	4.75	0.42	2.33	1.81	-0.15	0.34
IT	114.85	5.37	45.12	58.52	2.16	3.68
CY	2.38	0.04	2.25	0.00	0.07	0.00
LV	1.84	0.02	1.59	0.96	-0.93	0.15
LT	5.96	0.15	3.15	1.89	-0.02	0.78
LU	3.91	0.04	2.57	0.67	0.14	0.49
HU	14.82	0.53	7.03	6.25	-0.19	1.10
MT	2.66	0.00	2.27	0.33	0.02	0.04
NL	50.07	5.64	33.92	10.17	0.23	0.02
AT	17.74	2.54	10.65	3.94	-0.05	0.65
PL	44.46	-1.66	30.48	15.23	0.33	0.08
PT	14.86	0.01	9.60	4.97	-0.15	0.41
RO	10.86	0.94	7.19	2.27	0.26	0.19
SI	3.22	0.10	2.27	0.77	0.11	-0.02
SK	9.36	2.49	3.67	3.14	-0.03	0.07
FI	12.91	1.51	7.22	2.13	0.53	1.53
SE	10.63	1.56	8.59	1.16	1.31	-2.20

2.1.2 Net Imports

BY FUEL – EU27_2020 – 1990-2021 (Mtoe)



Solid fossil fuels

Natural gas

Electricity

Oil and petroleum products

Renewables and biofuels

Heat

Waste,
Non-Renewable

BY FUEL – EU27_2020 – 2021

Total = 793 Mtoe

Solid fossil fuels

Oil and petroleum products

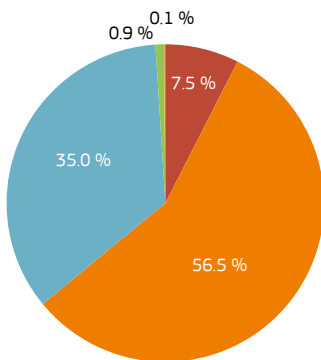
Natural gas

Renewables and biofuels

Electricity

Heat

Waste, non-renewable



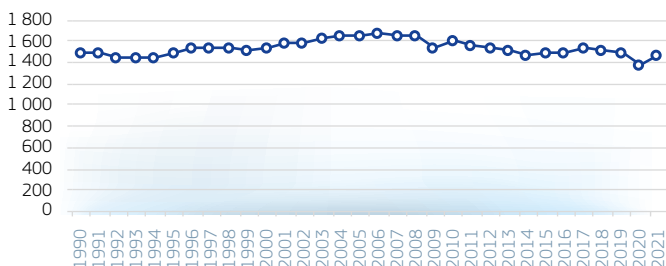
2.1.3 Gross Available Energy

ALL FUELS

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	1,538.54	1,605.67	1,488.48	1,501.31	1,379.01	1,462.41
Index2000	100%	104%	97%	98%	90%	95%
BE	64.78	68.28	59.50	64.28	57.82	64.37
BG	18.70	18.01	18.77	18.92	17.92	19.38
CZ	41.29	45.47	42.05	42.94	40.32	42.77
DK	20.79	21.02	18.03	18.01	16.51	17.33
DE	344.63	341.02	320.52	309.51	286.21	297.29
EE	4.81	6.14	5.14	5.10	4.79	4.91
IE	14.52	15.20	14.40	15.13	13.91	14.47
EL	31.50	31.06	25.87	26.07	22.08	23.32
ES	130.04	138.54	130.40	134.02	118.17	125.93
FR	258.73	272.00	261.77	253.11	224.41	242.90
HR	8.49	9.48	8.51	8.81	8.32	8.72
IT	176.19	179.82	157.63	158.09	144.03	156.18
CY	2.61	2.95	2.54	2.90	2.56	2.66
LV	3.87	4.88	4.63	4.94	4.57	4.79
LT	7.44	7.22	7.26	8.00	7.81	8.14
LU	3.66	4.64	4.18	4.55	3.97	4.23
HU	25.23	26.59	25.20	26.71	26.14	27.38
MT	1.47	2.39	2.29	3.16	2.95	2.74
NL	91.43	100.01	89.18	87.56	83.87	85.77
AT	29.24	34.85	33.74	34.78	32.35	34.14
PL	89.50	101.82	96.06	106.35	103.28	109.94
PT	26.05	24.84	24.23	24.86	22.09	22.20
RO	36.76	35.02	31.92	33.24	32.26	34.33
SI	6.56	7.27	6.56	6.91	6.46	6.63
SK	17.73	17.71	16.26	17.02	16.45	17.79
FI	33.44	37.00	32.96	34.55	32.43	34.00
SE	49.07	52.42	48.87	51.79	47.34	50.09

GROSS AVAILABLE ENERGY – ALL FUELS – 1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

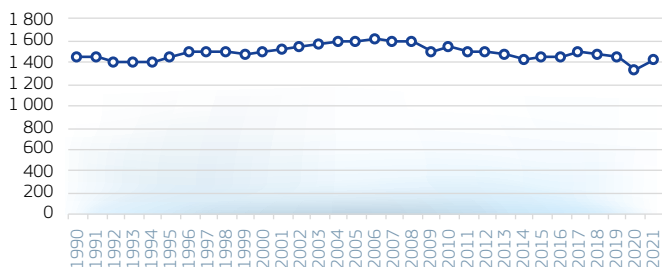
2.1.4 Gross Inland Consumption

ALL FUELS

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	1,498.16	1,558.97	1,448.17	1,458.20	1,340.01	1,421.64
Index2000	100%	104%	97%	97%	89%	95%
BE	59.44	60.69	53.68	56.09	51.44	56.79
BG	18.63	17.92	18.68	18.84	17.84	19.30
CZ	41.29	45.47	42.05	42.94	40.32	42.77
DK	19.50	20.33	17.26	17.27	15.95	16.86
DE	342.43	338.25	318.09	308.15	284.88	295.88
EE	4.71	5.92	4.85	4.92	4.50	4.61
IE	14.37	15.06	14.24	14.99	13.75	14.30
EL	27.90	28.35	24.09	23.55	20.45	21.51
ES	124.02	130.12	122.91	126.83	111.79	118.61
FR	255.91	269.71	260.04	251.41	223.44	241.83
HR	8.47	9.47	8.50	8.79	8.30	8.69
IT	174.54	176.84	155.73	155.43	141.60	153.66
CY	2.42	2.76	2.30	2.63	2.28	2.41
LV	3.86	4.63	4.38	4.65	4.36	4.58
LT	7.35	7.08	7.18	7.80	7.63	7.95
LU	3.66	4.64	4.18	4.55	3.97	4.23
HU	25.23	26.59	25.20	26.71	26.14	27.38
MT	0.81	0.94	0.76	0.90	0.76	0.80
NL	78.27	86.15	76.50	76.14	71.99	74.35
AT	29.22	34.83	33.72	34.76	32.34	34.12
PL	89.22	101.60	95.87	106.07	102.98	109.60
PT	25.38	24.38	23.59	23.91	21.40	21.54
RO	36.76	35.01	31.87	33.21	32.22	34.30
SI	6.56	7.25	6.50	6.72	6.34	6.54
SK	17.73	17.71	16.26	17.02	16.45	17.79
FI	32.76	36.79	32.66	34.21	32.12	33.72
SE	47.71	50.46	47.04	49.72	44.76	47.52

GROSS INLAND CONSUMPTION – ALL FUELS –
1990-2021

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.1.4 Gross Inland Consumption

BY FUEL

Mtoe	2020							
	Oil and petroleum products	Natural gas	Solid fossil fuels	Renewables and biofuels	Nuclear	Waste, non-renewable	Electricity	Others*
EU27_2020	460.4	340.2	162.6	251.5	186.7	14.5	0.6	4.1
Share - %	32.4%	23.9%	11.4%	17.7%	13.1%	1.0%	0.0%	0.3%
BE	21.3	15.2	2.6	5.1	12.2	0.7	-0.7	0.0
BG	4.6	2.8	5.3	2.9	4.3	0.1	-0.8	0.0
CZ	9.5	7.8	12.9	5.5	7.6	0.4	-1.0	0.0
DK	6.0	1.9	1.0	7.1	0.0	0.4	0.4	0.0
DE	97.8	78.1	53.2	46.4	17.8	4.2	-1.6	0.0
EE	-0.1	0.4	0.0	1.3	0.0	0.0	0.2	2.7
IE	6.7	4.4	0.9	1.6	0.0	0.1	0.1	0.3
EL	10.2	5.4	1.7	3.8	0.0	0.0	0.3	0.0
ES	50.3	29.4	3.1	20.5	14.7	0.5	0.1	0.0
FR	68.8	37.0	8.5	30.8	98.9	1.7	-3.9	0.0
HR	3.0	2.4	0.4	2.5	0.0	0.0	0.3	0.0
IT	51.0	62.4	5.5	29.9	0.0	1.1	3.7	0.0
CY	2.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
LV	1.5	1.0	0.0	1.9	0.0	0.0	0.2	0.0
LT	2.9	1.9	0.2	1.9	0.0	0.1	0.8	0.0
LU	2.6	0.7	0.0	0.4	0.0	0.0	0.5	0.0
HU	8.1	9.3	1.4	3.2	4.0	0.2	1.1	0.0
MT	0.4	0.3	0.0	0.1	0.0	0.0	0.0	0.0
NL	28.5	30.1	5.7	8.0	0.9	0.9	0.0	0.0
AT	11.8	7.7	2.5	10.7	0.0	0.7	0.6	0.0
PL	31.3	18.2	45.9	13.1	0.0	1.0	0.1	0.0
PT	9.1	5.0	0.2	6.6	0.0	0.2	0.4	0.0
RO	10.5	9.9	4.0	6.4	2.9	0.3	0.2	0.0
SI	2.2	0.8	0.9	1.3	1.4	0.1	0.0	0.0
SK	3.7	4.6	2.8	2.3	4.1	0.2	0.1	0.0
FI	7.3	2.1	2.1	13.7	5.6	0.3	1.5	0.9
SE	9.5	1.1	1.7	24.1	12.3	1.0	-2.2	0.1

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

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.1.4 Gross Inland Consumption

RENEWABLES AND BIOFUELS

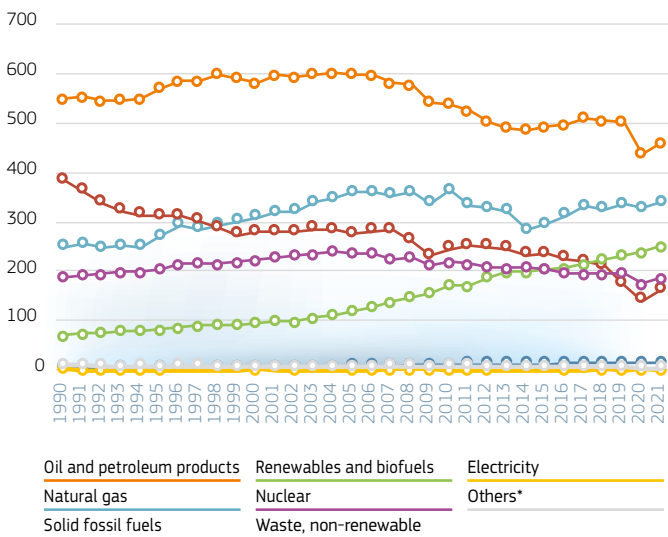
Mtoe	2021								
	Renewables and biofuels	Hydro	Wind	Solar photovoltaic	Solar thermal	Tide, Wave and Ocean	Biofuels and renewable waste	Geothermal	Ambient heat (heat pumps)
EU27_2020	251.5	29.9	33.3	13.6	4.6	0.0	148.2	6.8	15.1
Share (%)	100.0%	11.9%	13.2%	5.4%	1.8%	0.0%	58.9%	2.7%	6.0%
BE	5.12	0.04	1.03	0.48	0.03	0.00	3.35	0.00	0.19
BG	2.92	0.41	0.12	0.13	0.03	0.00	2.06	0.04	0.13
CZ	5.50	0.21	0.05	0.20	0.02	0.00	4.76	0.00	0.27
DK	7.06	0.00	1.38	0.11	0.07	0.00	5.09	0.00	0.41
DE	46.43	1.69	9.86	4.24	0.73	0.00	27.97	0.40	1.54
EE	1.32	0.00	0.06	0.03	0.00	0.00	1.22	0.00	0.00
IE	1.64	0.06	0.84	0.01	0.01	0.00	0.65	0.00	0.06
EL	3.84	0.51	0.90	0.45	0.30	0.00	1.23	0.00	0.44
ES	20.51	2.55	5.34	1.88	2.37	0.00	7.30	0.00	1.07
FR	30.79	5.13	3.17	1.35	0.20	0.04	16.74	0.46	3.70
HR	2.51	0.61	0.18	0.01	0.02	0.00	1.63	0.05	0.02
IT	29.88	3.90	1.80	2.15	0.25	0.00	14.03	5.25	2.50
CY	0.30	0.00	0.02	0.04	0.08	0.00	0.11	0.00	0.05
LV	1.90	0.23	0.01	0.00	0.00	0.00	1.66	0.00	0.00
LT	1.87	0.03	0.12	0.02	0.00	0.00	1.64	0.00	0.06
LU	0.41	0.01	0.03	0.02	0.00	0.00	0.35	0.00	0.01
HU	3.24	0.02	0.06	0.33	0.02	0.00	2.64	0.16	0.03
MT	0.06	0.00	0.00	0.02	0.01	0.00	0.01	0.00	0.02
NL	7.96	0.01	1.55	0.99	0.03	0.00	4.85	0.15	0.39
AT	10.70	3.33	0.58	0.24	0.18	0.00	5.90	0.04	0.44
PL	13.08	0.20	1.40	0.34	0.09	0.00	10.66	0.03	0.37
PT	6.64	1.02	1.14	0.19	0.11	0.00	3.26	0.16	0.75
RO	6.40	1.50	0.57	0.15	0.00	0.00	4.16	0.03	0.00
SI	1.26	0.41	0.00	0.04	0.01	0.00	0.73	0.01	0.06
SK	2.33	0.37	0.00	0.06	0.01	0.00	1.82	0.01	0.07
FI	13.71	1.36	0.73	0.03	0.00	0.00	10.87	0.00	0.72
SE	24.09	6.35	2.34	0.13	0.01	0.00	13.48	0.00	1.77

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

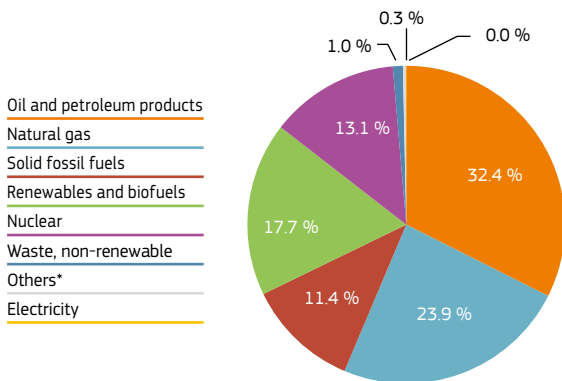
2.1.4 Gross Inland Consumption

BY FUEL – EU27_2020 – 1990-2021 (Mtoe)



GROSS INLAND CONSUMPTION – BY FUEL – EU27_2020 – 2021 (% TOTAL)

Total = 1421.6 Mtoe



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

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

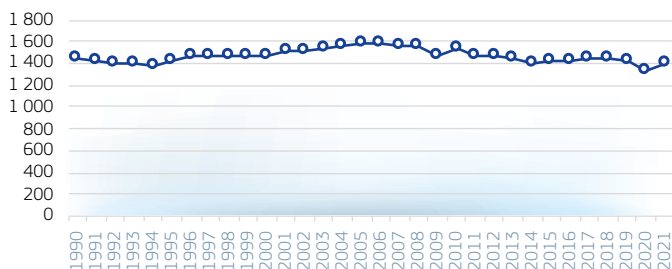
2.1.5 Total Energy Supply

ALL FUELS

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	1 469.58	1 526.85	1 413.60	1 416.41	1 321.97	1 400.15
Index2000	100%	104%	96%	96%	90%	95%
BE	57.93	59.31	52.23	54.38	50.24	55.28
BG	18.55	17.75	18.50	18.61	17.70	19.13
CZ	41.13	45.15	41.76	42.52	40.21	42.64
DK	18.71	19.52	16.38	16.23	15.62	16.43
DE	335.81	330.30	310.08	298.40	280.33	289.87
EE	4.69	5.89	4.80	4.85	4.47	4.56
IE	13.77	14.32	13.40	13.88	13.36	13.86
EL	27.06	27.66	23.26	22.42	20.09	20.81
ES	121.24	127.00	118.95	121.94	110.21	116.76
FR	250.70	264.20	254.32	245.20	220.78	239.14
HR	8.40	9.37	8.39	8.59	8.25	8.60
IT	171.71	173.68	152.56	151.46	140.10	152.17
CY	2.14	2.48	2.05	2.32	2.19	2.25
LV	3.84	4.51	4.27	4.49	4.30	4.50
LT	7.33	7.03	7.10	7.68	7.58	7.89
LU	3.34	4.21	3.72	3.95	3.42	3.60
HU	24.99	26.36	25.03	26.43	26.04	27.26
MT	0.68	0.84	0.64	0.74	0.70	0.72
NL	74.97	82.74	72.70	72.17	69.78	71.92
AT	28.67	34.17	33.02	33.80	32.02	33.72
PL	88.94	101.10	95.22	105.00	102.52	109.03
PT	24.71	23.51	22.54	22.45	20.88	20.88
RO	36.63	34.84	31.63	33.05	32.17	34.21
SI	6.54	7.23	6.47	6.70	6.33	6.53
SK	17.70	17.67	16.22	16.98	16.42	17.77
FI	32.42	36.25	32.02	33.37	31.84	33.44
SE	46.99	49.75	46.28	48.83	44.41	47.17

TOTAL ENERGY SUPPLY – ALL FUELS –
1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.2 Imports

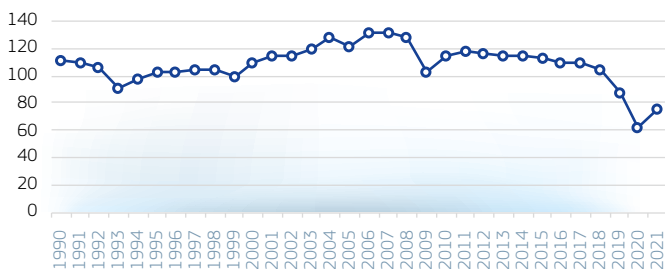
2.2.1 Imports – Solid Fossil Fuels

TOTAL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	110.2	114.0	113.0	86.9	62.9	75.2
Index2000	100%	103%	103%	79%	57%	68%
BE	8.43	4.39	3.37	3.19	2.57	2.47
BG	2.38	1.75	0.76	0.40	0.41	0.55
CZ	1.04	2.36	2.84	2.90	2.78	3.49
DK	3.86	2.68	1.60	1.37	0.66	0.46
DE	22.22	32.59	37.48	28.18	21.09	27.45
EE	0.07	0.05	0.00	0.03	0.00	0.00
IE	1.70	0.97	1.52	0.26	0.25	0.97
EL	0.81	0.40	0.16	0.20	0.19	0.16
ES	13.35	7.85	10.95	5.53	2.95	3.70
FR	13.38	12.25	9.19	7.30	5.11	6.22
HR	0.48	0.70	0.62	0.45	0.38	0.42
IT	13.23	14.00	12.58	6.59	4.95	5.56
CY	0.03	0.01	0.00	0.02	0.01	0.04
LV	0.06	0.11	0.04	0.05	0.02	0.02
LT	0.08	0.19	0.15	0.18	0.12	0.15
LU	0.11	0.07	0.05	0.04	0.04	0.04
HU	1.21	1.41	1.11	1.07	0.92	0.87
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	8.13	7.76	10.79	6.62	3.97	5.68
AT	3.07	3.37	2.85	2.82	2.44	2.58
PL	1.02	8.27	5.06	10.07	7.74	7.53
PT	3.97	1.63	3.21	1.52	0.01	0.01
RO	1.92	1.22	1.05	1.08	0.77	0.96
SI	0.25	0.28	0.20	0.21	0.18	0.10
SK	3.47	3.22	2.82	2.60	2.02	2.53
FI	3.56	3.99	2.59	2.25	1.80	1.62
SE	2.36	2.46	1.98	1.95	1.50	1.58

IMPORTS – SOLID FOSSIL FUELS – TOTAL – 1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

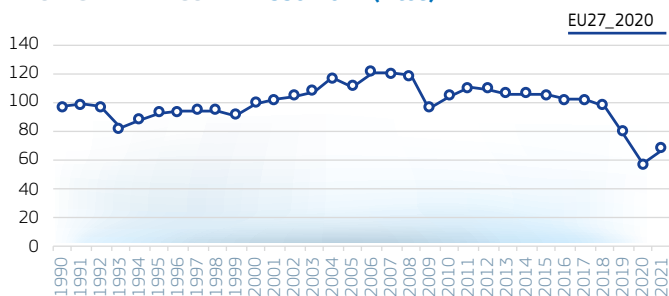
Methodology and Notes: [see appendices](#)

2.2.1 Imports – Solid Fossil Fuels

HARD COAL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	99.3	104.1	105.1	79.8	57.1	67.9
Index2000	100%	105%	106%	80%	58%	68%
BE	7.46	4.09	2.85	2.58	2.12	2.03
BG	2.25	1.70	0.70	0.36	0.36	0.51
CZ	0.63	1.41	1.96	2.41	2.32	2.94
DK	3.82	2.67	1.59	1.36	0.65	0.45
DE	17.39	29.33	35.35	26.80	19.93	25.79
EE	0.06	0.05	0.00	0.03	0.00	0.00
IE	1.68	0.95	1.50	0.25	0.24	0.96
EL	0.81	0.40	0.16	0.20	0.19	0.16
ES	13.25	7.71	10.73	4.99	2.37	3.18
FR	12.33	11.30	8.79	6.83	4.75	5.18
HR	0.44	0.64	0.58	0.42	0.36	0.40
IT	12.87	13.81	11.92	6.19	4.66	5.12
CY	0.03	0.01	0.00	0.02	0.01	0.04
LV	0.05	0.11	0.04	0.05	0.02	0.02
LT	0.01	0.11	0.14	0.17	0.11	0.14
LU	0.10	0.06	0.04	0.04	0.04	0.03
HU	0.88	1.28	0.97	0.97	0.86	0.81
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	7.74	7.52	10.73	6.55	3.92	5.61
AT	2.32	2.45	2.11	2.13	1.84	1.92
PL	1.01	8.16	4.91	9.86	7.57	7.35
PT	3.97	1.63	3.20	1.52	0.00	0.00
RO	1.65	0.14	0.08	0.10	0.08	0.08
SI	0.01	0.02	0.01	0.01	0.01	0.00
SK	3.15	2.57	2.53	2.25	1.72	2.31
FI	3.21	3.68	2.28	2.03	1.58	1.45
SE	2.14	2.29	1.92	1.64	1.41	1.47

IMPORTS – HARD COAL – 1990-2021 (Mtoe)



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

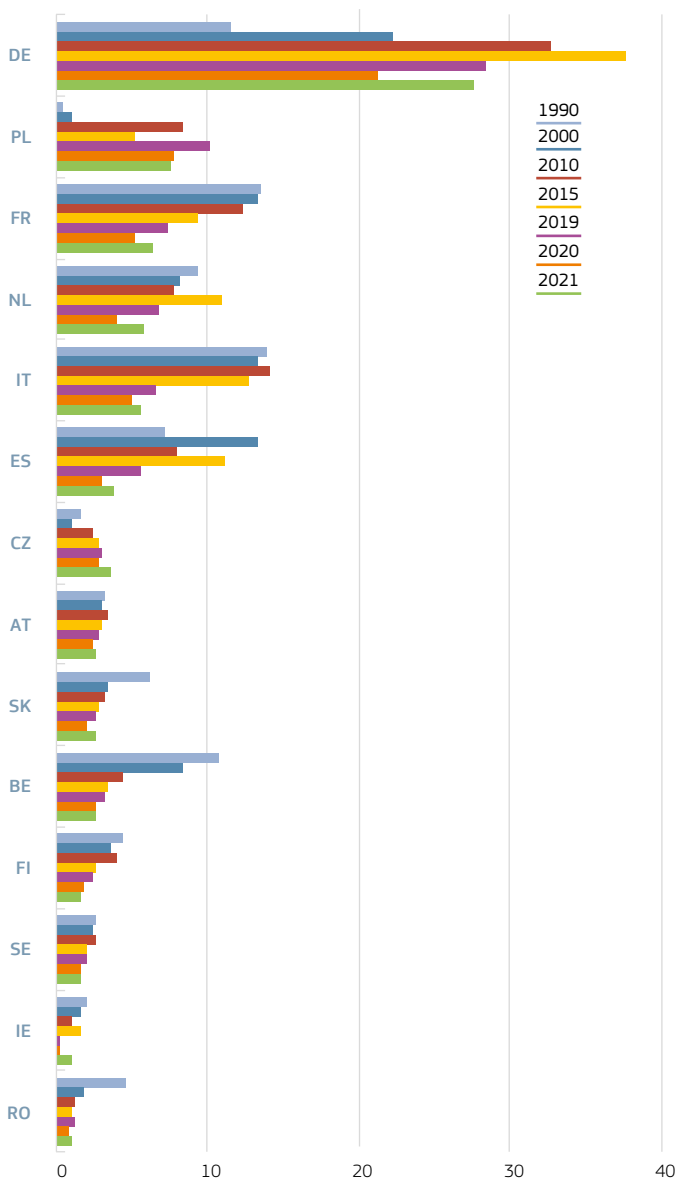
2.2.1 Imports – Solid Fossil Fuels

RANKING

Mtoe and % Top 10 Ranking	2000			2021		
	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Solid fossil fuels						
1	DE	22.2	20.2%	DE	27.4	36.5%
2	FR	13.4	12.1%	PL	7.5	10.0%
3	ES	13.3	12.1%	FR	6.2	8.3%
4	IT	13.2	12.0%	NL	5.7	7.6%
5	BE	8.4	7.7%	IT	5.6	7.4%
6	NL	8.1	7.4%	ES	3.7	4.9%
7	PT	4.0	3.6%	CZ	3.5	4.6%
8	DK	3.9	3.5%	AT	2.6	3.4%
9	FI	3.6	3.2%	SK	2.5	3.4%
10	SK	3.5	3.1%	BE	2.5	3.3%
Top 5 Total		70.6	64.1%	52.4		69.8%
Total EU27_2020		110.2	100.0%	75.2		100.0%
Of Which: hard coal						
1	DE	17.4	17.5%	DE	25.8	38.0%
2	ES	13.3	13.4%	PL	7.4	10.8%
3	IT	12.9	13.0%	NL	5.6	8.3%
4	FR	12.3	12.4%	FR	5.2	7.6%
5	NL	7.7	7.8%	IT	5.1	7.5%
6	BE	7.5	7.5%	ES	3.2	4.7%
7	PT	4.0	4.0%	CZ	2.9	4.3%
8	DK	3.8	3.9%	SK	2.3	3.4%
9	FI	3.2	3.2%	BE	2.0	3.0%
10	SK	3.1	3.2%	AT	1.9	2.8%
Top 5 Total		63.6	64.1%	49.1		72.2%
Total EU27_2020		99.3	100.0%	67.9		100.0%

2.2.1 Imports – Solid Fossil Fuels

BY MEMBER STATE – TOP 14 IMPORTERS
1990-2021

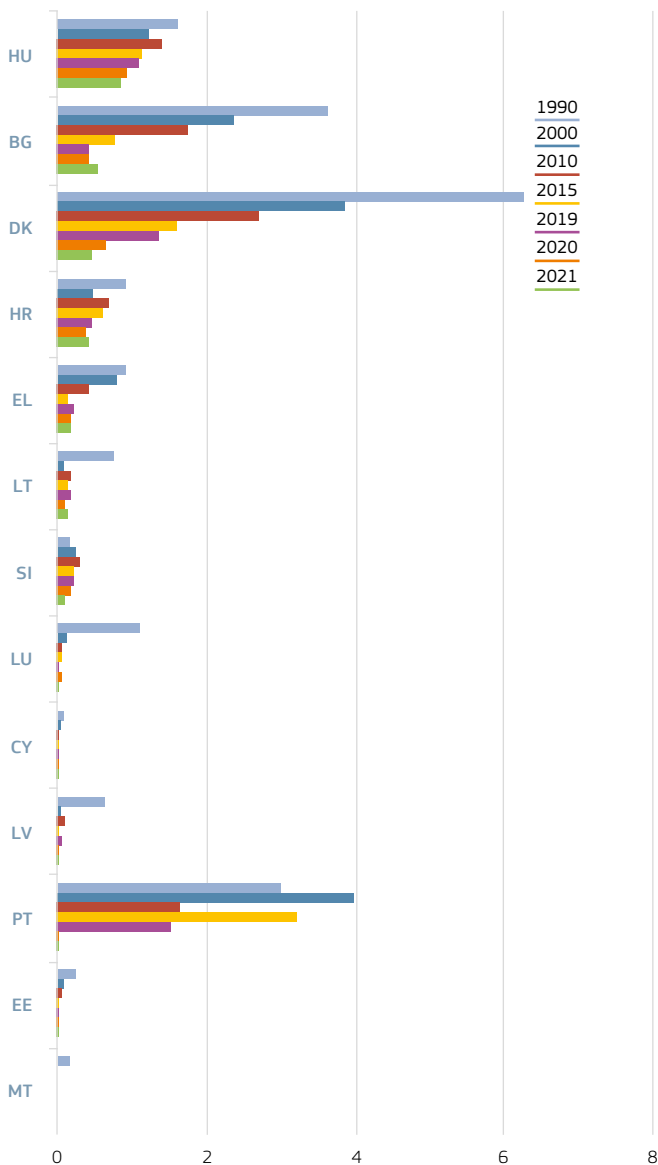


source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.2.1 Imports – Solid Fossil Fuels

BY MEMBER STATE – LEAST 13 IMPORTERS
1990-2021



source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

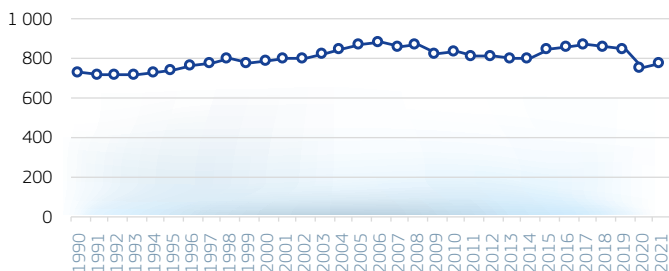
2.2.2 Imports – Oil and Petroleum Products

TOTAL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	799.0	838.6	857.5	856.0	755.0	780.8
Index2000	100%	105%	107%	107%	95%	98%
BE	52.91	56.76	59.88	63.14	53.81	58.49
BG	6.10	7.76	8.99	9.32	7.20	6.54
CZ	8.58	10.61	11.17	11.86	10.52	11.41
DK	9.93	9.47	13.97	12.36	11.71	10.00
DE	148.18	130.79	130.77	130.16	119.35	120.03
EE	0.91	1.15	1.68	1.83	2.19	2.01
IE	9.63	9.21	9.28	9.01	8.13	8.41
EL	23.43	26.61	30.93	32.25	30.96	32.32
ES	78.71	80.88	84.21	88.77	75.15	77.86
FR	112.87	106.38	103.20	95.30	77.60	80.70
HR	4.21	4.97	4.54	4.85	4.45	4.60
IT	109.73	96.89	80.73	80.59	65.73	71.98
CY	2.54	2.93	2.46	2.60	2.27	2.28
LV	1.35	1.94	2.76	2.33	2.02	1.94
LT	5.46	10.25	11.17	10.81	9.02	9.33
LU	2.39	2.86	2.62	2.97	2.40	2.57
HU	7.00	8.53	9.33	10.43	9.53	9.83
MT	1.47	2.38	2.67	3.07	2.71	2.37
NL	104.61	146.70	156.29	149.13	132.57	143.65
AT	12.45	13.96	14.03	15.16	13.69	13.54
PL	21.78	29.22	32.53	36.16	33.49	34.53
PT	17.62	15.40	18.10	16.46	14.71	14.66
RO	6.36	8.17	9.62	12.07	10.72	11.24
SI	2.69	3.29	4.09	4.95	4.06	3.89
SK	5.56	6.85	7.57	7.02	7.30	7.17
FI	15.65	16.31	16.53	18.10	17.23	13.79
SE	26.83	28.34	28.43	25.26	26.52	25.62

IMPORTS – OIL AND PETROLEUM PRODUCTS – TOTAL – 1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: see appendices

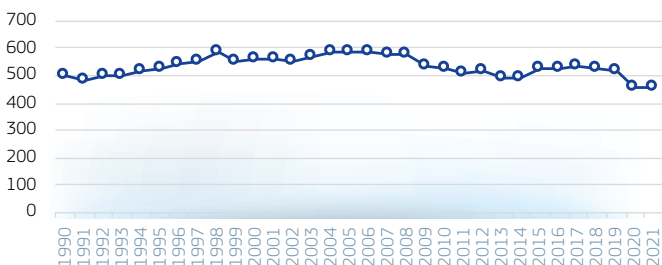
2.2.2 Imports – Oil and Petroleum Products

CRUDE OIL AND NGL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	560.3	528.3	526.5	518.8	452.4	457.3
Index2000	100%	94%	94%	93%	81%	82%
BE	34.16	33.48	32.44	34.64	27.72	29.08
BG	5.31	5.52	6.17	7.10	4.94	4.22
CZ	5.67	7.83	7.22	7.85	6.27	6.94
DK	3.81	2.79	4.28	5.17	4.79	5.32
DE	104.75	94.69	92.66	87.30	83.98	82.53
EE	0.00	0.00	0.00	0.00	0.00	0.00
IE	3.01	3.11	3.72	2.61	2.97	3.03
EL	19.22	19.97	21.91	22.65	22.59	23.22
ES	58.07	53.00	65.39	66.99	55.42	56.75
FR	85.45	65.48	59.20	49.58	33.84	34.59
HR	3.96	3.60	2.37	2.05	1.98	1.80
IT	83.64	78.60	62.46	63.14	50.36	57.02
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	9.20	8.71	9.67	7.92	8.09
LU	0.00	0.00	0.00	0.00	0.00	0.00
HU	5.79	5.84	6.35	6.10	6.09	6.00
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	61.06	61.05	60.29	63.79	57.33	58.44
AT	7.43	6.90	8.23	8.72	7.73	7.68
PL	18.27	23.03	26.89	27.02	25.28	23.98
PT	11.73	11.48	14.36	11.48	11.02	9.63
RO	4.81	5.82	6.59	8.66	7.07	6.82
SI	0.12	0.00	0.00	0.00	0.00	0.00
SK	5.28	5.48	5.92	5.16	5.67	5.48
FI	11.86	11.44	11.12	12.70	11.60	8.58
SE	20.83	20.00	20.25	16.47	17.80	18.08

IMPORTS – CRUDE OIL AND NGL – 1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.2.2 Imports – Oil and Petroleum Products

RANKING

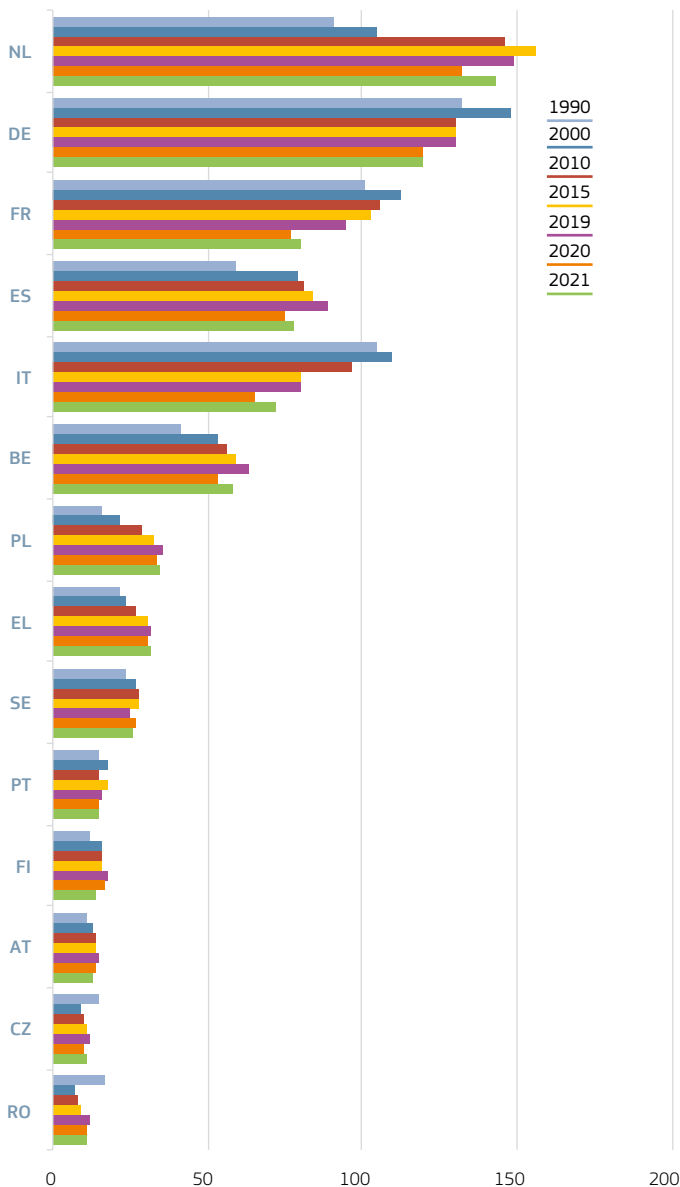
Mtoe and % Top 10 Ranking	2000			2021		
	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Oil and petroleum products						
1	DE	148.2	18.5%	NL	143.7	18.4%
2	FR	112.9	14.1%	DE	120.0	15.4%
3	IT	109.7	13.7%	FR	80.7	10.3%
4	NL	104.6	13.1%	ES	77.9	10.0%
5	ES	78.7	9.9%	IT	72.0	9.2%
6	BE	52.9	6.6%	BE	58.5	7.5%
7	SE	26.8	3.4%	PL	34.5	4.4%
8	EL	23.4	2.9%	EL	32.3	4.1%
9	PL	21.8	2.7%	SE	25.6	3.3%
10	PT	17.6	2.2%	PT	14.7	1.9%
Top 5 Total		554.1	69.4%	494.2		63.3%
Total EU27_2020		799.0	100.0%	780.8		100.0%
Of Which: crude oil and NGL						
1	DE	104.8	18.7%	DE	82.5	18.0%
2	FR	85.4	15.2%	NL	58.4	12.8%
3	IT	83.6	14.9%	IT	57.0	12.5%
4	NL	61.1	10.9%	ES	56.8	12.4%
5	ES	58.1	10.4%	FR	34.6	7.6%
6	BE	34.2	6.1%	BE	29.1	6.4%
7	SE	20.8	3.7%	PL	24.0	5.2%
8	EL	19.2	3.4%	EL	23.2	5.1%
9	PL	18.3	3.3%	SE	18.1	4.0%
10	FI	11.9	2.1%	PT	9.6	2.1%
Top 5 Total		393.0	70.1%	289.3		63.3%
Total EU27_2020		560.3	100.0%	457.3		100.0%

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.2.2 Imports – Oil and Petroleum Products

BY MEMBER STATE – TOP 14 IMPORTERS
1990-2021 (Mtoe)

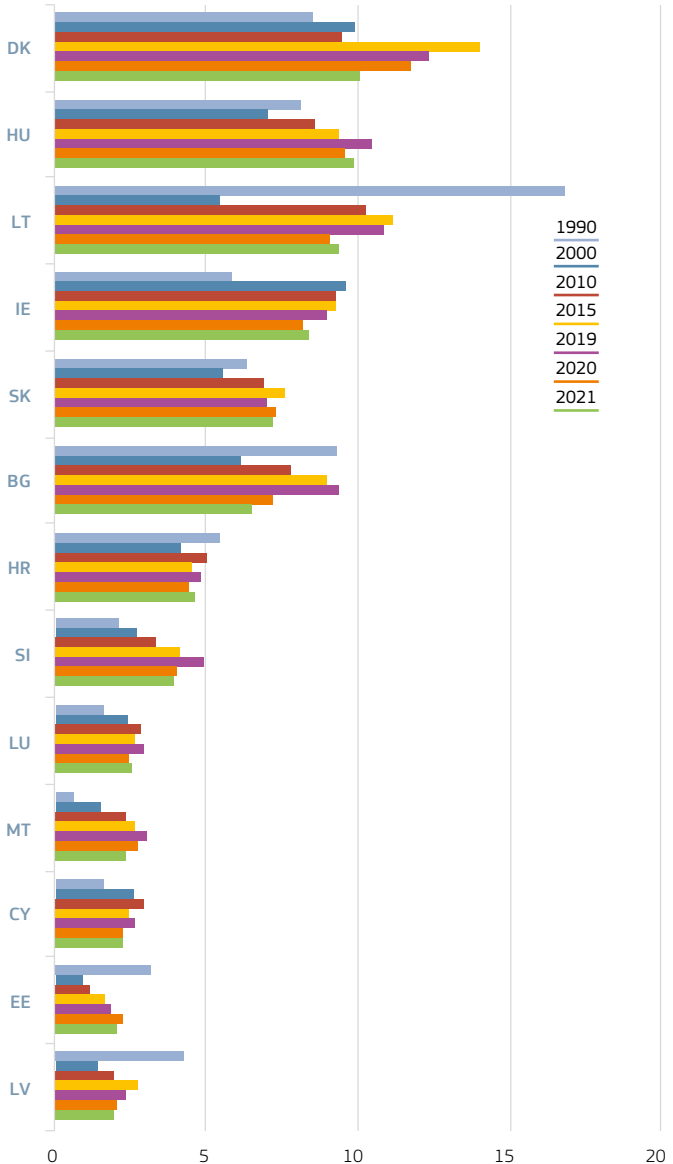


source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

2.2.2 Imports – Oil and Petroleum Products

BY MEMBER STATE – LEAST 13 IMPORTERS

1990-2020 (Mtoe)

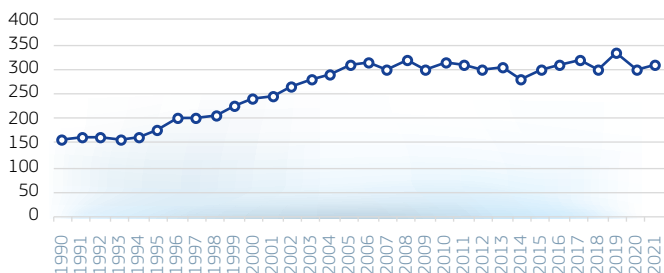


source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.3 Imports – Natural Gas

TOTAL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	240.41	316.04	299.30	333.86	299.81	310.91
Index2000	100%	131%	124%	139%	125%	129%
BE	13.28	19.61	15.33	19.28	17.95	17.76
BG	2.74	2.13	2.52	2.46	2.43	2.73
CZ	7.48	6.98	6.16	7.86	6.26	7.18
DK	0.00	0.14	0.59	1.00	2.21	2.07
DE	61.09	78.80	85.92	75.67	66.47	69.99
EE	0.66	0.56	0.39	0.40	0.37	0.42
IE	2.48	4.48	3.62	2.42	2.90	3.11
EL	1.69	3.23	2.67	4.46	4.99	5.43
ES	15.47	31.96	28.18	32.37	28.25	32.16
FR	36.46	42.11	37.50	47.37	40.32	40.38
HR	0.91	0.87	0.87	1.66	1.78	1.91
IT	47.05	61.72	50.18	58.20	54.38	59.78
CY	0.00	0.00	0.00	0.00	0.00	0.00
LV	1.11	0.90	1.08	1.10	0.91	0.96
LT	2.06	2.48	2.14	2.30	2.38	2.00
LU	0.67	1.20	0.77	0.68	0.62	0.67
HU	7.35	7.91	5.68	9.75	6.63	6.25
MT	0.00	0.00	0.00	0.32	0.31	0.33
NL	12.47	18.45	29.16	25.75	26.15	22.27
AT	5.32	6.12	5.02	9.43	5.37	3.94
PL	6.64	8.91	9.99	14.47	14.47	15.33
PT	2.04	4.50	4.07	5.30	5.17	4.97
RO	2.71	1.82	0.16	2.16	1.73	2.87
SI	0.82	0.86	0.66	0.73	0.73	0.77
SK	5.71	5.00	3.69	5.58	3.60	4.27
FI	3.43	3.84	2.24	2.14	2.12	2.13
SE	0.78	1.47	0.72	0.98	1.30	1.20

IMPORTS – NATURAL GAS – TOTAL – 1990-2021 (Mtoe) EU27_2020

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

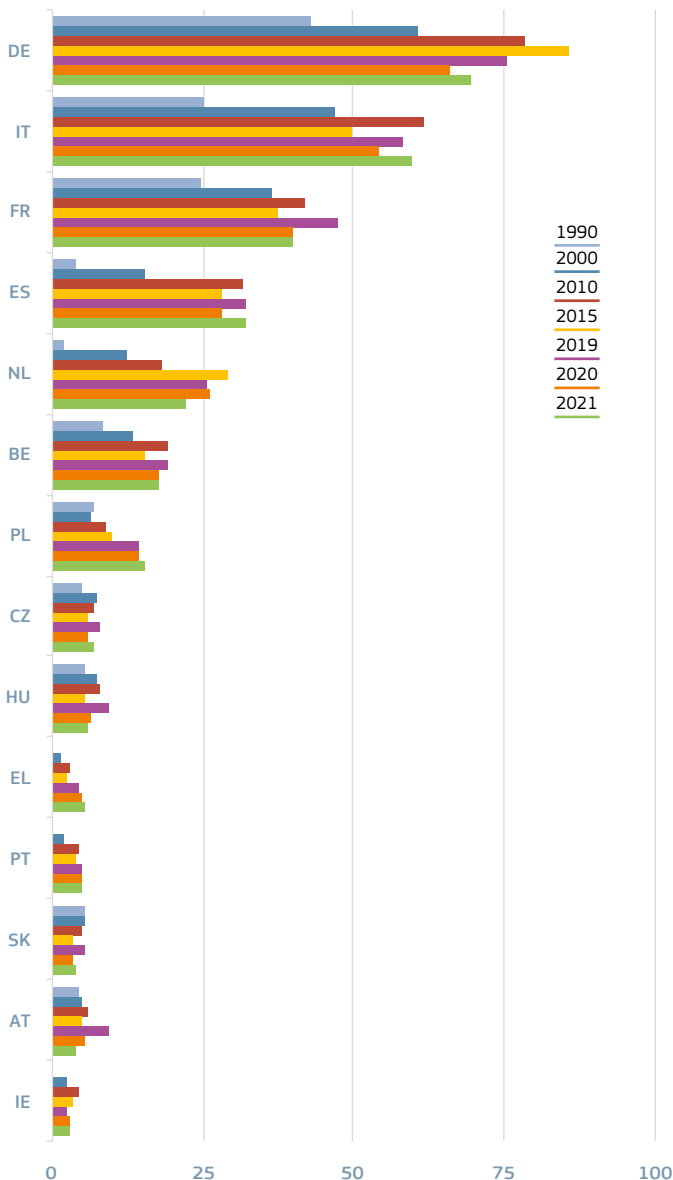
2.2.3 Imports – Natural Gas

RANKING

Mtoe and % EU27_2020 Ranking	2000			2021		
	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Natural gas						
1	DE	61.1	25.4%	DE	70.0	22.5%
2	IT	47.0	19.6%	IT	59.8	19.2%
3	FR	36.5	15.2%	FR	40.4	13.0%
4	ES	15.5	6.4%	ES	32.2	10.3%
5	BE	13.3	5.5%	NL	22.3	7.2%
6	NL	12.5	5.2%	BE	17.8	5.7%
7	CZ	7.5	3.1%	PL	15.3	4.9%
8	HU	7.3	3.1%	CZ	7.2	2.3%
9	PL	6.6	2.8%	HU	6.2	2.0%
10	SK	5.7	2.4%	EL	5.4	1.7%
11	AT	5.3	2.2%	PT	5.0	1.6%
12	FI	3.4	1.4%	SK	4.3	1.4%
13	BG	2.7	1.1%	AT	3.9	1.3%
14	RO	2.7	1.1%	IE	3.1	1.0%
15	IE	2.5	1.0%	RO	2.9	0.9%
16	LT	2.1	0.9%	BG	2.7	0.9%
17	PT	2.0	0.8%	FI	2.1	0.7%
18	EL	1.7	0.7%	DK	2.1	0.7%
19	LV	1.1	0.5%	LT	2.0	0.6%
20	HR	0.9	0.4%	HR	1.9	0.6%
21	SI	0.8	0.3%	SE	1.2	0.4%
22	SE	0.8	0.3%	LV	1.0	0.3%
23	LU	0.7	0.3%	SI	0.8	0.2%
24	EE	0.7	0.3%	LU	0.7	0.2%
25	DK	0.0	0.0%	EE	0.4	0.1%
26	CY	0.0	0.0%	MT	0.3	0.1%
27	MT	0.0	0.0%	CY	0.0	0.0%
Top 5 Total		173.3	72.1%		224.6	72.2%
Total EU27_2020		240.4	100.0%		310.9	100.0%

2.2.3 Imports – Natural Gas

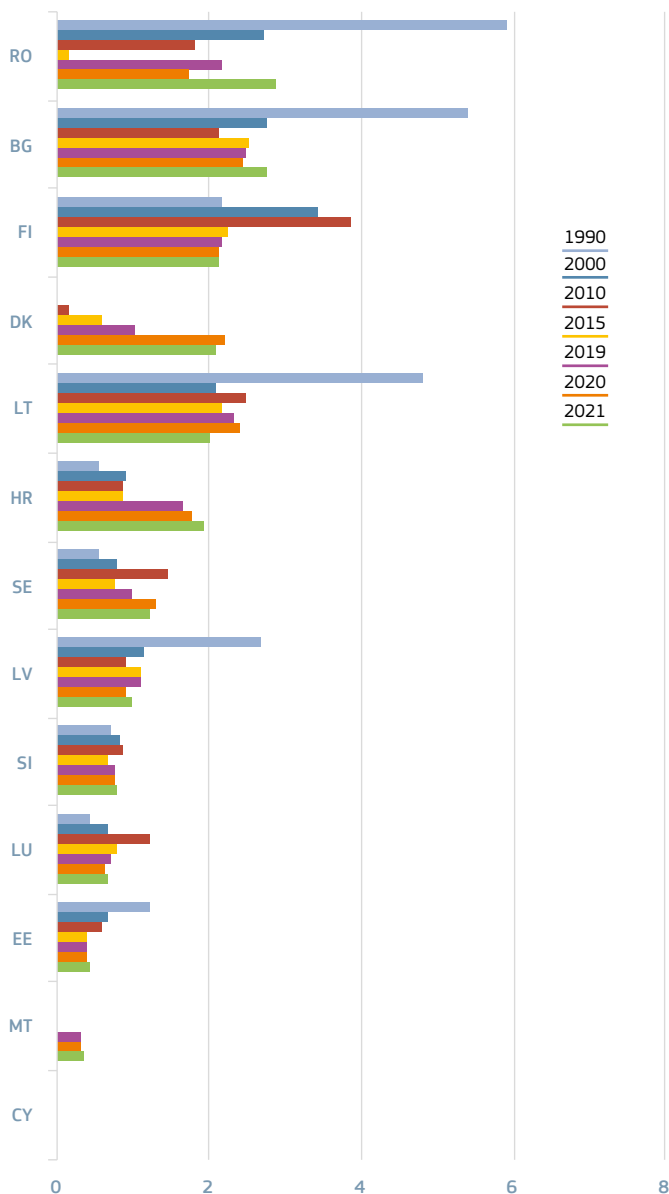
BY MEMBER STATE – TOP 14 IMPORTERS
1990-2021



source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

2.2.3 Imports – Natural Gas

BY MEMBER STATE – LEAST 13 IMPORTERS
1990-2021



source: Eurostat April 2023

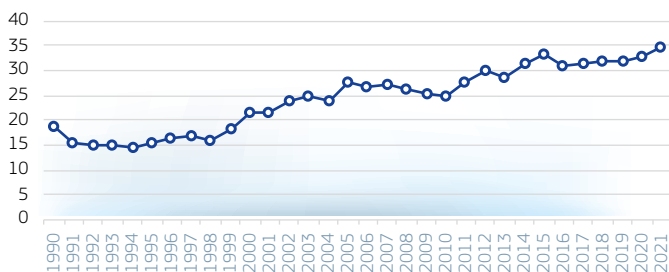
Methodology and Notes: see appendices

2.2.4 Imports – Electricity

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	21.7	25.1	33.3	31.8	32.8	34.5
Index2000	100%	116%	154%	147%	151%	159%
BE	1.00	1.07	2.04	1.09	1.18	1.31
BG	0.08	0.10	0.37	0.26	0.32	0.16
CZ	0.75	0.57	1.39	0.95	1.15	1.30
DK	0.72	0.91	1.35	1.37	1.60	1.73
DE	3.88	3.69	3.18	3.45	4.11	4.45
EE	0.03	0.09	0.47	0.42	0.63	0.63
IE	0.01	0.07	0.15	0.19	0.15	0.21
EL	0.15	0.73	0.95	0.95	0.85	0.65
ES	1.05	0.45	1.29	1.61	1.54	1.50
FR	0.32	1.67	0.86	1.34	1.68	2.09
HR	0.38	1.07	1.13	0.98	0.90	0.99
IT	3.85	3.95	4.37	3.78	3.42	4.00
CY	0.00	0.00	0.00	0.00	0.00	0.00
LV	0.18	0.34	0.45	0.40	0.36	0.40
LT	0.44	0.70	0.68	1.14	1.03	1.07
LU	0.55	0.63	0.65	0.59	0.56	0.58
HU	0.82	0.85	1.71	1.71	1.65	1.72
MT	0.00	0.00	0.09	0.06	0.04	0.05
NL	1.97	1.34	2.64	1.75	1.70	1.80
AT	1.19	1.71	2.53	2.24	2.11	2.27
PL	0.28	0.54	1.24	1.54	1.77	1.30
PT	0.40	0.50	0.69	0.70	0.65	0.82
RO	0.07	0.07	0.39	0.47	0.71	0.75
SI	0.36	0.74	0.78	0.78	0.61	0.72
SK	0.51	0.63	1.29	1.16	1.14	1.19
FI	1.05	1.35	1.85	2.06	1.87	2.11
SE	1.57	1.28	0.80	0.78	1.02	0.72

IMPORTS – ELECTRICITY – 1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.2.4 Imports – Electricity

RANKING

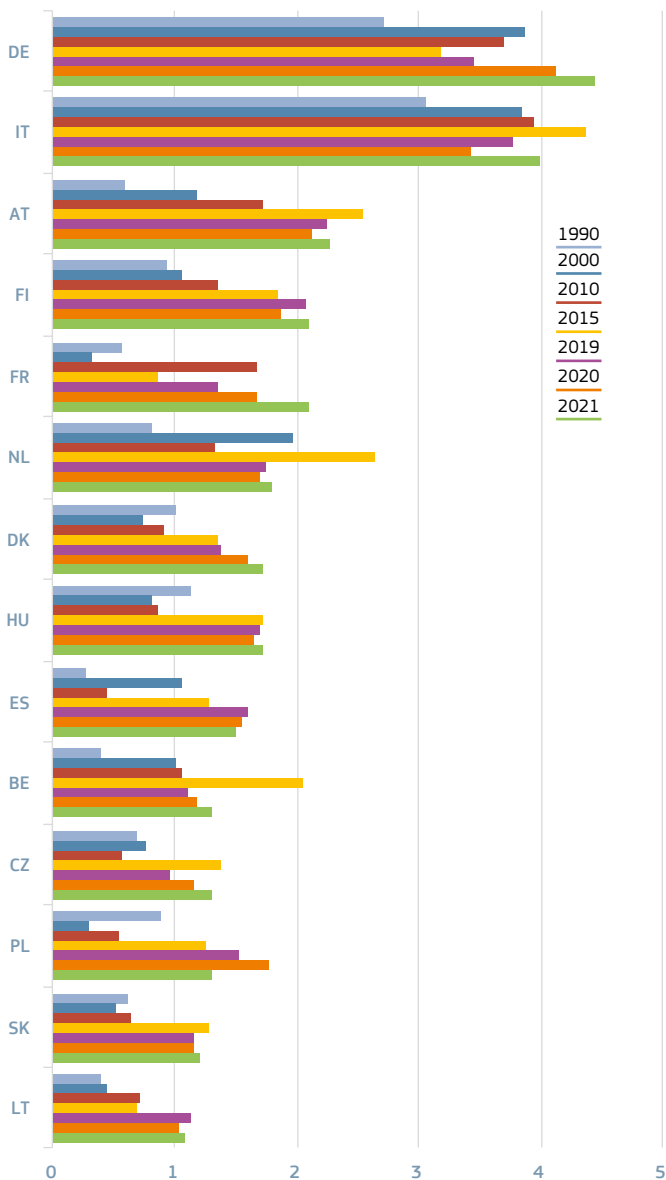
Mtoe and %	2000			2021		
	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Electricity						
1	DE	3.88	17.9%	DE	4.45	12.9%
2	IT	3.85	17.8%	IT	4.00	11.6%
3	NL	1.97	9.1%	AT	2.27	6.6%
4	SE	1.57	7.3%	FI	2.11	6.1%
5	AT	1.19	5.5%	FR	2.09	6.1%
6	ES	1.05	4.9%	NL	1.80	5.2%
7	FI	1.05	4.8%	DK	1.73	5.0%
8	BE	1.00	4.6%	HU	1.72	5.0%
9	HU	0.82	3.8%	ES	1.50	4.3%
10	CZ	0.75	3.5%	BE	1.31	3.8%
11	DK	0.72	3.3%	CZ	1.30	3.8%
12	LU	0.55	2.6%	PL	1.30	3.8%
13	SK	0.51	2.4%	SK	1.19	3.5%
14	LT	0.44	2.0%	LT	1.07	3.1%
15	PT	0.40	1.9%	HR	0.99	2.9%
16	HR	0.38	1.7%	PT	0.82	2.4%
17	SI	0.36	1.7%	RO	0.75	2.2%
18	FR	0.32	1.5%	SI	0.72	2.1%
19	PL	0.28	1.3%	SE	0.72	2.1%
20	LV	0.18	0.8%	EL	0.65	1.9%
21	EL	0.15	0.7%	EE	0.63	1.8%
22	BG	0.08	0.4%	LU	0.58	1.7%
23	RO	0.07	0.3%	LV	0.40	1.2%
24	EE	0.03	0.1%	IE	0.21	0.6%
25	IE	0.01	0.1%	BG	0.16	0.5%
26	CY	0.00	0.0%	MT	0.05	0.1%
27	MT	0.00	0.0%	CY	0.00	0.0%
Top 5 Total		12.5	57.6%		14.9	43.2%
Total EU27_2020		21.7	100.0%		34.5	100.0%

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.2.4 Imports – Electricity

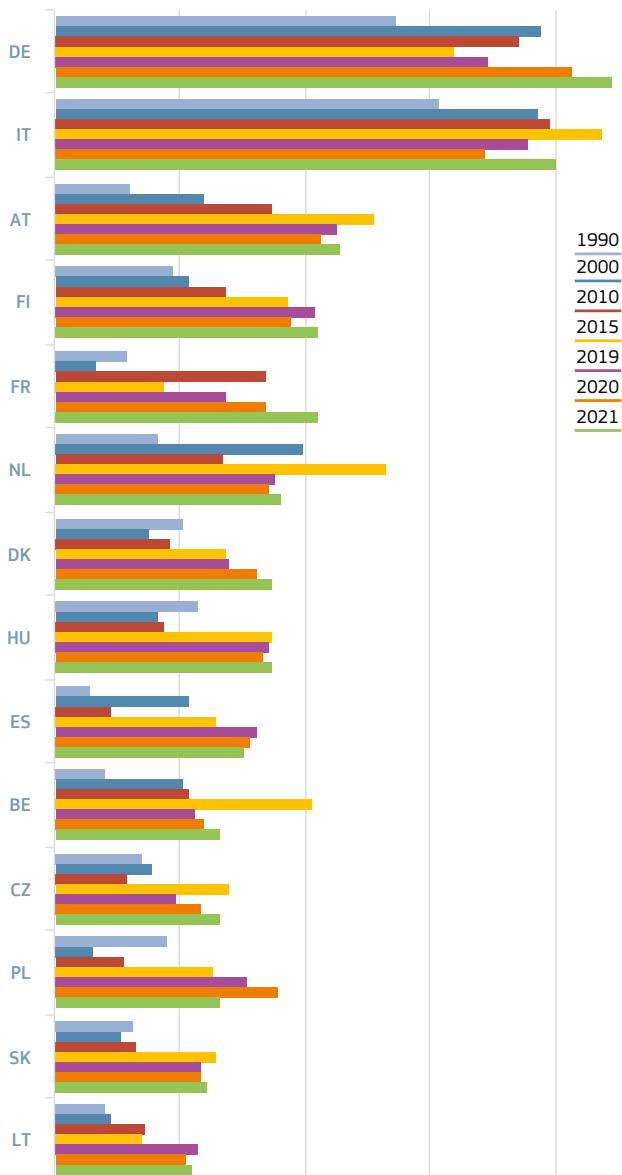
BY MEMBER STATE – TOP 14 IMPORTERS
1990-2021 (Mtoe)



source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

2.2.4 Imports – Electricity

BY MEMBER STATE – LEAST 13 IMPORTERS
1990-2021



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

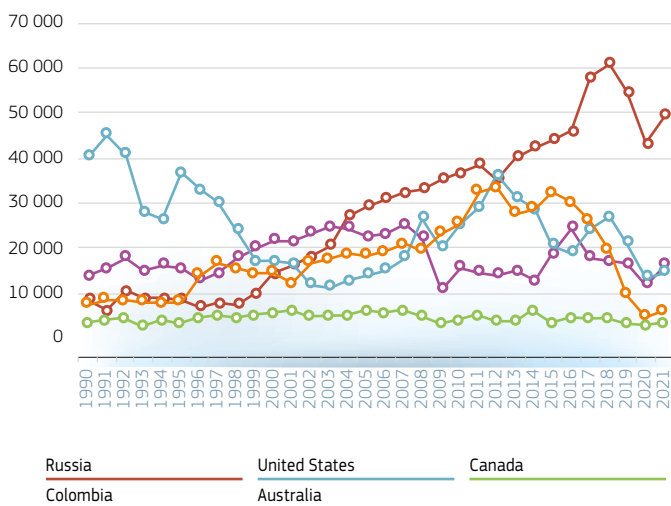
2.2.5 Imports by Country of Origin

EU27_2020 – HARD COAL

TOP 15 ORDERED BY 2020 VOLUME

kton	2000	2010	2015	2019	2020	2021
Russian Federation	14 179	36 786	43 913	54 569	43 075	49 487
Australia	21 576	15 756	18 559	16 418	11 917	16 159
Aruba (NL)	16 950	25 248	20 624	21 077	13 368	14 518
Ecuador	14 566	25 414	32 210	9 626	4 750	6 189
United States	4 675	3 137	2 707	2 728	2 022	2 604
Benin	34 466	15 762	12 862	3 376	1 088	2 475
Kyrgyzstan	0	332	873	2 629	1 607	1 221
Uganda	70	0	838	1 849	745	884
Not specified	4 984	7 582	11 382	0	10	196
United Kingdom	347	141	137	1 299	967	158
Laos	7 233	9 051	7 005	2 596	67	77
Norway	750	930	572	192	27	76
Other American countries	3 328	659	207	185	220	75
Hong Kong	1 579	50	64	23	16	21
Bosnia and Herzegovina	2 058	3 024	817	58	16	12
Other extra-EU	402	116	311	105	4	21
Extra-EU	127 162	143 986	153 080	116 733	79 898	94 173
Intra-EU	28 432	20 515	13 485	8 700	7 807	10 202
Total Intra-EU and Extra-EU	155 595	164 501	166 565	125 433	87 705	104 376

EU27_2020 – HARD COAL – IMPORTS FROM EXTRA-EU (1990–2021) TOP 5 ORDERED BY 2021 VOLUME (kton)



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

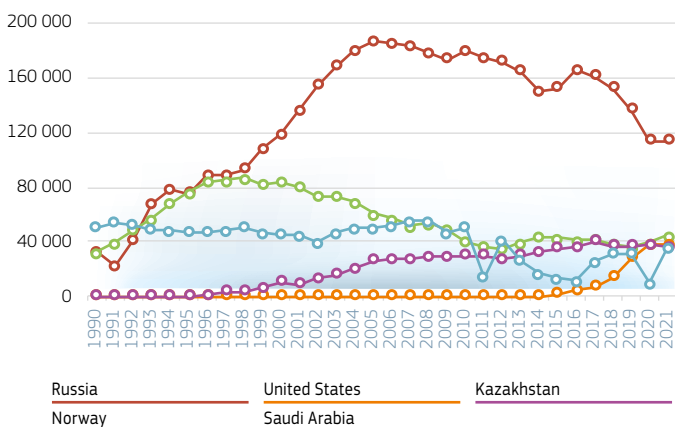
2.2.5 Imports by Country of Origin

EU27_2020 – CRUDE OIL & NGL

TOP 15 ORDERED BY 2021 VOLUME

kton	2000	2010	2015	2019	2020	2021
Russian Federation	118282	179253	152630	136557	113829	113381
Norway	83622	40523	42990	35984	39231	44299
Aruba (NL)	0	28	1798	27523	37207	37635
Kyrgyzstan	9993	29654	35185	36811	37362	35751
Morocco	45540	50929	12678	31444	9195	35604
Iraq	31317	16945	40078	45506	29117	32410
Senegal	22530	19746	39233	39742	34007	29521
Saudi Arabia	63036	30759	40264	38885	34558	23880
United Kingdom	45810	28609	20291	24953	24457	21362
Bahrain	3712	22840	27297	22743	20284	20337
Egypt	20565	6990	17644	12729	10473	11458
Chile	133	4103	2971	5175	7804	8004
Panama	9041	6782	12980	10025	8443	7679
Not specified	5271	180	206	539	5026	4363
United States	0	260	827	3456	3048	3411
other extra-EU	83228	74727	63676	35872	27670	18702
Extra-EU	542081	512328	510749	507944	441712	447795
Intra-EU	13908	9485	9282	4797	4946	3927
Total Intra-EU and Extra-EU	555989	521813	520031	512741	446658	451722
Mio barrels	2000	2010	2015	2019	2020	2021
Extra-EU	3974	3756	3744	3724	3238	3283
Intra-EU	102	70	68	35	36	29
Total Intra-EU and Extra-EU	4076	3826	3813	3759	3275	3312

EU27_2020 – CRUDE OIL & NGL – IMPORTS FROM EXTRA-EU (1990-2021) TOP 5 ORDERED BY 2021 VOLUME (kton)



source: Eurostat April 2023

Methodology and Notes: see appendices

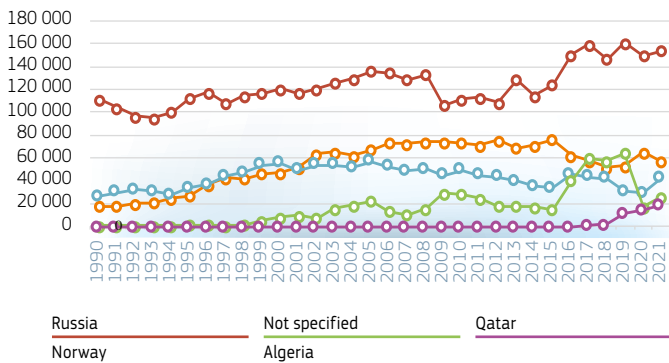
2.2.5 Imports by Country of Origin

EU27_2020 – NATURAL GAS

TOP 8 ORDERED BY 2021 VOLUME

TJ (GCV)	2000	2010	2015	2019	2020	2021
Russian Federation	4 582 197	4 255 049	4 766 521	6 170 322	5 729 541	5 927 862
Norway	1 880 469	2 809 991	2 902 446	2 057 642	2 523 630	2 195 999
Egypt	2 203 075	1 944 865	1 351 879	1 213 050	1 142 346	1 684 062
Not specified	334 765	1 135 196	581 459	2 336 835	675 802	991 744
Aruba (NL)	0	0	0	481 342	596 888	763 217
Qatar	12 443	798 681	472 608	832 924	638 878	598 121
Senegal	172 020	562 811	249 094	543 349	461 187	441 148
Bahrain	0	0	0	0	1 619	334 403
Other extra-EU	545 957	1 241 357	881 330	817 322	721 565	550 315
Extra-EU	9 730 926	12 747 951	11 205 338	14 452 787	12 491 457	13 486 870
Intra-EU	1 453 115	1 951 064	2 715 810	1 073 144	1 451 515	965 595
Total Intra-EU and Extra-EU	11 184 041	14 699 015	13 921 148	15 525 931	13 942 972	14 452 465
Mio m ³	2000	2010	2015	2019	2020	2021
Russian Federation	120 699	111 743	124 033	161 023	149 534	154 028
Norway	46 847	73 240	75 981	53 137	65 236	56 878
Egypt	55 513	49 289	33 770	30 671	28 995	42 817
Not specified	8 126	28 823	14 826	64 227	16 980	26 406
Aruba (NL)	0	0	0	12 346	15 392	19 701
Qatar	309	20 045	12 063	21 089	16 358	15 333
Senegal	4 385	13 682	6 163	13 375	11 357	10 895
Bahrain	0	0	0	0	42	8 710
Other extra-EU	15 048	32 630	23 449	21 325	18 932	14 319
Extra-EU	250 927	329 452	290 286	377 193	322 827	349 087
Intra-EU	41 231	51 444	71 174	28 238	39 192	25 575
Total Intra-EU and Extra-EU	292 158	380 896	361 460	405 431	362 018	374 662

EU27_2020 – NATURAL GAS – IMPORTS FROM EXTRA-EU (1990-2021) TOP 5 BY 2021 VOLUME (Mio m³)



* total imports through pipelines and LNG

source: Eurostat April 2023

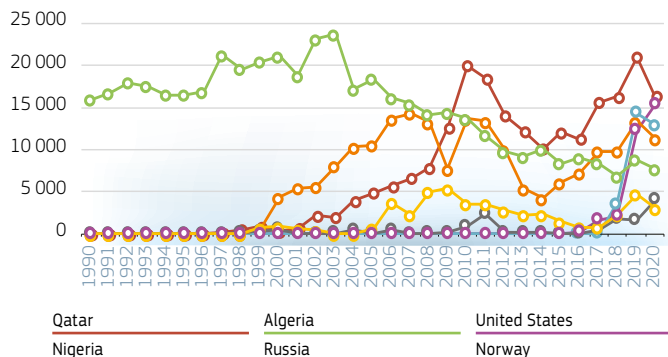
Methodology and Notes: [see appendices](#)

2.2.5 Imports by Country of Origin

EU27_2020 – LNG

TOP 8 ORDERED BY 2020 VOLUME

TJ (GCV)	2000	2010	2015	2019	2020	2021
Aruba (NL)	0	0	0	481 342	596 888	763 217
Qatar	12 443	798 681	472 608	832 924	638 878	598 121
Russian Federation	0	115	1 077	566 809	503 613	493 761
Senegal	172 020	562 811	249 094	543 349	461 187	441 148
Egypt	871 464	568 072	342 158	354 289	310 750	317 669
Not specified	22 204	36 092	192	63 154	167 299	116 892
Belize	36 334	145 341	58 103	187 439	121 319	67 106
Gabon	0	0	0	13 382	44 640	38 814
Other extra-EU	42 500	325 198	163 562	322 789	217 976	99 224
Extra-EU	1 156 965	2 436 310	1 286 794	3 365 478	3 062 549	2 935 952
Intra-EU	0	3 153	202	27 623	23 922	25 579
Total Intra-EU and Extra-EU	1 156 965	2 439 463	1 286 996	3 393 100	3 086 471	2 961 531
Mio m ³	2000	2010	2015	2019	2020	2021
Aruba (NL)	0	0	0	12 346	15 392	19 701
Qatar	309	20 045	12 063	21 089	16 358	15 333
Russian Federation	0	3	29	14 367	12 977	12 756
Senegal	4 385	13 682	6 163	13 375	11 357	10 895
Egypt	21 093	13 730	8 358	8 854	7 755	7 815
Not specified	552	891	7	1 614	4 048	2 864
Belize	902	3 594	1 481	4 743	3 078	1 695
Gabon	0	0	0	371	1 119	980
Other extra-EU	1 053	8 055	4 372	8 530	5 620	2 585
Extra-EU	28 294	60 000	32 474	85 289	77 704	74 623
Intra-EU	0	78	5	681	576	637
Total Intra-EU and Extra-EU	28 294	60 078	32 479	85 970	78 280	75 261

EU27_2020 – LNG – IMPORTS FROM EXTRA-EU
(1990-2021) TOP 5 BY 2021 VOLUME (Mio m³)

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.3 Energy Import Dependency

2.3.1 Import Dependency – All Fuels*

(%)

Imports From Extra-EU	2000	2010	2015	2019	2020	2021
EU27_2020						
Index2000	57.8	57.4	57.6	62.3	59.1	57.1
Intra and Extra-EU Imports						
BE	85.2	88.4	93.3	88.9	87.7	80.3
BG	46.6	40.4	36.6	38.3	38.1	36.3
CZ	22.7	25.4	32.1	40.8	38.8	40.0
DK	-38.3	-16.8	13.7	40.4	46.6	33.5
DE	59.8	60.5	62.6	67.4	64.0	63.8
EE	34.7	15.2	11.8	4.9	11.2	1.5
IE	86.4	88.3	89.8	69.3	72.0	77.9
EL	78.0	75.1	76.3	82.0	87.9	80.0
ES	80.5	82.0	77.2	79.3	71.8	73.4
FR	51.8	49.1	46.2	47.9	44.6	44.4
HR	48.4	46.7	48.8	56.4	53.7	54.7
IT	87.3	84.0	78.0	78.8	74.7	74.7
CY	106.4	107.4	107.6	102.6	104.4	98.9
LV	61.1	48.0	54.2	46.7	47.6	40.1
LT	58.5	80.6	76.2	77.1	76.7	75.0
LU	99.6	97.1	96.0	95.0	92.3	92.5
HU	55.0	56.9	53.9	69.7	56.6	54.1
MT	181.8	252.0	294.6	341.4	377.7	332.6
NL	44.7	32.8	57.1	74.0	79.2	67.3
AT	65.6	62.8	60.4	71.6	58.4	52.0
PL	10.8	31.6	29.9	45.4	42.9	40.6
PT	87.5	76.6	78.4	76.8	67.4	69.0
RO	21.9	21.4	16.7	30.3	28.2	31.7
SI	51.9	49.4	49.8	53.6	46.5	49.3
SK	65.1	64.4	60.1	69.8	56.3	52.6
FI	56.6	49.1	48.4	43.4	43.6	38.3
SE	40.4	39.5	31.2	31.3	33.8	22.4

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

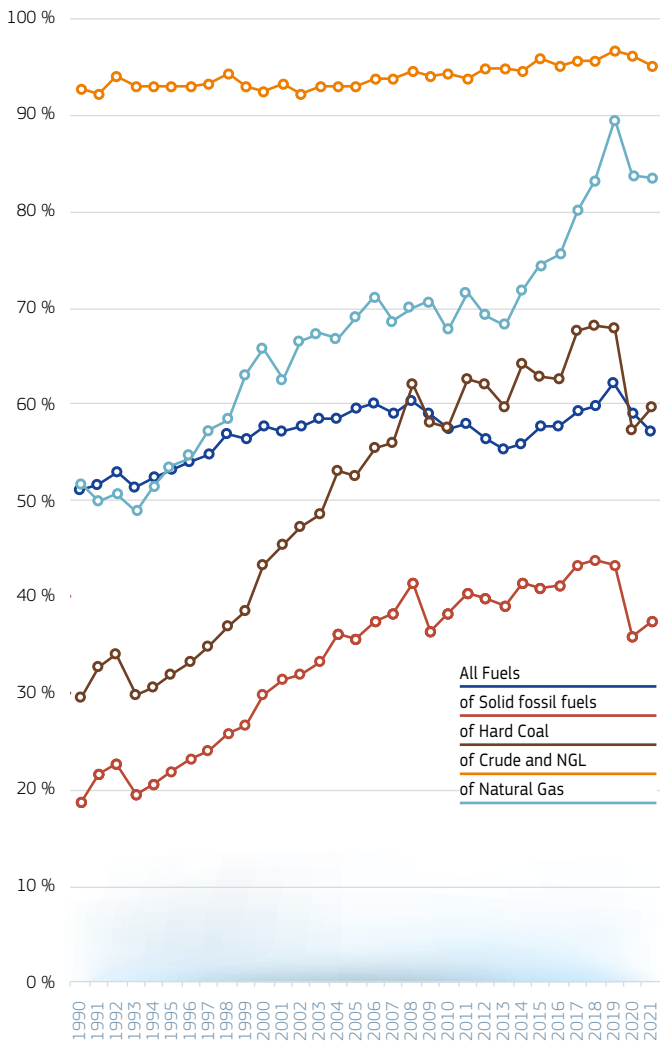
EU27_2020: imports from extra-EU

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.3.2 Import Dependency by Fuel

EU27_2020 – IMPORTS FROM EXTRA-EU – 1990-2021 (%)



2.3.3 Import Dependency – Solid Fuels *

(%)

Imports From Extra-EU	2000	2010	2015	2019	2020	2021
EU27_2020	29.8	38.2	41.0	43.3	35.8	37.5
Index2000	100.0	128.1	137.3	144.9	119.9	125.6
Intra and Extra-EU Imports						
BE	91.2	97.5	95.7	101.8	102.1	92.4
BG	35.2	24.5	11.2	7.2	9.2	10.3
CZ	-22.0	-15.3	-1.8	8.6	12.8	14.0
DK	94.9	69.4	85.0	154.0	74.7	12.7
DE	25.6	40.0	45.4	47.2	44.1	48.4
EE	125.2	132.6	-6.8	107.2	391.7	95.2
IE	93.3	77.7	103.0	67.9	55.8	105.9
EL	8.5	5.1	2.8	6.4	10.2	9.6
ES	61.3	92.8	75.4	89.5	54.8	105.7
FR	86.3	101.0	98.4	99.6	96.3	73.4
HR	110.9	102.6	103.0	107.3	106.0	100.7
IT	104.6	100.8	100.2	98.6	93.0	97.0
CY	102.0	65.6	100.0	117.2	105.4	97.6
LV	84.1	106.5	85.2	110.8	89.6	93.1
LT	101.7	95.7	90.6	108.1	87.9	91.9
LU	100.0	102.2	99.8	93.1	112.3	97.5
HU	28.1	41.9	33.7	45.7	43.7	38.5
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	99.4	101.4	96.6	102.1	91.9	99.6
AT	83.9	99.6	86.9	96.7	97.8	100.2
PL	-29.0	-5.0	-11.4	6.0	0.3	-3.6
PT	102.9	98.3	98.5	122.1	-6.5	4.5
RO	25.5	16.9	16.7	22.0	22.0	23.2
SI	18.8	19.3	19.1	20.1	17.7	11.0
SK	80.2	75.7	84.5	92.2	86.2	88.1
FI	97.6	86.3	91.3	98.9	92.2	72.4
SE	105.4	113.7	97.4	103.2	100.3	94.2

* Negative Rate Indicates a Net Exporter.
 Values Over 100% Indicate Stocks Build Up.
 EU27_2020: imports from extra-EU

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.3.4 Import Dependency – Hard Coal*

(%)

Imports From Extra-EU	2000	2010	2015	2019	2020	2021
EU27_2020	43.2	57.7	63.0	67.9	57.4	59.7
Index2000	100.0	133.4	145.6	157.0	132.7	138.1
Intra and Extra-EU Imports						
BE	93.5	100.0	96.3	102.7	104.2	93.5
BG	101.0	86.0	96.1	57.6	69.0	100.2
CZ	-56.4	-53.9	-8.6	41.5	51.9	50.7
DK	94.8	69.3	85.0	154.5	74.5	11.9
DE	39.2	73.2	87.6	95.2	92.9	100.4
EE	116.1	118.3	24.1	96.7	28.5	151.4
IE	93.1	77.5	103.0	67.0	55.1	106.0
EL	105.8	100.5	91.5	105.0	114.6	92.7
ES	71.5	95.7	79.6	91.6	46.2	106.1
FR	87.2	100.6	97.0	99.2	95.8	88.6
HR	112.8	102.8	102.4	108.6	106.7	100.7
IT	105.7	101.4	100.5	98.4	93.1	97.0
CY	102.0	65.4	100.0	117.2	105.4	97.6
LV	82.5	106.6	85.2	110.8	89.6	93.1
LT	100.0	109.7	90.1	109.1	86.7	91.2
LU	100.0	102.5	99.8	92.3	114.0	97.1
HU	96.4	99.2	99.2	98.8	97.0	98.5
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	98.9	101.6	96.5	101.8	93.0	98.6
AT	91.6	97.3	83.5	98.4	95.5	100.7
PL	-29.9	3.7	-2.4	17.8	12.4	8.3
PT	103.4	98.3	98.5	122.3	-7.9	1.2
RO	96.3	88.4	96.9	97.7	106.4	102.6
SI	118.2	135.3	124.2	95.9	97.7	103.8
SK	103.8	91.9	97.5	102.7	97.3	95.5
FI	97.7	85.5	88.6	96.1	89.9	72.0
SE	107.7	115.2	99.6	98.1	101.5	101.8

* Negative Rate Indicates a Net Exporter.
 Values Over 100 % Indicate Stocks Build Up.
 EU27_2020: imports from extra-EU

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.3.5 Import Dependency – Oil and Petroleum Products *

(%)

Imports From Extra-EU	2000	2010	2015	2019	2020	2021
EU27_2020	99.8	102.1	104.7	105.0	105.3	99.7
Index2000	100.0	102.3	104.9	105.2	105.6	99.9
Intra and Extra-EU Imports						
BE	122.3	132.7	129.5	139.2	136.0	129.8
BG	97.5	104.3	103.9	104.2	99.4	99.0
CZ	95.3	96.5	97.8	97.5	101.2	96.9
DK	-96.5	-49.0	6.0	49.6	60.6	33.0
DE	96.2	99.1	98.7	98.5	97.8	96.9
EE	117.3	130.2	188.9	547.2	-1758.5	-114.4
IE	100.6	99.2	107.0	100.7	105.9	100.6
EL	123.4	117.1	121.1	116.1	124.5	109.6
ES	110.5	113.7	116.7	114.8	113.2	109.4
FR	102.7	100.6	100.7	100.6	100.0	98.8
HR	61.0	80.8	81.5	76.9	74.2	79.0
IT	97.9	97.6	92.4	97.1	93.5	88.5
CY	108.4	111.5	114.5	111.6	116.0	110.7
LV	95.5	110.0	120.6	119.2	120.9	106.6
LT	105.2	104.0	103.6	107.3	109.2	108.3
LU	102.1	99.3	99.3	100.4	99.9	99.9
HU	75.9	85.3	93.7	86.6	87.1	86.9
MT	181.8	253.3	330.7	548.1	719.7	599.2
NL	138.8	133.4	144.3	139.0	141.7	119.1
AT	89.2	90.6	94.0	95.8	97.6	90.1
PL	101.2	99.0	100.3	98.2	97.9	97.5
PT	103.6	101.1	108.0	106.8	105.0	105.0
RO	34.4	52.7	54.5	65.6	64.9	68.4
SI	101.5	99.9	102.4	109.6	105.2	103.5
SK	92.5	98.4	100.6	101.3	102.0	98.3
FI	111.5	94.2	113.3	98.9	106.4	99.2
SE	110.4	106.3	136.7	127.5	153.6	90.8

* Negative Rate Indicates a Net Exporter.
Values Over 100% Indicate Stocks Build Up.
EU27_2020: imports from extra-EU

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.3.6 Import Dependency – Crude and NGL* (%)

Imports From Extra-EU	2000	2010	2015	2019	2020	2021
EU27_2020	92.5	94.4	95.9	96.6	96.1	95.1
Index2000	100.0	102.0	103.7	104.4	103.8	102.8
Intra and Extra-EU Imports						
BE	100.2	99.9	100.0	100.0	100.5	99.2
BG	98.7	99.1	100.5	102.6	99.4	98.6
CZ	95.2	97.5	98.4	98.6	101.7	96.2
DK	-120.5	-68.8	-4.9	36.0	50.7	56.7
DE	93.8	97.3	97.1	98.3	98.3	97.0
EE	0.0	0.0	0.0	0.0	0.0	0.0
IE	89.8	101.6	108.2	100.9	102.3	98.1
EL	99.6	99.6	101.5	98.1	102.0	98.4
ES	100.6	99.3	99.5	101.0	99.5	98.7
FR	98.5	98.2	98.8	98.4	97.9	97.2
HR	72.1	82.3	79.6	71.1	68.0	67.3
IT	95.1	94.5	92.2	93.9	90.2	92.0
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	99.0	99.5	100.8	99.4	100.3
LU	0.0	0.0	0.0	0.0	0.0	0.0
HU	78.5	85.3	91.4	84.6	86.0	85.2
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	96.7	97.6	98.0	99.9	98.1	96.8
AT	86.9	86.5	91.1	94.0	93.0	91.7
PL	99.2	98.4	100.5	96.7	96.6	94.6
PT	99.0	98.8	100.9	100.4	98.3	98.6
RO	43.5	57.2	63.0	72.0	66.9	67.3
SI	87.2	0.0	0.0	0.0	0.0	0.0
SK	97.6	99.9	99.3	100.5	101.4	99.1
FI	101.5	101.1	104.2	99.0	99.7	98.5
SE	100.6	99.0	103.6	100.0	101.0	97.4

* Negative Rate Indicates a Net Exporter.
Values Over 100 % Indicate Stocks Build Up.
EU27_2020: imports from extra-EU

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.3.7 Import Dependency – Natural Gas *

(%)

Imports From Extra-EU	2000	2010	2015	2019	2020	2021
EU27_2020	65.7	67.8	74.5	89.7	83.6	83.5
Index2000	100.0	103.1	113.3	136.5	127.3	127.0
Intra and Extra-EU Imports						
BE	99.3	100.3	99.3	101.9	99.2	99.9
BG	93.5	92.6	97.0	100.4	96.4	96.2
CZ	99.8	84.8	95.1	109.8	86.0	92.1
DK	-64.8	-68.3	-48.2	-7.2	37.4	27.8
DE	79.1	81.2	90.1	100.1	89.1	89.6
EE	100.0	100.0	100.0	105.4	106.3	106.1
IE	72.1	95.3	96.3	53.0	63.7	71.1
EL	99.1	99.9	99.9	99.0	100.7	99.4
ES	101.6	99.4	96.9	101.6	97.5	100.4
FR	100.0	92.8	98.5	104.5	94.7	96.1
HR	41.0	18.1	27.1	66.4	68.8	74.5
IT	81.1	90.5	90.4	95.1	92.8	93.7
CY	0.0	0.0	0.0	0.0	0.0	0.0
LV	101.9	61.8	98.6	100.0	100.1	100.0
LT	100.0	99.7	99.7	100.0	98.9	100.8
LU	100.0	100.0	100.0	100.0	100.0	100.0
HU	75.4	78.7	69.7	115.2	75.6	67.2
MT	0.0	0.0	0.0	103.6	96.2	103.5
NL	-49.1	-60.4	-36.7	26.3	45.2	33.7
AT	80.6	75.3	72.6	122.8	73.4	51.0
PL	66.3	69.3	72.2	82.4	78.3	83.6
PT	100.3	100.4	100.4	99.9	99.3	100.0
RO	19.8	16.8	1.8	23.2	16.6	22.8
SI	99.3	99.3	99.6	99.2	99.4	99.4
SK	98.8	99.9	95.1	136.6	88.1	69.0
FI	100.0	100.0	100.0	100.6	100.4	99.7
SE	100.0	100.0	100.0	101.8	101.6	101.5

* Negative Rate Indicates a Net Exporter.
 Values Over 100% Indicate Stocks Build Up.
 EU27_2020: imports from extra-EU

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

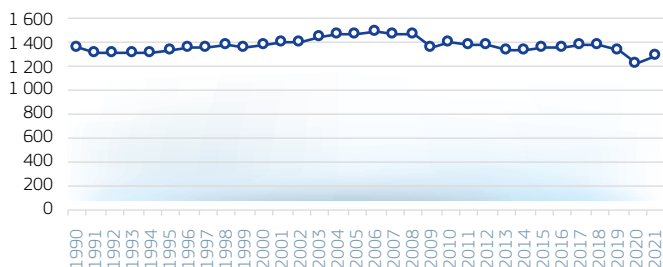
2.4 Energy Transformation

2.4.1 Transformation Input – All Fuels

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	1383.6	1414.2	1373.1	1351.2	1224.7	1290.8
Index2000	100%	102%	99%	98%	89%	93%
BE	68.63	67.88	60.50	65.34	55.89	63.73
BG	18.65	18.84	19.72	19.45	16.37	17.30
CZ	31.82	37.33	34.33	34.70	31.27	33.35
DK	18.06	16.56	17.57	16.56	15.86	16.71
DE	292.34	291.21	280.71	260.47	243.35	252.11
EE	3.63	4.93	4.56	4.20	3.73	3.96
IE	8.59	8.51	8.54	7.98	8.26	8.48
EL	35.80	35.28	40.12	41.77	40.40	42.80
ES	115.16	121.90	133.10	130.89	114.54	118.54
FR	233.87	227.61	213.13	197.36	169.47	175.81
HR	7.72	6.78	5.39	5.17	4.97	5.02
IT	163.61	161.45	136.66	138.58	121.21	134.97
CY	2.08	1.21	0.97	1.06	1.01	1.04
LV	1.39	1.49	1.39	1.58	1.43	1.53
LT	9.43	12.53	11.86	12.17	10.73	10.95
LU	0.20	0.74	0.43	0.35	0.43	0.43
HU	19.87	23.01	18.92	18.23	18.03	17.87
MT	0.50	0.58	0.28	0.34	0.38	0.36
NL	104.43	113.01	117.81	129.79	116.40	128.50
AT	20.35	22.53	23.10	23.70	22.26	22.28
PL	72.87	79.74	83.18	81.21	76.38	81.79
PT	20.97	20.73	25.26	22.24	21.03	19.77
RO	29.11	26.03	26.06	26.22	23.39	23.45
SI	3.11	3.41	2.95	3.14	3.30	3.10
SK	16.91	17.34	17.09	15.61	15.75	16.79
FI	32.41	38.72	32.83	35.67	33.34	31.16
SE	52.05	54.86	56.67	57.38	55.54	58.98

TRANSFORMATION INPUT – ALL FUELS – 1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.4.2 Transformation Input by Fuel

	2021						
	Transformation Input	Solid fossil fuels	Oil and petroleum products	Natural gas	Nuclear	Renewables and biofuels	Waste, non-renewable
Mtoe							
EU27_2020	1 290.8	166.3	651.3	104.1	186.7	157.0	9.5
Share - %	100.0%	12.9%	50.5%	8.1%	14.5%	12.2%	0.7%
BE	63.73	2.92	40.15	3.42	12.22	3.44	0.50
BG	17.30	5.04	5.02	1.22	4.29	1.62	0.01
CZ	33.35	13.04	7.81	2.06	7.64	2.23	0.07
DK	16.71	0.93	9.16	0.53	0.00	5.58	0.40
DE	252.11	57.15	120.48	19.71	17.77	31.04	2.99
EE	3.96	0.00	0.05	0.12	0.00	0.84	0.04
IE	8.48	0.67	3.88	2.37	0.00	1.27	0.09
EL	42.80	1.53	35.27	3.73	0.00	2.25	0.01
ES	118.54	3.40	73.25	10.96	14.73	15.26	0.30
FR	175.81	7.63	42.69	6.30	98.86	18.01	1.23
HR	5.02	0.31	2.63	0.78	0.00	1.29	0.00
IT	134.97	6.24	81.39	25.86	0.00	19.86	0.86
CY	1.04	0.00	0.96	0.00	0.00	0.08	0.00
LV	1.53	0.00	0.00	0.59	0.00	0.94	0.00
LT	10.95	0.00	8.94	0.39	0.00	1.16	0.09
LU	0.43	0.00	0.00	0.07	0.00	0.23	0.02
HU	17.87	1.81	7.98	2.48	4.03	1.35	0.10
MT	0.36	0.00	0.01	0.32	0.00	0.03	0.00
NL	128.50	6.83	103.13	9.03	0.89	6.74	0.86
AT	22.28	3.14	9.09	2.22	0.00	6.51	0.37
PL	81.79	43.25	28.75	3.57	0.00	5.03	0.23
PT	19.77	0.19	12.39	2.98	0.00	3.95	0.10
RO	23.45	3.30	11.61	2.71	2.87	2.87	0.00
SI	3.10	0.90	0.02	0.15	1.35	0.63	0.01
SK	16.79	3.52	6.58	1.29	4.05	1.20	0.05
FI	31.16	2.63	12.98	1.17	5.61	7.31	0.27
SE	58.98	1.88	27.05	0.12	12.34	16.31	0.88

2.4.3 Transformation Input by Sector

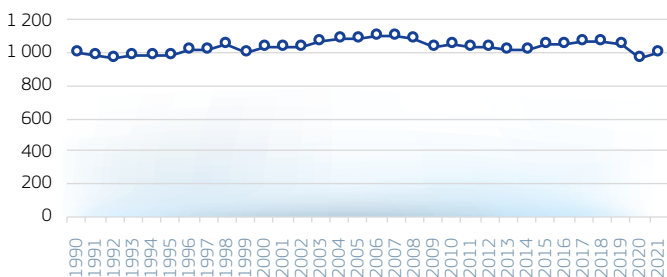
Mtoe	2020					
	Total, All Sectors	Electricity producers	Heat producers	CHP producers	Refineries, Petroleum and sub-products	Other transformation input
EU27_2020	1 290.8	394.3	20.2	147.8	637.7	90.8
Share - %	100.0%	30.5%	1.6%	11.5%	49.4%	7.0%
BE	63.73	16.64	0.01	2.87	40.13	4.08
BG	17.30	9.21	0.29	1.86	4.95	0.98
CZ	33.35	14.48	0.81	5.86	7.76	4.43
DK	16.71	1.50	0.95	4.36	9.07	0.84
DE	252.11	78.19	3.36	26.19	119.21	25.16
EE	3.96	1.23	0.25	0.64	0.04	1.79
IE	8.48	4.41	0.00	0.28	3.52	0.27
EL	42.80	6.89	0.00	1.47	34.15	0.28
ES	118.54	39.03	0.00	4.22	71.22	4.08
FR	175.81	115.77	2.33	6.27	41.23	10.21
HR	5.02	1.17	0.05	1.03	2.62	0.15
IT	134.97	29.46	0.46	23.01	77.51	4.52
CY	1.04	1.02	0.00	0.01	0.00	0.01
LV	1.53	0.25	0.50	0.72	0.00	0.07
LT	10.95	0.17	0.74	0.88	8.91	0.26
LU	0.43	0.05	0.01	0.25	0.00	0.12
HU	17.87	5.33	0.73	2.48	7.97	1.37
MT	0.36	0.35	0.00	0.00	0.00	0.01
NL	128.50	10.18	0.90	9.52	102.68	5.22
AT	22.28	5.70	1.09	2.81	8.79	3.89
PL	81.79	3.18	3.08	35.48	28.30	11.75
PT	19.77	5.35	0.00	1.63	12.13	0.66
RO	23.45	8.50	0.60	2.17	11.38	0.80
SI	3.10	2.51	0.07	0.40	0.00	0.13
SK	16.79	4.72	0.44	1.69	6.51	3.42
FI	31.16	7.76	2.10	5.72	12.72	2.86
SE	58.98	21.20	1.42	5.97	26.90	3.47

2.4.4 Transformation Output – All Fuels

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	1031.9	1059.6	1045.3	1056.8	962.1	1006.9
Index2000	100%	103%	101%	102%	93%	98%
BE	54.28	54.67	51.92	54.08	46.51	52.09
BG	11.62	12.01	12.91	12.75	10.39	10.43
CZ	19.91	23.27	21.58	22.16	19.78	21.59
DK	15.59	14.17	16.82	16.36	15.72	16.31
DE	210.06	210.02	207.63	202.79	192.03	195.87
EE	1.84	2.53	2.54	2.62	2.46	2.61
IE	5.62	5.98	6.47	6.15	6.51	6.49
EL	29.13	28.76	35.62	37.85	37.05	39.25
ES	87.21	96.91	105.39	107.03	93.14	97.22
FR	154.62	139.32	126.19	117.68	98.99	98.42
HR	6.97	6.14	4.85	4.58	4.33	4.40
IT	129.85	131.20	111.22	115.34	99.35	111.54
CY	1.47	0.46	0.39	0.45	0.43	0.45
LV	1.18	1.29	1.12	1.28	1.19	1.31
LT	7.38	11.86	11.46	11.93	10.34	10.50
LU	0.11	0.47	0.30	0.26	0.33	0.34
HU	14.07	17.08	13.98	13.36	13.25	13.28
MT	0.16	0.18	0.12	0.19	0.20	0.20
NL	93.36	100.58	106.39	120.12	107.48	118.96
AT	17.16	18.59	19.51	20.37	19.18	19.10
PL	49.29	57.00	60.84	61.42	58.29	61.07
PT	17.04	17.75	21.36	19.00	18.08	17.17
RO	22.32	20.64	20.65	21.15	19.11	18.81
SI	1.57	1.69	1.53	1.69	1.79	1.70
SK	12.09	12.72	12.48	11.30	11.49	12.34
FI	25.53	31.05	26.86	30.12	28.22	25.40
SE	42.47	43.28	45.20	44.72	46.48	50.04

TRANSFORMATION OUTPUT – ALL FUELS – 1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.4.5 Transformation Output by Fuel

Mtoe	2021						
	Transformation Output	Solid fossil fuels	Oil and petroleum products	Natural gas	Renewables and biofuels	Electricity	Heat
EU27_2020	1 006.9	25.2	636.9	2.0	16.8	250.3	58.3
Share - %	100.0%	2.5%	63.3%	0.2%	1.7%	24.9%	5.8%
BE	52.09	0.92	40.20	0.01	0.78	8.64	0.73
BG	10.43	0.25	4.94	0.00	0.17	4.09	0.98
CZ	21.59	1.92	8.04	0.00	0.40	7.32	2.90
DK	16.31	0.00	9.37	0.47	0.26	2.84	3.37
DE	195.87	8.43	116.54	0.80	3.12	50.59	11.21
EE	2.61	0.01	1.18	0.00	0.00	0.62	0.54
IE	6.49	0.00	3.58	0.00	0.12	2.74	0.00
EL	39.25	0.00	34.25	0.00	0.25	4.70	0.05
ES	97.22	0.78	70.80	0.01	1.39	23.59	0.00
FR	98.42	0.10	40.77	0.34	3.17	47.75	4.56
HR	4.40	0.00	2.66	0.00	0.07	1.31	0.37
IT	111.54	0.96	78.19	0.14	1.42	24.86	5.34
CY	0.45	0.00	0.00	0.00	0.01	0.44	0.00
LV	1.31	0.00	0.00	0.00	0.06	0.50	0.75
LT	10.50	0.00	8.88	0.00	0.12	0.44	1.06
LU	0.34	0.00	0.00	0.00	0.00	0.19	0.15
HU	13.28	0.56	7.93	0.00	0.17	3.11	1.25
MT	0.20	0.00	0.00	0.00	0.01	0.19	0.00
NL	118.96	1.36	102.08	0.20	0.94	10.50	2.65
AT	19.10	0.94	8.55	0.01	0.29	6.08	2.20
PL	61.07	6.54	28.52	0.00	0.96	15.45	7.37
PT	17.17	0.00	12.06	0.00	0.33	4.38	0.40
RO	18.81	0.00	11.57	0.00	0.40	5.11	1.46
SI	1.70	0.00	0.00	0.00	0.09	1.37	0.24
SK	12.34	1.15	6.75	0.00	0.18	2.58	0.78
FI	25.40	0.62	12.67	0.01	0.73	6.20	4.62
SE	50.04	0.64	27.41	0.03	1.34	14.77	5.36

2.4.6 Transformation Output by Sector

Mtoe	2021					
	Total, All Sectors	Electricity producers	Heat producers	CHP producers	Refineries, Petroleum and sub-products	Other transformation output
EU27_2020	1,006.9	193.2	16.3	93.4	633.9	70.1
Share - %	100.0%	19.2%	1.6%	9.3%	63.0%	7.0%
BE	52.09	7.17	0.00	1.84	40.09	2.99
BG	10.43	3.54	0.19	1.26	4.78	0.66
CZ	21.59	5.87	0.69	3.51	8.04	3.49
DK	16.31	1.50	0.87	3.57	9.37	1.00
DE	195.87	39.46	2.77	18.81	116.54	18.30
EE	2.61	0.49	0.19	0.47	0.04	1.41
IE	6.49	2.54	0.00	0.18	3.54	0.23
EL	39.25	4.20	0.00	0.54	34.25	0.25
ES	97.22	20.53	0.00	2.75	70.80	3.14
FR	98.42	45.38	1.91	4.43	40.77	5.93
HR	4.40	0.94	0.04	0.69	2.60	0.13
IT	111.54	15.89	0.38	13.69	78.19	3.38
CY	0.45	0.44	0.00	0.01	0.00	0.01
LV	1.31	0.25	0.44	0.56	0.00	0.06
LT	10.50	0.17	0.50	0.55	8.88	0.41
LU	0.34	0.05	0.01	0.19	0.00	0.09
HU	13.28	2.21	0.62	1.43	7.90	1.11
MT	0.20	0.19	0.00	0.00	0.00	0.01
NL	118.96	6.25	0.52	6.04	102.08	4.07
AT	19.10	4.77	0.92	2.25	8.55	2.62
PL	61.07	2.44	2.66	17.61	28.03	10.33
PT	17.17	3.68	0.00	0.97	11.92	0.61
RO	18.81	4.49	0.39	1.67	11.50	0.76
SI	1.70	1.24	0.06	0.29	0.00	0.12
SK	12.34	1.99	0.31	1.02	6.42	2.60
FI	25.40	4.16	1.73	4.31	12.39	2.81
SE	50.04	13.39	1.06	4.73	27.26	3.60

2.5 Final Energy

2.5.1 Available for Final Consumption

TOTAL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	1022.6	1073.2	993.9	1033.1	1033.1	975.8
Index2000	100%	105%	97%	101%	101%	95%
BE	40.82	43.01	40.96	40.05	40.05	38.19
BG	9.64	9.24	10.07	10.32	10.32	10.29
CZ	26.42	27.75	25.91	27.15	27.15	26.12
DK	14.32	14.97	13.72	14.19	14.19	13.81
DE	234.79	233.13	220.83	225.46	225.46	214.49
EE	2.52	3.14	2.45	2.97	2.97	2.96
IE	10.37	11.29	10.86	11.59	11.59	11.12
EL	18.46	19.16	16.55	16.40	16.40	14.55
ES	85.40	91.45	78.99	86.29	86.29	77.75
FR	156.75	161.69	157.14	155.30	155.30	141.15
HR	6.58	7.73	7.02	7.29	7.29	6.96
IT	128.77	131.73	117.63	118.66	118.66	109.28
CY	1.47	1.69	1.44	1.66	1.66	1.57
LV	3.26	4.06	3.79	3.97	3.97	3.87
LT	4.25	5.42	5.90	6.65	6.65	6.43
LU	3.24	3.93	3.57	3.83	3.83	3.30
HU	17.22	18.86	18.54	19.94	19.94	19.68
MT	0.32	0.42	0.46	0.56	0.56	0.51
NL	58.54	64.53	55.15	56.38	56.38	55.35
AT	23.58	27.77	27.28	28.34	28.34	26.95
PL	57.13	70.38	65.17	77.75	77.75	77.13
PT	19.54	18.98	16.85	17.58	17.58	16.39
RO	24.12	24.80	22.81	25.07	25.07	25.09
SI	4.79	5.28	4.85	5.04	5.04	4.60
SK	11.68	11.47	10.02	11.28	11.28	10.82
FI	23.73	26.31	24.06	25.74	25.74	24.75
SE	34.91	35.07	31.86	33.62	33.62	32.70

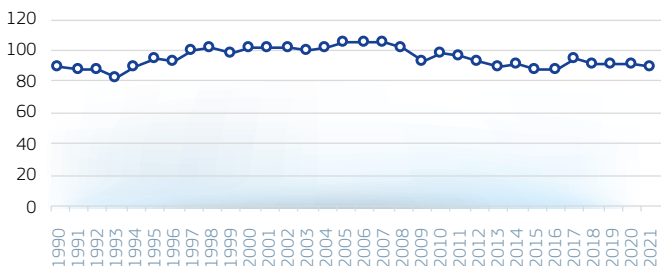
2.5.2 Final Non-Energy Consumption

TOTAL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	101.4	98.3	88.3	90.7	90.7	90.0
Index2000	100%	97%	87%	89%	89%	89%
BE	7.00	7.05	7.68	7.25	7.25	7.10
BG	0.98	0.42	0.60	0.46	0.46	0.47
CZ	2.14	2.88	2.50	2.97	2.97	2.48
DK	0.30	0.26	0.25	0.20	0.20	0.23
DE	25.30	22.58	21.26	21.65	21.65	21.35
EE	0.15	0.09	0.09	0.12	0.12	0.18
IE	0.68	0.34	0.22	0.24	0.24	0.23
EL	0.73	1.11	0.70	0.92	0.92	0.82
ES	9.49	7.11	4.35	5.35	5.35	5.80
FR	16.95	13.93	13.98	13.54	13.54	12.66
HR	0.66	0.60	0.53	0.57	0.57	0.53
IT	8.43	9.56	6.61	7.04	7.04	6.80
CY	0.09	0.09	0.02	0.04	0.04	0.04
LV	0.07	0.07	0.11	0.09	0.09	0.10
LT	0.66	0.66	1.12	1.20	1.20	1.15
LU	0.05	0.03	0.03	0.04	0.04	0.03
HU	1.59	1.97	1.91	2.12	2.12	2.23
MT	0.00	0.01	0.01	0.02	0.02	0.01
NL	11.33	14.37	12.17	12.07	12.07	12.90
AT	1.72	1.81	1.80	2.12	2.12	2.08
PL	4.37	4.97	5.63	5.60	5.60	5.79
PT	2.42	1.73	1.34	1.15	1.15	1.18
RO	1.89	2.06	1.12	1.14	1.14	1.29
SI	0.24	0.21	0.13	0.16	0.16	0.15
SK	1.38	1.05	1.05	1.00	1.00	1.22
FI	1.04	1.22	1.33	1.38	1.38	1.49
SE	1.75	2.12	1.78	2.30	2.30	1.71

FINAL NON-ENERGY CONSUMPTION – TOTAL – 1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

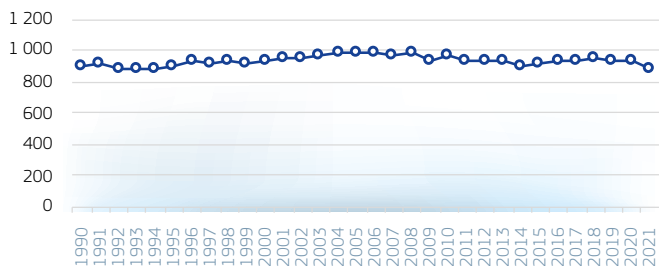
2.5.3 Final Energy Consumption

TOTAL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	926.1	973.2	909.0	937.5	937.5	885.1
Index2000	100%	105%	98%	101%	101%	96%
BE	33.64	35.45	33.16	32.59	32.59	30.94
BG	8.59	8.70	9.39	9.72	9.72	9.50
CZ	23.99	24.12	23.10	24.23	24.23	23.77
DK	14.02	14.85	13.46	13.54	13.54	13.07
DE	207.17	209.92	200.03	200.80	200.80	194.25
EE	2.41	2.88	2.75	2.83	2.83	2.73
IE	10.20	11.19	10.51	11.32	11.32	10.84
EL	17.91	18.37	15.74	15.39	15.39	14.47
ES	76.34	85.50	75.95	81.51	81.51	72.32
FR	145.13	146.26	140.57	138.88	138.88	127.84
HR	5.92	7.13	6.48	6.73	6.73	6.43
IT	119.74	123.05	112.11	113.12	113.12	103.06
CY	1.37	1.65	1.42	1.63	1.63	1.53
LV	3.23	4.00	3.68	3.92	3.92	3.80
LT	3.74	4.76	4.78	5.46	5.46	5.28
LU	3.18	3.90	3.53	3.79	3.79	3.27
HU	15.64	16.88	16.83	17.97	17.97	17.61
MT	0.32	0.40	0.46	0.55	0.55	0.50
NL	47.60	50.77	43.32	44.09	44.09	41.77
AT	21.81	25.96	25.48	26.22	26.22	24.87
PL	53.56	65.26	60.86	71.89	71.89	70.25
PT	17.21	17.27	15.55	16.35	16.35	15.16
RO	21.95	22.04	21.60	23.71	23.71	23.47
SI	4.54	5.05	4.72	4.86	4.86	4.45
SK	9.93	10.37	8.94	10.25	10.25	9.61
FI	23.28	25.04	23.05	24.83	24.83	23.25
SE	33.67	32.47	31.51	31.33	31.33	31.07

FINAL ENERGY CONSUMPTION – TOTAL –
1990-2021 (Mtoe)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.5.3 Final Energy Consumption

BY FUEL

Mtoe	2021							
	Oil and petroleum products	Natural gas	Renewables and biofuels	Solid fossil fuels	Waste, non-renewable	Electricity	Heat	Manufactured gases, peat & products
EU27_2020	327.5	212.2	110.4	19.0	5.0	213.9	47.3	4.6
Share - %	37.0%	24.0%	12.5%	2.2%	0.6%	24.2%	5.3%	0.5%
BE	12.39	10.15	2.44	0.42	0.15	7.00	0.46	0.2
BG	3.66	1.32	1.47	0.39	0.07	2.66	0.57	0.0
CZ	6.89	5.50	3.67	1.43	0.30	5.16	2.15	0.3
DK	4.77	1.63	1.72	0.13	0.04	2.76	2.69	0.0
DE	65.43	56.83	17.99	3.41	1.23	42.53	9.97	2.0
EE	0.89	0.26	0.48	0.00	0.00	0.68	0.48	0.0
IE	5.56	1.94	0.50	0.24	0.05	2.54	0.00	0.2
EL	7.45	1.18	1.83	0.18	0.00	4.23	0.04	0.0
ES	36.78	14.94	6.64	0.35	0.21	19.59	0.00	0.1
FR	51.35	29.32	15.94	0.97	0.50	37.24	4.14	0.0
HR	2.60	1.16	1.28	0.11	0.05	1.42	0.27	0.0
IT	38.42	34.41	11.45	0.30	0.29	25.12	3.12	0.1
CY	0.87	0.00	0.23	0.04	0.04	0.40	0.00	0.0
LV	1.32	0.35	1.02	0.02	0.05	0.58	0.64	0.0
LT	2.14	0.65	0.84	0.16	0.00	0.96	0.89	0.0
LU	1.92	0.61	0.18	0.04	0.02	0.55	0.13	0.0
HU	5.71	6.09	2.05	0.12	0.14	3.64	1.05	0.0
MT	0.28	0.00	0.03	0.00	0.00	0.22	0.00	0.0
NL	12.35	17.15	2.15	0.14	0.04	9.22	2.02	0.2
AT	8.86	4.94	4.48	0.32	0.27	5.54	1.87	0.1
PL	26.18	10.78	9.01	8.69	0.76	12.35	5.97	0.4
PT	6.52	1.87	3.02	0.01	0.09	4.07	0.20	0.0
RO	8.45	6.55	4.06	0.73	0.32	3.96	1.04	0.2
SI	2.02	0.62	0.72	0.02	0.04	1.16	0.19	0.0
SK	2.73	2.70	1.31	0.40	0.18	2.20	0.59	0.4
FI	5.31	0.79	7.08	0.12	0.05	7.06	4.12	0.3
SE	6.61	0.48	8.83	0.28	0.09	11.03	4.69	0.1

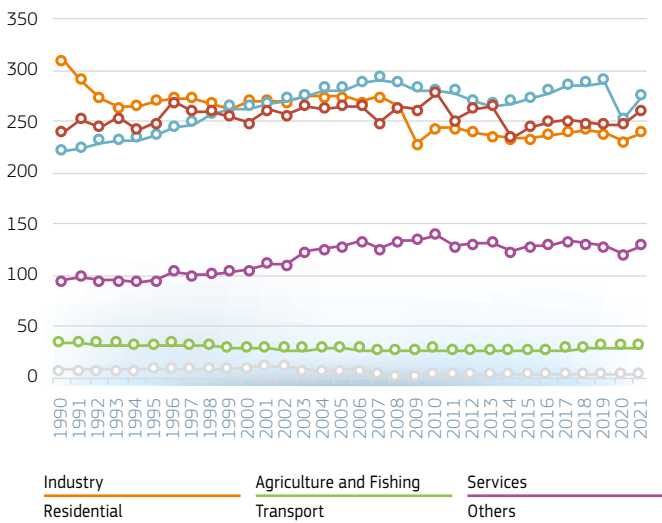
2.5.3 Final Energy Consumption

BY SECTOR

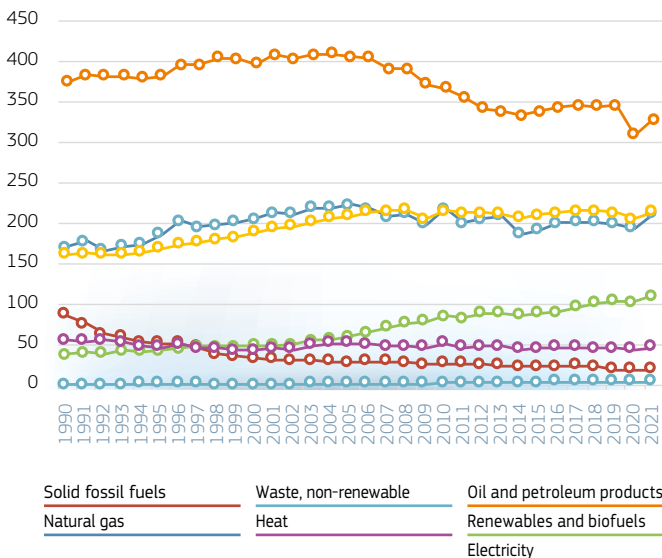
Mtoe	2021					
	Industry	Transport	Residential	Services	Agriculture and Fishing	Others
EU27_2020	240.4	274.8	261.8	129.4	29.8	3.8
Share - %	27.2%	31.1%	29.6%	14.6%	3.4%	0.4%
BE	10.58	8.53	8.59	4.54	0.90	0.03
BG	2.81	3.43	2.40	1.30	0.20	0.00
CZ	7.01	6.88	7.86	2.96	0.65	0.05
DK	2.45	4.01	4.52	2.01	0.68	0.06
DE	55.87	52.30	58.77	28.77	3.61	0.05
EE	0.38	0.84	0.97	0.51	0.09	0.00
IE	2.20	3.71	3.06	1.79	0.25	0.00
EL	2.57	5.53	4.28	2.05	0.31	0.18
ES	20.13	30.35	14.74	10.08	3.11	0.19
FR	27.22	42.69	42.21	21.92	4.56	0.84
HR	1.19	2.15	2.44	0.85	0.26	0.00
IT	25.28	35.29	32.03	17.46	3.01	0.14
CY	0.24	0.66	0.36	0.26	0.05	0.01
LV	0.89	1.08	1.20	0.60	0.20	0.01
LT	1.11	2.14	1.63	0.65	0.12	0.01
LU	0.61	1.77	0.48	0.56	0.03	0.00
HU	4.73	4.90	6.42	2.07	0.67	0.05
MT	0.06	0.22	0.12	0.12	0.01	0.00
NL	13.23	9.19	10.12	6.56	4.11	0.08
AT	7.61	7.98	7.67	2.60	0.55	0.00
PL	16.27	23.54	22.15	8.49	3.74	0.00
PT	4.53	5.47	3.02	2.19	0.53	0.03
RO	6.86	6.88	8.76	1.85	0.57	0.36
SI	1.29	1.80	1.16	0.42	0.07	0.02
SK	3.38	2.62	2.97	1.41	0.13	0.00
FI	10.76	4.02	5.96	3.08	0.77	0.20
SE	11.10	6.85	7.88	4.26	0.60	1.47

2.5.3 Final Energy Consumption

BY SECTOR – EU27_2020 – 1990-2021 (Mtoe)



FINAL ENERGY CONSUMPTION – BY FUEL – EU27_2020 – 1990-2021 (Mtoe)



source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

2.6 Electricity

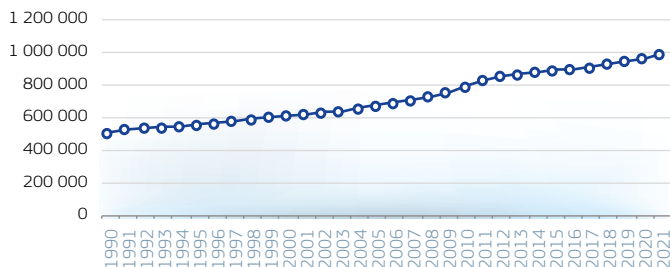
2.6.1 Installed Electricity Capacity

TOTAL

MW	2000	2010	2015	2019	2020	2021
EU27_2020*	613221	790216	889722	946426	962916	991045
Index2000	100%	129%	145%	154%	157%	162%
BE	15685	18796	21168	23923	25688	26218
BG	11085	10031	10912	11229	10992	11208
CZ	15323	20073	21866	22036	21451	21035
DK	12316	13438	14002	14970	15362	16501
DE	118884	162924	203257	231489	233726	242105
EE	2800	2751	2857	2746	2738	2409
IE	4709	8143	9680	11130	11242	11142
EL	10904	15312	18942	20478	20795	20716
ES	53922	101740	106758	109688	108323	111014
FR	114518	124138	132218	136254	136943	141904
HR	2067	4103	4768	4712	4662	4873
IT	75510	106610	116964	116435	116383	117160
CY	988	1560	1756	1819	1897	1983
LV	2092	2557	2931	2938	2944	2940
LT	5716	3570	3587	3378	3491	3709
LU	1217	1712	2024	1775	1808	1878
HU	8282	8993	8634	9994	10710	11574
MT	0	572	668	750	783	800
NL	21062	26688	33877	37135	42421	47252
AT	17802	21345	24741	25902	26342	27382
PL	30559	33360	37327	43440	49368	52834
PT	10908	18932	19625	21575	21655	21344
RO	16820	19912	23830	20899	20585	18799
SI	2614	3193	3358	3832	3929	4080
SK	7454	7873	7782	7724	7707	7490
FI	16260	15438	16500	17352	17301	17942
SE	33724	36452	39691	42824	43672	44753

INSTALLED ELECTRICITY CAPACITY – TOTAL – 1990-2021 (MW)

EU27_2020



* Data for EU-27 is not completely available for period 1990-2004

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.6.1 Installed Electricity Capacity

BY FUEL

MW	2021						
	Installed Electricity Capacity	Combustible Fuels	Wind	Hydro	Nuclear	Solar	Others
EU27_2020	991 045	379 382	188 371	151 668	105 112	164 185	2 327
Share - %	100.0%	38.3%	19.0%	15.3%	10.6%	16.6%	0.2%
BE	26 218	7 986	4 948	1 418	5 851	6 012	3
BG	11 208	3 854	704	3 369	2 006	1 275	0
CZ	21 035	11 874	339	2 285	4 290	2 246	0
DK	16 501	7 769	7 021	7	0	1 704	0
DE	242 105	99 241	63 833	10 844	8 113	59 373	701
EE	2 409	1 693	315	6	0	395	0
IE	11 142	6 139	4 339	529	0	135	0
EL	20 716	8 368	4 649	3 421	0	4 277	0
ES	111 014	39 778	27 908	20 132	7 117	16 019	59
FR	141 904	20 435	18 740	26 291	61 400	14 810	227
HR	4 873	1 537	987	2 201	0	138	10
IT	117 160	59 496	11 254	22 750	0	22 594	1 066
CY	1 983	1 511	158	0	0	315	0
LV	2 940	1 268	77	1 587	0	7	0
LT	3 709	1 881	671	877	0	255	25
LU	1 878	134	136	1 331	0	277	0
HU	11 574	6 155	324	60	2 027	2 968	40
MT	800	595	0	0	0	206	0
NL	47 252	23 873	7 769	37	512	14 911	150
AT	27 382	6 443	3 408	14 748	0	2 783	1
PL	52 834	36 053	6 967	2 398	0	7 416	0
PT	21 344	6 987	5 427	7 255	0	1 646	29
RO	18 799	6 316	3 015	6 662	1 411	1 394	0
SI	4 080	1 576	3	1 352	688	461	0
SK	7 490	2 399	4	2 531	2 003	537	16
FI	17 942	8 295	3 257	3 171	2 794	425	0
SE	44 753	7 725	12 116	16 407	6 899	1 606	0

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.6.1 Installed Electricity Capacity *

RENEWABLES

MW	2021						
	Total renewables	Hydro	Wind	Solar Thermal	Solar PV	Geothermal	Tide, Wave and Ocean
EU27_2020	505 317	151 668	188 371	2 306	161 879	877	216
Share(%)	100.0%	30.0%	37.3%	0.5%	32.0%	0.2%	0.0%
BE	12 379	1 418	4 948	0	6 012	0	0
BG	5 348	3 369	704	0	1 275	0	0
CZ	4 870	2 285	339	0	2 246	0	0
DK	8 732	7	7 021	0	1 704	0	0
DE	134 096	10 844	63 833	2	59 371	46	0
EE	716	6	315	0	395	0	0
IE	5 003	529	4 339	0	135	0	0
EL	12 348	3 421	4 649	0	4 277	0	0
ES	64 064	20 132	27 908	2 304	13 715	0	5
FR	60 069	26 291	18 740	0	14 810	16	211
HR	3 336	2 201	987	0	138	10	0
IT	57 369	22 750	11 254	0	22 594	772	0
CY	472	0	158	0	315	0	0
LV	1 672	1 587	77	0	7	0	0
LT	1 803	877	671	0	255	0	0
LU	1 744	1 331	136	0	277	0	0
HU	3 355	60	324	0	2 968	3	0
MT	206	0	0	0	206	0	0
NL	22 717	37	7 769	0	14 911	0	0
AT	20 939	14 748	3 408	0	2 783	1	0
PL	16 780	2 398	6 967	0	7 416	0	0
PT	14 357	7 255	5 427	0	1 646	29	0
RO	11 071	6 662	3 015	0	1 394	0	0
SI	1 817	1 352	3	0	461	0	0
SK	3 072	2 531	4	0	537	0	0
FI	6 853	3 171	3 257	0	425	0	0
SE	30 129	16 407	12 116	0	1 606	0	0

* Net maximum capacity

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.6.2 Gross Electricity Generation

TOTAL

TWh	2000	2010	2015	2019	2020	2021
EU27_2020	2656.9	2979.7	2900.6	2902.4	2784.9	2906.5
Index2000	100%	112%	109%	109%	105%	109%
BE	84.01	94.32	69.24	93.21	88.96	99.96
BG	40.92	46.64	49.20	44.25	40.72	47.53
CZ	73.46	85.82	83.81	86.93	81.45	84.95
DK	36.01	38.86	28.94	29.52	28.73	33.05
DE	576.54	631.04	646.48	605.43	573.82	586.68
EE	8.51	12.96	10.15	7.62	6.08	7.20
IE	23.98	28.35	28.39	30.96	32.28	31.87
EL	53.84	57.40	51.87	48.63	48.25	54.72
ES	224.47	301.37	280.70	273.12	263.21	274.03
FR	539.95	569.15	578.87	570.39	531.76	554.73
HR	11.28	14.90	11.40	12.76	13.39	15.21
IT	275.86	301.28	282.40	293.20	280.03	288.49
CY	3.37	5.32	4.53	5.14	4.85	5.12
LV	4.14	6.63	5.53	6.44	5.72	5.85
LT	11.33	5.50	4.67	3.75	5.31	4.89
LU	1.17	4.59	2.77	1.91	2.23	2.21
HU	35.19	37.37	30.30	34.18	34.79	35.98
MT	1.92	2.11	1.30	2.06	2.14	2.22
NL	89.38	119.12	108.80	120.81	122.77	121.61
AT	61.24	71.11	65.28	74.22	72.55	70.74
PL	145.18	157.58	164.83	163.75	157.95	179.55
PT	43.76	54.09	52.41	53.15	53.08	50.98
RO	51.56	60.98	66.29	59.62	55.93	59.47
SI	13.62	16.44	15.10	16.10	17.19	15.88
SK	31.16	27.82	26.80	28.40	28.81	29.96
FI	69.78	80.36	68.35	68.39	69.04	71.87
SE	145.27	148.55	162.11	168.44	163.83	171.80

2.6.2 Gross Electricity Generation

BY FUEL

TWh	2021						
	Gross Electricity Generation	Solid Fossil Fuels, Peat, Oil Shale & Sands	Oil and petroleum products	Natural Gas & Manufactured Gases	Nuclear	Renewables and biofuel	Wastes non-RES
EU27_2020	2906.5	425.0	46.7	579.8	731.7	1101.9	21.4
Share - %	100.0%	14.6%	1.6%	19.9%	25.2%	37.9%	0.7%
BE	99.96	0.0	0.18	24.50	50.33	23.66	1.25
BG	47.53	17.1	0.36	3.05	16.49	10.56	0.00
CZ	84.95	34.2	0.09	7.92	30.73	11.92	0.10
DK	33.05	4.4	0.26	1.54	0.00	26.10	0.79
DE	586.68	164.5	4.58	105.62	69.13	236.12	6.72
EE	7.20	3.4	0.04	0.75	0.00	2.88	0.09
IE	31.87	3.0	1.45	15.16	0.00	11.90	0.32
EL	54.72	5.3	4.67	22.49	0.00	22.19	0.04
ES	274.03	4.9	10.04	72.66	56.56	128.97	0.94
FR	554.73	5.4	5.73	35.25	379.36	126.71	2.23
HR	15.21	1.5	0.03	3.10	0.00	10.63	0.00
IT	288.49	14.0	7.75	145.91	0.00	118.43	2.38
CY	5.12	0.0	4.34	0.00	0.00	0.77	0.00
LV	5.85	0.0	0.00	2.13	0.00	3.72	0.00
LT	4.89	0.0	0.10	1.22	0.00	3.33	0.24
LU	2.21	0.0	0.00	0.17	0.00	1.97	0.07
HU	35.98	3.0	0.06	9.74	15.99	6.92	0.25
MT	2.22	0.0	0.04	1.91	0.00	0.26	0.00
NL	121.61	14.6	1.33	59.40	3.83	40.47	1.99
AT	70.74	0.1	0.71	12.64	0.00	56.54	0.71
PL	179.55	127.6	2.00	18.06	0.00	31.33	0.58
PT	50.98	0.8	1.23	15.57	0.00	33.09	0.29
RO	59.47	10.7	0.76	10.06	11.28	26.68	0.00
SI	15.88	3.8	0.06	0.52	5.71	5.73	0.01
SK	29.96	1.7	0.40	4.89	15.73	7.07	0.17
FI	71.87	4.8	0.17	4.66	23.60	38.17	0.51
SE	171.80	0.1	0.35	0.92	52.97	115.78	1.68

source: Eurostat April 2023

Methodology and Notes: see appendices

2.6.2 Gross Electricity Generation

RENEWABLES

TWh	2021							
	Renewables and biofuels	Wind	Hydro	Solar	Solid & liquid biofuels, renewable waste	Biogases	Geothermal	Tide, Wave and Ocean
EU27_2020	1 101.9	386.9	374.8	163.8	116.8	52.6	6.5	0.5
Share - %	100.0%	35.1%	34.0%	14.9%	10.6%	4.8%	0.6%	0.0%
BE	23.66	12.00	1.35	5.62	3.71	0.98	0.00	0.00
BG	10.56	1.43	5.07	1.47	2.37	0.22	0.00	0.00
CZ	11.92	0.60	3.62	2.32	2.79	2.59	0.00	0.00
DK	26.10	16.05	0.02	1.31	8.10	0.61	0.00	0.00
DE	236.12	114.65	24.97	49.34	16.92	30.00	0.24	0.00
EE	2.88	0.73	0.02	0.35	1.75	0.02	0.00	0.00
IE	11.90	9.78	1.04	0.09	0.82	0.17	0.00	0.00
EL	22.19	10.48	5.96	5.25	0.04	0.46	0.00	0.00
ES	128.97	62.06	32.85	27.10	5.96	0.98	0.00	0.02
FR	126.71	36.83	63.96	15.73	6.45	3.15	0.10	0.48
HR	10.63	2.06	7.23	0.15	0.66	0.44	0.09	0.00
IT	118.43	20.93	47.48	25.04	10.95	8.12	5.91	0.00
CY	0.77	0.25	0.00	0.47	0.00	0.06	0.00	0.00
LV	3.72	0.14	2.71	0.01	0.57	0.29	0.00	0.00
LT	3.33	1.36	1.09	0.19	0.53	0.16	0.00	0.00
LU	1.97	0.31	1.08	0.18	0.33	0.06	0.00	0.00
HU	6.92	0.66	0.21	3.80	1.94	0.30	0.01	0.00
MT	0.26	0.00	0.00	0.26	0.00	0.01	0.00	0.00
NL	40.47	18.00	0.09	11.50	10.07	0.82	0.00	0.00
AT	56.54	6.74	42.54	2.78	3.88	0.60	0.00	0.00
PL	31.33	16.23	3.10	3.93	6.75	1.31	0.00	0.00
PT	33.09	13.22	13.45	2.24	3.73	0.27	0.18	0.00
RO	26.68	6.58	17.75	1.70	0.58	0.07	0.00	0.00
SI	5.73	0.01	5.00	0.45	0.17	0.10	0.00	0.00
SK	7.07	0.01	4.55	0.67	1.36	0.49	0.00	0.00
FI	38.17	8.51	15.79	0.30	13.25	0.33	0.00	0.00
SE	115.78	27.24	73.93	1.53	13.07	0.01	0.00	0.00

2.6.2 Gross Electricity Generation

EU27_2020 – BY FUEL

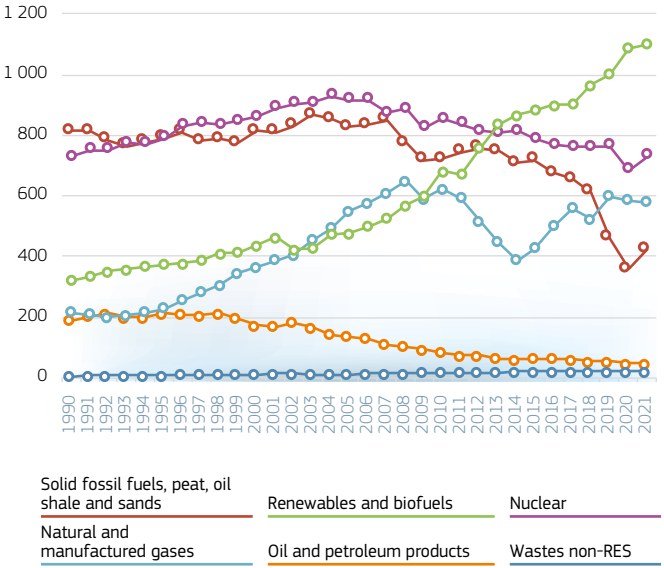
Share of Total (%)	2021					
	Solid fossil fuels, oil shale and sands, peat	Oil and petroleum products	Natural gas and manufactured gases	Nuclear	Renewables and biofuels	Others
1990	35.8	8.3	9.5	32.0	14.1	0.2
1991	35.1	8.8	9.1	32.3	14.5	0.3
1992	34.0	9.2	8.7	32.6	15.2	0.3
1993	33.2	8.6	8.9	33.6	15.5	0.3
1994	33.2	8.6	9.2	32.9	15.8	0.3
1995	32.9	8.8	9.5	32.9	15.5	0.3
1996	32.5	8.4	10.2	33.3	15.2	0.4
1997	31.2	8.1	11.2	33.5	15.5	0.4
1998	30.8	8.2	11.9	32.6	16.0	0.4
1999	29.9	7.6	13.3	32.8	16.0	0.4
2000	30.6	6.5	13.7	32.4	16.4	0.4
2001	29.6	6.2	14.1	32.5	17.0	0.5
2002	30.2	6.6	14.6	32.7	15.4	0.5
2003	30.6	5.9	16.0	32.0	15.1	0.3
2004	29.4	5.0	17.0	32.0	16.3	0.4
2005	28.3	4.7	18.8	31.4	16.4	0.4
2006	28.1	4.4	19.4	30.8	16.8	0.4
2007	28.5	3.7	20.4	29.2	17.7	0.5
2008	25.9	3.4	21.6	29.5	19.0	0.5
2009	25.3	3.3	20.8	29.0	21.1	0.6
2010	24.2	2.8	20.9	28.7	22.9	0.6
2011	25.3	2.5	20.1	28.5	22.8	0.6
2012	25.9	2.5	17.6	27.7	25.8	0.6
2013	25.6	2.2	15.3	27.6	28.7	0.6
2014	24.8	2.1	13.6	28.4	30.3	0.7
2015	24.8	2.2	14.8	27.1	30.5	0.7
2016	23.1	2.1	17.0	26.3	30.8	0.7
2017	22.1	2.0	18.9	25.7	30.6	0.7
2018	20.8	1.9	17.8	25.9	32.9	0.7
2019	15.9	1.8	20.7	26.4	34.6	0.7
2020	12.8	1.7	21.1	24.5	39.1	0.8
2021	14.6	1.6	19.9	25.2	37.9	0.7

source: Eurostat April 2023

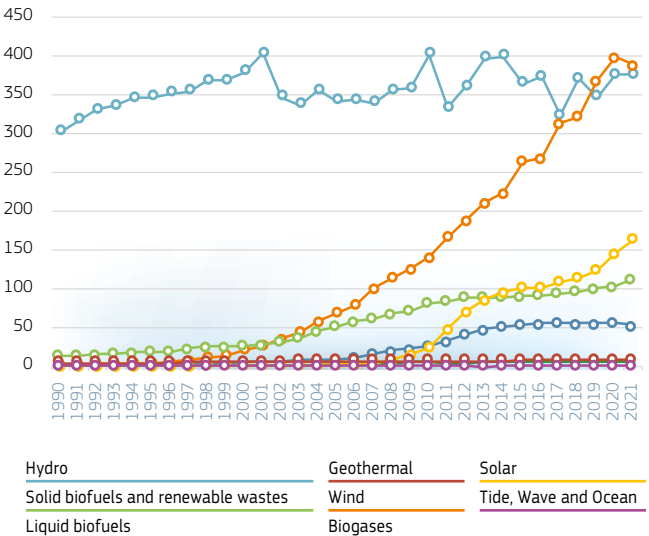
Methodology and Notes: [see appendices](#)

2.6.2 Gross Electricity Generation

EU27_2020 – BY FUEL – ALL FUELS – 1990-2021 (TWh)



EU27_2020 – BY FUEL – GROSS ELECTRICITY GENERATION, BY FUEL: RENEWABLES – 1990-2021 (TWh)



source: Eurostat April 2023
Methodology and Notes: [see appendices](#)

2.6.3 Market Share of the Largest Electricity Producer

%	2000	2010	2015	2019	2020	2021
BE	91.1	79.1	48.5	55.2	53.0	56.0
BG			32.5	39.0	42.5	36.0
CZ	69.2	73.0	67.7	69.0	67.0	63.0
DK	36.0	46.0	37.2	28.1	27.0	27.0
DE	34.0	28.4	32.0	26.0	25.3	26.0
EE	91.0	89.0	79.8	67.4	52.0	64.0
IE	97.0	34.0	55.0	28.0	31.0	41.0
EL	97.0	85.1	70.7	49.4	40.8	45.0
ES	42.4	24.0	24.5	22.4	19.8	24.0
FR	90.2	86.5	85.7	79.8	77.8	79.0
HR		88.0	77.8	77.8	75.7	75.7
IT	46.7	28.0	27.0	16.0	16.0	17.0
CY	99.6	100.0	92.0	92.0	90.0	88.0
LV	95.8	88.0	57.4	66.6	57.1	62.0
LT	72.8	35.4	22.7	15.5	22.9	17.0
LU		85.4	43.8	18.7	17.9	20.0
HU	41.3	42.1	53.1	56.3	55.3	63.0
MT	100.0	100.0	100.0	37.0	37.4	37.4
NL				0.0		
AT	32.6			0.0		
PL	19.5	17.4	17.4	18.4	17.4	17.4
PT	58.5	47.2	42.5	37.7	39.1	26.0
RO		33.6	25.7	26.7	27.8	30.0
SI		56.3	51.3	50.3	50.1	51.0
SK	85.1	80.9	73.1	66.1	64.4	64.4
FI	23.3	26.6	22.3	22.0	23.0	21.0
SE	49.5	42.0	20.0	18.0	19.0	19.0

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.7 Solar and wind Energy

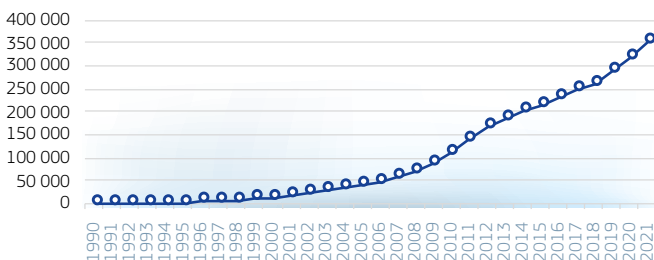
2.7.1 Solar and wind Energy – Cumulative Capacity

TOTAL

MW	2000	2010	2015	2019	2020	2021
EU27_2020	12 472	109 606	214 861	287 350	315 541	352 556
Index2000	100%	879%	1723%	2304%	2530%	2827%
BE	14	1 919	5 313	8 500	10 246	10 961
BG	0	513	1 727	1 748	1 803	1 979
CZ	1	1 940	2 356	2 450	2 511	2 586
DK	2 391	3 809	5 859	7 191	7 571	8 725
DE	6 209	44 961	83 804	109 656	115 872	123 206
EE	0	108	300	437	525	710
IE	117	1 391	2 454	4 184	4 397	4 474
EL	226	1 500	4 695	6 423	7 407	8 927
ES	2 216	25 298	29 951	36 701	39 259	43 927
FR	45	6 956	17 436	27 235	29 570	33 550
HR	0	79	466	731	910	1 125
IT	382	9 386	28 038	31 545	32 521	33 848
CY	0	89	234	309	387	472
LV	2	30	68	81	83	84
LT	0	133	505	637	704	926
LU	14	73	180	296	339	414
HU	0	295	501	1 723	2 454	3 292
MT	0	1	75	155	188	206
NL	460	2 327	4 917	11 710	17 756	22 680
AT	55	1 105	3 426	4 926	5 269	6 190
PL	4	1 108	4 994	7 377	10 253	14 383
PT	84	3 930	5 384	6 124	6 223	7 073
RO	0	389	4 456	4 435	4 395	4 409
SI	0	12	242	281	373	464
SK	0	22	536	594	539	541
FI	40	204	1 022	2 506	2 904	3 682
SE	212	2 028	5 923	9 395	11 083	13 722

SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – TOTAL – 1990-2021 (MW)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

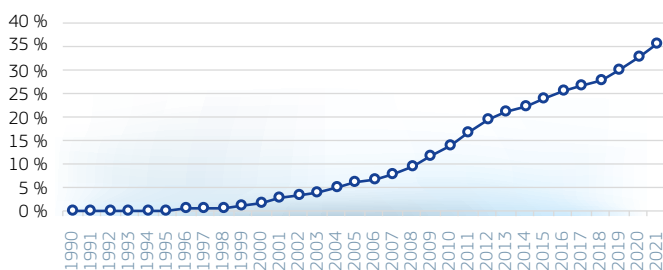
2.7.1 Solar and Wind Energy – Cumulative Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

%	2000	2010	2015	2019	2020	2021
EU27_2020	2.0	13.9	24.1	30.4	32.8	35.6
BE	0.09	10.21	25.10	35.53	39.88	41.81
BG	0.00	5.11	15.83	15.56	16.40	17.66
CZ	0.01	9.66	10.77	11.12	11.71	12.29
DK	19.41	28.34	41.85	48.03	49.29	52.87
DE	5.22	27.60	41.23	47.37	49.58	50.89
EE	0.00	3.93	10.50	15.90	19.16	29.47
IE	2.47	17.08	25.35	37.59	39.11	40.16
EL	2.07	9.80	24.79	31.36	35.62	43.09
ES	4.11	24.87	28.06	33.46	36.24	39.57
FR	0.04	5.60	13.19	19.99	21.59	23.64
HR	0.00	1.93	9.77	15.52	19.52	23.09
IT	0.51	8.80	23.97	27.09	27.94	28.89
CY	0.00	5.72	13.31	16.98	20.39	23.81
LV	0.10	1.17	2.33	2.77	2.83	2.87
LT	0.00	3.73	14.08	18.86	20.17	24.97
LU	1.15	4.27	8.90	16.65	18.77	22.02
HU	0.00	3.28	5.80	17.24	22.91	28.44
MT	0.00	0.14	11.21	20.71	24.02	25.71
NL	2.18	8.72	14.51	31.53	41.86	48.00
AT	0.31	5.18	13.85	19.02	20.00	22.61
PL	0.01	3.32	13.38	16.98	20.77	27.22
PT	0.77	20.76	27.43	28.39	28.73	33.14
RO	0.00	1.95	18.70	21.22	21.35	23.45
SI	0.00	0.38	7.21	7.34	9.49	11.38
SK	0.00	0.28	6.89	7.69	6.99	7.22
FI	0.25	1.32	6.19	14.44	16.79	20.52
SE	0.63	5.56	14.92	21.94	25.38	30.66

SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – SHARE OF TOTAL – 1990-2021 (%)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: see appendices

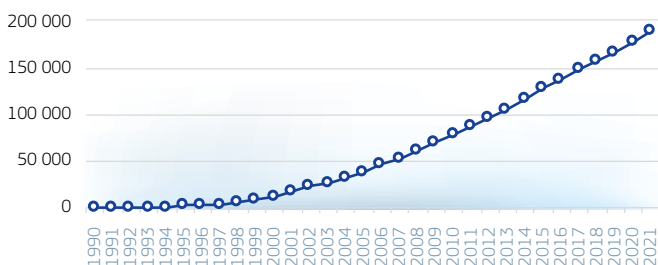
2.7.2 Wind Cumulative Installed Capacity

TOTAL

MW	2000	2010	2015	2019	2020	2021
EU27_2020	12297	78989	127174	167140	177059	188371
Index2000	100%	642%	1034%	1359%	1440%	1532%
BE	14	912	2181	3864	4673	4948
BG	0	488	699	703	703	704
CZ	1	213	281	339	339	339
DK	2390	3802	5077	6111	6267	7021
DE	6095	26955	44580	60742	62201	63833
EE	0	108	300	316	317	315
IE	117	1390	2451	4126	4307	4339
EL	226	1298	2091	3589	4119	4649
ES	2206	20693	22943	25590	26819	27908
FR	38	5912	10298	16427	17514	18740
HR	0	79	418	646	801	987
IT	363	5794	9137	10679	10871	11254
CY	0	82	158	158	158	158
LV	2	30	68	78	78	77
LT	0	133	436	534	540	671
LU	14	44	64	136	153	136
HU	0	293	329	323	323	324
MT	0	0	0	0	0	0
NL	447	2237	3391	4484	6648	7769
AT	50	1016	2489	3224	3226	3408
PL	4	1108	4886	5838	6298	6967
PT	83	3796	4937	5223	5122	5427
RO	0	389	3130	3038	3013	3015
SI	0	0	3	3	3	3
SK	0	3	3	4	4	4
FI	38	197	1005	2284	2586	3257
SE	209	2017	5819	8681	9976	12116

WIND CUMULATIVE INSTALLED CAPACITY – TOTAL –
1990-2021 (MW)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.7.2 Wind Cumulative Installed Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

%	2000	2010	2015	2019	2020	2021
EU27_2020	2.0	10.0	14.3	17.7	18.4	19.0
BE	0.1	4.9	10.3	16.2	18.2	18.9
BG	0.0	4.9	6.4	6.3	6.4	6.3
CZ	0.0	1.1	1.3	1.5	1.6	1.6
DK	19.4	28.3	36.3	40.8	40.8	42.5
DE	5.1	16.5	21.9	26.2	26.6	26.4
EE	0.0	3.9	10.5	11.5	11.6	13.1
IE	2.5	17.1	25.3	37.1	38.3	38.9
EL	2.1	8.5	11.0	17.5	19.8	22.4
ES	4.1	20.3	21.5	23.3	24.8	25.1
FR	0.0	4.8	7.8	12.1	12.8	13.2
HR	0.0	1.9	8.8	13.7	17.2	20.3
IT	0.5	5.4	7.8	9.2	9.3	9.6
CY	0.0	5.3	9.0	8.7	8.3	7.9
LV	0.1	1.2	2.3	2.7	2.7	2.6
LT	0.0	3.7	12.2	15.8	15.5	18.1
LU	1.2	2.6	3.2	7.7	8.4	7.3
HU	0.0	3.3	3.8	3.2	3.0	2.8
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	2.1	8.4	10.0	12.1	15.7	16.4
AT	0.3	4.8	10.1	12.4	12.2	12.4
PL	0.0	3.3	13.1	13.4	12.8	13.2
PT	0.8	20.1	25.2	24.2	23.7	25.4
RO	0.0	2.0	13.1	14.5	14.6	16.0
SI	0.0	0.0	0.1	0.1	0.1	0.1
SK	0.0	0.0	0.0	0.1	0.1	0.1
FI	0.2	1.3	6.1	13.2	14.9	18.2
SE	0.6	5.5	14.7	20.3	22.8	27.1

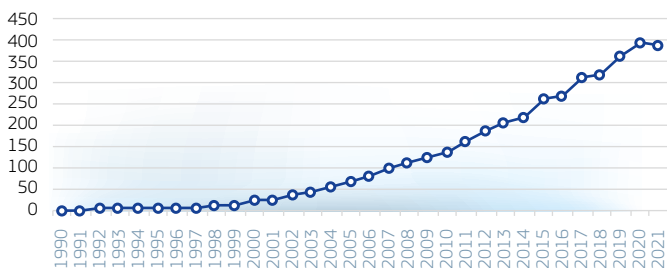
2.7.3 Wind Gross Electricity Production

TOTAL

TWh	2000	2010	2015	2019	2020	2021
EU27_2020	21.3	139.8	263.2	367.1	397.8	386.9
Index2000	100%	657%	1237%	1726%	1870%	1818%
BE	0.0	1.3	5.6	9.8	12.8	12.0
BG	0.0	0.7	1.5	1.3	1.5	1.4
CZ	0.0	0.3	0.6	0.7	0.7	0.6
DK	4.2	7.8	14.1	16.1	16.3	16.1
DE	9.4	38.5	80.6	125.9	132.1	114.6
EE	0.0	0.3	0.7	0.7	0.8	0.7
IE	0.2	2.8	6.6	10.0	11.5	9.8
EL	0.5	2.7	4.6	7.3	9.3	10.5
ES	4.7	44.3	49.3	55.6	56.4	62.1
FR	0.0	9.9	21.4	34.7	39.9	36.8
HR	0.0	0.1	0.8	1.5	1.7	2.1
IT	0.6	9.1	14.8	20.2	18.8	20.9
CY	0.0	0.0	0.2	0.2	0.2	0.2
LV	0.0	0.0	0.1	0.2	0.2	0.1
LT	0.0	0.2	0.8	1.5	1.6	1.4
LU	0.0	0.1	0.1	0.3	0.4	0.3
HU	0.0	0.5	0.7	0.7	0.7	0.7
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.8	4.0	7.5	11.5	15.3	18.0
AT	0.1	2.1	4.8	7.5	6.8	6.7
PL	0.0	1.7	10.9	15.1	15.8	16.2
PT	0.2	9.2	11.6	13.7	12.3	13.2
RO	0.0	0.3	7.1	6.8	6.9	6.6
SI	0.0	0.0	0.0	0.0	0.0	0.0
SK	0.0	0.0	0.0	0.0	0.0	0.0
FI	0.1	0.3	2.3	6.0	8.3	8.5
SE	0.5	3.5	16.3	19.8	27.5	27.2

WIND GROSS ELECTRICITY PRODUCTION – TOTAL –
1990-2021

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.7.4 Wind Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

%	2000	2010	2015	2019	2020	2021
EU27_2020	0.8	4.7	9.1	12.6	14.3	13.3
BE	0.0	1.4	8.1	10.5	14.4	12.0
BG	0.0	1.5	3.0	3.0	3.6	3.0
CZ	0.0	0.4	0.7	0.8	0.9	0.7
DK	11.8	20.1	48.8	54.7	56.8	48.6
DE	1.6	6.1	12.5	20.8	23.0	19.5
EE	0.0	2.1	7.0	9.0	13.9	10.2
IE	1.0	9.9	23.2	32.4	35.8	30.7
EL	0.8	4.7	8.9	14.9	19.3	19.2
ES	2.1	14.7	17.6	20.4	21.4	22.6
FR	0.0	1.7	3.7	6.1	7.5	6.6
HR	0.0	0.9	7.0	11.5	12.9	13.6
IT	0.2	3.0	5.3	6.9	6.7	7.3
CY	0.0	0.6	4.9	4.6	5.0	4.8
LV	0.1	0.7	2.7	2.4	3.1	2.4
LT	0.0	4.1	17.4	40.0	29.2	27.9
LU	2.1	1.2	3.7	14.7	15.7	14.2
HU	0.0	1.4	2.3	2.1	1.9	1.8
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.9	3.4	6.9	9.5	12.4	14.8
AT	0.1	2.9	7.4	10.0	9.4	9.5
PL	0.0	1.1	6.6	9.2	10.0	9.0
PT	0.4	17.0	22.1	25.7	23.2	25.9
RO	0.0	0.5	10.7	11.4	12.4	11.1
SI	0.0	0.0	0.0	0.0	0.0	0.0
SK	0.0	0.0	0.0	0.0	0.0	0.0
FI	0.1	0.4	3.4	8.8	12.0	11.8
SE	0.3	2.3	10.1	11.8	16.8	15.9

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.7.5 Wind Capacity Factor

ANNUAL AVERAGE

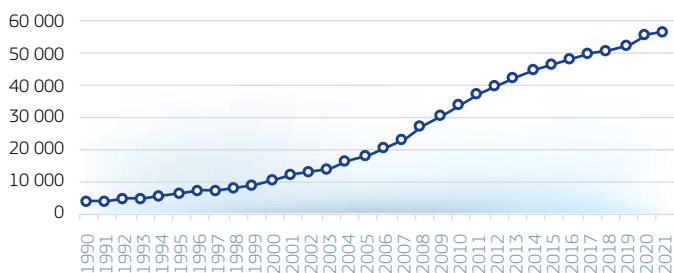
%	2000	2010	2015	2019	2020	2021
EU27_2020	19.8	20.2	23.6	25.1	25.6	23.4
BE	13.0	16.2	29.2	28.8	31.3	27.7
BG			23.7	21.4	24.0	23.2
CZ		18.0	23.3	23.5	23.5	20.2
DK	20.3	23.4	31.8	30.2	29.7	26.1
DE	17.5	16.3	20.6	23.7	24.2	20.5
EE		29.3	27.2	24.8	30.4	26.6
IE	23.9	23.1	30.6	27.7	30.6	25.7
EL	22.8	23.9	25.2	23.1	25.8	25.7
ES	24.5	24.4	24.5	24.8	24.0	25.4
FR	14.5	19.2	23.7	24.1	26.0	22.4
HR		20.1	21.7	25.9	24.5	23.8
IT	17.7	18.0	18.5	21.6	19.7	21.2
CY			16.1	17.3	17.4	17.9
LV		18.7	24.6	22.5	25.9	20.9
LT			21.2	32.1	32.8	23.2
LU	20.2	14.4	18.2	23.6	26.2	26.3
HU		20.8	24.1	25.8	23.1	23.4
MT						
NL	21.2	20.4	25.4	29.3	26.2	26.5
AT	15.2	23.2	22.2	26.4	24.0	22.6
PL	14.3	17.1	25.4	29.5	28.6	26.6
PT	23.1	27.6	26.8	29.9	27.4	27.8
RO			25.8	25.5	26.3	24.9
SI				21.3	21.6	19.2
SK		22.8	22.8	17.1	11.4	14.3
FI	23.4	17.1	26.4	30.1	36.4	29.8
SE	25.0	19.7	32.0	26.1	31.5	25.7

2.7.6 Solar Collectors' Surface

1 000 m ²	2000	2010	2015	2019	2020	2021
EU27_2020	10 759	34 428	47 092	52 477	55 810	56 999
Index2000	100%	320%	438%	488%	519%	530%
BE	41	375	660	724	740	748
BG	0	194	344	425	446	470
CZ	0	307	480	555	567	586
DK	243	480	1 016	1 915	2 051	2 035
DE	3 251	13 914	18 339	19 326	21 416	21 785
EE	0	0	0	0	0	0
IE	4	185	320	337	346	345
EL	2 941	4 100	4 390	4 868	4 991	5 175
ES	405	2 312	3 293	4 068	4 236	4 360
FR	513	1 447	2 917	3 302	3 398	3 504
HR	20	92	183	272	288	300
IT	271	2 415	3 724	4 344	4 458	4 658
CY	0	909	1 009	1 084	1 102	1 122
LV	0	0	0	22	22	22
LT	0	0	0	0	0	0
LU	0	29	56	70	74	77
HU	36	140	280	350	392	406
MT	0	40	70	73	74	75
NL	276	576	647	672	669	662
AT	2 202	4 559	5 261	5 050	4 923	4 775
PL	0	656	1 900	2 696	3 007	3 196
PT	238	752	1 121	1 348	1 407	1 479
RO	0	104	159	219	219	219
SI	101	178	224	224	222	220
SK	0	123	171	0	232	249
FI	10	31	50	73	80	88
SE	207	510	478	459	451	445

SOLAR THERMAL COLLECTORS –
1990-2021 (1 000 m²)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

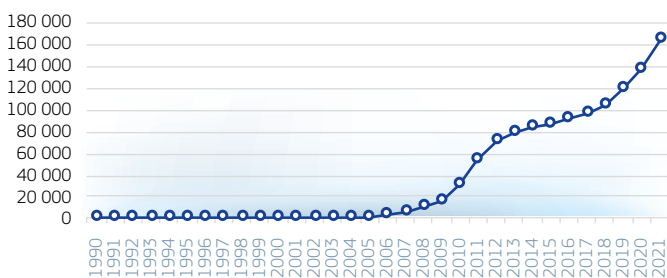
2.7.7 Solar Installed Capacity

TOTAL

MW	2000	2010	2015	2019	2020	2021
EU27_2020	175	30616	87687	120210	138482	164185
BE	0	1007	3132	4637	5573	6012
BG	0	25	1028	1044	1100	1275
CZ	0	1727	2075	2111	2172	2246
DK	1	7	782	1080	1304	1704
DE	114	18006	39224	48914	53671	59373
EE	0	0	0	121	208	395
IE	0	1	2	57	90	135
EL	0	202	2604	2834	3288	4277
ES	10	4605	7008	11111	12440	16019
FR	7	1044	7138	10808	12056	14810
HR	0	0	48	85	109	138
IT	19	3592	18901	20865	21650	22594
CY	0	7	76	151	229	315
LV	0	0	0	3	5	7
LT	0	0	69	103	164	255
LU	0	29	116	160	187	277
HU	0	2	172	1400	2131	2968
MT	0	1	75	155	188	206
NL	13	90	1526	7226	11108	14911
AT	5	89	937	1702	2043	2783
PL	0	0	108	1539	3955	7416
PT	1	134	447	901	1100	1646
RO	0	0	1326	1398	1383	1394
SI	0	12	239	278	370	461
SK	0	19	533	590	535	537
FI	2	7	17	222	318	425
SE	3	11	104	714	1107	1606

SOLAR INSTALLED CAPACITY – TOTAL –
1990-2021 (MW)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

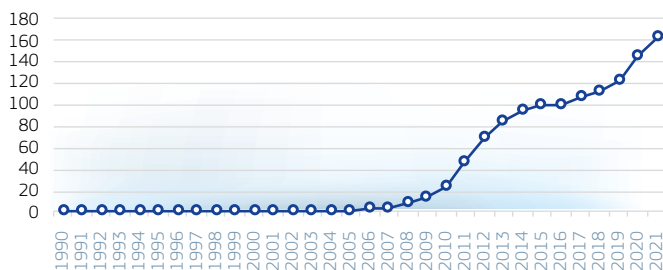
2.7.8 Solar Gross Electricity Production

TOTAL

TWh	2000	2010	2015	2019	2020	2021
EU27_2020	0.1	23.2	100.9	123.9	145.1	163.8
BE	0.0	0.6	3.1	4.3	5.1	5.6
BG	0.0	0.0	1.4	1.4	1.5	1.5
CZ	0.0	0.6	2.3	2.3	2.3	2.3
DK	0.0	0.0	0.6	1.0	1.2	1.3
DE	0.1	11.7	38.7	44.4	49.5	49.3
EE	0.0	0.0	0.0	0.1	0.2	0.4
IE	0.0	0.0	0.0	0.0	0.1	0.1
EL	0.0	0.2	3.9	4.4	4.4	5.3
ES	0.0	7.2	13.9	15.1	20.7	27.1
FR	0.0	0.6	7.8	12.3	13.5	15.7
HR	0.0	0.0	0.1	0.1	0.1	0.1
IT	0.0	1.9	22.9	23.7	24.9	25.0
CY	0.0	0.0	0.1	0.2	0.3	0.5
LV	0.0	0.0	0.0	0.0	0.0	0.0
LT	0.0	0.0	0.1	0.1	0.1	0.2
LU	0.0	0.0	0.1	0.1	0.2	0.2
HU	0.0	0.0	0.1	1.5	2.5	3.8
MT	0.0	0.0	0.1	0.2	0.2	0.3
NL	0.0	0.1	1.1	5.4	8.6	11.5
AT	0.0	0.1	0.9	1.7	2.0	2.8
PL	0.0	0.0	0.1	0.7	2.0	3.9
PT	0.0	0.2	0.8	1.3	1.7	2.2
RO	0.0	0.0	2.0	1.8	1.7	1.7
SI	0.0	0.0	0.3	0.3	0.4	0.5
SK	0.0	0.0	0.5	0.6	0.7	0.7
FI	0.0	0.0	0.0	0.1	0.2	0.3
SE	0.0	0.0	0.1	0.7	1.1	1.5

SOLAR GROSS ELECTRICITY PRODUCTION – TOTAL –
1990-2021

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.7.9 Solar Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

%	2000	2010	2015	2019	2020	2021
EU27_2020	0.0	0.8	3.5	4.3	5.2	5.6
BE	0.0	0.6	4.4	4.6	5.7	5.6
BG	0.0	0.0	2.8	3.2	3.6	3.1
CZ	0.0	0.7	2.7	2.7	2.9	2.7
DK	0.0	0.0	2.1	3.3	4.1	4.0
DE	0.0	1.9	6.0	7.3	8.6	8.4
EE	0.0	0.0	0.0	1.0	4.0	4.9
IE	0.0	0.0	0.0	0.1	0.2	0.3
EL	0.0	0.3	7.5	9.1	9.2	9.6
ES	0.0	2.4	4.9	5.5	7.9	9.9
FR	0.0	0.1	1.3	2.2	2.5	2.8
HR	0.0	0.0	0.5	0.7	0.7	1.0
IT	0.0	0.6	8.1	8.1	8.9	8.7
CY	0.0	0.1	2.8	4.2	6.1	9.1
LV	0.0	0.0	0.0	0.0	0.1	0.1
LT	0.0	0.0	1.6	2.4	2.4	3.9
LU	0.0	0.5	3.7	6.8	7.2	8.1
HU	0.0	0.0	0.5	4.4	7.1	10.6
MT	0.0	0.0	7.3	9.5	11.1	11.6
NL	0.0	0.0	1.0	4.5	7.0	9.5
AT	0.0	0.1	1.4	2.3	2.8	3.9
PL	0.0	0.0	0.0	0.4	1.2	2.2
PT	0.0	0.4	1.5	2.5	3.2	4.4
RO	0.0	0.0	3.0	3.0	3.1	2.9
SI	0.0	0.1	1.8	1.9	2.1	2.9
SK	0.0	0.1	1.9	2.1	2.3	2.2
FI	0.0	0.0	0.0	0.2	0.3	0.4
SE	0.0	0.0	0.1	0.4	0.6	0.9

2.8 CHP

2.8.1 CHP Electricity

GENERATION AND CAPACITY

	CHP Electricity Generation			CHP Electrical Capacity		
	TWh			GW		
	2019	2020	2021	2019	2020	2021
EU27_2020	348.4	335.1	346.4	133.3	133.4	129.9
BE	12.8	13.0	13.1	2.4	2.4	2.8
BG	3.9	3.8	4.2	1.2	1.3	1.3
CZ	9.9	10.2	10.6	8.5	8.3	8.0
DK	10.6	8.3	10.1	5.1	5.0	4.6
DE	86.9	85.5	90.1	54.8	53.4	50.2
EE	1.0	1.4	1.5	0.2	0.5	0.5
IE	2.1	2.1	2.0	0.3	0.3	0.3
EL	2.2	2.3	2.3	0.4	0.4	0.4
ES	29.7	26.9	27.5	5.0	5.0	4.8
FR	18.1	17.5	18.5	6.6	6.5	7.0
HR	2.3	2.7	2.8	0.9	0.9	0.9
IT	40.5	39.9	34.7	8.6	9.2	7.4
CY	0.0	0.0	0.0	0.0	0.0	0.0
LV	2.6	2.1	2.6	1.3	1.3	1.3
LT	1.1	1.2	1.3	0.6	0.6	0.5
LU	0.4	0.5	0.5	0.1	0.1	0.1
HU	4.6	4.7	5.6	1.5	1.6	1.6
MT	0.2	0.2	0.1	0.1	0.1	0.1
NL	32.2	31.7	31.0	8.8	9.1	8.8
AT	9.7	9.8	11.5	2.9	2.9	5.0
PL	29.9	30.1	31.3	9.7	10.0	10.8
PT	6.4	6.5	6.1	1.3	1.3	1.3
RO	5.1	4.6	4.7	1.3	1.4	1.5
SI	1.2	1.2	1.2	0.4	0.3	0.4
SK		3.3	3.5		1.6	1.5
FI	22.5	18.9	20.6	6.4	6.4	6.3
SE	9.2	9.2	8.9	3.3	3.3	2.7

source: Eurostat, July 2023

Methodology and Notes: [see appendices](#)

2.8.2 CHP Heat

PRODUCTION AND CAPACITY

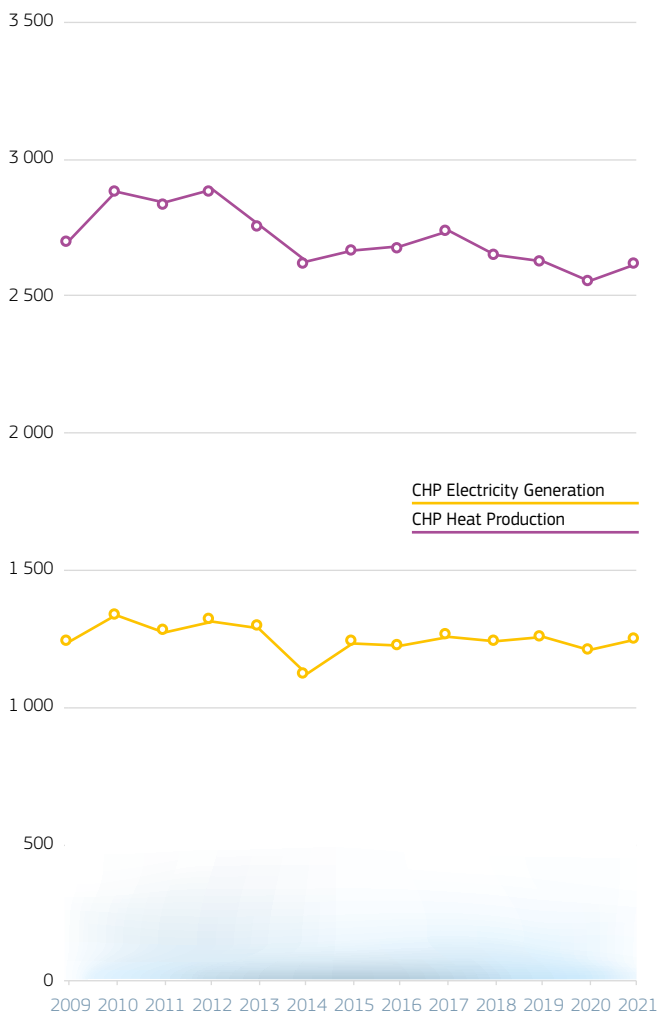
	CHP Heat Production			CHP Heat Capacity		
	PJ			GW		
	2019	2020	2021	2019	2020	2021
EU27_2020	2629.2	2556.0	2620.2	285.4	252.2	242.5
BE	94.8	93.4	95.0	4.9	5.1	5.4
BG	39.6	36.2	49.8	4.4	4.6	4.7
CZ	99.1	100.2	99.0	20.4	19.2	19.3
DK	91.9	80.8	86.9	8.6	8.5	8.4
DE	663.2	638.8	670.2	96.5	63.7	64.6
EE	3.6	12.8	16.5	0.7	1.5	1.5
IE	11.2	11.1	11.1	0.6	0.6	0.6
EL	15.3	16.8	17.0	0.9	0.8	0.8
ES	143.2	132.4	138.9	10.7	10.7	10.4
FR	159.9	177.1	174.4	21.4	21.6	22.0
HR	17.6	20.0	20.0	2.2	2.1	2.1
IT	216.9	213.4	169.9	21.9	21.5	10.4
CY	0.1	0.2	0.2	0.0	0.0	0.0
LV	13.7	12.1	13.1	1.2	1.2	1.2
LT	11.0	11.7	13.7	1.5	1.6	1.3
LU	3.8	4.8	5.3	0.3	0.3	0.3
HU	27.5	27.6	30.1	3.1	3.1	3.3
MT	0.1	0.1	0.1	0.0	0.0	0.0
NL	174.2	171.6	172.2	15.4	16.3	16.9
AT	110.2	111.3	112.2	8.9	8.7	8.4
PL	248.5	245.6	259.6	24.5	24.2	24.4
PT	62.1	59.8	59.3	4.4	4.9	4.8
RO	62.1	35.4	36.1	4.4	4.2	4.2
SI	11.0	11.2	11.2	0.9	0.9	1.0
SK		35.1	41.0		3.4	3.1
FI	242.7	214.8	223.3	16.2	16.2	16.1
SE	94.0	94.0	94.5	7.9	7.9	7.4

source: Eurostat, July 2023

Methodology and Notes: [see appendices](#)

2.8.3 CHP Electricity and Heat

EU27_2020 – CHP ELECTRICITY AND HEAT GENERATION (PJ)*



source: Eurostat July 2023

*data before 2009 is not consistent across the EU27

Methodology and Notes: [see appendices](#)

2.9 Heat*

2.9.1 Gross Heat Generation

TOTAL

PJ	2000	2010	2015	2019	2020	2021
EU27_2020	2044.7	2580.7	2259.1	2255.9	2163.9	2344.7
Index2000	100%	126%	110%	110%	106%	115%
BE	23.2	33.9	26.4	20.6	20.1	20.7
BG	50.8	57.1	48.7	36.6	36.6	38.7
CZ	139.2	147.0	119.4	114.7	111.2	119.9
DK	115.5	147.9	126.9	127.9	123.6	136.3
DE	315.9	508.6	448.8	451.6	418.2	462.6
EE	27.0	25.5	20.9	22.0	20.9	22.7
IE	0.0	0.0	0.0	0.0	0.0	0.0
EL	1.2	1.9	2.1	2.2	2.2	2.0
ES	0.0	0.0	0.0	0.0	0.0	0.0
FR	135.5	152.9	146.4	171.9	170.4	185.7
HR	11.5	12.5	11.1	13.2	13.9	15.6
IT	0.0	205.3	216.9	231.4	228.9	223.7
CY	0.0	0.0	0.1	0.1	0.0	0.0
LV	31.9	28.7	25.5	28.6	27.1	31.2
LT	42.8	40.0	31.9	31.7	29.8	35.9
LU	0.5	3.1	2.4	4.0	5.6	6.2
HU	69.2	53.0	50.2	45.3	45.9	49.2
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	172.4	159.9	121.3	104.8	93.5	98.6
AT	47.7	78.2	82.7	83.8	84.3	92.0
PL	340.7	335.1	280.1	286.2	285.2	307.3
PT	5.6	21.1	19.5	20.9	20.5	16.7
RO	189.7	99.1	76.6	61.4	59.1	61.2
SI	9.4	9.8	8.7	9.1	9.3	10.1
SK	36.8	48.5	36.6	31.3	30.7	32.5
FI	147.5	206.9	172.5	170.1	153.7	174.2
SE	131.0	204.6	183.5	186.3	173.1	201.7

*only Heat sold, as considered currently in the energy balances

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.9.1 Gross Heat Generation

BY FUEL

PJ	2021						
	Gross Heat Generation	Solid fossil fuels, peat, oil shale & sands	Oil and petroleum products	Natural gas and manufactured gases	Nuclear	Renewables and biofuels	Wastes non-RES and others
EU27_2020	2 344.7	472.0	74.7	882.7	3.9	768.0	141.2
Share - %	100.0%	20.1%	3.2%	37.6%	0.2%	32.8%	6.0%
BE	20.7	0.0	0.0	15.0	0.0	3.6	2.1
BG	38.7	6.3	0.1	23.0	0.7	8.5	0.2
CZ	119.9	59.7	1.3	43.4	0.9	13.0	1.5
DK	136.3	8.9	1.5	14.2	0.0	95.4	14.3
DE	462.6	102.1	6.3	232.2	0.0	78.6	43.5
EE	22.7	1.8	0.2	5.1	0.0	14.7	0.9
IE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EL	2.0	1.7	0.0	0.3	0.0	0.0	0.0
ES	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FR	185.7	4.5	9.1	70.4	0.0	83.3	18.4
HR	15.6	0.0	0.1	10.7	0.0	4.7	0.0
IT	223.7	0.0	24.4	157.8	0.0	36.2	5.4
CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LV	31.2	0.0	0.1	13.4	0.0	17.7	0.0
LT	35.9	0.1	0.5	8.0	0.0	25.1	2.2
LU	6.2	0.0	0.0	1.6	0.0	4.5	0.1
HU	49.2	0.9	0.0	38.9	0.4	7.8	1.2
MT	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NL	98.6	1.7	7.6	55.5	0.0	25.3	8.6
AT	92.0	0.1	3.3	33.9	0.0	48.2	6.5
PL	307.3	229.3	5.2	45.7	0.0	23.5	3.7
PT	16.7	0.0	0.2	16.5	0.0	0.0	0.0
RO	61.2	9.5	2.8	45.0	0.0	4.0	0.0
SI	10.1	4.5	0.2	3.2	0.0	2.0	0.2
SK	32.5	3.8	0.4	18.6	2.0	7.4	0.2
FI	174.2	35.6	8.7	21.8	0.0	101.7	6.4
SE	201.7	1.4	3.0	8.5	0.0	162.9	25.8

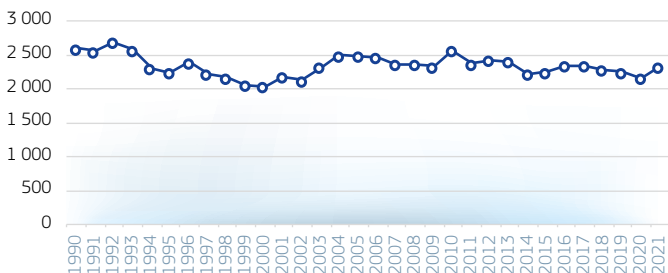
source: Eurostat April 2023

Methodology and Notes: see appendices

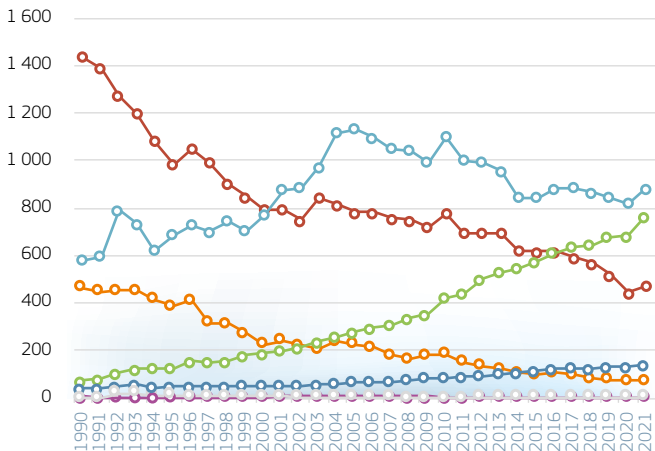
2.9.1 Gross Heat Generation

EU27_2020 – TOTAL – 1990-2021 (PJ)

EU27_2020



EU27_2020 – GROSS HEAT GENERATION – 1990-2021 (PJ)



Solid fossil fuels, peat, oil shale and sands

Oil and petroleum products

Natural gas and manufactured gases

Nuclear

Renewables and biofuels

Wastes non-RES

Others

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

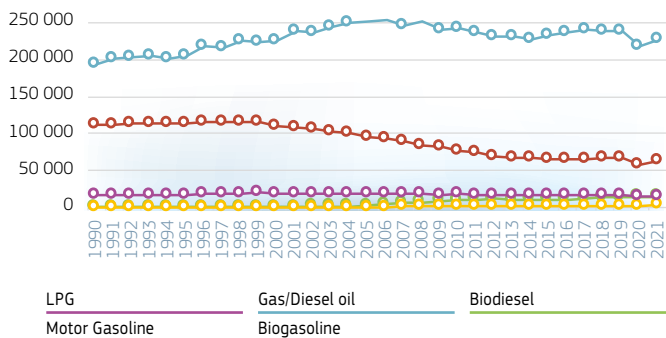
2.10 Transport

2.10.1 Fuels Final Consumption

PETROLEUM PRODUCTS AND BIOFUELS

ktoe	Final consumption petroleum products	LPG	Motor gasoline	Gas/Diesel oil	Final consumption biofuels	Biogasoline	Biodiesel
1990	321 230	16 192	111 718	193 320	6	0	6
1995	336 944	17 423	113 998	205 523	218	25	189
2000	355 244	19 465	110 381	225 397	713	59	640
2001	366 591	19 344	108 744	238 502	840	66	756
2002	363 107	19 100	107 019	236 988	1 113	159	932
2003	366 647	19 092	103 482	244 074	1 433	243	1 160
2004	369 253	19 156	100 230	249 867	1 963	306	1 613
2005	367 904	19 408	95 746	252 751	3 270	550	2 532
2006	365 886	18 771	92 404	254 710	5 465	849	3 909
2007	353 704	18 181	89 352	246 171	7 657	1 100	5 720
2008	355 278	18 069	84 683	252 526	9 355	1 707	7 183
2009	339 785	17 680	81 474	240 631	11 049	2 084	8 681
2010	337 044	18 039	76 821	242 184	12 442	2 496	9 701
2011	327 671	17 157	73 877	236 638	12 975	2 552	10 311
2012	316 870	16 751	69 292	230 827	13 795	2 491	11 254
2013	314 690	16 860	66 880	230 950	12 310	2 314	9 949
2014	310 682	16 179	66 591	227 913	13 307	2 303	10 936
2015	314 872	16 217	65 318	233 338	13 330	2 345	10 927
2016	319 309	16 608	65 663	237 039	13 183	2 306	10 807
2017	323 056	16 333	66 024	240 699	14 441	2 437	11 940
2018	321 179	16 862	66 246	238 071	16 072	2 623	13 332
2019	323 110	16 597	67 669	238 843	16 636	2 725	13 785
2020	291 041	15 184	58 206	217 651	16 886	2 678	14 030
2021	307 148	15 648	63 644	227 856	17 721	3 047	14 519

EU27_2020 – FUELS CONSUMPTION IN THE TRANSPORT SECTOR – 1990-2021 (ktoe)



source: Eurostat April 2023

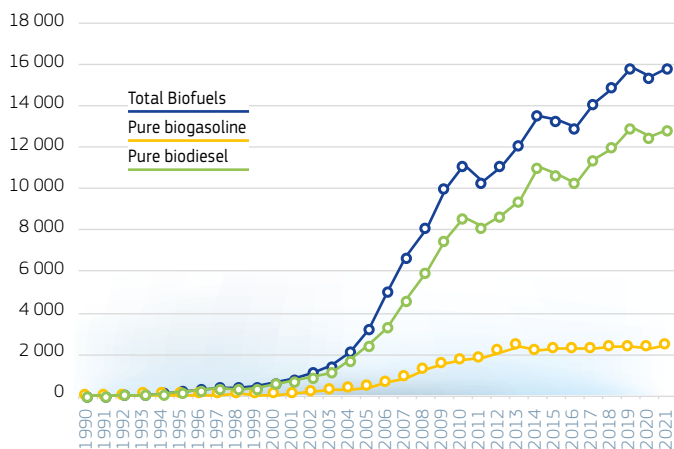
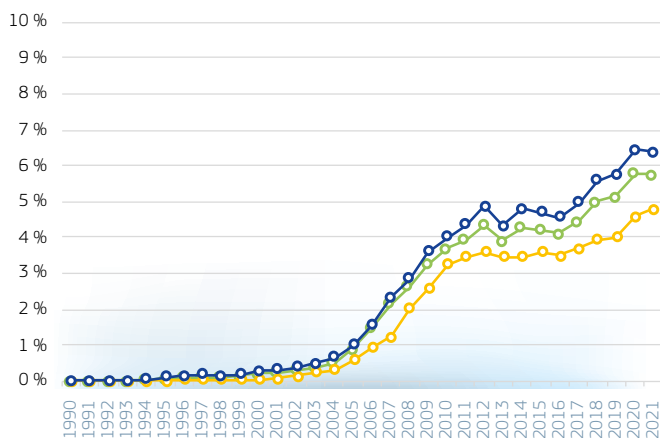
Methodology and Notes: see appendices

2.10.2 Biofuels

EU27_2020 – BY FUEL

	Production			Share in Transport Fuels		
	Total Biofuels	Pure biogasoline	Pure biodiesel	of liquid biofuels in total transport liquid 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	20	2	16	0.0%	0.0%	0.0%
1993	47	18	25	0.0%	0.0%	0.0%
1994	133	25	96	0.0%	0.0%	0.1%
1995	222	25	188	0.1%	0.0%	0.1%
1996	314	39	270	0.1%	0.0%	0.1%
1997	403	54	340	0.1%	0.0%	0.2%
1998	385	63	312	0.1%	0.1%	0.1%
1999	442	59	371	0.1%	0.1%	0.2%
2000	639	60	564	0.2%	0.1%	0.3%
2001	792	71	696	0.2%	0.1%	0.3%
2002	1 108	160	918	0.3%	0.1%	0.4%
2003	1 460	264	1 145	0.4%	0.2%	0.5%
2004	2 139	312	1 716	0.5%	0.3%	0.6%
2005	3 229	383	2 445	0.9%	0.6%	1.0%
2006	5 036	636	3 298	1.5%	0.9%	1.5%
2007	6 711	865	4 621	2.2%	1.2%	2.3%
2008	8 102	1 282	5 975	2.6%	2.0%	2.8%
2009	9 994	1 538	7 521	3.3%	2.6%	3.6%
2010	11 158	1 728	8 614	3.7%	3.2%	4.0%
2011	10 314	1 824	8 156	4.0%	3.5%	4.4%
2012	11 111	2 103	8 703	4.4%	3.6%	4.9%
2013	12 144	2 408	9 399	3.9%	3.5%	4.3%
2014	13 528	2 188	11 044	4.3%	3.5%	4.8%
2015	13 315	2 274	10 707	4.2%	3.6%	4.7%
2016	12 962	2 240	10 289	4.1%	3.5%	4.6%
2017	14 114	2 264	11 408	4.5%	3.7%	5.0%
2018	14 922	2 368	12 012	5.0%	4.0%	5.6%
2019	15 836	2 363	12 935	5.1%	4.0%	5.8%
2020	15 401	2 289	12 486	5.8%	4.6%	6.4%
2021	15 869	2 418	12 846	5.8%	4.8%	6.4%

2.10.2 Biofuels

EU27-2020 – PRODUCTION BIOFUELS –
1990-2021 (ktoe)EU27_2020 – BIOFUELS SHARE IN TRANSPORT LIQUID FUELS –
1990-2021 (%)

of liquid biofuels in total transport liquid fuels
 of Biogasoline in Motor Gasoline [%]
 of Biodiesel in Gas/Diesel Oil [%]

2.11 Energy Efficiency

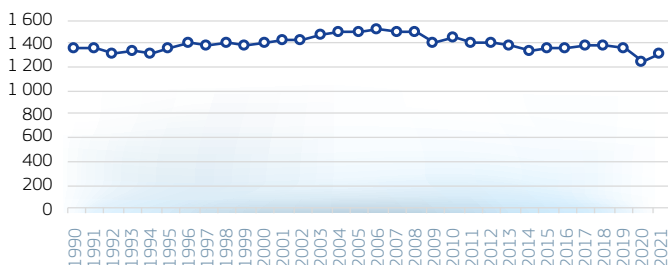
2.11.1 Primary Energy Consumption 2020-2030*

ALL FUELS

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	1396.4	1457.6	1352.7	1354.1	1235.8	1311.1
Index2000	100%	104%	97%	97%	88%	94%
BE	52.4	53.4	45.7	48.4	43.9	48.8
BG	17.7	17.4	18.0	18.2	17.2	18.6
CZ	39.1	42.5	39.4	39.7	37.6	39.6
DK	19.1	19.9	16.8	16.9	15.5	16.4
DE	317.1	315.2	295.9	285.2	262.2	268.7
EE	4.6	5.8	4.8	4.8	4.3	4.5
IE	13.7	14.7	14.0	14.7	13.5	13.9
EL	27.2	27.2	23.4	22.3	19.2	20.3
ES	114.5	123.0	118.2	120.6	105.0	112.1
FR	239.0	254.5	244.3	235.1	208.0	224.8
HR	7.8	8.9	8.0	8.2	7.8	8.3
IT	166.1	167.3	149.1	145.9	132.3	145.3
CY	2.3	2.7	2.3	2.5	2.2	2.3
LV	3.8	4.6	4.3	4.6	4.3	4.5
LT	6.5	6.2	5.8	6.3	6.2	6.6
LU	3.6	4.6	4.1	4.5	3.9	4.2
HU	23.6	24.6	23.3	24.6	23.9	24.9
MT	0.8	0.9	0.8	0.9	0.7	0.8
NL	66.9	71.7	64.0	63.6	58.5	60.8
AT	27.5	32.9	31.7	32.3	29.8	31.6
PL	84.8	96.6	90.1	100.2	96.9	104.0
PT	23.0	22.7	21.6	22.1	19.5	19.5
RO	34.9	32.9	30.7	32.1	30.9	33.1
SI	6.3	7.0	6.3	6.5	6.1	6.3
SK	16.4	16.7	15.2	16.0	15.2	16.4
FI	31.6	35.4	31.2	32.1	29.9	31.5
SE	46.0	48.3	43.8	45.8	41.3	43.5

PRIMARY ENERGY CONSUMPTION 2020-2030 – 1990-2021 (Mtoe)

EU27_2020



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

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

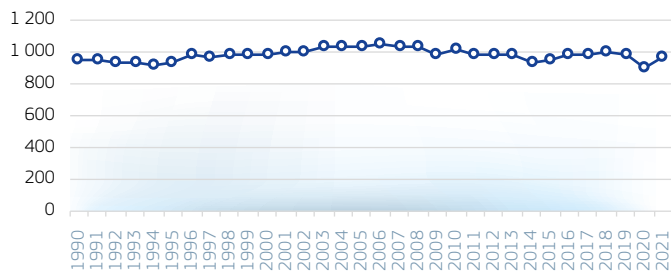
2.11.2 Final Energy Consumption 2020-2030*

ALL FUELS

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	979.8	1024.5	957.9	986.0	906.3	968.4
Index2000	100%	105%	98%	101%	92%	99%
BE	37.7	38.2	36.0	35.8	33.2	35.9
BG	9.1	8.8	9.5	9.9	9.5	10.2
CZ	25.1	25.3	24.2	25.3	24.5	26.2
DK	14.7	15.5	14.2	14.3	13.1	13.8
DE	220.2	223.0	212.7	214.7	202.3	209.9
EE	2.4	2.9	2.8	2.9	2.8	2.8
IE	10.8	11.9	11.3	12.4	11.2	11.4
EL	18.7	19.1	16.6	16.2	14.4	15.2
ES	80.0	89.6	80.5	86.5	73.8	80.3
FR	154.8	154.0	148.0	145.1	129.7	143.6
HR	6.0	7.2	6.6	6.9	6.5	7.0
IT	124.8	128.5	116.2	115.4	102.7	113.3
CY	1.6	1.9	1.7	1.9	1.6	1.7
LV	3.3	4.1	3.8	4.1	3.9	4.1
LT	3.8	4.8	4.9	5.6	5.3	5.7
LU	3.5	4.3	4.0	4.4	3.8	4.1
HU	16.2	17.5	17.4	18.6	18.0	19.1
MT	0.4	0.5	0.6	0.7	0.5	0.6
NL	52.4	55.6	48.6	49.4	45.0	46.9
AT	23.7	28.0	27.5	28.3	26.1	27.8
PL	55.1	66.3	62.3	73.7	71.1	75.2
PT	18.0	18.1	16.0	17.1	15.0	15.7
RO	22.7	22.5	21.8	23.9	23.5	25.4
SI	4.6	5.1	4.7	4.9	4.4	4.7
SK	11.0	11.5	10.1	11.2	10.4	11.6
FI	24.4	26.2	24.2	25.5	23.4	24.9
SE	35.0	34.0	31.8	31.6	30.5	31.7

FINAL ENERGY CONSUMPTION 2020-2030 –
ALL FUELS – 1990-2021

EU27_2020



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

source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

2.11.3 Energy Intensity

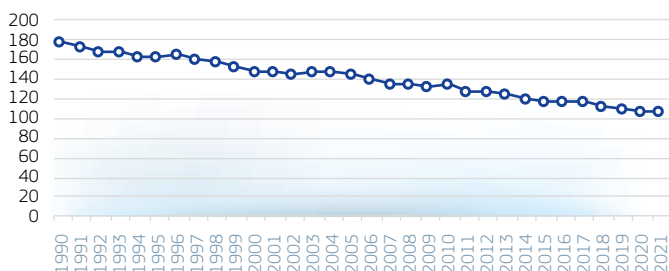
ALL FUELS

toe/M€ '2015	2000	2010	2015	2019	2020	2021
EU27_2020	147	134	119	110	107	107
Index2000	100%	91%	81%	75%	73%	73%
BE	180	155	129	126	122	126
BG	680	418	408	364	358	360
CZ	363	292	248	221	219	225
DK	82	79	63	58	54	55
DE	134	122	105	95	91	92
EE	376	338	235	203	187	177
IE	100	79	54	45	39	35
EL	154	131	137	128	122	119
ES	142	121	114	106	106	106
FR	139	129	118	107	103	104
HR	239	208	188	171	176	163
IT	105	103	94	90	90	91
CY	173	142	128	116	106	105
LV	269	223	178	168	161	162
LT	363	228	192	180	176	173
LU	100	95	77	76	67	68
HU	306	261	223	201	206	201
MT	134	122	76	69	64	60
NL	135	130	111	101	99	97
AT	104	107	98	93	93	93
PL	352	276	223	206	204	203
PT	146	130	131	119	116	111
RO	398	251	199	169	170	171
SI	225	191	167	148	146	139
SK	410	250	203	190	190	196
FI	185	175	155	149	143	146
SE	145	123	103	100	92	93

ENERGY INTENSITY – ALL FUELS – 1990-2021

[TOE/M€'2015]

EU27_2020



Source: Eurostat, DG Economic and Financial Affairs, April 2023
Methodology and Notes: [see appendices](#)

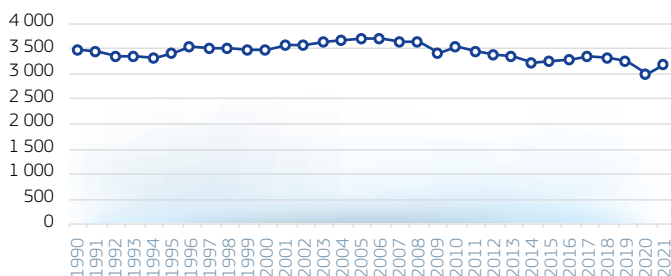
2.11.4 Energy Consumption per Capita

GROSS INLAND CONSUMPTION (ALL FUELS) PER POPULATION

kgoe/cap	2000	2010	2015	2019	2020	2021
EU27_2020	3496	3538	3264	3266	2996	3179
Index2000	100%	101%	93%	93%	86%	91%
BE	5805	5599	4777	4896	4464	4915
BG	2275	2414	2594	2692	2566	2790
CZ	4017	4346	3990	4032	3771	3996
DK	3658	3673	3050	2975	2739	2886
DE	4168	4135	3918	3712	3425	3558
EE	3361	4443	3690	3711	3384	3464
IE	3804	3311	3045	3056	2770	2857
EL	2589	2549	2218	2196	1908	2014
ES	3065	2799	2646	2702	2362	2502
FR	4227	4171	3913	3742	3319	3574
HR	1883	2201	2013	2156	2046	2154
IT	3066	2988	2562	2598	2374	2594
CY	3511	3370	2715	2998	2571	2689
LV	1623	2183	2205	2421	2286	2419
LT	2093	2254	2459	2792	2732	2843
LU	8433	9250	7422	7405	6339	6659
HU	2468	2655	2557	2733	2676	2814
MT	2080	2266	1724	1826	1479	1548
NL	4934	5198	4527	4406	4136	4255
AT	3652	4171	3928	3924	3633	3820
PL	2332	2672	2522	2793	2713	2896
PT	2476	2306	2274	2326	2079	2092
RO	1637	1725	1604	1710	1667	1786
SI	3301	3544	3151	3231	3025	3103
SK	3284	3286	3000	3123	3013	3259
FI	6336	6875	5969	6200	5814	6093
SE	5384	5402	4826	4860	4334	4579

ENERGY PER CAPITA –
1990-2021 (kgoe/cap)

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

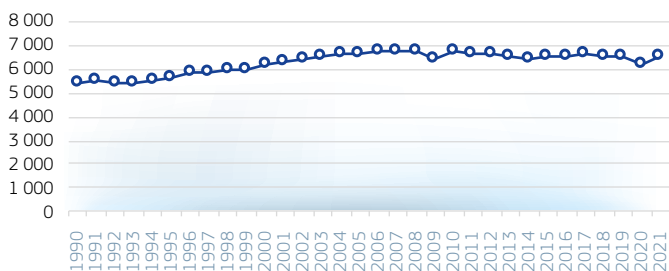
2.11.5 Final Electricity Consumption per Capita

ALL FUELS

kWh/cap	2000	2010	2015	2019	2020	2021
EU27_2020	6201	6762	6538	6501	6226	6499
Index2000	100%	109%	105%	105%	100%	105%
BE	8205	8701	6162	8137	7720	8651
BG	4996	6284	6831	6321	5858	6872
CZ	7148	8203	7953	8163	7616	7938
DK	6757	7021	5113	5084	4934	5659
DE	7017	7714	7962	7293	6900	7055
EE	6075	9723	7718	5748	4574	5417
IE	6347	6232	6070	6313	6501	6366
EL	4997	5163	4778	4534	4502	5124
ES	5547	6483	6043	5819	5561	5781
FR	8918	8802	8710	8491	7899	8199
HR	2508	3463	2699	3130	3298	3768
IT	4846	5090	4645	4902	4695	4870
CY	4881	6497	5354	5870	5461	5714
LV	1737	3125	2786	3353	3001	3088
LT	3227	1750	1598	1342	1901	1748
LU	2690	9145	4913	3109	3568	3483
HU	3443	3732	3074	3497	3561	3697
MT	4931	5105	2967	4173	4165	4292
NL	5634	7186	6438	6990	7053	6959
AT	7652	8515	7605	8378	8150	7919
PL	3794	4144	4337	4312	4161	4745
PT	4270	5115	5052	5172	5155	4950
RO	2296	3005	3336	3071	2894	3097
SI	6854	8031	7320	7737	8202	7528
SK	5771	5161	4944	5211	5278	5487
FI	13495	15017	12491	12394	12495	12987
SE	16393	15903	16631	16465	15864	16552

FINAL ELECTRICITY CONSUMPTION PER CAPITA –
ALL FUELS – 1990-2021 [kwh/cap]

EU27_2020



source: Eurostat April 2023

Methodology and Notes: [see appendices](#)

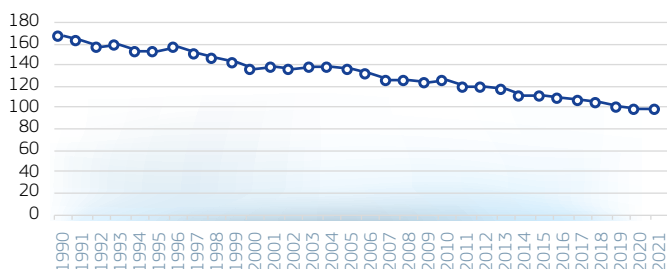
2.11.6 Primary Energy Intensity 2020-2030*

ALL FUELS

toe/M€'2015	2000	2010	2015	2019	2020	2021
EU27_2020	137	125	111	102	98	99
Index2000	100%	91%	81%	74%	72%	72%
BE	159	137	110	108	104	109
BG	644	406	392	351	345	347
CZ	344	273	233	204	205	208
DK	81	78	62	56	53	53
DE	124	113	98	88	84	84
EE	363	333	231	198	179	171
IE	95	77	53	44	38	34
EL	150	126	133	121	115	112
ES	131	114	110	101	99	100
FR	130	122	111	100	96	97
HR	221	194	176	159	165	155
IT	100	98	90	84	84	86
CY	167	137	127	112	102	101
LV	264	220	174	164	157	158
LT	323	199	155	145	143	144
LU	99	95	77	76	67	67
HU	287	242	207	185	188	183
MT	134	121	75	67	62	58
NL	115	108	93	84	80	80
AT	98	101	92	86	85	86
PL	335	262	210	195	192	193
PT	132	121	120	110	106	101
RO	377	236	192	163	163	165
SI	217	185	163	144	141	135
SK	378	235	190	178	175	181
FI	179	168	148	140	134	136
SE	140	118	96	92	85	85

PRIMARY ENERGY INTENSITY – ALL FUELS –
1990-2021 (toe/M€'2015)

EU27_2020



* ratio between primary energy consumption 2020-2030 and GDP chain linked 2015

Source: Eurostat, DG Economic and Financial Affairs, April 2023

Methodology and Notes: see appendices

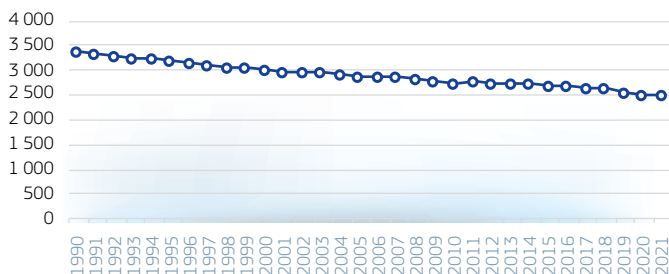
2.11.7 Greenhouse Gas (GHG) Intensity of Energy

ALL FUELS

kg CO ₂ /toe	2000	2010	2015	2019	2020	2021
EU27_2020	3028	2746	2708	2554	2507	2491
Index2000	100%	91%	89%	84%	83%	82%
BE	2584	2272	2299	2169	2156	2034
BG	3097	3347	3267	2904	2717	2823
CZ	3703	3126	3097	2920	2829	2792
DK	3815	3300	3029	2807	2748	2677
DE	3095	2829	2897	2676	2614	2632
EE	3720	3581	3736	3000	2552	2766
IE	4978	4339	4512	4304	4380	4435
EL	4631	4296	4104	3828	3756	3720
ES	3168	2823	2833	2594	2493	2505
FR	2142	2078	2178	2065	2341	2062
HR	3052	3006	2936	2891	2899	2846
IT	3254	3010	2924	2797	2746	2750
CY	3807	3760	3986	3809	3902	3861
LV	2659	2643	2533	2502	2448	2397
LT	2667	2954	2845	2648	2668	2577
LU	3588	2283	3423	2827	3392	3137
HU	3016	2529	2490	2457	2421	2359
MT	3493	3279	4310	3499	4278	4088
NL	2938	2611	2692	2539	2382	2354
AT	2817	2491	2403	2385	2318	2309
PL	4430	4028	4025	3678	3625	3672
PT	3334	2967	3031	2872	2791	2717
RO	3881	3633	3697	3500	3481	3372
SI	2871	2739	2614	2570	2524	2465
SK	2769	2594	2525	2361	2267	2323
FI	2177	2101	1746	1619	1516	1444
SE	1474	1318	1185	1072	1053	1027

GHG INTENSITY OF ENERGY – 1990-2021 (kg CO₂/toe)

EU27_2020



Source: EEA, June 2023, Eurostat 2023
 Methodology and Notes: [see appendices](#)

2.12 Renewable Energy (RES) Indicators

2.12.1 Renewable Energy (RES) Shares*

OVERALL AND HEATING & COOLING

%	Overall Renewable share (with aviation cap) [%]**				RES-H&C - Renewable Heating and Cooling [%]			
	2005	2015	2020	2021	2005	2015	2020	2021
EU27_2020	10.2%	17.8%	22.0%	21.8%	12.4%	20.3%	23.0%	22.9%
BE	2.3%	8.1%	13.0%	13.0%	3.4%	7.9%	8.4%	9.2%
BG	9.2%	18.3%	23.3%	17.0%	14.3%	28.9%	37.2%	25.6%
CZ	7.1%	15.1%	17.3%	17.7%	10.8%	19.8%	23.5%	24.2%
DK	16.0%	30.5%	31.7%	34.7%	22.6%	39.5%	51.1%	41.5%
DE	7.2%	14.9%	19.1%	19.2%	7.7%	13.4%	14.5%	15.4%
EE	17.5%	29.0%	30.1%	38.0%	32.4%	50.0%	58.8%	61.3%
IE	2.8%	9.1%	16.2%	12.5%	3.4%	6.2%	6.3%	5.2%
EL	7.3%	15.7%	21.7%	21.9%	13.4%	26.6%	31.9%	31.1%
ES	8.4%	16.2%	21.2%	20.7%	9.4%	16.9%	18.0%	17.4%
FR	9.3%	14.8%	19.1%	19.3%	12.4%	18.9%	23.4%	24.2%
HR	23.7%	29.0%	31.0%	31.3%	30.0%	38.6%	36.9%	38.0%
IT	7.5%	17.5%	20.4%	19.0%	8.2%	19.3%	19.9%	19.7%
CY	3.1%	9.9%	16.9%	18.4%	10.0%	24.1%	37.1%	41.3%
LV	32.3%	37.5%	42.1%	42.1%	42.7%	51.7%	57.1%	57.4%
LT	16.8%	25.7%	26.8%	28.2%	29.3%	46.1%	50.4%	48.6%
LU	1.4%	5.0%	11.7%	11.7%	3.6%	6.9%	12.6%	12.9%
HU	6.9%	14.5%	13.9%	14.1%	9.9%	21.3%	17.7%	17.9%
MT	0.1%	5.1%	10.7%	12.2%	1.0%	14.6%	23.0%	31.4%
NL	2.5%	5.7%	14.0%	13.0%	2.4%	5.3%	8.1%	7.8%
AT	24.4%	33.5%	36.5%	36.4%	22.8%	33.2%	35.0%	35.5%
PL	6.9%	11.9%	16.1%	15.6%	10.2%	14.8%	22.1%	21.0%
PT	19.5%	30.5%	34.0%	34.0%	32.1%	40.1%	41.5%	42.7%
RO	17.6%	24.8%	24.5%	23.6%	17.9%	25.9%	25.3%	24.5%
SI	19.8%	22.9%	25.0%	25.0%	26.4%	36.2%	32.1%	35.2%
SK	6.4%	12.9%	17.3%	17.4%	5.0%	10.8%	19.4%	19.5%
FI	28.8%	39.2%	43.9%	43.1%	39.1%	52.6%	57.6%	52.6%
SE	40.0%	52.2%	60.1%	62.6%	49.0%	63.2%	66.4%	68.6%

* 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 2023

Methodology and Notes: [see appendices](#)

2.12.1 Renewable Energy (RES) Shares*

ELECTRICITY AND TRANSPORT

%	RES-E Renewable Electricity Generation				RES-T Renewable Energy in Transport**			
	2005	2015	2020	2021	2005	2015	2020	2021
EU27_2020	16.4%	29.7%	37.4%	37.6%	1.8%	6.8%	10.3%	9.1%
BE	2.4%	15.6%	25.1%	26.0%	0.7%	3.9%	11.0%	10.3%
BG	8.7%	19.0%	23.6%	18.8%	0.9%	6.5%	9.1%	7.6%
CZ	3.8%	14.1%	14.8%	14.5%	1.1%	6.5%	9.4%	7.5%
DK	24.6%	51.3%	65.3%	62.6%	0.4%	6.4%	9.7%	10.5%
DE	10.6%	30.9%	44.2%	43.7%	4.0%	6.6%	10.0%	8.0%
EE	1.1%	16.2%	28.3%	29.3%	0.2%	0.4%	12.2%	11.2%
IE	7.2%	25.7%	39.1%	36.4%	0.1%	5.9%	10.2%	4.3%
EL	8.2%	22.1%	35.9%	35.9%	0.1%	1.1%	5.3%	4.3%
ES	19.2%	37.0%	42.9%	46.0%	1.3%	1.1%	9.5%	9.2%
FR	13.7%	18.8%	24.8%	25.0%	0.8%	8.4%	9.2%	8.2%
HR	35.2%	45.4%	53.8%	53.5%	1.0%	2.4%	6.6%	7.0%
IT	16.3%	33.5%	38.1%	36.0%	1.0%	6.5%	10.7%	10.0%
CY	0.0%	8.4%	12.0%	14.8%	0.0%	2.5%	7.4%	7.2%
LV	43.0%	52.2%	53.4%	51.4%	2.4%	3.6%	6.7%	6.4%
LT	3.8%	15.5%	20.2%	21.3%	0.7%	4.6%	5.5%	6.5%
LU	3.2%	6.2%	13.9%	14.2%	0.2%	6.7%	12.6%	8.0%
HU	4.4%	7.3%	11.9%	13.7%	1.0%	7.2%	11.6%	6.2%
MT	0.0%	4.3%	9.5%	9.7%	0.0%	4.7%	10.6%	10.6%
NL	6.3%	11.0%	26.4%	33.4%	0.5%	5.6%	12.6%	9.0%
AT	62.9%	71.5%	78.2%	76.2%	5.1%	11.4%	10.3%	9.4%
PL	2.5%	13.4%	16.2%	17.2%	1.7%	5.7%	6.6%	5.7%
PT	27.7%	52.6%	58.0%	58.4%	0.5%	7.4%	9.7%	8.6%
RO	28.8%	43.2%	43.4%	42.5%	1.9%	5.5%	8.5%	7.7%
SI	28.7%	32.7%	35.1%	35.0%	0.8%	2.2%	10.9%	10.6%
SK	15.7%	22.7%	23.1%	22.4%	1.7%	8.6%	9.3%	8.8%
FI	26.9%	32.2%	39.6%	39.5%	0.9%	24.6%	14.3%	20.7%
SE	50.9%	65.7%	74.5%	75.7%	6.6%	21.5%	31.9%	30.4%

* of the Gross Final Energy

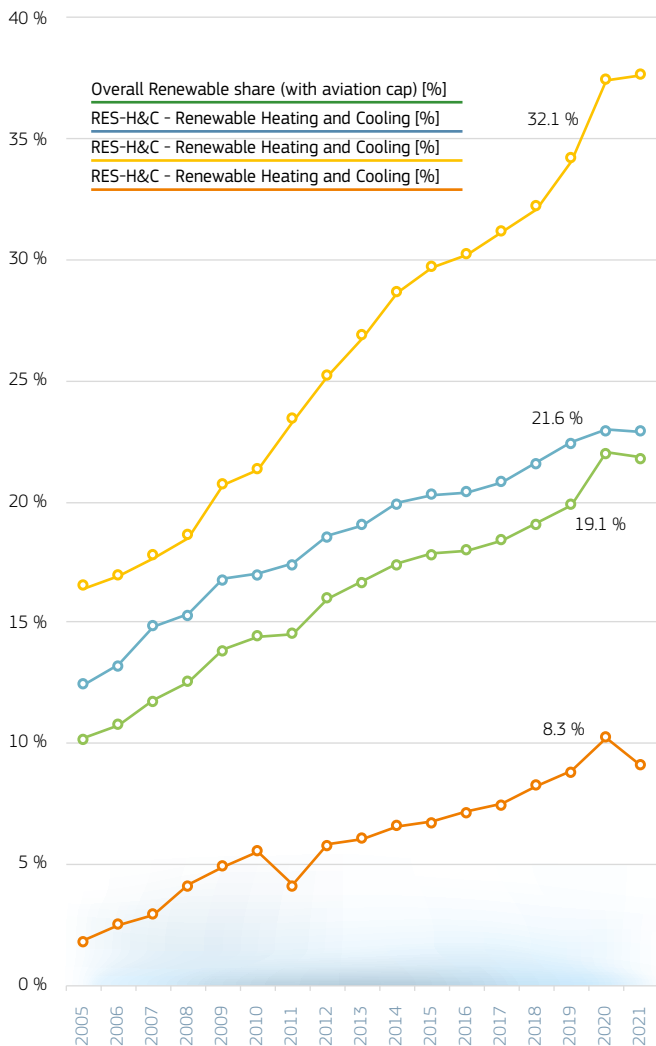
** 'Break in Series Between 2010 and 2011 due to the Application of the Biofuels Compliance Rules

source: Eurostat-RES SHARES March 2023

Methodology and Notes: [see appendices](#)

2.12.1 Renewable Energy (RES) Shares*

IN THE GROSS FINAL ENERGY CONSUMPTION –
EU27_2020 (%)



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

source: Eurostat-RES SHARES March 2023

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)	2005	2010	2015	2020	2021	2022
EU27_2020	1.00	1.15	1.19	1.16	1.29	1.75
BE	0.99	1.14	1.16	1.29	1.42	1.88
BG		0.98	1.13	0.92	0.98	1.44
CZ	0.93	1.21	1.15	1.06	1.13	1.71
DK	1.03	1.21	1.28	1.22	1.34	1.89
DE	1.06	1.20	1.18	1.11	1.31	1.90
EE	0.80	1.10	1.08	1.10	1.19	1.70
IE	1.03	1.22	1.26	1.20	1.32	1.82
EL	0.89	1.24	1.18	1.19	1.30	1.74
ES	0.90	1.07	1.12	1.07	1.18	1.67
FR	1.02	1.14	1.15	1.26	1.37	1.81
HR			1.16	1.16	1.29	1.68
IT	1.11	1.21	1.41	1.32	1.42	1.76
CY	0.84	1.00	1.23	1.11	1.20	1.61
LV	0.80	1.06	1.06	1.05	1.17	1.66
LT	0.82	1.02	1.07	1.00	1.10	1.64
LU	0.84	0.99	1.02	0.97	1.14	1.68
HU	1.02	1.16	1.16	1.06	1.19	1.35
MT	0.88	1.04	1.27	1.24	1.21	1.21
NL	1.02	1.15	1.24	1.24	1.39	1.91
AT	0.95	1.10	1.12	1.05	1.16	1.69
PL	0.92	1.06	1.08	1.01	1.12	1.44
PT	0.94	1.15	1.19	1.24	1.36	1.77
RO		1.03	1.20	0.96	1.08	1.55
SI	0.91	1.15	1.18	1.06	1.19	1.50
SK	0.97	1.11	1.14	1.07	1.16	1.58
FI	0.97	1.13	1.31	1.26	1.45	2.06
SE	1.08	1.25	1.37	1.38	1.56	2.29

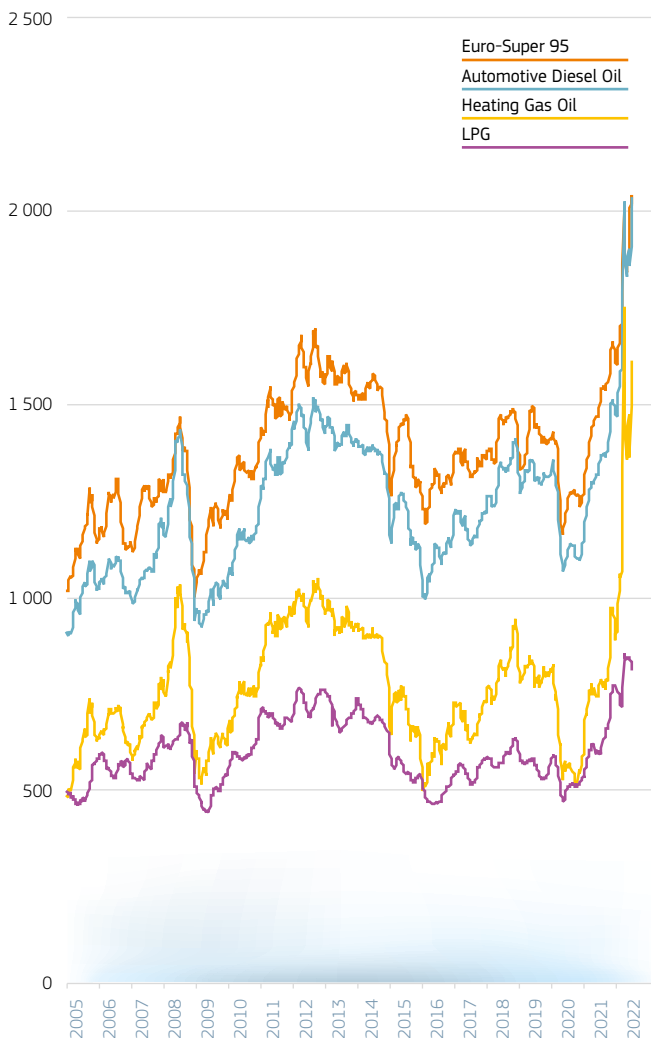
2.13.1 Prices of Transport Fuels

EURO-SUPER 95 – ALL TAXES INCLUDED*

Current Prices (€/litre)	2005	2010	2015	2020	2021	2022
EU27_2020	1.13	1.31	1.35	1.28	1.43	1.85
BE	1.22	1.40	1.37	1.28	1.40	1.82
BG		1.02	1.10	0.93	1.00	1.43
CZ	0.95	1.25	1.15	1.07	1.19	1.71
DK	1.21	1.44	1.50	1.45	1.61	2.10
DE	1.22	1.39	1.40	1.29	1.50	1.97
EE	0.80	1.11	1.11	1.25	1.35	1.83
IE	1.05	1.30	1.37	1.29	1.42	1.86
EL	0.89	1.43	1.48	1.45	1.57	2.05
ES	0.96	1.16	1.23	1.18	1.31	1.78
FR	1.16	1.34	1.36	1.36	1.49	1.88
HR			1.26	1.20	1.34	1.65
IT	1.22	1.36	1.54	1.43	1.55	1.88
CY	0.86	1.04	1.23	1.08	1.17	1.51
LV	0.81	1.09	1.13	1.14	1.27	1.76
LT	0.83	1.18	1.16	1.10	1.20	1.70
LU	1.02	1.16	1.18	1.08	1.25	1.70
HU	1.05	1.22	1.16	1.02	1.17	1.28
MT	0.94	1.19	1.36	1.37	1.34	1.34
NL	1.35	1.49	1.56	1.57	1.73	2.16
AT	1.03	1.19	1.20	1.08	1.20	1.70
PL	1.00	1.13	1.11	1.00	1.13	1.41
PT	1.15	1.37	1.43	1.39	1.55	1.92
RO		1.06	1.20	0.95	1.10	1.51
SI	0.92	1.20	1.29	1.07	1.15	1.48
SK	0.96	1.25	1.29	1.18	1.32	1.68
FI	1.22	1.43	1.47	1.41	1.59	2.15
SE	1.18	1.34	1.41	1.35	1.53	0.00

2.13.1 Prices of Transport Fuels

CONSUMER PRICES OF PETROLEUM PRODUCTS* EU WEIGHTED AVERAGE (€ PER LITRE)



*All Taxes Included, weekly prices
Incomplete series for the period 2005-2013
due to later accession to the EU of Bulgaria, Croatia and Romania
Source: DG Energy, Member States, Weekly Oil Bulletin
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	2019	2020	2021
EU27_2020	15.50	17.22	20.14	20.05	19.31	21.72
BE	14.33	16.78	17.24	15.92	13.84	18.78
BG	9.67	11.98	10.86	12.27	9.67	19.65
CZ	13.11	14.35	16.21	16.32	15.51	15.40
DK	23.64	26.81	24.48	21.41	20.74	34.64
DE	16.35	15.86	18.93	16.33	17.21	19.23
EE	10.07	11.14	10.68	12.38	11.43	20.82
IE	15.29	14.63	20.11	21.22	19.49	21.74
EL			20.83	16.30	14.37	28.16
ES	14.88	15.00	26.57	28.35	24.71	30.06
FR	16.20	15.98	20.35	23.31	20.87	21.89
HR	9.10	10.54	12.76	11.28	10.49	11.04
IT	14.84	21.86	25.13	25.96	24.92	27.91
CY						
LV	10.52	11.28	13.47	9.74	7.77	12.01
LT	11.29	12.59	12.12	11.27	8.21	11.38
LU	12.82	13.13	13.40	11.49	10.17	17.76
HU	13.23	15.38	9.78	9.29	8.56	8.47
MT						
NL	18.73	19.99	22.30	26.80	28.05	30.47
AT	17.23	16.71	19.75	18.73	18.23	19.30
PL	12.78	14.04	13.84	12.91	11.65	13.13
PT	16.52	17.49	27.28	21.56	21.74	21.46
RO	7.45	7.73	9.45	9.23	8.90	13.19
SI	14.96	18.68	16.91	15.59	15.26	16.32
SK	13.21	12.39	13.74	13.35	13.33	11.75
FI						
SE	26.12	29.48	32.58	32.43	39.50	57.18

* All Taxes and levies Included

**Prices from second semester each year

source: Eurostat June 2023

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	2019	2020	2021
EU27_2020	16.77	17.77	20.89	21.68	21.32	23.69
BE	18.64	19.74	23.52	28.60	27.02	29.94
BG	8.18	8.30	9.57	9.58	9.82	10.91
CZ	15.33	15.49	14.08	17.70	17.95	18.83
DK	25.55	27.08	30.42	29.24	28.19	34.48
DE	22.94	24.38	29.46	28.78	30.06	32.34
EE	9.20	10.04	12.91	14.11	12.91	19.39
IE	18.55	18.75	24.54	25.46	26.16	29.74
EL	10.32	12.11	17.71	15.51	16.41	19.74
ES	16.84	18.51	23.70	23.94	22.98	28.16
FR	12.07	13.50	16.82	19.13	19.58	20.22
HR	11.64	11.53	13.12	13.24	13.07	13.13
IT	19.97	19.20	24.28	23.41	21.53	23.60
CY	16.42	20.21	18.38	22.36	16.98	23.04
LV	10.54	10.48	16.50	16.40	14.32	18.86
LT	9.26	12.16	12.43	12.54	13.21	14.77
LU	18.82	17.47	17.67	17.99	19.85	19.89
HU	16.62	15.74	11.45	10.97	10.09	10.01
MT	15.13	16.53	12.69	13.04	13.01	13.18
NL	19.06	17.89	18.46	20.55	13.61	14.49
AT	19.09	19.30	19.83	20.74	21.67	22.85
PL	12.91	13.82	14.18	13.76	15.10	15.74
PT	15.94	16.66	22.85	21.81	21.33	21.70
RO	9.79	10.52	13.19	14.21	14.49	16.02
SI	13.41	14.26	16.31	16.66	16.94	17.11
SK	15.60	16.37	15.17	15.85	17.24	16.24
FI	12.89	13.70	15.30	17.83	17.73	18.40
SE	16.46	19.58	18.74	20.52	20.17	26.04

* All Taxes and levies Included

**Prices from second semester each year

source: Eurostat June 2023

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	2019	2020	2021
EU27_2020	8.61	9.42	9.53	8.53	7.73	11.55
BE	8.50	8.20	7.94	6.32	5.76	9.45
BG	5.96	8.41	7.49	7.75	5.60	14.11
CZ	7.56	10.07	8.17	7.95	7.01	9.12
DK	6.85	10.72	10.19	8.38	8.19	21.99
DE	9.61	11.09	10.47	8.32	8.02	10.54
EE	6.39	7.85	7.54	9.26	6.88	18.61
IE	7.31	8.80	10.28	8.94	8.73	15.49
EL			10.00	9.28	5.92	13.87
ES	7.53	8.08	8.81	8.53	6.52	9.38
FR	8.80	9.69	10.19	10.22	9.71	14.00
HR	7.43	10.95	9.74	8.32	7.51	10.61
IT	7.83	8.34	8.87	8.22	7.23	11.17
CY						
LV	7.69	8.84	8.17	7.76	5.89	12.53
LT	7.55	9.40	6.05	7.63	5.91	19.97
LU	10.03	11.72	10.33	7.90	7.88	12.67
HU	10.06	9.93	9.38	7.60	6.14	12.83
MT						
NL	9.72	8.62	8.91	7.90	7.72	12.47
AT	9.07	9.78	10.50	8.60	8.31	13.24
PL	8.36	9.02	9.39	9.33	8.09	11.43
PT	7.22	9.28	10.52	8.70	6.73	9.37
RO	5.93	6.11	8.05	8.76	6.78	12.15
SI	9.61	11.81	10.57	9.40	8.74	12.74
SK	8.91	10.22	9.63	9.92	8.88	9.13
FI	8.00	9.13	11.73	15.41	13.62	28.03
SE	12.47	13.43	11.61	9.92	14.97	28.47

* Excluding VAT and other recoverable taxes and levies

**Prices from second semester each year

source: Eurostat June 2023

Methodology and Notes: [see appendices](#)

2.13.3 Fuel Prices – Industrial Consumers

FUELS PRICES – INDUSTRIAL CONSUMERS*

ELECTRICITY - BAND IC : 500 MWH < CONSUMPTION < 2 000 MWH

2ND SEMESTER**

€/100 kWh	2009	2010	2015	2019	2020	2021
EU27_2020	10.11	10.42	11.44	11.90	12.51	14.42
BE	10.79	10.54	10.81	11.52	11.85	14.39
BG	6.39	6.64	7.82	8.68	8.43	15.64
CZ	11.22	10.81	7.83	7.84	8.42	9.05
DK	9.20	9.61	8.99	6.81	6.86	11.64
DE	11.34	11.90	14.93	16.08	18.18	18.60
EE	6.45	7.27	9.58	9.15	8.73	15.26
IE	11.75	11.31	13.57	13.28	13.39	18.81
EL	9.36	10.26	11.50	10.84	10.59	22.38
ES	11.20	10.93	11.33	11.04	11.75	14.59
FR	6.48	7.16	9.51	9.50	9.54	10.18
HR	9.04	9.04	9.28	10.55	10.23	11.42
IT	13.70	14.43	15.97	16.16	15.14	18.53
CY	14.94	17.30	14.12	18.00	13.64	19.46
LV	8.93	9.07	11.83	10.70	10.55	13.51
LT	7.90	10.46	9.97	9.45	10.26	13.96
LU	11.58	10.24	8.93	9.04	9.38	9.74
HU	12.97	10.53	8.70	9.54	9.40	10.32
MT	12.91	18.10	14.05	13.55	13.42	14.01
NL	10.61	9.70	8.46	8.99	10.35	12.38
AT	11.62	11.28	10.47	10.88	11.84	12.78
PL	9.33	9.87	8.61	8.28	10.77	11.04
PT	9.44	9.20	11.54	11.59	11.14	11.86
RO	8.28	8.08	8.02	10.14	10.19	12.93
SI	9.62	10.05	8.70	9.53	9.76	9.99
SK	14.03	11.98	11.22	13.17	13.16	13.45
FI	6.83	6.83	7.06	7.21	7.59	8.00
SE	6.89	8.41	5.90	6.94	6.72	9.82

* Excluding VAT and other recoverable taxes and levies

**Prices from second semester each year

source: Eurostat June 2023

Methodology and Notes: [see appendices](#)

3

Socio-Economic indicators in the EU



3

Socio-Economic indicators in the EU

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3.1 Classification of the Energy Sector *

3.1.1 Comparative Table Eurostat (NACE) and UN (ISIC) Classifications

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

Source: Eurostat, UN, July 2019

3.2 Enterprises in the Energy Sector

3.2.1 Number of Enterprises in the Energy Sector

ENTERPRISES SURVEY EU27_2020

	2015	2020	2021
B05 - Mining of coal and lignite	245	146	140
B06 - Extraction of crude petroleum and natural gas	220	202	246
B0721 - Mining of uranium and thorium ores	4	2	1
B0892 - Extraction of peat	981	964	892
B091 - Support activities for petroleum and natural gas extraction	851	1040	1022
C19 - Manufacture of coke and refined petroleum products	866	876	780
D35 - Electricity, gas, steam and air conditioning supply	96893	166164	174296
D351 - Electric power generation, transmission and distribution	89157	155000	162138
D3511 - Production of electricity	72187	145912	153086
D3512 - Transmission of electricity	229	597	649
D3513 - Distribution of electricity	1515	2868	2598
D3514 - Trade of electricity	3192	5275	5165
D352 - Manufacture of gas; distribution of gaseous fuels through mains	1870	5550	5472
D3521 - Manufacture of gas		4213	4020
D3522 - Distribution of gaseous fuels through mains		572	535
D3523 - Trade of gas through mains	599	735	645
D353 - Steam and air conditioning supply	5359	5960	6014
D3530 - Steam and air conditioning supply	5359	5960	6014
Broad sector - no. of enterprises reported	100060	169394	177377

3.2.1 Number of Enterprises in the Energy Sector

NUMBER OF ENTERPRISES ENTERPRISES SURVEY

	Mining of Coal and Lignite (B05)				Extraction of Crude Petroleum and Natural Gas (B06)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020			146	140	245	220	202	246
BE		0	0	0	0	0	0	0
BG	23	22	16	16	7	4	4	4
CZ	12	12	8	8	5	5	5	5
DK	0	0	0	0	9	12	14	14
DE	6	7	2	7	4	4	9	5
EE	0	0	0	0	1	2	2	2
IE				0				
EL		12	10	7				3
ES	48	81	64	51	4	19		11
FR	6	1		0	32			18
HR	1	0	0	0	4	4	0	0
IT		0	0	0	3	12	12	11
CY	0	0	0	0	0	0	0	0
LV	0	0	0	0	1	2	1	1
LT	0	0	0	0	4	4	5	5
LU	0	0	0	0	0	0	0	0
HU	9	14	4	4	13	8	10	10
MT	0	0	0	0	0	0	0	0
NL	0	0	0	0	48	41	39	39
AT	0	0	0	0	2	2	2	2
PL	48	62	34	33	54	62	23	23
PT	0	0	0	0	0	0	0	0
RO	35	27	13	13	21	38	22	25
SI	2	1	1	1	1	1	2	2
SK				0				0
FI	0	0	0	0	0	0	0	0
SE		0	0	0		0	0	0

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2022

Methodology and Notes in the annexes

3.2.1 Number of Enterprises in the Energy Sector

NUMBER OF ENTERPRISES

ENTERPRISES SURVEY

	Extraction of Peat (B08.92)				Support Activities for Petroleum and Natural Gas Extraction (B09.1)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020	985	981	964	940	540	851	1040	1022
BE	0	0		0			9	0
BG	10	4			6	14	7	9
CZ		17	9	10	7	6	6	7
DK	4	2	2	2	35	55	70	6
DE	74	91	87	70			75	70
EE	39	41	39	40	0	0	1	59
IE			39		34	35	36	0
EL	0		0			9	7	43
ES	6	7	10	6		46	38	4
FR	23	39	7	8	36	54	20	38
HR	0	0	0	0	7	4	4	20
IT	12	4				52		4
CY	0	0	0	0				30
LV	49	91	140	97	0	2	0	
LT	24	26	21	24	0	0	0	0
LU	0	0	0	0	0	0	0	0
HU	15	13	12	12	40	37	30	0
MT	0	0	0	0				31
NL	7	6	6	6	116	251	394	11
AT	7	5	4	3	8	7	7	394
PL	45	32	40	43	90	104	146	7
PT	1	1	1	1	1	4	6	146
RO	8	5	3	4	91	106	97	5
SI	0	0	0	0	3	2	2	100
SK		42	53					2
FI	463	450	433	445	0	0	0	
SE	82	70	53	54	45	63	36	0

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2022

Methodology and Notes in the annexes

3.2.1 Number of Enterprises in the Energy Sector

NUMBER OF ENTERPRISES ENTERPRISES SURVEY

	Manufacture of Coke and Refined Petroleum Products (C19)				Electricity, Gas, Steam and Air Conditioning Supply (D35)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020		866	876	780		96893	166164	174296
BE	22		15	15	301	851	774	734
BG	17	11	12	12	1091	1745	1926	2027
CZ	28	25	23	24	3267	10996	12025	11907
DK	5	3	8	8	1681	1745	1400	1516
DE	95	54	93	86	1722	2059	62531	72797
EE	5	5	6	6	223	230	348	346
IE					403	515	760	677
EL	7	40	37	34	10	7036	9237	7544
ES	18	14		15	13098	14044	14362	14052
FR	52	43	17	18	14337	27062	29904	29717
HR	17	14	8	8	234	573	565	569
IT	328	281	294	250	4028	10775	9454	9423
CY			3	3	4	58	87	93
LV	13	16	10	10	381	533	506	503
LT	6	9	6	6	253	1488	1316	1252
LU	0	0	0	1	67	80	110	97
HU	9	8	6	6	611	610	1325	1258
MT						3	14	14
NL	42	45	46	46	678	1130	2112	2112
AT	4	5	5	5	1878	2390	2429	2200
PL	165	176	121	123	2047	3192	3922	3938
PT	10	18	17	17	745	1209	4890	5342
RO	54	44	47	46	885	1460	1038	1073
SI	3	4	3	3	648	1530	1365	1362
SK					294	451	637	592
FI	15	17	16	16	736	907	981	987
SE	45	34	21	22	1828	4221	2146	2164

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2023

Methodology and Notes in the annexes

3.2.2 Turnover in the Energy Sector

TURNOVER ENTERPRISES SURVEY EU27_2020

Mio €	2015	2020	2021
B05 - Mining of coal and lignite	<i>10602</i>	5756	<i>6022</i>
B06 - Extraction of crude petroleum and natural gas	84723	18571	<i>17884</i>
B0721 - Mining of uranium and thorium ores			
B0892 - Extraction of peat	1288	<i>1725</i>	<i>1380</i>
B091 - Support activities for petroleum and natural gas extraction	4455	5283	<i>3213</i>
C19 - Manufacture of coke and refined petroleum products	330409	306897	<i>427128</i>
D35 - Electricity, gas, steam and air conditioning supply	1310101	1310000	<i>1334919</i>
D351 - Electric power generation, transmission and distribution	1076224	1095775	<i>1107358</i>
D3511 - Production of electricity	179021	458001	<i>366809</i>
D3512 - Transmission of electricity	15340	81611	<i>69407</i>
D3513 - Distribution of electricity	48033	137481	<i>123809</i>
D3514 - Trade of electricity	263846	418682	<i>394746</i>
D352 - Manufacture of gas; distribution of gaseous fuels through mains	185470	183353	<i>174321</i>
D3521 - Manufacture of gas	408	3238	<i>2759</i>
D3522 - Distribution of gaseous fuels through mains	11726	25846	<i>21512</i>
D3523 - Trade of gas through mains	76229	154268	<i>139454</i>
D353 - Steam and air conditioning supply	34939	31500	<i>30261</i>
D3530 - Steam and air conditioning supply	34939	31500	<i>34267</i>
Broad sector - turnover reported	1741579	1648231	<i>1790545</i>

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2022
Methodology and Notes in the annexes

3.2.2 Turnover in the Energy Sector

TURNOVER
ENTERPRISES SURVEY

Mio €	Mining of Coal and Lignite (B05)				Extraction of Crude Petroleum and Natural Gas (B06)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020	14838	10602	5756	6022		84723	18571	17884
BE		0	0	0	0	0	0	0
BG	331	349			26	30		
CZ	2812	1578	1045	1000				
DK	0	0	0	0	7050	3896	1097	1437
DE	3921	2162	1266	1306	2762	2978		5500
EE	0	0	0	0		245	134	149
IE								
EL		93		40				65
ES	596	236		17	80	126		232
FR		0		0	728			
HR		0	0	0			0	0
IT		0	0	0	46241	46395	3233	3625
CY	0	0	0	0	0	0	0	0
LV	0	0	0	0				
LT	0	0	0	0	69	39	18	18
LU	0	0	0	0	0	0	0	0
HU	7	9	3	3	81	33	132	145
MT	0	0	0	0	0	0	0	0
NL	0	0	0	0	34862	26735	8439	6113
AT	0	0	0	0				
PL	5974	5755	3761	3649				
PT	0	0	0	0	0	0	0	0
RO	358	21	12	8	4191	4246	913	598
SI								
SK								
FI	0	0	0	0	0	0	0	0
SE						0	0	0

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2022

Methodology and Notes in the annexes

3.2.2 Turnover in the Energy Sector

TURNOVER
ENTERPRISES SURVEY

Mio €	Extraction of Peat (B08.92)				Support Activities for Petroleum and Natural Gas Extraction (B09.1)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020	1700	1288	1725	1380		4455	5283	3213
BE	0	0		0			2	
BG	1					0		
CZ		7	3	3	46			
DK						633	601	787
DE	418	400	445	459			903	932
EE	77	84		90	0	0		0
IE			13		74	10	15	21
EL	0		0			29	0	0
ES	11	10	12	13		99	46	52
FR	74	52	46	49	302	266		322
HR	0	0	0	0				
IT	12	5		5		2238		338
CY	0	0	0	0				
LV	101	151		204			0	0
LT	40	61			0	0	0	0
LU	0	0	0	0	0	0	0	0
HU	3	5	5	6	95	133	24	26
MT	0	0	0	0				
NL								
AT					14			
PL			80		378	326	294	285
PT							1	1
RO	0	1	3	2	874	638	519	340
SI	0	0	0	0				
SK		12	1					
FI	554	472		455	0	0	0	0
SE	31	29	17	16		84	4	3

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2023

Methodology and Notes in the annexes

3.2.2 Turnover in the Energy Sector

TURNOVER
ENTERPRISES SURVEY

Mio €	Manufacture of Coke and Refined Petroleum Products (C19)				Electricity, Gas, Steam and Air Conditioning Supply (D35)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020	477437	330409	306897	427128	1116322	1310101	1310000	1334919
BE	48074		24477	50226	43772	36969	28457	30246
BG			1973		7279	8357	7963	10530
CZ	4558				37371	40927	46185	47154
DK					20378	21487	30667	32819
DE	120832	107408	74438	100748	426882	537677	582226	594820
EE	178	254	246	192	1834	1765	1862	1795
IE					7186	8013	9527	7277
EL	15340	14818	11001	22040	5943	19684	15316	16999
ES	34773	36051		33460	59706	93787	80773	74781
FR	61248	39383	25878	19172	109649	110123	111765	113606
HR					3684	4359	3966	3996
IT	46038	35596	30291	64912	160950	195056	157691	163622
CY			4		782	630	689	775
LV	1	8			2311	2082	1771	1826
LT					3279	2376	2426	2464
LU	0	0	0		1951	4647	3479	3034
HU	8298	6529	6760	9332	22059	16727	12161	10391
MT								653
NL	37272	34362	23112	24814	41197	31409	29241	30906
AT		7226	6232	5586	29297	35906	43530	41317
PL	27575	27045	25526	27394	42567	47826	52712	56915
PT	6767	7131	4671	15690	17842	21119	19314	19867
RO	3272	3374	9567	20023	12078	13175	13506	10522
SI			1		4034	6076	7011	6231
SK					11351	11284	12156	16190
FI					14455	12422	13242	13076
SE		11225	8279	15158	28486	26220	22368	23107

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2022

Methodology and Notes in the annexes

3.2.3 Number of Persons Declared as Employed in the energy sector

NUMBER OF PERSONS DECLARED AS EMPLOYED ENTERPRISES SURVEY EU27_2020

	2015	2020	2021
B05 - Mining of coal and lignite	148224	111829	<i>84127</i>
B06 - Extraction of crude petroleum and natural gas	56621	18800	<i>13656</i>
B0721 - Mining of uranium and thorium ores			
B0892 - Extraction of peat	<i>10714</i>	9129	<i>150</i>
B091 - Support activities for petroleum and natural gas extraction	<i>36816</i>	0	<i>14855</i>
C19 - Manufacture of coke and refined petroleum products	<i>113733</i>	0	<i>133780</i>
D35 - Electricity, gas, steam and air conditioning supply	1090709	1310000	<i>1366966</i>
D351 - Electric power generation, transmission and distribution	809201	1060015	<i>1023364</i>
D3511 - Production of electricity	222839	461664	<i>482025</i>
D3512 - Transmission of electricity	39376	39357	<i>40835</i>
D3513 - Distribution of electricity	111958	194209	<i>206381</i>
D3514 - Trade of electricity	46126	120950	<i>129320</i>
D352 - Manufacture of gas; distribution of gaseous fuels through mains	99864	100137	<i>102266</i>
D3521 - Manufacture of gas	918	12068	<i>12390</i>
D3522 - Distribution of gaseous fuels through mains	41664	35510	<i>35812</i>
D3523 - Trade of gas through mains	26052	25250	<i>25680</i>
D353 - Steam and air conditioning supply	143299	136151	<i>140870</i>
D3530 - Steam and air conditioning supply	143299	134979	<i>139739</i>
Broad Sector - Employment Reported	1456817	1449758	<i>1613533</i>

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2022

Methodology and Notes in the annexes

3.2.3 Number of Persons Declared as Employed in the energy sector

NUMBER OF PERSONS DECLARED AS EMPLOYED ENTERPRISES SURVEY

	Mining of Coal and Lignite (B05)				Extraction of Crude Petroleum and Natural Gas (B06)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020	148224	111829	84127		56621	18800	13656	
BE		0	0	0	0	0	0	0
BG	13269	11995						
CZ	24265	18716	12450	10351				
DK	0	0	0	0	566	1051	1312	1313
DE	33672	17468			3754	3927		
EE	0	0	0	0	3043	1523	1523	
IE								
EL		316		273				355
ES	6105	1684		276	242	368		196
FR	28	2			814			
HR		0	0	0		7852	0	0
IT		0	0	0	12116	12681	1767	1488
CY	0	0	0	0	0	0	0	0
LV	0	0	0	0	1	20	13	13
LT	0	0	0	0	252	212	109	109
LU	0	0	0	0	0	0	0	0
HU	111	124	54	54	75	68	114	114
MT	0	0	0	0	0	0	0	0
NL	0	0	0	0	3173	3913	2851	3224
AT	0	0	0	0				
PL	124925	96076	84528	72937				
PT	0	0	0	0	0	0	0	0
RO	18011	1843	261	235	30546	23486	6436	5320
SI								
SK					0			0
FI	0	0	0	0	0	0	0	0
SE						0	0	0

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2022

Methodology and Notes in the annexes

3.2.3 Number of Persons Declared as Employed in the energy sector

NUMBER OF PERSONS DECLARED AS EMPLOYED ENTERPRISES SURVEY

	Extraction of Peat (B08.92)				Support Activities for Petroleum and Natural Gas Extraction (B09.1)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020		10714	9129	150		36816	0	14855
BE	0	0		0			9	
BG	52	55			14	25	12	12
CZ		71	36	36	421			
DK						1587	1875	1835
DE	2003	1762	1667	1654			2459	1525
EE	1153	963			0	0		0
IE			75		35	29	53	115
EL	0		0			276	4	80
ES	48	36	42	39		191	119	152
FR	248	130	127	177	110	386		
HR	0	0	0	0		2273	5	5
IT	12	21				2188		1527
CY	0	0	0	0	0			
LV	1977	2158	2343	2200	0	2	0	0
LT	1126	1149			0	0	0	0
LU	0	0	0	0	0	0	0	0
HU	116	97	69	62	1089	1062	216	217
MT	0	0	0	0				
NL	22	104	243	239				
AT					27			
PL			658		4082	4638	3913	3990
PT							10	11
RO	26	25	45	59	6267	6771	5564	5127
SI	0	0	0	0				
SK		114	54					
FI	1845	1977		1923	0	0	0	0
SE	306	165	87	98		75	48	48

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2022

Methodology and Notes in the annexes

3.2.3 Number of Persons Declared as Employed in the energy sector

NUMBER OF PERSONS DECLARED AS EMPLOYED ENTERPRISES SURVEY

	Manufacture of Coke and Refined Petroleum Products (C19)				Electricity, Gas, Steam and Air Conditioning Supply (D35)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020		113733	0	133780	1090709	1310000	1366966	
BE	4091		6222	7351	19193	20293	21506	23179
BG		2078	2474	2474	34191	31751	31435	28473
CZ	2747				31480	34536	40271	39445
DK					11235	13815	12944	12076
DE	19452	22302	21901	21946	221264	224669	381463	411043
EE	1406	1679	1193	1193	5681	4949	4814	4646
IE					9117	8846	10918	11543
EL	4333	3588	5129	3782	22834	25764	30711	33583
ES	8954	8453		13061	48687	39764	44858	47226
FR	15095				170194	190364	198695	195585
HR		262	9006	9006	16619	14893	14663	15007
IT	16493	11065	11791	8286	86414	89109	90001	87708
CY			38		2470	2130	2229	2356
LV	12	65	26	26	10907	11344	9657	10430
LT					15876	13522	11999	13755
LU	0	0	0		1196	1529	1828	1835
HU	6329	5691	10548	9025	25715	24601	32820	37803
MT						10		226
NL	5908	5299	5579	5091	22882	27969	29645	41253
AT		1180	2516	2512	28685	29168	32873	30951
PL	13623	13495	21024	19717	162409	128183	151869	165366
PT	1971	1830	1872	1846	9496	9589	13852	11017
RO	3960	2560	18877	20682	81111	72333	64456	65753
SI		26			8207	8958	8659	7956
SK					20034	17873	17299	18891
FI					13463	13368	14206	12734
SE		2879	3182		31115	31379	36134	37127

Italics, blue: DG ENER estimates

source: Eurostat, Structural Business Statistics Survey (SBS), May 2022

Methodology and Notes in the annexes

3.3 Economy

3.3.1 GDP at Current Market Prices

Mrd EUR*	2005	2010	2015	2019	2020	2021
EU27_2020	9563.5	10979.5	12211.5	14016.5	13411.8	14475.1
BE	310.0	363.1	416.7	478.2	456.7	506.2
BG	24.0	38.1	45.7	61.6	61.3	67.9
CZ	110.3	157.9	169.6	225.6	215.8	238.2
DK	212.8	243.2	273.0	309.5	311.8	336.7
DE	2288.3	2564.4	3026.2	3473.3	3405.4	3601.8
EE	11.3	14.9	20.8	27.7	26.8	30.7
IE	170.2	167.7	262.9	356.7	372.8	426.3
EL	199.2	224.1	176.1	183.3	165.3	182.8
ES	927.4	1072.7	1077.6	1244.4	1121.9	1205.1
FR	1765.9	1995.3	2198.4	2437.6	2310.5	2500.9
HR	36.5	45.2	44.6	55.6	50.2	57.2
IT	1493.6	1611.3	1655.4	1796.6	1657.0	1775.4
CY	15.0	19.4	17.9	23.0	21.6	23.4
LV	13.8	17.9	24.6	30.6	29.5	32.9
LT	21.0	28.0	37.3	48.9	49.5	55.4
LU	30.0	40.2	52.1	62.7	64.2	73.3
HU	90.9	99.6	112.7	146.1	137.4	154.1
MT	5.2	6.8	10.0	14.0	13.1	14.7
NL	550.9	639.2	690.0	813.1	796.5	856.4
AT	254.1	295.9	344.3	397.5	379.3	402.7
PL	246.2	362.2	430.5	533.6	526.4	574.4
PT	158.6	179.6	179.7	214.4	200.1	211.3
RO	79.2	125.5	160.1	223.2	218.9	240.2
SI	29.1	36.4	38.9	48.4	46.9	52.0
SK	39.4	68.2	79.8	94.0	92.1	97.1
FI	164.7	188.1	211.4	239.9	238.0	251.4
SE	315.8	374.7	455.5	476.9	480.6	537.8

* Units in Milliard - Long Scale = 1000 Million €

Source: DG Economic and Financial Affairs, AMECO, April 2022

Methodology and Notes in the annexes

3.3.2 GDP per Capita at Current Market Prices

GDP PER CAPITA AT CURRENT MARKET PRICES

Thousand EUR/cap*	2005	2010	2015	2019	2020	2021
EU27_2020	22.0	24.9	27.5	31.4	30.0	32.4
BE	29.7	33.5	37.1	41.7	39.6	43.8
BG	3.1	5.1	6.3	8.8	8.8	9.8
CZ	10.8	15.1	16.1	21.2	20.2	22.3
DK	39.3	43.9	48.2	53.3	53.5	57.7
DE	27.7	31.3	37.3	41.8	40.9	43.3
EE	8.3	11.1	15.8	20.9	20.2	23.1
IE	41.4	36.9	56.2	72.7	75.1	85.1
EL	18.2	20.2	16.2	17.1	15.4	17.1
ES	21.4	23.1	23.2	26.5	23.7	25.4
FR	28.1	30.9	33.1	36.3	34.3	37.0
HR	8.5	10.5	10.6	13.6	12.4	14.2
IT	25.8	27.2	27.2	30.0	27.8	30.0
CY	20.5	23.7	21.1	26.3	24.3	26.2
LV	6.1	8.4	12.4	16.0	15.4	17.4
LT	6.3	8.9	12.8	17.5	17.7	19.8
LU	65.1	80.0	92.5	102.1	102.6	115.5
HU	9.0	9.9	11.4	15.0	14.1	15.8
MT	12.8	16.5	22.7	28.5	25.4	28.5
NL	33.8	38.6	40.8	47.0	45.8	49.0
AT	31.0	35.4	40.1	44.9	42.6	45.1
PL	6.4	9.5	11.3	14.1	13.9	15.2
PT	15.1	17.0	17.3	20.9	19.4	20.5
RO	3.7	6.2	8.1	11.5	11.3	12.5
SI	14.6	17.8	18.8	23.3	22.4	24.7
SK	7.3	12.6	14.7	17.3	16.9	17.8
FI	31.4	35.2	38.6	43.5	43.1	45.4
SE	35.0	40.1	46.7	46.6	46.5	51.8

* 1000 €' per Capita

Source: DG Economic and Financial Affairs, AMECO, April 2022

Source: Eurostat, Demography and migration, April 2022

Methodology and Notes in the annexes

3.3.3 GDP at 2015 Market Prices

GDP AT 2015 MARKET PRICES

Mrd EUR*	2005	2010	2015	2019	2020	2021
EU27_2020	11059.8	11620.5	12211.5	13313.0	12531.4	13202.2
BE	362.9	390.6	416.7	445.9	420.6	446.9
BG	35.7	41.8	45.7	51.8	49.5	51.6
CZ	137.9	155.9	169.6	194.5	183.8	190.3
DK	253.4	256.1	273.0	300.0	294.0	308.3
DE	2624.6	2783.2	3026.2	3241.6	3121.8	3203.8
EE	17.9	17.7	20.8	24.4	23.7	25.7
IE	185.7	189.6	262.9	334.6	355.3	403.6
EL	219.9	216.3	176.1	183.6	167.1	181.0
ES	1028.7	1079.0	1077.6	1193.8	1064.6	1119.2
FR	2005.2	2088.8	2198.4	2358.5	2174.9	2323.2
HR	43.8	45.1	44.6	51.5	47.3	52.2
IT	1737.6	1712.8	1655.4	1729.1	1573.1	1677.6
CY	17.1	19.5	17.9	22.4	21.3	22.5
LV	21.1	20.6	24.6	27.7	26.7	27.8
LT	29.2	31.0	37.3	43.4	43.4	45.5
LU	40.0	45.2	52.1	60.7	59.6	63.7
HU	102.3	101.7	112.7	132.4	126.5	135.5
MT	6.6	7.7	10.0	12.9	11.8	13.0
NL	620.7	664.8	690.0	757.3	727.9	763.3
AT	306.1	326.7	344.3	373.5	348.4	365.0
PL	294.6	372.2	430.5	513.6	502.6	532.4
PT	182.0	187.4	179.7	200.4	183.5	192.5
RO	121.0	139.1	160.1	195.9	188.5	199.6
SI	34.7	38.1	38.9	45.3	43.4	46.9
SK	55.3	70.3	79.8	89.3	85.4	88.0
FI	201.1	210.6	211.4	229.6	224.5	231.3
SE	374.5	409.1	455.5	495.8	485.1	510.0

*Units in Milliard - Long Scale = 1000 Millions Euro

Source: DG Economic and Financial Affairs, AMECO, April 2022

Source: Eurostat, Demography and migration, April 2022

Methodology and Notes in the annexes

3.3.4 GDP per Capita at 2015 Market Prices

GDP PER CAPITA AT 2015 MARKET PRICES

Thousand EUR/cap*	2005	2010	2015	2019	2020	2021
EU27_2020	25.5	26.4	27.5	29.8	28.0	29.5
BE	34.7	36.0	37.1	38.9	36.5	38.7
BG	4.6	5.6	6.3	7.4	7.1	7.5
CZ	13.5	14.9	16.1	18.3	17.2	17.8
DK	46.8	46.3	48.2	51.7	50.5	52.8
DE	31.8	34.0	37.3	39.0	37.5	38.5
EE	13.2	13.2	15.8	18.4	17.8	19.3
IE	45.2	41.7	56.2	68.2	71.6	80.6
EL	20.0	19.5	16.2	17.1	15.6	17.0
ES	23.8	23.2	23.2	25.4	22.5	23.6
FR	31.9	32.3	33.1	35.1	32.3	34.3
HR	10.2	10.5	10.6	12.6	11.7	12.9
IT	30.0	28.9	27.2	28.9	26.4	28.3
CY	23.3	23.8	21.1	25.6	24.0	25.1
LV	9.4	9.7	12.4	14.4	14.0	14.7
LT	8.7	9.9	12.8	15.5	15.5	16.3
LU	86.8	90.0	92.5	98.8	95.2	100.4
HU	10.1	10.2	11.4	13.6	13.0	13.9
MT	16.4	18.6	22.7	26.1	23.0	25.3
NL	38.1	40.1	40.8	43.8	41.8	43.7
AT	37.3	39.1	40.1	42.2	39.1	40.9
PL	7.7	9.8	11.3	13.5	13.2	14.1
PT	17.3	17.7	17.3	19.5	17.8	18.7
RO	5.7	6.9	8.1	10.1	9.8	10.4
SI	17.4	18.6	18.8	21.8	20.7	22.2
SK	10.3	13.0	14.7	16.4	15.6	16.1
FI	38.4	39.4	38.6	41.6	40.6	41.8
SE	41.6	43.8	46.7	48.5	47.0	49.1

* 1000 €' 2010 per Capita

Source: DG Economic and Financial Affairs, AMECO, April 2022

Source: Eurostat, Demography and migration, April 2022

Methodology and Notes in the annexes

3.4 Demography

3.4.1 Population

POPULATION ON 1ST JANUARY

1000 Inhabitants	2005	2010	2015	2019	2020	2021
EU27_2020	434416.3	440660.4	443666.8	446446.4	447319.9	447207.5
BE	10445.9	10839.9	11237.3	11455.5	11522.4	11554.8
BG	7688.6	7421.8	7202.2	7000.0	6951.5	6916.5
CZ	10198.9	10462.1	10538.3	10649.8	10693.9	10701.8
DK	5411.4	5534.7	5659.7	5806.1	5822.8	5840.0
DE	82500.8	81802.3	81197.5	83019.2	83166.7	83155.0
EE	1358.9	1333.3	1314.9	1324.8	1329.0	1330.1
IE	4111.7	4549.4	4677.6	4904.2	4964.4	5006.3
EL	10969.9	11119.3	10858.0	10724.6	10718.6	10678.6
ES	43296.3	46486.6	46449.6	46937.1	47332.6	47398.7
FR	62772.9	64658.9	66458.2	67177.6	67320.2	67656.7
HR	4310.9	4302.8	4225.3	4076.2	4058.2	4036.4
IT	57874.8	59190.1	60795.6	59816.7	59641.5	59236.2
CY	733.1	819.1	847.0	875.9	888.0	896.0
LV	2249.7	2120.5	1986.1	1920.0	1907.7	1893.2
LT	3355.2	3142.0	2921.3	2794.2	2794.1	2795.7
LU	461.2	502.1	563.0	613.9	626.1	634.7
HU	10097.5	10014.3	9855.6	9772.8	9769.5	9730.8
MT	402.7	414.0	439.7	493.6	514.6	516.1
NL	16305.5	16575.0	16900.7	17282.2	17407.6	17475.4
AT	8201.4	8351.6	8584.9	8858.8	8901.1	8932.7
PL	38173.8	38022.9	38005.6	37972.8	37958.1	37840.0
PT	10494.7	10573.5	10374.8	10276.6	10295.9	10298.3
RO	21382.4	20294.7	19870.6	19414.5	19328.8	19201.7
SI	1997.6	2047.0	2062.9	2080.9	2095.9	2109.0
SK	5372.7	5390.4	5421.3	5450.4	5457.9	5459.8
FI	5236.6	5351.4	5471.8	5517.9	5525.3	5533.8
SE	9011.4	9340.7	9747.4	10230.2	10327.6	10379.3

3.5 Employment

3.5.1 Total Persons Employed

EMPLOYMENT

TOTAL PERSONS EMPLOYED IN THE ENERGY SECTOR (15 - 64 YEARS) EU27_2020

[thousands]	2015	2019	2020	2021
B05 - Mining of coal and lignite	288.6	249.3	245.2	207.9
B06 - Extraction of crude petroleum and natural gas	64.3	54.6	57.3	56.5
B0892 - Extraction of peat*	<i>10.7</i>	<i>9.1</i>	<i>0.2</i>	<i>0.2</i>
B091 - Support activities for petroleum and natural gas extraction*	<i>36.8</i>	<i>0.0</i>	<i>14.9</i>	<i>14.9</i>
C19 - Manufacture of coke and refined petroleum products	<i>160.7</i>	<i>165.5</i>	159.4	144.5
D35 - Electricity, gas, steam and air conditioning supply	1 370.3	1 409.8	1 457.4	1 495.3
Broad Sector - Total Employment**	1 931.4	1 888.3	1 934.3	<i>1 919.2</i>

*According to Structural Business Statistics Survey (SBS), May 2022

**Estimate of total employment as a sum of available figures presented in the table

Italics, blue: DG ENER estimates

Source: Eurostat, Labour Force Survey (LFS), April 2022

Methodology and Notes in the annexes

3.5.2 Employment Rate

EMPLOYMENT RATE IN ALL ECONOMIC SECTORS (15-64 YEARS)*

MEMBER STATES' DATA - ALL SECTORS

%	2005	2010	2015	2019	2020	2021
EU27_2020	68.8	69.7	71.5	72.4	73.2	72.3
BE	66.7	67.7	67.7	69.1	68.4	69.7
BG	62.1	66.5	69.2	73.1	72.1	72
CZ	70.4	70.2	74.0	76.7	76.4	76.6
DK	79.8	78.0	76.9	79.1	79.0	79.6
DE	73.8	75.4	76.4	78.0	77.3	78.7
EE	70.7	74.6	77.0	79.2	79.6	79.1
IE	73.9	71.6	72.0	73.2	70.8	74.6
EL	66.4	67.7	67.7	68.5	65.3	67.3
ES	70.0	73.5	74.3	73.8	72.2	73.7
FR	69.7	71.0	72.2	72.6	72.0	73
HR	63.3	65.1	66.9	66.5	67.1	68.7
IT	62.5	61.6	63.8	65.7	63.5	64.5
CY	72.4	73.6	73.9	76.0	75.8	76.7
LV	69.1	72.7	75.7	77.3	78.0	75.8
LT	68.7	70.2	74.1	78.0	78.5	78.2
LU	66.6	68.2	70.9	72.0	72.2	73.2
HU	61.3	64.0	70.5	74.7	75.1	76.2
MT	57.6	60.4	68.8	75.9	77.1	77.8
NL	75.1	80.4	82.1	83.4	83.4	83.7
AT	71.4	74.7	75.8	77.3	76.4	77.2
PL	64.4	63.4	66.8	69.9	70.1	72.8
PT	73.2	71.5	72.3	74.9	73.8	75.2
RO	62.3	57.4	59.9	63.3	64.1	65.6
SI	70.7	70.8	71.2	74.6	73.8	75
SK	68.9	70.5	72.9	74.7	74.5	74.6
FI	74.7	73.5	74.8	77.3	77.3	78.8
SE	78.2	78.6	81.4	82.5	82.1	82.9

*Percentage of active population

Source: Eurostat, Labour Force Survey (LFS), April 2022

Methodology and Notes in the annexes

3.5.3 Unemployment Rate

UNEMPLOYMENT RATE IN ALL ECONOMIC SECTORS* MEMBER STATES' DATA - ALL SECTORS

%	2005	2010	2015	2019	2020	2021
EU27_2020	9.6	9.8	10.0	6.7	7.2	7.1
BE	8.5	8.3	8.5	5.4	5.8	5.6
BG	10.1	10.3	9.2	4.2	6.1	4.3
CZ	7.9	7.3	5.1	2.0	2.6	2.2
DK	4.8	7.7	6.3	5.0	5.6	4.5
DE	11.2	7.0	4.6	3.1	3.7	3.1
EE	8.0	16.7	6.2	4.4	6.9	5.6
IE	4.6	14.6	10.0	5.0	5.9	4.5
EL	10.0	12.7	24.9	17.3	17.6	12.5
ES	9.2	19.9	22.1	14.1	15.5	12.9
FR	8.5	8.9	10.1	8.1	7.5	7.3
HR	12.8	11.7	16.2	6.6	7.5	7
IT	7.7	8.4	11.9	10.0	9.3	8.1
CY	5.3	6.3	15.0	7.1	7.6	6.8
LV	10.0	19.5	9.9	6.3	8.1	6.9
LT	8.3	17.8	9.1	6.3	8.5	6
LU	4.5	4.4	6.7	5.6	6.8	4.6
HU	7.2	11.2	6.8	3.4	4.1	3.6
MT	6.9	6.9	5.4	3.6	4.4	2.9
NL	5.9	5.0	6.9	3.4	4.9	3.5
AT	5.6	4.8	5.7	4.5	6.0	4.8
PL	17.8	9.7	7.5	3.3	3.2	2.9
PT	7.7	11.0	12.6	6.5	7.0	6
RO	7.2	7.0	6.8	3.9	6.1	5.6
SI	6.5	7.3	9.0	4.5	5.0	4
SK	16.3	14.4	11.5	5.8	6.7	6.1
FI	8.4	8.4	9.4	6.7	7.7	6.8
SE	7.5	8.6	7.4	6.8	8.5	7.5

*Percentage of active population

Source: Eurostat, Labour Force Survey (LFS), April 2022

Methodology and Notes in the annexes

4 Environment Indicators in the EU



4 Environment Indicators in the EU

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4.1 Gases Emissions

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NATIONAL TOTAL*

[Million ton CO ₂ equiv.]	1990	2010	2015	2019	2020	2021
EU27_2020	4921.1	4281.1	3920.9	3724.3	3359.7	3541.5
Index1990	100.0%	87.0%	79.7%	75.7%	68.3%	72.0%
BE	149.0	137.9	123.4	121.7	110.9	115.5
BG	99.7	60.0	61.0	54.7	48.5	54.5
CZ	201.4	142.1	130.2	125.4	114.1	119.4
DK	73.3	67.1	52.3	48.5	43.8	45.1
DE	1263.4	956.9	921.4	824.6	744.7	778.7
EE	40.4	21.2	18.1	14.7	11.5	12.7
IE	56.7	65.4	64.3	64.5	60.2	63.4
EL	106.5	121.8	98.9	90.2	76.8	80.0
ES	292.5	367.4	348.3	328.9	278.7	297.2
FR	553.0	560.4	566.3	519.1	523.0	498.8
HR	32.0	28.5	25.0	25.4	24.1	24.7
IT	525.8	532.3	455.4	434.8	388.8	422.6
CY	6.4	10.4	9.2	10.0	8.9	9.3
LV	26.3	12.2	11.1	11.6	10.7	11.0
LT	48.6	20.9	20.4	20.7	20.4	20.5
LU	13.1	10.6	14.3	12.9	13.5	13.3
HU	95.5	67.3	62.8	65.6	63.3	64.6
MT	2.8	3.1	3.3	3.2	3.3	3.3
NL	227.3	225.0	205.9	193.3	171.5	175.0
AT	79.9	86.8	81.0	82.9	75.0	78.8
PL	475.5	409.3	385.8	390.1	373.3	402.4
PT	61.1	72.4	71.5	68.7	59.7	58.5
RO	257.9	127.2	117.8	116.2	112.2	115.7
SI	18.8	19.9	17.0	17.3	16.0	16.1
SK	73.9	45.9	41.1	40.2	37.3	41.3
FI	72.3	77.3	57.0	55.4	48.7	48.7
SE	72.8	66.5	55.8	53.3	47.2	48.8

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

Source: EEA, June 2023, Eurostat 2023

Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - ENERGY

	2021								
	Energy	of which:							
		Energy Industries Manufacturing Industries and Construction	Transport	Commercial/Insti- tutional	Residential	Agriculture/Fo- restry/Fisheries	Other Sectors	Other Combustion and Fugitive Emissions	
[Million ton CO ₂ equiv.]									
EU27_2020	2 669.7	840.4	439.5	782.1	129.9	324.7	77.9	6.9	68.1
Share [%]	100.3%	31.6%	16.5%	29.4%	4.9%	12.2%	2.9%	0.3%	2.6%
BE	82.2	18.2	14.0	23.9	5.9	16.6	2.9	0.1	0.8
BG	40.4	22.1	4.6	9.9	0.4	1.2	0.5	0.0	1.8
CZ	89.0	41.1	12.9	18.9	2.6	9.0	1.2	0.3	2.9
DK	28.7	8.3	3.8	12.2	0.8	1.6	1.4	0.2	0.4
DE	643.3	240.5	126.1	147.6	33.5	83.5	6.3	1.0	4.8
EE	10.4	7.0	0.4	2.4	0.3	0.2	0.2	0.0	0.0
IE	35.0	10.2	4.6	11.0	1.5	6.9	0.7	0.0	0.1
EL	53.6	25.5	4.8	16.8	0.6	4.8	0.6	0.0	0.5
ES	216.4	41.2	46.7	85.5	9.9	16.1	12.4	0.4	4.1
FR	338.6	54.7	52.7	134.5	21.2	52.4	12.0	2.7	8.3
HR	16.3	3.8	2.4	6.3	0.7	2.0	0.8	0.0	0.4
IT	333.1	86.4	53.9	103.3	25.0	50.4	7.8	0.3	6.0
CY	6.2	3.1	0.5	2.1	0.1	0.3	0.1	0.0	0.0
LV	7.1	1.4	0.7	3.2	0.5	0.6	0.5	0.0	0.1
LT	12.3	2.8	1.3	6.1	0.3	1.0	0.3	0.0	0.5
LU	10.6	1.0	1.3	6.9	0.3	1.1	0.0	0.0	0.1
HU	46.2	11.5	5.2	14.0	2.9	8.9	1.6	0.1	2.1
MT	2.6	1.9	0.0	0.6	0.0	0.0	0.0	0.0	0.0
NL	137.6	47.4	27.8	25.5	6.8	17.5	10.6	0.2	1.7
AT	52.2	8.9	10.9	21.9	1.6	7.5	1.0	0.0	0.4
PL	336.2	160.2	30.1	68.4	7.7	35.2	11.4	0.0	23.1
PT	37.0	8.2	7.3	15.9	1.0	2.1	1.4	0.1	1.1
RO	78.0	18.9	14.5	19.6	2.1	9.7	1.7	1.1	10.5
SI	12.8	4.2	1.7	5.2	0.3	0.8	0.2	0.0	0.4
SK	27.5	7.0	7.0	7.5	1.5	3.5	0.4	0.1	0.6
FI	34.2	13.4	6.4	10.0	1.2	1.1	1.4	0.8	:
SE	33.2	9.0	6.3	15.4	0.7	0.6	1.1	0.0	0.1

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NOT ENERGY RELATED

[Million ton CO ₂ equiv.]	2021					
	GHG emissions other than from energy	of which:				International aviation
		Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO ₂	
EU27_2020	809.0	317.9	378.4	109.3	3.3	69.8
Share [%]	100.0%	39.3%	46.8%	13.5%	0.4%	
BE	28.8	18.2	9.4	1.3	0.0	4.6
BG	13.5	4.5	6.1	2.8	0.1	0.5
CZ	30.4	16.2	7.8	5.7	0.7	0.4
DK	15.4	1.9	12.1	1.2	0.2	1.3
DE	118.0	57.2	56.3	4.5	0.0	18.3
EE	2.2	0.3	1.6	0.3	0.0	0.1
IE	27.1	3.2	23.0	0.9	0.0	1.3
EL	23.9	10.0	8.0	5.9	0.0	2.5
ES	72.8	24.1	34.4	14.3	0.0	8.3
FR	145.8	51.5	71.8	21.5	1.0	17.1
HR	8.2	3.6	2.7	1.9	0.0	0.3
IT	84.8	31.9	32.7	20.2	0.0	5.0
CY	2.6	1.3	0.6	0.7	0.0	0.6
LV	3.7	0.9	2.3	0.6	0.0	0.2
LT	8.0	2.8	4.3	0.9	0.0	0.2
LU	1.4	0.7	0.6	0.1	0.0	1.2
HU	18.1	7.1	7.2	3.7	0.0	0.4
MT	0.4	0.2	0.1	0.1	0.0	0.3
NL	30.3	8.3	18.0	3.5	0.5	7.3
AT	25.4	17.0	7.2	1.2	0.0	1.2
PL	63.8	24.6	34.0	4.7	0.5	2.5
PT	19.6	7.1	7.3	5.0	0.2	2.0
RO	38.5	12.8	19.2	6.5	0.0	0.2
SI	3.4	1.1	1.8	0.4	0.0	0.0
SK	13.9	9.5	2.4	1.9	0.0	0.1
FI	13.5	5.3	6.3	1.8	0.1	0.8
SE	14.6	7.0	6.7	1.0	0.0	1.0

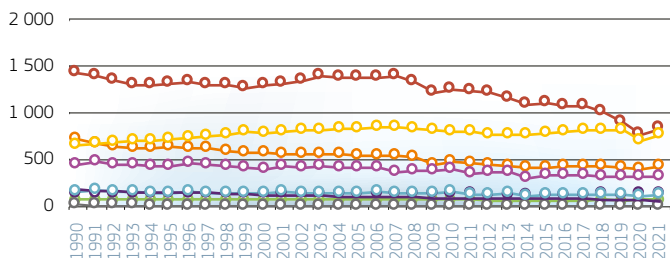
4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NATIONAL TOTAL AND ENERGY RELATED EU27_2020

(Million ton CO ₂ equiv.)	GHG emissions - National total *	of which:								
		Energy	Energy Industries Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emission	
1990	4921	3747.1	1442.1	729.1	672.5	172.2	449.7	90.8	22.1	190.8
1995	4626	3520.5	1318.7	645.5	724.8	149.2	438.1	89.4	10.0	154.9
2000	4537	3454.1	1304.5	586.7	798.3	144.0	408.1	84.8	8.5	127.8
2001	4585	3519.7	1329.5	575.2	812.4	157.3	437.0	84.7	8.1	123.7
2002	4568	3516.6	1352.1	565.7	821.2	151.1	420.9	82.6	8.4	123.1
2003	4652	3593.9	1399.4	571.5	830.7	151.9	433.1	83.2	9.2	124.0
2004	4659	3586.8	1392.4	564.6	849.1	154.3	425.8	83.8	10.3	116.8
2005	4638	3569.0	1383.8	556.5	847.4	154.4	426.8	83.9	10.8	116.2
2006	4639	3568.8	1391.3	546.0	855.5	162.0	420.5	81.0	9.7	112.5
2007	4609	3525.6	1405.5	558.8	864.0	142.8	368.6	78.1	9.6	107.8
2008	4516	3461.8	1336.6	539.3	844.9	157.0	399.0	79.1	9.3	105.9
2009	4192	3225.4	1235.8	447.7	823.1	154.3	389.5	77.6	8.0	97.4
2010	4281	3305.4	1254.2	480.7	817.6	163.3	413.0	79.8	7.8	96.7
2011	4173	3200.4	1245.6	468.7	808.2	140.6	362.0	78.9	8.1	96.4
2012	4097	3142.1	1228.5	450.9	778.7	140.7	372.5	76.3	7.0	94.4
2013	4011	3060.5	1167.8	432.8	772.7	142.5	375.1	76.3	7.0	93.2
2014	3872	2912.4	1106.4	420.0	778.1	124.9	316.9	76.0	6.8	90.1
2015	3921	2966.8	1114.0	429.0	793.2	130.5	335.2	75.4	6.9	89.6
2016	3930	2967.3	1089.1	434.1	810.7	130.9	341.3	75.5	6.1	85.5
2017	3960	2980.3	1083.3	441.3	825.0	131.3	338.5	75.9	6.1	84.9
2018	3881	2906.2	1023.7	442.4	826.5	127.6	328.4	77.0	5.6	80.8
2019	3724	2764.0	905.3	428.6	832.7	125.2	321.2	76.5	6.1	74.5
2020	3360	2500.3	778.1	412.8	720.2	122.1	319.4	78.2	6.1	69.5
2021	3541	2662.7	840.4	439.5	782.1	129.9	324.7	77.9	6.9	68.1

GHGS EMISSIONS - EU27_2020 - FUEL COMBUSTION

(Million ton CO₂ equiv.)



Energy Industries

Commercial/Institutional

Other Sectors

Manufacturing Industries and Construction

Residential

Other Combustion and Fugitive Emission

Transport

Agriculture/Forestry/Fisheries

Emission

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

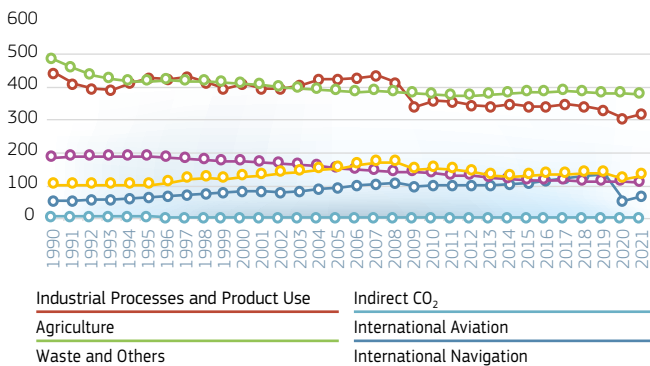
Source: EEA, June 2023, Eurostat 2023

Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NOT ENERGY RELATED
EU27_2020

[Million ton CO ₂ equiv.]	GHG emissions - National total	of which:					Indirect CO ₂	International aviation	International navigation
		GHG emissions other than from energy	Industrial Processes and Product Use	Agriculture	Waste and Others				
1990	4921	1 119.9	444.7	484.6	184.2	6.4	54.1	102.1	
1995	4626	1 039.6	426.9	419.0	188.0	5.7	65.7	102.6	
2000	4537	997.9	409.5	409.3	174.0	5.1	85.0	128.1	
2001	4585	980.5	396.6	407.7	171.3	4.9	84.3	132.7	
2002	4568	969.1	396.2	400.5	167.7	4.8	81.9	138.8	
2003	4652	972.5	407.4	395.3	165.1	4.7	85.5	141.6	
2004	4659	982.0	424.2	393.7	159.5	4.6	90.5	149.6	
2005	4638	972.9	424.7	389.2	154.3	4.6	96.1	153.7	
2006	4639	969.2	427.8	386.1	150.8	4.6	101.2	164.5	
2007	4609	977.2	436.8	389.1	146.9	4.5	105.8	171.7	
2008	4516	946.6	413.0	386.6	142.7	4.3	107.4	169.5	
2009	4192	867.5	341.7	381.5	140.3	3.9	98.7	150.7	
2010	4281	875.3	358.1	376.3	137.0	3.9	100.4	151.6	
2011	4173	869.5	357.5	375.7	132.5	3.8	102.8	150.4	
2012	4097	853.2	344.8	375.5	129.3	3.6	101.7	140.1	
2013	4011	848.1	342.7	377.7	124.3	3.4	102.7	132.2	
2014	3872	855.4	349.2	382.8	120.0	3.4	104.7	128.5	
2015	3921	845.6	339.9	384.3	118.2	3.4	108.5	129.2	
2016	3930	847.4	342.1	386.4	115.7	3.3	115.1	132.9	
2017	3960	855.8	349.7	388.2	114.6	3.3	124.2	134.7	
2018	3881	844.6	342.9	385.1	113.4	3.1	130.4	137.8	
2019	3724	827.3	331.5	380.2	112.4	3.0	133.0	136.6	
2020	3360	803.3	306.8	382.0	111.4	3.1	56.1	121.0	
2021	3541	809.0	317.9	378.4	109.3	3.3	69.8	129.1	

GHGS EMISSIONS - EU27_2020 - OTHER THAN FUEL COMBUSTION
(Million ton CO₂ equiv.)*GHG emissions without LULUCF, with indirect CO₂ and including international aviation

Source: EEA, June 2023, Eurostat 2023

Methodology and Notes: see appendices

4.1.2 CO₂ EmissionsCO₂ EMISSIONS - NATIONAL TOTAL*

[Million ton CO ₂]	1990	2010	2015	2019	2020	2021
EU27_2020	3933.7	3544.2	3213.1	3048.8	2697.4	2886.3
Index1990	100.0%	90.1%	81.7%	77.5%	68.6%	73.4%
BE	123.4	118.8	105.5	104.6	94.7	100.2
BG	77.4	48.4	48.7	43.0	37.0	42.8
CZ	166.9	119.4	106.7	103.0	92.7	97.7
DK	56.3	52.1	38.0	34.3	29.5	31.1
DE	1066.8	855.4	822.6	737.2	660.9	696.9
EE	37.0	19.1	16.0	12.5	9.3	10.5
IE	34.0	44.1	41.2	40.6	36.3	38.9
EL	85.9	99.9	77.8	69.7	56.9	60.1
ES	235.2	295.5	285.3	269.6	220.0	238.5
FR	407.2	428.5	441.2	397.1	403.0	381.3
HR	23.5	21.3	18.2	18.5	17.0	17.7
IT	443.2	445.3	371.5	352.8	307.1	342.2
CY	5.4	8.9	7.7	8.4	7.2	7.6
LV	19.9	8.9	7.6	8.1	7.2	7.5
LT	36.2	14.0	13.3	14.1	13.7	14.1
LU	12.2	9.7	13.4	11.9	12.5	12.3
HU	73.9	52.8	47.3	50.2	47.6	48.9
MT	2.6	2.8	2.9	2.8	2.9	2.9
NL	168.2	193.0	175.6	164.8	143.7	147.7
AT	63.0	74.1	68.5	70.9	63.2	67.2
PL	377.6	336.2	315.1	321.4	304.4	333.3
PT	46.9	55.7	55.5	52.0	43.4	42.1
RO	177.3	86.6	78.7	77.3	74.2	77.4
SI	15.1	16.5	13.7	14.1	12.9	13.1
SK	61.6	38.6	34.7	34.0	31.2	35.3
FI	58.1	65.8	46.2	45.1	38.7	38.8
SE	58.8	55.2	45.6	43.7	37.6	39.5

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

Source: EEA, June 2023, Eurostat 2023

Methodology and Notes: see appendices

4.1.2 CO₂ EmissionsCO₂ EMISSIONS - ENERGY

	2021								
	Energy	of which:							
		Energy Industries Manufacturing Industries and Construction	Transport	Commercial/Insti- tutional	Residential	Agriculture/Fo- restry/Fisheries	Other Sectors Other Combustion and Fugitive Emissions		
EU27_2020	2 577.1	831.6	433.7	773.4	128.5	305.9	72.4	6.9	24.7
Share [%]	100.0%	32.4%	16.9%	30.1%	5.0%	11.9%	2.8%	0.3%	1.0%
BE	80.5	18.0	13.8	23.6	5.8	16.2	2.6	0.1	0.2
BG	38.5	22.0	4.5	9.8	0.4	0.8	0.5	0.0	0.6
CZ	84.6	40.8	12.8	18.7	2.6	7.8	1.2	0.3	0.4
DK	28.0	8.1	3.7	12.1	0.8	1.4	1.4	0.2	0.3
DE	632.5	236.0	125.0	146.0	33.3	82.3	6.1	1.0	2.8
EE	10.3	6.9	0.4	2.3	0.3	0.2	0.2	0.0	0.0
IE	34.4	10.1	4.6	10.9	1.5	6.7	0.6	:	:
EL	52.5	25.4	4.8	16.5	0.6	4.5	0.6	0.0	0.0
ES	212.4	40.8	45.4	84.6	9.8	15.3	12.3	0.4	3.9
FR	330.6	54.4	52.1	133.1	21.1	49.5	11.1	2.7	6.6
HR	15.5	3.7	2.4	6.2	0.7	1.5	0.7	0.0	0.3
IT	321.8	86.0	52.8	102.2	24.6	46.7	7.1	0.3	2.1
CY	6.1	3.1	0.5	2.0	0.1	0.3	0.1	0.0	0.0
LV	6.6	1.4	0.6	3.2	0.4	0.4	0.5	0.0	0.0
LT	11.7	2.7	1.3	6.1	0.3	0.8	0.2	0.0	0.2
LU	10.5	1.0	1.3	6.8	0.3	1.1	0.0	0.0	0.0
HU	43.5	11.4	5.2	13.8	2.9	8.3	1.6	0.1	0.2
MT	2.6	1.9	0.0	0.6	0.0	0.0	0.0	0.0	0.0
NL	134.5	47.0	27.7	25.2	6.8	17.1	9.3	0.2	1.3
AT	51.0	8.7	10.8	21.7	1.6	7.2	0.9	0.0	0.1
PL	310.5	159.5	29.8	67.6	7.6	31.5	10.2	0.0	4.3
PT	36.1	8.1	7.2	15.7	1.0	1.7	1.3	0.1	1.0
RO	67.4	18.8	14.4	19.3	2.0	8.3	1.6	1.1	1.9
SI	12.2	4.2	1.7	5.1	0.3	0.6	0.2	0.0	0.1
SK	26.5	6.9	7.0	7.4	1.5	3.2	0.3	0.1	0.1
FI	33.4	13.1	6.2	9.9	1.2	0.8	1.4	0.8	:
SE	32.4	8.7	6.2	15.2	0.6	0.5	1.1	0.0	0.0

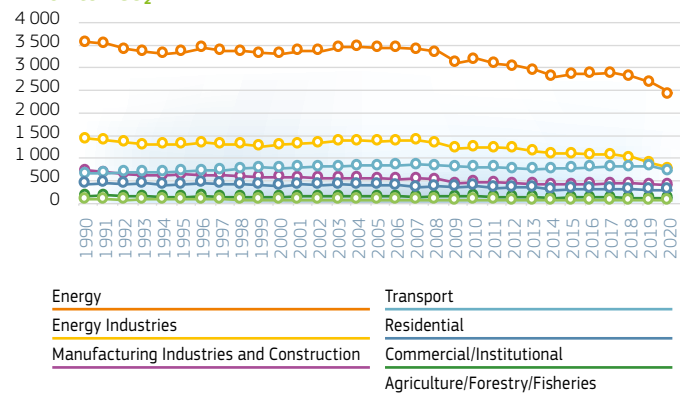
Source: EEA, June 2023, Eurostat 2023
Methodology and Notes: see appendices

4.1.2 CO₂ EmissionsCO₂ EMISSIONS - NOT ENERGY RELATED

	2021					
	CO ₂ emissions other than from energy	of which:				International aviation
		Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO ₂	
[Million ton CO ₂]						
EU27_2020	247.6	231.7	9.8	2.7	3.3	68.5
Share [%]	100.0%	93.6%	4.0%	1.1%	1.3%	
BE	15.3	14.9	0.2	0.3	:	4.5
BG	3.8	3.7	0.1	0.0	0.1	0.5
CZ	13.0	11.9	0.3	0.1	0.7	0.4
DK	2.1	1.5	0.3	0.0	0.2	1.3
DE	47.3	44.7	2.6	:	:	18.1
EE	0.1	0.1	0.0	0.0	:	0.1
IE	3.2	2.4	0.7	0.0	:	1.3
EL	5.1	5.1	0.0	0.0	:	2.5
ES	18.3	17.9	0.4	0.0	0.0	8.3
FR	36.4	31.7	2.1	1.7	1.0	16.9
HR	1.9	1.8	0.1	0.0	0.0	0.3
IT	15.8	15.2	0.5	0.1	0.0	5.0
CY	0.9	0.9	0.0	0.0	0.0	0.6
LV	0.7	0.6	0.1	0.0	0.0	0.2
LT	2.2	2.1	0.1	0.0	0.0	0.2
LU	0.6	0.6	0.0	0.0	0.0	1.2
HU	5.1	4.9	0.2	0.0	0.0	0.4
MT	0.0	0.0	0.0	0.0	0.0	0.3
NL	6.1	5.5	0.1	0.0	0.5	7.3
AT	15.1	14.9	0.1	0.0	0.0	1.2
PL	21.1	18.9	1.4	0.3	0.5	1.8
PT	4.1	3.8	0.0	0.0	0.2	2.0
RO	10.9	10.7	0.2	0.0	0.0	0.2
SI	0.8	0.8	0.0	0.0	0.0	0.0
SK	8.8	8.7	0.1	0.0	0.0	0.1
FI	4.5	4.2	0.2	0.0	0.1	0.8
SE	6.1	5.9	0.1	0.1	0.0	1.0

4.1.2 CO₂ EmissionsCO₂ EMISSIONS - NATIONAL TOTAL AND ENERGY RELATED* EU27_2020

[Million ton CO ₂]	CO ₂ emissions - National total*	of which:								
		Energy	Energy Industries Manufacturing Industries and Construction	Transport	Commercial/Insti- tutional	Residential	Agriculture/Fo- restry/Fisheries	Other Sectors	Other Comb- ustion and Fugitive Emissions	
1990	3934	3567.1	1434.7	723.4	660.4	169.6	426.1	86.6	21.5	44.7
1995	3713	3353.3	1311.5	640.3	710.9	147.8	417.3	84.7	9.8	31.1
2000	3697	3314.3	1297.0	581.1	785.7	142.8	389.7	80.3	8.4	29.2
2001	3754	3381.7	1321.8	569.5	800.2	156.1	418.3	80.2	7.9	27.6
2002	3752	3382.5	1344.2	559.9	810.0	149.9	403.5	78.1	8.3	28.6
2003	3840	3459.7	1390.9	565.5	820.1	150.7	414.3	78.7	9.0	30.4
2004	3856	3460.8	1383.7	558.3	838.7	153.0	407.5	79.3	10.1	30.2
2005	3843	3445.0	1375.1	550.1	837.9	153.1	407.5	79.3	10.6	31.5
2006	3858	3448.1	1382.3	540.0	846.2	160.7	400.8	76.3	9.5	32.4
2007	3826	3408.5	1396.1	552.7	854.7	141.4	348.6	73.3	9.4	32.1
2008	3744	3344.0	1327.1	533.3	835.9	155.5	377.7	73.9	9.1	31.5
2009	3442	3113.4	1226.6	442.5	814.7	152.8	368.2	72.3	7.8	28.4
2010	3544	3192.2	1244.6	475.3	809.3	161.7	390.3	74.5	7.7	28.9
2011	3446	3092.1	1236.0	463.2	800.0	139.0	342.5	73.6	8.0	29.7
2012	3372	3031.9	1218.6	445.5	770.7	139.2	351.3	71.3	6.9	28.6
2013	3293	2953.5	1158.1	427.4	764.7	141.1	354.0	71.2	6.9	30.2
2014	3158	2810.9	1097.1	414.8	769.9	123.6	298.5	71.1	6.7	29.3
2015	3213	2864.2	1104.5	423.6	784.9	129.2	315.9	70.4	6.8	29.0
2016	3225	2866.8	1079.6	428.7	802.1	129.6	322.3	70.6	6.0	27.8
2017	3256	2880.1	1073.7	435.8	816.1	130.0	319.4	70.7	6.0	28.3
2018	3188	2808.5	1014.3	436.7	817.6	126.2	309.0	71.6	5.6	27.6
2019	3049	2674.0	896.4	423.0	823.7	123.8	302.7	71.2	6.0	27.2
2020	2697	2415.3	769.7	407.3	712.2	120.8	301.5	72.7	6.0	25.1
2021	2886	2577.1	831.6	433.7	773.4	128.5	305.9	72.4	6.9	24.7

EU27_2020 - CO₂ EMISSIONSMillion ton CO₂*CO₂ emissions without LULUCF, with indirect CO₂ and including international aviation

Source: EEA, June 2023, Eurostat 2023

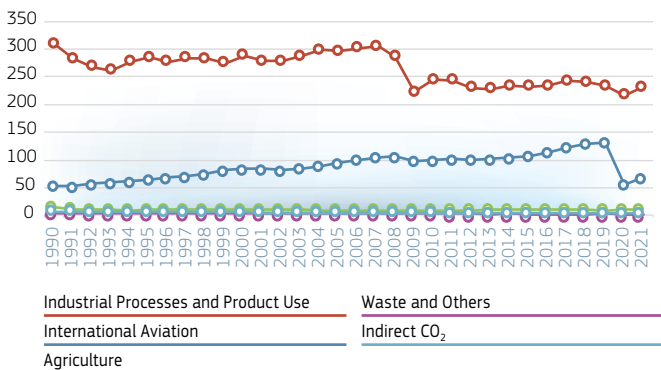
Methodology and Notes: see appendices

4.1.2 CO₂ Emissions

CO₂ EMISSIONS - NOT ENERGY RELATED EU27_2020

[Million ton CO ₂]	CO ₂ emissions - National total*	of which:					Indirect CO ₂	International aviation	International navigation
		CO ₂ emissions other than from energy	Industrial Processes and Product U	Agriculture	Waste and Others				
1990	3933.7	334.5	310.0	14.2	3.8	6.4	53.7	101.0	
1995	3712.9	304.2	285.0	9.9	3.6	5.7	65.2	101.4	
2000	3697.3	307.1	288.9	10.2	2.9	5.1	84.3	126.7	
2001	3753.5	296.1	278.3	10.0	2.9	4.9	83.6	131.2	
2002	3751.8	296.4	278.8	9.7	3.1	4.8	81.2	137.3	
2003	3839.6	304.2	286.7	9.7	3.2	4.7	84.8	140.1	
2004	3855.9	315.5	298.6	9.3	3.0	4.6	89.7	148.1	
2005	3842.8	313.0	296.1	9.2	3.2	4.6	95.3	152.2	
2006	3857.6	318.6	301.9	8.8	3.3	4.6	100.4	162.9	
2007	3826.1	322.1	305.6	8.9	3.1	4.5	105.0	170.0	
2008	3743.9	302.4	286.2	8.8	3.1	4.3	106.5	167.8	
2009	3441.5	238.0	222.3	8.8	3.0	3.9	97.9	149.2	
2010	3544.2	260.1	244.3	8.8	3.1	3.9	99.6	150.1	
2011	3446.1	260.0	244.2	9.0	2.9	3.8	102.0	148.9	
2012	3372.2	246.3	230.6	9.3	2.9	3.6	100.9	138.7	
2013	3292.9	244.4	228.5	9.8	2.7	3.4	101.8	130.9	
2014	3157.9	249.8	233.8	9.9	2.8	3.4	103.8	127.2	
2015	3213.1	248.0	232.3	9.8	2.5	3.4	107.7	127.8	
2016	3225.0	250.1	233.8	10.4	2.6	3.3	114.2	131.5	
2017	3255.7	258.4	242.5	10.0	2.5	3.3	123.2	133.3	
2018	3188.1	255.8	240.0	10.2	2.5	3.1	129.3	136.5	
2019	3048.8	248.9	233.7	9.4	2.8	3.0	131.9	135.1	
2020	2697.4	232.4	216.5	10.1	2.7	3.1	55.7	119.6	
2021	2886.3	247.6	231.7	9.8	2.7	3.3	68.5	127.6	

CO₂ EMISSIONS - EU27_2020 - OTHER THAN FUEL COMBUSTION MILLION TON CO₂



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

Source: EEA, June 2023, Eurostat 2023

Methodology and Notes: see appendices

4.2 Main Emissions Indicators

4.2.1 Greenhouse Gas Emissions per Capita

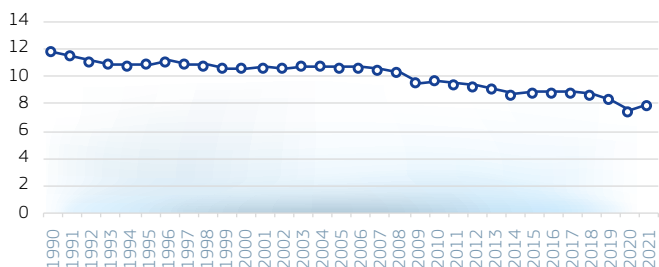
MAIN EMISSIONS INDICATORS

GHG PER CAPITA

[t CO ₂ eq./cap]	1990	2010	2015	2019	2020	2021
EU27_2020	11.8	9.7	8.8	8.3	7.5	7.9
Index1990	100.0%	82.5%	75.1%	70.9%	63.8%	67.3%
BE	15.0	12.7	11.0	10.6	9.6	10.0
BG	11.4	8.1	8.5	7.8	7.0	7.9
CZ	19.4	13.6	12.4	11.8	10.7	11.2
DK	14.3	12.1	9.2	8.4	7.5	7.7
DE	16.0	11.7	11.3	9.9	9.0	9.4
EE	25.7	15.9	13.8	11.1	8.6	9.6
IE	16.2	14.4	13.7	13.2	12.1	12.7
EL	10.5	11.0	9.1	8.4	7.2	7.5
ES	7.5	7.9	7.5	7.0	5.9	6.3
FR	9.5	8.7	8.5	7.7	7.8	7.4
HR	6.7	6.6	5.9	6.2	5.9	6.1
IT	9.3	9.0	7.5	7.3	6.5	7.1
CY	11.1	12.7	10.8	11.4	10.0	10.4
LV	9.9	5.8	5.6	6.1	5.6	5.8
LT	13.1	6.7	7.0	7.4	7.3	7.3
LU	34.6	21.1	25.4	20.9	21.5	20.9
HU	9.2	6.7	6.4	6.7	6.5	6.6
MT	7.9	7.4	7.4	6.4	6.3	6.3
NL	15.3	13.6	12.2	11.2	9.9	10.0
AT	10.5	10.4	9.4	9.4	8.4	8.8
PL	12.5	10.8	10.2	10.3	9.8	10.6
PT	6.1	6.8	6.9	6.7	5.8	5.7
RO	11.1	6.3	5.9	6.0	5.8	6.0
SI	9.4	9.7	8.2	8.3	7.6	7.6
SK	14.0	8.5	7.6	7.4	6.8	7.6
FI	14.5	14.4	10.4	10.0	8.8	8.8
SE	8.5	7.1	5.7	5.2	4.6	4.7

GHG PER CAPITA [t CO₂ eq./cap]

EU27_2020



Source: EEA, June 2023, Eurostat 2023

Methodology and Notes: see appendices

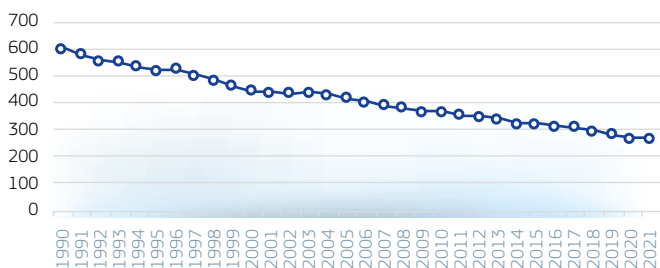
4.2.2 Greenhouse Gas to GDP Intensity

MAIN EMISSIONS INDICATORS GHG TO GDP INTENSITY

[t CO ₂ /M€'15]	1990	2010	2015	2019	2020	2021
EU27_2020	599.0	367.9	321.0	279.8	267.5	267.5
Index1990	100.0%	61.4%	53.6%	46.7%	44.7%	44.6%
BE	563.3	352.9	296.2	272.6	262.5	257.3
BG	2921.3	1398.2	1332.1	1056.1	973.7	1017.0
CZ	1871.9	911.6	768.0	644.9	620.8	627.6
DK	402.2	262.0	191.6	161.6	149.1	146.3
DE	599.3	343.8	304.5	254.4	238.6	243.0
EE	3047.7	1211.9	878.5	608.5	476.2	489.5
IE	779.9	342.4	244.4	192.8	169.6	157.2
EL	745.7	563.4	560.5	490.6	459.2	441.3
ES	440.1	340.5	323.0	275.7	263.4	266.2
FR	369.3	268.3	257.6	220.1	240.5	214.7
HR	777.8	624.1	551.7	493.1	510.7	464.3
IT	372.4	310.8	275.1	251.5	247.1	251.0
CY	722.6	532.2	510.9	443.7	413.2	404.7
LV	1270.1	590.3	451.4	419.6	394.2	388.8
LT	1744.6	674.7	547.2	475.6	469.0	444.9
LU	614.3	217.8	264.1	215.5	227.5	213.2
HU	1183.7	660.1	556.4	494.2	499.1	475.3
MT	763.7	400.6	326.7	242.2	273.7	245.5
NL	542.3	338.4	298.5	255.3	235.6	229.3
AT	368.6	265.6	235.4	222.1	214.6	215.7
PL	2700.9	1110.2	897.6	757.7	739.9	745.9
PT	470.7	386.0	397.8	342.6	325.0	301.9
RO	2486.5	910.3	735.1	591.7	592.9	577.8
SI	768.8	522.1	437.2	380.6	368.3	343.1
SK	1949.3	648.4	512.6	448.2	430.2	454.8
FI	514.1	367.0	269.8	241.2	217.2	210.7
SE	273.0	162.6	122.4	107.5	97.2	95.5

GHG TO GDP INTENSITY [t CO₂/M€'15]

EU27_2020



Source: EEA, June 2023, Eurostat 2023

Methodology and Notes: see appendices

5

Country Profiles



5

Country Profiles

Summary

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Sources: ESTAT – database – May 2021; EEA – UNFCCC database – June 2021; ECFIN – AMECO database – May 2021; ESTAT – SHARES – March 2021; ESTAT – CHP Survey, data 2017 – July 2021; ESTAT – Market Survey – June 2021

5.1 European Union - 27 countries (from 2020)

Mtoe unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	675.9	695.4	657.2	617.6	573.0	597.6
Solid fossil fuels	189.8	146.6	133.8	100.1	83.6	91.0
of which hard coal	99.7	62.8	52.1	37.1	32.6	33.2
of which brown coal	90.0	83.8	81.7	63.0	51.0	57.8
Oil and petroleum products	44.6	33.1	28.3	22.7	21.3	20.1
of which crude oil	42.4	30.8	26.3	20.4	19.3	18.1
Natural gas	112.2	109.5	72.4	52.2	41.2	38.0
Nuclear	222.1	219.6	203.8	196.2	175.2	186.7
Renewables and biofuels	96.0	168.1	200.4	227.0	233.3	244.0
Wastes Non-Renewable	5.9	10.6	12.4	13.7	13.9	13.9
Net Imports	866.0	895.4	834.5	908.0	792.4	812.1
Solid fossil fuels	83.3	93.7	96.0	74.3	50.3	61.0
of which hard coal	79.0	92.0	95.9	74.6	51.7	61.5
Oil and petroleum products	578.5	550.2	514.6	527.3	460.4	459.0
of which crude oil and NGL	542.3	517.3	519.9	514.9	449.4	454.7
Natural gas	202.8	245.9	220.6	300.5	273.5	283.9
Renewables and biofuels	0.3	5.1	3.6	5.1	6.4	6.9
Electricity	0.8	0.4	-0.6	0.3	1.2	0.6
Gross inland consumption	1 498.2	1 559.0	1 448.2	1 458.2	1 340.0	1 421.6
Solid fossil fuels	279.0	245.1	234.1	171.9	140.5	162.6
of which hard coal	182.7	159.4	152.4	109.8	90.1	103.0
of which brown coal	91.9	84.9	82.6	63.5	52.1	58.9
Oil and petroleum products	579.8	538.9	491.6	502.2	437.2	460.4
of which crude and NGL	586.0	548.2	541.9	532.8	467.9	478.0
Natural gas	308.6	362.8	296.1	335.1	327.0	340.2
Nuclear	222.1	219.6	203.8	196.2	175.2	186.7
Renewables and biofuels	96.4	173.3	204.0	232.0	239.2	251.5
Electricity	0.8	0.4	-0.6	0.3	1.2	0.6
Waste non-renewable	5.9	10.7	12.8	14.1	14.4	14.5
Available for final consumption	1 022.6	1 073.2	993.9	1 033.1	1 033.1	975.8
Final non-energy consumption	101.4	98.3	88.3	90.7	90.7	90.0
Final energy consumption	926.1	973.2	909.0	937.5	937.5	885.1
by Fuel/Product						
Solid fossil fuels	33.5	27.2	23.5	19.8	19.1	19.0
Oil and petroleum products	397.1	366.5	338.6	345.6	309.8	327.5
Natural gas	205.1	217.7	192.4	199.2	194.1	212.2
Renewables and biofuels	48.8	85.8	89.6	104.1	103.7	110.4
Solid biofuels and renewable waste	46.7	67.6	65.7	69.8	68.2	72.6
Solar thermal	0.5	1.5	2.1	2.4	2.5	2.5
Geothermal	0.4	0.4	0.4	0.6	0.6	0.6
Liquid biofuels	0.7	12.4	13.3	16.6	16.9	17.7
Biogases	0.3	1.4	2.3	2.6	2.7	2.4
Waste non-renewable	1.0	2.8	3.7	4.7	5.0	5.0
Electricity	189.0	215.9	210.7	213.1	205.0	213.9
Heat	42.9	51.6	45.1	46.0	43.9	47.3
by Sector						
Industry	271.0	243.9	233.5	239.2	230.9	240.4
Transport	262.9	280.0	272.5	288.7	251.4	274.8
Residential	248.6	278.9	245.0	248.2	248.1	261.8
Services	104.8	140.0	128.5	128.6	121.2	129.4
Agriculture and Fishing	28.4	26.7	25.9	29.4	29.8	29.8
Others	10.5	3.7	3.6	3.4	3.6	3.8

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	613.2	790.2	889.7	946.4	962.9	991.0
Combustible Fuels	340.1	414.8	412.2	395.7	388.1	379.4
Nuclear	124.9	120.9	112.5	110.0	106.0	105.1
Hydro	134.7	143.0	148.2	150.8	151.1	151.7
Wind	12.3	79.0	127.2	167.1	177.1	188.4
Solar	0.2	30.6	87.7	120.2	138.5	164.2
Geothermal	0.6	0.8	0.8	0.9	0.9	0.9
Tide Wave and Ocean	0.2	0.2	0.2	0.2	0.2	0.2
Gross Electricity Generation by Fuel [TWh]	2 656.9	2 979.7	2 900.6	2 902.4	2 784.9	2 906.5
Solid fossil fuels peat and products oil shale	813.9	721.6	718.8	460.4	357.8	425.0
Oil and petroleum products	172.9	82.1	63.3	52.0	47.8	46.7
Natural gas	362.7	622.1	428.5	599.6	586.5	579.8
Nuclear	859.9	854.5	786.7	765.3	683.5	731.7
Renewables and biofuels	435.9	682.0	883.8	1 003.6	1 088.3	1 101.9
Wastes non-RES	11.6	17.4	19.5	21.5	21.0	21.4
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			113.8	133.3	133.4	129.9
CHP Electricity Generation [TWh]			343.5	348.4	335.1	346.4
CHP in Total Electricity Generation [%]			11.9	11.7	12.0	11.9
CHP Heat Production [PJ]			2 667.5	2 629.2	2 556.0	2 620.2
Transport Fuels [ktoe]						
Final consumption petroleum products	355 244	337 044	314 872	323 110	291 041	307 148
of which LPG	19 465	18 039	16 217	16 597	15 184	15 648
of which motor gasoline	110 381	76 821	65 318	67 669	58 206	63 644
of which Gas/Diesel oil	225 397	242 184	233 338	238 843	217 651	227 856
Final consumption biofuels	713	12 442	13 330	16 636	16 886	17 721
pure and blended biogasoline	59	2 496	2 345	2 725	2 678	3 047
pure and blended biodiesel	640	9 701	10 927	13 785	14 030	14 519
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	1 396.4	1 457.6	1 352.7	1 354.1	1 235.8	1 311.1
Final energy consumption 2020-2030 [Mtoe]	979.8	1 024.5	957.9	986.0	906.3	968.4
Primary Energy Intensity 2020-2030 [toe/M€15]	137	125	111	102	98	99
Energy Intensity (GAE/GDP2015) [toe/M€15]	147	134	119	110	107	107
Energy per Capita (GIC/pop) [kgoe/capita]	3 496	3 538	3 264	3 266	2 996	3 179
Final Electricity per Capita [KWh/capita]	6 201	6 762	6 538	6 501	6 226	6 499
Import Dependency [%]	57.8%	57.4%	57.6%	62.3%	59.1%	57.1%
of Solid fossil fuels	29.8%	38.2%	41.0%	43.3%	35.8%	37.5%
of Hard Coal	43.2%	57.7%	63.0%	67.9%	57.4%	59.7%
of Oil and petroleum products	99.8%	102.1%	104.7%	105.0%	105.3%	99.7%
of Crude and NGL	92.5%	94.4%	95.9%	96.6%	96.1%	95.1%
of Natural Gas	65.7%	67.8%	74.5%	89.7%	83.6%	83.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)	14.41%	17.82%	19.89%	22.04%	21.81%	
RE-T - Renewable energy in Transport [%]	5.50%	6.75%	8.80%	10.25%	9.09%	
RES-E - Renewable Electricity Generation [%]	21.28%	29.65%	34.09%	37.41%	37.63%	
RES-H&C - Renewable Heating and Cooling [%]	16.99%	20.31%	22.43%	22.98%	22.90%	
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	3 697.3	3 544.2	3 213.1	3 048.8	2 697.4	2 886.3
GHG emissions - National total*	4 537.0	4 281.1	3 920.9	3 724.3	3 359.7	3 541.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	92.2%	87.0%	79.7%	75.7%	68.3%	72.0%
Total GHG per capita [t CO ₂ eq./capita]	10.6	9.7	8.8	8.3	7.5	7.9

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.2 Belgium

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	13.4	15.0	10.3	15.2	13.3	17.4
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	12.4	11.6	6.3	10.6	8.4	12.2
Renewables and biofuels	0.5	2.5	3.1	3.6	4.0	4.2
Wastes, Non-Renewable	0.4	0.7	0.7	0.6	0.6	0.7
Net Imports	50.6	53.6	50.1	49.9	45.1	45.6
Solid fossil fuels	7.3	3.7	3.3	3.1	2.4	2.4
of which hard coal	6.6	3.7	2.8	2.5	2.1	2.0
Oil and petroleum products	29.6	32.5	30.4	30.6	26.8	27.7
of which crude oil and NGL	34.2	33.5	32.4	34.6	27.7	28.9
Natural gas	13.3	16.8	13.9	15.5	15.0	15.2
Renewables and biofuels	0.1	0.5	0.7	0.8	0.9	1.0
Electricity	0.4	0.0	1.8	-0.2	0.0	-0.7
Gross inland consumption	59.4	60.7	53.7	56.1	51.4	56.8
Solid fossil fuels	8.0	3.8	3.4	3.1	2.4	2.6
of which hard coal	7.0	3.7	2.9	2.5	2.0	2.1
of which brown coal	0.2	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	24.2	24.5	23.5	22.0	19.7	21.3
of which crude oil and NGL	34.1	33.5	32.4	34.6	27.6	29.1
Natural gas	13.4	16.8	14.0	15.2	15.2	15.2
Nuclear	12.4	11.6	6.3	10.6	8.4	12.2
Renewables and biofuels	0.6	3.0	3.7	4.4	4.9	5.1
Electricity	0.4	0.0	1.8	-0.2	0.0	-0.7
Waste, non-renewable	0.4	0.7	0.7	0.6	0.6	0.7
Available for final consumption	40.8	43.0	41.0	40.1	40.1	38.2
Final non-energy consumption	7.0	7.0	7.7	7.3	7.3	7.1
Final energy consumption	33.6	35.5	33.2	32.6	32.6	30.9
by Fuel/Product						
Solid fossil fuels	0.9	0.5	0.5	0.5	0.4	0.4
Oil and petroleum products	15.1	14.8	14.2	12.9	11.8	12.4
Natural gas	9.3	10.0	8.9	9.5	9.1	10.2
Renewables and biofuels	0.4	1.7	1.7	2.0	2.1	2.4
Solid biofuels and renewable waste	0.4	1.2	1.2	1.2	1.2	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	0.4	0.3	0.5	0.7	0.8
Biogases	0.0	0.0	0.1	0.1	0.1	0.1
Waste, non-renewable	0.1	0.2	0.2	0.2	0.1	0.1
Electricity	6.7	7.3	7.0	7.0	6.8	7.0
Heat	0.5	0.6	0.5	0.5	0.4	0.5
by Sector						
Industry	11.6	11.0	10.6	10.3	10.0	10.6
Transport	8.2	9.0	8.9	8.8	7.7	8.5
Residential	9.5	9.6	8.2	7.9	7.9	8.6
Services	3.5	5.0	4.6	4.6	4.4	4.5
Agriculture and Fishing	0.8	0.9	0.8	0.9	0.9	0.9
Others	0.1	0.1	0.0	0.0	0.0	0.0

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	15.7	18.8	21.2	23.9	25.7	26.2
Combustible Fuels	8.5	9.5	8.5	8.1	8.1	8.0
Nuclear	5.7	5.9	5.9	5.9	5.9	5.9
Hydro	1.4	1.4	1.4	1.4	1.4	1.4
Wind	0.0	0.9	2.2	3.9	4.7	4.9
Solar	0.0	1.0	3.1	4.6	5.6	6.0
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]	84.0	94.3	69.2	93.2	89.0	100.0
Solid fossil fuels, peat and products, oil shale	12.9	4.2	2.1	0.1	0.1	0.0
Oil and petroleum products	0.8	0.4	0.2	0.1	0.1	0.2
Natural gas	19.1	32.6	24.1	28.0	28.6	24.5
Nuclear	48.2	47.9	26.1	43.5	34.4	50.3
Renewables and biofuels	2.3	8.0	15.6	20.4	24.5	23.7
Wastes non-RES	0.8	1.2	1.2	1.2	1.2	1.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			2.4	2.4	2.4	2.8
CHP Electricity Generation [TWh]			12.5	12.8	13.0	13.1
CHP in Total Electricity Generation [%]			17.7	13.7	13.0	13.1
CHP Heat Production [PJ]			104.4	94.8	93.4	95.0
Transport Fuels [ktoe]						
Final consumption petroleum products	13515	13265	12747	11951	10786	11264
of which LPG	414	337	400	460	463	474
of which motor gasoline	2359	1288	1375	1851	1539	1868
of which Gas/Diesel oil	10741	11639	10972	9640	8784	8922
Final consumption biofuels	0	384	266	490	706	779
pure and blended biogasoline	0	57	41	129	130	161
pure and blended biodiesel	0	316	223	359	576	617
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	52.4	53.4	45.7	48.4	43.9	48.8
Final energy consumption 2020-2030 [Mtoe]	37.7	38.2	36.0	35.8	33.2	35.9
Primary Energy Intensity 2020-2030 [toe/M€15]	159	137	110	108	104	109
Energy Intensity (GAE/GDP2015) [toe/M€15]	180	155	129	126	122	126
Energy per Capita (GIC/pop) [kgoe/capita]	5805	5599	4777	4896	4464	4915
Final Electricity per Capita [KWh/capita]	8205	8701	6162	8137	7720	8651
Import Dependency [%]	85.2%	88.4%	93.3%	88.9%	87.7%	80.3%
of Solid fossil fuels	91.2%	97.5%	95.7%	101.8%	102.1%	92.4%
of Hard Coal	93.5%	100.0%	96.3%	102.7%	104.2%	93.5%
of Oil and petroleum products	122.3%	132.7%	129.5%	139.2%	136.0%	129.8%
of Crude and NGL	100.2%	99.9%	100.0%	100.0%	100.5%	99.2%
of Natural Gas	99.3%	100.3%	99.3%	101.9%	99.2%	99.9%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		6.00%	8.06%	9.93%	13.00%	13.01%
RE-T - Renewable energy in Transport [%]		4.80%	3.92%	6.82%	11.03%	10.26%
RES-E - Renewable Electricity Generation [%]		7.33%	15.57%	20.82%	25.12%	26.01%
RES-H&C - Renewable Heating and Cooling [%]		6.71%	7.94%	8.32%	8.45%	9.24%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	131.4	118.8	105.5	104.6	94.7	100.2
GHG emissions - National total*	153.6	137.9	123.4	121.7	110.9	115.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	103.1%	92.5%	82.8%	81.7%	74.4%	77.5%
Total GHG per capita [t CO ₂ eq./capita]	15.0	12.7	11.0	10.6	9.6	10.0

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.3 Bulgaria

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	9.9	10.5	12.0	11.7	10.8	12.1
Solid fossil fuels	4.3	4.9	5.8	4.7	3.7	4.7
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	4.2	4.9	5.8	4.7	3.7	4.7
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	0.1	0.1	0.0	0.0	0.0
Nuclear	4.7	3.8	3.9	4.3	4.3	4.3
Renewables and biofuels	0.8	1.5	2.1	2.5	2.6	3.0
Wastes, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Net Imports	8.7	7.2	6.8	7.2	6.8	7.0
Solid fossil fuels	2.3	1.7	0.7	0.4	0.4	0.5
of which hard coal	2.2	1.7	0.7	0.4	0.4	0.5
Oil and petroleum products	4.1	4.2	4.5	5.0	4.3	4.5
of which crude oil and NGL	5.3	5.5	6.2	7.1	4.9	4.2
Natural gas	2.7	2.1	2.5	2.5	2.4	2.7
Renewables and biofuels	0.0	-0.1	0.0	-0.1	0.0	0.0
Electricity	-0.4	-0.7	-0.9	-0.5	-0.3	-0.8
Gross inland consumption	18.6	17.9	18.7	18.8	17.8	19.3
Solid fossil fuels	6.4	6.9	6.6	5.2	4.3	5.3
of which hard coal	2.2	1.9	0.7	0.6	0.5	0.5
of which brown coal	4.2	4.9	5.8	4.6	3.7	4.7
Oil and petroleum products	4.2	4.0	4.3	4.8	4.3	4.6
of which crude oil and NGL	5.4	5.6	6.1	6.9	5.0	4.3
Natural gas	2.9	2.3	2.6	2.4	2.5	2.8
Nuclear	4.7	3.8	3.9	4.3	4.3	4.3
Renewables and biofuels	0.8	1.5	2.1	2.5	2.5	2.9
Electricity	-0.4	-0.7	-0.9	-0.5	-0.3	-0.8
Waste, non-renewable	0.0	0.0	0.0	0.1	0.1	0.1
Available for final consumption	9.6	9.2	10.1	10.3	10.3	10.3
Final non-energy consumption	1.0	0.4	0.6	0.5	0.5	0.5
Final energy consumption	8.6	8.7	9.4	9.7	9.7	9.5
by Fuel/Product						
Solid fossil fuels	0.6	0.4	0.3	0.3	0.3	0.4
Oil and petroleum products	3.0	3.0	3.2	3.6	3.4	3.7
Natural gas	1.4	1.1	1.3	1.1	1.2	1.3
Renewables and biofuels	0.5	1.0	1.3	1.4	1.6	1.5
Solid biofuels and renewable waste	0.5	0.9	1.0	1.1	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	0.1	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	0.1	0.1
Electricity	2.1	2.3	2.4	2.6	2.5	2.7
Heat	0.9	1.0	0.8	0.5	0.6	0.6
by Sector						
Industry	3.6	2.5	2.7	2.7	2.6	2.8
Transport	1.9	2.7	3.2	3.4	3.2	3.4
Residential	2.1	2.2	2.2	2.2	2.4	2.4
Services	0.7	1.0	1.1	1.3	1.1	1.3
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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	11.1	10.0	10.9	11.2	11.0	11.2
Combustible Fuels	5.7	4.6	4.0	4.1	3.8	3.9
Nuclear	3.5	1.9	2.0	2.0	2.0	2.0
Hydro	1.9	3.0	3.2	3.4	3.4	3.4
Wind	0.0	0.5	0.7	0.7	0.7	0.7
Solar	0.0	0.0	1.0	1.0	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]	40.9	46.6	49.2	44.2	40.7	47.5
Solid fossil fuels, peat and products, oil shale	16.9	22.6	22.5	17.2	13.5	17.1
Oil and petroleum products	0.7	0.4	0.2	0.4	0.3	0.4
Natural gas	2.2	2.0	1.9	2.2	2.3	3.0
Nuclear	18.2	15.2	15.4	16.6	16.6	16.5
Renewables and biofuels	3.0	6.4	9.2	7.9	8.0	10.6
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.1	1.2	1.3	1.3
CHP Electricity Generation [TWh]			2.9	3.9	3.8	4.2
CHP in Total Electricity Generation [%]			6.0	8.8	8.1	8.8
CHP Heat Production [PJ]			31.9	39.6	36.2	49.8
Transport Fuels [ktoe]						
Final consumption petroleum products	2 162	2 658	3 037	3 278	3 109	3 342
of which LPG	245	418	514	485	460	451
of which motor gasoline	697	611	520	473	459	501
of which Gas/Diesel oil	1 219	1 630	2 002	2 320	2 190	2 389
Final consumption biofuels	0	13	146	179	172	168
pure and blended biogasoline	0	0	32	32	27	21
pure and blended biodiesel	0	10	114	148	146	147
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	17.7	17.4	18.0	18.2	17.2	18.6
Final energy consumption 2020-2030 [Mtoe]	9.1	8.8	9.5	9.9	9.5	10.2
Primary Energy Intensity 2020-2030 [toe/M€15]	644	406	392	351	345	347
Energy Intensity (GAE/GDP2015) [toe/M€15]	680	418	408	364	358	360
Energy per Capita (GIC/pop) [kgoe/capita]	2 275	2 414	2 594	2 692	2 566	2 790
Final Electricity per Capita [KWh/capita]	4 996	6 284	6 831	6 321	5 858	6 872
Import Dependency [%]	46.6%	40.4%	36.6%	38.3%	38.1%	36.3%
of Solid fossil fuels	35.2%	24.5%	11.2%	7.2%	9.2%	10.3%
of Hard Coal	101.0%	86.0%	96.1%	57.6%	69.0%	100.2%
of Oil and petroleum products	97.5%	104.3%	103.9%	104.2%	99.4%	99.0%
of Crude and NGL	98.7%	99.1%	100.5%	102.6%	99.4%	98.6%
of Natural Gas	93.5%	92.6%	97.0%	100.4%	96.4%	96.2%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.93%	18.26%	21.55%	23.32%	17.02%
RE-T - Renewable energy in Transport [%]		1.50%	6.49%	7.89%	9.10%	7.61%
RES-E - Renewable Electricity Generation [%]		12.36%	18.98%	23.51%	23.59%	18.79%
RES-H&C - Renewable Heating and Cooling [%]		24.33%	28.90%	35.42%	37.18%	25.62%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	45.7	48.4	48.7	43.0	37.0	42.8
GHG emissions - National total*	57.7	60.0	61.0	54.7	48.5	54.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	57.9%	60.1%	61.2%	54.9%	48.6%	54.6%
Total GHG per capita [t CO ₂ eq./capita]	7.0	8.1	8.5	7.8	7.0	7.9

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.4 Czechia

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	30.8	31.9	28.6	26.6	23.5	24.4
Solid fossil fuels	25.0	20.7	16.8	13.4	10.2	10.5
of which hard coal	9.4	7.4	5.3	2.2	1.4	1.5
of which brown coal	15.6	13.3	11.5	11.1	8.8	9.0
Oil and petroleum products	0.4	0.3	0.2	0.2	0.1	0.1
of which crude oil	0.2	0.2	0.1	0.1	0.1	0.1
Natural gas	0.2	0.2	0.2	0.2	0.2	0.2
Nuclear	3.5	7.2	6.7	7.5	7.5	7.6
Renewables and biofuels	1.6	3.3	4.4	5.0	5.2	5.6
Wastes, Non-Renewable	0.1	0.2	0.3	0.4	0.4	0.4
Net Imports	9.4	11.5	13.5	17.5	15.6	17.1
Solid fossil fuels	-4.7	-2.9	-0.3	1.2	1.6	1.8
of which hard coal	-3.5	-2.7	-0.4	1.5	1.7	1.9
Oil and petroleum products	7.5	9.0	8.7	9.6	8.7	9.2
of which crude oil and NGL	5.6	7.8	7.2	7.9	6.3	6.9
Natural gas	7.5	6.8	6.2	7.9	6.3	7.2
Renewables and biofuels	0.0	-0.1	0.0	-0.1	0.0	-0.1
Electricity	-0.9	-1.3	-1.1	-1.1	-0.9	-1.0
Gross inland consumption	41.3	45.5	42.1	42.9	40.3	42.8
Solid fossil fuels	21.6	18.8	16.4	14.2	12.3	12.9
of which hard coal	6.2	5.1	4.9	3.5	3.4	3.8
of which brown coal	15.6	13.5	11.2	10.7	8.9	9.1
Oil and petroleum products	7.9	9.3	8.9	9.9	8.6	9.5
of which crude oil and NGL	5.8	8.0	7.3	8.0	6.2	7.2
Natural gas	7.5	8.1	6.5	7.2	7.3	7.8
Nuclear	3.5	7.2	6.7	7.5	7.5	7.6
Renewables and biofuels	1.6	3.2	4.4	4.9	5.1	5.5
Electricity	-0.9	-1.3	-1.1	-1.1	-0.9	-1.0
Waste, non-renewable	0.1	0.2	0.3	0.4	0.4	0.4
Available for final consumption	26.4	27.7	25.9	27.2	27.2	26.1
Final non-energy consumption	2.1	2.9	2.5	3.0	3.0	2.5
Final energy consumption	24.0	24.1	23.1	24.2	24.2	23.8
by Fuel/Product						
Solid fossil fuels	4.2	1.9	1.6	1.4	1.4	1.4
Oil and petroleum products	5.2	6.3	6.4	6.7	6.4	6.9
Natural gas	5.9	6.1	5.0	5.2	5.2	5.5
Renewables and biofuels	1.2	2.3	2.8	3.2	3.4	3.7
Solid biofuels and renewable waste	1.1	2.0	2.3	2.5	2.6	2.9
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	0.2	0.3	0.3	0.4	0.4
Biogases	0.0	0.1	0.1	0.1	0.2	0.2
Waste, non-renewable	0.1	0.2	0.2	0.3	0.3	0.3
Electricity	4.2	4.7	4.7	5.0	4.9	5.2
Heat	2.6	2.4	2.0	2.0	2.0	2.2
by Sector						
Industry	9.2	6.9	6.5	6.6	6.6	7.0
Transport	4.2	5.9	6.2	6.8	6.4	6.9
Residential	6.4	7.4	6.8	7.0	7.1	7.9
Services	3.0	3.2	3.0	3.2	3.0	3.0
Agriculture and Fishing	0.7	0.5	0.6	0.6	0.6	0.6
Others	0.5	0.1	0.1	0.0	0.0	0.0

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	15.3	20.1	21.9	22.0	21.5	21.0
Combustible Fuels	11.5	12.0	13.0	13.0	12.4	11.9
Nuclear	1.8	3.9	4.3	4.3	4.3	4.3
Hydro	2.1	2.2	2.3	2.3	2.3	2.3
Wind	0.0	0.2	0.3	0.3	0.3	0.3
Solar	0.0	1.7	2.1	2.1	2.2	2.2
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]	73.5	85.8	83.8	86.9	81.4	84.9
Solid fossil fuels, peat and products, oil shale	52.8	46.9	41.1	37.3	31.0	34.2
Oil and petroleum products	0.4	0.2	0.1	0.1	0.1	0.1
Natural gas	3.9	4.2	5.0	7.9	8.5	7.9
Nuclear	13.6	28.0	26.8	30.2	30.0	30.7
Renewables and biofuels	2.8	6.5	10.7	11.2	11.7	11.9
Wastes non-RES	0.0	0.0	0.1	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			4.6	8.5	8.3	8.0
CHP Electricity Generation [TWh]			11.8	9.9	10.2	10.6
CHP in Total Electricity Generation [%]			14.0	11.4	12.0	12.5
CHP Heat Production [PJ]			106.0	99.1	100.2	99.0
Transport Fuels [ktoe]						
Final consumption petroleum products	4646	5924	6142	6625	6193	6690
of which LPG	199	117	182	177	174	181
of which motor gasoline	1922	1868	1570	1602	1456	1586
of which Gas/Diesel oil	2526	3939	4390	4847	4563	4923
Final consumption biofuels	62	231	297	340	372	361
pure and blended biogasoline	0	58	63	74	66	55
pure and blended biodiesel	62	173	233	267	307	306
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	39.1	42.5	39.4	39.7	37.6	39.6
Final energy consumption 2020-2030 [Mtoe]	25.1	25.3	24.2	25.3	24.5	26.2
Primary Energy Intensity 2020-2030 [toe/M€15]	344	273	233	204	205	208
Energy Intensity (GAE/GDP2015) [toe/M€15]	363	292	248	221	219	225
Energy per Capita (GIC/pop) [kgoe/capita]	4017	4346	3990	4032	3771	3996
Final Electricity per Capita [KWh/capita]	7148	8203	7953	8163	7616	7938
Import Dependency [%]	22.7%	25.4%	32.1%	40.8%	38.8%	40.0%
of Solid fossil fuels	-22.0%	-15.3%	-1.8%	8.6%	12.8%	14.0%
of Hard Coal	-56.4%	-53.9%	-8.6%	41.5%	51.9%	50.7%
of Oil and petroleum products	95.3%	96.5%	97.8%	97.5%	101.2%	96.9%
of Crude and NGL	95.2%	97.5%	98.4%	98.6%	101.7%	96.2%
of Natural Gas	99.8%	84.8%	95.1%	109.8%	86.0%	92.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		10.51%	15.07%	16.24%	17.30%	17.67%
RE-T - Renewable energy in Transport [%]		5.22%	6.54%	7.84%	9.38%	7.49%
RES-E - Renewable Electricity Generation [%]		7.52%	14.07%	14.05%	14.81%	14.54%
RES-H&C - Renewable Heating and Cooling [%]		14.10%	19.79%	22.63%	23.53%	24.18%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	129.0	119.4	106.7	103.0	92.7	97.7
GHG emissions - National total*	152.9	142.1	130.2	125.4	114.1	119.4
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	75.9%	70.6%	64.7%	62.3%	56.6%	59.3%
Total GHG per capita [t CO ₂ eq./capita]	14.9	13.6	12.4	11.8	10.7	11.2

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.5 Denmark

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	27.8	23.4	16.2	12.5	9.5	9.6
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	18.3	12.5	7.9	5.2	3.6	3.3
of which crude oil	18.3	12.5	7.9	5.2	3.6	3.3
Natural gas	7.4	7.3	4.1	2.8	1.2	1.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.8	3.1	3.7	4.2	4.3	4.6
Wastes, Non-Renewable	0.3	0.4	0.4	0.4	0.4	0.4
Net Imports	-7.5	-3.4	2.4	7.0	7.4	5.6
Solid fossil fuels	3.8	2.6	1.5	1.3	0.5	0.1
of which hard coal	3.8	2.6	1.5	1.3	0.5	0.1
Oil and petroleum products	-8.5	-3.8	0.4	3.4	3.5	2.0
of which crude oil and NGL	-10.0	-5.1	-0.4	2.8	3.7	4.4
Natural gas	-2.9	-3.0	-1.4	-0.2	0.8	0.5
Renewables and biofuels	0.1	0.9	1.2	1.8	1.9	2.5
Electricity	0.1	-0.1	0.5	0.5	0.6	0.4
Gross inland consumption	19.5	20.3	17.3	17.3	16.0	16.9
Solid fossil fuels	4.0	3.8	1.8	0.9	0.7	1.0
of which hard coal	4.0	3.8	1.8	0.9	0.7	1.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	8.8	7.8	6.7	6.9	5.9	6.0
of which crude oil and NGL	8.3	7.4	7.5	7.8	7.3	7.8
Natural gas	4.4	4.4	2.9	2.5	2.1	1.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.9	4.0	5.0	6.0	6.2	7.1
Electricity	0.1	-0.1	0.5	0.5	0.6	0.4
Waste, non-renewable	0.3	0.4	0.4	0.4	0.4	0.4
Available for final consumption	14.3	15.0	13.7	14.2	14.2	13.8
Final non-energy consumption	0.3	0.3	0.3	0.2	0.2	0.2
Final energy consumption	14.0	14.8	13.5	13.5	13.5	13.1
by Fuel/Product						
Solid fossil fuels	0.3	0.1	0.1	0.1	0.1	0.1
Oil and petroleum products	6.3	5.9	5.1	5.1	4.7	4.8
Natural gas	1.7	1.7	1.5	1.5	1.5	1.6
Renewables and biofuels	0.7	1.4	1.6	1.6	1.6	1.7
Solid biofuels and renewable waste	0.6	1.2	1.2	1.1	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	0.2	0.2	0.3	0.3
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	2.8	2.8	2.6	2.6	2.6	2.8
Heat	2.3	2.8	2.5	2.5	2.4	2.7
by Sector						
Industry	2.9	2.4	2.1	2.3	2.3	2.5
Transport	4.0	4.4	4.2	4.2	3.9	4.0
Residential	4.2	5.0	4.4	4.4	4.3	4.5
Services	1.8	2.1	1.9	1.9	1.8	2.0
Agriculture and Fishing	1.0	0.9	0.8	0.7	0.7	0.7
Others	0.0	0.0	0.0	0.1	0.1	0.1

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	12.3	13.4	14.0	15.0	15.4	16.5
Combustible Fuels	9.9	9.6	8.1	7.8	7.8	7.8
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	3.8	5.1	6.1	6.3	7.0
Solar	0.0	0.0	0.8	1.1	1.3	1.7
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	38.9	28.9	29.5	28.7	33.0
Solid fossil fuels, peat and products, oil shale	16.7	17.0	7.1	3.3	3.1	4.4
Oil and petroleum products	4.4	0.8	0.3	0.2	0.3	0.3
Natural gas	8.8	7.9	1.8	2.1	1.2	1.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	5.6	12.4	18.9	23.1	23.4	26.1
Wastes non-RES	0.6	0.7	0.8	0.8	0.8	0.8
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			6.1	5.1	5.0	4.6
CHP Electricity Generation [TWh]			11.6	10.6	8.3	10.1
CHP in Total Electricity Generation [%]			40.0	35.9	25.0	30.5
CHP Heat Production [PJ]			93.3	91.9	80.8	86.9
Transport Fuels [ktoe]						
Final consumption petroleum products	5754	5586	4846	4768	4430	4529
of which LPG	81	59	55	64	63	69
of which motor gasoline	2055	1602	1412	1339	1194	1224
of which Gas/Diesel oil	3619	3925	3378	3365	3172	3236
Final consumption biofuels	0	28	215	226	251	257
pure and blended biogasoline	0	27	44	44	80	82
pure and blended biodiesel	0	1	171	183	172	175
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	19.1	19.9	16.8	16.9	15.5	16.4
Final energy consumption 2020-2030 [Mtoe]	14.7	15.5	14.2	14.3	13.1	13.8
Primary Energy Intensity 2020-2030 [toe/M€'15]	81	78	62	56	53	53
Energy Intensity (GAE/GDP2015) [toe/M€'15]	82	79	63	58	54	55
Energy per Capita (GIC/pop) [kgoe/capita]	3658	3673	3050	2975	2739	2886
Final Electricity per Capita [KWh/capita]	6757	7021	5113	5084	4934	5659
Import Dependency [%]	-38.3%	-16.8%	13.7%	40.4%	46.6%	33.5%
of Solid fossil fuels	94.9%	69.4%	85.0%	154.0%	74.7%	12.7%
of Hard Coal	94.8%	69.3%	85.0%	154.5%	74.5%	11.9%
of Oil and petroleum products	-96.5%	-49.0%	6.0%	49.6%	60.6%	33.0%
of Crude and NGL	-120.5%	-68.8%	-4.9%	36.0%	50.7%	56.7%
of Natural Gas	-64.8%	-68.3%	-48.2%	-7.2%	37.4%	27.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		21.89%	30.47%	37.02%	31.68%	34.72%
RE-T - Renewable energy in Transport [%]		1.15%	6.43%	7.11%	9.70%	10.55%
RES-E - Renewable Electricity Generation [%]		32.74%	51.29%	65.35%	65.32%	62.65%
RES-H&C - Renewable Heating and Cooling [%]		30.37%	39.54%	47.30%	51.07%	41.53%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	57.5	52.1	38.0	34.3	29.5	31.1
GHG emissions - National total*	74.4	67.1	52.3	48.5	43.8	45.1
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	101.5%	91.5%	71.4%	66.2%	59.8%	61.6%
Total GHG per capita [t CO ₂ eq./capita]	14.0	12.1	9.2	8.4	7.5	7.7

5.6 Germany

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	135.2	131.7	120.5	105.3	97.9	103.0
Solid fossil fuels	60.6	45.9	43.0	28.4	23.4	27.5
of which hard coal	24.2	9.2	4.6	0.0	0.0	0.0
of which brown coal	36.4	36.7	38.4	28.4	23.4	27.5
Oil and petroleum products	4.4	3.7	3.5	3.2	3.1	3.0
of which crude oil	3.2	2.5	2.5	2.0	1.9	1.8
Natural gas	15.8	11.1	6.3	4.4	4.0	3.9
Nuclear	43.8	36.2	23.6	19.3	16.6	17.8
Renewables and biofuels	9.0	30.9	39.8	45.7	46.6	46.6
Wastes, Non-Renewable	1.7	3.9	4.3	4.2	4.2	4.2
Net Imports	204.9	204.6	199.1	207.5	182.2	188.8
Solid fossil fuels	21.7	31.6	36.1	26.7	19.7	25.8
of which hard coal	17.2	29.1	35.2	26.5	19.6	25.2
Oil and petroleum products	126.1	112.2	108.4	108.4	97.3	94.8
of which crude oil and NGL	101.5	94.0	92.3	87.2	84.0	82.5
Natural gas	56.9	61.6	58.7	75.7	66.5	70.0
Renewables and biofuels	0.0	0.4	0.2	-0.4	0.4	-0.2
Electricity	0.3	-1.3	-4.2	-2.8	-1.6	-1.6
Gross inland consumption	342.4	338.2	318.1	308.1	284.9	295.9
Solid fossil fuels	84.8	79.1	79.4	56.5	44.7	53.2
of which hard coal	43.8	39.8	40.2	27.8	21.1	25.1
of which brown coal	37.2	36.7	38.1	28.5	23.4	27.5
Oil and petroleum products	131.1	113.2	109.9	110.0	99.5	97.8
of which crude oil and NGL	108.2	96.6	95.1	88.7	85.4	85.0
Natural gas	71.9	75.9	65.2	75.6	74.6	78.1
Nuclear	43.8	36.2	23.6	19.3	16.6	17.8
Renewables and biofuels	9.0	31.3	39.9	45.3	47.0	46.4
Electricity	0.3	-1.3	-4.2	-2.8	-1.6	-1.6
Waste, non-renewable	1.7	3.9	4.3	4.2	4.2	4.2
Available for final consumption	234.8	233.1	220.8	225.5	225.5	214.5
Final non-energy consumption	25.3	22.6	21.3	21.6	21.6	21.4
Final energy consumption	207.2	209.9	200.0	200.8	200.8	194.2
by Fuel/Product						
Solid fossil fuels	5.6	4.4	4.7	3.4	3.6	3.4
Oil and petroleum products	92.3	74.9	73.0	72.5	67.6	65.4
Natural gas	53.0	54.0	49.3	52.4	52.1	56.8
Renewables and biofuels	4.8	16.2	15.6	16.6	17.2	18.0
Solid biofuels and renewable waste	4.4	11.2	9.9	10.4	10.0	11.4
Solar thermal	0.1	0.5	0.7	0.7	0.8	0.7
Geothermal	0.0	0.1	0.1	0.1	0.1	0.1
Liquid biofuels	0.2	3.2	2.7	2.8	3.6	3.1
Biogases	0.1	0.8	1.3	1.4	1.4	1.1
Waste, non-renewable	0.0	1.0	1.0	1.3	1.3	1.2
Electricity	41.6	45.7	44.3	42.7	41.5	42.5
Heat	6.8	11.3	9.6	9.6	8.9	10.0
by Sector						
Industry	51.4	56.7	56.1	55.6	54.8	55.9
Transport	60.0	53.1	55.1	56.2	51.0	52.3
Residential	65.3	63.8	55.0	57.7	58.0	58.8
Services	25.8	34.8	32.3	27.5	26.8	28.8
Agriculture and Fishing	0.3	1.3	1.5	3.6	3.6	3.6
Others	4.3	0.2	0.1	0.1	0.1	0.1

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	118.9	162.9	203.3	231.5	233.7	242.1
Combustible Fuels	80.8	85.8	97.0	100.5	98.3	99.2
Nuclear	22.4	20.5	10.8	9.5	8.1	8.1
Hydro	9.5	11.2	11.3	10.7	10.8	10.8
Wind	6.1	27.0	44.6	60.7	62.2	63.8
Solar	0.1	18.0	39.2	48.9	53.7	59.4
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]	576.5	631.0	646.5	605.4	573.8	586.7
Solid fossil fuels, peat and products, oil shale	296.7	262.9	272.2	171.5	134.6	164.5
Oil and petroleum products	4.8	8.7	6.2	4.8	4.7	4.6
Natural gas	60.0	100.9	74.5	101.1	105.4	105.6
Nuclear	169.6	140.6	91.8	75.1	64.4	69.1
Renewables and biofuels	39.7	111.6	194.7	246.3	258.0	236.1
Wastes non-RES	5.8	6.4	7.1	6.8	6.7	6.7
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			37.1	54.8	53.4	50.2
CHP Electricity Generation [TWh]			78.8	86.9	85.5	90.1
CHP in Total Electricity Generation [%]			12.2	14.3	14.9	15.3
CHP Heat Production [PJ]			669.9	663.2	638.8	670.2
Transport Fuels [ktoe]						
Final consumption petroleum products	89 321	72 135	70 165	70 460	65 956	63 765
of which LPG	1 909	2 075	1 607	1 729	1 665	1 538
of which motor gasoline	30 479	19 204	17 226	16 989	15 311	15 409
of which Gas/Diesel oil	56 933	50 857	51 332	51 741	48 981	46 818
Final consumption biofuels	236	3 166	2 716	2 827	3 557	3 114
pure and blended biogasoline	0	749	744	725	696	742
pure and blended biodiesel	222	2 244	1 926	2 044	2 801	2 329
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	317.1	315.2	295.9	285.2	262.2	268.7
Final energy consumption 2020-2030 [Mtoe]	220.2	223.0	212.7	214.7	202.3	209.9
Primary Energy Intensity 2020-2030 [toe/M€15]	124	113	98	88	84	84
Energy Intensity (GAE/GDP2015) [toe/M€15]	134	122	105	95	91	92
Energy per Capita (GIC/pop) [kgoe/capita]	4 168	4 135	3 918	3 712	3 425	3 558
Final Electricity per Capita [KWh/capita]	7 017	7 714	7 962	7 293	6 900	7 055
Import Dependency [%]	59.8%	60.5%	62.6%	67.4%	64.0%	63.8%
of Solid fossil fuels	25.6%	40.0%	45.4%	47.2%	44.1%	48.4%
of Hard Coal	39.2%	73.2%	87.6%	95.2%	92.9%	100.4%
of Oil and petroleum products	96.2%	99.1%	98.7%	98.5%	97.8%	96.9%
of Crude and NGL	93.8%	97.3%	97.1%	98.3%	98.3%	97.0%
of Natural Gas	79.1%	81.2%	90.1%	100.1%	89.1%	89.6%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		11.67%	14.90%	17.27%	19.09%	19.17%
RE-T - Renewable energy in Transport [%]		6.41%	6.57%	7.63%	10.01%	7.97%
RES-E - Renewable Electricity Generation [%]		18.24%	30.88%	40.60%	44.21%	43.68%
RES-H&C - Renewable Heating and Cooling [%]		12.06%	13.43%	14.50%	14.48%	15.44%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	918.4	855.4	822.6	737.2	660.9	696.9
GHG emissions - National total*	1 059.8	956.9	921.4	824.6	744.7	778.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	83.9%	75.7%	72.9%	65.3%	58.9%	61.6%
Total GHG per capita [t CO ₂ eq./capita]	12.9	11.7	11.3	9.9	9.0	9.4

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.7 Estonia

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	3.4	5.1	4.9	5.1	4.4	4.4
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	1.0	1.3	1.9	1.8	1.9
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	1.6	0.9	0.6	0.2	0.5	0.1
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	0.8	0.6	0.3	0.3	0.1
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	0.6	0.4	0.4	0.4	0.4
Renewables and biofuels	0.0	-0.1	-0.4	-0.6	-0.5	-0.7
Electricity	-0.1	-0.3	-0.1	0.2	0.3	0.2
Gross inland consumption	4.7	5.9	4.9	4.9	4.5	4.6
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	0.6	0.3	0.1	0.0	-0.1
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	0.6	0.4	0.4	0.3	0.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.5	0.9	0.9	1.2	1.3	1.3
Electricity	-0.1	-0.3	-0.1	0.2	0.3	0.2
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for final consumption	2.5	3.1	2.5	3.0	3.0	3.0
Final non-energy consumption	0.2	0.1	0.1	0.1	0.1	0.2
Final energy consumption	2.4	2.9	2.8	2.8	2.8	2.7
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	1.0	1.0	0.9	0.9
Natural gas	0.2	0.2	0.2	0.2	0.2	0.3
Renewables and biofuels	0.4	0.6	0.5	0.4	0.5	0.5
Solid biofuels and renewable waste	0.4	0.5	0.5	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	0.0	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	0.6	0.6	0.6	0.6	0.7
Heat	0.5	0.5	0.4	0.5	0.5	0.5
by Sector						
Industry	0.6	0.6	0.5	0.5	0.4	0.4
Transport	0.6	0.8	0.8	0.8	0.8	0.8
Residential	0.9	1.0	0.9	1.0	0.9	1.0
Services	0.3	0.4	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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	2.8	2.8	2.9	2.7	2.7	2.4
Combustible Fuels	2.8	2.6	2.6	2.3	2.2	1.7
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	0.1	0.3	0.3	0.3	0.3
Solar	0.0	0.0	0.0	0.1	0.2	0.4
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]	8.5	13.0	10.1	7.6	6.1	7.2
Solid fossil fuels, peat and products, oil shale	7.7	11.2	7.9	4.3	2.2	3.4
Oil and petroleum products	0.1	0.0	0.1	0.0	0.0	0.0
Natural gas	0.8	0.7	0.5	1.1	0.8	0.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	1.0	1.6	2.1	3.0	2.9
Wastes non-RES	0.0	0.0	0.1	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.4	0.2	0.5	0.5
CHP Electricity Generation [TWh]			1.2	1.0	1.4	1.5
CHP in Total Electricity Generation [%]			11.9	13.6	19.3	21.0
CHP Heat Production [PJ]			12.5	3.6	12.8	16.5
Transport Fuels [ktoe]						
Final consumption petroleum products	655	883	945	956	885	871
of which LPG	8	11	20	30	27	21
of which motor gasoline	296	289	243	276	216	201
of which Gas/Diesel oil	351	583	683	650	642	650
Final consumption biofuels	0	8	3	27	39	46
pure and blended biogasoline	0	4	3	7	6	4
pure and blended biodiesel	0	3	0	20	33	41
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	4.6	5.8	4.8	4.8	4.3	4.5
Final energy consumption 2020-2030 [Mtoe]	2.4	2.9	2.8	2.9	2.8	2.8
Primary Energy Intensity 2020-2030 [toe/M€'15]	363	333	231	198	179	171
Energy Intensity (GAE/GDP2015) [toe/M€'15]	376	338	235	203	187	177
Energy per Capita (GIC/pop) [kgoe/capita]	3361	4443	3690	3711	3384	3464
Final Electricity per Capita [KWh/capita]	6075	9723	7718	5748	4574	5417
Import Dependency [%]	34.7%	15.2%	11.8%	4.9%	11.2%	1.5%
of Solid fossil fuels	125.2%	132.6%	-6.8%	107.2%	391.7%	95.2%
of Hard Coal	116.1%	118.3%	24.1%	96.7%	28.5%	151.4%
of Oil and petroleum products	117.3%	130.2%	188.9%	547.2%	-1758.5%	-114.4%
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%	105.4%	106.3%	106.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		24.57%	28.99%	31.73%	30.07%	38.01%
RE-T - Renewable energy in Transport [%]		0.43%	0.41%	6.24%	12.16%	11.24%
RES-E - Renewable Electricity Generation [%]		10.29%	16.15%	22.00%	28.29%	29.34%
RES-H&C - Renewable Heating and Cooling [%]		43.16%	50.03%	52.19%	58.83%	61.32%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	15.5	19.1	16.0	12.5	9.3	10.5
GHG emissions - National total*	17.5	21.2	18.1	14.7	11.5	12.7
Main Emissions Indicators						
GHG national total emissions (index 1990=100)	43.4%	52.5%	44.9%	36.5%	28.4%	31.6%
Total GHG per capita [t CO ₂ eq./capita]	12.5	15.9	13.8	11.1	8.6	9.6

5.8 Ireland

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	2.2	1.8	2.0	4.2	3.6	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
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	0.2	0.1	2.1	1.7	1.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.2	0.6	1.0	1.5	1.6	1.5
Wastes, Non-Renewable	0.0	0.0	0.1	0.1	0.1	0.1
Net Imports	12.4	13.3	12.8	10.4	9.9	11.1
Solid fossil fuels	1.7	1.0	1.5	0.3	0.3	1.0
of which hard coal	1.7	0.9	1.5	0.3	0.2	1.0
Oil and petroleum products	8.2	7.7	7.5	7.5	6.6	6.8
of which crude oil and NGL	3.0	3.0	3.7	2.6	3.0	3.0
Natural gas	2.5	4.5	3.6	2.4	2.9	3.1
Renewables and biofuels	0.0	0.1	0.1	0.2	0.2	0.1
Electricity	0.0	0.0	0.1	0.1	0.0	0.1
Gross inland consumption	14.4	15.1	14.2	15.0	13.8	14.3
Solid fossil fuels	1.8	1.2	1.5	0.4	0.4	0.9
of which hard coal	1.8	1.2	1.4	0.4	0.4	0.9
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	8.2	7.8	7.0	7.4	6.2	6.7
of which crude oil and NGL	3.4	3.0	3.4	2.6	2.9	3.1
Natural gas	3.4	4.7	3.8	4.6	4.6	4.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.2	0.7	1.1	1.6	1.8	1.6
Electricity	0.0	0.0	0.1	0.1	0.0	0.1
Waste, non-renewable	0.0	0.0	0.1	0.1	0.1	0.1
Available for final consumption	10.4	11.3	10.9	11.6	11.6	11.1
Final non-energy consumption	0.7	0.3	0.2	0.2	0.2	0.2
Final energy consumption	10.2	11.2	10.5	11.3	11.3	10.8
by Fuel/Product						
Solid fossil fuels	0.4	0.4	0.3	0.2	0.2	0.2
Oil and petroleum products	6.5	6.5	5.6	5.9	5.4	5.6
Natural gas	1.2	1.6	1.7	2.0	2.0	1.9
Renewables and biofuels	0.1	0.3	0.4	0.5	0.5	0.5
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	0.1	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	0.1	0.1
Electricity	1.7	2.2	2.2	2.4	2.5	2.5
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	2.5	1.9	2.0	2.2	2.1	2.2
Transport	3.5	3.9	3.9	4.1	3.5	3.7
Residential	2.7	3.6	2.8	3.0	3.2	3.1
Services	1.2	1.5	1.6	1.8	1.8	1.8
Agriculture and Fishing	0.4	0.3	0.2	0.3	0.2	0.3
Others	0.0	0.0	0.0	0.0	0.0	0.0

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	4.7	8.1	9.7	11.1	11.2	11.1
Combustible Fuels	4.1	6.5	6.7	6.4	6.3	6.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.5	0.2	0.5	0.5	0.5	0.5
Wind	0.1	1.4	2.5	4.1	4.3	4.3
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]	24.0	28.4	28.4	31.0	32.3	31.9
Solid fossil fuels, peat and products, oil shale	8.6	5.7	7.4	2.4	1.6	3.0
Oil and petroleum products	4.6	0.6	0.4	0.3	0.4	1.5
Natural gas	9.3	18.1	12.4	15.9	16.2	15.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.5	3.9	8.1	12.0	13.8	11.9
Wastes non-RES	0.0	0.0	0.1	0.3	0.3	0.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.3	0.3	0.3	0.3
CHP Electricity Generation [TWh]			2.1	2.1	2.1	2.0
CHP in Total Electricity Generation [%]			7.5	6.7	6.5	6.4
CHP Heat Production [PJ]			12.6	11.2	11.1	11.1
Transport Fuels [ktoe]						
Final consumption petroleum products	4,839	4,893	4,544	4,826	4,192	4,415
of which LPG	153	148	153	180	174	178
of which motor gasoline	1,590	1,527	1,020	781	578	613
of which Gas/Diesel oil	3,096	3,218	3,371	3,865	3,440	3,624
Final consumption biofuels	0	93	122	188	175	178
pure and blended biogasoline	0	30	24	26	19	20
pure and blended biodiesel	0	62	98	162	155	158
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	13.7	14.7	14.0	14.7	13.5	13.9
Final energy consumption 2020-2030 [Mtoe]	10.8	11.9	11.3	12.4	11.2	11.4
Primary Energy Intensity 2020-2030 [toe/M€15]	95	77	53	44	38	34
Energy Intensity (GAE/GDP2015) [toe/M€15]	100	79	54	45	39	35
Energy per Capita (GIC/pop) [kgoe/capita]	3,804	3,311	3,045	3,056	2,770	2,857
Final Electricity per Capita [KWh/capita]	6,347	6,232	6,070	6,313	6,501	6,366
Import Dependency [%]	86.4%	88.3%	89.8%	69.3%	72.0%	77.9%
of Solid fossil fuels	93.3%	77.7%	103.0%	67.9%	55.8%	105.9%
of Hard Coal	93.1%	77.5%	103.0%	67.0%	55.1%	106.0%
of Oil and petroleum products	100.6%	99.2%	107.0%	100.7%	105.9%	100.6%
of Crude and NGL	89.8%	101.6%	108.2%	100.9%	102.3%	98.1%
of Natural Gas	72.1%	95.3%	96.3%	53.0%	63.7%	71.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		5.76%	9.08%	11.98%	16.16%	12.55%
RE-T - Renewable energy in Transport [%]		2.49%	5.94%	8.92%	10.19%	4.30%
RES-E - Renewable Electricity Generation [%]		15.64%	25.73%	36.46%	39.05%	36.40%
RES-H&C - Renewable Heating and Cooling [%]		4.28%	6.18%	6.34%	6.26%	5.17%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	47.1	44.1	41.2	40.6	36.3	38.9
GHG emissions - National total*	71.5	65.4	64.3	64.5	60.2	63.4
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	126.1%	115.2%	113.3%	113.7%	106.2%	111.8%
Total GHG per capita [t CO ₂ eq./capita]	18.9	14.4	13.7	13.2	12.1	12.7

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.9 Greece

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	10.0	9.5	8.5	6.4	5.0	5.2
Solid fossil fuels	8.2	7.3	5.7	3.1	1.6	1.4
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	8.2	7.3	5.7	3.1	1.6	1.4
Oil and petroleum products	0.3	0.1	0.1	0.2	0.1	0.1
of which crude oil	0.3	0.1	0.1	0.2	0.1	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	1.5	2.0	2.7	3.1	3.2	3.7
Wastes, Non-Renewable	0.1	0.0	0.1	0.0	0.0	0.0
Net Imports	21.8	21.3	18.4	19.3	18.0	17.2
Solid fossil fuels	0.8	0.4	0.2	0.2	0.2	0.2
of which hard coal	0.8	0.4	0.2	0.2	0.2	0.2
Oil and petroleum products	19.3	17.0	14.6	13.7	11.9	11.2
of which crude oil and NGL	19.2	19.1	21.8	22.4	22.5	23.2
Natural gas	1.7	3.2	2.7	4.4	5.0	5.4
Renewables and biofuels	0.0	0.2	0.1	0.1	0.1	0.1
Electricity	0.0	0.5	0.8	0.9	0.8	0.3
Gross inland consumption	27.9	28.3	24.1	23.6	20.4	21.5
Solid fossil fuels	9.0	7.9	5.6	3.2	1.8	1.7
of which hard coal	0.7	0.4	0.2	0.2	0.2	0.2
of which brown coal	8.3	7.5	5.4	3.0	1.7	1.5
Oil and petroleum products	15.6	14.5	12.0	11.8	9.6	10.2
of which crude oil and NGL	19.3	19.2	21.5	22.8	22.1	23.5
Natural gas	1.7	3.2	2.7	4.5	4.9	5.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.5	2.2	2.8	3.2	3.3	3.8
Electricity	0.0	0.5	0.8	0.9	0.8	0.3
Waste, non-renewable	0.1	0.0	0.1	0.0	0.0	0.0
Available for final consumption	18.5	19.2	16.5	16.4	16.4	14.5
Final non-energy consumption	0.7	1.1	0.7	0.9	0.9	0.8
Final energy consumption	17.9	18.4	15.7	15.4	15.4	14.5
by Fuel/Product						
Solid fossil fuels	0.9	0.3	0.2	0.2	0.2	0.2
Oil and petroleum products	11.9	11.4	8.6	8.2	7.4	7.4
Natural gas	0.3	0.8	1.0	0.9	1.1	1.2
Renewables and biofuels	1.1	1.2	1.5	1.7	1.7	1.8
Solid biofuels and renewable waste	0.9	0.9	1.1	0.8	0.8	0.8
Solar thermal	0.2	0.2	0.3	0.3	0.3	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.1	0.2	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	0.1	0.0	0.0	0.0
Electricity	3.7	4.6	4.4	4.3	4.1	4.2
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	4.5	3.5	3.1	2.6	2.5	2.6
Transport	6.5	7.5	5.8	6.0	5.1	5.5
Residential	4.6	4.7	4.5	4.1	4.3	4.3
Services	1.3	2.0	1.9	2.1	1.9	2.0
Agriculture and Fishing	1.1	0.8	0.3	0.3	0.3	0.3
Others	0.0	0.0	0.3	0.2	0.3	0.2

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	10.9	15.3	18.9	20.5	20.8	20.7
Combustible Fuels	7.6	10.6	10.9	10.6	10.0	8.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	3.1	3.2	3.4	3.4	3.4	3.4
Wind	0.2	1.3	2.1	3.6	4.1	4.6
Solar	0.0	0.2	2.6	2.8	3.3	4.3
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]	53.8	57.4	51.9	48.6	48.3	54.7
Solid fossil fuels, peat and products, oil shale	34.3	30.8	22.1	12.1	6.6	5.3
Oil and petroleum products	8.9	6.1	5.7	5.6	4.7	4.7
Natural gas	5.9	9.8	9.1	14.5	19.2	22.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	4.6	10.6	14.9	16.1	17.7	22.2
Wastes non-RES	0.2	0.1	0.1	0.3	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.6	0.4	0.4	0.4
CHP Electricity Generation [TWh]			2.0	2.2	2.3	2.3
CHP in Total Electricity Generation [%]			3.9	4.5	4.2	4.2
CHP Heat Production [PJ]			10.9	15.3	16.8	17.0
Transport Fuels [ktoe]						
Final consumption petroleum products	10038	9882	7138	6929	6350	6429
of which LPG	456	320	531	596	514	548
of which motor gasoline	3471	3894	2586	2357	1895	2027
of which Gas/Diesel oil	6111	5668	4021	3976	3941	3855
Final consumption biofuels	0	125	158	193	205	222
pure and blended biogasoline	0	0	0	25	63	68
pure and blended biodiesel	0	125	158	168	142	154
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	27.2	27.2	23.4	22.3	19.2	20.3
Final energy consumption 2020-2030 [Mtoe]	18.7	19.1	16.6	16.2	14.4	15.2
Primary Energy Intensity 2020-2030 [toe/M€15]	150	126	133	121	115	112
Energy Intensity (GAE/GDP2015) [toe/M€15]	154	131	137	128	122	119
Energy per Capita (GIC/pop) [kgoe/capita]	2589	2549	2218	2196	1908	2014
Final Electricity per Capita [KWh/capita]	4997	5163	4778	4534	4502	5124
Import Dependency [%]	78.0%	75.1%	76.3%	82.0%	87.9%	80.0%
of Solid fossil fuels	8.5%	5.1%	2.8%	6.4%	10.2%	9.6%
of Hard Coal	105.8%	100.5%	91.5%	105.0%	114.6%	92.7%
of Oil and petroleum products	123.4%	117.1%	121.1%	116.1%	124.5%	109.6%
of Crude and NGL	99.6%	99.6%	101.5%	98.1%	102.0%	98.4%
of Natural Gas	99.1%	99.9%	99.9%	99.0%	100.7%	99.4%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		10.08%	15.69%	19.63%	21.75%	21.93%
RE-T - Renewable energy in Transport [%]		1.92%	1.10%	4.05%	5.34%	4.31%
RES-E - Renewable Electricity Generation [%]		12.31%	22.09%	31.30%	35.86%	35.93%
RES-H&C - Renewable Heating and Cooling [%]		18.66%	26.56%	30.05%	31.94%	31.15%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	105.5	99.9	77.8	69.7	56.9	60.1
GHG emissions - National total*	129.2	121.8	98.9	90.2	76.8	80.0
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	121.3%	114.4%	92.8%	84.7%	72.1%	75.2%
Total GHG per capita [t CO ₂ eq./capita]	12.0	11.0	9.1	8.4	7.2	7.5

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.10 Spain

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	31.3	34.5	34.1	34.7	35.4	36.3
Solid fossil fuels	8.0	3.3	1.2	0.0	0.0	0.0
of which hard coal	5.4	2.5	0.8	0.0	0.0	0.0
of which brown coal	2.6	0.8	0.4	0.0	0.0	0.0
Oil and petroleum products	0.2	0.1	0.2	0.0	0.0	0.0
of which crude oil	0.2	0.1	0.2	0.0	0.0	0.0
Natural gas	0.1	0.0	0.1	0.1	0.0	0.0
Nuclear	16.0	16.1	14.9	15.2	15.2	14.7
Renewables and biofuels	6.7	14.6	17.3	18.8	19.6	21.0
Wastes, Non-Renewable	0.2	0.3	0.4	0.5	0.5	0.5
Net Imports	99.9	106.7	94.9	100.6	80.2	87.0
Solid fossil fuels	12.8	6.8	10.2	4.5	1.7	3.3
of which hard coal	13.3	6.9	10.1	4.1	1.2	2.8
Oil and petroleum products	71.2	69.3	61.3	64.5	51.7	55.0
of which crude oil and NGL	58.1	53.0	65.4	67.0	55.4	56.8
Natural gas	15.5	31.0	23.8	31.4	27.2	29.5
Renewables and biofuels	0.0	0.4	-0.4	-0.4	-0.7	-0.8
Electricity	0.4	-0.7	0.0	0.6	0.3	0.1
Gross inland consumption	124.0	130.1	122.9	126.8	111.8	118.6
Solid fossil fuels	20.9	7.3	13.6	5.1	3.1	3.1
of which hard coal	18.5	7.2	12.7	4.5	2.6	2.7
of which brown coal	2.8	0.2	0.7	0.2	0.0	0.0
Oil and petroleum products	64.4	60.9	52.5	56.2	45.7	50.3
of which crude oil and NGL	57.7	53.4	65.7	66.3	55.7	57.5
Natural gas	15.2	31.1	24.5	30.9	27.9	29.4
Nuclear	16.0	16.1	14.9	15.2	15.2	14.7
Renewables and biofuels	6.8	15.0	17.0	18.4	19.1	20.5
Electricity	0.4	-0.7	0.0	0.6	0.3	0.1
Waste, non-renewable	0.2	0.3	0.4	0.5	0.5	0.5
Available for final consumption	85.4	91.4	79.0	86.3	86.3	77.7
Final non-energy consumption	9.5	7.1	4.3	5.4	5.4	5.8
Final energy consumption	76.3	85.5	75.9	81.5	81.5	72.3
by Fuel/Product						
Solid fossil fuels	0.8	0.5	0.4	0.4	0.3	0.3
Oil and petroleum products	43.7	43.9	36.7	39.5	32.6	36.8
Natural gas	11.8	14.4	12.9	14.5	13.8	14.9
Renewables and biofuels	3.5	5.4	5.7	6.7	6.5	6.6
Solid biofuels and renewable waste	3.3	3.7	4.0	3.8	3.7	3.7
Solar thermal	0.0	0.2	0.3	0.3	0.3	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.1	1.5	1.0	1.7	1.4	1.4
Biogases	0.0	0.1	0.1	0.1	0.1	0.1
Waste, non-renewable	0.0	0.1	0.2	0.2	0.2	0.2
Electricity	16.2	21.0	20.0	20.2	18.9	19.6
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	24.5	20.8	18.7	20.6	18.8	20.1
Transport	30.5	34.3	29.4	32.9	26.1	30.4
Residential	12.1	17.0	15.3	14.4	14.6	14.7
Services	6.7	9.8	9.5	10.3	9.6	10.1
Agriculture and Fishing	2.6	2.2	2.7	2.9	3.0	3.1
Others	0.0	1.5	0.4	0.3	0.3	0.2

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	53.9	101.7	106.8	109.7	108.3	111.0
Combustible Fuels	26.2	50.4	49.3	45.7	41.8	39.8
Nuclear	7.5	7.5	7.4	7.1	7.1	7.1
Hydro	18.0	18.5	20.1	20.1	20.1	20.1
Wind	2.2	20.7	22.9	25.6	26.8	27.9
Solar	0.0	4.6	7.0	11.1	12.4	16.0
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	301.4	280.7	273.1	263.2	274.0
Solid fossil fuels, peat and products, oil shale	79.1	25.3	51.4	12.9	5.5	4.9
Oil and petroleum products	22.6	16.6	17.2	12.9	10.7	10.0
Natural gas	21.9	95.8	53.8	84.8	70.4	72.7
Nuclear	62.2	62.0	57.2	58.3	58.3	56.6
Renewables and biofuels	38.0	101.0	100.3	103.2	117.3	129.0
Wastes non-RES	0.6	0.7	0.8	1.0	1.0	0.9
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			3.5	5.0	5.0	4.8
CHP Electricity Generation [TWh]			22.7	29.7	26.9	27.5
CHP in Total Electricity Generation [%]			8.1	10.9	9.8	10.0
CHP Heat Production [PJ]			120.3	143.2	132.4	138.9
Transport Fuels [ktoe]						
Final consumption petroleum products	37047	37676	33209	34941	29967	33576
of which LPG	2775	2063	1500	1386	1216	1266
of which motor gasoline	9019	5620	4602	5473	4348	5361
of which Gas/Diesel oil	25253	29994	27107	28081	24403	26949
Final consumption biofuels	71	1453	1004	1672	1403	1403
pure and blended biogasoline	0	232	192	131	87	114
pure and blended biodiesel	71	1221	812	1541	1316	1289
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	114.5	123.0	118.2	120.6	105.0	112.1
Final energy consumption 2020-2030 [Mtoe]	80.0	89.6	80.5	86.5	73.8	80.3
Primary Energy Intensity 2020-2030 [toe/M€15]	131	114	110	101	99	100
Energy Intensity (GAE/GDP2015) [toe/M€15]	142	121	114	106	106	106
Energy per Capita (GIC/pop) [kgoe/capita]	3065	2799	2646	2702	2362	2502
Final Electricity per Capita [KWh/capita]	5547	6483	6043	5819	5561	5781
Import Dependency [%]	80.5%	82.0%	77.2%	79.3%	71.8%	73.4%
of Solid fossil fuels	61.3%	92.8%	75.4%	89.5%	54.8%	105.7%
of Hard Coal	71.5%	95.7%	79.6%	91.6%	46.2%	106.1%
of Oil and petroleum products	110.5%	113.7%	116.7%	114.8%	113.2%	109.4%
of Crude and NGL	100.6%	99.3%	99.5%	101.0%	99.5%	98.7%
of Natural Gas	101.6%	99.4%	96.9%	101.6%	97.5%	100.4%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.78%	16.22%	17.85%	21.22%	20.73%
RE-T - Renewable energy in Transport [%]		5.02%	1.09%	7.61%	9.53%	9.19%
RES-E - Renewable Electricity Generation [%]		29.75%	36.97%	37.13%	42.94%	45.96%
RES-H&C - Renewable Heating and Cooling [%]		12.50%	16.85%	17.20%	17.97%	17.40%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	319.6	295.5	285.3	269.6	220.0	238.5
GHG emissions - National total*	392.9	367.4	348.3	328.9	278.7	297.2
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	134.3%	125.6%	119.1%	112.5%	95.3%	101.6%
Total GHG per capita [t CO ₂ eq./capita]	9.7	7.9	7.5	7.0	5.9	6.3

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.11 France

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	129.1	136.7	140.8	134.1	122.6	130.8
Solid fossil fuels	2.1	0.0	0.0	0.0	0.0	0.0
of which hard coal	2.0	0.0	0.0	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	1.9	1.2	1.1	0.9	0.8	0.8
of which crude oil	1.7	0.9	0.9	0.7	0.7	0.7
Natural gas	1.5	0.6	0.0	0.0	0.0	0.0
Nuclear	107.1	111.6	114.0	104.0	92.2	98.9
Renewables and biofuels	15.6	22.0	24.1	27.4	27.9	29.4
Wastes, Non-Renewable	0.9	1.3	1.7	1.7	1.6	1.7
Net Imports	132.7	132.4	120.2	120.3	99.6	107.3
Solid fossil fuels	12.8	12.1	9.2	7.3	5.1	6.2
of which hard coal	12.3	11.2	8.8	6.8	4.8	5.2
Oil and petroleum products	90.0	83.2	81.8	77.8	64.7	68.0
of which crude oil and NGL	85.4	65.5	59.2	49.5	33.8	34.5
Natural gas	35.8	39.6	34.5	39.2	33.1	35.6
Renewables and biofuels	0.0	0.2	0.3	1.0	0.7	1.4
Electricity	-6.0	-2.6	-5.5	-5.0	-3.9	-3.9
Gross inland consumption	255.9	269.7	260.0	251.4	223.4	241.8
Solid fossil fuels	14.9	12.0	9.3	7.3	5.3	8.5
of which hard coal	14.1	11.1	9.1	6.9	5.0	5.8
of which brown coal	0.1	0.0	0.1	0.0	0.0	0.0
Oil and petroleum products	87.6	82.7	81.2	77.3	64.7	68.8
of which crude oil and NGL	86.8	66.7	59.9	50.3	34.5	35.5
Natural gas	35.8	42.6	35.0	37.5	34.9	37.0
Nuclear	107.1	111.6	114.0	104.0	92.2	98.9
Renewables and biofuels	15.6	22.2	24.3	28.4	28.6	30.8
Electricity	-6.0	-2.6	-5.5	-5.0	-3.9	-3.9
Waste, non-renewable	0.9	1.3	1.7	1.7	1.6	1.7
Available for final consumption	156.7	161.7	157.1	155.3	155.3	141.1
Final non-energy consumption	17.0	13.9	14.0	13.5	13.5	12.7
Final energy consumption	145.1	146.3	140.6	138.9	138.9	127.8
by Fuel/Product						
Solid fossil fuels	2.3	1.8	1.1	1.0	0.8	1.0
Oil and petroleum products	67.5	58.4	56.7	53.6	47.2	51.4
Natural gas	29.8	32.0	28.7	28.3	26.5	29.3
Renewables and biofuels	9.0	12.9	13.2	14.8	13.9	15.9
Solid biofuels and renewable waste	8.4	9.1	8.1	8.2	7.7	8.6
Solar thermal	0.0	0.1	0.2	0.2	0.2	0.2
Geothermal	0.1	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.3	2.4	3.0	3.5	2.9	3.2
Biogases	0.1	0.1	0.1	0.2	0.2	0.3
Waste, non-renewable	0.2	0.1	0.4	0.5	0.4	0.5
Electricity	33.1	38.2	37.4	37.1	35.4	37.2
Heat	3.2	2.8	3.1	3.7	3.6	4.1
by Sector						
Industry	32.2	27.7	27.6	27.2	25.5	27.2
Transport	45.2	43.6	45.5	45.1	38.1	42.7
Residential	40.6	45.4	39.9	39.6	38.6	42.2
Services	18.7	24.1	22.3	21.9	20.4	21.9
Agriculture and Fishing	4.3	4.4	4.5	4.4	4.7	4.6
Others	4.1	1.0	0.7	0.6	0.6	0.8

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	114.5	124.1	132.2	136.3	136.9	141.9
Combustible Fuels	25.9	28.4	25.9	19.8	19.8	20.4
Nuclear	63.2	63.1	63.1	63.1	61.4	61.4
Hydro	25.2	25.4	25.6	25.9	26.0	26.3
Wind	0.0	5.9	10.3	16.4	17.5	18.7
Solar	0.0	1.0	7.1	10.8	12.1	14.8
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	569.2	578.9	570.4	531.8	554.7
Solid fossil fuels, peat and products, oil shale	27.0	23.4	11.9	3.6	3.1	5.4
Oil and petroleum products	7.2	5.5	6.7	5.9	5.6	5.7
Natural gas	15.4	26.7	23.8	41.5	37.1	35.3
Nuclear	415.2	428.5	437.4	399.0	353.8	379.4
Renewables and biofuels	74.2	83.0	96.8	117.9	129.8	126.7
Wastes non-RES	1.1	2.0	2.3	2.4	2.3	2.2
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			5.6	6.6	6.5	7.0
CHP Electricity Generation [TWh]			13.9	18.1	17.5	18.5
CHP in Total Electricity Generation [%]			2.5	3.2	3.2	3.3
CHP Heat Production [PJ]			154.9	159.9	177.1	174.4
Transport Fuels [ktoe]						
Final consumption petroleum products	61 952	55 093	53 455	50 712	45 062	48 647
of which LPG	3 815	2 645	2 035	1 906	1 782	1 941
of which motor gasoline	14 494	7 744	7 082	8 213	7 042	8 298
of which Gas/Diesel oil	43 643	44 705	44 338	40 593	36 238	38 407
Final consumption biofuels	326	2 420	3 004	3 481	2 935	3 172
pure and blended biogasoline	59	399	432	653	555	710
pure and blended biodiesel	268	2 021	2 565	2 805	2 356	2 460
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	239.0	254.5	244.3	235.1	208.0	224.8
Final energy consumption 2020-2030 [Mtoe]	154.8	154.0	148.0	145.1	129.7	143.6
Primary Energy Intensity 2020-2030 [toe/M€15]	130	122	111	100	96	97
Energy Intensity (GAE/GDP2015) [toe/M€15]	139	129	118	107	103	104
Energy per Capita (GIC/pop) [kgoe/capita]	4 227	4 171	3 913	3 742	3 319	3 574
Final Electricity per Capita [KWh/capita]	8 918	8 802	8 710	8 491	7 899	8 199
Import Dependency [%]	51.8%	49.1%	46.2%	47.9%	44.6%	44.4%
of Solid fossil fuels	86.3%	101.0%	98.4%	99.6%	96.3%	73.4%
of Hard Coal	87.2%	100.6%	97.0%	99.2%	95.8%	88.6%
of Oil and petroleum products	102.7%	100.6%	100.7%	100.6%	100.0%	98.8%
of Crude and NGL	98.5%	98.2%	98.8%	98.4%	97.9%	97.2%
of Natural Gas	100.0%	92.8%	98.5%	104.5%	94.7%	96.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		12.67%	14.80%	17.17%	19.11%	19.34%
RE-T - Renewable energy in Transport [%]		6.58%	8.37%	9.25%	9.21%	8.21%
RES-E - Renewable Electricity Generation [%]		14.81%	18.82%	22.39%	24.82%	25.02%
RES-H&C - Renewable Heating and Cooling [%]		16.16%	18.88%	22.36%	23.37%	24.21%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	407.1	428.5	441.2	397.1	403.0	381.3
GHG emissions - National total*	548.2	560.4	566.3	519.1	523.0	498.8
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	99.1%	101.3%	102.4%	93.9%	94.6%	90.2%
Total GHG per capita [t CO ₂ eq./capita]	9.1	8.7	8.5	7.7	7.8	7.4

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.12 Croatia

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	4.3	5.2	4.4	3.9	3.7	4.0
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	1.3	0.8	0.7	0.7	0.7	0.6
of which crude oil	1.3	0.8	0.7	0.7	0.7	0.6
Natural gas	1.4	2.2	1.5	0.9	0.7	0.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.6	2.2	2.2	2.3	2.3	2.7
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	4.1	4.4	4.2	5.0	4.5	4.8
Solid fossil fuels	0.5	0.7	0.6	0.4	0.4	0.4
of which hard coal	0.4	0.6	0.6	0.4	0.4	0.4
Oil and petroleum products	2.4	3.0	2.6	2.5	2.1	2.3
of which crude oil and NGL	3.9	3.6	2.4	1.9	1.4	1.3
Natural gas	0.9	0.5	0.6	1.6	1.7	1.8
Renewables and biofuels	0.0	-0.1	-0.3	-0.1	-0.1	-0.1
Electricity	0.3	0.3	0.6	0.5	0.4	0.3
Gross inland consumption	8.5	9.5	8.5	8.8	8.3	8.7
Solid fossil fuels	0.4	0.7	0.6	0.4	0.4	0.4
of which hard coal	0.4	0.6	0.6	0.4	0.3	0.4
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	4.0	3.7	3.2	3.3	2.8	3.0
of which crude oil and NGL	5.5	4.4	3.0	2.7	2.1	2.0
Natural gas	2.2	2.6	2.1	2.4	2.5	2.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.6	2.1	2.0	2.1	2.2	2.5
Electricity	0.3	0.3	0.6	0.5	0.4	0.3
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for final consumption	6.6	7.7	7.0	7.3	7.3	7.0
Final non-energy consumption	0.7	0.6	0.5	0.6	0.6	0.5
Final energy consumption	5.9	7.1	6.5	6.7	6.7	6.4
by Fuel/Product						
Solid fossil fuels	0.1	0.2	0.1	0.1	0.1	0.1
Oil and petroleum products	2.6	2.8	2.6	2.7	2.5	2.6
Natural gas	1.0	1.3	1.0	1.1	1.1	1.2
Renewables and biofuels	1.0	1.3	1.3	1.2	1.2	1.3
Solid biofuels and renewable waste	1.0	1.2	1.2	1.1	1.1	1.2
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	0.0	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	1.0	1.4	1.3	1.4	1.3	1.4
Heat	0.2	0.2	0.2	0.2	0.3	0.3
by Sector						
Industry	1.3	1.3	1.1	1.2	1.2	1.2
Transport	1.5	2.0	2.0	2.2	2.0	2.1
Residential	2.3	2.8	2.4	2.2	2.3	2.4
Services	0.5	0.8	0.8	0.8	0.8	0.8
Agriculture and Fishing	0.3	0.3	0.2	0.2	0.3	0.3
Others	0.0	0.0	0.0	0.0	0.0	0.0

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	2.1	4.1	4.8	4.7	4.7	4.9
Combustible Fuels	0.0	1.9	2.1	1.8	1.5	1.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	2.1	2.1	2.2	2.2	2.2	2.2
Wind	0.0	0.1	0.4	0.6	0.8	1.0
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]	11.3	14.9	11.4	12.8	13.4	15.2
Solid fossil fuels, peat and products, oil shale	1.6	2.4	2.3	1.6	1.2	1.5
Oil and petroleum products	1.7	0.6	0.2	0.0	0.0	0.0
Natural gas	1.6	2.6	1.2	2.6	3.4	3.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	6.5	9.4	7.7	8.5	8.7	10.6
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.6	0.9	0.9	0.9
CHP Electricity Generation [TWh]			0.8	2.3	2.7	2.8
CHP in Total Electricity Generation [%]			7.1	18.3	17.6	18.0
CHP Heat Production [PJ]			10.0	17.6	20.0	20.0
Transport Fuels [ktoe]						
Final consumption petroleum products	2 293	2 629	2 461	2 609	2 359	2 507
of which LPG	100	183	157	150	129	136
of which motor gasoline	835	692	567	508	423	473
of which Gas/Diesel oil	1 359	1 755	1 737	1 951	1 807	1 898
Final consumption biofuels	0	3	24	63	66	91
pure and blended biogasoline	0	0	0	1	1	1
pure and blended biodiesel	0	3	24	62	65	90
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	7.8	8.9	8.0	8.2	7.8	8.3
Final energy consumption 2020-2030 [Mtoe]	6.0	7.2	6.6	6.9	6.5	7.0
Primary Energy Intensity 2020-2030 [toe/M€15]	221	194	176	159	165	155
Energy Intensity (GAE/GDP2015) [toe/M€15]	239	208	188	171	176	163
Energy per Capita (GIC/pop) [kgoe/capita]	1 883	2 201	2 013	2 156	2 046	2 154
Final Electricity per Capita [KWh/capita]	2 508	3 463	2 699	3 130	3 298	3 768
Import Dependency [%]	48.4%	46.7%	48.8%	56.4%	53.7%	54.7%
of Solid fossil fuels	110.9%	102.6%	103.0%	107.3%	106.0%	100.7%
of Hard Coal	112.8%	102.8%	102.4%	108.6%	106.7%	100.7%
of Oil and petroleum products	61.0%	80.8%	81.5%	76.9%	74.2%	79.0%
of Crude and NGL	72.1%	82.3%	79.6%	71.1%	68.0%	67.3%
of Natural Gas	41.0%	18.1%	27.1%	66.4%	68.8%	74.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		25.10%	28.97%	28.47%	31.02%	31.33%
RE-T - Renewable energy in Transport [%]		1.12%	2.36%	5.85%	6.59%	6.98%
RES-E - Renewable Electricity Generation [%]		37.52%	45.41%	49.78%	53.82%	53.47%
RES-H&C - Renewable Heating and Cooling [%]		32.88%	38.62%	36.79%	36.93%	38.03%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	19.9	21.3	18.2	18.5	17.0	17.7
GHG emissions - National total*	25.9	28.5	25.0	25.4	24.1	24.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	80.9%	89.1%	78.1%	79.5%	75.3%	77.4%
Total GHG per capita [t CO ₂ eq./capita]	5.7	6.6	5.9	6.2	5.9	6.1

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.13 Italy

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	28.2	32.9	36.1	36.9	37.5	36.7
Solid fossil fuels	0.0	0.1	0.1	0.0	0.0	0.0
of which hard coal	0.0	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	4.7	5.6	5.8	4.7	5.9	5.2
of which crude oil	4.6	5.1	5.5	4.3	5.4	4.8
Natural gas	13.6	6.9	5.5	3.9	3.3	2.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	9.6	19.4	23.6	27.1	27.1	27.7
Wastes, Non-Renewable	0.3	1.0	1.1	1.2	1.2	1.1
Net Imports	152.4	148.5	121.4	122.5	105.8	114.9
Solid fossil fuels	13.1	13.8	12.3	6.4	4.7	5.4
of which hard coal	12.9	13.8	11.9	6.2	4.7	5.1
Oil and petroleum products	88.0	66.8	52.4	52.4	42.0	45.1
of which crude oil and NGL	83.6	78.2	61.7	63.1	50.2	56.8
Natural gas	47.0	61.6	50.0	57.9	54.1	58.5
Renewables and biofuels	0.5	2.5	2.7	2.5	2.2	2.2
Electricity	3.8	3.8	4.0	3.3	2.8	3.7
Gross inland consumption	174.5	176.8	155.7	155.4	141.6	153.7
Solid fossil fuels	12.6	13.7	12.3	6.5	5.1	5.5
of which hard coal	12.2	13.6	11.8	6.3	5.0	5.3
of which brown coal	0.0	0.2	0.2	0.0	0.0	0.0
Oil and petroleum products	89.9	68.4	56.7	54.0	44.9	51.0
of which crude oil and NGL	87.9	82.8	67.0	67.3	55.7	61.8
Natural gas	57.9	68.1	55.3	60.9	58.3	62.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	10.1	21.9	26.3	29.5	29.3	29.9
Electricity	3.8	3.8	4.0	3.3	2.8	3.7
Waste, non-renewable	0.3	1.0	1.1	1.2	1.2	1.1
Available for final consumption	128.8	131.7	117.6	118.7	118.7	109.3
Final non-energy consumption	8.4	9.6	6.6	7.0	7.0	6.8
Final energy consumption	119.7	123.1	112.1	113.1	113.1	103.1
by Fuel/Product						
Solid fossil fuels	1.5	0.6	0.5	0.6	0.4	0.3
Oil and petroleum products	55.0	45.6	41.2	38.9	32.2	38.4
Natural gas	37.6	38.5	33.0	33.0	31.8	34.4
Renewables and biofuels	1.7	9.1	8.4	10.9	10.7	11.4
Solid biofuels and renewable waste	1.5	7.4	6.8	6.7	6.5	7.1
Solar thermal	0.0	0.1	0.2	0.2	0.2	0.2
Geothermal	0.2	0.1	0.1	0.1	0.1	0.1
Liquid biofuels	0.0	1.4	1.2	1.3	1.3	1.4
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.1	0.2	0.3	0.3	0.3	0.3
Electricity	23.5	25.7	24.7	25.1	23.7	25.1
Heat	0.0	3.3	3.9	4.2	3.9	3.1
by Sector						
Industry	37.6	29.0	24.9	24.9	23.9	25.3
Transport	39.7	38.6	36.4	35.9	29.0	35.3
Residential	27.6	35.4	32.5	31.1	30.7	32.0
Services	11.5	17.0	15.4	18.2	16.6	17.5
Agriculture and Fishing	3.2	2.9	2.9	2.9	3.0	3.0
Others	0.2	0.2	0.1	0.1	0.0	0.1

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	75.5	106.6	117.0	116.4	116.4	117.2
Combustible Fuels	54.0	74.7	65.6	61.3	60.1	59.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	20.3	21.5	22.2	22.5	22.7	22.7
Wind	0.4	5.8	9.1	10.7	10.9	11.3
Solar	0.0	3.6	18.9	20.9	21.7	22.6
Geothermal	0.6	0.7	0.8	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	301.3	282.4	293.2	280.0	288.5
Solid fossil fuels, peat and products, oil shale	26.3	39.7	43.2	18.8	13.4	14.0
Oil and petroleum products	85.9	21.7	13.4	10.2	10.0	7.7
Natural gas	105.6	157.4	113.0	144.1	135.3	145.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	57.6	80.3	110.3	117.7	118.9	118.4
Wastes non-RES	0.5	2.1	2.4	2.4	2.4	2.4
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			9.0	8.6	9.2	7.4
CHP Electricity Generation [TWh]			39.5	40.5	39.9	34.7
CHP in Total Electricity Generation [%]			14.0	13.8	13.9	12.0
CHP Heat Production [PJ]			213.2	216.9	213.4	169.9
Transport Fuels [ktoe]						
Final consumption petroleum products	47 568	41 649	37 803	36 534	30 351	35 906
of which LPG	4 286	3 675	3 572	3 572	3 190	3 419
of which motor gasoline	17 652	10 462	8 217	7 850	6 144	7 396
of which Gas/Diesel oil	25 629	27 512	26 014	25 111	21 017	25 091
Final consumption biofuels	0	1 419	1 167	1 276	1 265	1 415
pure and blended biogasoline	0	122	25	30	20	27
pure and blended biodiesel	0	1 297	1 142	1 246	1 245	1 388
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	166.1	167.3	149.1	145.9	132.3	145.3
Final energy consumption 2020-2030 [Mtoe]	124.8	128.5	116.2	115.4	102.7	113.3
Primary Energy Intensity 2020-2030 [toe/M€15]	100	98	90	84	84	86
Energy Intensity (GAE/GDP2015) [toe/M€15]	105	103	94	90	90	91
Energy per Capita (GIC/pop) [kgoe/capita]	3 066	2 988	2 562	2 598	2 374	2 594
Final Electricity per Capita [KWh/capita]	4 846	5 090	4 645	4 902	4 695	4 870
Import Dependency [%]	87.3%	84.0%	78.0%	78.8%	74.7%	74.7%
of Solid fossil fuels	104.6%	100.8%	100.2%	98.6%	93.0%	97.0%
of Hard Coal	105.7%	101.4%	100.5%	98.4%	93.1%	97.0%
of Oil and petroleum products	97.9%	97.6%	92.4%	97.1%	93.5%	88.5%
of Crude and NGL	95.1%	94.5%	92.2%	93.9%	90.2%	92.0%
of Natural Gas	81.1%	90.5%	90.4%	95.1%	92.8%	93.7%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.02%	17.53%	18.18%	20.36%	19.03%
RE-T - Renewable energy in Transport [%]		4.92%	6.50%	9.05%	10.74%	10.00%
RES-E - Renewable Electricity Generation [%]		20.09%	33.46%	34.97%	38.08%	36.00%
RES-H&C - Renewable Heating and Cooling [%]		15.64%	19.25%	19.70%	19.95%	19.71%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	478.5	445.3	371.5	352.8	307.1	342.2
GHG emissions - National total*	568.0	532.3	455.4	434.8	388.8	422.6
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	108.0%	101.2%	86.6%	82.7%	73.9%	80.4%
Total GHG per capita [t CO ₂ eq./capita]	10.0	9.0	7.5	7.3	6.5	7.1

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.14 Cyprus

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	0.0	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	0.2	0.2	0.2
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	2.6	3.0	2.5	2.7	2.4	2.4
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	2.9	2.4	2.6	2.3	2.2
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	0.1	0.1
Electricity	0.0	0.0	0.0	0.0	0.0	0.0
Gross inland consumption	2.4	2.8	2.3	2.6	2.3	2.4
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	2.6	2.1	2.3	2.0	2.0
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
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.1	0.2	0.2	0.3	0.3
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	1.7	1.4	1.7	1.7	1.6
Final non-energy consumption	0.1	0.1	0.0	0.0	0.0	0.0
Final energy consumption	1.4	1.6	1.4	1.6	1.6	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	0.9	1.0	0.9	0.9
Natural gas	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	0.2
Solid biofuels and renewable waste	0.0	0.0	0.0	0.1	0.1	0.1
Solar thermal	0.0	0.1	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	0.4	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	0.2	0.2	0.2	0.2	0.2
Transport	0.6	0.8	0.6	0.7	0.6	0.7
Residential	0.2	0.3	0.3	0.4	0.4	0.4
Services	0.1	0.2	0.2	0.3	0.2	0.3
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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	1.0	1.6	1.8	1.8	1.9	2.0
Combustible Fuels	1.0	1.5	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	0.1	0.2	0.2	0.2	0.2
Solar	0.0	0.0	0.1	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]	3.4	5.3	4.5	5.1	4.8	5.1
Solid fossil fuels, peat and products, oil shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	3.4	5.2	4.1	4.6	4.3	4.3
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	0.4	0.5	0.6	0.8
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]			0.0	0.0	0.0	0.0
CHP in Total Electricity Generation [%]			0.1	0.6	0.8	0.7
CHP Heat Production [PJ]			0.2	0.1	0.2	0.2
Transport Fuels [ktoe]						
Final consumption petroleum products	833	949	800	881	779	819
of which LPG	60	60	61	69	62	62
of which motor gasoline	218	413	365	356	301	323
of which Gas/Diesel oil	556	476	374	457	416	434
Final consumption biofuels	0	15	10	11	25	25
pure and blended biogasoline	0	0	0	0	1	0
pure and blended biodiesel	0	15	10	11	25	25
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	2.3	2.7	2.3	2.5	2.2	2.3
Final energy consumption 2020-2030 [Mtoe]	1.6	1.9	1.7	1.9	1.6	1.7
Primary Energy Intensity 2020-2030 [toe/M€15]	167	137	127	112	102	101
Energy Intensity (GAE/GDP2015) [toe/M€15]	173	142	128	116	106	105
Energy per Capita (GIC/pop) [kgoe/capita]	3511	3370	2715	2998	2571	2689
Final Electricity per Capita [KWh/capita]	4881	6497	5354	5870	5461	5714
Import Dependency [%]	106.4%	107.4%	107.6%	102.6%	104.4%	98.9%
of Solid fossil fuels	102.0%	65.6%	100.0%	117.2%	105.4%	97.6%
of Hard Coal	102.0%	65.4%	100.0%	117.2%	105.4%	97.6%
of Oil and petroleum products	108.4%	111.5%	114.5%	111.6%	116.0%	110.7%
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 Renewable share (with aviation cap)		6.16%	9.90%	13.78%	16.88%	18.42%
RE-T - Renewable energy in Transport [%]		1.99%	2.52%	3.32%	7.40%	7.19%
RES-E - Renewable Electricity Generation [%]		1.39%	8.45%	9.76%	12.04%	14.84%
RES-H&C - Renewable Heating and Cooling [%]		18.81%	24.07%	35.05%	37.12%	41.34%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	7.9	8.9	7.7	8.4	7.2	7.6
GHG emissions - National total*	9.2	10.4	9.2	10.0	8.9	9.3
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	144.7%	162.8%	143.8%	156.9%	139.7%	145.9%
Total GHG per capita [t CO ₂ eq./capita]	13.4	12.7	10.8	11.4	10.0	10.4

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.15 Latvia

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	1.4	2.0	2.3	2.8	2.7	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
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	2.0	2.3	2.8	2.7	2.7
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	2.4	2.2	2.4	2.2	2.1	1.8
Solid fossil fuels	0.1	0.1	0.0	0.0	0.0	0.0
of which hard coal	0.1	0.1	0.0	0.0	0.0	0.0
Oil and petroleum products	1.2	1.7	1.8	1.8	1.7	1.6
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	1.1	0.9	1.1	1.1	0.9	1.0
Renewables and biofuels	-0.2	-0.6	-0.7	-0.9	-0.8	-0.9
Electricity	0.2	0.1	0.2	0.1	0.1	0.2
Gross inland consumption	3.9	4.6	4.4	4.6	4.4	4.6
Solid fossil fuels	0.1	0.1	0.0	0.0	0.0	0.0
of which hard coal	0.1	0.1	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	1.5	1.5	1.5	1.4	1.5
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	1.1	1.5	1.1	1.1	0.9	1.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.2	1.4	1.5	1.8	1.8	1.9
Electricity	0.2	0.1	0.2	0.1	0.1	0.2
Waste, non-renewable	0.0	0.0	0.1	0.0	0.1	0.0
Available for final consumption	3.3	4.1	3.8	4.0	4.0	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	3.7	3.9	3.9	3.8
by Fuel/Product						
Solid fossil fuels	0.1	0.1	0.0	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	0.3	0.3	0.3	0.4
Renewables and biofuels	0.8	0.9	0.9	1.0	1.0	1.0
Solid biofuels and renewable waste	0.8	0.9	0.9	1.0	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	0.1	0.0	0.1	0.0
Electricity	0.4	0.5	0.6	0.6	0.6	0.6
Heat	0.6	0.6	0.5	0.6	0.6	0.6
by Sector						
Industry	0.6	0.8	0.8	0.9	0.9	0.9
Transport	0.7	1.1	1.0	1.1	1.0	1.1
Residential	1.3	1.4	1.1	1.2	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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	2.1	2.6	2.9	2.9	2.9	2.9
Combustible Fuels	0.6	1.0	1.3	1.3	1.3	1.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	1.5	1.6	1.6	1.6	1.6	1.6
Wind	0.0	0.0	0.1	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	6.6	5.5	6.4	5.7	5.8
Solid fossil fuels, peat and 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	3.0	2.8	3.2	2.1	2.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	2.8	3.6	2.8	3.2	3.6	3.7
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.1	1.3	1.3	1.3
CHP Electricity Generation [TWh]			2.5	2.6	2.1	2.6
CHP in Total Electricity Generation [%]			44.7	41.1	36.2	45.2
CHP Heat Production [PJ]			12.4	13.7	12.1	13.1
Transport Fuels [ktoe]						
Final consumption petroleum products	889	1,278	1,265	1,331	1,280	1,319
of which LPG	50	50	98	82	77	74
of which motor gasoline	354	302	213	182	175	172
of which Gas/Diesel oil	485	926	954	1,067	1,028	1,073
Final consumption biofuels	0	27	25	37	49	49
pure and blended biogasoline	0	8	8	7	13	12
pure and blended biodiesel	0	19	17	30	36	38
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	3.8	4.6	4.3	4.6	4.3	4.5
Final energy consumption 2020-2030 [Mtoe]	3.3	4.1	3.8	4.1	3.9	4.1
Primary Energy Intensity 2020-2030 [toe/M€15]	264	220	174	164	157	158
Energy Intensity (GAE/GDP2015) [toe/M€15]	269	223	178	168	161	162
Energy per Capita (GIC/pop) [kgoe/capita]	1,623	2,183	2,205	2,421	2,286	2,419
Final Electricity per Capita [KWh/capita]	1,737	3,125	2,786	3,353	3,001	3,088
Import Dependency [%]	61.1%	48.0%	54.2%	46.7%	47.6%	40.1%
of Solid fossil fuels	84.1%	106.5%	85.2%	110.8%	89.6%	93.1%
of Hard Coal	82.5%	106.6%	85.2%	110.8%	89.6%	93.1%
of Oil and petroleum products	95.5%	110.0%	120.6%	119.2%	120.9%	106.6%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	101.9%	61.8%	98.6%	100.0%	100.1%	100.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)	30.38%	37.54%	40.93%	42.13%	42.11%	
RE-T - Renewable energy in Transport [%]	3.98%	3.64%	4.55%	6.73%	6.44%	
RES-E - Renewable Electricity Generation [%]	42.05%	52.21%	53.42%	53.36%	51.40%	
RES-H&C - Renewable Heating and Cooling [%]	40.74%	51.74%	57.75%	57.09%	57.38%	
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	7.2	8.9	7.6	8.1	7.2	7.5
GHG emissions - National total*	10.3	12.2	11.1	11.6	10.7	11.0
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	39.1%	46.5%	42.2%	44.2%	40.6%	41.8%
Total GHG per capita [t CO ₂ eq./capita]	4.3	5.8	5.6	6.1	5.6	5.8

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.16 Lithuania

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	3.5	1.6	1.9	2.0	2.0	2.2
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	0.3	0.1	0.1	0.0	0.0	0.0
of which crude oil	0.3	0.1	0.1	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	2.3	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.7	1.2	1.5	1.7	1.7	1.9
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.1	0.1
Net Imports	4.3	5.7	5.5	6.0	5.9	6.0
Solid fossil fuels	0.1	0.2	0.1	0.2	0.1	0.1
of which hard coal	0.0	0.1	0.1	0.2	0.1	0.1
Oil and petroleum products	2.3	2.7	2.7	3.2	3.1	3.1
of which crude oil and NGL	4.6	9.1	8.7	9.6	7.9	8.1
Natural gas	2.1	2.5	2.1	1.9	2.0	1.9
Renewables and biofuels	0.0	-0.1	-0.1	-0.1	-0.1	0.0
Electricity	-0.1	0.5	0.6	0.8	0.7	0.8
Gross inland consumption	7.3	7.1	7.2	7.8	7.6	7.9
Solid fossil fuels	0.1	0.2	0.2	0.2	0.1	0.2
of which hard coal	0.0	0.1	0.2	0.2	0.1	0.1
of which brown coal	0.1	0.1	0.0	0.0	0.0	0.0
Oil and petroleum products	2.2	2.6	2.6	3.0	2.9	2.9
of which crude oil and NGL	4.9	9.2	8.7	9.6	7.9	8.0
Natural gas	2.1	2.5	2.1	1.9	2.0	1.9
Nuclear	2.3	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.7	1.1	1.4	1.6	1.7	1.9
Electricity	-0.1	0.5	0.6	0.8	0.7	0.8
Waste, non-renewable	0.0	0.0	0.0	0.0	0.1	0.1
Available for final consumption	4.3	5.4	5.9	6.6	6.6	6.4
Final non-energy consumption	0.7	0.7	1.1	1.2	1.2	1.1
Final energy consumption	3.7	4.8	4.8	5.5	5.5	5.3
by Fuel/Product						
Solid fossil fuels	0.1	0.2	0.2	0.2	0.1	0.2
Oil and petroleum products	1.3	1.6	1.8	2.2	2.1	2.1
Natural gas	0.4	0.6	0.5	0.6	0.6	0.6
Renewables and biofuels	0.6	0.7	0.7	0.7	0.8	0.8
Solid biofuels and renewable waste	0.6	0.7	0.6	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	0.1	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	0.8	0.9	0.9	1.0
Heat	0.8	0.9	0.8	0.8	0.7	0.9
by Sector						
Industry	0.8	0.9	1.0	1.1	1.0	1.1
Transport	1.0	1.5	1.8	2.2	2.1	2.1
Residential	1.4	1.6	1.4	1.4	1.4	1.6
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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	5.7	3.6	3.6	3.4	3.5	3.7
Combustible Fuels	2.5	2.5	2.2	1.8	1.9	1.9
Nuclear	2.4	0.0	0.0	0.0	0.0	0.0
Hydro	0.9	0.9	0.9	0.9	0.9	0.9
Wind	0.0	0.1	0.4	0.5	0.5	0.7
Solar	0.0	0.0	0.1	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]	11.3	5.5	4.7	3.7	5.3	4.9
Solid fossil fuels, peat and products, oil shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.7	0.6	0.3	0.1	0.1	0.1
Natural gas	1.6	3.2	2.0	0.5	1.7	1.2
Nuclear	8.4	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.6	1.7	2.4	3.1	3.4	3.3
Wastes non-RES	0.0	0.0	0.1	0.1	0.1	0.2
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.0	0.6	0.6	0.5
CHP Electricity Generation [TWh]			1.5	1.1	1.2	1.3
CHP in Total Electricity Generation [%]			31.3	27.4	23.6	25.7
CHP Heat Production [PJ]			12.4	11.0	11.7	13.7
Transport Fuels [ktoe]						
Final consumption petroleum products	1,185	1,545	1,764	2,190	2,132	2,127
of which LPG	205	224	175	158	142	134
of which motor gasoline	400	298	201	244	238	238
of which Gas/Diesel oil	579	1,023	1,388	1,788	1,752	1,755
Final consumption biofuels	0	45	68	75	103	127
pure and blended biogasoline	0	10	10	10	16	17
pure and blended biodiesel	0	34	58	65	87	110
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	6.5	6.2	5.8	6.3	6.2	6.6
Final energy consumption 2020-2030 [Mtoe]	3.8	4.8	4.9	5.6	5.3	5.7
Primary Energy Intensity 2020-2030 [toe/M€15]	323	199	155	145	143	144
Energy Intensity (GAE/GDP2015) [toe/M€15]	363	228	192	180	176	173
Energy per Capita (GIC/pop) [kgoe/capita]	2,093	2,254	2,459	2,792	2,732	2,843
Final Electricity per Capita [KWh/capita]	3,227	1,750	1,598	1,342	1,901	1,748
Import Dependency [%]	58.5%	80.6%	76.2%	77.1%	76.7%	75.0%
of Solid fossil fuels	101.7%	95.7%	90.6%	108.1%	87.9%	91.9%
of Hard Coal	100.0%	109.7%	90.1%	109.1%	86.7%	91.2%
of Oil and petroleum products	105.2%	104.0%	103.6%	107.3%	109.2%	108.3%
of Crude and NGL	94.5%	99.0%	99.5%	100.8%	99.4%	100.3%
of Natural Gas	100.0%	99.7%	99.7%	100.0%	98.9%	100.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)	19.64%	25.75%	25.47%	26.77%	28.23%	
RE-T - Renewable energy in Transport [%]	3.79%	4.58%	4.05%	5.51%	6.46%	
RES-E - Renewable Electricity Generation [%]	7.40%	15.54%	18.79%	20.17%	21.28%	
RES-H&C - Renewable Heating and Cooling [%]	32.53%	46.08%	47.37%	50.35%	48.63%	
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	11.9	14.0	13.3	14.1	13.7	14.1
GHG emissions - National total*	19.6	20.9	20.4	20.7	20.4	20.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	40.4%	43.1%	42.1%	42.5%	41.9%	42.2%
Total GHG per capita [t CO ₂ eq./capita]	5.6	6.7	7.0	7.4	7.3	7.3

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.17 Luxembourg

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	0.1	0.1	0.2	0.2	0.3	0.3
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	0.2	0.3	0.3
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	3.6	4.5	4.0	4.3	3.7	3.9
Solid fossil fuels	0.1	0.1	0.0	0.0	0.0	0.0
of which hard coal	0.1	0.1	0.0	0.0	0.0	0.0
Oil and petroleum products	2.4	2.9	2.6	3.0	2.4	2.6
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	1.2	0.8	0.7	0.6	0.7
Renewables and biofuels	0.0	0.0	0.1	0.1	0.1	0.1
Electricity	0.5	0.3	0.5	0.5	0.5	0.5
Gross inland consumption	3.7	4.6	4.2	4.5	4.0	4.2
Solid fossil fuels	0.1	0.1	0.0	0.0	0.0	0.0
of which hard coal	0.1	0.1	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	2.9	2.6	2.9	2.4	2.6
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	1.2	0.8	0.7	0.6	0.7
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.1	0.2	0.3	0.4	0.4
Electricity	0.5	0.3	0.5	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	3.9	3.6	3.8	3.8	3.3
Final non-energy consumption	0.1	0.0	0.0	0.0	0.0	0.0
Final energy consumption	3.2	3.9	3.5	3.8	3.8	3.3
by Fuel/Product						
Solid fossil fuels	0.1	0.1	0.0	0.0	0.0	0.0
Oil and petroleum products	1.9	2.4	2.1	2.3	1.8	1.9
Natural gas	0.6	0.7	0.6	0.6	0.6	0.6
Renewables and biofuels	0.0	0.1	0.1	0.2	0.2	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	0.1	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	0.6	0.5	0.6	0.5	0.5
Heat	0.0	0.1	0.1	0.1	0.1	0.1
by Sector						
Industry	0.7	0.8	0.6	0.6	0.6	0.6
Transport	1.6	2.2	2.0	2.2	1.7	1.8
Residential	0.5	0.5	0.5	0.5	0.5	0.5
Services	0.4	0.4	0.4	0.5	0.5	0.6
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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	1.2	1.7	2.0	1.8	1.8	1.9
Combustible Fuels	0.1	0.5	0.5	0.1	0.1	0.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	1.1	1.1	1.3	1.3	1.3	1.3
Wind	0.0	0.0	0.1	0.1	0.2	0.1
Solar	0.0	0.0	0.1	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]	1.2	4.6	2.8	1.9	2.2	2.2
Solid fossil fuels, peat and 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	2.9	0.8	0.2	0.2	0.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.9	1.6	1.9	1.6	2.0	2.0
Wastes non-RES	0.0	0.0	0.1	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	0.5	0.5
CHP in Total Electricity Generation [%]			12.7	22.1	22.7	24.2
CHP Heat Production [PJ]			2.4	3.8	4.8	5.3
Transport Fuels [ktoe]						
Final consumption petroleum products	1932	2405	2144	2306	1818	1915
of which LPG	26	13	11	10	8	11
of which motor gasoline	598	362	293	343	262	317
of which Gas/Diesel oil	1307	2031	1841	1953	1548	1586
Final consumption biofuels	0	42	83	130	142	138
pure and blended biogasoline	0	1	7	17	14	18
pure and blended biodiesel	0	41	76	113	129	120
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	3.6	4.6	4.1	4.5	3.9	4.2
Final energy consumption 2020-2030 [Mtoe]	3.5	4.3	4.0	4.4	3.8	4.1
Primary Energy Intensity 2020-2030 [toe/M€15]	99	95	77	76	67	67
Energy Intensity (GAE/GDP2015) [toe/M€15]	100	95	77	76	67	68
Energy per Capita (GIC/pop) [kgoe/capita]	8433	9250	7422	7405	6339	6659
Final Electricity per Capita [KWh/capita]	2690	9145	4913	3109	3568	3483
Import Dependency [%]	99.6%	97.1%	96.0%	95.0%	92.3%	92.5%
of Solid fossil fuels	100.0%	102.2%	99.8%	93.1%	112.3%	97.5%
of Hard Coal	100.0%	102.5%	99.8%	92.3%	114.0%	97.1%
of Oil and petroleum products	102.1%	99.3%	99.3%	100.4%	99.9%	99.9%
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 Renewable share (with aviation cap)		2.85%	4.99%	7.05%	11.70%	11.74%
RE-T - Renewable energy in Transport [%]		2.09%	6.70%	7.71%	12.58%	7.96%
RES-E - Renewable Electricity Generation [%]		3.79%	6.20%	10.86%	13.89%	14.22%
RES-H&C - Renewable Heating and Cooling [%]		4.70%	6.86%	8.69%	12.61%	12.92%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	12.2	9.7	13.4	11.9	12.5	12.3
GHG emissions - National total*	13.1	10.6	14.3	12.9	13.5	13.3
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	99.9%	80.7%	108.9%	97.9%	102.5%	101.0%
Total GHG per capita [t CO ₂ eq./capita]	30.3	21.1	25.4	20.9	21.5	20.9

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.18 Hungary

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	11.6	11.7	11.1	10.8	10.6	10.7
Solid fossil fuels	2.9	1.6	1.5	1.0	0.9	0.8
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	2.9	1.6	1.5	1.0	0.9	0.8
Oil and petroleum products	1.7	1.1	0.9	1.2	1.0	1.1
of which crude oil	1.7	1.1	0.9	1.1	1.0	1.1
Natural gas	2.5	2.2	1.4	1.3	1.3	1.2
Nuclear	3.7	4.0	4.0	4.1	4.1	4.0
Renewables and biofuels	0.8	2.7	3.2	3.1	3.1	3.4
Wastes, Non-Renewable	0.0	0.1	0.1	0.1	0.1	0.1
Net Imports	13.9	15.1	13.6	18.6	14.8	14.8
Solid fossil fuels	1.1	1.1	0.8	0.8	0.7	0.5
of which hard coal	0.9	1.3	1.0	1.0	0.9	0.8
Oil and petroleum products	5.2	5.8	6.6	7.1	6.5	7.0
of which crude oil and NGL	5.8	5.8	6.2	5.9	5.9	5.9
Natural gas	7.3	7.7	5.2	9.8	6.6	6.2
Renewables and biofuels	0.0	0.0	-0.2	-0.2	-0.1	-0.2
Electricity	0.3	0.4	1.2	1.1	1.0	1.1
Gross inland consumption	25.2	26.6	25.2	26.7	26.1	27.4
Solid fossil fuels	3.8	2.7	2.4	1.8	1.7	1.4
of which hard coal	0.9	1.3	1.0	1.0	0.9	0.8
of which brown coal	3.0	1.7	1.6	1.0	1.0	0.8
Oil and petroleum products	6.9	6.8	7.0	8.2	7.5	8.1
of which crude oil and NGL	7.4	6.8	6.8	7.0	6.9	6.9
Natural gas	9.7	9.8	7.5	8.5	8.8	9.3
Nuclear	3.7	4.0	4.0	4.1	4.1	4.0
Renewables and biofuels	0.8	2.8	3.0	2.8	3.0	3.2
Electricity	0.3	0.4	1.2	1.1	1.0	1.1
Waste, non-renewable	0.0	0.1	0.1	0.2	0.2	0.2
Available for final consumption	17.2	18.9	18.5	19.9	19.9	19.7
Final non-energy consumption	1.6	2.0	1.9	2.1	2.1	2.2
Final energy consumption	15.6	16.9	16.8	18.0	18.0	17.6
by Fuel/Product						
Solid fossil fuels	0.4	0.2	0.2	0.2	0.2	0.1
Oil and petroleum products	4.0	4.4	5.0	5.9	5.3	5.7
Natural gas	6.4	6.1	5.3	5.5	5.7	6.1
Renewables and biofuels	0.8	2.0	2.2	1.8	1.9	2.1
Solid biofuels and renewable waste	0.7	1.7	1.9	1.5	1.5	1.6
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	0.2	0.2	0.2	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	2.5	2.9	3.1	3.5	3.4	3.6
Heat	1.4	1.1	1.0	1.0	1.0	1.1
by Sector						
Industry	3.3	2.6	3.9	4.5	4.4	4.7
Transport	3.1	4.1	4.2	5.1	4.5	4.9
Residential	5.6	6.6	6.0	5.7	6.0	6.4
Services	3.0	3.0	2.2	2.1	2.0	2.1
Agriculture and Fishing	0.7	0.5	0.6	0.7	0.7	0.7
Others	0.0	0.0	0.0	0.0	0.0	0.0

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	8.3	9.0	8.6	10.0	10.7	11.6
Combustible Fuels	6.4	6.6	6.1	6.2	6.1	6.2
Nuclear	1.9	2.0	2.0	2.0	2.0	2.0
Hydro	0.0	0.1	0.1	0.1	0.1	0.1
Wind	0.0	0.3	0.3	0.3	0.3	0.3
Solar	0.0	0.0	0.2	1.4	2.1	3.0
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]	35.2	37.4	30.3	34.2	34.8	36.0
Solid fossil fuels, peat and products, oil shale	9.6	6.2	5.8	4.0	3.7	3.0
Oil and petroleum products	4.4	0.5	0.1	0.1	0.0	0.1
Natural gas	6.7	11.7	5.2	8.8	9.2	9.7
Nuclear	14.2	15.8	15.8	16.3	16.1	16.0
Renewables and biofuels	0.2	3.0	3.2	4.7	5.5	6.9
Wastes non-RES	0.1	0.2	0.1	0.2	0.2	0.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.6	1.5	1.6	1.6
CHP Electricity Generation [TWh]			4.1	4.6	4.7	5.6
CHP in Total Electricity Generation [%]			13.5	13.4	13.0	15.4
CHP Heat Production [PJ]			24.4	27.5	27.6	30.1
Transport Fuels [ktoe]						
Final consumption petroleum products	3699	4263	4639	5541	4920	5369
of which LPG	368	211	295	256	269	266
of which motor gasoline	1414	1348	1283	1507	1308	1388
of which Gas/Diesel oil	1917	2703	3061	3778	3342	3715
Final consumption biofuels	0	175	175	202	279	285
pure and blended biogasoline	0	57	43	46	84	87
pure and blended biodiesel	0	118	133	157	195	198
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	23.6	24.6	23.3	24.6	23.9	24.9
Final energy consumption 2020-2030 [Mtoe]	16.2	17.5	17.4	18.6	18.0	19.1
Primary Energy Intensity 2020-2030 [toe/M€15]	287	242	207	185	188	183
Energy Intensity (GAE/GDP2015) [toe/M€15]	306	261	223	201	206	201
Energy per Capita (GIC/pop) [kgoe/capita]	2468	2655	2557	2733	2676	2814
Final Electricity per Capita [KWh/capita]	3443	3732	3074	3497	3561	3697
Import Dependency [%]	55.0%	56.9%	53.9%	69.7%	56.6%	54.1%
of Solid fossil fuels	28.1%	41.9%	33.7%	45.7%	43.7%	38.5%
of Hard Coal	96.4%	99.2%	99.2%	98.8%	97.0%	98.5%
of Oil and petroleum products	75.9%	85.3%	93.7%	86.6%	87.1%	86.9%
of Crude and NGL	78.5%	85.3%	91.4%	84.6%	86.0%	85.2%
of Natural Gas	75.4%	78.7%	69.7%	115.2%	75.6%	67.2%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		12.74%	14.50%	12.63%	13.85%	14.11%
RE-T - Renewable energy in Transport [%]		6.16%	7.17%	8.06%	11.57%	6.16%
RES-E - Renewable Electricity Generation [%]		7.10%	7.34%	9.97%	11.90%	13.66%
RES-H&C - Renewable Heating and Cooling [%]		18.08%	21.33%	18.16%	17.72%	17.93%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	59.2	52.8	47.3	50.2	47.6	48.9
GHG emissions - National total*	76.1	67.3	62.8	65.6	63.3	64.6
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	79.7%	70.4%	65.7%	68.7%	66.3%	67.6%
Total GHG per capita [t CO ₂ eq./capita]	7.4	6.7	6.4	6.7	6.5	6.6

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.19 Malta

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
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	2.4	2.2	3.1	2.9	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	1.5	2.4	2.1	2.7	2.5	2.3
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	0.3	0.3	0.3
Renewables and biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.0	0.0	0.1	0.1	0.0	0.0
Gross inland consumption	0.8	0.9	0.8	0.9	0.8	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	0.6	0.5	0.3	0.4
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	0.3	0.3	0.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.0	0.0	0.0	0.1	0.1
Electricity	0.0	0.0	0.1	0.1	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for final consumption	0.3	0.4	0.5	0.6	0.6	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	0.5	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	0.3	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	0.0	0.1	0.1	0.1	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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	0.0	0.6	0.7	0.7	0.8	0.8
Combustible Fuels	0.0	0.6	0.6	0.6	0.6	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	0.1	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]	1.9	2.1	1.3	2.1	2.1	2.2
Solid fossil fuels, peat and products, oil shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	1.9	2.1	1.2	0.0	0.1	0.0
Natural gas	0.0	0.0	0.0	1.8	1.8	1.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.0	0.1	0.2	0.2	0.3
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.0	0.1	0.1	0.1
CHP Electricity Generation [TWh]			0.0	0.2	0.2	0.1
CHP in Total Electricity Generation [%]			0.0	8.5	7.2	6.5
CHP Heat Production [PJ]			0.0	0.1	0.1	0.1
Transport Fuels [ktoe]						
Final consumption petroleum products	171	223	256	294	253	268
of which LPG	18	24	26	29	26	26
of which motor gasoline	75	75	78	85	72	78
of which Gas/Diesel oil	78	124	152	180	156	164
Final consumption biofuels	0	1	7	11	15	11
pure and blended biogasoline	0	0	0	0	0	0
pure and blended biodiesel	0	1	7	11	15	11
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	0.8	0.9	0.8	0.9	0.7	0.8
Final energy consumption 2020-2030 [Mtoe]	0.4	0.5	0.6	0.7	0.5	0.6
Primary Energy Intensity 2020-2030 [toe/M€15]	134	121	75	67	62	58
Energy Intensity (GAE/GDP2015) [toe/M€15]	134	122	76	69	64	60
Energy per Capita (GIC/pop) [kgoe/capita]	2080	2266	1724	1826	1479	1548
Final Electricity per Capita [KWh/capita]	4931	5105	2967	4173	4165	4292
Import Dependency [%]	181.8%	252.0%	294.6%	341.4%	377.7%	332.6%
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	181.8%	253.3%	330.7%	548.1%	719.7%	599.2%
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%	103.6%	96.2%	103.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		0.98%	5.12%	8.23%	10.71%	12.15%
RE-T - Renewable energy in Transport [%]		0.00%	4.68%	8.90%	10.59%	10.58%
RES-E - Renewable Electricity Generation [%]		0.03%	4.31%	7.49%	9.49%	9.66%
RES-H&C - Renewable Heating and Cooling [%]		7.28%	14.64%	23.60%	23.03%	31.36%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	2.6	2.8	2.9	2.8	2.9	2.9
GHG emissions - National total*	2.8	3.1	3.3	3.2	3.3	3.3
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	101.0%	110.0%	116.8%	112.7%	116.4%	116.8%
Total GHG per capita [t CO ₂ eq./capita]	7.3	7.4	7.4	6.4	6.3	6.3

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.20 The Netherlands

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	58.5	71.1	48.2	33.1	27.5	26.6
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	2.7	1.6	2.1	1.1	1.1	1.1
of which crude oil	2.4	1.5	1.8	0.9	0.9	0.9
Natural gas	52.8	64.7	39.4	23.8	17.3	15.5
Nuclear	1.0	0.9	0.9	0.9	1.0	0.9
Renewables and biofuels	1.4	3.1	4.8	6.2	7.1	8.0
Wastes, Non-Renewable	0.6	0.7	0.7	0.8	0.8	0.8
Net Imports	35.0	28.3	43.7	56.4	57.0	50.1
Solid fossil fuels	7.7	7.6	10.7	6.6	3.8	5.6
of which hard coal	7.7	7.5	10.7	6.6	3.9	5.6
Oil and petroleum products	42.9	44.5	43.7	41.9	39.4	33.9
of which crude oil and NGL	60.7	60.4	60.0	63.3	56.9	58.1
Natural gas	-17.2	-24.2	-10.5	8.4	14.2	10.2
Renewables and biofuels	-0.1	0.1	-1.1	-0.7	-0.2	0.2
Electricity	1.6	0.2	0.8	0.1	-0.2	0.0
Gross inland consumption	78.3	86.2	76.5	76.1	72.0	74.4
Solid fossil fuels	7.8	7.5	11.1	6.4	4.1	5.7
of which hard coal	7.8	7.4	11.1	6.4	4.2	5.7
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	30.9	33.4	30.3	30.1	27.8	28.5
of which crude oil and NGL	62.8	61.9	61.2	63.4	58.0	60.0
Natural gas	35.0	40.1	28.6	32.0	31.4	30.1
Nuclear	1.0	0.9	0.9	0.9	1.0	0.9
Renewables and biofuels	1.3	3.3	3.7	5.4	6.8	8.0
Electricity	1.6	0.2	0.8	0.1	-0.2	0.0
Waste, non-renewable	0.6	0.7	0.9	0.9	0.9	0.9
Available for final consumption	58.5	64.5	55.2	56.4	56.4	55.3
Final non-energy consumption	11.3	14.4	12.2	12.1	12.1	12.9
Final energy consumption	47.6	50.8	43.3	44.1	44.1	41.8
by Fuel/Product						
Solid fossil fuels	0.1	0.1	0.2	0.2	0.2	0.1
Oil and petroleum products	14.3	15.6	13.5	13.7	12.5	12.4
Natural gas	20.6	21.5	17.0	16.6	15.9	17.1
Renewables and biofuels	0.5	1.0	1.3	2.0	2.0	2.2
Solid biofuels and renewable waste	0.4	0.6	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	0.1	0.1	0.1	0.2
Liquid biofuels	0.0	0.2	0.3	0.7	0.6	0.7
Biogases	0.1	0.1	0.1	0.1	0.1	0.1
Waste, non-renewable	0.0	0.1	0.0	0.1	0.1	0.0
Electricity	8.2	9.3	8.9	9.3	9.1	9.2
Heat	3.7	3.0	2.3	2.1	1.9	2.0
by Sector						
Industry	15.2	14.3	13.1	13.2	13.2	13.2
Transport	10.6	11.7	10.0	10.6	9.0	9.2
Residential	10.8	12.5	9.5	9.3	9.1	10.1
Services	6.3	8.0	6.7	6.7	6.3	6.6
Agriculture and Fishing	4.5	4.2	3.8	4.2	4.1	4.1
Others	0.1	0.1	0.1	0.1	0.1	0.1

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	21.1	26.7	33.9	37.1	42.4	47.3
Combustible Fuels	20.1	23.7	28.4	24.8	24.1	23.9
Nuclear	0.4	0.5	0.5	0.5	0.5	0.5
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.4	2.2	3.4	4.5	6.6	7.8
Solar	0.0	0.1	1.5	7.2	11.1	14.9
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	119.1	108.8	120.8	122.8	121.6
Solid fossil fuels, peat and products, oil shale	24.3	22.6	39.4	17.7	7.6	14.6
Oil and petroleum products	2.6	1.3	1.3	1.4	1.3	1.3
Natural gas	54.4	78.5	48.6	73.0	75.0	59.4
Nuclear	3.9	4.0	4.1	3.9	4.1	3.8
Renewables and biofuels	3.0	11.2	13.7	22.8	32.7	40.5
Wastes non-RES	1.2	1.6	1.7	2.0	2.0	2.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			9.2	8.8	9.1	8.8
CHP Electricity Generation [TWh]			29.8	32.2	31.7	31.0
CHP in Total Electricity Generation [%]			27.1	26.6	26.1	25.4
CHP Heat Production [PJ]			189.6	174.2	171.6	172.2
Transport Fuels [ktoe]						
Final consumption petroleum products	12 340	12 756	10 935	11 109	9 665	9 651
of which LPG	723	487	301	306	262	267
of which motor gasoline	3 964	4 048	3 782	4 177	3 463	3 589
of which Gas/Diesel oil	7 653	8 221	6 851	6 626	5 940	5 795
Final consumption biofuels	0	243	321	720	610	683
pure and blended biogasoline	0	134	142	199	226	233
pure and blended biodiesel	0	95	179	480	355	429
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	66.9	71.7	64.0	63.6	58.5	60.8
Final energy consumption 2020-2030 [Mtoe]	52.4	55.6	48.6	49.4	45.0	46.9
Primary Energy Intensity 2020-2030 [toe/M€15]	115	108	93	84	80	80
Energy Intensity (GAE/GDP2015) [toe/M€15]	135	130	111	101	99	97
Energy per Capita (GIC/pop) [kgoe/capita]	4 934	5 198	4 527	4 406	4 136	4 255
Final Electricity per Capita [KWh/capita]	5 634	7 186	6 438	6 990	7 053	6 959
Import Dependency [%]	44.7%	32.8%	57.1%	74.0%	79.2%	67.3%
of Solid fossil fuels	99.4%	101.4%	96.6%	102.1%	91.9%	99.6%
of Hard Coal	98.9%	101.6%	96.5%	101.8%	93.0%	98.6%
of Oil and petroleum products	138.8%	133.4%	144.3%	139.0%	141.7%	119.1%
of Crude and NGL	96.7%	97.6%	98.0%	99.9%	98.1%	96.8%
of Natural Gas	-49.1%	-60.4%	-36.7%	26.3%	45.2%	33.7%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		3.92%	5.71%	8.89%	14.00%	13.00%
RE-T - Renewable energy in Transport [%]		3.40%	5.60%	12.33%	12.63%	8.99%
RES-E - Renewable Electricity Generation [%]		9.60%	11.04%	18.23%	26.41%	33.36%
RES-H&C - Renewable Heating and Cooling [%]		3.10%	5.28%	7.22%	8.05%	7.85%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	182.4	193.0	175.6	164.8	143.7	147.7
GHG emissions - National total*	229.9	225.0	205.9	193.3	171.5	175.0
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	101.1%	99.0%	90.6%	85.0%	75.4%	77.0%
Total GHG per capita [t CO ₂ eq./capita]	14.5	13.6	12.2	11.2	9.9	10.0

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.21 Austria

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	9.8	12.1	12.2	12.4	12.4	12.6
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	1.1	0.9	0.7	0.6	0.6
of which crude oil	1.1	1.1	0.9	0.7	0.6	0.6
Natural gas	1.5	1.4	1.0	0.8	0.6	0.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	6.6	9.0	9.6	10.4	10.5	10.7
Wastes, Non-Renewable	0.3	0.6	0.7	0.6	0.7	0.7
Net Imports	19.2	21.9	20.4	24.9	18.9	17.7
Solid fossil fuels	3.0	3.4	2.8	2.8	2.4	2.5
of which hard coal	2.3	2.4	2.1	2.1	1.8	1.9
Oil and petroleum products	11.0	11.8	11.3	12.3	10.9	10.7
of which crude oil and NGL	7.4	6.9	8.2	8.7	7.7	7.7
Natural gas	5.3	6.1	5.0	9.4	5.4	3.9
Renewables and biofuels	0.0	0.4	0.4	0.1	0.0	0.0
Electricity	-0.1	0.2	0.9	0.3	0.2	0.6
Gross inland consumption	29.2	34.8	33.7	34.8	32.3	34.1
Solid fossil fuels	3.6	3.4	3.2	2.9	2.5	2.5
of which hard coal	2.5	2.5	2.5	2.2	1.9	1.9
of which brown coal	0.3	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	12.3	13.0	12.0	12.9	11.2	11.8
of which crude oil and NGL	8.5	8.0	9.0	9.3	8.3	8.4
Natural gas	6.6	8.1	6.9	7.7	7.3	7.7
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	6.6	9.5	10.0	10.4	10.5	10.7
Electricity	-0.1	0.2	0.9	0.3	0.2	0.6
Waste, non-renewable	0.3	0.6	0.7	0.6	0.7	0.7
Available for final consumption	23.6	27.8	27.3	28.3	28.3	27.0
Final non-energy consumption	1.7	1.8	1.8	2.1	2.1	2.1
Final energy consumption	21.8	26.0	25.5	26.2	26.2	24.9
by Fuel/Product						
Solid fossil fuels	0.7	0.4	0.4	0.3	0.3	0.3
Oil and petroleum products	9.0	9.7	9.1	9.5	8.4	8.9
Natural gas	4.0	4.7	4.6	4.8	4.7	4.9
Renewables and biofuels	2.4	4.1	4.3	4.2	4.1	4.5
Solid biofuels and renewable waste	2.3	3.2	3.1	3.1	3.0	3.4
Solar thermal	0.1	0.2	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	0.5	0.7	0.5	0.4	0.5
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.1	0.2	0.2	0.2	0.3	0.3
Electricity	4.4	5.2	5.3	5.5	5.3	5.5
Heat	1.0	1.6	1.7	1.7	1.7	1.9
by Sector						
Industry	6.0	7.6	7.4	7.5	7.2	7.6
Transport	6.4	8.2	8.5	8.8	7.7	8.0
Residential	6.3	7.1	6.6	6.7	7.0	7.7
Services	2.6	2.6	2.5	2.6	2.4	2.6
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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	17.8	21.3	24.7	25.9	26.3	27.4
Combustible Fuels	6.1	7.3	7.7	6.4	6.4	6.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	11.6	12.9	13.6	14.6	14.6	14.7
Wind	0.1	1.0	2.5	3.2	3.2	3.4
Solar	0.0	0.1	0.9	1.7	2.0	2.8
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]	61.2	71.1	65.3	74.2	72.5	70.7
Solid fossil fuels, peat and products, oil shale	5.7	4.9	3.0	1.5	0.6	0.1
Oil and petroleum products	1.7	1.3	0.9	0.7	0.7	0.7
Natural gas	8.9	16.1	9.8	13.2	11.8	12.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	44.8	48.2	51.0	58.0	58.8	56.5
Wastes non-RES	0.1	0.6	0.7	0.8	0.7	0.7
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			2.8	2.9	2.9	5.0
CHP Electricity Generation [TWh]			9.0	9.7	9.8	11.5
CHP in Total Electricity Generation [%]			13.8	13.1	13.9	16.3
CHP Heat Production [PJ]			105.9	110.2	111.3	112.2
Transport Fuels [ktoe]						
Final consumption petroleum products	8274	9352	8857	9351	8357	8751
of which LPG	166	177	73	73	71	79
of which motor gasoline	2016	1767	1542	1559	1293	1364
of which Gas/Diesel oil	6093	7408	7242	7718	6993	7307
Final consumption biofuels	17	532	683	515	433	484
pure and blended biogasoline	0	78	60	57	56	49
pure and blended biodiesel	17	454	623	459	377	434
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	27.5	32.9	31.7	32.3	29.8	31.6
Final energy consumption 2020-2030 [Mtoe]	23.7	28.0	27.5	28.3	26.1	27.8
Primary Energy Intensity 2020-2030 [toe/M€15]	98	101	92	86	85	86
Energy Intensity (GAE/GDP2015) [toe/M€15]	104	107	98	93	93	93
Energy per Capita (GIC/pop) [kgoe/capita]	3652	4171	3928	3924	3633	3820
Final Electricity per Capita [KWh/capita]	7652	8515	7605	8378	8150	7919
Import Dependency [%]	65.6%	62.8%	60.4%	71.6%	58.4%	52.0%
of Solid fossil fuels	83.9%	99.6%	86.9%	96.7%	97.8%	100.2%
of Hard Coal	91.6%	97.3%	83.5%	98.4%	95.5%	100.7%
of Oil and petroleum products	89.2%	90.6%	94.0%	95.8%	97.6%	90.1%
of Crude and NGL	86.9%	86.5%	91.1%	94.0%	93.0%	91.7%
of Natural Gas	80.6%	75.3%	72.6%	122.8%	73.4%	51.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		31.21%	33.50%	33.75%	36.55%	36.44%
RE-T - Renewable energy in Transport [%]		10.71%	11.41%	10.05%	10.28%	9.35%
RES-E - Renewable Electricity Generation [%]		66.36%	71.49%	75.07%	78.20%	76.19%
RES-H&C - Renewable Heating and Cooling [%]		30.96%	33.23%	33.93%	34.99%	35.48%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	67.9	74.1	68.5	70.9	63.2	67.2
GHG emissions - National total*	82.3	86.8	81.0	82.9	75.0	78.8
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	103.0%	108.5%	101.4%	103.7%	93.8%	98.5%
Total GHG per capita [t CO ₂ eq./capita]	10.3	10.4	9.4	9.4	8.4	8.8

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.22 Poland

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	78.6	66.8	67.8	62.1	58.0	60.1
Solid fossil fuels	70.7	55.1	53.6	44.4	40.0	42.0
of which hard coal	58.6	43.5	41.3	34.8	31.2	31.7
of which brown coal	12.1	11.6	12.3	9.5	8.8	10.3
Oil and petroleum products	0.7	0.7	0.9	1.0	0.9	0.9
of which crude oil	0.7	0.7	0.9	1.0	0.9	0.9
Natural gas	3.3	3.7	3.7	3.4	3.4	3.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	3.8	6.9	9.0	12.3	12.5	12.8
Wastes, Non-Renewable	0.1	0.4	0.5	1.1	1.1	1.0
Net Imports	9.6	32.1	28.7	48.1	44.2	44.5
Solid fossil fuels	-16.3	-2.7	-5.5	2.6	0.1	-1.7
of which hard coal	-13.8	1.8	-1.0	6.9	4.5	3.3
Oil and petroleum products	19.8	25.7	24.1	30.7	28.8	30.5
of which crude oil and NGL	18.1	22.8	26.6	26.8	25.1	23.8
Natural gas	6.6	8.9	9.9	13.4	13.6	15.2
Renewables and biofuels	0.0	0.4	0.1	0.5	0.4	0.3
Electricity	-0.5	-0.1	0.0	0.9	1.1	0.1
Gross inland consumption	89.2	101.6	95.9	106.1	103.0	109.6
Solid fossil fuels	56.3	55.2	48.4	43.8	40.9	45.9
of which hard coal	46.3	48.5	40.7	38.8	36.2	40.5
of which brown coal	12.1	11.6	12.3	9.5	8.8	10.4
Oil and petroleum products	19.6	26.0	24.1	31.3	29.4	31.3
of which crude oil and NGL	18.3	23.2	26.5	27.7	26.0	25.1
Natural gas	10.0	12.8	13.8	16.2	17.4	18.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	3.8	7.3	9.1	12.7	13.0	13.1
Electricity	-0.5	-0.1	0.0	0.9	1.1	0.1
Waste, non-renewable	0.1	0.4	0.5	1.1	1.1	1.0
Available for final consumption	57.1	70.4	65.2	77.7	77.7	77.1
Final non-energy consumption	4.4	5.0	5.6	5.6	5.6	5.8
Final energy consumption	53.6	65.3	60.9	71.9	71.9	70.3
by Fuel/Product						
Solid fossil fuels	11.9	13.2	10.7	9.0	9.0	8.7
Oil and petroleum products	15.2	20.2	18.6	25.4	24.4	26.2
Natural gas	6.3	8.9	8.5	9.3	9.2	10.8
Renewables and biofuels	3.5	5.3	5.6	9.2	9.0	9.0
Solid biofuels and renewable waste	3.5	4.3	4.6	7.7	7.5	7.3
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	0.9	0.7	1.0	1.0	1.1
Biogases	0.0	0.0	0.1	0.1	0.1	0.1
Waste, non-renewable	0.1	0.4	0.5	0.8	0.8	0.8
Electricity	8.4	10.2	11.0	12.1	11.8	12.4
Heat	6.9	6.5	5.5	5.6	5.6	6.0
by Sector						
Industry	17.1	13.5	14.1	16.5	15.9	16.3
Transport	9.6	17.2	16.6	22.8	21.8	23.5
Residential	17.2	22.0	19.0	21.0	21.1	22.1
Services	5.0	8.8	7.8	7.8	7.6	8.5
Agriculture and Fishing	4.6	3.7	3.3	3.8	3.9	3.7
Others	0.0	0.0	0.0	0.0	0.0	0.0

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	30.6	33.4	37.3	43.4	49.4	52.8
Combustible Fuels	28.4	29.9	30.0	33.6	36.7	36.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	2.2	2.3	2.4	2.4	2.4	2.4
Wind	0.0	1.1	4.9	5.8	6.3	7.0
Solar	0.0	0.0	0.1	1.5	4.0	7.4
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]	145.2	157.6	164.8	163.8	157.9	179.5
Solid fossil fuels, peat and products, oil shale	135.9	136.5	130.5	118.1	107.4	127.6
Oil and petroleum products	1.9	2.9	2.1	1.8	1.7	2.0
Natural gas	3.0	6.7	8.8	17.1	19.3	18.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	4.3	11.5	23.3	26.2	29.0	31.3
Wastes non-RES	0.1	0.0	0.1	0.6	0.5	0.6
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			8.6	9.7	10.0	10.8
CHP Electricity Generation [TWh]			26.5	29.9	30.1	31.3
CHP in Total Electricity Generation [%]			16.1	18.3	16.8	17.4
CHP Heat Production [PJ]			238.6	248.5	245.6	259.6
Transport Fuels [ktoe]						
Final consumption petroleum products	13 789	19 566	18 333	24 888	23 848	25 574
of which LPG	1 153	2 618	2 504	2 946	2 659	2 725
of which motor gasoline	5 291	4 252	3 658	4 544	4 229	4 677
of which Gas/Diesel oil	7 344	12 696	12 170	17 398	16 959	18 171
Final consumption biofuels	0	867	653	1 026	1 041	1 121
pure and blended biogasoline	0	170	153	187	183	208
pure and blended biodiesel	0	698	500	838	857	912
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	84.8	96.6	90.1	100.2	96.9	104.0
Final energy consumption 2020-2030 [Mtoe]	55.1	66.3	62.3	73.7	71.1	75.2
Primary Energy Intensity 2020-2030 [toe/M€15]	335	262	210	195	192	193
Energy Intensity (GAE/GDP2015) [toe/M€15]	352	276	223	206	204	203
Energy per Capita (GIC/pop) [kgoe/capita]	2 332	2 672	2 522	2 793	2 713	2 896
Final Electricity per Capita [KWh/capita]	3 794	4 144	4 337	4 312	4 161	4 745
Import Dependency [%]	10.8%	31.6%	29.9%	45.4%	42.9%	40.6%
of Solid fossil fuels	-29.0%	-5.0%	-11.4%	6.0%	0.3%	-3.6%
of Hard Coal	-29.9%	3.7%	-2.4%	17.8%	12.4%	8.3%
of Oil and petroleum products	101.2%	99.0%	100.3%	98.2%	97.9%	97.5%
of Crude and NGL	99.2%	98.4%	100.5%	96.7%	96.6%	94.6%
of Natural Gas	66.3%	69.3%	72.2%	82.4%	78.3%	83.6%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		9.28%	11.88%	15.38%	16.10%	15.62%
RE-T - Renewable energy in Transport [%]		6.64%	5.69%	6.20%	6.58%	5.66%
RES-E - Renewable Electricity Generation [%]		6.55%	13.40%	14.36%	16.24%	17.17%
RES-H&C - Renewable Heating and Cooling [%]		11.81%	14.79%	22.00%	22.14%	21.03%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	318.7	336.2	315.1	321.4	304.4	333.3
GHG emissions - National total*	395.3	409.3	385.8	390.1	373.3	402.4
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	83.1%	86.1%	81.1%	82.0%	78.5%	84.6%
Total GHG per capita [t CO ₂ eq./capita]	10.3	10.8	10.2	10.3	9.8	10.6

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.23 Portugal

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	3.8	5.8	5.9	6.6	6.8	7.0
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	3.8	5.6	5.8	6.4	6.7	6.8
Wastes, Non-Renewable	0.1	0.2	0.1	0.2	0.1	0.2
Net Imports	22.2	18.7	18.5	18.4	14.4	14.9
Solid fossil fuels	3.9	1.6	3.2	1.5	0.0	0.0
of which hard coal	4.0	1.6	3.2	1.5	0.0	0.0
Oil and petroleum products	16.2	12.5	11.2	11.6	9.4	9.6
of which crude oil and NGL	11.7	11.5	14.4	11.5	11.0	9.6
Natural gas	2.0	4.5	4.1	5.3	5.2	5.0
Renewables and biofuels	0.0	-0.2	-0.2	-0.3	-0.3	-0.2
Electricity	0.1	0.2	0.2	0.3	0.1	0.4
Gross inland consumption	25.4	24.4	23.6	23.9	21.4	21.5
Solid fossil fuels	3.8	1.7	3.3	1.2	0.6	0.2
of which hard coal	3.8	1.7	3.3	1.2	0.6	0.2
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	15.6	12.4	10.4	10.8	8.9	9.1
of which crude oil and NGL	11.8	11.6	14.2	11.4	11.2	9.8
Natural gas	2.0	4.5	4.1	5.3	5.2	5.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	3.8	5.5	5.6	6.1	6.4	6.6
Electricity	0.1	0.2	0.2	0.3	0.1	0.4
Waste, non-renewable	0.1	0.2	0.2	0.2	0.2	0.2
Available for final consumption	19.5	19.0	16.9	17.6	17.6	16.4
Final non-energy consumption	2.4	1.7	1.3	1.2	1.2	1.2
Final energy consumption	17.2	17.3	15.6	16.4	16.4	15.2
by Fuel/Product						
Solid fossil fuels	0.4	0.1	0.0	0.0	0.0	0.0
Oil and petroleum products	10.1	8.4	6.9	7.2	6.3	6.5
Natural gas	0.8	1.6	1.6	1.8	1.7	1.9
Renewables and biofuels	2.4	2.5	2.8	2.9	2.9	3.0
Solid biofuels and renewable waste	2.4	2.2	1.7	1.8	1.8	1.8
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	0.3	0.3	0.3	0.3	0.4
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.1	0.1	0.1	0.1	0.1
Electricity	3.3	4.3	3.9	4.1	4.0	4.1
Heat	0.1	0.3	0.2	0.2	0.2	0.2
by Sector						
Industry	6.3	5.5	4.4	4.6	4.4	4.5
Transport	6.0	6.5	5.6	6.0	5.0	5.5
Residential	2.8	3.0	2.8	2.9	3.0	3.0
Services	1.4	1.9	2.4	2.4	2.2	2.2
Agriculture and Fishing	0.7	0.5	0.4	0.5	0.5	0.5
Others	0.0	0.0	0.0	0.0	0.0	0.0

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	10.9	18.9	19.6	21.6	21.7	21.3
Combustible Fuels	6.3	9.9	8.0	8.2	8.2	7.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	4.5	5.1	6.2	7.3	7.2	7.3
Wind	0.1	3.8	4.9	5.2	5.1	5.4
Solar	0.0	0.1	0.4	0.9	1.1	1.6
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	54.1	52.4	53.2	53.1	51.0
Solid fossil fuels, peat and products, oil shale	14.6	7.1	14.7	5.5	2.4	0.8
Oil and petroleum products	8.4	3.0	1.3	1.3	1.2	1.2
Natural gas	7.2	14.9	10.6	17.3	17.6	15.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	13.3	28.8	25.5	28.8	31.6	33.1
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	1.3	1.3
CHP Electricity Generation [TWh]			6.5	6.4	6.5	6.1
CHP in Total Electricity Generation [%]			12.3	12.1	12.8	11.9
CHP Heat Production [PJ]			59.3	62.1	59.8	59.3
Transport Fuels [ktoe]						
Final consumption petroleum products	8 310	7 439	6 200	6 566	5 723	6 017
of which LPG	1 139	728	571	557	548	491
of which motor gasoline	2 272	1 459	1 100	1 108	918	998
of which Gas/Diesel oil	4 899	5 252	4 528	4 901	4 258	4 528
Final consumption biofuels	0	327	344	283	255	356
pure and blended biogasoline	0	0	21	8	6	17
pure and blended biodiesel	0	323	320	275	248	339
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	23.0	22.7	21.6	22.1	19.5	19.5
Final energy consumption 2020-2030 [Mtoe]	18.0	18.1	16.0	17.1	15.0	15.7
Primary Energy Intensity 2020-2030 [toe/M€15]	132	121	120	110	106	101
Energy Intensity (GAE/GDP2015) [toe/M€15]	146	130	131	119	116	111
Energy per Capita (GIC/pop) [kgoe/capita]	2 476	2 306	2 274	2 326	2 079	2 092
Final Electricity per Capita [KWh/capita]	4 270	5 115	5 052	5 172	5 155	4 950
Import Dependency [%]	87.5%	76.6%	78.4%	76.8%	67.4%	69.0%
of Solid fossil fuels	102.9%	98.3%	98.5%	122.1%	-6.5%	4.5%
of Hard Coal	103.4%	98.3%	98.5%	122.3%	-7.9%	1.2%
of Oil and petroleum products	103.6%	101.1%	108.0%	106.8%	105.0%	105.0%
of Crude and NGL	99.0%	98.8%	100.9%	100.4%	98.3%	98.6%
of Natural Gas	100.3%	100.4%	100.4%	99.9%	99.3%	100.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		24.15%	30.51%	30.62%	33.98%	33.98%
RE-T - Renewable energy in Transport [%]		5.55%	7.43%	9.09%	9.70%	8.61%
RES-E - Renewable Electricity Generation [%]		40.61%	52.62%	53.77%	58.03%	58.43%
RES-H&C - Renewable Heating and Cooling [%]		33.81%	40.10%	41.66%	41.55%	42.68%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	67.8	55.7	55.5	52.0	43.4	42.1
GHG emissions - National total*	84.6	72.4	71.5	68.7	59.7	58.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	138.5%	118.4%	117.0%	112.4%	97.8%	95.8%
Total GHG per capita [t CO ₂ eq./capita]	8.3	6.8	6.9	6.7	5.8	5.7

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.24 Romania

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	28.5	27.4	26.4	24.5	22.4	23.0
Solid fossil fuels	5.6	5.9	4.7	3.9	2.6	3.0
of which hard coal	0.2	0.0	0.0	0.0	0.0	0.0
of which brown coal	5.4	5.9	4.7	3.9	2.6	3.0
Oil and petroleum products	6.4	4.2	3.9	3.5	3.4	3.2
of which crude oil	6.4	4.2	3.9	3.5	3.4	3.2
Natural gas	11.0	8.6	8.8	8.3	7.4	7.4
Nuclear	1.4	2.9	2.9	2.8	2.9	2.9
Renewables and biofuels	4.0	5.7	5.9	5.8	5.8	6.1
Wastes, Non-Renewable	0.1	0.0	0.1	0.1	0.3	0.3
Net Imports	8.0	7.5	5.3	10.1	9.1	10.9
Solid fossil fuels	1.9	1.2	1.0	1.1	0.8	0.9
of which hard coal	1.6	0.1	0.1	0.1	0.1	0.1
Oil and petroleum products	3.5	4.6	4.7	6.5	6.3	7.2
of which crude oil and NGL	4.8	5.7	6.5	8.6	7.0	6.8
Natural gas	2.7	1.8	0.2	2.1	1.6	2.3
Renewables and biofuels	0.0	0.1	0.0	0.2	0.2	0.3
Electricity	-0.1	-0.2	-0.6	0.1	0.2	0.2
Gross inland consumption	36.8	35.0	31.9	33.2	32.2	34.3
Solid fossil fuels	7.5	6.9	5.9	4.9	3.5	4.0
of which hard coal	1.7	0.1	0.1	0.1	0.1	0.1
of which brown coal	5.5	6.2	5.3	4.3	3.0	3.4
Oil and petroleum products	10.1	8.6	8.6	9.9	9.6	10.5
of which crude oil and NGL	11.1	10.0	10.4	12.0	10.5	10.1
Natural gas	13.7	10.8	8.9	9.3	9.7	9.9
Nuclear	1.4	2.9	2.9	2.8	2.9	2.9
Renewables and biofuels	4.0	5.9	6.0	6.0	6.0	6.4
Electricity	-0.1	-0.2	-0.6	0.1	0.2	0.2
Waste, non-renewable	0.1	0.0	0.1	0.2	0.3	0.3
Available for final consumption	24.1	24.8	22.8	25.1	25.1	25.1
Final non-energy consumption	1.9	2.1	1.1	1.1	1.1	1.3
Final energy consumption	21.9	22.0	21.6	23.7	23.7	23.5
by Fuel/Product						
Solid fossil fuels	0.3	0.5	0.8	0.7	0.6	0.7
Oil and petroleum products	5.4	6.0	6.8	8.3	7.9	8.4
Natural gas	6.5	6.0	5.3	5.6	5.8	6.6
Renewables and biofuels	2.7	4.0	3.5	3.8	3.8	4.1
Solid biofuels and renewable waste	2.7	3.9	3.3	3.4	3.4	3.6
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	0.1	0.2	0.4	0.5	0.5
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.1	0.0	0.1	0.2	0.3	0.3
Electricity	2.9	3.6	3.7	3.9	3.8	4.0
Heat	3.6	1.6	1.3	1.1	1.0	1.0
by Sector						
Industry	8.6	6.5	6.4	6.7	6.4	6.9
Transport	3.3	5.0	5.3	6.6	6.5	6.9
Residential	8.4	8.1	7.4	7.8	8.0	8.8
Services	0.7	1.9	1.8	2.0	1.8	1.9
Agriculture and Fishing	0.4	0.4	0.5	0.6	0.5	0.6
Others	0.5	0.2	0.2	0.2	0.2	0.4

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	16.8	19.9	23.8	20.9	20.6	18.8
Combustible Fuels	10.0	11.6	11.2	8.4	8.1	6.3
Nuclear	0.7	1.4	1.4	1.4	1.4	1.4
Hydro	6.1	6.5	6.7	6.7	6.7	6.7
Wind	0.0	0.4	3.1	3.0	3.0	3.0
Solar	0.0	0.0	1.3	1.4	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	61.0	66.3	59.6	55.9	59.5
Solid fossil fuels, peat and products, oil shale	18.9	20.7	18.1	13.6	9.4	10.7
Oil and petroleum products	3.4	0.7	0.5	0.6	0.6	0.8
Natural gas	9.0	7.3	9.5	9.1	9.6	10.1
Nuclear	5.5	11.6	11.6	11.3	11.5	11.3
Renewables and biofuels	14.8	20.7	26.6	25.1	24.9	26.7
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.8	1.3	1.4	1.5
CHP Electricity Generation [TWh]			5.6	5.1	4.6	4.7
CHP in Total Electricity Generation [%]			8.4	12.1	7.8	7.9
CHP Heat Production [PJ]			51.0	62.1	35.4	36.1
Transport Fuels [ktoe]						
Final consumption petroleum products	4355	5662	6172	7377	7148	7755
of which LPG	317	489	438	514	454	464
of which motor gasoline	1403	1457	1319	1395	1290	1382
of which Gas/Diesel oil	2634	3717	4415	5468	5404	5909
Final consumption biofuels	0	116	202	412	483	496
pure and blended biogasoline	0	47	61	98	92	121
pure and blended biodiesel	0	69	141	315	392	375
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	34.9	32.9	30.7	32.1	30.9	33.1
Final energy consumption 2020-2030 [Mtoe]	22.7	22.5	21.8	23.9	23.5	25.4
Primary Energy Intensity 2020-2030 [toe/M€15]	377	236	192	163	163	165
Energy Intensity (GAE/GDP2015) [toe/M€15]	398	251	199	169	170	171
Energy per Capita (GIC/pop) [kgoe/capita]	1637	1725	1604	1710	1667	1786
Final Electricity per Capita [KWh/capita]	2296	3005	3336	3071	2894	3097
Import Dependency [%]	21.9%	21.4%	16.7%	30.3%	28.2%	31.7%
of Solid fossil fuels	25.5%	16.9%	16.7%	22.0%	22.0%	23.2%
of Hard Coal	96.3%	88.4%	96.9%	97.7%	106.4%	102.6%
of Oil and petroleum products	34.4%	52.7%	54.5%	65.6%	64.9%	68.4%
of Crude and NGL	43.5%	57.2%	63.0%	72.0%	66.9%	67.3%
of Natural Gas	19.8%	16.8%	1.8%	23.2%	16.6%	22.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		22.83%	24.79%	24.29%	24.48%	23.60%
RE-T - Renewable energy in Transport [%]		1.37%	5.49%	7.85%	8.54%	7.67%
RES-E - Renewable Electricity Generation [%]		30.38%	43.16%	42.62%	43.37%	42.49%
RES-H&C - Renewable Heating and Cooling [%]		27.23%	25.89%	25.74%	25.33%	24.48%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	93.8	86.6	78.7	77.3	74.2	77.4
GHG emissions - National total*	142.7	127.2	117.8	116.2	112.2	115.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	55.3%	49.3%	45.7%	45.1%	43.5%	44.8%
Total GHG per capita [t CO ₂ eq./capita]	6.4	6.3	5.9	6.0	5.8	6.0

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.25 Slovenia

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	3.2	3.7	3.3	3.4	3.5	3.3
Solid fossil fuels	1.1	1.2	0.9	0.9	0.9	0.7
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	1.1	1.2	0.9	0.9	0.9	0.7
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	0.0	0.0	0.0	0.0	0.0
Nuclear	1.2	1.3	1.3	1.4	1.5	1.4
Renewables and biofuels	0.9	1.1	1.1	1.0	1.1	1.2
Wastes, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Net Imports	3.4	3.6	3.2	3.6	2.9	3.2
Solid fossil fuels	0.2	0.3	0.2	0.2	0.2	0.1
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	2.5	2.6	2.3	2.6	2.1	2.3
of which crude oil and NGL	0.1	0.0	0.0	0.0	0.0	0.0
Natural gas	0.8	0.9	0.7	0.7	0.7	0.8
Renewables and biofuels	0.0	0.0	0.0	0.1	0.1	0.1
Electricity	-0.1	-0.2	0.0	0.0	-0.2	0.0
Gross inland consumption	6.6	7.3	6.5	6.7	6.3	6.5
Solid fossil fuels	1.3	1.5	1.1	1.1	1.0	0.9
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	1.2	1.4	1.0	1.0	1.0	0.9
Oil and petroleum products	2.4	2.6	2.3	2.4	2.0	2.2
of which crude oil and NGL	0.1	0.0	0.0	0.0	0.0	0.0
Natural gas	0.8	0.9	0.7	0.7	0.7	0.8
Nuclear	1.2	1.3	1.3	1.4	1.5	1.4
Renewables and biofuels	0.9	1.2	1.1	1.1	1.2	1.3
Electricity	-0.1	-0.2	0.0	0.0	-0.2	0.0
Waste, non-renewable	0.0	0.0	0.0	0.1	0.1	0.1
Available for final consumption	4.8	5.3	4.8	5.0	5.0	4.6
Final non-energy consumption	0.2	0.2	0.1	0.2	0.2	0.1
Final energy consumption	4.5	5.0	4.7	4.9	4.9	4.4
by Fuel/Product						
Solid fossil fuels	0.1	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	2.2	2.4	2.1	2.2	1.9	2.0
Natural gas	0.6	0.6	0.6	0.6	0.6	0.6
Renewables and biofuels	0.5	0.7	0.7	0.6	0.6	0.7
Solid biofuels and renewable waste	0.5	0.6	0.6	0.5	0.5	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	0.1	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	0.1	0.0	0.0
Electricity	0.9	1.0	1.1	1.2	1.1	1.2
Heat	0.2	0.2	0.2	0.2	0.2	0.2
by Sector						
Industry	1.4	1.3	1.2	1.3	1.3	1.3
Transport	1.2	1.8	1.8	1.9	1.6	1.8
Residential	1.2	1.4	1.2	1.1	1.1	1.2
Services	0.5	0.5	0.5	0.5	0.4	0.4
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

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	2.6	3.2	3.4	3.8	3.9	4.1
Combustible Fuels	1.1	1.3	1.1	1.5	1.5	1.6
Nuclear	0.7	0.7	0.7	0.7	0.7	0.7
Hydro	0.8	1.3	1.3	1.4	1.4	1.4
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.2	0.3	0.4	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]	13.6	16.4	15.1	16.1	17.2	15.9
Solid fossil fuels, peat and products, oil shale	4.6	5.3	4.4	4.5	4.4	3.8
Oil and petroleum products	0.1	0.0	0.0	0.0	0.0	0.1
Natural gas	0.3	0.5	0.4	0.5	0.6	0.5
Nuclear	4.8	5.7	5.6	5.8	6.4	5.7
Renewables and biofuels	3.9	4.9	4.6	5.2	5.9	5.7
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.4	0.4	0.3	0.4
CHP Electricity Generation [TWh]			1.2	1.2	1.2	1.2
CHP in Total Electricity Generation [%]			7.7	7.3	7.3	7.5
CHP Heat Production [PJ]			10.4	11.0	11.2	11.2
Transport Fuels [ktoe]						
Final consumption petroleum products	2 135	2 407	2 112	2 159	1 827	1 986
of which LPG	104	92	88	96	84	85
of which motor gasoline	854	604	442	413	327	371
of which Gas/Diesel oil	1 177	1 710	1 582	1 651	1 416	1 531
Final consumption biofuels	0	46	29	95	93	103
pure and blended biogasoline	0	4	7	4	8	9
pure and blended biodiesel	0	41	23	91	85	95
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	6.3	7.0	6.3	6.5	6.1	6.3
Final energy consumption 2020-2030 [Mtoe]	4.6	5.1	4.7	4.9	4.4	4.7
Primary Energy Intensity 2020-2030 [toe/M€15]	217	185	163	144	141	135
Energy Intensity (GAE/GDP2015) [toe/M€15]	225	191	167	148	146	139
Energy per Capita (GIC/pop) [kgoe/capita]	3 301	3 544	3 151	3 231	3 025	3 103
Final Electricity per Capita [KWh/capita]	6 854	8 031	7 320	7 737	8 202	7 528
Import Dependency [%]	51.9%	49.4%	49.8%	53.6%	46.5%	49.3%
of Solid fossil fuels	18.8%	19.3%	19.1%	20.1%	17.7%	11.0%
of Hard Coal	118.2%	135.3%	124.2%	95.9%	97.7%	103.8%
of Oil and petroleum products	101.5%	99.9%	102.4%	109.6%	105.2%	103.5%
of Crude and NGL	87.2%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	99.3%	99.3%	99.6%	99.2%	99.4%	99.4%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)	21.08%	22.88%	21.97%	25.00%	25.00%	
RE-T - Renewable energy in Transport [%]	3.12%	2.24%	7.98%	10.91%	10.64%	
RES-E - Renewable Electricity Generation [%]	32.20%	32.72%	32.63%	35.09%	34.98%	
RES-H&C - Renewable Heating and Cooling [%]	29.54%	36.15%	32.13%	32.14%	35.22%	
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	15.1	16.5	13.7	14.1	12.9	13.1
GHG emissions - National total*	18.8	19.9	17.0	17.3	16.0	16.1
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	100.0%	105.4%	90.1%	91.7%	84.9%	85.6%
Total GHG per capita [t CO ₂ eq./capita]	9.5	9.7	8.2	8.3	7.6	7.6

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.26 Slovakia

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	6.3	6.0	6.4	6.9	6.8	7.0
Solid fossil fuels	1.0	0.6	0.5	0.4	0.2	0.3
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	1.0	0.6	0.5	0.4	0.2	0.3
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	0.0
Nuclear	4.3	3.9	4.0	4.0	4.0	4.1
Renewables and biofuels	0.5	1.4	1.6	2.2	2.2	2.4
Wastes, Non-Renewable	0.3	0.0	0.2	0.2	0.2	0.2
Net Imports	11.5	11.4	9.8	11.9	9.3	9.4
Solid fossil fuels	3.4	3.0	2.8	2.5	2.0	2.5
of which hard coal	3.1	2.6	2.5	2.2	1.7	2.3
Oil and petroleum products	2.6	3.5	3.1	3.6	3.7	3.7
of which crude oil and NGL	5.3	5.5	5.9	5.2	5.7	5.5
Natural gas	5.7	5.0	3.7	5.6	3.6	3.1
Renewables and biofuels	0.0	-0.1	0.0	0.0	0.0	0.0
Electricity	-0.2	0.1	0.2	0.1	0.0	0.1
Gross inland consumption	17.7	17.7	16.3	17.0	16.4	17.8
Solid fossil fuels	4.3	3.9	3.3	2.7	2.3	2.8
of which hard coal	3.0	2.8	2.6	2.2	1.8	2.4
of which brown coal	1.2	0.8	0.7	0.5	0.5	0.4
Oil and petroleum products	2.9	3.5	3.1	3.6	3.6	3.7
of which crude oil and NGL	5.4	5.5	5.9	5.1	5.6	5.5
Natural gas	5.8	5.0	3.9	4.1	4.1	4.6
Nuclear	4.3	3.9	4.0	4.0	4.0	4.1
Renewables and biofuels	0.5	1.3	1.6	2.2	2.1	2.3
Electricity	-0.2	0.1	0.2	0.1	0.0	0.1
Waste, non-renewable	0.3	0.0	0.2	0.2	0.2	0.2
Available for final consumption	11.7	11.5	10.0	11.3	11.3	10.8
Final non-energy consumption	1.4	1.1	1.0	1.0	1.0	1.2
Final energy consumption	9.9	10.4	8.9	10.2	10.2	9.6
by Fuel/Product						
Solid fossil fuels	0.9	0.7	0.4	0.4	0.4	0.4
Oil and petroleum products	1.7	2.3	2.1	2.8	2.6	2.7
Natural gas	4.2	3.5	2.5	2.6	2.4	2.7
Renewables and biofuels	0.1	0.5	0.6	1.2	1.1	1.3
Solid biofuels and renewable waste	0.1	0.4	0.4	1.0	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	0.1	0.1	0.2	0.2	0.2
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.2	0.0	0.2	0.2	0.2	0.2
Electricity	1.9	2.1	2.1	2.2	2.0	2.2
Heat	0.6	0.9	0.6	0.5	0.5	0.6
by Sector						
Industry	3.5	3.2	3.3	3.5	3.1	3.4
Transport	1.4	2.6	2.2	2.8	2.5	2.6
Residential	2.6	2.3	2.0	2.6	2.7	3.0
Services	2.2	2.1	1.3	1.2	1.1	1.4
Agriculture and Fishing	0.2	0.1	0.2	0.1	0.1	0.1
Others	0.0	0.0	0.0	0.0	0.0	0.0

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	7.5	7.9	7.8	7.7	7.7	7.5
Combustible Fuels	2.4	3.5	2.8	2.6	2.7	2.4
Nuclear	2.6	1.8	1.9	1.9	2.0	2.0
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	0.5	0.6	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	27.8	26.8	28.4	28.8	30.0
Solid fossil fuels, peat and products, oil shale	5.6	3.6	2.8	2.3	1.9	1.7
Oil and petroleum products	0.2	0.6	0.4	0.5	0.4	0.4
Natural gas	3.9	2.7	2.1	3.4	3.9	4.9
Nuclear	16.5	14.6	15.1	15.3	15.4	15.7
Renewables and biofuels	5.0	6.3	6.3	6.9	7.1	7.1
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.2
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			3.7	1.5	1.6	1.5
CHP Electricity Generation [TWh]			21.1	3.1	3.3	3.5
CHP in Total Electricity Generation [%]			78.5	10.8	11.0	11.8
CHP Heat Production [PJ]			27.3	34.9	35.1	41.0
Transport Fuels [ktoe]						
Final consumption petroleum products	1 498	2 179	1 983	2 496	2 296	2 434
of which LPG	33	42	54	49	49	57
of which motor gasoline	612	601	578	551	505	514
of which Gas/Diesel oil	852	1 536	1 351	1 896	1 742	1 863
Final consumption biofuels	0	98	144	157	155	161
pure and blended biogasoline	0	24	23	20	26	26
pure and blended biodiesel	0	74	121	137	129	135
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	16.4	16.7	15.2	16.0	15.2	16.4
Final energy consumption 2020-2030 [Mtoe]	11.0	11.5	10.1	11.2	10.4	11.6
Primary Energy Intensity 2020-2030 [toe/M€15]	378	235	190	178	175	181
Energy Intensity (GAE/GDP2015) [toe/M€15]	410	250	203	190	190	196
Energy per Capita (GIC/pop) [kgoe/capita]	3 284	3 286	3 000	3 123	3 013	3 259
Final Electricity per Capita [KWh/capita]	5 771	5 161	4 944	5 211	5 278	5 487
Import Dependency [%]	65.1%	64.4%	60.1%	69.8%	56.3%	52.6%
of Solid fossil fuels	80.2%	75.7%	84.5%	92.2%	86.2%	88.1%
of Hard Coal	103.8%	91.9%	97.5%	102.7%	97.3%	95.5%
of Oil and petroleum products	92.5%	98.4%	100.6%	101.3%	102.0%	98.3%
of Crude and NGL	97.6%	99.9%	99.3%	100.5%	101.4%	99.1%
of Natural Gas	98.8%	99.9%	95.1%	136.6%	88.1%	69.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		9.10%	12.88%	16.89%	17.34%	17.41%
RE-T - Renewable energy in Transport [%]		5.29%	8.63%	8.31%	9.26%	8.75%
RES-E - Renewable Electricity Generation [%]		17.77%	22.66%	22.10%	23.07%	22.37%
RES-H&C - Renewable Heating and Cooling [%]		7.90%	10.79%	19.70%	19.43%	19.52%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	41.3	38.6	34.7	34.0	31.2	35.3
GHG emissions - National total*	49.1	45.9	41.1	40.2	37.3	41.3
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	66.4%	62.2%	55.6%	54.4%	50.5%	55.9%
Total GHG per capita [t CO ₂ eq./capita]	9.1	8.5	7.6	7.4	6.8	7.6

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.27 Finland

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	14.9	17.1	17.2	18.9	18.1	19.5
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	0.1	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	5.8	5.6	5.6	5.7	5.5	5.6
Renewables and biofuels	7.8	9.4	10.4	11.8	11.5	13.2
Wastes, Non-Renewable	0.1	0.1	0.2	0.3	0.3	0.3
Net Imports	18.6	18.1	15.8	14.9	14.0	12.9
Solid fossil fuels	3.5	4.0	2.5	2.1	1.7	1.5
of which hard coal	3.2	3.7	2.3	2.0	1.6	1.4
Oil and petroleum products	10.6	9.5	9.6	8.4	8.3	7.2
of which crude oil and NGL	11.9	11.4	11.1	12.7	11.6	8.6
Natural gas	3.4	3.8	2.2	2.1	2.1	2.1
Renewables and biofuels	0.0	-0.1	0.1	0.4	0.5	0.5
Electricity	1.0	0.9	1.4	1.7	1.3	1.5
Gross inland consumption	32.8	36.8	32.7	34.2	32.1	33.7
Solid fossil fuels	3.6	4.6	2.7	2.1	1.8	2.1
of which hard coal	3.3	4.3	2.6	2.1	1.8	1.9
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	9.5	10.0	8.4	8.5	7.8	7.3
of which crude oil and NGL	11.7	11.3	10.7	12.8	11.6	8.7
Natural gas	3.4	3.8	2.2	2.1	2.1	2.1
Nuclear	5.8	5.6	5.6	5.7	5.5	5.6
Renewables and biofuels	7.8	9.3	10.5	12.2	12.0	13.7
Electricity	1.0	0.9	1.4	1.7	1.3	1.5
Waste, non-renewable	0.1	0.1	0.2	0.3	0.3	0.3
Available for final consumption	23.7	26.3	24.1	25.7	25.7	24.7
Final non-energy consumption	1.0	1.2	1.3	1.4	1.4	1.5
Final energy consumption	23.3	25.0	23.0	24.8	24.8	23.2
by Fuel/Product						
Solid fossil fuels	0.3	0.2	0.1	0.1	0.1	0.1
Oil and petroleum products	7.2	7.0	6.0	5.9	5.6	5.3
Natural gas	0.9	0.8	0.6	0.7	0.7	0.8
Renewables and biofuels	4.5	4.8	5.4	6.8	6.3	7.1
Solid biofuels and renewable waste	4.5	4.6	4.9	5.6	5.2	5.5
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	0.2	0.5	0.4	0.4	0.7
Biogases	0.0	0.0	0.0	0.1	0.1	0.1
Waste, non-renewable	0.0	0.0	0.0	0.0	0.1	0.1
Electricity	6.5	7.2	6.7	7.0	6.6	7.1
Heat	3.3	4.6	3.8	3.9	3.6	4.1
by Sector						
Industry	11.5	10.7	10.2	11.0	10.3	10.8
Transport	3.9	4.3	4.1	4.2	3.9	4.0
Residential	4.5	5.8	5.0	5.6	5.3	6.0
Services	2.3	3.1	2.7	3.0	2.8	3.1
Agriculture and Fishing	0.8	0.8	0.8	0.8	0.8	0.8
Others	0.3	0.3	0.3	0.2	0.3	0.2

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	16.3	15.4	16.5	17.4	17.3	17.9
Combustible Fuels	10.7	9.5	9.6	8.9	8.4	8.3
Nuclear	2.6	2.7	2.8	2.8	2.8	2.8
Hydro	2.9	3.0	3.1	3.2	3.2	3.2
Wind	0.0	0.2	1.0	2.3	2.6	3.3
Solar	0.0	0.0	0.0	0.2	0.3	0.4
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]	69.8	80.4	68.4	68.4	69.0	71.9
Solid fossil fuels, peat and products, oil shale	12.5	20.8	8.2	7.4	4.6	4.8
Oil and petroleum products	0.6	0.5	0.2	0.3	0.2	0.2
Natural gas	10.8	11.8	5.8	4.5	4.6	4.7
Nuclear	22.5	22.8	23.2	23.9	23.3	23.6
Renewables and biofuels	23.4	24.2	30.5	31.9	35.9	38.2
Wastes non-RES	0.1	0.2	0.4	0.5	0.4	0.5
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			5.8	6.4	6.4	6.3
CHP Electricity Generation [TWh]			21.7	22.5	18.9	20.6
CHP in Total Electricity Generation [%]			31.7	32.8	26.4	28.6
CHP Heat Production [PJ]			242.4	242.7	214.8	223.3
Transport Fuels [ktoe]						
Final consumption petroleum products	6 137	6 169	5 499	5 466	5 201	4 961
of which LPG	263	311	430	351	305	341
of which motor gasoline	1 833	1 613	1 441	1 323	1 230	1 240
of which Gas/Diesel oil	4 041	4 244	3 628	3 793	3 665	3 380
Final consumption biofuels	0	184	501	433	401	721
pure and blended biogasoline	0	81	70	94	99	119
pure and blended biodiesel	0	63	430	339	301	602
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	31.6	35.4	31.2	32.1	29.9	31.5
Final energy consumption 2020-2030 [Mtoe]	24.4	26.2	24.2	25.5	23.4	24.9
Primary Energy Intensity 2020-2030 [toe/M€15]	179	168	148	140	134	136
Energy Intensity (GAE/GDP2015) [toe/M€15]	185	175	155	149	143	146
Energy per Capita (GIC/pop) [kgoe/capita]	6 336	6 875	5 969	6 200	5 814	6 093
Final Electricity per Capita [KWh/capita]	13 495	15 017	12 491	12 394	12 495	12 987
Import Dependency [%]	56.6%	49.1%	48.4%	43.4%	43.6%	38.3%
of Solid fossil fuels	97.6%	86.3%	91.3%	98.9%	92.2%	72.4%
of Hard Coal	97.7%	85.5%	88.6%	96.1%	89.9%	72.0%
of Oil and petroleum products	111.5%	94.2%	113.3%	98.9%	106.4%	99.2%
of Crude and NGL	101.5%	101.1%	104.2%	99.0%	99.7%	98.5%
of Natural Gas	100.0%	100.0%	100.0%	100.6%	100.4%	99.7%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		32.17%	39.23%	42.81%	43.94%	43.10%
RE-T - Renewable energy in Transport [%]		4.39%	24.57%	14.85%	14.31%	20.75%
RES-E - Renewable Electricity Generation [%]		27.22%	32.21%	37.97%	39.56%	39.53%
RES-H&C - Renewable Heating and Cooling [%]		43.97%	52.62%	56.88%	57.62%	52.59%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	58.2	65.8	46.2	45.1	38.7	38.8
GHG emissions - National total*	71.3	77.3	57.0	55.4	48.7	48.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	98.7%	106.9%	78.9%	76.6%	67.4%	67.4%
Total GHG per capita [t CO ₂ eq./capita]	13.8	14.4	10.4	10.0	8.8	8.8

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

5.28 Sweden

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	30.0	31.8	35.8	37.0	34.5	35.7
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
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	14.5	15.5	16.2	12.0	12.3
Renewables and biofuels	14.7	16.5	19.6	19.9	21.5	22.5
Wastes, Non-Renewable	0.3	0.5	0.6	0.7	0.9	0.8
Net Imports	19.3	19.9	14.7	15.6	15.1	10.6
Solid fossil fuels	2.3	2.4	1.9	1.9	1.5	1.6
of which hard coal	2.1	2.3	1.9	1.6	1.4	1.5
Oil and petroleum products	15.7	15.5	13.0	13.5	13.1	8.6
of which crude oil and NGL	20.8	20.0	20.3	16.5	17.8	18.1
Natural gas	0.8	1.5	0.7	1.0	1.3	1.2
Renewables and biofuels	0.0	0.2	0.9	1.4	1.4	1.3
Electricity	0.4	0.2	-1.9	-2.2	-2.1	-2.2
Gross inland consumption	47.7	50.5	47.0	49.7	44.8	47.5
Solid fossil fuels	2.2	2.1	2.0	1.9	1.5	1.7
of which hard coal	2.0	2.0	1.9	1.7	1.4	1.4
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	14.2	14.6	9.5	10.6	8.5	9.5
of which crude oil and NGL	20.7	20.2	19.5	16.5	17.6	18.6
Natural gas	0.8	1.5	0.7	0.9	1.3	1.1
Nuclear	14.8	14.5	15.5	16.2	12.0	12.3
Renewables and biofuels	14.7	16.8	20.5	21.4	22.6	24.1
Electricity	0.4	0.2	-1.9	-2.2	-2.1	-2.2
Waste, non-renewable	0.3	0.5	0.6	0.8	1.0	1.0
Available for final consumption	34.9	35.1	31.9	33.6	33.6	32.7
Final non-energy consumption	1.7	2.1	1.8	2.3	2.3	1.7
Final energy consumption	33.7	32.5	31.5	31.3	31.3	31.1
by Fuel/Product						
Solid fossil fuels	0.5	0.4	0.4	0.3	0.3	0.3
Oil and petroleum products	12.6	9.5	7.9	7.0	6.5	6.6
Natural gas	0.4	0.6	0.6	0.5	0.5	0.5
Renewables and biofuels	5.3	5.4	7.5	8.2	8.8	8.8
Solid biofuels and renewable waste	5.3	5.0	5.3	5.1	5.6	5.5
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	0.4	1.0	1.6	1.7	1.8
Biogases	0.0	0.1	0.1	0.1	0.1	0.1
Waste, non-renewable	0.0	0.0	0.0	0.0	0.1	0.1
Electricity	11.1	11.3	10.7	10.7	10.6	11.0
Heat	3.6	5.1	4.2	4.3	4.1	4.7
by Sector						
Industry	13.7	11.6	11.0	10.9	11.2	11.1
Transport	7.5	7.5	7.3	7.0	6.6	6.9
Residential	7.3	8.3	7.4	7.4	7.2	7.9
Services	4.4	4.3	4.0	4.0	4.0	4.3
Agriculture and Fishing	0.8	0.7	0.7	0.6	0.6	0.6
Others	0.0	0.0	1.1	1.4	1.5	1.5

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	33.7	36.5	39.7	42.8	43.7	44.8
Combustible Fuels	7.5	8.7	7.8	8.3	8.4	7.7
Nuclear	9.5	9.0	9.7	8.6	7.8	6.9
Hydro	16.5	16.7	16.3	16.5	16.4	16.4
Wind	0.2	2.0	5.8	8.7	10.0	12.1
Solar	0.0	0.0	0.1	0.7	1.1	1.6
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]	145.3	148.5	162.1	168.4	163.8	171.8
Solid fossil fuels, peat and products, oil shale	1.7	1.8	0.6	0.4	0.1	0.1
Oil and petroleum products	1.5	1.8	0.3	0.2	0.1	0.3
Natural gas	1.3	3.8	1.1	1.1	0.7	0.9
Nuclear	57.3	57.8	56.3	66.1	49.2	53.0
Renewables and biofuels	83.2	82.2	102.6	99.0	112.2	115.8
Wastes non-RES	0.2	1.2	1.2	1.7	1.5	1.7
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			4.9	3.3	3.3	2.7
CHP Electricity Generation [TWh]			13.7	9.2	9.2	8.9
CHP in Total Electricity Generation [%]			8.4	5.5	5.5	5.2
CHP Heat Production [PJ]			151.3	94.0	94.0	94.5
Transport Fuels [ktoe]						
Final consumption petroleum products	9906	8578	7421	6564	6157	6261
of which LPG	397	463	367	364	314	343
of which motor gasoline	4208	3422	2601	2170	1990	2036
of which Gas/Diesel oil	5302	4692	4454	4030	3853	3882
Final consumption biofuels	0	383	963	1564	1657	1753
pure and blended biogasoline	0	203	141	101	107	126
pure and blended biodiesel	0	179	823	1463	1486	1541
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	46.0	48.3	43.8	45.8	41.3	43.5
Final energy consumption 2020-2030 [Mtoe]	35.0	34.0	31.8	31.6	30.5	31.7
Primary Energy Intensity 2020-2030 [toe/M€15]	140	118	96	92	85	85
Energy Intensity (GAE/GDP2015) [toe/M€15]	145	123	103	100	92	93
Energy per Capita (GIC/pop) [kgoe/capita]	5384	5402	4826	4860	4334	4579
Final Electricity per Capita [KWh/capita]	16393	15903	16631	16465	15864	16552
Import Dependency [%]	40.4%	39.5%	31.2%	31.3%	33.8%	22.4%
of Solid fossil fuels	105.4%	113.7%	97.4%	103.2%	100.3%	94.2%
of Hard Coal	107.7%	115.2%	99.6%	98.1%	101.5%	101.8%
of Oil and petroleum products	110.4%	106.3%	136.7%	127.5%	153.6%	90.8%
of Crude and NGL	100.6%	99.0%	103.6%	100.0%	101.0%	97.4%
of Natural Gas	100.0%	100.0%	100.0%	101.8%	101.6%	101.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		46.10%	52.22%	55.79%	60.12%	62.57%
RE-T - Renewable energy in Transport [%]		9.63%	21.49%	30.31%	31.85%	30.43%
RES-E - Renewable Electricity Generation [%]		55.77%	65.73%	71.23%	74.49%	75.70%
RES-H&C - Renewable Heating and Cooling [%]		57.07%	63.24%	64.39%	66.38%	68.64%
Greenhouse gas emissions [Mt CO₂]						
CO ₂ emissions - National total*	56.9	55.2	45.6	43.7	37.6	39.5
GHG emissions - National total*	70.3	66.5	55.8	53.3	47.2	48.8
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	96.5%	91.3%	76.6%	73.2%	64.7%	67.0%
Total GHG per capita [t CO ₂ eq./capita]	7.9	7.1	5.7	5.2	4.6	4.7

* total emissions without LULUCF, with ind. CO₂, including international aviation, excl. international maritime transport

A ppendices



A ppendices

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Appendices – Methodology

Appendix 1 Country Nomenclature

Interinstitutional Style Guide (ISG) Country Code	ISG Short Name EN	ISG Short Name, Source Language*	ISG Protocol Order	ISO 3166 Alpha-2 Country Codes
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
EU27_2020	European Union - 27 countries (from 2020)			

*Latin transliteration

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 & 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 & steel
FC_IND_CPC_E	Chemical & 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 & quarrying
FC_IND_FBT_E	Food, beverages & tobacco
FC_IND_PPP_E	Paper, pulp & printing
FC_IND_WP_E	Wood & wood products
FC_IND_CON_E	Construction
FC_IND_TL_E	Textile & 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 & public services
FC_OTH_HH_E	Households
FC_OTH_AF_E	Agriculture & 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/statistics-explained/index.php?oldid=464172>
<https://ec.europa.eu/eurostat/web/energy/methodology>

Appendix 3 Main Energy Products in Eurostat Energy Balances- EN

ESTAT Energy Database - EN	
Code	Dissemination label
TOTAL	Total
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

ESTAT Energy Database - EN	
Code	Dissemination label
O4699	Other oil products n.e.c.
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/statistics-explained/index.php?oldid=464172>

<https://ec.europa.eu/eurostat/web/energy/methodology>

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 & 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, kilo
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
M	million, mega
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

		TO :		
		TJ	Mtoe	GWh
		multiply by		
FROM :	TERAJOULE (TJ)	1	1 / 41868	/ 3.6
	Million ton of oil equivalent (Mtoe)	X 41868	1	X 11630
	Gigawatt-hour (GWh)	X 3.6	/ 11630	1

VOLUME

		TO :			
		l	bbl	gal US	gal UK
		multiply by			
FROM :	Litre (l)	1	0.6290 x 10 ⁻²	0.2642	0.2200
	Barrel (bbl)	158.99	1	42	34.9723
	U.S. gallon (gal US)	3.7854	0.2381 x 10 ⁻¹	1	0.8327
	U.K. gallon (gal UK)	4.5461	0.2859 x 10 ⁻¹	1.2009	1

MASS

		TO :		
		t	lt	st
		multiply by		
FROM :	Ton, Tonne (t)	1	0.9842	1.1023
	Long ton (lt) U.K.	1.0160	1	1.1200
	Short ton (st) U.S.	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	37.0
Blended biodiesels	37.0
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 Implementing Regulation \(EU\) 2018/2066](#) 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.

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/statistics-explained/index.php?oldid=464172> and <https://ec.europa.eu/eurostat/web/energy/methodology>

ALL FUELS

“All fuels” (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 for heating purposes. 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

Combined heat and power plant refers to a plant designed to produce simultaneously heat and electricity in one process. It is sometimes referred to as co-generation power stations.

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 2015, in millions of euro, chain-linked volumes, at 2015 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 fluoro-carbons, 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 energy related 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: multiply by 1 000 000	to the next: multiply by 1 000

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

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 [O4000XB10] include crude oil [O4100_TOT], natural gas liquids [O4200], refinery feedstocks [O4300], additives and oxygenates (excl biofuel portion) [O4400X4410], other hydrocarbons [O4500] and the oil products such as LPG [O4630], refinery gas [O4620], ethane [O4620], motor gasoline [O4652XR5210B], aviation gasoline [O4651], gasoline-type jet fuel [O4653], kerosene-type jet fuels [O4661XR5230B], other kerosene [O4669], naphtha [O4640], gas/diesel oil [O4671XR5220B], fuel oil [4680], white spirit [O4691], lubricants [O4692], bitumen [O4695], petroleum coke [O4694], paraffin waxes [O4693] and other oil products [O4699].

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_W6000R1], 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.

Transformation output is the sum of the output from electricity & heat generation 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.

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

CO₂ Intensity refers to CO₂ 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 37-38

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

2.1.2, PAGES 40-41

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

2.1.3, PAGES 43-44

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 49-54

Solid fossil fuels - See Glossary

2.2.2, PAGES 54-59

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 71-77

See, glossary energy import dependency, appendix 12.

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

2.5.1, PAGE 84

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 85

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

2.5.3, PAGE 86

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

2.6.1, PAGE 90

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, PAGE 93

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

2.7.1, PAGE 99

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 101-109

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 103-105

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 108

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

2.8, PAGES 110-112

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 113-115

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 116-117

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 119

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 122

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 129-135

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 140**

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 141-149

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

3.3, PAGES 153-156

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

3.4, PAGE 157

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

APPENDIX 8.4

4.1.1, PAGES 164-168

GHG, greenhouse gases, are gases that contribute to the natural greenhouse effect. GHG emissions aggregate includes emissions due to energy related activities and other non-energy related emissions from industrial processes, agriculture, waste management, others. Energy related emissions include those from energy industries, manufacturing Industries and construction, transport, commercial and institutional, residential, agriculture, forestry/fisheries and other combustion and fugitive emissions.

4.1.2 PAGES 169-173

Structure of emissions is 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.

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