European Commission

EU energy in figures

STATISTICAL POCKETBOOK

2024

Energy

Manuscript completed in August 2024

Luxembourg: Publications Office of the European Union, 2024

Print	ISBN 978-92-68-16604-8	1977-4559	doi:10.2833/870216	MJ-AB-24-001-EN-C
PDF	ISBN 978-92-68-16603-1	2363-247X	doi:10.2833/802460	MJ-AB-24-001-EN-N

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-pocketbook-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-pocketbook-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/ameco-database_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/data-and-statistics

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

Summary

PART 1 Overview

PART 2 Energy in the EU

Appendices

1 Overview

1 Overview

Summary

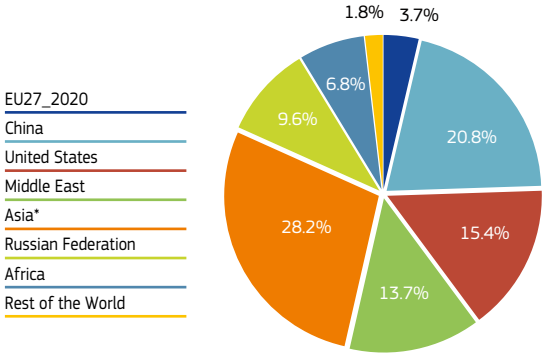
1.1 Energy in the World (Overview)

1.1.1 World Energy Production by Region

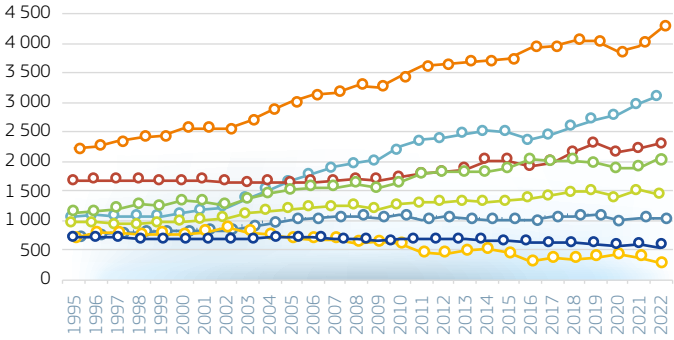
Mtoe

	2000	2010	2019	2020	2021	2022
EU27_2020	679	698	610	564	588	551
China	1124	2236	2714	2787	2966	3138
United States	1666	1723	2306	2157	2214	2319
Middle East	1328	1635	1974	1874	1898	2066
Asia*	2555	3426	4034	3854	3946	4246
Russian Federation	978	1280	1494	1395	1511	1444
Africa	821	1083	1086	992	1042	1031
Rest of the World	763	599	382	419	377	277
World	9914	12679	14600	14040	14542	15072

TOTAL 2022 = 15072 Mtoe



World Energy Production by Region (Mtoe)



* non OECD and OECD Asia, excluding China
Source: IEA statistics, August 2024

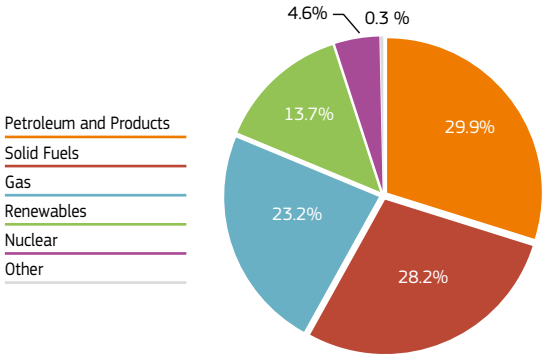
Methodology and Notes: see appendices

1.1.2 World Energy Production by Fuel

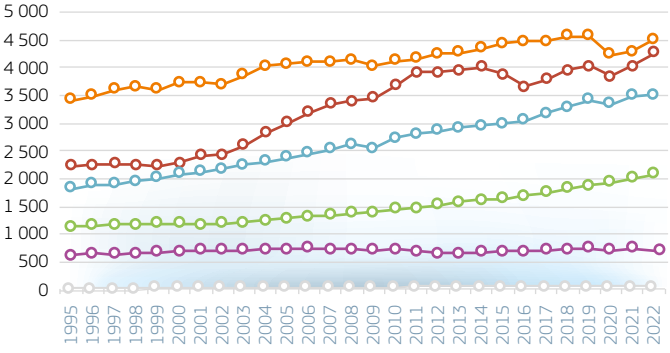
Mtoe

	2000	2010	2019	2020	2021	2022
Petroleum and Products	3711	4107	4548	4224	4282	4499
Solid Fuels	2277	3670	4006	3828	4009	4250
Gas	2060	2713	3402	3327	3475	3503
Renewables	1169	1436	1866	1914	1993	2070
Nuclear	675	719	728	698	734	700
Other	22	34	50	49	50	50
Total	9914	12679	14600	14040	14542	15072

TOTAL 2022 = 15 072 Mtoe



World Energy Production by Fuel (Mtoe)



Source: IEA statistics, August 2024

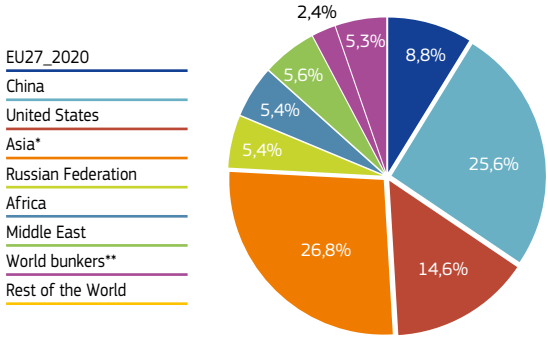
Methodology and Notes: **see appendices**

1.1.3 World Total Energy Supply by Region

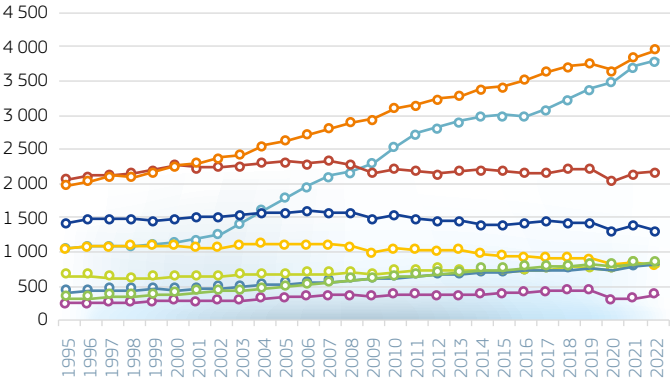
Mtoe

	2000	2010	2019	2020	2021	2022
EU27_2020	1471	1528	1407	1311	1387	1307
China	1147	2550	3397	3501	3733	3811
United States	2273	2216	2212	2035	2139	2173
Asia*	2262	3117	3775	3663	3855	3978
Russian Federation	619	693	737	733	822	808
Africa	435	608	754	733	778	796
Middle East	362	624	795	788	813	836
World bunkers**	275	362	425	297	314	363
Rest of the World	1091	1034	885	797	833	788
World	9936	12732	14388	13857	14674	14860

TOTAL 2022 = 14860 Mtoe



World Total Energy Supply by Region (Mtoe)



* non OECD and OECD Asia, excluding China

** International aviation and international navigation

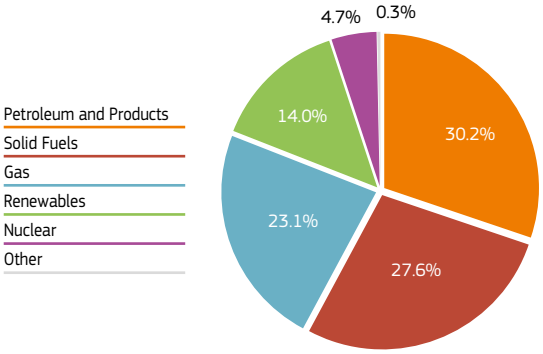
Source: IEA statistics, August 2024
Methodology and Notes: **see appendices**

1.1.4 World Total Energy Supply by Fuel

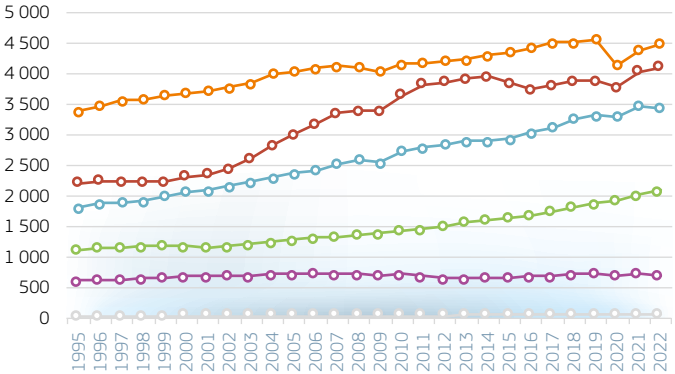
Mtoe

	2000	2010	2019	2020	2021	2022
Petroleum and Products	3683	4152	4552	4130	4376	4488
Solid Fuels	2316	3652	3870	3762	4032	4106
Gas	2068	2736	3314	3292	3477	3437
Renewables	1170	1439	1876	1927	2006	2080
*Hydro	225	297	366	375	370	374
*Geothermal	52	62	101	107	110	116
*Solar/Wind/Other	8	48	222	249	290	339
*Biofuels and Waste	906	1065	1235	1243	1284	1301
Nuclear	675	719	728	698	734	700
Other	23	34	49	48	49	48
Total	9936	12732	14388	13857	14674	14860

TOTAL 2022 = 14860 Mtoe



World Gross Inland Consumption by Fuel (Mtoe)



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

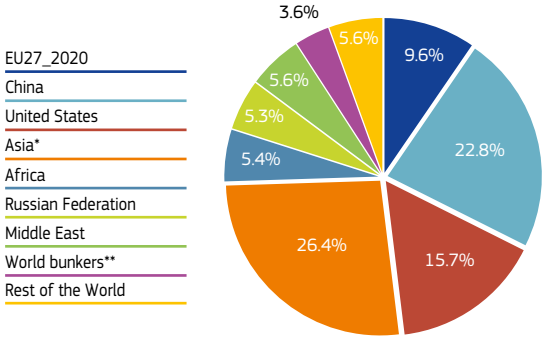
Source: IEA statistics, August 2024
Methodology and Notes: see appendices see appendices

1.1.5 World Total Final Consumption by Region

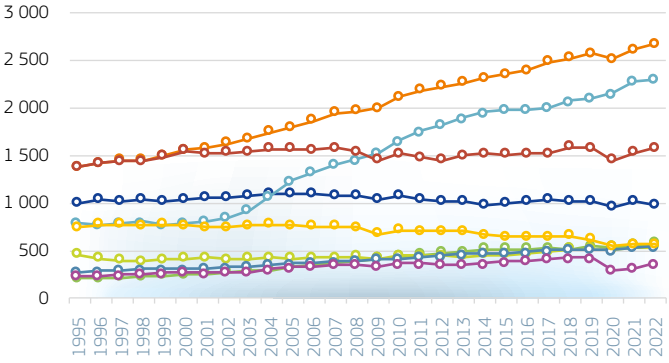
Mtoe

	2000	2010	2019	2020	2021	2022
EU27_2020	1026	1071	1017	963	1019	966
China	791	1652	2105	2153	2280	2297
United States	1546	1513	1577	1449	1529	1579
Asia*	1552	2111	2569	2506	2607	2665
Africa	305	418	513	507	533	544
Russian Federation	418	447	515	500	538	531
Middle East	247	435	547	537	550	569
World bunkers**	275	362	425	297	314	363
Rest of the World	758	710	613	539	565	562
World	6918	8719	9880	9451	9934	10076

TOTAL 2022 = 10076 Mtoe



World Total Final Consumption by Region (Mtoe)



* non OECD and OECD Asia, excluding China

** International aviation and international navigation

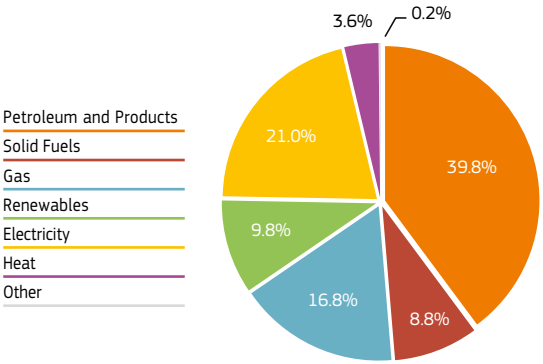
Source: IEA statistics, August 2024
Methodology and Notes: **see appendices**

1.1.6 World Total Final Consumption by Fuel

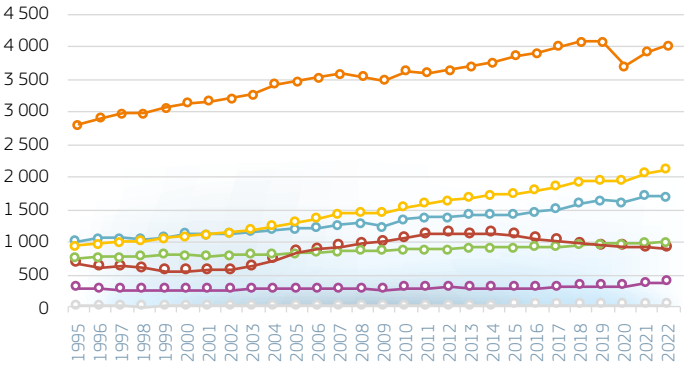
Mtoe

	2000	2010	2019	2020	2021	2022
Petroleum and Products	3127	3620	4083	3698	3915	4014
Solid Fuels	540	1058	936	917	910	890
Gas	1121	1346	1635	1609	1710	1690
Renewables	789	874	960	959	978	992
Electricity	1087	1538	1945	1943	2059	2113
Heat	248	275	307	310	347	360
Other	7	9	15	15	16	16
Total	6918	8719	9880	9451	9934	10076

TOTAL 2022 = 10076 Mtoe



World Total Final Consumption by Fuel (Mtoe)



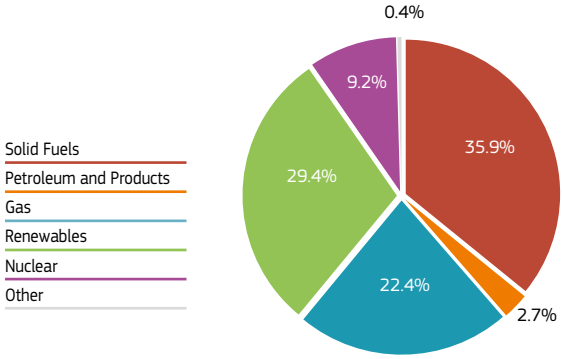
Source: IEA statistics, August 2024
Methodology and Notes: **see appendices**

1.1.7 World Electricity Generation by Fuel

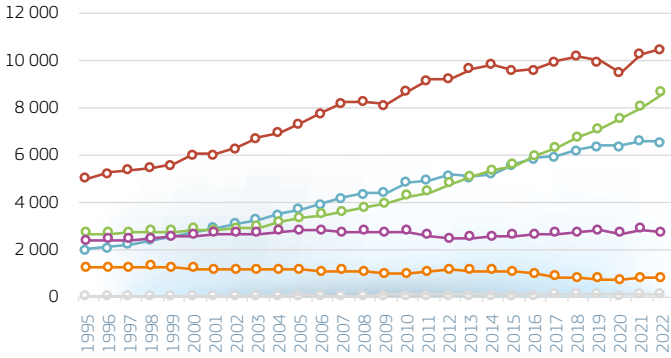
TWh

	2000	2010	2019	2020	2021	2022
Solid Fuels	5993	8675	9940	9464	10251	10450
Petroleum and Products	1187	968	757	710	785	801
Gas	2765	4820	6340	6359	6564	6522
Renewables	2835	4209	7054	7504	7959	8559
**Hydro*	2619	3455	4259	4358	4300	4350
**Solar/Wind/Other*	54	408	2172	2471	2936	3474
**Biofuels and Waste*	163	363	649	686	740	760
**Geothermal*	52	68	92	95	95	97
Nuclear	2591	2756	2790	2676	2813	2685
Other	54	88	123	109	115	126
Total	15425	21515	27004	26822	28488	29143

TOTAL 2022 = 29 143 TWh



World Electricity Generation by Fuel (TWh)



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

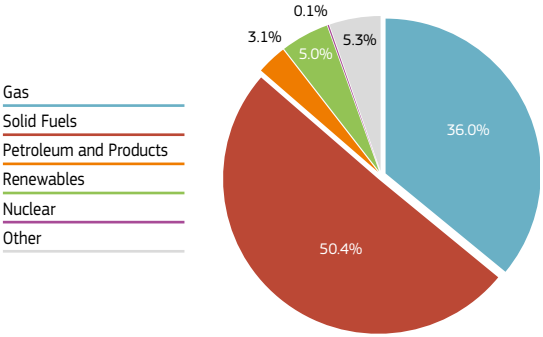
Source: IEA statistics, August 2024
Methodology and Notes: **see appendices**

1.1.8 World Heat Generation by Fuel

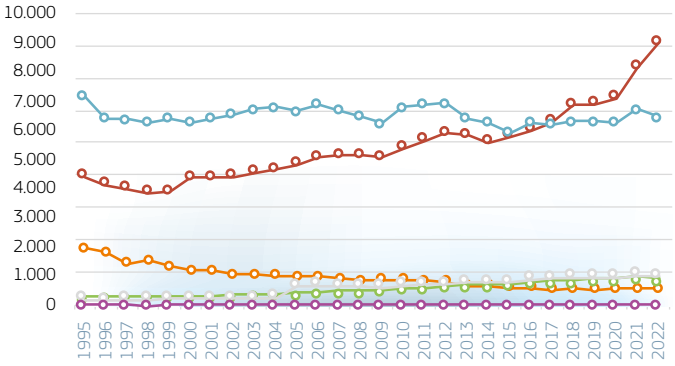
PJ

	2000	2010	2019	2020	2021	2022
Gas	6239	6776	6285	6236	6706	6410
Solid Fuels	4332	5359	6873	7066	8094	8988
Petroleum and Products	1160	845	508	546	542	558
Renewables	298	587	880	880	949	895
**Geothermal*	18	31	51	49	50	50
**Solar/Wind/Other*	17	363	457	458	502	475
**Biofuels and Waste*	417	778	1172	1206	1295	1218
Nuclear	19	27	26	25	26	24
Other	208	657	933	939	1009	950
Total	12257	14252	15504	15691	17327	17826

TOTAL 2022 = 17826 PJ



World Heat Generation by Fuel (PJ)



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

Source: IEA statistics, August 2024

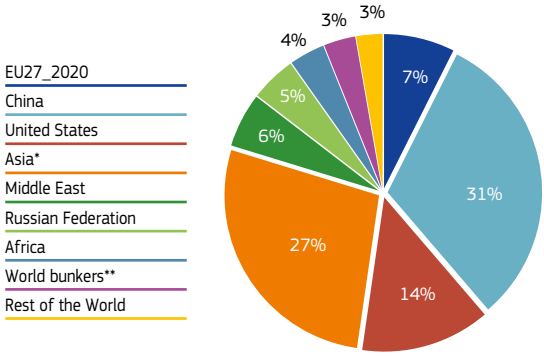
Methodology and Notes: **see appendices**

1.1.9 World CO_2 Emissions by Region

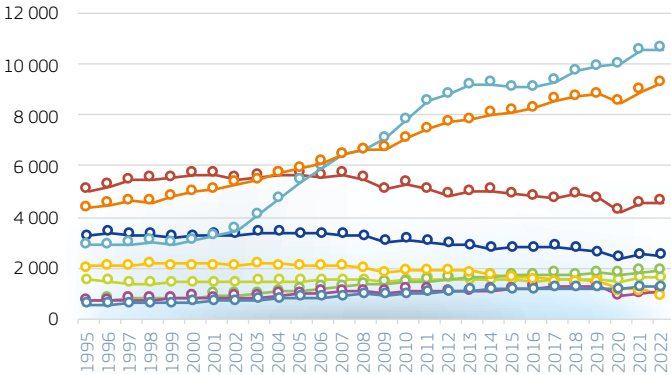
MT CO_2

	2000	2010	2019	2020	2021	2022
EU27_2020	3264	3137	2654	2397	2569	2517
China	3119	7845	9958	10038	10609	10644
United States	5730	5352	4745	4258	4549	4608
Asia*	5041	7140	8878	8551	8990	9332
Middle East	884	1479	1808	1788	1870	1934
Russian Federation	1474	1529	1592	1518	1659	1623
Africa	661	1022	1246	1199	1262	1262
World bunkers**	859	1131	1318	931	984	1131
Rest of the World	2203	1948	1509	1202	1199	935
World	23235	30583	32308	30881	32690	32986

TOTAL 2022 = 32 986 Mt CO_2



World CO_2 Emissions by Region (Mt CO_2)



* non OECD and OECD Asia, excluding China

** International aviation and international navigation

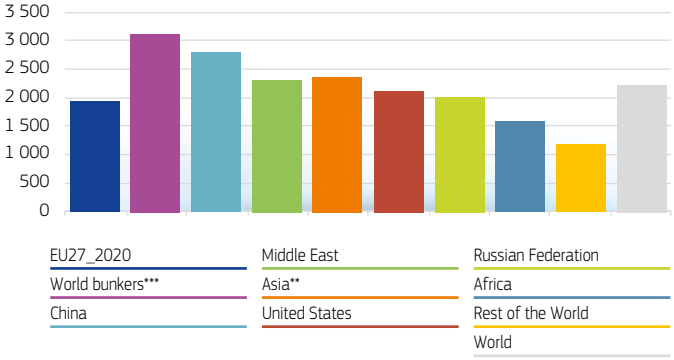
Source: IEA, May 2023, estimates of world CO_2 emissions from fuel combustion
Methodology and Notes: **see appendices**

1.1.10 World CO_2 Intensity by Region

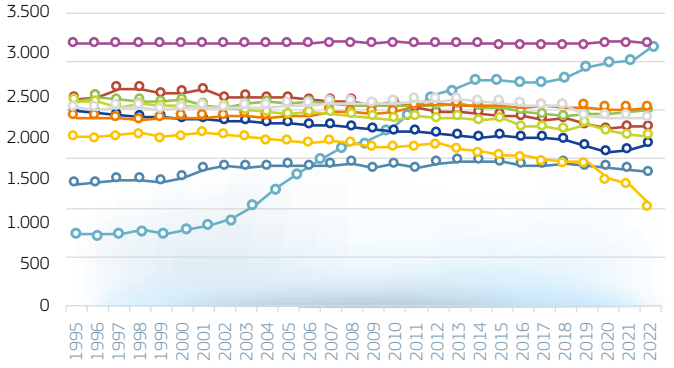
KG CO_2 PER TOE

	2000	2010	2019	2020	2021	2022
EU27_2020	2219	2053	1886	1829	1852	1926
World bunkers***	3120	3123	3101	3133	3133	3112
China	2719	3077	2931	2867	2842	2793
Middle East	2444	2368	2274	2270	2301	2313
Asia**	2229	2291	2352	2334	2332	2346
United States	2521	2415	2145	2092	2127	2120
Russian Federation	2380	2206	2160	2071	2017	2009
Africa	1518	1682	1652	1636	1621	1585
Rest of the World	2019	1883	1705	1509	1440	1186
World	2339	2402	2245	2229	2228	2220

WORLD AVERAGE 2022= 2220 kg CO_2 per toe



World CO_2 Intensity by Region (kg CO_2 per toe)



* CO_2 Emissions from Fuel Combustion per Unit of Total Energy Supply

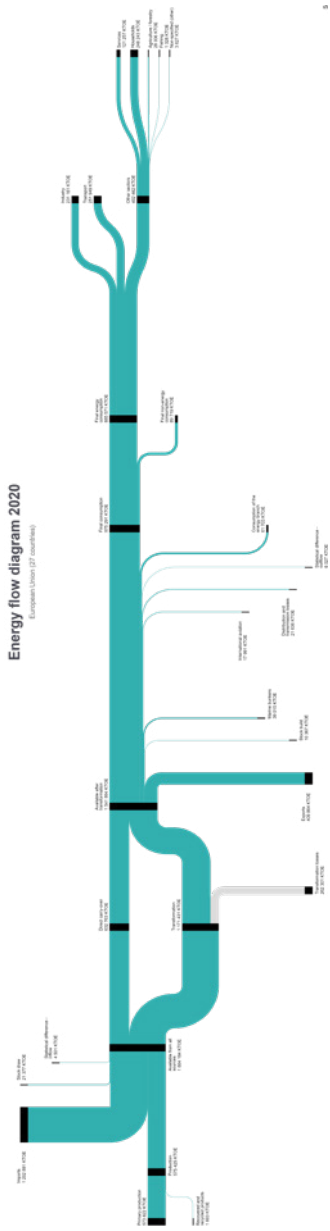
** non OECD and OECD Asia, excluding China and Middle East

*** International aviation and international navigation

Source: IEA statistics, August 2024
Methodology and Notes: **see appendices**

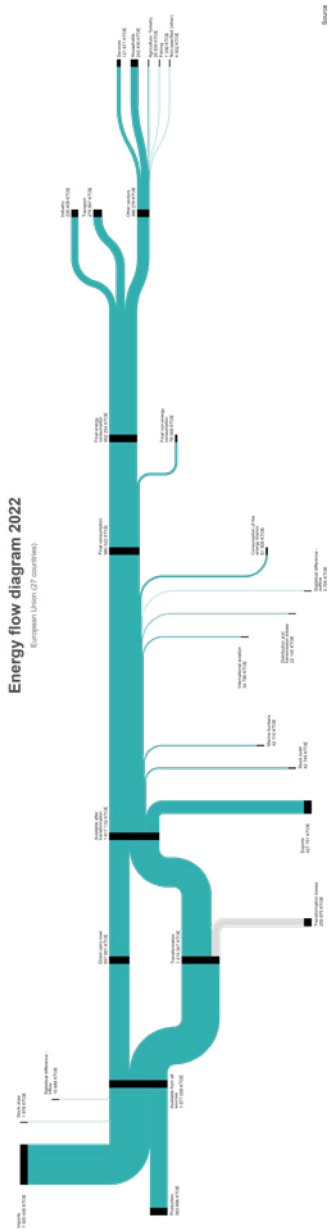
1.2 Energy in the EU (Overview)

1.2.1 Energy Flow - 2000



source: Eurostat April 2024
Methodology and Notes: see appendices

1.2.2 Energy Flow - 2022

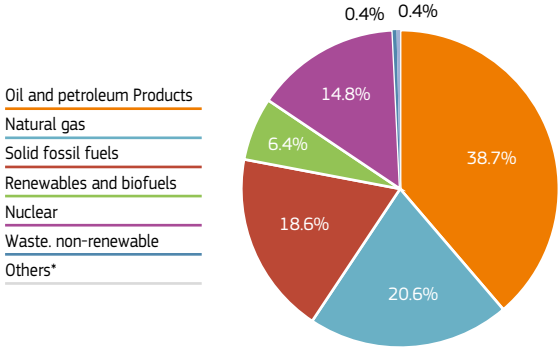


source: Eurostat April 2024
Methodology and Notes: **see appendices**

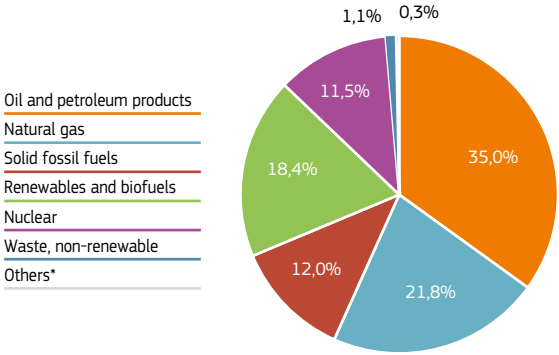
1.2.3 Gross Inland Consumption

ENERGY MIX (%) - PRIMARY PRODUCTS ONLY

TOTAL PRIMARY PRODUCTS 2000: 1 497.4 Mtoe
(Total Primary and secondary products 2000: 1 498.2 Mtoe)



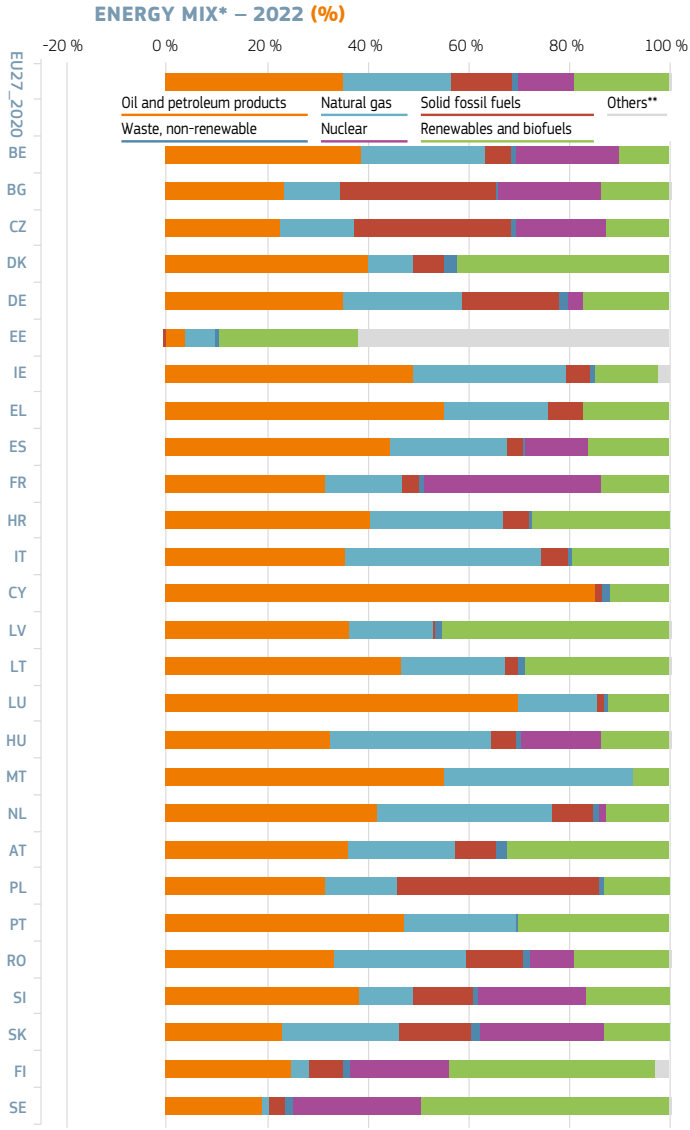
TOTAL PRIMARY PRODUCTS 2022: 1 355.4 Mtoe
(Total Primary and secondary products 2022: 1 354.2 Mtoe)



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

source: Eurostat April 2024
Methodology and Notes: **see appendices**

1.2.3 Gross Inland Consumption



*Primary Products Only

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

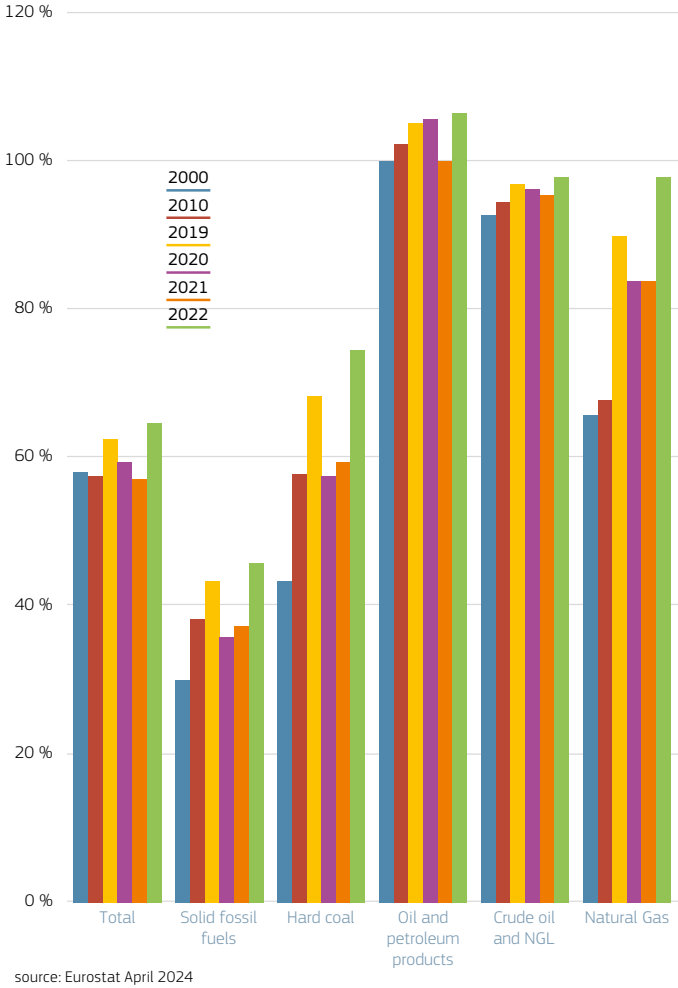
source: Eurostat April 2024
Methodology and Notes: **see appendices**

1.2.4 Energy Import Dependency

BY FUEL – (%)

	2000	2010	2019	2020	2021	2022
Total	57.8%	57.4%	62.3%	59.1%	57.1%	64.4%
Solid fossil fuels	29.8%	38.2%	43.3%	35.8%	37.3%	45.8%
of which Hard Coal	43.2%	57.7%	68.0%	57.4%	59.2%	74.4%
Oil and petroleum products	99.8%	102.1%	105.0%	105.3%	99.7%	106.3%
of which Crude and NGL	92.5%	94.4%	96.6%	96.1%	95.1%	97.6%
Natural Gas	65.7%	67.8%	89.7%	83.6%	83.7%	97.6%

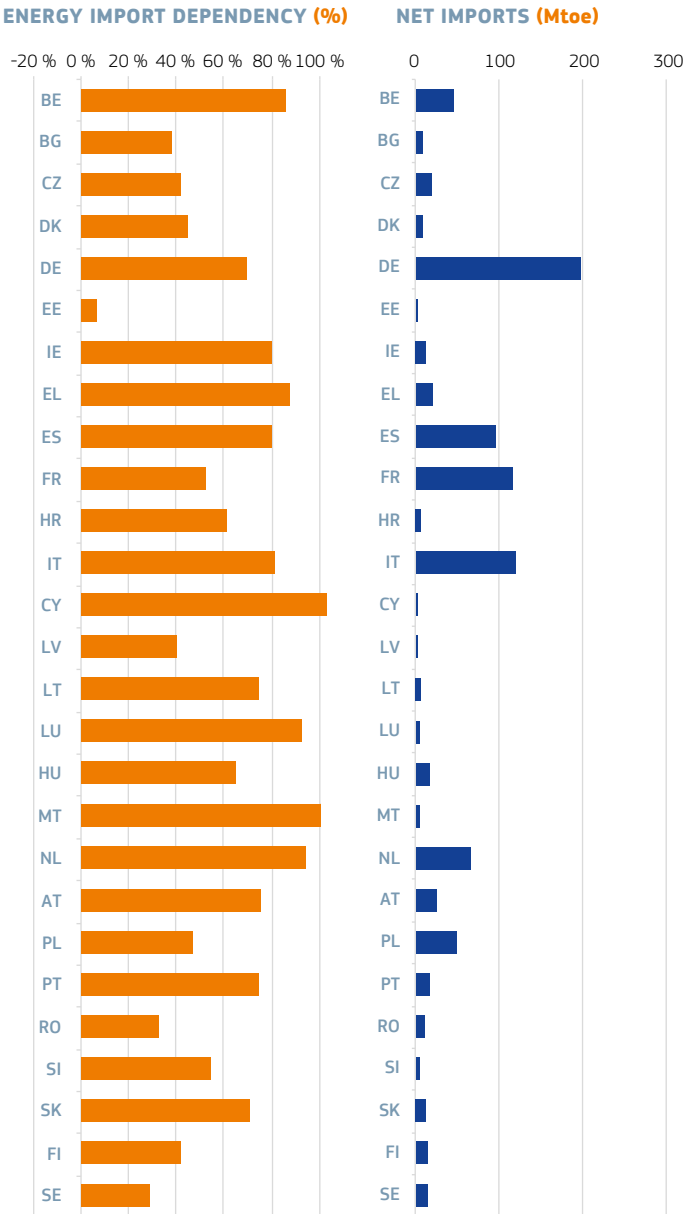
BY FUEL 2000 - 2022 (%)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

1.2.5 Energy Import Dependency - Net Imports

2022

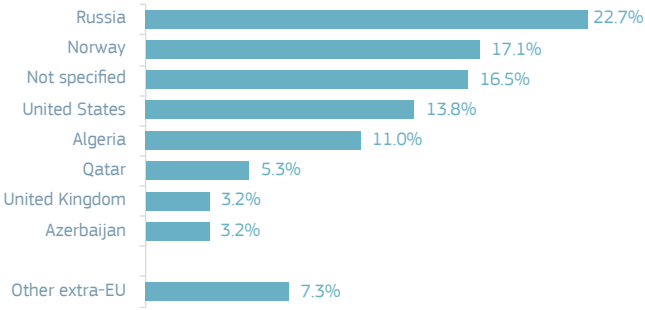


source: Eurostat April 2024
Methodology and Notes: see appendices

1.2.6 Imports by Country of Origin

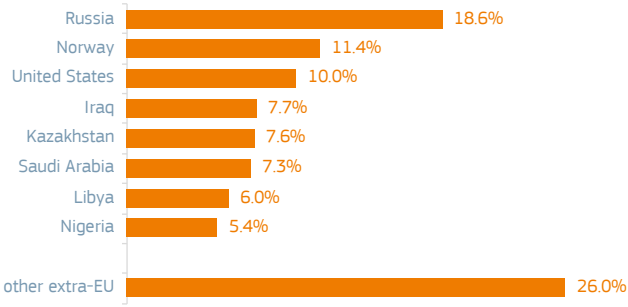
EU27_2020 IMPORTS* OF NATURAL GAS - 2022

Total extra-EU= 14 503 257.3 TJ-GCV (376.4 bn m³)



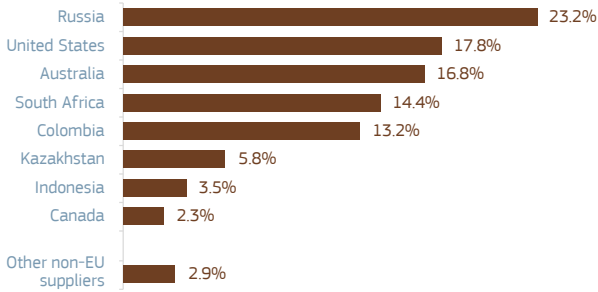
EU27_2020 IMPORTS* OF CRUDE OIL AND NGL - 2022

Total extra-EU = 483 902.4 kton



EU27_2020 imports* of hard coal - 2022

Total Extra-EU= 117 253.9 kton



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

source: Eurostat April 2024
Methodology and Notes: **see appendices**

1.3 EU Targets

1.3.1 Renewable Energy Targets

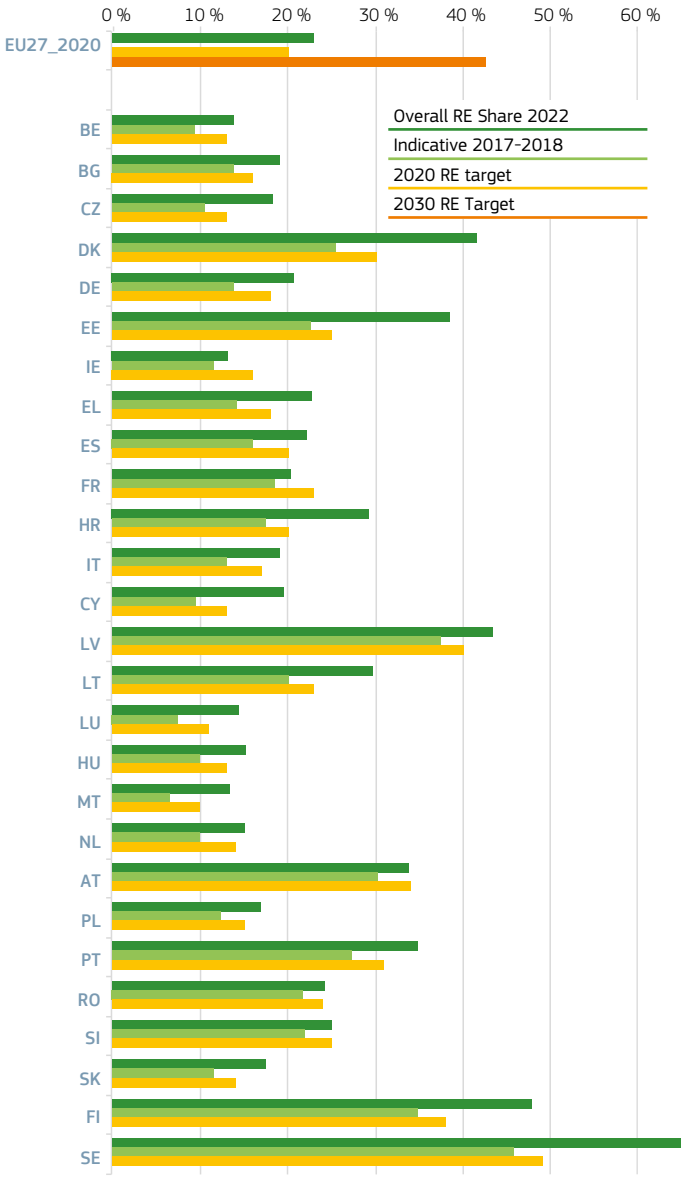
%	2022 Renewable energy shares						
	RE transport 2022	RE electricity 2022	RE Heating and cooling 2022	Overall RE Share 2022	Indicative 2017-2018	2020 RE target	2030 RE Target
EU27_2020	9.6%	41.2%	24.9%	23.0%	n.a.	20%	43%
BE	10.4%	29.1%	10.4%	13.8%	9.2%	13.0%	
BG	7.7%	20.2%	31.7%	19.1%	13.7%	16.0%	
CZ	7.2%	15.5%	25.8%	18.2%	10.6%	13.0%	
DK	10.2%	77.2%	50.1%	41.6%	25.5%	30.0%	
DE	9.9%	47.6%	17.5%	20.8%	13.7%	18.0%	
EE	8.5%	29.1%	65.4%	38.5%	22.6%	25.0%	
IE	5.5%	36.8%	6.3%	13.1%	11.5%	16.0%	
EL	4.1%	42.4%	30.6%	22.7%	14.1%	18.0%	
ES	9.7%	50.9%	20.0%	22.1%	16.0%	20.0%	
FR	9.0%	27.3%	26.3%	20.3%	18.6%	23.0%	
HR	2.4%	55.5%	37.2%	29.4%	17.4%	20.0%	
IT	10.1%	37.1%	20.6%	19.1%	12.9%	17.0%	
CY	7.2%	17.0%	41.6%	19.4%	9.5%	13.0%	
LV	3.1%	53.3%	61.0%	43.3%	37.4%	40.0%	
LT	6.7%	26.5%	51.5%	29.6%	20.2%	23.0%	
LU	8.7%	15.9%	15.4%	14.4%	7.5%	11.0%	
HU	7.8%	15.3%	20.3%	15.2%	10.0%	13.0%	
MT	10.5%	10.1%	38.0%	13.4%	6.5%	10.0%	
NL	10.8%	39.9%	8.6%	15.0%	9.9%	14.0%	
AT	10.1%	74.7%	30.6%	33.8%	30.3%	34.0%	
PL	5.8%	21.0%	22.7%	16.9%	12.3%	15.0%	
PT	8.7%	61.0%	45.5%	34.7%	27.3%	31.0%	
RO	8.2%	43.7%	26.3%	24.1%	21.8%	24.0%	
SI	7.8%	37.0%	34.0%	25.0%	21.9%	25.0%	
SK	8.9%	22.9%	19.9%	17.5%	11.4%	14.0%	
FI	18.8%	47.9%	58.5%	47.9%	34.7%	38.0%	
SE	29.2%	83.3%	69.4%	66.0%	45.8%	49.0%	

* in % of the Gross Final Energy Consumption

source: Eurostat-RES SHARES March 2024
Methodology and Notes: see appendices

1.3.1 Renewable Energy Targets

RENEWABLE ENERGY SHARES AND TARGETS* (%)

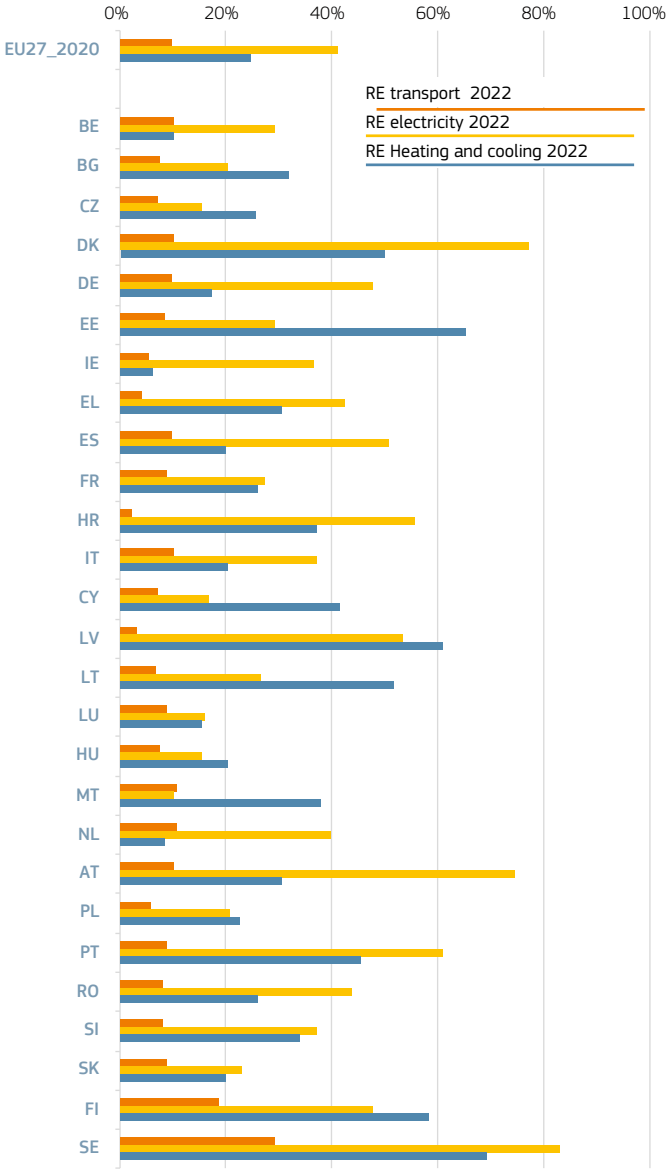


* in Gross Final Energy Consumption

source: Eurostat-RES SHARES March 2024
Methodology and Notes: **see appendices**

1.3.1 Renewable Energy Shares

RES SHARES IN HEATING AND COOLING, ELECTRICITY, AND TRANSPORT 2022



* in Gross Final Energy Consumption

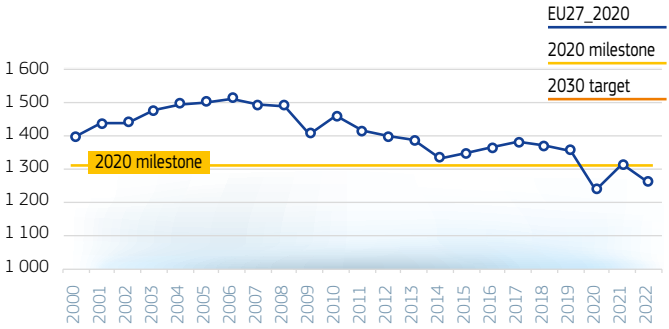
source: Eurostat-RES SHARES March 2024
Methodology and Notes: **see appendices**

1.3.2 Energy efficiency targets

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

	2010	2019	2020	2021	2022	2020 MILESTONE & TARGET	2030 TARGET
EU27_2020	1 458.3	1 354.4	1 235.8	1 313.3	1 258.6	*1 312**	992.5
BE	53.4	48.4	43.9	48.7	45.2		
BG	17.4	18.0	17.1	18.6	18.9		
CZ	42.5	39.7	37.6	39.5	38.6		
DK	19.9	16.9	15.5	16.4	16.0		
DE	315.2	285.2	262.2	271.5	260.6		
EE	5.8	4.8	4.3	4.5	4.7		
IE	14.7	14.7	13.5	13.8	14.3		
EL	27.2	22.3	19.2	20.3	20.9		
ES	123.0	120.6	105.0	111.5	113.2		
FR	254.5	235.5	208.0	224.8	205.6		
HR	8.9	8.2	7.8	8.3	8.3		
IT	167.3	145.9	132.3	145.6	139.6		
CY	2.7	2.5	2.2	2.3	2.5		
LV	4.6	4.6	4.3	4.5	4.3		
LT	6.2	6.3	6.2	6.6	6.3		
LU	4.6	4.5	3.9	4.2	3.8		
HU	24.6	24.6	23.9	24.9	23.9		
MT	0.9	0.9	0.7	0.8	0.9		
NL	71.7	63.8	58.5	60.7	56.1		
AT	32.9	32.3	29.9	31.6	30.2		
PL	96.6	100.2	96.8	104.0	98.6		
PT	22.7	22.1	19.5	19.5	20.8		
RO	32.9	32.1	30.9	33.1	31.0		
SI	7.0	6.5	6.1	6.3	6.2		
SK	17.4	16.0	15.2	16.4	15.4		
FI	35.4	32.1	29.9	31.5	30.2		
SE	48.3	45.8	41.3	43.3	42.5		

EU27_2020: PRIMARY ENERGY CONSUMPTION 2020-2030 (Mtoe)



*milestone for EU27_2020, based on the target for EU28

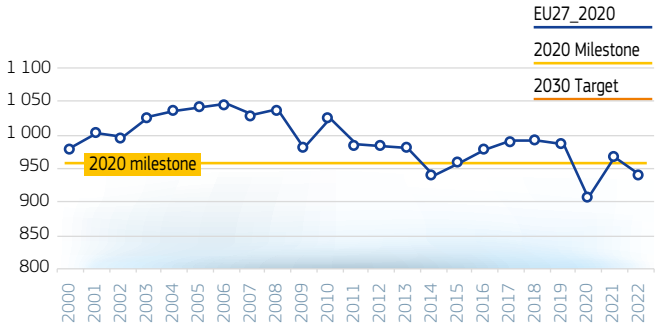
source: Eurostat April 2024
Methodology and Notes: **see appendices**

1.3.2 Energy efficiency targets

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

	2010	2019	2020	2021	2022	2020 MILESTONE & TARGET	2030 TARGET
EU27_2020	1 025.2	986.4	906.3	967.6	940.1	*959**	763
BE	38.2	35.8	33.2	35.9	33.4		
BG	8.8	9.9	9.5	10.2	9.9		
CZ	25.3	25.3	24.5	26.1	24.9		
DK	15.5	14.3	13.1	13.9	13.3		
DE	223.0	214.7	202.3	207.9	202.8		
EE	2.9	2.9	2.7	2.8	2.8		
IE	11.9	12.4	11.2	11.4	12.0		
EL	19.1	16.2	14.4	15.2	16.1		
ES	89.6	86.5	73.8	80.3	81.2		
FR	154.0	145.5	129.7	143.0	138.5		
HR	7.2	6.9	6.5	7.0	6.9		
IT	128.5	115.4	102.7	114.8	111.7		
CY	1.9	1.9	1.6	1.7	1.8		
LV	4.1	4.1	3.9	4.1	4.0		
LT	4.8	5.6	5.3	5.7	5.4		
LU	4.3	4.4	3.8	4.1	3.7		
HU	17.5	18.6	18.0	19.1	18.3		
MT	0.5	0.7	0.5	0.6	0.7		
NL	55.6	49.5	45.1	46.8	43.4		
AT	28.0	28.3	26.1	27.9	26.3		
PL	66.3	73.7	71.1	75.2	72.4		
PT	18.1	17.1	15.0	15.7	16.7		
RO	22.5	23.9	23.5	25.4	24.0		
SI	5.1	4.9	4.4	4.7	4.7		
SK	12.3	11.2	10.4	11.6	10.6		
FI	26.2	25.5	23.4	24.9	23.3		
SE	34.0	31.5	30.5	31.7	30.9		

EU27_2020: FINAL ENERGY CONSUMPTION 2020-2030 (Mtoe)



*milestone for EU27_2020, based on the target for EU28

source: Eurostat April 2024
Methodology and Notes: see appendices

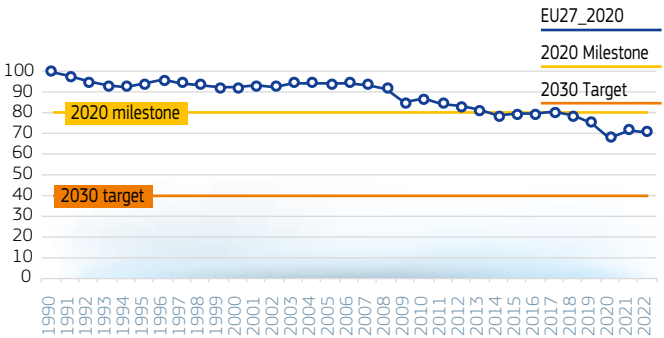
1.3.3 Greenhouse gas (GHG) Emissions Milestones and Targets

GHG EMISSIONS MILESTONES AND TARGETS

INDEX 100=1990

	1990	2000	2010	2019	2021	2022	2020 GHG MILE-STONE & TARGET	2030 GHG TARGET
EU27_2020	100	92.2	86.8	75.5	71.7	70.8	*80**	40
BE	100	103.1	92.4	81.8	77.0	73.1		
BG	100	58.0	60.2	54.9	54.7	59.2		
CZ	100	75.8	70.5	62.3	59.4	58.7		
DK	100	101.7	91.4	65.9	61.1	60.3		
DE	100	83.9	75.4	65.5	61.6	61.6		
EE	100	43.4	52.5	36.5	31.5	35.0		
IE	100	126.4	115.6	114.0	112.0	113.0		
EL	100	121.3	114.4	84.8	75.6	77.2		
ES	100	134.5	125.7	112.4	101.6	105.9		
FR	100	102.0	95.2	81.7	76.6	74.6		
HR	100	82.2	91.6	82.8	79.9	80.7		
IT	100	108.1	100.9	81.4	79.4	79.6		
CY	100	145.1	163.6	157.6	147.3	151.9		
LV	100	39.1	46.6	44.3	41.8	40.2		
LT	100	40.2	42.9	42.4	42.1	39.7		
LU	100	80.8	102.5	95.6	85.8	77.3		
HU	100	79.7	70.4	68.5	67.1	63.1		
MT	100	108.9	115.4	93.4	83.1	93.7		
NL	100	101.1	98.8	84.9	76.7	71.7		
AT	100	103.0	108.6	103.8	98.3	93.6		
PL	100	83.0	85.8	81.8	84.2	80.5		
PT	100	139.4	118.4	112.7	96.4	100.1		
RO	100	55.4	48.6	44.9	44.9	42.7		
SI	100	99.8	105.1	91.4	85.4	83.2		
SK	100	66.6	62.6	54.5	56.1	50.6		
FI	100	98.5	106.6	76.4	66.9	65.4		
SE	100	96.5	91.3	72.8	67.1	64.8		

EU27_2020: GHG EMISSIONS (index100=1990) 1990 - 2022



*milestone for EU27_2020, based on the target for EU28

Source: EEA, June 2024, Eurostat 2024
source: Eurostat April 2024

2 Energy in the EU

2 Energy in the EU

Summary

2.1 Energy Supply

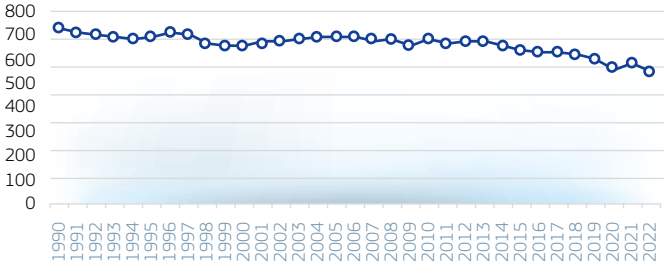
2.1.1 Production*

ALL FUELS

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	675.9	696.1	618.1	573.1	598.2	562.9
Index2000	100%	103%	91%	85%	89%	83%
BE	13.40	15.03	15.18	13.33	17.37	15.88
BG	9.86	10.45	11.69	10.83	12.14	13.16
CZ	30.81	31.86	26.60	23.50	24.37	25.28
DK	27.82	23.36	12.49	9.52	9.54	9.94
DE	135.24	131.67	105.28	97.90	103.63	97.31
EE	3.38	5.05	5.09	4.39	4.41	4.69
IE	2.16	1.83	4.16	3.56	3.04	3.14
EL	10.04	9.49	6.37	4.95	5.19	5.25
ES	31.32	34.55	34.67	35.42	35.59	35.96
FR	129.12	136.74	134.54	122.76	131.04	107.80
HR	4.26	5.17	3.90	3.73	3.96	3.70
IT	28.17	32.94	36.91	37.48	37.08	34.71
CY	0.04	0.09	0.21	0.22	0.24	0.26
LV	1.41	1.98	2.83	2.71	2.71	2.92
LT	3.49	1.56	2.04	2.03	2.24	2.05
LU	0.06	0.12	0.24	0.31	0.31	0.33
HU	11.61	11.71	10.79	10.59	10.65	10.63
MT	0.00	0.00	0.04	0.04	0.04	0.05
NL	58.45	71.12	33.11	27.50	26.59	24.26
AT	9.80	12.12	12.42	12.41	12.65	12.13
PL	78.63	66.83	62.14	57.96	60.09	59.35
PT	3.85	5.80	6.55	6.80	6.95	6.74
RO	28.53	27.37	24.53	22.36	22.97	22.23
SI	3.20	3.69	3.38	3.52	3.28	3.01
SK	6.28	6.73	6.93	6.75	6.95	6.75
FI	14.91	17.08	18.95	18.05	19.50	19.60
SE	30.01	31.76	37.02	34.47	35.70	35.70

PRODUCTION - ALL FUELS - 1990- 2022 - (Mtoe)

EU27_2020



* Primary production. recycled and recovered products

source: Eurostat April 2024
Methodology and Notes: see appendices

2.1.1 Production*

BY FUEL

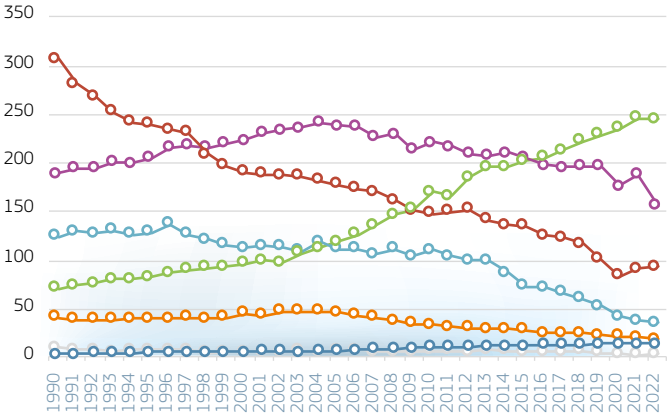
	2022						
Mtoe	Nuclear	Solid fossil fuels	Renewables and biofuels	Natural gas	Oil and petroleum products	Wastes, Non-Renewable	Peat, oil shale and oil sands
EU27_2020	155.5	92.5	243.3	34.9	18.8	13.8	3.2
Share (%)	27.6%	16.4%	43.2%	6.2%	3.3%	2.4%	0.6%
BE	10.70	0.00	4.28	0.01	0.00	0.60	0.00
BG	4.29	5.90	2.80	0.01	0.00	0.08	0.01
CZ	7.71	11.38	5.55	0.18	0.08	0.35	0.00
DK	0.00	0.00	5.06	1.24	3.27	0.37	0.00
DE	8.94	28.49	49.36	3.61	2.84	4.07	0.00
EE	0.00	0.00	1.92	0.00	0.00	0.03	2.74
IE	0.00	0.00	1.70	1.16	0.00	0.15	0.13
EL	0.00	1.66	3.60	0.00	0.00	0.00	0.00
ES	15.30	0.00	20.12	0.03	0.00	0.52	0.00
FR	76.81	0.00	28.39	0.02	0.79	1.80	0.00
HR	0.00	0.00	2.42	0.63	0.61	0.05	0.00
IT	0.00	0.00	26.18	2.54	4.82	1.17	0.00
CY	0.00	0.00	0.25	0.00	0.00	0.01	0.00
LV	0.00	0.00	2.91	0.00	0.00	0.01	0.00
LT	0.00	0.00	1.83	0.00	0.03	0.09	0.00
LU	0.00	0.00	0.28	0.00	0.00	0.04	0.00
HU	3.99	0.78	3.46	1.18	1.08	0.14	0.00
MT	0.00	0.00	0.05	0.00	0.00	0.00	0.00
NL	0.97	0.00	8.70	12.88	0.74	0.72	0.00
AT	0.00	0.00	10.38	0.53	0.52	0.69	0.00
PL	0.00	40.67	13.45	3.27	0.92	1.03	0.00
PT	0.00	0.00	6.60	0.00	0.00	0.15	0.00
RO	2.82	2.78	5.73	7.52	3.05	0.33	0.00
SI	1.34	0.65	0.96	0.00	0.00	0.05	0.00
SK	4.10	0.21	2.17	0.05	0.00	0.22	0.00
FI	6.12	0.00	12.72	0.00	0.00	0.32	0.32
SE	12.41	0.00	22.48	0.00	0.00	0.78	0.03

* Primary production. recycled and recovered products

source: Eurostat April 2024
Methodology and Notes: see appendices

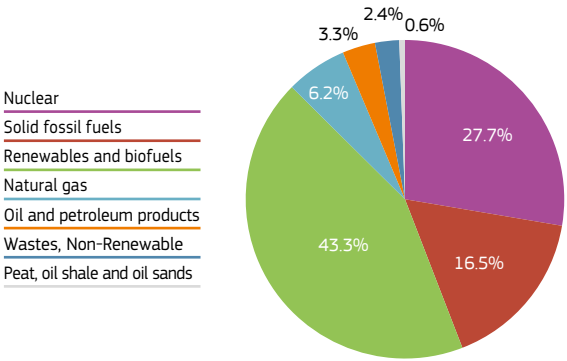
2.1.1 Production*

BY FUEL – EU27_2020 – 1990-2022 (Mtoe)



PRODUCTION* EU27_2020 IN 2022 (% TOTAL)

Total = 562.9 Mtoe



* Primary production. recycled and recovered products

source: Eurostat April 2024
Methodology and Notes: see appendices

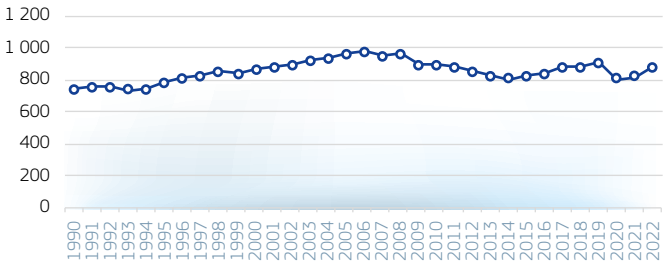
2.1.2 Net Imports

ALL FUELS

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	865.96	895.42	908.24	792.55	811.91	872.73
Index2000	100%	103%	105%	92%	94%	101%
BE	50.63	53.64	49.88	45.12	45.59	44.32
BG	8.68	7.23	7.21	6.79	7.01	7.29
CZ	9.37	11.54	17.52	15.63	17.09	17.50
DK	-7.47	-3.41	7.04	7.44	5.64	7.37
DE	204.85	204.59	207.54	182.25	188.76	194.52
EE	1.64	0.90	0.24	0.50	0.07	0.32
IE	12.41	13.30	10.38	9.90	11.13	11.71
EL	21.75	21.30	19.32	17.97	17.22	18.92
ES	99.86	106.68	100.56	80.23	87.01	95.25
FR	132.66	132.38	120.39	99.71	107.21	114.74
HR	4.10	4.43	4.95	4.46	4.75	5.14
IT	152.44	148.48	122.49	105.80	114.85	119.17
CY	2.58	2.96	2.69	2.38	2.38	2.63
LV	2.36	2.22	2.17	2.08	1.84	1.75
LT	4.30	5.71	6.01	5.85	5.96	5.28
LU	3.64	4.51	4.32	3.66	3.90	3.50
HU	13.87	15.14	18.62	14.80	14.82	16.55
MT	1.47	2.36	3.08	2.87	2.66	3.01
NL	34.99	28.28	56.47	57.16	50.04	63.19
AT	19.17	21.88	24.91	18.90	17.74	24.14
PL	9.60	32.14	48.11	44.16	44.49	48.30
PT	22.21	18.69	18.36	14.42	14.86	16.60
RO	8.04	7.49	10.07	9.10	10.86	10.27
SI	3.40	3.58	3.60	2.95	3.22	3.44
SK	11.54	11.41	11.88	9.26	9.36	11.57
FI	18.55	18.08	14.86	14.00	12.91	13.42
SE	19.29	19.91	15.56	15.14	10.55	12.84

NET IMPORTS – ALL FUELS – 1990-2022 (Mtoe)

EU27_2020



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.1.2 Net Imports

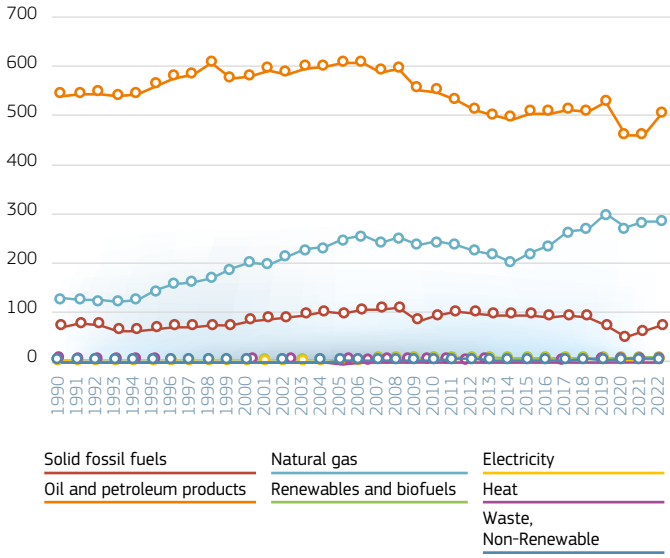
BY FUEL

	2022					
Mtoe	Net Imports	Solid fossil fuels	Oil and petroleum products	Natural gas	Renewables and biofuels	Electricity
EU27_2020	872.7	74.2	502.6	287.3	7.0	1.1
Share (%)	100%	8.5%	57.6%	32.9%	0.8%	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

source: Eurostat April 2024
Methodology and Notes: see appendices

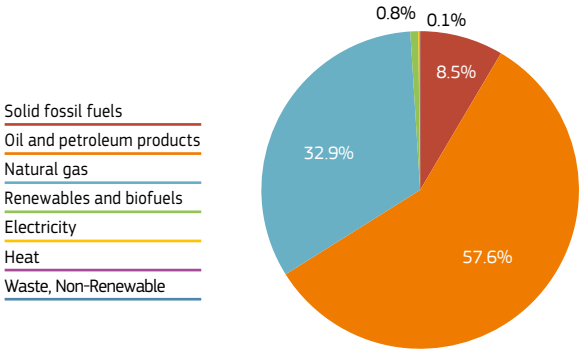
2.1.2 Net Imports

BY FUEL – EU27_2020 – 1990-2022 (Mtoe)



BY FUEL – EU27_2020 – 2022

Total = 872.7 Mtoe



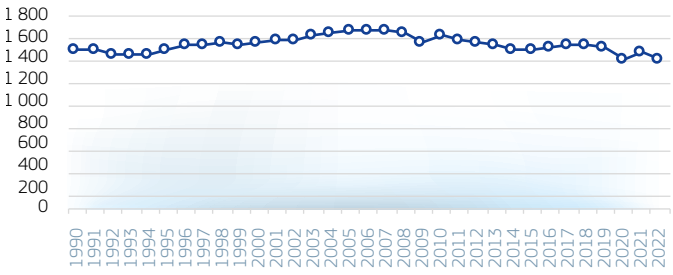
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.1.3 Gross available energy

ALL FUELS

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	1.538.53	1.606.38	1.501.83	1.379.22	1.462.45	1.396.32
Index2000	100%	104%	98%	90%	95%	91%
BE	64.78	68.28	64.28	57.82	64.37	59.93
BG	18.70	18.01	18.75	17.80	19.37	19.62
CZ	41.29	45.47	42.93	40.32	42.75	41.86
DK	20.79	21.02	18.11	16.58	17.45	17.19
DE	344.63	341.02	309.51	286.21	297.75	283.74
EE	4.81	6.14	5.10	4.79	4.91	5.16
IE	14.53	15.20	15.12	13.92	14.45	14.79
EL	31.50	31.06	26.07	22.08	23.32	23.77
ES	130.04	138.54	134.02	118.17	125.25	128.12
FR	258.73	272.00	253.56	224.63	243.08	221.00
HR	8.49	9.48	8.81	8.32	8.72	8.53
IT	176.19	179.82	158.09	144.03	156.58	150.53
CY	2.61	2.95	2.90	2.56	2.66	2.86
LV	3.87	4.88	4.94	4.57	4.79	4.51
LT	7.44	7.22	8.00	7.81	8.14	7.29
LU	3.66	4.64	4.55	3.97	4.22	3.83
HU	25.23	26.59	26.71	26.14	27.38	25.79
MT	1.47	2.39	3.16	2.95	2.74	3.04
NL	91.43	100.01	87.72	83.88	85.68	78.73
AT	29.24	34.85	34.78	32.35	34.23	32.43
PL	89.50	101.82	106.35	103.26	109.95	104.93
PT	26.05	24.84	24.86	22.09	22.20	23.29
RO	36.76	35.02	33.24	32.26	34.33	31.68
SI	6.56	7.27	6.91	6.46	6.63	6.37
SK	17.73	18.43	17.02	16.45	17.79	16.62
FI	33.44	37.00	34.55	32.43	33.99	32.83
SE	49.07	52.42	51.79	47.36	49.74	47.87

GROSS AVAILABLE ENERGY – ALL FUELS – 1990-2022 (Mtoe)



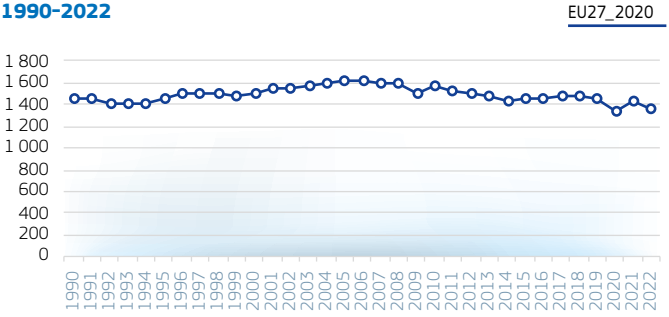
source: Eurostat April 2024
Methodology and Notes: see appendices

2.1.4 Gross inland consumption

ALL FUELS

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	1 498.16	1 559.68	1 458.70	1 340.20	1 421.68	1 354.21
Index2000	100%	104%	97%	89%	95%	90%
BE	59.44	60.69	56.09	51.44	56.79	52.28
BG	18.63	17.92	18.67	17.71	19.28	19.55
CZ	41.29	45.47	42.93	40.32	42.75	41.86
DK	19.50	20.33	17.37	16.03	16.97	16.66
DE	342.43	338.25	308.15	284.88	296.34	282.27
EE	4.71	5.92	4.92	4.50	4.61	4.85
IE	14.37	15.06	14.97	13.77	14.28	14.67
EL	27.90	28.35	23.55	20.45	21.51	21.82
ES	124.02	130.12	126.83	111.79	117.93	119.49
FR	255.91	269.71	251.84	223.65	242.00	219.83
HR	8.47	9.47	8.79	8.30	8.69	8.51
IT	174.54	176.84	155.43	141.60	154.06	148.06
CY	2.42	2.76	2.63	2.28	2.41	2.57
LV	3.86	4.63	4.65	4.36	4.58	4.40
LT	7.35	7.08	7.80	7.63	7.95	7.13
LU	3.66	4.64	4.55	3.97	4.22	3.83
HU	25.23	26.59	26.71	26.14	27.38	25.79
MT	0.81	0.94	0.90	0.76	0.80	0.92
NL	78.27	86.15	76.29	72.00	74.25	67.17
AT	29.22	34.83	34.77	32.34	34.21	32.41
PL	89.22	101.60	106.07	102.96	109.60	104.66
PT	25.38	24.38	23.91	21.40	21.54	22.59
RO	36.76	35.01	33.21	32.22	34.29	31.67
SI	6.56	7.25	6.72	6.34	6.54	6.37
SK	17.73	18.43	17.02	16.45	17.79	16.62
FI	32.76	36.79	34.21	32.12	33.71	32.49
SE	47.71	50.46	49.72	44.78	47.17	45.74

GROSS INLAND CONSUMPTION – ALL FUELS – 1990-2022



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.1.4 Gross inland consumption

BY FUEL

Mtoe	2022							
	Oil and petroleum products	Natural gas	Solid fossil fuels	Renewables and biofuels	Nuclear	Waste, non-renewable	Electricity	Others*
EU27_2020	472.8	294.2	162.0	249.2	155.5	14.3	1.1	4.2
Share - %	34.9%	21.7%	12.0%	18.4%	11.5%	1.1%	0.1%	0.3%
BE	20.3	13.0	2.7	5.3	10.7	0.6	-0.6	0.0
BG	4.8	2.3	6.3	2.7	4.3	0.1	-1.0	0.0
CZ	9.7	6.3	13.4	5.5	7.7	0.4	-1.2	0.0
DK	6.6	1.4	1.1	7.0	0.0	0.4	0.1	0.0
DE	100.1	66.8	55.5	49.2	8.9	4.1	-2.3	0.0
EE	0.2	0.3	0.0	1.3	0.0	0.0	0.1	2.9
IE	7.1	4.5	0.7	1.8	0.0	0.1	0.0	0.3
EL	11.9	4.4	1.6	3.7	0.0	0.0	0.3	0.0
ES	53.8	28.3	3.6	19.6	15.3	0.5	-1.7	0.0
FR	69.2	33.2	7.5	30.1	76.8	1.8	1.3	0.0
HR	3.3	2.1	0.4	2.2	0.0	0.0	0.4	0.0
IT	51.5	56.1	7.4	28.2	0.0	1.2	3.7	0.0
CY	2.2	0.0	0.0	0.3	0.0	0.0	0.0	0.0
LV	1.5	0.7	0.0	1.9	0.0	0.1	0.2	0.0
LT	3.0	1.3	0.2	1.8	0.0	0.1	0.7	0.0
LU	2.3	0.5	0.0	0.4	0.0	0.0	0.5	0.0
HU	8.1	7.9	1.2	3.3	4.0	0.2	1.0	0.0
MT	0.5	0.3	0.0	0.1	0.0	0.0	0.1	0.0
NL	28.1	23.4	5.5	8.5	1.0	0.8	-0.4	0.0
AT	11.4	6.9	2.4	10.3	0.0	0.7	0.7	0.0
PL	32.9	15.0	42.1	13.6	0.0	1.0	-0.1	0.0
PT	10.3	4.8	0.0	6.5	0.0	0.2	0.8	0.0
RO	10.5	8.4	3.5	6.0	2.8	0.3	0.1	0.0
SI	2.4	0.7	0.7	1.0	1.3	0.1	0.1	0.0
SK	3.8	3.8	2.4	2.1	4.1	0.2	0.1	0.0
FI	7.8	1.1	2.2	12.9	6.1	0.3	1.1	0.9
SE	9.3	0.6	1.5	23.8	12.4	1.0	-2.9	0.0

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

source: Eurostat April 2024
Methodology and Notes: see appendices

2.1.4 Gross Inland Consumption

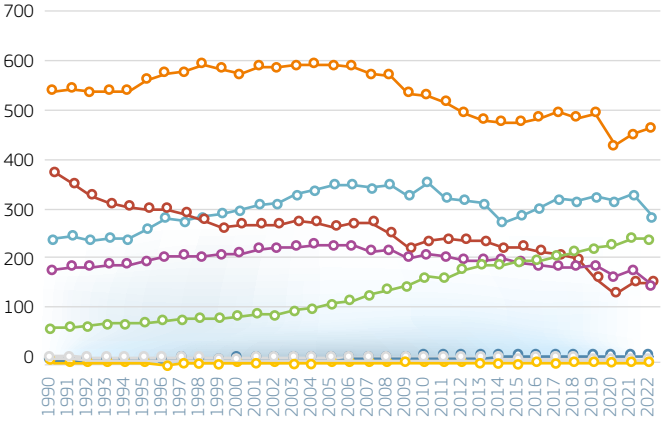
RENEWABLES AND BIOFUELS

	2022								
Mtoe	Renewables and biofuels	Hydro	Wind	Solar photovoltaic	Solar thermal	Tide, Wave and Ocean	Biofuels and renewable waste	Geothermal	Ambient heat (heat pumps)
EU27_2020	249.2	23.8	36.2	17.7	3.9	0.0	144.2	6.7	16.6
Share (%)	100.0%	9.5%	14.5%	7.1%	1.6%	0.0%	57.9%	2.7%	6.7%
BE	5.30	0.02	1.06	0.59	0.03	0.00	3.36	0.00	0.23
BG	2.75	0.33	0.13	0.18	0.03	0.00	1.89	0.04	0.15
CZ	5.45	0.18	0.06	0.23	0.02	0.00	4.59	0.00	0.39
DK	6.96	0.00	1.64	0.19	0.08	0.00	4.60	0.00	0.46
DE	49.21	1.52	10.73	5.19	0.84	0.00	28.81	0.41	1.71
EE	1.32	0.00	0.06	0.05	0.00	0.00	1.21	0.00	0.00
IE	1.85	0.06	0.96	0.01	0.01	0.00	0.70	0.00	0.10
EL	3.66	0.33	0.94	0.61	0.32	0.00	1.00	0.01	0.44
ES	19.61	1.51	5.40	2.68	1.53	0.00	7.28	0.00	1.21
FR	30.07	3.91	3.27	1.69	0.23	0.04	16.64	0.44	3.85
HR	2.23	0.47	0.18	0.01	0.02	0.00	1.49	0.04	0.01
IT	28.16	2.44	1.76	2.42	0.26	0.00	13.34	5.18	2.76
CY	0.31	0.00	0.02	0.05	0.08	0.00	0.11	0.00	0.05
LV	1.91	0.24	0.02	0.00	0.00	0.00	1.65	0.00	0.00
LT	1.79	0.04	0.13	0.03	0.00	0.00	1.51	0.00	0.08
LU	0.40	0.01	0.03	0.02	0.00	0.00	0.34	0.00	0.01
HU	3.33	0.02	0.05	0.41	0.02	0.00	2.60	0.17	0.07
MT	0.06	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.02
NL	8.49	0.00	1.84	1.47	0.03	0.00	4.50	0.16	0.49
AT	10.29	2.98	0.62	0.33	0.18	0.00	5.66	0.04	0.48
PL	13.64	0.17	1.70	0.71	0.09	0.00	10.42	0.03	0.52
PT	6.52	0.56	1.14	0.30	0.11	0.00	3.38	0.18	0.85
RO	6.01	1.20	0.60	0.17	0.00	0.00	4.01	0.03	0.00
SI	1.04	0.27	0.00	0.06	0.01	0.00	0.63	0.01	0.06
SK	2.15	0.32	0.00	0.06	0.01	0.00	1.67	0.01	0.09
FI	12.92	1.16	1.03	0.03	0.00	0.00	9.90	0.00	0.79
SE	23.81	6.01	2.86	0.17	0.01	0.00	12.97	0.00	1.79

source: Eurostat April 2024
Methodology and Notes: **see appendices**

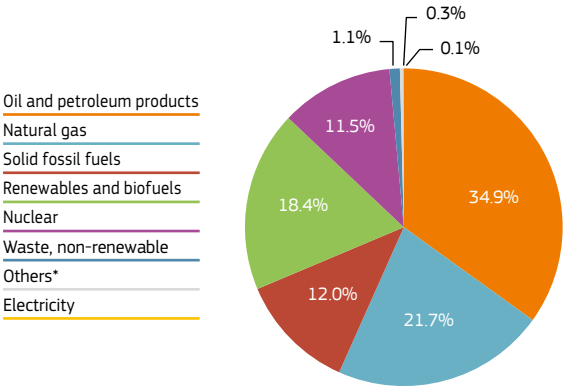
2.1.4 Gross Inland Consumption

BY FUEL – EU27_2020 – 1990-2022 (Mtoe)



GROSS INLAND CONSUMPTION – BY FUEL – EU27_2020 – 2022 (% TOTAL)

Total = 1 354.2 Mtoe



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

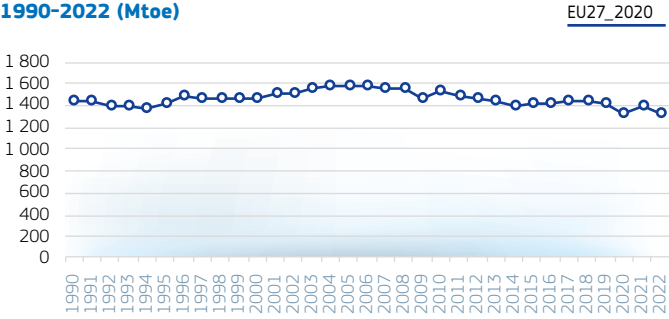
source: Eurostat April 2024
Methodology and Notes: see appendices

2.1.5 Total energy supply

ALL FUELS

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	1 469.58	1 527.56	1 416.90	1 322.16	1 400.01	1 319.57
Index2000	100%	104%	96%	90%	95%	90%
BE	57.93	59.31	54.38	50.24	55.28	50.53
BG	18.55	17.75	18.43	17.58	19.12	19.34
CZ	41.13	45.15	42.52	40.21	42.59	41.60
DK	18.71	19.52	16.32	15.69	16.55	15.92
DE	335.81	330.30	298.40	280.33	290.33	273.32
EE	4.69	5.89	4.85	4.47	4.56	4.80
IE	13.77	14.32	13.86	13.37	13.84	13.66
EL	27.06	27.66	22.42	20.09	20.81	20.66
ES	121.24	127.00	121.94	110.21	116.08	115.82
FR	250.70	264.20	245.63	220.98	239.30	215.04
HR	8.40	9.37	8.59	8.25	8.60	8.32
IT	171.71	173.68	151.46	140.10	152.43	145.22
CY	2.14	2.48	2.32	2.19	2.25	2.31
LV	3.84	4.51	4.49	4.30	4.50	4.26
LT	7.33	7.03	7.68	7.58	7.89	7.03
LU	3.34	4.21	3.95	3.42	3.60	3.18
HU	24.99	26.36	26.43	26.04	27.25	25.53
MT	0.68	0.84	0.74	0.70	0.72	0.79
NL	74.97	82.74	72.32	69.79	71.82	63.98
AT	28.67	34.17	33.81	32.02	33.80	31.79
PL	88.94	101.10	105.00	102.50	109.04	103.68
PT	24.71	23.51	22.45	20.88	20.88	21.20
RO	36.63	34.84	33.05	32.17	34.21	31.57
SI	6.54	7.23	6.70	6.33	6.53	6.35
SK	17.70	18.39	16.97	16.42	17.77	16.58
FI	32.42	36.25	33.37	31.84	33.43	31.96
SE	46.99	49.75	48.83	44.44	46.82	45.12

TOTAL ENERGY SUPPLY – ALL FUELS – 1990-2022 (Mtoe)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.2 Imports

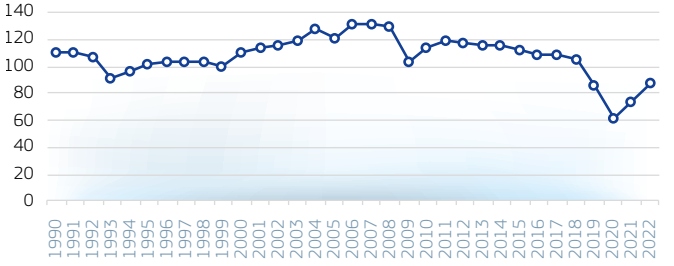
2.2.1 Imports – Solid Fossil Fuels

TOTAL

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	110.2	114.0	87.0	62.9	75.1	87.3
Index2000	100%	103%	79%	57%	68%	79%
BE	8.43	4.39	3.19	2.57	2.47	2.80
BG	2.38	1.75	0.40	0.41	0.55	0.80
CZ	1.04	2.36	2.90	2.78	3.48	3.41
DK	3.86	2.68	1.44	0.67	0.47	1.13
DE	22.22	32.59	28.18	21.09	27.45	29.55
EE	0.07	0.05	0.03	0.00	0.00	0.00
IE	1.69	0.96	0.26	0.25	0.97	0.92
EL	0.81	0.40	0.20	0.19	0.16	0.05
ES	13.35	7.85	5.53	2.95	3.70	6.11
FR	13.38	12.25	7.30	5.11	6.22	6.09
HR	0.48	0.70	0.45	0.38	0.42	0.41
IT	13.23	14.00	6.59	4.95	5.56	7.83
CY	0.03	0.01	0.02	0.01	0.04	0.05
LV	0.06	0.11	0.05	0.02	0.02	0.03
LT	0.08	0.19	0.18	0.12	0.15	0.20
LU	0.11	0.07	0.04	0.04	0.04	0.04
HU	1.21	1.41	1.07	0.92	0.87	0.63
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	8.13	7.76	6.62	3.96	5.61	5.75
AT	3.07	3.37	2.82	2.44	2.58	2.46
PL	1.02	8.27	10.07	7.74	7.53	11.39
PT	3.97	1.63	1.52	0.01	0.01	0.01
RO	1.92	1.22	1.08	0.77	0.96	0.74
SI	0.25	0.28	0.21	0.18	0.10	0.21
SK	3.47	3.22	2.60	2.02	2.53	2.37
FI	3.56	3.99	2.25	1.80	1.62	2.77
SE	2.36	2.46	1.95	1.50	1.58	1.58

IMPORTS – SOLID FOSSIL FUELS – TOTAL – 1990-2022 (Mtoe)

EU27_2020



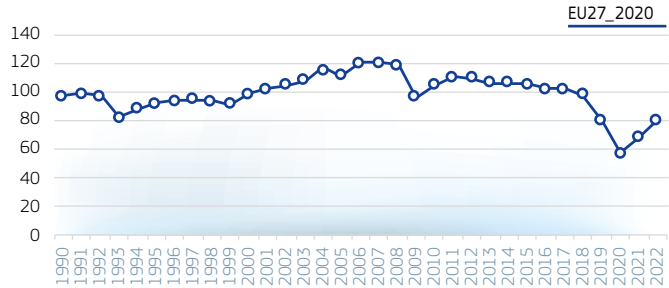
source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.1 Imports – Solid Fossil Fuels

HARD COAL

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	99.3	104.1	79.8	57.2	67.9	80.3
Index2000	100%	105%	80%	58%	68%	81%
BE	7.46	4.09	2.58	2.12	2.03	2.21
BG	2.25	1.70	0.36	0.36	0.52	0.75
CZ	0.63	1.41	2.41	2.32	2.92	2.91
DK	3.82	2.67	1.43	0.66	0.46	1.13
DE	17.39	29.33	26.80	19.93	25.79	27.83
EE	0.06	0.05	0.03	0.00	0.00	0.00
IE	1.68	0.95	0.25	0.24	0.96	0.91
EL	0.81	0.40	0.20	0.19	0.16	0.05
ES	13.25	7.71	4.99	2.37	3.18	5.81
FR	12.33	11.30	6.83	4.75	5.18	5.23
HR	0.44	0.64	0.42	0.36	0.40	0.39
IT	12.87	13.81	6.19	4.66	5.12	7.61
CY	0.03	0.01	0.02	0.01	0.04	0.05
LV	0.05	0.11	0.05	0.02	0.02	0.03
LT	0.01	0.11	0.17	0.11	0.14	0.18
LU	0.10	0.06	0.04	0.04	0.03	0.04
HU	0.88	1.28	0.97	0.86	0.81	0.54
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	7.74	7.52	6.55	3.92	5.55	5.71
AT	2.32	2.45	2.13	1.84	1.92	1.77
PL	1.01	8.16	9.86	7.57	7.35	11.20
PT	3.97	1.63	1.52	0.00	0.00	0.00
RO	1.65	0.14	0.10	0.08	0.08	0.03
SI	0.01	0.02	0.01	0.01	0.00	0.00
SK	3.15	2.57	2.25	1.72	2.31	2.04
FI	3.21	3.68	2.03	1.58	1.45	2.54
SE	2.14	2.29	1.64	1.41	1.47	1.31

IMPORTS – HARD COAL – 1990-2022 (Mtoe)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.2.1 Imports – Solid Fossil Fuels

RANKING

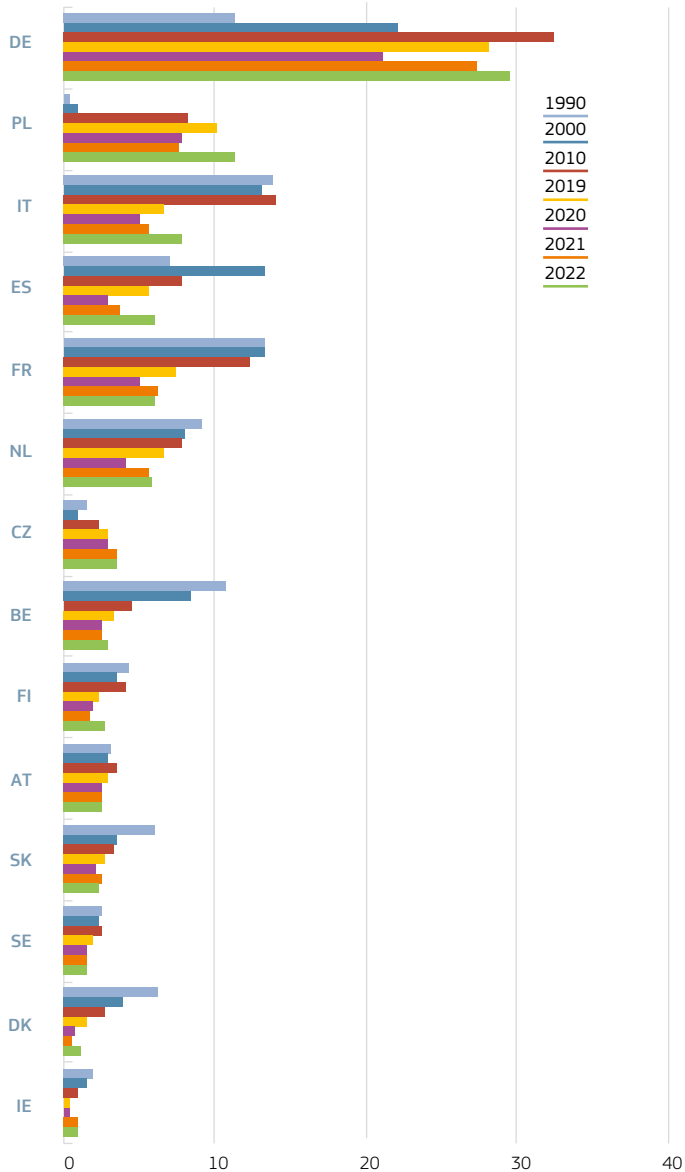
Mtoe and %	2000			2022		
Top 10 Ranking	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Solid fossil fuels						
1	DE	22.2	20.2%	DE	29.5	33.8%
2	FR	13.4	12.2%	PL	11.4	13.0%
3	ES	13.3	12.1%	IT	7.8	9.0%
4	IT	13.2	12.0%	ES	6.1	7.0%
5	BE	8.4	7.7%	FR	6.1	7.0%
6	NL	8.1	7.4%	NL	5.8	6.6%
7	PT	4.0	3.6%	CZ	3.4	3.9%
8	DK	3.9	3.5%	BE	2.8	3.2%
9	FI	3.6	3.2%	FI	2.8	3.2%
10	SK	3.5	3.1%	AT	2.5	2.8%
Top 5 Total		70.6	64.1%		61.0	69.8%
Total EU27_2020		110.2	100.0%		87.3	100.0%
Of Which: hard coal						
1	DE	17.4	17.5%	DE	27.8	34.7%
2	ES	13.3	13.4%	PL	11.2	14.0%
3	IT	12.9	13.0%	IT	7.6	9.5%
4	FR	12.3	12.4%	ES	5.8	7.2%
5	NL	7.7	7.8%	NL	5.7	7.1%
6	BE	7.5	7.5%	FR	5.2	6.5%
7	PT	4.0	4.0%	CZ	2.9	3.6%
8	DK	3.8	3.9%	FI	2.5	3.2%
9	FI	3.2	3.2%	BE	2.2	2.8%
10	SK	3.1	3.2%	SK	2.0	2.5%
Top 5 Total		63.6	64.1%		58.2	72.5%
Total EU27_2020		99.3	100.0%		80.3	100.0%

source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.1 Imports – Solid Fossil Fuels

BY MEMBER STATE – TOP 14 IMPORTERS

1990-2022

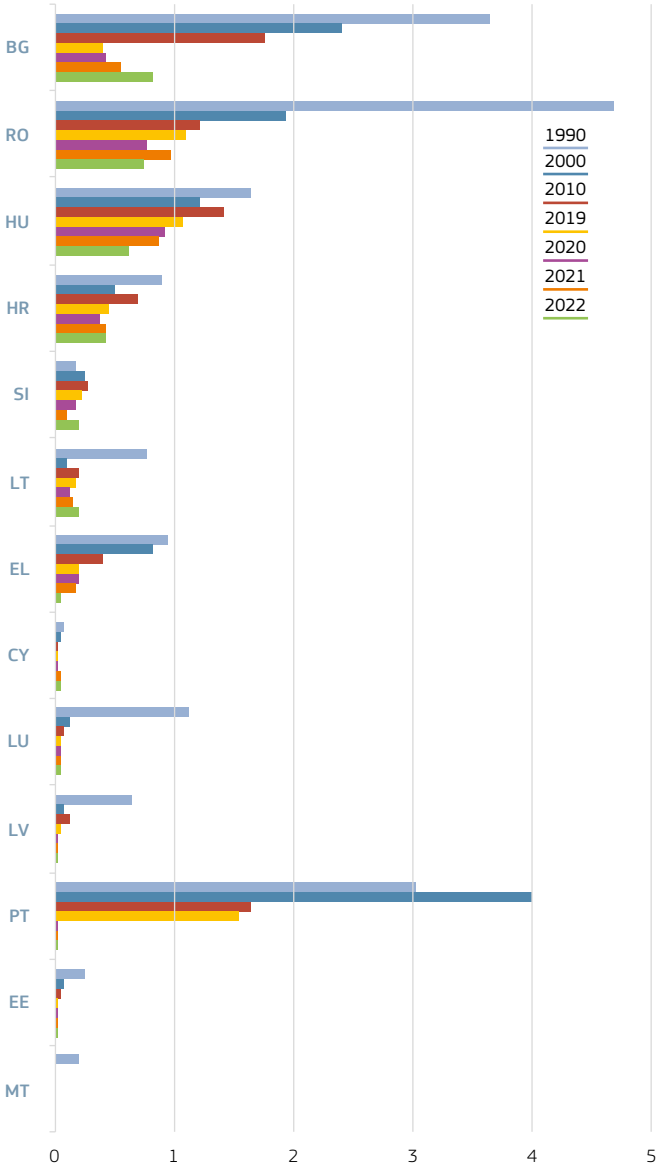


source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.2.1 Imports – Solid Fossil Fuels

BY MEMBER STATE – LEAST 13 IMPORTERS

1990-2022



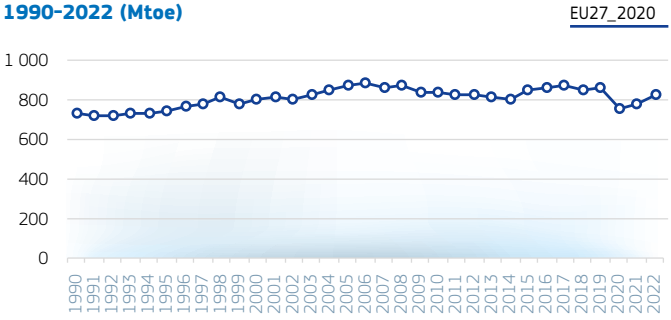
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.2.2 Imports – Oil and Petroleum Products

TOTAL

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	799.0	838.6	854.6	754.9	780.7	819.0
Index2000	100%	105%	107%	94%	98%	103%
BE	52.91	56.76	63.13	53.81	58.50	56.21
BG	6.10	7.76	9.32	7.20	6.54	9.35
CZ	8.58	10.61	11.86	10.52	11.38	11.55
DK	9.93	9.47	12.36	11.71	10.00	10.41
DE	148.18	130.79	130.16	119.35	120.03	125.80
EE	0.91	1.15	1.83	2.19	2.01	1.68
IE	9.63	9.21	9.01	8.13	8.40	8.81
EL	23.43	26.61	32.25	30.96	32.32	31.93
ES	78.71	80.88	88.77	75.15	77.86	83.92
FR	112.87	106.38	95.30	77.60	80.55	83.32
HR	4.21	4.97	4.85	4.45	4.60	4.79
IT	109.73	96.89	80.59	65.73	71.98	78.26
CY	2.54	2.93	2.60	2.27	2.28	2.50
LV	1.35	1.94	2.33	2.02	1.94	2.29
LT	5.46	10.25	10.81	9.02	9.33	9.68
LU	2.39	2.86	2.97	2.40	2.57	2.34
HU	7.00	8.53	10.43	9.53	9.83	9.62
MT	1.47	2.38	3.07	2.71	2.37	2.65
NL	104.61	146.70	147.74	132.40	143.68	150.23
AT	12.45	13.96	15.16	13.69	13.54	12.45
PL	21.78	29.22	36.16	33.49	34.53	38.00
PT	17.62	15.40	16.46	14.71	14.66	15.40
RO	6.36	8.17	12.07	10.72	11.24	12.54
SI	2.69	3.29	4.95	4.06	3.89	4.69
SK	5.56	6.85	7.02	7.30	7.17	7.19
FI	15.65	16.31	18.10	17.23	13.79	16.23
SE	26.83	28.34	25.26	26.52	25.66	27.17

IMPORTS – OIL AND PETROLEUM PRODUCTS – TOTAL – 1990-2022 (Mtoe)



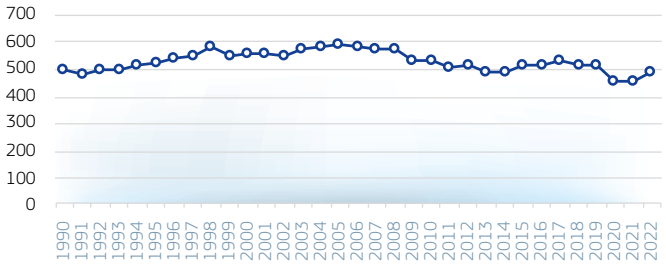
source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.2 Imports – Oil and Petroleum Products

CRUDE OIL AND NGL

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	560.3	528.3	518.8	452.4	457.3	493.7
Index2000	100%	94%	93%	81%	82%	88%
BE	34.16	33.48	34.64	27.72	29.08	28.08
BG	5.31	5.52	7.10	4.94	4.22	7.22
CZ	5.67	7.83	7.85	6.27	6.94	7.54
DK	3.81	2.79	5.17	4.79	5.32	4.58
DE	104.75	94.69	87.30	83.98	82.53	89.59
EE	0.00	0.00	0.00	0.00	0.00	0.00
IE	3.01	3.11	2.61	2.97	3.03	3.13
EL	19.22	19.97	22.65	22.59	23.22	21.76
ES	58.07	53.00	66.99	55.42	56.75	64.25
FR	85.45	65.48	49.58	33.84	34.59	41.92
HR	3.96	3.60	2.05	1.98	1.80	1.50
IT	83.64	78.60	63.14	50.36	57.02	62.52
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	9.67	7.92	8.09	8.31
LU	0.00	0.00	0.00	0.00	0.00	0.00
HU	5.79	5.84	6.10	6.09	6.00	5.98
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	61.06	61.05	63.79	57.33	58.44	61.85
AT	7.43	6.90	8.72	7.73	7.68	5.22
PL	18.27	23.03	27.02	25.28	23.98	26.69
PT	11.73	11.48	11.48	11.02	9.63	10.35
RO	4.81	5.82	8.66	7.07	6.82	8.70
SI	0.12	0.00	0.00	0.00	0.00	0.00
SK	5.28	5.48	5.16	5.67	5.48	5.48
FI	11.86	11.44	12.70	11.60	8.58	10.05
SE	20.83	20.00	16.47	17.80	18.08	18.98

IMPORTS – CRUDE OIL AND NGL – 1990-2022 (Mtoe) EU27_2020



source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.2 Imports – Oil and Petroleum Products

RANKING

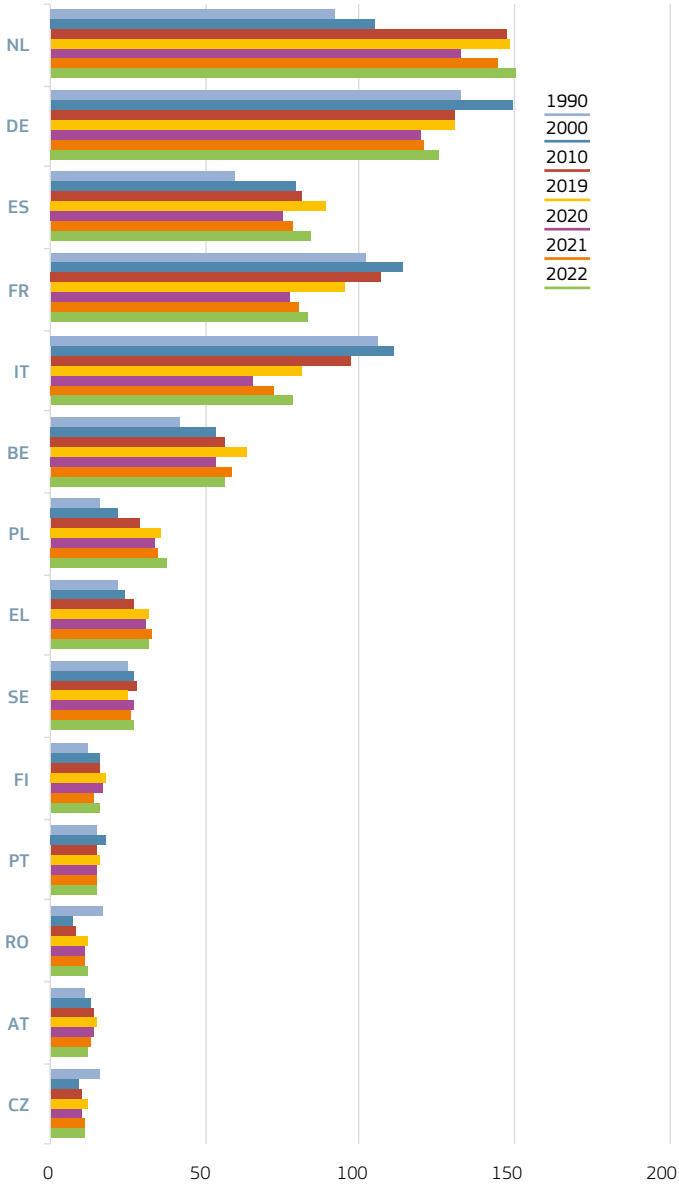
Mtoe and %	2000			2022		
Top 10 Ranking	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Oil and petroleum products						
1	DE	148.2	18.5%	NL	150.2	18.3%
2	FR	112.9	14.1%	DE	125.8	15.4%
3	IT	109.7	13.7%	ES	83.9	10.2%
4	NL	104.6	13.1%	FR	83.3	10.2%
5	ES	78.7	9.9%	IT	78.3	9.6%
6	BE	52.9	6.6%	BE	56.2	6.9%
7	SE	26.8	3.4%	PL	38.0	4.6%
8	EL	23.4	2.9%	EL	31.9	3.9%
9	PL	21.8	2.7%	SE	27.2	3.3%
10	PT	17.6	2.2%	FI	16.2	2.0%
Top 5 Total		554.1	69.4%		521.5	63.7%
Total EU27_2020		799.0	100.0%		819.0	100.0%
Of Which: crude oil and NGL						
1	DE	104.8	18.7%	DE	89.6	18.1%
2	FR	85.4	15.2%	ES	64.3	13.0%
3	IT	83.6	14.9%	IT	62.5	12.7%
4	NL	61.1	10.9%	NL	61.9	12.5%
5	ES	58.1	10.4%	FR	41.9	8.5%
6	BE	34.2	6.1%	BE	28.1	5.7%
7	SE	20.8	3.7%	PL	26.7	5.4%
8	EL	19.2	3.4%	EL	21.8	4.4%
9	PL	18.3	3.3%	SE	19.0	3.8%
10	FI	11.9	2.1%	PT	10.3	2.1%
Top 5 Total		393.0	70.1%		320.1	64.8%
Total EU27_2020		560.3	100.0%		493.7	100.0%

source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.2 Imports – Oil and Petroleum Products

BY MEMBER STATE – TOP 14 IMPORTERS

1990-2022 (Mtoe)

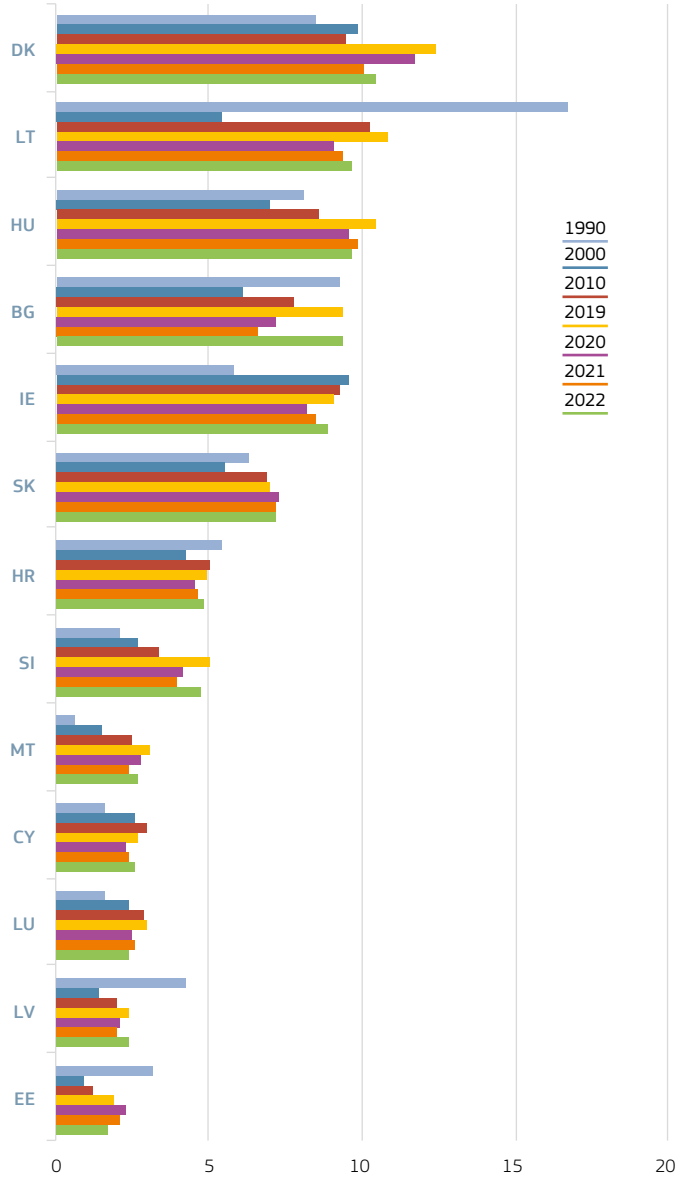


source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.2 Imports – Oil and Petroleum Products

BY MEMBER STATE – LEAST 13 IMPORTERS

1990-2022 (Mtoe)



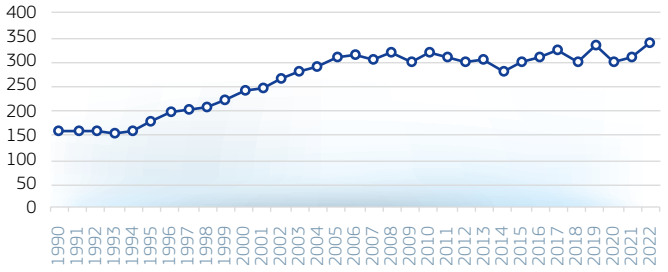
source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.3 Imports – Natural gas

TOTAL

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	240.41	316.04	333.85	299.80	310.65	335.74
Index2000	100%	131%	139%	125%	129%	140%
BE	13.28	19.61	19.28	17.95	17.65	20.28
BG	2.74	2.13	2.46	2.43	2.73	2.47
CZ	7.48	6.98	7.86	6.26	7.18	7.19
DK	0.00	0.14	1.00	2.21	2.07	2.30
DE	61.09	78.80	75.67	66.47	69.99	70.70
EE	0.66	0.56	0.40	0.37	0.42	0.35
IE	2.48	4.48	2.42	2.90	3.11	3.30
EL	1.69	3.23	4.46	4.99	5.43	4.89
ES	15.47	31.96	32.37	28.25	32.16	34.53
FR	36.46	42.11	47.37	40.32	40.38	49.49
HR	0.91	0.87	1.66	1.78	1.91	2.55
IT	47.05	61.72	58.20	54.38	59.78	59.45
CY	0.00	0.00	0.00	0.00	0.00	0.00
LV	1.11	0.90	1.10	0.91	0.96	0.69
LT	2.06	2.48	2.30	2.38	2.00	2.96
LU	0.67	1.20	0.68	0.62	0.67	0.53
HU	7.35	7.91	9.75	6.63	6.25	7.83
MT	0.00	0.00	0.32	0.31	0.33	0.32
NL	12.47	18.45	25.75	26.14	22.25	27.95
AT	5.32	6.12	9.43	5.37	3.94	10.27
PL	6.64	8.91	14.47	14.47	15.33	12.72
PT	2.04	4.50	5.30	5.17	4.97	5.01
RO	2.71	1.82	2.16	1.73	2.87	2.29
SI	0.82	0.86	0.73	0.73	0.77	0.68
SK	5.71	5.00	5.58	3.60	4.27	5.21
FI	3.43	3.84	2.14	2.12	2.12	1.13
SE	0.78	1.47	0.98	1.30	1.07	0.65

IMPORTS – NATURAL GAS – TOTAL – 1990-2022 (Mtoe) EU27_2020



source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.3 Imports – Natural gas

RANKING

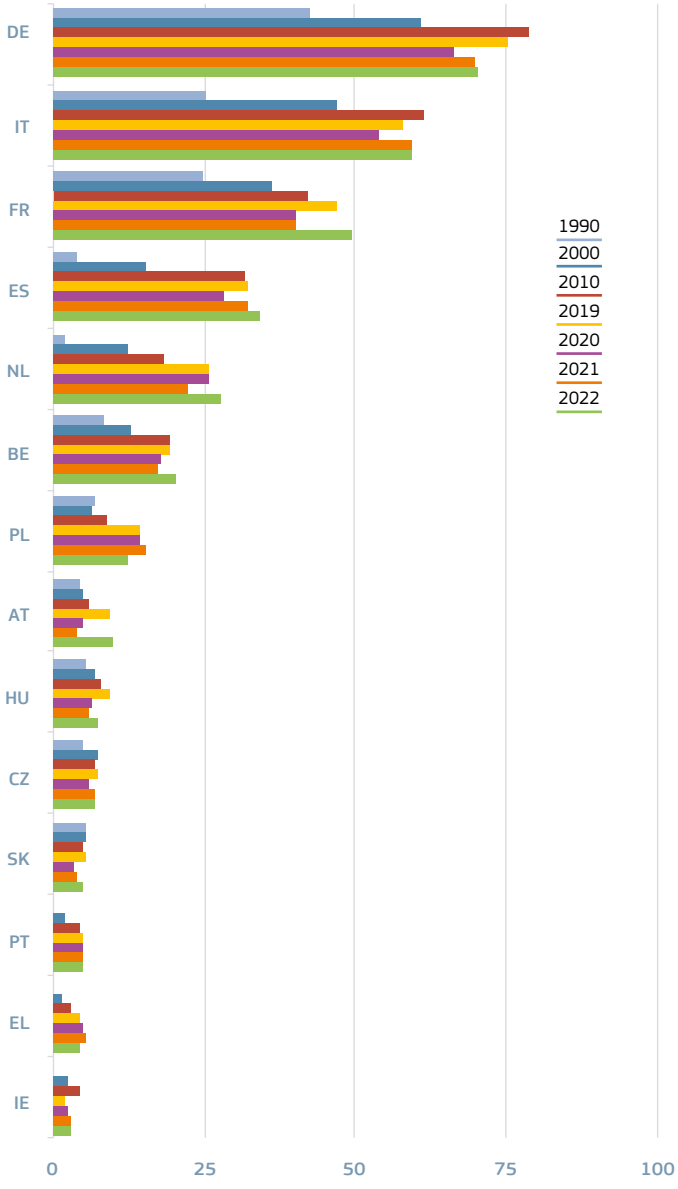
Mtoe and %	2000			2022		
	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Natural gas						
1	DE	61.1	25.4%	DE	70.7	21.1%
2	IT	47.0	19.6%	IT	59.5	17.7%
3	FR	36.5	15.2%	FR	49.5	14.7%
4	ES	15.5	6.4%	ES	34.5	10.3%
5	BE	13.3	5.5%	NL	27.9	8.3%
6	NL	12.5	5.2%	BE	20.3	6.0%
7	CZ	7.5	3.1%	PL	12.7	3.8%
8	HU	7.3	3.1%	AT	10.3	3.1%
9	PL	6.6	2.8%	HU	7.8	2.3%
10	SK	5.7	2.4%	CZ	7.2	2.1%
11	AT	5.3	2.2%	SK	5.2	1.6%
12	FI	3.4	1.4%	PT	5.0	1.5%
13	BG	2.7	1.1%	EL	4.9	1.5%
14	RO	2.7	1.1%	IE	3.3	1.0%
15	IE	2.5	1.0%	LT	3.0	0.9%
16	LT	2.1	0.9%	HR	2.5	0.8%
17	PT	2.0	0.8%	BG	2.5	0.7%
18	EL	1.7	0.7%	DK	2.3	0.7%
19	LV	1.1	0.5%	RO	2.3	0.7%
20	HR	0.9	0.4%	FI	1.1	0.3%
21	SI	0.8	0.3%	LV	0.7	0.2%
22	SE	0.8	0.3%	SI	0.7	0.2%
23	LU	0.7	0.3%	SE	0.7	0.2%
24	EE	0.7	0.3%	LU	0.5	0.2%
25	DK	0.0	0.0%	EE	0.3	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%		242.1	72.1%
Total EU27_2020		240.4	100.0%		335.7	100.0%

source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.3 Imports – Natural Gas

BY MEMBER STATE – TOP 14 IMPORTERS

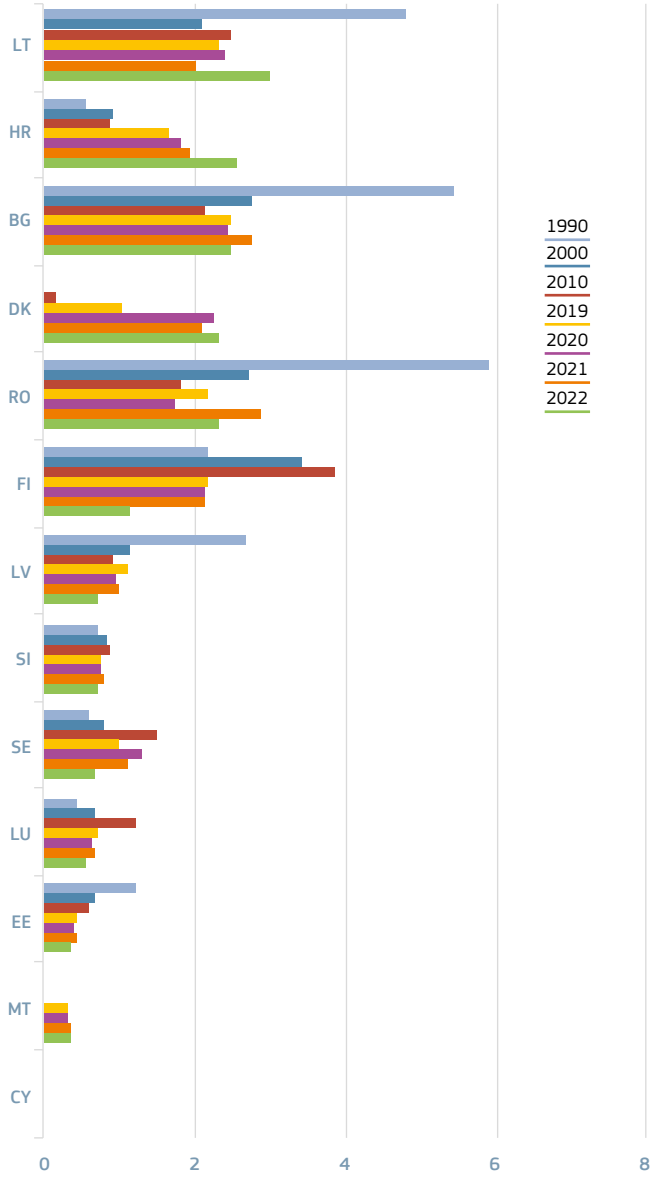
1990-2022



source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.3 Imports – Natural Gas

BY MEMBER STATE – LEAST 13 IMPORTERS
1990-2022



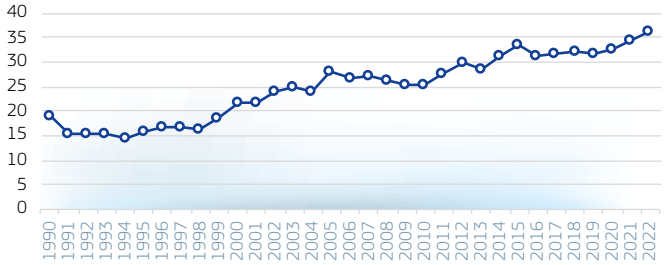
source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.4 Imports – Electricity

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	21.7	25.1	31.8	32.8	34.5	36.3
Index2000	100%	116%	147%	151%	159%	168%
BE	1.00	1.07	1.09	1.18	1.31	1.41
BG	0.08	0.10	0.26	0.32	0.16	0.13
CZ	0.75	0.57	0.95	1.15	1.30	1.44
DK	0.72	0.91	1.37	1.60	1.73	1.61
DE	3.88	3.69	3.45	4.11	4.45	4.24
EE	0.03	0.09	0.42	0.63	0.63	0.62
IE	0.01	0.07	0.19	0.15	0.21	0.14
EL	0.15	0.73	0.95	0.85	0.65	0.67
ES	1.05	0.45	1.61	1.54	1.50	0.69
FR	0.32	1.67	1.34	1.68	2.09	4.51
HR	0.38	1.07	0.98	0.90	0.99	1.02
IT	3.85	3.95	3.78	3.42	4.00	4.07
CY	0.00	0.00	0.00	0.00	0.00	0.00
LV	0.18	0.34	0.40	0.36	0.40	0.46
LT	0.44	0.70	1.14	1.03	1.07	1.11
LU	0.55	0.63	0.59	0.56	0.58	0.61
HU	0.82	0.85	1.71	1.65	1.72	1.86
MT	0.00	0.00	0.06	0.04	0.05	0.06
NL	1.97	1.34	1.75	1.70	1.80	1.59
AT	1.19	1.71	2.24	2.11	2.27	2.46
PL	0.28	0.54	1.54	1.77	1.30	1.31
PT	0.40	0.50	0.70	0.65	0.82	1.06
RO	0.07	0.07	0.47	0.71	0.75	0.74
SI	0.36	0.74	0.78	0.61	0.72	0.88
SK	0.51	0.63	1.16	1.14	1.19	1.44
FI	1.05	1.35	2.06	1.87	2.11	1.67
SE	1.57	1.28	0.78	1.02	0.72	0.53

IMPORTS – ELECTRICITY – 1990-2022 (Mtoe)

EU27_2020



source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.4 Imports – Electricity

RANKING

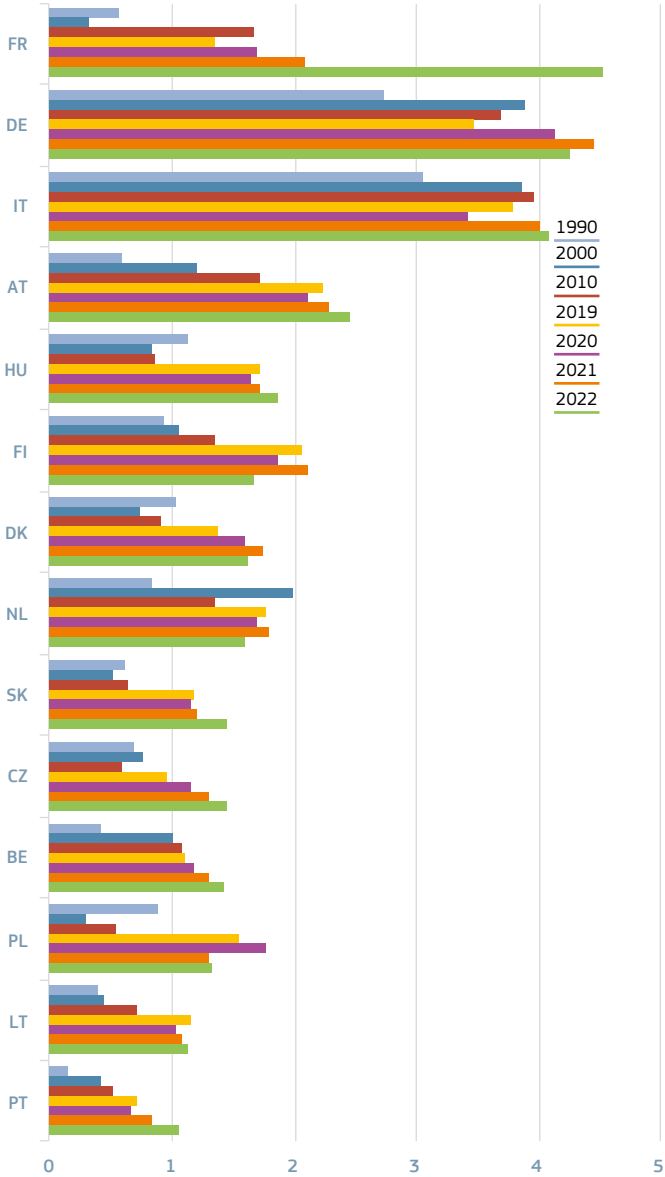
Mtoe and %	2000			2022		
	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Electricity						
1	DE	3.88	17.9%	FR	4.51	12.4%
2	IT	3.85	17.8%	DE	4.24	11.7%
3	NL	1.97	9.1%	IT	4.07	11.2%
4	SE	1.57	7.3%	AT	2.46	6.8%
5	AT	1.19	5.5%	HU	1.86	5.1%
6	ES	1.05	4.9%	FI	1.67	4.6%
7	FI	1.05	4.8%	DK	1.61	4.4%
8	BE	1.00	4.6%	NL	1.59	4.4%
9	HU	0.82	3.8%	SK	1.44	4.0%
10	CZ	0.75	3.5%	CZ	1.44	4.0%
11	DK	0.72	3.3%	BE	1.41	3.9%
12	LU	0.55	2.6%	PL	1.31	3.6%
13	SK	0.51	2.4%	LT	1.11	3.1%
14	LT	0.44	2.0%	PT	1.06	2.9%
15	PT	0.40	1.9%	HR	1.02	2.8%
16	HR	0.38	1.7%	SI	0.88	2.4%
17	SI	0.36	1.7%	RO	0.74	2.0%
18	FR	0.32	1.5%	ES	0.69	1.9%
19	PL	0.28	1.3%	EL	0.67	1.8%
20	LV	0.18	0.8%	EE	0.62	1.7%
21	EL	0.15	0.7%	LU	0.61	1.7%
22	BG	0.08	0.4%	SE	0.53	1.5%
23	RO	0.07	0.3%	LV	0.46	1.3%
24	EE	0.03	0.1%	IE	0.14	0.4%
25	IE	0.01	0.1%	BG	0.13	0.3%
26	CY	0.00	0.0%	MT	0.06	0.2%
27	MT	0.00	0.0%	CY	0.00	0.0%
Top 5 Total		12.5	57.6%		17.1	47.2%
Total EU27_2020		21.7	100.0%		36.3	100.0%

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.2.4 Imports – Electricity

BY MEMBER STATE – TOP 14 IMPORTERS

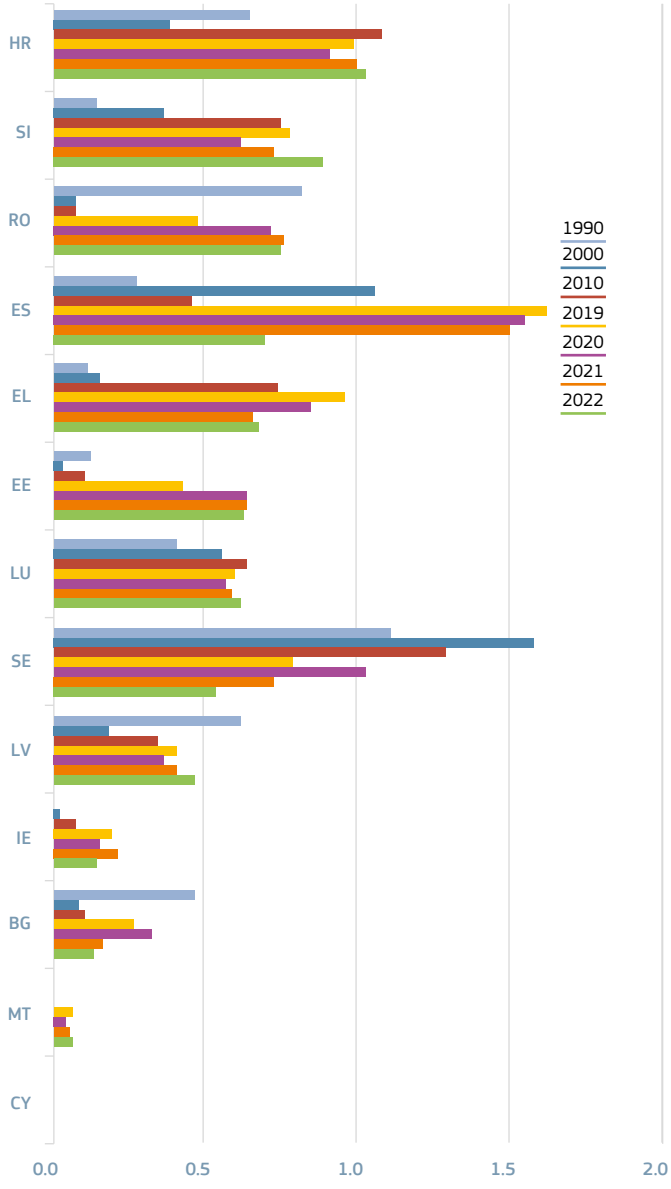
1990-2022 (Mtoe)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.2.4 Imports – Electricity

BY MEMBER STATE – LEAST 13 IMPORTERS
1990-2022



source: Eurostat April 2024
Methodology and Notes: see appendices

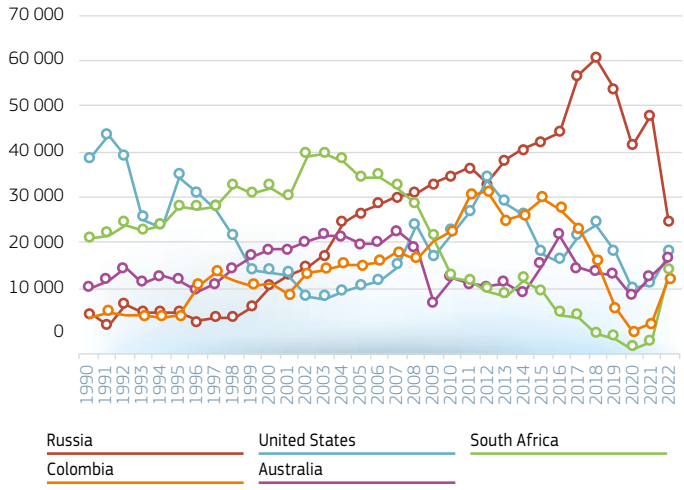
2.2.5 Imports by Country of Origin

EU27_2020 - HARD COAL

TOP 15 ORDERED BY 2022 VOLUME

kton	2000	2010	2019	2020	2021	2022
Russia	14179	36786	54569	43076	49426	27234
United States	16950	25248	21077	13369	14491	20879
Australia	21576	15756	16418	11919	16157	19751
South Africa	34466	15762	3376	1088	2469	16851
Colombia	14566	25414	9626	4750	6180	15532
Kazakhstan	0	332	2629	1607	1210	6746
Indonesia	7233	9051	2596	67	77	4130
Canada	4675	3137	2728	2022	2604	2679
Mozambique	70	0	1849	745	874	1094
Ukraine	2058	3024	58	16	12	713
Norway	750	930	192	27	76	331
Tanzania	0	0	0	0	0	250
United Kingdom	347	132	1299	968	158	199
Peru	0	0	62	0	0	160
Other African countries (aggregate changing according to the context)	0	0	0	0	0	153
Other extra-EU	10287	8407	252	249	313	550
Extra-EU	127156	143977	116733	79901	94048	117254
Intra-EU	28432	20515	8700	7807	10202	9481
Total Intra-EU and Extra-EU	155589	164492	125433	87708	104250	126735

EU27_2020 – HARD COAL – IMPORTS FROM EXTRA-EU (1990-2022) TOP 5 ORDERED BY 2022 VOLUME (kton)



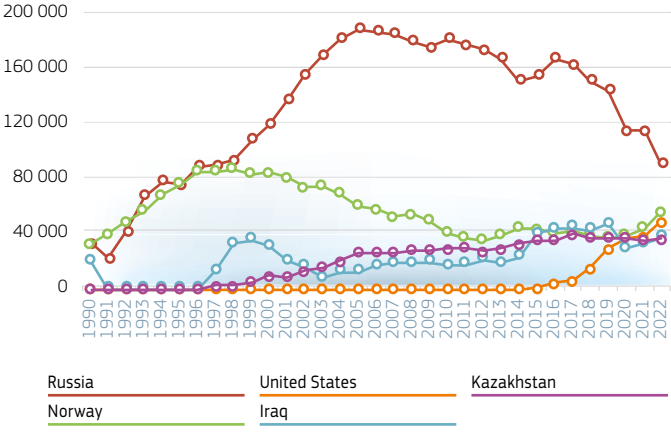
source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.5 Imports by Country of Origin

EU27_2020 – CRUDE OIL AND NGL
TOP 15 ORDERED BY 2022 VOLUME

kton	2000	2010	2019	2020	2021	2022
Russia	118282	179253	142617	113833	113434	90214
Norway	83622	40523	36864	39311	44411	55305
United States	0	28	29172	37207	37635	48430
Iraq	31317	16945	46616	29114	32473	37147
Kazakhstan	9993	29654	36811	37362	35751	36574
Saudi Arabia	63036	30759	39322	34563	23818	35496
Libya	45540	50929	31318	9192	35414	29207
Nigeria	22530	19746	41587	34005	29548	25952
United Kingdom	45810	28609	16453	24465	21866	25440
Azerbaijan	3712	22840	22648	20284	20425	19880
Algeria	20565	6990	12769	10503	11327	13281
Brazil	133	4103	4579	7806	7931	12684
Angola	3861	8367	7303	5763	1735	11266
Not specified	5271	180	0	4859	4221	7358
Mexico	9041	6782	10135	8443	7679	6125
other extra-EU	79367	66620	29679	24948	20161	29545
Extra-EU	542081	512328	507872	441657	447828	483902
Intra-EU	13908	9485	4869	5002	3892	3588
Total Intra-EU and Extra-EU	555989	521813	512741	446660	451720	487491
Mio barrels	**2000**	**2010**	**2019**	**2020**	**2021**	**2022**
Extra-EU	3974	3756	3723	3238	3283	3548
Intra-EU	102	70	36	37	29	26
Total Intra-EU and Extra-EU	4076	3826	3759	3275	3312	3574

EU27_2020 – CRUDE OIL & NGL – IMPORTS FROM EXTRA-EU (1990-2022) TOP 5 ORDERED BY 2022 VOLUME (kton)



source: Eurostat April 2024
Methodology and Notes: see appendices

2.2.5 Imports by Country of Origin

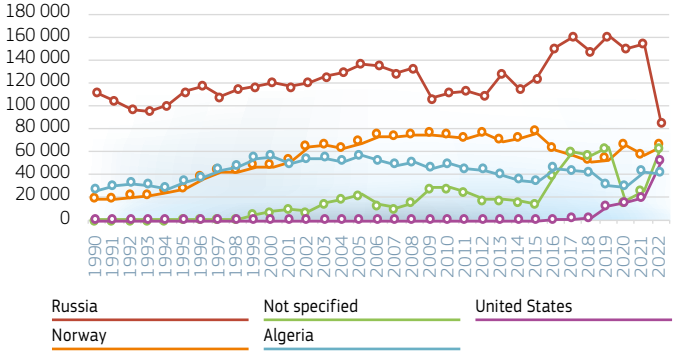
EU27_2020 – NATURAL GAS*

TOP 8 ORDERED BY 2022 VOLUME

TJ (GCV)	2000	2010	2019	2020	2021	2022
Russia	4582197	4255049	6166553	5731415	5929969	3295266
Norway	1880469	2809991	2052047	2521528	2182906	2482268
Not specified	334765	1135196	2326172	667016	991098	2394075
United States	0	0	481324	596775	763073	1995077
Algeria	2203075	1944865	1213029	1142346	1684052	1591003
Qatar	12443	798681	832925	638857	598121	762698
United Kingdom	427099	490364	229404	266950	211634	463477
Azerbaijan	0	0	0	1619	334403	460315
Other extra-EU	290878	1313804	1132775	914259	794299	1059079
Extra-EU	9730926	12747951	14434227	12480765	13489556	14503257
Intra-EU	1453115	1951064	1091596	1461860	956737	1110494
Total Intra-EU and Extra-EU	11184041	14699015	15525823	13942625	14446292	15613751

Mio m³	2000	2010	2019	2020	2021	2022
Russia	120699	111743	160934	149582	154082	84997
Norway	46847	73240	53003	65191	56593	64261
Not specified	8126	28823	63966	16767	26390	64028
United States	0	0	12346	15389	19697	50999
Algeria	55513	49289	30670	28995	42817	40712
Qatar	309	20045	21089	16358	15333	19474
United Kingdom	12044	13481	6103	7228	5522	12480
Azerbaijan	0	0	0	42	8710	12009
Other extra-EU	7389	32831	28623	23010	20025	27474
Extra-EU	250927	329452	376733	322561	349168	376434
Intra-EU	41231	51444	28694	39447	25334	29186
Total Intra-EU and Extra-EU	292158	380896	405428	362008	374503	405620

EU27_2020 – NATURAL GAS – IMPORTS FROM EXTRA-EU (1990-2022) TOP 5 BY 2022 VOLUME (Mio m³)



* total imports through pipelines and LNG

source: Eurostat April 2024
Methodology and Notes: see appendices

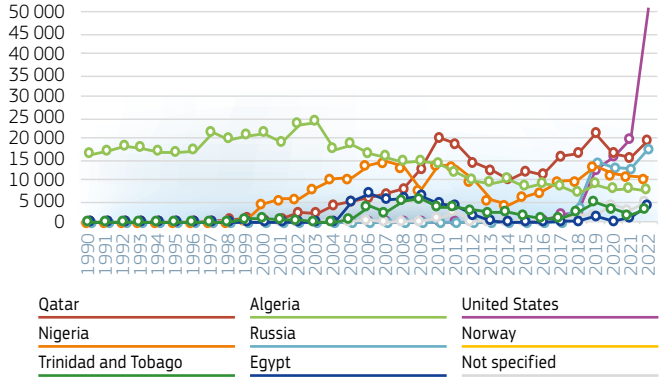
2.2.5 Imports by Country of Origin

EU27_2020 - LNG

TOP 8 ORDERED BY 2022 VOLUME

TJ (GCV)	2000	2010	2019	2020	2021	2022
United States	0	0	481 324	596 775	763 073	1 995 076
Qatar	12 443	798 681	832 925	638 857	598 121	762 698
Russia	0	115	566 789	503 554	493 867	686 344
Nigeria	172 020	562 811	543 345	461 171	441 139	425 757
Algeria	871 464	568 072	354 297	310 750	317 660	300 561
Not specified	22 204	36 092	63 235	167 353	117 375	202 259
Egypt	0	179 984	51 832	6 479	37 975	151 638
Norway	0	104 694	199 396	149 056	11 586	117 183
Other extra-EU	78 834	185 861	272 350	228 339	155 336	332 175
Extra-EU	1 156 965	2 436 310	3 365 494	3 062 334	2 936 132	4 973 691
Intra-EU	0	3 153	27 623	23 922	25 624	44 517
Total Intra-EU and Extra-EU	1 156 965	2 439 463	3 393 116	3 086 256	2 961 756	5 018 209
Mio m³	**2000**	**2010**	**2019**	**2020**	**2021**	**2022**
United States	0	0	12 346	15 389	19 697	50 999
Qatar	309	20 045	21 089	16 358	15 333	19 474
Russia	0	3	14 367	12 975	12 758	17 540
Nigeria	4 385	13 682	13 375	11 356	10 894	10 555
Algeria	21 093	13 730	8 854	7 755	7 815	7 402
Not specified	552	891	1 616	4 050	2 878	4 907
Egypt	0	4 455	1 307	163	966	3 963
Trinidad and Tobago	902	3 594	4 743	3 077	1 695	3 041
Other extra-EU	1 053	3 600	7 594	6 575	2 592	9 006
Extra-EU	28 294	60 000	85 289	77 698	74 628	126 887
Intra-EU	0	78	681	576	638	1 158
Total Intra-EU and Extra-EU	28 294	60 078	85 970	78 273	75 266	128 045

EU27_2020 – LNG – IMPORTS FROM EXTRA-EU (1990-2022) TOP 5 BY 2022 VOLUME (Mio m³)



source: Eurostat April 2024

Methodology and Notes: see appendices

2.3 Energy Import dependency

2.3.1 Import Dependency* – All Fuels

(%)

Imports From Extra-EU	2000	2010	2019	2020	2021	2022
EU27_2020	57.8	57.4	62.3	59.1	57.1	64.4
Index2000	100.0	99.3	107.7	102.3	98.8	111.5
Intra and Extra-EU Imports						
BE	85.2	88.4	88.9	87.7	80.3	84.8
BG	46.6	40.4	38.6	38.4	36.3	37.3
CZ	22.7	25.4	40.8	38.8	40.0	41.8
DK	-38.3	-16.8	40.5	46.5	33.2	44.2
DE	59.8	60.5	67.4	64.0	63.7	68.9
EE	34.7	15.2	4.9	11.2	1.5	6.6
IE	86.4	88.3	69.3	71.9	77.9	79.8
EL	78.0	75.1	82.0	87.9	80.0	86.7
ES	80.5	82.0	79.3	71.8	73.8	79.7
FR	51.8	49.1	47.8	44.6	44.3	52.2
HR	48.4	46.7	56.4	53.7	54.7	60.4
IT	87.3	84.0	78.8	74.7	74.5	80.5
CY	106.4	107.4	102.6	104.4	98.9	102.3
LV	61.1	48.0	46.7	47.6	40.1	39.7
LT	58.5	80.6	77.1	76.7	75.0	74.0
LU	99.6	97.1	95.0	92.3	92.4	91.3
HU	55.0	56.9	69.7	56.6	54.1	64.2
MT	181.8	252.0	341.4	377.7	333.0	328.7
NL	44.7	32.8	74.0	79.4	67.4	94.1
AT	65.6	62.8	71.6	58.4	51.9	74.5
PL	10.8	31.6	45.4	42.9	40.6	46.1
PT	87.5	76.6	76.8	67.4	69.0	73.5
RO	21.9	21.4	30.3	28.2	31.7	32.4
SI	51.9	49.4	53.6	46.5	49.3	54.0
SK	65.1	61.9	69.8	56.3	52.6	69.6
FI	56.6	49.1	43.4	43.6	38.3	41.3
SE	40.4	39.5	31.3	33.8	22.4	28.1

* Negative Rate Indicates a Net Exporter.

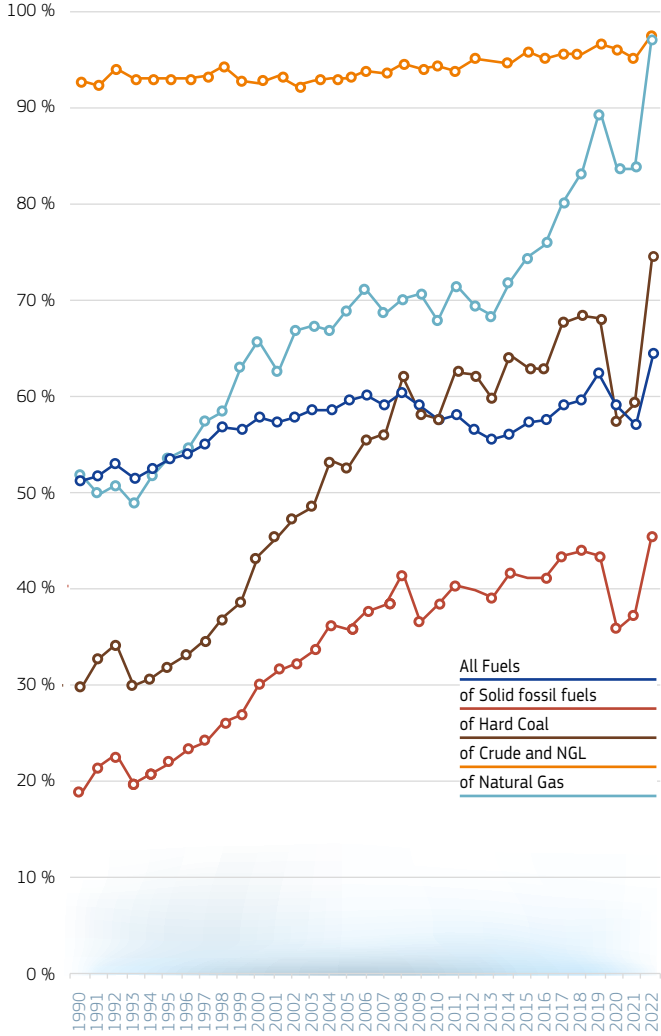
Values Over 100% Indicate Stocks Build Up.

EU27_2020: imports from extra-EU

source: Eurostat April 2024
Methodology and Notes: see appendices

2.3.2 Import Dependency by Fuel

EU27_2020 – IMPORTS FROM EXTRA-EU – 1990-2022 (%)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.3.3 Import Dependency - Solid Fossil Fuels*

(%)

Imports From Extra-EU	2000	2010	2019	2020	2021	2022
EU27_2020	29.8	38.2	43.3	35.8	37.3	45.8
Index2000	100.0	128.1	145.1	119.9	124.8	153.3
Intra and Extra-EU Imports						
BE	91.2	97.5	101.8	102.1	92.6	99.5
BG	35.2	24.5	7.5	9.6	10.5	11.6
CZ	-22.0	-15.3	8.6	12.8	13.9	13.9
DK	94.9	69.4	145.3	67.4	10.9	105.5
DE	25.6	40.0	47.2	44.1	47.8	50.0
EE	125.2	132.6	107.2	391.7	95.2	95.8
IE	93.3	77.7	67.9	55.9	106.0	126.5
EL	8.5	5.1	6.4	10.2	9.6	-0.7
ES	61.3	92.8	89.5	54.8	105.7	144.8
FR	86.3	101.0	99.6	96.3	73.5	81.6
HR	110.9	102.6	107.3	106.0	100.7	100.9
IT	104.6	100.8	98.6	93.0	97.0	102.4
CY	102.0	65.6	117.2	105.4	97.6	147.3
LV	84.1	106.5	110.8	89.6	93.1	193.2
LT	101.7	95.7	108.1	87.9	91.9	127.8
LU	100.0	102.2	93.1	112.3	97.4	101.5
HU	28.1	41.9	45.7	43.7	38.5	41.5
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	99.4	101.4	102.1	91.9	99.6	102.1
AT	83.9	99.6	96.7	97.8	99.4	99.9
PL	-29.0	-5.0	6.0	0.3	-3.6	8.0
PT	102.9	98.3	122.1	-6.5	4.5	107.4
RO	25.5	16.9	22.0	22.0	23.2	20.0
SI	18.8	19.3	20.1	17.7	11.0	28.1
SK	80.2	75.7	92.2	86.2	88.1	96.1
FI	97.6	86.3	98.9	92.2	72.4	126.3
SE	105.4	113.7	103.2	98.8	94.2	104.7

* Negative Rate Indicates a Net Exporter.

Values Over 100% Indicate Stocks Build Up.

EU27_2020: imports from extra-EU

source: Eurostat April 2024
Methodology and Notes: see appendices

2.3.4 Import Dependency – Hard Coal *
(%)

Imports From Extra-EU	2000	2010	2019	2020	2021	2022
EU27_2020	43.2	57.7	68.0	57.4	59.2	74.4
Index2000	100.0	133.4	157.3	132.8	137.0	172.0
Intra and Extra-EU Imports						
BE	93.5	100.0	102.7	104.2	93.5	99.0
BG	101.0	86.0	91.5	103.0	108.2	196.9
CZ	-56.4	-53.9	41.5	51.9	50.5	65.6
DK	94.8	69.3	145.7	67.1	10.3	105.6
DE	39.2	73.2	95.2	92.9	97.6	102.9
EE	116.1	118.3	96.7	28.5	151.4	112.0
IE	93.1	77.5	67.0	55.2	106.1	126.9
EL	105.8	100.5	105.0	114.6	92.7	82.0
ES	71.5	95.7	91.6	46.2	106.1	146.8
FR	87.2	100.6	99.2	95.8	88.7	103.4
HR	112.8	102.8	108.6	106.7	100.7	101.3
IT	105.7	101.4	98.4	93.1	97.0	102.3
CY	102.0	65.4	117.2	105.4	97.6	147.3
LV	82.5	106.6	110.8	89.6	93.1	193.2
LT	100.0	109.7	109.1	86.7	91.2	132.1
LU	100.0	102.5	92.3	114.0	97.1	101.7
HU	96.4	99.2	98.8	97.0	98.5	96.5
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	98.9	101.6	101.8	92.9	98.6	102.2
AT	91.6	97.3	98.4	95.5	100.8	99.2
PL	-29.9	3.7	17.8	12.4	8.3	21.4
PT	103.4	98.3	122.3	-7.9	1.2	107.9
RO	96.3	88.4	97.7	106.4	102.6	72.9
SI	118.2	135.3	95.9	97.7	103.8	95.6
SK	103.8	91.9	102.7	97.3	95.5	101.0
FI	97.7	85.5	96.1	89.9	72.0	121.4
SE	107.7	115.2	98.1	99.9	101.8	95.3

* Negative Rate Indicates a Net Exporter.

Values Over 100% Indicate Stocks Build Up.

EU27_2020: imports from extra-EU

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.3.5 Import Dependency - Oil and Petroleum Products*

(%)

Imports From Extra-EU	2000	2010	2019	2020	2021	2022
EU27_2020	99.8	102.1	105.0	105.3	99.7	106.3
Index2000	100.0	102.3	105.2	105.6	100.0	106.6
Intra and Extra-EU Imports						
BE	122.3	132.7	139.2	136.0	129.8	138.4
BG	97.5	104.3	104.2	99.4	99.0	107.6
CZ	95.3	96.5	97.5	101.2	96.9	99.9
DK	-96.5	-49.0	49.6	60.6	33.0	57.1
DE	96.2	99.1	98.5	97.8	96.9	98.3
EE	117.3	130.2	547.2	-1758.5	-114.4	265.0
IE	100.6	99.2	100.9	105.8	100.9	102.3
EL	123.4	117.1	116.1	124.5	109.6	118.5
ES	110.5	113.7	114.8	113.2	109.4	117.2
FR	102.7	100.6	100.6	100.0	98.7	100.4
HR	61.0	80.8	76.9	74.2	79.0	87.3
IT	97.9	97.6	97.1	93.5	88.5	97.4
CY	108.4	111.5	111.6	116.0	110.7	113.4
LV	95.5	110.0	119.2	120.9	106.6	108.8
LT	105.2	104.0	107.3	109.2	108.3	104.0
LU	102.1	99.3	100.4	99.9	99.8	99.7
HU	75.9	85.3	86.6	87.1	86.9	89.4
MT	181.8	253.3	548.1	719.7	599.3	551.0
NL	138.8	133.4	138.7	142.1	119.2	149.5
AT	89.2	90.6	95.8	97.6	90.5	94.9
PL	101.2	99.0	98.2	97.9	97.5	99.2
PT	103.6	101.1	106.8	105.0	105.0	105.4
RO	34.4	52.7	65.6	64.9	68.4	72.8
SI	101.5	99.9	109.6	105.2	103.5	98.4
SK	92.5	98.4	101.3	102.0	98.3	103.0
FI	111.5	94.2	98.9	106.4	99.2	106.1
SE	110.4	106.3	127.5	153.6	92.1	128.3

* Negative Rate Indicates a Net Exporter.

Values Over 100% Indicate Stocks Build Up.

EU27_2020: imports from extra-EU

source: Eurostat April 2024
Methodology and Notes: see appendices see appendices

2.3.6 Import Dependency – Crude and NGL*
(%)

Imports From Extra-EU	2000	2010	2019	2020	2021	2022
EU27_2020	92.5	94.4	96.6	96.1	95.1	97.6
Index2000	100.0	102.0	104.4	103.8	102.8	105.5
Intra and Extra-EU Imports						
BE	100.2	99.9	100.0	100.5	99.2	99.7
BG	98.7	99.1	102.6	99.4	98.6	101.3
CZ	95.2	97.5	98.6	101.7	96.2	99.6
DK	-120.5	-68.8	36.0	50.7	56.7	53.8
DE	93.8	97.3	98.3	98.3	97.0	98.0
EE	0.0	0.0	0.0	0.0	0.0	0.0
IE	89.8	101.6	100.9	102.3	98.1	102.5
EL	99.6	99.6	98.1	102.0	98.4	99.8
ES	100.6	99.3	101.0	99.5	98.7	100.3
FR	98.5	98.2	98.4	97.9	97.2	98.9
HR	72.1	82.3	71.1	68.0	67.3	70.3
IT	95.1	94.5	93.9	90.2	92.0	94.1
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	100.8	99.4	100.3	99.2
LU	0.0	0.0	0.0	0.0	0.0	0.0
HU	78.5	85.3	84.6	86.0	85.2	89.8
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	96.7	97.6	99.9	98.1	96.8	103.6
AT	86.9	86.5	94.0	93.0	91.7	91.3
PL	99.2	98.4	96.7	96.6	94.6	98.0
PT	99.0	98.8	100.4	98.3	98.6	99.2
RO	43.5	57.2	72.0	66.9	67.3	74.5
SI	87.2	0.0	0.0	0.0	0.0	0.0
SK	97.6	99.9	100.5	101.4	99.1	101.1
FI	101.5	101.1	99.0	99.7	98.5	99.2
SE	100.6	99.0	100.0	101.0	97.4	102.6

* Negative Rate Indicates a Net Exporter.

Values Over 100% Indicate Stocks Build Up.

EU27_2020: imports from extra-EU

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.3.7 Import Dependency - Natural Gas*

(%)

Imports From Extra-EU	2000	2010	2019	2020	2021	2022
EU27_2020	65.7	67.8	89.7	83.6	83.7	97.6
Index2000	100.0	103.1	136.5	127.3	127.4	148.6
Intra and Extra-EU Imports						
BE	99.3	100.3	101.9	99.2	99.9	100.8
BG	93.5	92.6	100.4	96.4	96.2	106.1
CZ	99.8	84.8	109.8	86.0	92.1	113.4
DK	-64.8	-68.3	-7.2	37.4	27.8	28.0
DE	79.1	81.2	100.1	89.1	90.7	105.9
EE	100.0	100.0	105.4	106.3	106.1	118.8
IE	72.1	95.3	53.0	63.7	71.1	73.9
EL	99.1	99.9	99.0	100.7	99.4	101.6
ES	101.6	99.4	101.6	97.5	100.4	103.3
FR	100.0	92.8	104.5	94.7	96.1	109.0
HR	41.0	18.1	66.4	68.8	74.5	77.5
IT	81.1	90.5	95.1	92.8	93.7	99.2
CY	0.0	0.0	0.0	0.0	0.0	0.0
LV	101.9	61.8	100.0	100.1	100.0	99.8
LT	100.0	99.7	100.0	98.9	100.8	101.2
LU	100.0	100.0	100.0	100.0	100.0	100.0
HU	75.4	78.7	115.2	75.6	67.2	99.1
MT	0.0	0.0	103.6	96.2	103.5	100.2
NL	-49.1	-60.4	26.3	45.2	33.8	64.9
AT	80.6	75.3	122.8	73.4	51.0	149.1
PL	66.3	69.3	82.4	78.3	83.6	81.2
PT	100.3	100.4	99.9	99.3	100.0	104.0
RO	19.8	16.8	23.2	16.6	22.8	18.1
SI	99.3	99.3	99.2	99.4	99.4	99.5
SK	98.8	99.9	136.6	88.1	69.0	137.3
FI	100.0	100.0	100.6	100.4	99.7	103.3
SE	100.0	100.0	101.8	101.6	101.7	100.1

* Negative Rate Indicates a Net Exporter.

Values Over 100% Indicate Stocks Build Up.

EU27_2020: imports from extra-EU

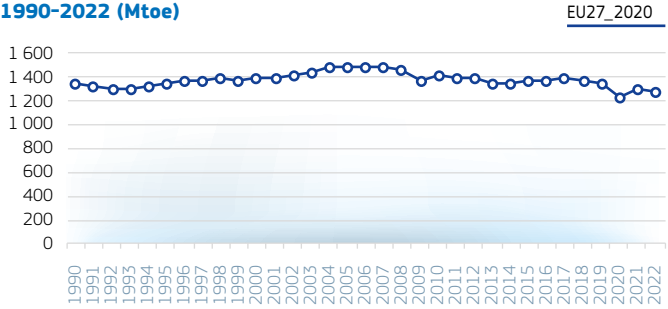
source: Eurostat April 2024
Methodology and Notes: see appendices

2.4 Energy Transformation

2.4.1 Transformation Input - All Fuels

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	1.383.8	1.414.3	1.350.9	1.224.8	1.287.7	1.275.6
Index2000	100%	102%	98%	89%	93%	92%
BE	68.63	67.88	65.34	55.89	63.73	60.77
BG	18.65	18.84	19.45	16.37	17.30	21.13
CZ	31.82	37.33	34.70	31.26	33.33	33.15
DK	18.06	16.56	16.56	16.25	17.19	16.91
DE	292.34	291.21	260.47	243.35	252.82	247.89
EE	3.64	4.93	4.20	3.73	3.97	4.20
IE	8.59	8.51	7.98	8.26	8.48	8.53
EL	35.80	35.28	41.77	40.40	42.80	41.72
ES	115.16	121.90	130.89	114.54	117.86	127.28
FR	234.06	227.79	197.23	169.37	175.83	159.43
HR	7.72	6.78	5.17	4.97	5.02	4.80
IT	163.61	161.45	138.58	121.21	131.53	137.60
CY	2.08	1.21	1.06	1.01	1.04	1.07
LV	1.39	1.49	1.58	1.43	1.53	1.31
LT	9.43	12.53	12.17	10.73	10.95	10.97
LU	0.20	0.74	0.35	0.43	0.44	0.42
HU	19.87	23.01	18.23	18.03	17.87	16.68
MT	0.50	0.58	0.34	0.38	0.36	0.38
NL	104.43	113.01	129.70	116.26	128.41	126.70
AT	20.35	22.52	23.70	22.25	22.25	19.49
PL	72.87	79.74	81.21	76.38	81.79	81.43
PT	20.97	20.73	22.24	21.03	19.77	19.84
RO	29.11	26.03	26.22	23.39	23.45	23.75
SI	3.11	3.41	3.14	3.30	3.10	2.74
SK	16.91	17.34	15.61	15.75	16.79	15.65
FI	32.41	38.72	35.67	33.34	31.15	33.12
SE	52.05	54.78	57.35	55.52	58.98	58.62

TRANSFORMATION INPUT – ALL FUELS – 1990-2022 (Mtoe)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.4.2 Transformation Input by Fuel

	2022						
Mtoe	Transformation Input	Solid fossil fuels	Oil and petroleum products	Natural gas	Nuclear	Renewables and biofuels	Waste, non-renewable
EU27_2020	1 275.6	167.5	675.2	97.3	155.5	155.4	9.2
Share - %	100.0%	13.1%	52.9%	7.6%	12.2%	12.2%	0.7%
BE	60.77	3.11	38.33	3.39	10.70	3.64	0.46
BG	21.13	6.09	8.20	0.99	4.29	1.47	0.01
CZ	33.15	13.21	8.12	1.40	7.71	2.20	0.06
DK	16.91	0.95	9.54	0.34	0.00	5.59	0.39
DE	247.89	59.01	124.17	17.31	8.94	32.82	2.81
EE	4.20	0.00	0.08	0.11	0.00	0.84	0.03
IE	8.53	0.56	3.68	2.61	0.00	1.45	0.09
EL	41.72	1.51	35.03	3.15	0.00	2.01	0.00
ES	127.28	4.14	79.09	13.62	15.30	14.13	0.30
FR	159.43	6.85	47.80	7.81	76.81	17.84	1.28
HR	4.80	0.33	2.48	0.85	0.00	1.14	0.00
IT	137.60	8.22	86.87	23.01	0.00	17.99	0.87
CY	1.07	0.00	0.97	0.00	0.00	0.09	0.00
LV	1.31	0.00	0.02	0.38	0.00	0.91	0.00
LT	10.97	0.00	9.43	0.19	0.00	1.07	0.09
LU	0.42	0.00	0.00	0.05	0.00	0.23	0.02
HU	16.68	1.50	7.33	2.24	3.99	1.42	0.10
MT	0.38	0.00	0.02	0.32	0.00	0.04	0.00
NL	126.70	6.70	102.15	7.68	0.97	7.46	0.78
AT	19.49	3.02	6.83	2.14	0.00	6.15	0.36
PL	81.43	40.98	30.93	2.72	0.00	5.62	0.25
PT	19.84	0.00	12.87	2.98	0.00	3.64	0.08
RO	23.75	3.04	12.64	2.53	2.82	2.64	0.00
SI	2.74	0.72	0.03	0.13	1.34	0.50	0.01
SK	15.65	3.09	6.36	0.86	4.10	1.11	0.04
FI	33.12	2.58	15.58	0.40	6.12	7.04	0.26
SE	58.62	1.91	26.70	0.07	12.41	16.34	0.87

source: Eurostat April 2024
Methodology and Notes: see appendices

2.4.3 Transformation Input by Sector

Mtoe	2022					
	Total, All Sectors	Electricity producers	Heat producers	CHP producers	Refineries, Petroleum and sub-products	Other transformation input
EU27_2020	1 275.6	374.1	18.5	135.0	660.9	87.1
Share - %	100.0%	29.3%	1.4%	10.6%	51.8%	6.8%
BE	60.77	15.30	0.00	2.82	38.29	4.35
BG	21.13	10.27	0.31	1.60	8.11	0.84
CZ	33.15	15.45	0.71	4.92	8.07	4.01
DK	16.91	1.84	0.86	3.94	9.40	0.88
DE	247.89	73.70	3.10	24.30	122.63	24.17
EE	4.20	1.60	0.28	0.62	0.05	1.65
IE	8.53	4.57	0.00	0.27	3.42	0.27
EL	41.72	6.39	0.00	1.60	33.71	0.02
ES	127.28	43.09	0.00	2.98	76.92	4.29
FR	159.43	94.07	2.06	6.78	46.24	10.28
HR	4.80	1.05	0.04	1.16	2.45	0.10
IT	137.60	29.55	0.42	19.83	83.41	4.38
CY	1.07	1.05	0.00	0.01	0.00	0.01
LV	1.31	0.26	0.49	0.53	0.00	0.03
LT	10.97	0.20	0.59	0.65	9.34	0.20
LU	0.42	0.06	0.01	0.23	0.00	0.13
HU	16.68	5.31	0.65	2.33	7.32	1.07
MT	0.38	0.36	0.00	0.00	0.00	0.01
NL	126.70	10.54	0.82	8.37	101.53	5.44
AT	19.49	5.53	0.96	2.60	6.65	3.76
PL	81.43	3.88	2.84	33.48	30.42	10.81
PT	19.84	5.30	0.00	1.31	12.62	0.61
RO	23.75	8.11	0.47	2.00	12.40	0.76
SI	2.74	2.23	0.06	0.35	0.00	0.10
SK	15.65	4.44	0.41	1.56	6.27	2.96
FI	33.12	8.43	2.11	5.04	15.15	2.39
SE	58.62	21.50	1.29	5.69	26.54	3.60

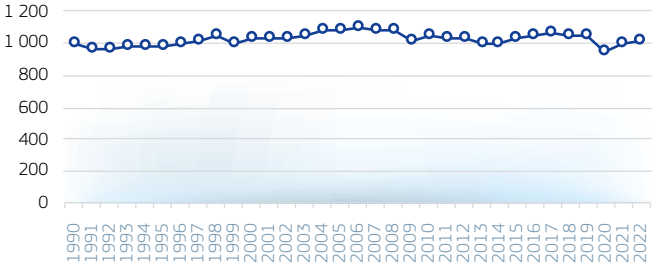
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.4.4 Transformation Output - All Fuels

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	1031.9	1059.6	1056.5	962.0	1004.4	1014.8
Index2000	100%	103%	102%	93%	97%	98%
BE	54.28	54.67	54.08	46.51	52.09	49.80
BG	11.62	12.01	12.75	10.39	10.43	13.59
CZ	19.91	23.27	22.16	19.78	21.51	21.21
DK	15.59	14.17	16.36	15.80	16.49	16.18
DE	210.06	210.02	202.79	192.03	196.36	200.15
EE	1.84	2.53	2.62	2.47	2.62	2.59
IE	5.62	5.98	6.15	6.51	6.49	6.59
EL	29.13	28.76	37.85	37.05	39.25	38.76
ES	87.21	96.91	107.03	93.14	97.22	104.24
FR	154.62	139.32	117.68	99.01	98.48	96.49
HR	6.97	6.14	4.58	4.33	4.40	4.04
IT	129.85	131.20	115.34	99.35	108.41	113.98
CY	1.47	0.46	0.45	0.43	0.45	0.46
LV	1.18	1.29	1.28	1.19	1.31	1.12
LT	7.38	11.86	11.93	10.34	10.50	10.70
LU	0.11	0.47	0.26	0.33	0.34	0.33
HU	14.07	17.08	13.36	13.25	13.28	12.25
MT	0.16	0.18	0.19	0.20	0.20	0.21
NL	93.36	100.58	119.88	107.33	118.97	117.59
AT	17.16	18.58	20.36	19.17	19.11	16.40
PL	49.29	57.00	61.42	58.29	61.07	61.68
PT	17.04	17.75	19.00	18.08	17.17	17.28
RO	22.32	20.64	21.15	19.11	18.81	19.57
SI	1.57	1.69	1.69	1.79	1.70	1.46
SK	12.09	12.72	11.30	11.49	12.34	11.44
FI	25.53	31.05	30.09	28.17	25.32	27.39
SE	42.47	43.28	44.72	46.45	50.05	49.34

TRANSFORMATION OUTPUT – ALL FUELS – 1990-2022 (Mtoe)

EU27_2020



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.4.5 Transformation Output by Fuel

	2022						
Mtoe	Transformation Output	Solid fossil fuels	Oil and petroleum products	Natural gas	Renewables and biofuels	Electricity	Heat
EU27_2020	1014.8	24.3	661.6	2.4	16.8	242.8	50.6
Share - %	100.0%	2.4%	65.2%	0.2%	1.7%	23.9%	5.0%
BE	49.80	0.92	38.31	0.01	0.81	8.25	0.65
BG	13.59	0.18	8.01	0.00	0.19	4.34	0.87
CZ	21.21	1.74	8.25	0.00	0.37	7.30	2.63
DK	16.18	0.00	9.29	0.54	0.23	3.02	3.09
DE	200.15	8.35	122.68	0.79	3.07	49.89	10.21
EE	2.59	0.01	1.00	0.01	0.00	0.77	0.57
IE	6.59	0.00	3.47	0.00	0.17	2.91	0.00
EL	38.76	0.00	34.20	0.00	0.00	4.52	0.04
ES	104.24	0.88	76.15	0.01	1.38	25.15	0.00
FR	96.49	0.10	45.68	0.54	3.38	40.82	4.38
HR	4.04	0.00	2.46	0.00	0.02	1.22	0.34
IT	113.98	1.15	84.28	0.18	1.40	24.42	2.05
CY	0.46	0.00	0.00	0.00	0.01	0.45	0.00
LV	1.12	0.00	0.00	0.00	0.02	0.43	0.66
LT	10.70	0.00	9.31	0.00	0.11	0.41	0.87
LU	0.33	0.00	0.00	0.00	0.00	0.19	0.13
HU	12.25	0.39	7.29	0.00	0.19	3.08	1.12
MT	0.21	0.00	0.00	0.00	0.01	0.20	0.00
NL	117.59	1.32	100.64	0.27	1.19	10.47	2.47
AT	16.40	0.90	6.44	0.01	0.17	5.95	1.97
PL	61.68	5.98	30.36	0.00	1.03	15.46	6.84
PT	17.28	0.00	12.50	0.00	0.30	4.20	0.28
RO	19.57	0.00	12.91	0.00	0.42	4.82	1.22
SI	1.46	0.00	0.00	0.00	0.07	1.17	0.21
SK	11.44	1.04	6.44	0.00	0.20	2.31	0.68
FI	27.39	0.60	15.16	0.01	0.61	6.21	4.34
SE	49.34	0.71	26.78	0.03	1.45	14.89	4.99

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.4.6 Transformation Output by Sector

Mtoe	2022 Total, All Sectors	Electricity producers	Heat producers	CHP producers	Refineries, Petroleum and sub-products	Other transformation output
EU27_2020	1 014.8	188.7	15.0	84.0	659.4	67.9
Share - %	100.0%	18.6%	1.5%	8.3%	65.0%	6.7%
BE	49.80	6.80	0.00	1.73	38.21	3.07
BG	13.59	3.86	0.17	1.11	7.81	0.63
CZ	21.21	5.88	0.60	3.31	8.25	3.17
DK	16.18	1.83	0.79	3.21	9.29	1.05
DE	200.15	39.42	2.55	17.38	122.68	18.11
EE	2.59	0.65	0.23	0.45	0.05	1.20
IE	6.59	2.71	0.00	0.18	3.45	0.24
EL	38.76	3.97	0.00	0.58	34.20	0.01
ES	104.24	22.81	0.00	1.93	76.17	3.34
FR	96.49	38.26	1.67	4.56	45.68	6.31
HR	4.04	0.82	0.04	0.70	2.40	0.08
IT	113.98	15.13	0.35	10.76	84.28	3.47
CY	0.46	0.45	0.00	0.01	0.00	0.01
LV	1.12	0.26	0.43	0.41	0.00	0.03
LT	10.70	0.20	0.46	0.48	9.31	0.25
LU	0.33	0.06	0.01	0.17	0.00	0.09
HU	12.25	2.24	0.56	1.32	7.26	0.87
MT	0.21	0.20	0.00	0.00	0.00	0.01
NL	117.59	6.82	0.45	5.35	100.64	4.31
AT	16.40	4.64	0.81	2.07	6.44	2.44
PL	61.68	3.13	2.50	16.56	30.04	9.45
PT	17.28	3.52	0.00	0.75	12.46	0.54
RO	19.57	4.21	0.33	1.47	12.84	0.72
SI	1.46	1.05	0.05	0.26	0.00	0.09
SK	11.44	1.79	0.28	0.89	6.13	2.34
FI	27.39	4.44	1.75	3.79	15.03	2.37
SE	49.34	13.52	0.96	4.52	26.72	3.62

source: Eurostat April 2024
Methodology and Notes: see appendices

2.5 Final Energy

2.5.1 Available for Final Consumption

TOTAL

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	1 022.4	1 073.8	1 033.3	1 033.3	975.5	1 030.0
Index2000	100%	105%	101%	101%	95%	101%
BE	40.82	43.01	40.05	40.05	38.20	40.91
BG	9.64	9.24	10.15	10.15	10.18	10.82
CZ	26.42	27.75	27.15	27.15	26.11	28.27
DK	14.32	14.97	14.29	14.29	13.56	14.07
DE	234.79	233.13	225.46	225.46	214.49	219.16
EE	2.52	3.14	2.97	2.97	2.96	2.95
IE	10.37	11.29	11.57	11.57	11.14	11.38
EL	18.46	19.16	16.40	16.40	14.55	14.99
ES	85.40	91.45	86.29	86.29	77.75	83.81
FR	156.55	161.51	155.68	155.68	141.27	152.39
HR	6.58	7.73	7.29	7.29	6.96	7.30
IT	128.77	131.73	118.66	118.66	109.28	120.35
CY	1.47	1.69	1.66	1.66	1.57	1.62
LV	3.26	4.06	3.97	3.97	3.87	4.07
LT	4.25	5.42	6.65	6.65	6.43	6.68
LU	3.24	3.93	3.83	3.83	3.30	3.47
HU	17.22	18.86	19.94	19.94	19.68	21.18
MT	0.32	0.42	0.56	0.56	0.51	0.54
NL	58.54	64.53	56.37	56.37	55.31	56.52
AT	23.58	27.77	28.34	28.34	26.95	28.64
PL	57.13	70.38	77.75	77.75	77.12	80.51
PT	19.54	18.98	17.58	17.58	16.39	16.94
RO	24.12	24.80	25.07	25.07	25.09	26.74
SI	4.79	5.28	5.04	5.04	4.60	4.93
SK	11.68	12.19	11.27	11.27	10.82	11.81
FI	23.73	26.31	25.72	25.72	24.70	25.70
SE	34.91	35.15	33.64	33.64	32.73	34.27

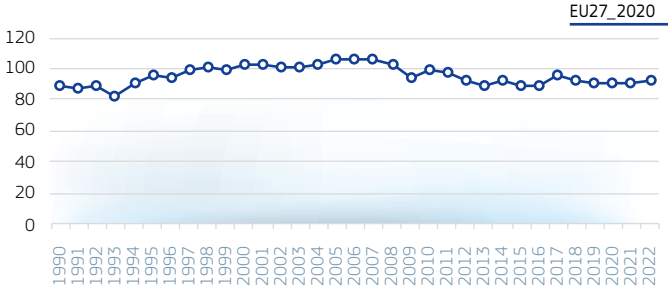
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.5.2 Final Non-Energy Consumption

TOTAL

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	101.4	98.3	90.6	90.6	89.9	92.0
Index2000	100%	97%	89%	89%	89%	91%
BE	7.00	7.05	7.25	7.25	7.11	7.54
BG	0.98	0.42	0.46	0.46	0.47	0.52
CZ	2.14	2.88	2.97	2.97	2.48	2.91
DK	0.30	0.26	0.20	0.20	0.23	0.22
DE	25.30	22.58	21.65	21.65	21.35	23.36
EE	0.15	0.09	0.12	0.12	0.18	0.16
IE	0.68	0.34	0.24	0.24	0.23	0.38
EL	0.73	1.11	0.92	0.92	0.82	0.74
ES	9.49	7.11	5.35	5.35	5.80	5.40
FR	16.95	13.93	13.46	13.46	12.63	13.29
HR	0.66	0.60	0.57	0.57	0.53	0.41
IT	8.43	9.56	7.00	7.00	6.77	5.85
CY	0.09	0.09	0.04	0.04	0.04	0.05
LV	0.07	0.07	0.09	0.09	0.10	0.11
LT	0.66	0.66	1.20	1.20	1.15	1.02
LU	0.05	0.03	0.04	0.04	0.03	0.03
HU	1.59	1.97	2.12	2.12	2.23	2.42
MT	0.00	0.01	0.02	0.02	0.01	0.01
NL	11.33	14.37	12.03	12.03	12.87	12.83
AT	1.72	1.81	2.12	2.12	2.08	2.15
PL	4.37	4.97	5.60	5.60	5.79	5.24
PT	2.42	1.73	1.15	1.15	1.18	1.26
RO	1.89	2.06	1.14	1.14	1.29	1.20
SI	0.24	0.21	0.16	0.16	0.15	0.15
SK	1.38	1.05	1.00	1.00	1.22	1.29
FI	1.04	1.22	1.38	1.38	1.49	1.35
SE	1.75	2.12	2.30	2.30	1.71	2.08

FINAL NON-ENERGY CONSUMPTION – TOTAL



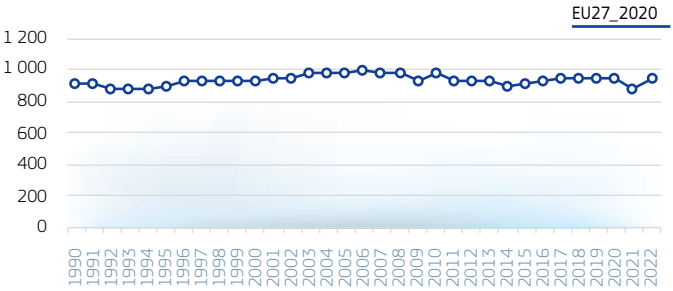
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.5.3 Final Energy Consumption

TOTAL

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	926.1	974.0	938.0	938.0	885.1	939.2
Index2000	100%	105%	101%	101%	96%	101%
BE	33.64	35.45	32.59	32.59	30.94	33.17
BG	8.59	8.70	9.72	9.72	9.50	10.16
CZ	23.99	24.12	24.23	24.23	23.77	25.32
DK	14.02	14.85	13.54	13.54	13.07	13.82
DE	207.17	209.92	200.80	200.80	194.25	197.57
EE	2.41	2.88	2.83	2.83	2.73	2.79
IE	10.20	11.19	11.32	11.32	10.85	11.06
EL	17.91	18.37	15.39	15.39	14.47	14.91
ES	76.34	85.50	81.51	81.51	72.32	78.61
FR	145.13	146.26	139.34	139.34	127.82	138.97
HR	5.92	7.13	6.73	6.73	6.43	6.89
IT	119.74	123.05	113.12	113.12	103.06	114.72
CY	1.37	1.65	1.63	1.63	1.53	1.58
LV	3.23	4.00	3.92	3.92	3.80	3.98
LT	3.74	4.76	5.46	5.46	5.28	5.66
LU	3.18	3.90	3.79	3.79	3.27	3.44
HU	15.64	16.88	17.97	17.97	17.61	18.79
MT	0.32	0.40	0.55	0.55	0.50	0.53
NL	47.60	50.77	44.13	44.13	41.87	43.21
AT	21.81	25.96	26.22	26.22	24.87	26.49
PL	53.56	65.26	71.89	71.89	70.23	74.19
PT	17.21	17.27	16.35	16.35	15.16	15.77
RO	21.95	22.04	23.71	23.71	23.47	25.28
SI	4.54	5.05	4.86	4.86	4.45	4.77
SK	9.93	11.09	10.24	10.24	9.61	10.51
FI	23.28	25.04	24.83	24.83	23.25	24.81
SE	33.67	32.47	31.30	31.30	31.02	32.16

FINAL ENERGY CONSUMPTION (Mtoe)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.5.3 Final Energy Consumption

BY FUEL

	2022							
Mtoe	Oil and petroleum products	Natural gas	Renewables and biofuels	Solid fossil fuels	Waste, non-renewable	Electricity	Heat	Manufactured gases, peat & products
EU27_2020	331.8	184.7	110.4	16.3	5.0	207.3	42.0	4.7
Share - %	35.3%	19.7%	11.8%	1.7%	0.5%	22.1%	4.5%	0.5%
BE	11.99	8.31	2.46	0.34	0.15	6.58	0.40	0.2
BG	3.74	1.11	1.48	0.26	0.07	2.64	0.56	0.0
CZ	6.94	4.71	3.62	1.40	0.29	5.04	1.97	0.3
DK	4.88	1.34	1.58	0.11	0.03	2.63	2.47	0.0
DE	64.19	50.77	19.11	3.13	1.24	41.08	8.80	2.1
EE	0.94	0.18	0.48	0.00	0.00	0.61	0.50	0.0
IE	5.64	1.80	0.58	0.17	0.06	2.65	0.00	0.2
EL	8.33	1.18	1.65	0.07	0.00	4.14	0.03	0.0
ES	38.53	12.48	6.87	0.38	0.21	19.29	0.00	0.1
FR	51.57	24.69	15.57	0.70	0.52	35.66	3.98	0.0
HR	2.80	1.05	1.10	0.08	0.05	1.40	0.25	0.0
IT	40.99	31.57	11.35	0.31	0.30	24.68	1.49	0.1
CY	0.89	0.00	0.23	0.03	0.05	0.42	0.00	0.0
LV	1.32	0.30	1.03	0.01	0.05	0.56	0.56	0.0
LT	2.13	0.59	0.83	0.16	0.00	0.92	0.74	0.0
LU	1.67	0.48	0.18	0.04	0.02	0.53	0.12	0.0
HU	5.92	5.20	2.09	0.12	0.11	3.56	0.96	0.0
MT	0.32	0.00	0.04	0.00	0.00	0.23	0.00	0.0
NL	12.16	13.84	2.18	0.12	0.04	8.92	1.83	0.3
AT	8.41	4.28	4.31	0.27	0.29	5.49	1.68	0.1
PL	26.29	9.68	9.05	7.27	0.78	12.16	5.63	0.4
PT	6.86	1.70	3.18	0.01	0.09	4.18	0.16	0.0
RO	8.99	5.38	3.94	0.55	0.33	3.67	0.90	0.1
SI	2.23	0.56	0.62	0.03	0.04	1.12	0.16	0.0
SK	2.80	2.45	1.24	0.31	0.19	1.97	0.54	0.4
FI	5.25	0.61	6.45	0.11	0.06	6.61	3.86	0.2
SE	6.02	0.45	9.17	0.33	0.09	10.56	4.41	0.2

source: Eurostat April 2024
Methodology and Notes: see appendices

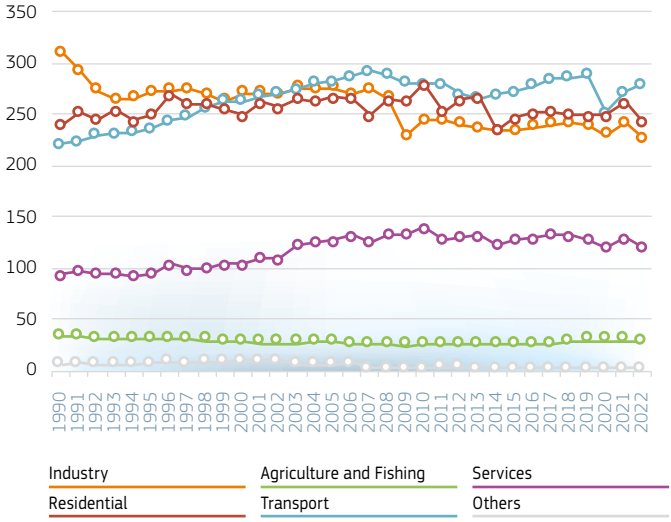
2.5.3 Final Energy Consumption

BY SECTOR

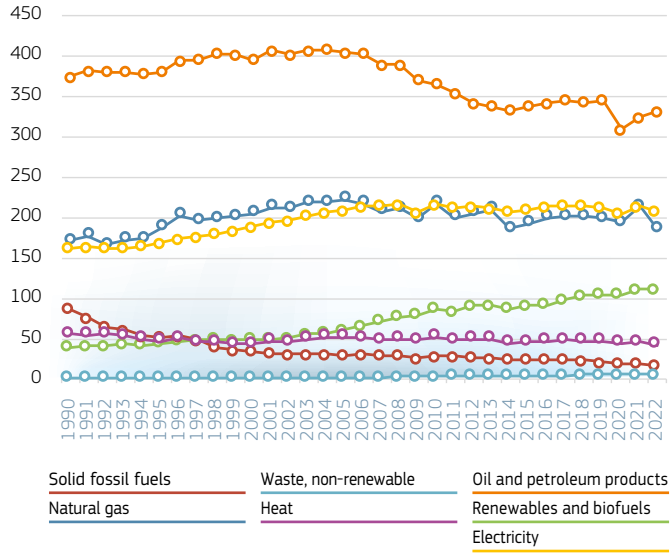
	2022					
Mtoe	Industry	Transport	Residential	Services	Agriculture and Fishing	Others
EU27_2020	226.3	279.9	242.5	121.3	28.2	4.0
Share - %	24.1%	29.8%	25.8%	12.9%	3.0%	0.4%
BE	9.58	8.66	7.30	3.99	0.82	0.04
BG	2.70	3.47	2.14	1.34	0.19	0.01
CZ	6.61	6.93	7.16	2.89	0.61	0.03
DK	2.37	3.98	4.03	1.91	0.68	0.06
DE	53.45	50.48	57.32	25.46	3.67	0.07
EE	0.36	0.85	0.96	0.46	0.10	0.00
IE	2.14	3.98	2.74	1.87	0.33	0.00
EL	2.57	5.87	4.32	2.10	0.29	0.27
ES	17.95	32.48	14.28	10.07	2.89	0.20
FR	25.30	44.51	37.23	20.20	4.69	0.76
HR	1.13	2.23	2.29	0.81	0.26	0.00
IT	24.63	36.68	30.04	16.14	3.11	0.18
CY	0.25	0.65	0.36	0.29	0.04	0.01
LV	0.91	1.02	1.11	0.57	0.20	0.01
LT	0.95	2.10	1.56	0.62	0.13	0.01
LU	0.54	1.55	0.46	0.45	0.03	0.00
HU	4.31	5.28	5.82	1.92	0.60	0.04
MT	0.07	0.25	0.11	0.13	0.02	0.00
NL	12.26	9.18	8.57	6.25	3.04	0.09
AT	7.62	7.52	6.64	2.52	0.51	0.00
PL	15.07	23.90	20.78	8.16	3.32	0.00
PT	4.50	5.79	2.97	2.39	0.49	0.04
RO	5.74	7.44	7.89	1.91	0.56	0.38
SI	1.18	1.97	1.05	0.42	0.07	0.07
SK	3.17	2.66	2.69	1.28	0.12	0.00
FI	9.75	3.86	5.64	2.97	0.73	0.22
SE	11.15	6.59	7.06	4.21	0.67	1.52

2.5.3 Final Energy Consumption

BY SECTOR – EU27_2020 – 1990-2022 (Mtoe)



FINAL ENERGY CONSUMPTION – BY FUEL – EU27_2020 – 1990-2022 (Mtoe)



source: Eurostat April 2024
Methodology and Notes: see appendices

2.6 Electricity

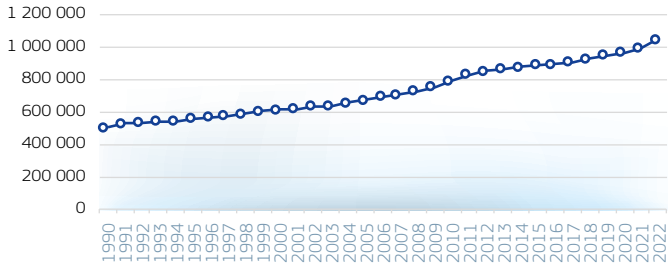
2.6.1 Installed Electricity Capacity

TOTAL

MW	2000	2010	2019	2020	2021	2022
EU27_2020*	613221	790216	947042	964312	992587	1046113
Index2000	100%	129%	154%	157%	162%	171%
BE	15685	18796	23923	25688	26218	26603
BG	11085	10031	11229	10992	11208	11860
CZ	15323	20073	22036	21451	21035	21126
DK	12316	13438	14970	15139	16180	17597
DE	118884	162924	231489	233726	242648	250327
EE	2800	2751	2746	2738	2410	2543
IE	4709	8142	11111	11214	11099	11253
EL	10904	15312	20478	20795	21929	23941
ES	53922	101740	109688	108323	111014	122513
FR	114518	124138	137170	138014	142184	148739
HR	2067	4103	4712	4662	4873	4974
IT	75510	106610	116435	116383	116846	120438
CY	988	1560	1819	1897	1983	2085
LV	2092	2557	2938	2944	2940	3017
LT	5716	3570	3378	3491	3709	3729
LU	1217	1712	1775	1808	1878	1957
HU	8282	8993	9994	10710	11575	12724
MT	0	572	750	783	800	723
NL	21062	26688	36853	42988	47851	53942
AT	17802	21345	25902	26350	27390	28195
PL	30559	33360	43440	49368	52834	55819
PT	10908	18932	21575	21655	21344	22588
RO	16820	19912	20899	20585	18799	19346
SI	2614	3193	3832	3929	4080	4235
SK	7454	7873	7724	7707	7490	7465
FI	16260	15438	17352	17301	17517	20602
SE	33724	36452	42824	43672	44753	47769

INSTALLED ELECTRICITY CAPACITY – TOTAL – 1990-2022 (MW)

EU27_2020



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

source: Eurostat April 2024
Methodology and Notes: see appendices see appendices

2.6.1 Installed Electricity Capacity

BY FUEL

	2022						
MW	Installed Electricity Capacity	Combustible Fuels	Wind	Hydro	Nuclear	Solar	Others
EU27_2020	1046113	379968	203554	152733	100200	205462	4197
Share - %	100.0%	36.3%	19.5%	14.6%	9.6%	19.6%	0.4%
BE	26603	8159	5303	1430	4845	6756	109
BG	11860	4025	702	3390	2006	1737	0
CZ	21126	11792	339	2285	4290	2420	0
DK	17597	7437	7084	7	0	3070	0
DE	250327	100870	66163	10974	4205	67479	636
EE	2543	1699	316	8	0	520	0
IE	11253	6000	4536	529	0	188	0
EL	23941	10387	4702	3421	0	5430	0
ES	122513	39470	30114	20137	7117	25615	59
FR	148739	21046	20811	25964	61400	17341	2178
HR	4974	1550	987	2206	0	222	10
IT	120438	60135	11821	22861	0	24555	1067
CY	2085	1504	158	0	0	424	0
LV	3017	1234	82	1588	0	113	0
LT	3729	1881	946	877	0	572	-547
LU	1957	145	165	1330	0	317	0
HU	12724	6038	324	60	2027	4235	40
MT	723	501	0	0	0	222	0
NL	53942	24489	8755	38	512	19600	549
AT	28195	5893	3579	14923	0	3792	8
PL	55819	33092	8150	2407	0	12170	0
PT	22588	6186	5538	8189	0	2646	29
RO	19346	6448	3015	6663	1411	1809	0
SI	4235	1572	3	1346	688	626	0
SK	7465	2361	4	2532	2003	549	16
FI	20602	8254	5677	3171	2794	664	42
SE	47769	7802	14279	16399	6901	2388	0

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.6.1 Installed Electricity Capacity*

RENEWABLES

MW	2022						
	Total renewables	Hydro	Wind	Solar Thermal	Solar PV	Geothermal	Tide, Wave and Ocean
EU27_2020	562846	152733	203554	2306	203156	880	217
Share(%)	100.0%	27.1%	36.2%	0.4%	36.1%	0.2%	0.0%
BE	13490	1430	5303	0	6756	0	0
BG	5829	3390	702	0	1737	0	0
CZ	5045	2285	339	0	2420	0	0
DK	10160	7	7084	0	3070	0	0
DE	144666	10974	66163	2	67477	50	0
EE	844	8	316	0	520	0	0
IE	5253	529	4536	0	188	0	0
EL	13553	3421	4702	0	5430	0	0
ES	75871	20137	30114	2304	23311	0	5
FR	64344	25964	20811	0	17341	16	212
HR	3425	2206	987	0	222	10	0
IT	60008	22861	11821	0	24555	772	0
CY	582	0	158	0	424	0	0
LV	1783	1588	82	0	113	0	0
LT	2395	877	946	0	572	0	0
LU	1812	1330	165	0	317	0	0
HU	4622	60	324	0	4235	3	0
MT	223	0	0	0	222	0	0
NL	28392	38	8755	0	19600	0	0
AT	22294	14923	3579	0	3792	0	0
PL	22727	2407	8150	0	12170	0	0
PT	16402	8189	5538	0	2646	29	0
RO	11487	6663	3015	0	1809	0	0
SI	1976	1346	3	0	626	0	0
SK	3085	2532	4	0	549	0	0
FI	9512	3171	5677	0	664	0	0
SE	33066	16399	14279	0	2388	0	0

* Net maximum capacity

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.6.2 Gross Electricity Generation

TOTAL

TWh	2000	2010	2019	2020	2021	2022
EU27_2020	2658.3	2984.0	2907.1	2789.5	2915.7	2824.3
Index2000	100%	112%	109%	105%	110%	106%
BE	84.01	94.58	93.65	89.46	100.47	95.94
BG	40.92	46.65	44.28	40.75	47.57	50.50
CZ	73.46	85.90	87.04	81.52	85.02	84.85
DK	36.05	38.86	29.52	28.73	33.05	35.13
DE	576.54	633.12	606.92	575.46	592.80	580.27
EE	8.51	12.96	7.62	6.08	7.20	8.94
IE	23.98	28.35	30.96	32.27	31.86	33.86
EL	53.84	57.40	48.63	48.25	54.72	52.61
ES	224.47	301.53	273.26	263.37	274.31	292.45
FR	539.95	569.29	570.77	532.26	555.08	474.74
HR	11.28	14.90	12.76	13.39	15.21	14.22
IT	276.64	302.06	293.85	280.53	289.07	283.96
CY	3.37	5.32	5.14	4.85	5.12	5.27
LV	4.14	6.63	6.44	5.72	5.85	5.00
LT	11.43	5.75	3.97	5.52	5.08	4.78
LU	1.17	4.59	1.91	2.23	2.21	2.24
HU	35.19	37.37	34.29	34.93	36.12	35.77
MT	1.92	2.11	2.06	2.14	2.21	2.29
NL	89.63	119.27	121.41	123.28	122.09	121.81
AT	61.25	71.13	74.23	72.56	70.76	69.23
PL	145.18	157.66	163.99	158.04	179.63	179.75
PT	43.76	54.09	53.15	53.08	50.98	48.81
RO	51.56	60.98	59.62	55.93	59.47	56.00
SI	13.62	16.44	16.10	17.19	15.88	13.62
SK	31.16	27.86	28.43	28.84	30.02	26.84
FI	69.97	80.67	68.65	69.27	72.12	72.22
SE	145.27	148.55	168.44	163.83	171.80	173.16

source: Eurostat April 2024
Methodology and Notes: see appendices

2.6.2 Gross Electricity Generation

BY FUEL

	2022						
TWh	Gross Electricity Generation	Solid fossil fuels, peat and products, oil shale and oil sands	Oil and petroleum products	Natural gas and manufactured gas	Nuclear	Renewables and biofuel	Wastes non-RES
EU27_2020	2824.3	456.3	55.7	566.4	609.3	1079.8	20.9
Share - %	100.0%	16.2%	2.0%	20.1%	21.6%	38.2%	0.7%
BE	95.94	0.1	0.29	24.21	43.88	24.44	1.28
BG	50.50	21.8	0.50	2.05	16.46	9.64	0.00
CZ	84.85	36.9	0.08	4.87	31.02	10.77	0.10
DK	35.13	4.4	0.33	1.02	0.00	28.52	0.83
DE	580.27	180.0	5.24	95.62	34.71	251.09	6.29
EE	8.94	5.1	0.03	0.86	0.00	2.86	0.10
IE	33.86	2.6	1.08	16.53	0.00	13.07	0.32
EL	52.61	5.8	5.12	19.14	0.00	22.45	0.00
ES	292.45	7.9	10.59	86.81	58.59	122.92	0.89
FR	474.74	4.3	6.36	47.45	294.73	113.54	2.25
HR	14.22	1.6	0.09	3.51	0.00	8.95	0.00
IT	283.96	22.6	12.86	143.03	0.00	100.47	2.40
CY	5.27	0.0	4.38	0.00	0.00	0.88	0.00
LV	5.00	0.0	0.00	1.21	0.00	3.78	0.00
LT	4.78	0.0	0.38	0.51	0.00	3.03	0.25
LU	2.24	0.0	0.00	0.10	0.00	1.01	0.07
HU	35.77	3.0	0.06	8.92	15.81	7.66	0.26
MT	2.29	0.0	0.06	1.94	0.00	0.30	0.00
NL	121.81	14.8	1.60	50.35	4.16	48.32	1.98
AT	69.23	0.1	0.67	12.79	0.00	50.43	0.76
PL	179.75	124.7	2.35	13.28	0.00	37.69	0.59
PT	48.81	0.0	1.28	17.39	0.00	27.61	0.22
RO	56.00	10.4	1.11	9.44	11.09	23.61	0.00
SI	13.62	3.1	0.06	0.49	5.61	4.07	0.01
SK	26.84	1.6	0.52	2.54	15.92	5.82	0.09
FI	72.22	5.6	0.25	1.55	25.34	38.67	0.53
SE	173.16	0.1	0.45	0.74	51.94	118.21	1.66

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.6.2 Gross Electricity Generation

RENEWABLES

	2022							
TWh	Renewables and biofuels	Wind	Hydro	Solar	Solid & liquid biofuels, renewable waste	Biogases	Geothermal	Tide, Wave and Ocean
EU27_2020	1079.8	421.3	276.2	210.2	110.7	54.3	6.4	0.5
Share - %	100.0%	39.0%	25.6%	19.5%	10.3%	5.0%	0.6%	0.0%
BE	24.44	12.35	0.27	6.88	3.92	1.01	0.00	0.00
BG	9.64	1.50	3.80	2.09	2.05	0.19	0.00	0.00
CZ	10.77	0.64	2.09	2.63	2.79	2.62	0.00	0.00
DK	28.52	19.03	0.01	2.20	6.70	0.57	0.00	0.00
DE	251.09	124.82	17.63	60.30	15.91	32.22	0.21	0.00
EE	2.86	0.67	0.02	0.60	1.56	0.01	0.00	0.00
IE	13.07	11.21	0.70	0.15	0.85	0.16	0.00	0.00
EL	22.45	10.88	3.86	7.14	0.05	0.52	0.00	0.00
ES	122.92	62.78	17.59	35.72	5.81	0.99	0.00	0.02
FR	113.54	38.00	45.52	19.63	6.80	2.98	0.11	0.49
HR	8.95	2.14	5.46	0.15	0.72	0.41	0.07	0.00
IT	100.47	20.49	28.40	28.12	9.77	7.84	5.84	0.00
CY	0.88	0.22	0.00	0.60	0.00	0.06	0.00	0.00
LV	3.78	0.19	2.75	0.04	0.55	0.25	0.00	0.00
LT	3.03	1.51	0.46	0.34	0.55	0.16	0.00	0.00
LU	1.01	0.31	0.06	0.28	0.31	0.05	0.00	0.00
HU	7.66	0.61	0.18	4.73	1.82	0.32	0.00	0.00
MT	0.30	0.00	0.00	0.29	0.00	0.01	0.00	0.00
NL	48.32	21.40	0.05	17.08	8.94	0.84	0.00	0.00
AT	50.43	7.25	34.71	3.79	4.10	0.59	0.00	0.00
PL	37.69	19.78	1.97	8.31	6.24	1.39	0.00	0.00
PT	27.61	13.24	6.54	3.52	3.85	0.26	0.19	0.00
RO	23.61	7.00	13.98	1.99	0.56	0.09	0.00	0.00
SI	4.07	0.01	3.15	0.65	0.17	0.10	0.00	0.00
SK	5.82	0.00	3.68	0.65	1.10	0.39	0.00	0.00
FI	38.67	12.02	13.49	0.39	12.50	0.26	0.00	0.00
SE	118.21	33.25	69.87	1.98	13.09	0.01	0.00	0.00

source: Eurostat April 2024
Methodology and Notes: see appendices

2.6.2 Gross Electricity Generation

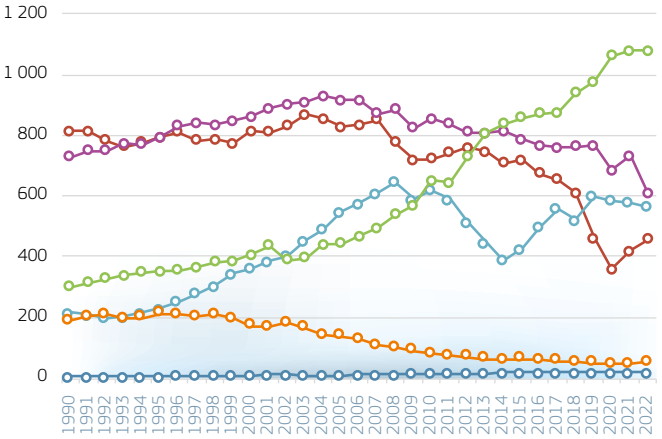
EU27_2020 BY FUEL

Share of Total (%)	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	13.3	1.0
1991	35.1	8.8	9.1	32.3	13.6	1.1
1992	34.0	9.2	8.7	32.6	14.3	1.2
1993	33.1	8.6	8.9	33.6	14.7	1.2
1994	33.2	8.6	9.2	32.9	15.0	1.1
1995	32.9	8.8	9.5	32.9	14.6	1.3
1996	32.5	8.4	10.2	33.3	14.2	1.3
1997	31.2	8.1	11.2	33.5	14.6	1.3
1998	30.8	8.2	11.9	32.6	15.0	1.4
1999	29.9	7.6	13.3	32.8	14.9	1.5
2000	30.6	6.5	13.6	32.3	15.3	1.6
2001	29.6	6.2	14.1	32.5	16.0	1.6
2002	30.1	6.6	14.6	32.7	14.1	1.8
2003	30.6	5.9	16.0	32.0	14.0	1.6
2004	29.4	4.9	16.9	31.9	15.1	1.7
2005	28.2	4.7	18.7	31.3	15.2	1.9
2006	28.1	4.4	19.4	30.7	15.7	1.7
2007	28.5	3.7	20.4	29.2	16.6	1.7
2008	25.9	3.4	21.6	29.5	18.0	1.6
2009	25.3	3.3	20.7	29.0	20.1	1.7
2010	24.2	2.8	20.8	28.6	21.9	1.7
2011	25.3	2.5	20.1	28.5	21.9	1.7
2012	25.8	2.5	17.6	27.6	24.8	1.7
2013	25.5	2.2	15.3	27.6	27.6	1.8
2014	24.8	2.1	13.6	28.4	29.3	1.8
2015	24.7	2.2	14.7	27.1	29.5	1.8
2016	23.0	2.1	17.0	26.2	29.8	1.8
2017	22.1	2.0	18.8	25.6	29.6	1.9
2018	20.8	1.9	17.8	25.9	31.9	1.8
2019	15.8	1.8	20.6	26.3	33.6	1.8
2020	12.8	1.7	21.0	24.5	38.0	1.9
2021	14.6	1.6	19.9	25.1	37.0	1.8
2022	16.2	2.0	20.1	21.6	38.2	2.0

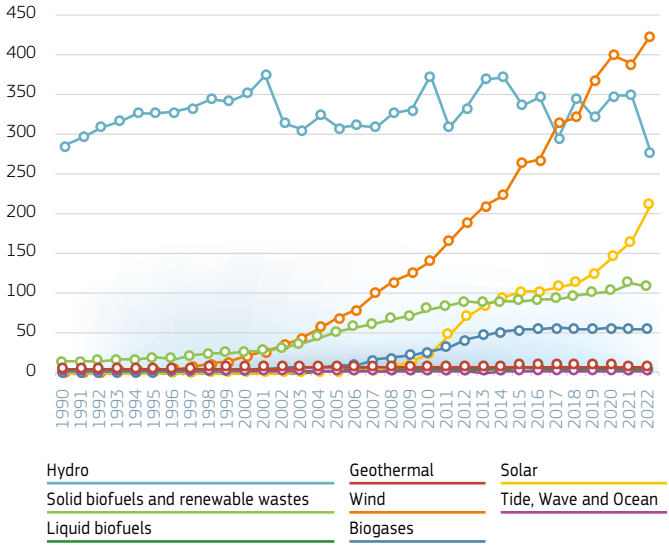
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.6.2 Gross Electricity Generation

EU27_2020 – BY FUEL – ALL FUELS – 1990-2022 (TWh)



EU27_2020 – BY FUEL – GROSS ELECTRICITY GENERATION, BY FUEL: RENEWABLES – 1990-2022 (TWh)



source: Eurostat April 2024
Methodology and Notes: see appendices

2.6.3 Market Share of the Largest Electricity Producer

%	2000	2010	2019	2020	2021	2022
BE	91.1	79.1	55.2	53.0	56.0	52.0
BG			39.0	42.5	36.0	34.0
CZ	69.2	73.0	69.0	67.0	63.0	60.0
DK	36.0	46.0	28.1	27.0	31.0	25.0
DE	34.0	28.4	26.0	25.3	26.0	26.0
EE	91.0	89.0	67.4	52.0	64.0	69.0
IE	97.0	34.0	28.0	31.0	41.0	38.0
EL	97.0	85.1	49.4	40.8	45.0	39.0
ES	42.4	24.0	22.4	19.8	24.0	19.0
FR	90.2	86.5	79.8	77.8	79.0	72.0
HR		88.0	77.8	75.7	75.7	74.0
IT	46.7	28.0	16.0	16.0	17.0	18.0
CY	99.6	100.0	92.0	90.0	88.0	88.0
LV	95.8	88.0	66.6	57.1	62.0	56.0
LT	72.8	35.4	15.5	22.9	17.0	12.0
LU		85.4	18.7	17.9	20.0	20.0
HU	41.3	42.1	56.3	55.3	63.0	63.0
MT	100.0	100.0	37.0	37.4	37.4	37.0
NL			0.0			0.0
AT	32.6		0.0			0.0
PL	19.5	17.4	18.4	17.4	17.4	15.0
PT	58.5	47.2	37.7	39.1	26.0	23.0
RO		33.6	26.7	27.8	30.0	25.0
SI		56.3	50.3	50.1	51.0	49.0
SK	85.1	80.9	66.1	64.4	64.4	70.0
FI	23.3	26.6	22.0	23.0	21.0	24.0
SE	49.5	42.0	18.0	19.0	19.0	19.0

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.7 Solar and wind Energy

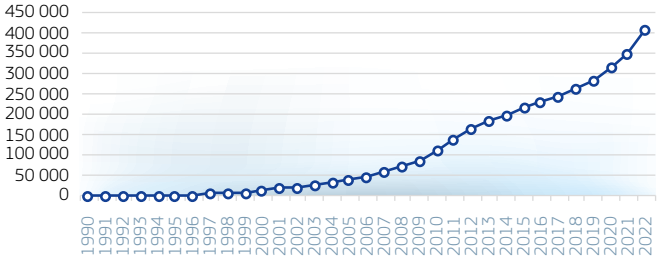
2.7.1 Solar and wind Energy Cumulative Capacity

TOTAL

MW	2000	2010	2019	2020	2021	2022
EU27_2020	12472	109605	287253	315388	352147	409016
Index2000	100%	879%	2303%	2529%	2824%	3280%
BE	14	1919	8500	10246	10961	12060
BG	0	513	1748	1803	1979	2439
CZ	1	1940	2450	2511	2586	2760
DK	2391	3809	7191	7563	8708	10154
DE	6209	44961	109656	115872	123749	133642
EE	0	108	437	525	711	836
IE	117	1391	4165	4369	4431	4724
EL	226	1500	6423	7407	8927	10132
ES	2216	25298	36701	39259	43927	55729
FR	45	6956	27155	29452	33154	38152
HR	0	79	731	910	1125	1209
IT	382	9386	31545	32521	33535	36376
CY	0	89	309	387	472	582
LV	2	30	81	83	84	195
LT	0	133	637	704	926	1518
LU	14	73	296	339	414	482
HU	0	295	1723	2454	3292	4559
MT	0	1	155	188	206	223
NL	460	2327	11712	17758	22497	28355
AT	55	1105	4926	5269	6190	7371
PL	4	1108	7377	10253	14383	20321
PT	84	3930	6124	6223	7073	8184
RO	0	389	4435	4395	4409	4824
SI	0	12	281	373	464	629
SK	0	22	594	539	541	553
FI	40	204	2506	2904	3682	6341
SE	212	2028	9395	11083	13722	16667

SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – TOTAL – 1990-2022 (MW)

EU27_2020



source: Eurostat April 2024
Methodology and Notes: see appendices

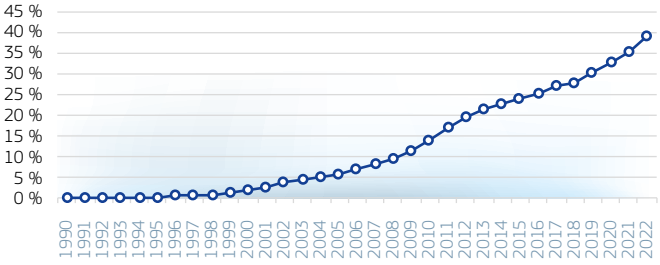
2.7.1 Solar and Wind Energy – Cumulative Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

%	2000	2010	2019	2020	2021	2022
EU27_2020	2.0	13.9	30.3	32.7	35.5	39.1
BE	0.09	10.21	35.53	39.88	41.81	45.33
BG	0.00	5.11	15.56	16.40	17.66	20.57
CZ	0.01	9.66	11.12	11.71	12.29	13.06
DK	19.41	28.34	48.03	49.96	53.82	57.70
DE	5.22	27.60	47.37	49.58	51.00	53.39
EE	0.00	3.93	15.90	19.16	29.50	32.87
IE	2.47	17.08	37.49	38.96	39.93	41.98
EL	2.07	9.80	31.36	35.62	40.71	42.32
ES	4.11	24.87	33.46	36.24	39.57	45.49
FR	0.04	5.60	19.80	21.34	23.32	25.65
HR	0.00	1.93	15.52	19.52	23.09	24.30
IT	0.51	8.80	27.09	27.94	28.70	30.20
CY	0.00	5.72	16.98	20.39	23.81	27.89
LV	0.10	1.17	2.77	2.83	2.87	6.48
LT	0.00	3.73	18.86	20.17	24.97	40.71
LU	1.15	4.27	16.65	18.77	22.02	24.63
HU	0.00	3.28	17.24	22.91	28.44	35.83
MT	0.00	0.14	20.71	24.02	25.69	30.77
NL	2.18	8.72	31.78	41.31	47.01	52.56
AT	0.31	5.18	19.02	20.00	22.60	26.14
PL	0.01	3.32	16.98	20.77	27.22	36.40
PT	0.77	20.76	28.39	28.73	33.14	36.23
RO	0.00	1.95	21.22	21.35	23.45	24.94
SI	0.00	0.38	7.34	9.49	11.38	14.86
SK	0.00	0.28	7.69	6.99	7.22	7.41
FI	0.25	1.32	14.44	16.79	21.02	30.78
SE	0.63	5.56	21.94	25.38	30.66	34.89

SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – SHARE OF TOTAL – **1990-2022 (%)**

EU27_2020



source: Eurostat April 2024
Methodology and Notes: **see appendices**

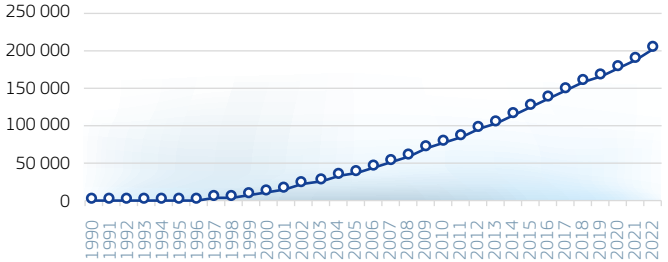
2.7.2 Wind Cumulative Installed Capacity

TOTAL

MW	2000	2010	2019	2020	2021	2022
EU27_2020	12297	78989	167140	177072	187948	203554
Index2000	100%	642%	1359%	1440%	1528%	1655%
BE	14	912	3864	4673	4948	5303
BG	0	488	703	703	704	702
CZ	1	213	339	339	339	339
DK	2390	3802	6111	6259	7004	7084
DE	6095	26955	60742	62201	63711	66163
EE	0	108	316	317	316	316
IE	117	1390	4126	4307	4339	4536
EL	226	1298	3589	4119	4649	4702
ES	2206	20693	25590	26819	27908	30114
FR	38	5912	16427	17535	18551	20811
HR	0	79	646	801	987	987
IT	363	5794	10679	10871	11254	11821
CY	0	82	158	158	158	158
LV	2	30	78	78	77	82
LT	0	133	534	540	671	946
LU	14	44	136	153	136	165
HU	0	293	323	323	324	324
MT	0	0	0	0	0	0
NL	447	2237	4484	6648	7674	8755
AT	50	1016	3224	3226	3408	3579
PL	4	1108	5838	6298	6967	8150
PT	83	3796	5223	5122	5427	5538
RO	0	389	3038	3013	3015	3015
SI	0	0	3	3	3	3
SK	0	3	4	4	4	4
FI	38	197	2284	2586	3257	5677
SE	209	2017	8681	9976	12116	14279

WIND CUMULATIVE INSTALLED CAPACITY – TOTAL – 1990-2022 (MW)

EU27_2020



source: Eurostat April 2024
Methodology and Notes: see appendices

2.7.2 Wind Cumulative Installed Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

%	2000	2010	2019	2020	2021	2022
EU27_2020	2.0	10.0	17.6	18.4	18.9	19.5
BE	0.1	4.9	16.2	18.2	18.9	19.9
BG	0.0	4.9	6.3	6.4	6.3	5.9
CZ	0.0	1.1	1.5	1.6	1.6	1.6
DK	19.4	28.3	40.8	41.3	43.3	40.3
DE	5.1	16.5	26.2	26.6	26.3	26.4
EE	0.0	3.9	11.5	11.6	13.1	12.4
IE	2.5	17.1	37.1	38.4	39.1	40.3
EL	2.1	8.5	17.5	19.8	21.2	19.6
ES	4.1	20.3	23.3	24.8	25.1	24.6
FR	0.0	4.8	12.0	12.7	13.0	14.0
HR	0.0	1.9	13.7	17.2	20.3	19.8
IT	0.5	5.4	9.2	9.3	9.6	9.8
CY	0.0	5.3	8.7	8.3	7.9	7.6
LV	0.1	1.2	2.7	2.7	2.6	2.7
LT	0.0	3.7	15.8	15.5	18.1	25.4
LU	1.2	2.6	7.7	8.4	7.3	8.4
HU	0.0	3.3	3.2	3.0	2.8	2.5
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	2.1	8.4	12.2	15.5	16.0	16.2
AT	0.3	4.8	12.4	12.2	12.4	12.7
PL	0.0	3.3	13.4	12.8	13.2	14.6
PT	0.8	20.1	24.2	23.7	25.4	24.5
RO	0.0	2.0	14.5	14.6	16.0	15.6
SI	0.0	0.0	0.1	0.1	0.1	0.1
SK	0.0	0.0	0.1	0.1	0.1	0.1
FI	0.2	1.3	13.2	14.9	18.6	27.6
SE	0.6	5.5	20.3	22.8	27.1	29.9

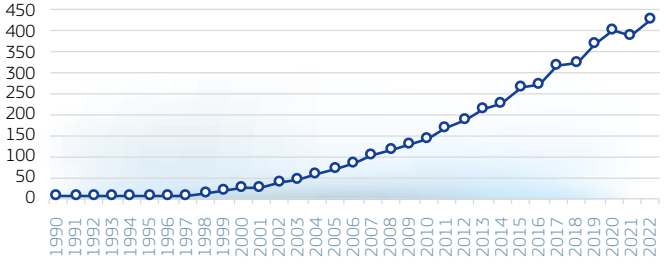
source: Eurostat April 2024
Methodology and Notes: **see appendices –**

2.7.3 Wind Gross Electricity Production

TOTAL

TWh	2000	2010	2019	2020	2021	2022
EU27_2020	21.3	139.8	367.1	398.0	386.7	421.3
Index2000	100%	657%	1726%	1871%	1818%	1980%
BE	0.0	1.3	9.8	12.8	12.0	12.4
BG	0.0	0.7	1.3	1.5	1.4	1.5
CZ	0.0	0.3	0.7	0.7	0.6	0.6
DK	4.2	7.8	16.1	16.3	16.1	19.0
DE	9.4	38.5	125.9	132.1	114.2	124.8
EE	0.0	0.3	0.7	0.8	0.7	0.7
IE	0.2	2.8	10.0	11.5	9.8	11.2
EL	0.5	2.7	7.3	9.3	10.5	10.9
ES	4.7	44.3	55.6	56.4	62.1	62.8
FR	0.0	9.9	34.7	40.0	37.1	38.0
HR	0.0	0.1	1.5	1.7	2.1	2.1
IT	0.6	9.1	20.2	18.8	20.9	20.5
CY	0.0	0.0	0.2	0.2	0.2	0.2
LV	0.0	0.0	0.2	0.2	0.1	0.2
LT	0.0	0.2	1.5	1.6	1.4	1.5
LU	0.0	0.1	0.3	0.4	0.3	0.3
HU	0.0	0.5	0.7	0.7	0.7	0.6
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.8	4.0	11.5	15.3	18.0	21.4
AT	0.1	2.1	7.5	6.8	6.7	7.2
PL	0.0	1.7	15.1	15.8	16.2	19.8
PT	0.2	9.2	13.7	12.3	13.2	13.2
RO	0.0	0.3	6.8	6.9	6.6	7.0
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	6.0	8.3	8.5	12.0
SE	0.5	3.5	19.8	27.5	27.2	33.3

WIND GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2022



source: Eurostat April 2024
Methodology and Notes: see appendices

2.7.4 Wind Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

%	2000	2010	2019	2020	2021	2022
EU27_2020	0.8	4.7	12.6	14.3	13.3	14.9
BE	0.0	1.4	10.4	14.3	11.9	12.9
BG	0.0	1.5	3.0	3.6	3.0	3.0
CZ	0.0	0.4	0.8	0.9	0.7	0.8
DK	11.8	20.1	54.7	56.8	48.6	54.2
DE	1.6	6.1	20.7	23.0	19.3	21.5
EE	0.0	2.1	9.0	13.9	10.2	7.5
IE	1.0	9.9	32.4	35.8	30.7	33.1
EL	0.8	4.7	14.9	19.3	19.2	20.7
ES	2.1	14.7	20.4	21.4	22.6	21.5
FR	0.0	1.7	6.1	7.5	6.7	8.0
HR	0.0	0.9	11.5	12.9	13.6	15.0
IT	0.2	3.0	6.9	6.7	7.2	7.2
CY	0.0	0.6	4.6	5.0	4.8	4.3
LV	0.1	0.7	2.4	3.1	2.4	3.8
LT	0.0	3.9	37.8	28.1	26.8	31.6
LU	2.1	1.2	14.7	15.7	14.2	14.0
HU	0.0	1.4	2.1	1.9	1.8	1.7
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	0.9	3.3	9.5	12.4	14.8	17.6
AT	0.1	2.9	10.0	9.4	9.5	10.5
PL	0.0	1.1	9.2	10.0	9.0	11.0
PT	0.4	17.0	25.7	23.2	25.9	27.1
RO	0.0	0.5	11.4	12.4	11.1	12.5
SI	0.0	0.0	0.0	0.0	0.0	0.0
SK	0.0	0.0	0.0	0.0	0.0	0.0
FI	0.1	0.4	8.8	11.9	11.8	16.6
SE	0.3	2.3	11.8	16.8	15.9	19.2

source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.7.5 Wind Capacity Factor

ANNUAL AVERAGE

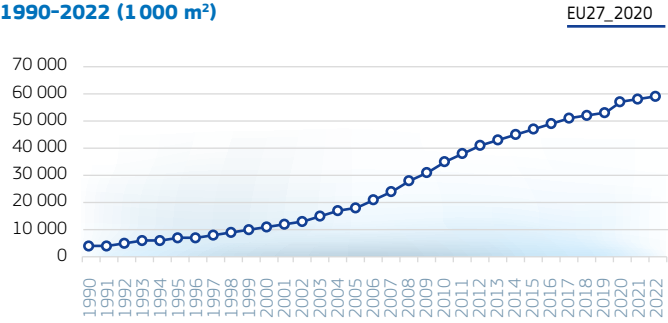
%	2000	2010	2019	2020	2021	2022
EU27_2020	19.8	20.2	25.1	25.7	23.5	23.6
BE	13.0	16.2	28.8	31.3	27.7	26.6
BG			21.4	24.0	23.2	24.4
CZ		18.0	23.5	23.5	20.2	21.6
DK	20.3	23.4	30.2	29.8	26.2	30.7
DE	17.5	16.3	23.7	24.2	20.5	21.5
EE		29.3	24.8	30.4	26.5	24.1
IE	23.9	23.1	27.7	30.6	25.7	28.2
EL	22.8	23.9	23.1	25.8	25.7	26.4
ES	24.5	24.4	24.8	24.0	25.4	23.8
FR	14.5	19.2	24.1	26.1	22.8	20.8
HR		20.1	25.9	24.5	23.8	24.7
IT	17.7	18.0	21.6	19.7	21.2	19.8
CY			17.3	17.4	17.9	16.3
LV		18.7	22.5	25.8	20.9	26.3
LT			32.1	32.8	23.2	18.3
LU	20.2	14.4	23.6	26.2	26.3	21.6
HU		20.8	25.8	23.1	23.4	21.5
MT						
NL	21.2	20.4	29.3	26.2	26.8	27.9
AT	15.2	23.2	26.4	24.0	22.6	23.1
PL	14.3	17.1	29.5	28.6	26.6	27.7
PT	23.1	27.6	29.9	27.4	27.8	27.3
RO			25.5	26.3	24.9	26.5
SI				21.6	19.2	19.7
SK		22.8	17.1	11.4	14.3	11.4
FI	23.4	17.1	30.1	36.4	29.8	24.2
SE	25.0	19.7	26.1	31.5	25.7	26.6

source: Eurostat April 2024
Methodology and Notes: see appendices

2.7.6 Solar Collectors' Surface

1 000 m²	2000	2010	2019	2020	2021	2022
EU27_2020	10759	34428	53093	56245	57732	59133
Index2000	100%	320%	493%	523%	537%	550%
BE	41	375	724	740	748	756
BG	0	194	425	446	470	516
CZ	0	307	555	567	586	611
DK	243	480	1915	2051	2035	2059
DE	3251	13914	19326	21416	22057	22415
EE	0	0	0	0	0	0
IE	4	185	337	346	345	346
EL	2941	4100	4868	4991	5175	5442
ES	405	2312	4068	4236	4360	4449
FR	513	1447	3698	3818	3957	4072
HR	20	92	272	288	300	313
IT	271	2415	4344	4458	4658	4954
CY	0	909	1084	1102	1122	1140
LV	0	0	22	22	22	22
LT	0	0	0	0	0	0
LU	0	29	70	74	77	91
HU	36	140	350	392	406	418
MT	0	40	73	74	52	46
NL	276	576	672	669	662	662
AT	2202	4559	5050	4923	4775	4616
PL	0	656	2696	3007	3196	3406
PT	238	752	1348	1407	1479	1545
RO	0	104	219	234	249	249
SI	101	178	224	222	220	217
SK	0	123	220	232	249	265
FI	10	31	73	80	88	88
SE	207	510	459	451	445	435

SOLAR THERMAL COLLECTORS – 1990-2022 (1 000 m²)



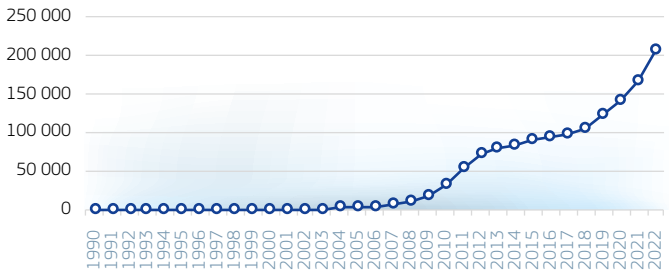
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.7.7 Solar Installed Capacity

TOTAL

MW	2000	2010	2019	2020	2021	2022
EU27_2020	175	30616	120113	138317	164199	205462
BE	0	1007	4637	5573	6012	6756
BG	0	25	1044	1100	1275	1737
CZ	0	1727	2111	2172	2246	2420
DK	1	7	1080	1304	1704	3070
DE	114	18006	48914	53671	60038	67479
EE	0	0	121	208	395	520
IE	0	1	39	62	92	188
EL	0	202	2834	3288	4277	5430
ES	10	4605	11111	12440	16019	25615
FR	7	1044	10729	11917	14603	17341
HR	0	0	85	109	138	222
IT	19	3592	20865	21650	22281	24555
CY	0	7	151	229	315	424
LV	0	0	3	5	7	113
LT	0	0	103	164	255	572
LU	0	29	160	187	277	317
HU	0	2	1400	2131	2968	4235
MT	0	1	155	188	205	222
NL	13	90	7228	11110	14823	19600
AT	5	89	1702	2043	2783	3792
PL	0	0	1539	3955	7416	12170
PT	1	134	901	1100	1646	2646
RO	0	0	1398	1383	1394	1809
SI	0	12	278	370	461	626
SK	0	19	590	535	537	549
FI	2	7	222	318	425	664
SE	3	11	714	1107	1606	2388

SOLAR INSTALLED CAPACITY – TOTAL – 1990-2022 (MW)



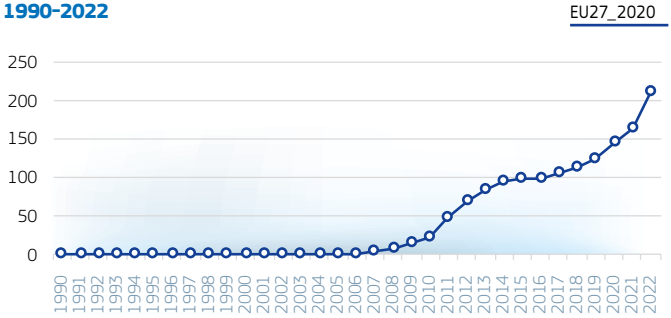
source: Eurostat April 2024
Methodology and Notes: see appendices

2.7.8 Solar Gross Electricity Production

TOTAL

TWh	2000	2010	2019	2020	2021	2022
EU27_2020	0.1	23.2	123.7	144.8	164.2	210.2
BE	0.0	0.6	4.3	5.1	5.6	6.9
BG	0.0	0.0	1.4	1.5	1.5	2.1
CZ	0.0	0.6	2.3	2.3	2.2	2.6
DK	0.0	0.0	1.0	1.2	1.3	2.2
DE	0.1	11.7	44.4	49.5	50.5	60.3
EE	0.0	0.0	0.1	0.2	0.4	0.6
IE	0.0	0.0	0.0	0.1	0.1	0.1
EL	0.0	0.2	4.4	4.4	5.3	7.1
ES	0.0	7.2	15.1	20.7	27.1	35.7
FR	0.0	0.6	12.2	13.2	15.4	19.6
HR	0.0	0.0	0.1	0.1	0.1	0.2
IT	0.0	1.9	23.7	24.9	25.0	28.1
CY	0.0	0.0	0.2	0.3	0.5	0.6
LV	0.0	0.0	0.0	0.0	0.0	0.0
LT	0.0	0.0	0.1	0.1	0.2	0.3
LU	0.0	0.0	0.1	0.2	0.2	0.3
HU	0.0	0.0	1.5	2.5	3.8	4.7
MT	0.0	0.0	0.2	0.2	0.3	0.3
NL	0.0	0.1	5.4	8.6	11.3	17.1
AT	0.0	0.1	1.7	2.0	2.8	3.8
PL	0.0	0.0	0.7	2.0	3.9	8.3
PT	0.0	0.2	1.3	1.7	2.2	3.5
RO	0.0	0.0	1.8	1.7	1.7	2.0
SI	0.0	0.0	0.3	0.4	0.5	0.6
SK	0.0	0.0	0.6	0.7	0.7	0.7
FI	0.0	0.0	0.1	0.2	0.3	0.4
SE	0.0	0.0	0.7	1.1	1.5	2.0

SOLAR GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2022



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.7.9 Solar Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

%	2000	2010	2019	2020	2021	2022
EU27_2020	0.0	0.8	4.3	5.2	5.6	7.4
BE	0.0	0.6	4.5	5.7	5.6	7.2
BG	0.0	0.0	3.2	3.6	3.1	4.1
CZ	0.0	0.7	2.7	2.8	2.6	3.1
DK	0.0	0.0	3.3	4.1	4.0	6.3
DE	0.0	1.9	7.3	8.6	8.5	10.4
EE	0.0	0.0	1.0	4.0	4.9	6.7
IE	0.0	0.0	0.1	0.2	0.2	0.4
EL	0.0	0.3	9.1	9.2	9.6	13.6
ES	0.0	2.4	5.5	7.8	9.9	12.2
FR	0.0	0.1	2.1	2.5	2.8	4.1
HR	0.0	0.0	0.7	0.7	1.0	1.1
IT	0.0	0.6	8.1	8.9	8.7	9.9
CY	0.0	0.1	4.2	6.1	9.1	11.4
LV	0.0	0.0	0.0	0.1	0.1	0.8
LT	0.0	0.0	2.3	2.3	3.8	7.2
LU	0.0	0.5	6.8	7.2	8.1	12.3
HU	0.0	0.0	4.4	7.0	10.5	13.2
MT	0.0	0.0	9.5	11.1	11.5	12.6
NL	0.0	0.0	4.4	7.0	9.3	14.0
AT	0.0	0.1	2.3	2.8	3.9	5.5
PL	0.0	0.0	0.4	1.2	2.2	4.6
PT	0.0	0.4	2.5	3.2	4.4	7.2
RO	0.0	0.0	3.0	3.1	2.9	3.6
SI	0.0	0.1	1.9	2.1	2.9	4.7
SK	0.0	0.1	2.1	2.3	2.2	2.4
FI	0.0	0.0	0.2	0.3	0.4	0.5
SE	0.0	0.0	0.4	0.6	0.9	1.1

source: Eurostat April 2024
Methodology and Notes: see appendices

2.8 CHP

2.8.1 CHP Electricity

GENERATION AND CAPACITY

	CHP Electricity Generation			CHP Electrical Capacity		
	TWh			GW		
	2020	2021	2022	2020	2021	2022
EU27_2020	335.1	346.4	313.2	133.4	129.2	129.4
BE	13.0	13.1	11.7	2.4	2.8	2.9
BG	3.8	4.2	3.7	1.3	1.3	1.7
CZ	10.2	10.6	10.1	8.3	8.0	7.8
DK	8.3	10.1	9.8	5.0	4.6	4.5
DE	85.5	90.1	80.3	53.4	50.2	51.3
EE	1.4	1.5	1.4	0.5	0.5	0.5
IE	2.1	2.0	2.1	0.3	0.3	0.3
EL	2.3	2.3	2.4	0.4	0.4	0.4
ES	26.9	27.5	19.3	5.0	4.8	4.8
FR	17.5	18.5	19.3	6.5	7.0	5.7
HR	2.7	2.7	2.6	0.9	0.9	0.9
IT	39.9	34.7	32.6	9.2	7.4	6.9
CY	0.0	0.0	0.0	0.0	0.0	0.0
LV	2.1	2.6	1.8	1.3	1.3	1.2
LT	1.2	1.3	1.3	0.6	0.5	0.6
LU	0.5	0.5	0.4	0.1	0.1	0.1
HU	4.7	5.6	4.6	1.6	1.6	1.6
MT	0.2	0.1	0.1	0.1	0.1	0.1
NL	31.7	31.4	27.4	9.1	8.3	8.8
AT	9.8	11.5	10.7	2.9	5.0	5.2
PL	30.1	30.8	28.6	10.0	10.6	10.4
PT	6.5	6.1	4.9	1.3	1.3	1.0
RO	4.6	4.7	3.9	1.4	1.5	1.4
SI	1.2	1.2	1.1	0.3	0.4	0.3
SK		3.5	3.3		1.5	1.4
FI	18.9	20.6	17.6	6.4	6.3	6.2
SE	9.2	8.9	12.3	3.3	2.7	3.3

source: Eurostat, July 2022
Methodology and Notes: see appendices

2.8.2 CHP Heat

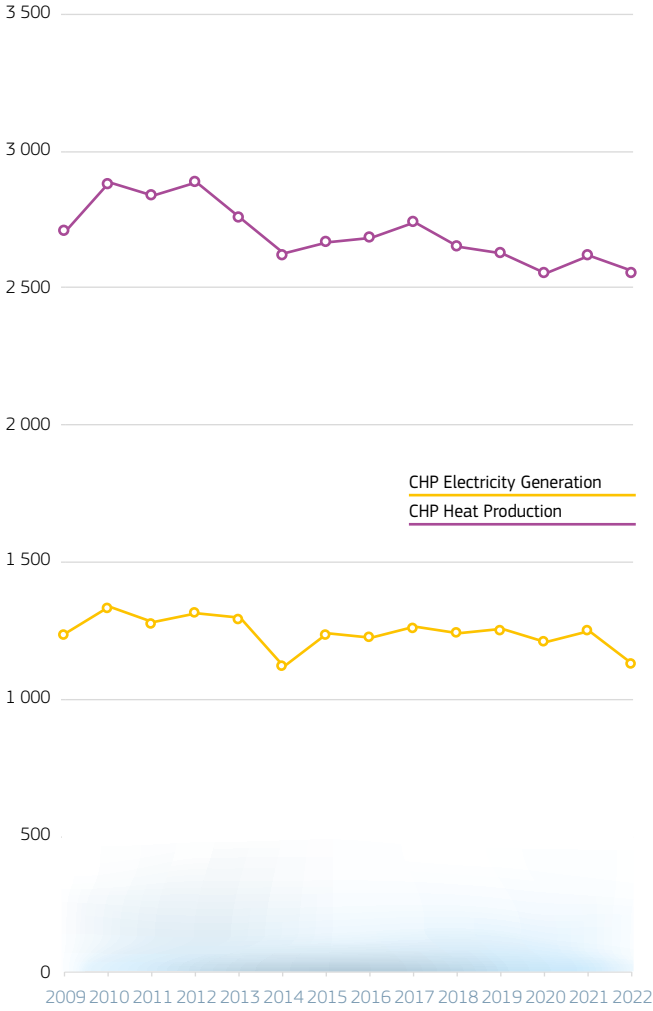
PRODUCTION AND CAPACITY

	CHP Heat Production			CHP Heat Capacity		
	PJ			GW		
	2020	2021	2022	2020	2021	2022
EU27_2020	2.556.0	2.621.1	2.557.6	252.2	242.5	241.2
BE	93.4	95.0	88.0	5.1	5.4	5.7
BG	36.2	49.8	43.5	4.6	4.7	4.7
CZ	100.2	99.0	90.2	19.2	19.3	18.2
DK	80.8	86.9	88.4	8.5	8.4	8.2
DE	638.8	670.2	617.4	63.7	64.6	64.4
EE	12.8	16.5	15.8	1.5	1.5	1.3
IE	11.1	10.9	11.3	0.6	0.6	0.7
EL	16.8	17.0	15.6	0.8	0.8	0.8
ES	132.4	138.9	101.4	10.7	10.4	10.3
FR	177.1	174.4	178.0	21.6	22.0	20.6
HR	20.0	20.0	17.5	2.1	2.1	1.9
IT	213.4	169.9	166.2	21.5	10.4	10.9
CY	0.2	0.2	0.1	0.0	0.0	0.0
LV	12.1	13.1	10.3	1.2	1.2	1.1
LT	11.7	13.7	13.5	1.6	1.3	1.6
LU	4.8	5.3	5.0	0.3	0.3	0.4
HU	27.6	30.1	27.6	3.1	3.3	3.1
MT	0.1	0.1	0.1	0.0	0.0	0.0
NL	171.6	173.4	154.9	16.3	15.6	16.0
AT	111.3	112.2	108.1	8.7	8.4	8.4
PL	245.6	259.6	247.9	24.2	24.4	24.4
PT	59.8	59.3	51.5	4.9	4.8	4.3
RO	35.4	36.1	32.8	4.2	4.2	3.9
SI	11.2	11.2	9.9	0.9	1.0	1.0
SK		41.0	36.1		3.1	3.0
FI	214.8	223.3	199.4	16.2	16.1	16.0
SE	94.0	94.5	227.2	7.9	7.4	13.5

source: Eurostat, July 2022
Methodology and Notes: see appendices

2.8.3 CHP Electricity and Heat

EU27_2020 – CHP ELECTRICITY AND HEAT GENERATION (PJ)*



source: Eurostat July 2022

*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	2019	2020	2021	2022
EU27_2020	2090.0	2652.6	2345.2	2255.8	2313.1	2119.9
Index2000	100%	127%	112%	108%	111%	101%
BE	23.2	42.7	30.5	30.1	30.4	27.4
BG	50.8	59.4	38.8	39.0	41.0	36.4
CZ	139.2	148.6	116.4	113.0	121.4	110.2
DK	119.2	150.4	132.3	128.5	141.5	129.3
DE	315.9	515.2	457.9	425.5	469.6	427.6
EE	27.0	25.5	22.0	20.9	22.7	23.8
IE	0.0	0.0	0.0	0.0	0.0	0.0
EL	1.2	1.9	2.2	2.2	2.0	1.5
ES	0.0	0.0	0.0	0.0	0.0	0.0
FR	135.5	153.3	176.2	174.0	191.0	183.4
HR	11.5	12.5	13.2	13.9	15.6	14.4
IT	0.0	205.3	231.4	228.9	92.9	86.0
CY	0.0	0.0	0.1	0.0	0.0	0.0
LV	31.9	28.7	28.6	27.1	31.2	27.8
LT	48.2	48.8	42.8	37.9	44.6	36.4
LU	0.5	3.1	4.0	5.6	6.2	6.2
HU	69.2	53.0	48.4	48.6	52.2	46.9
MT	0.0	0.0	0.0	0.0	0.0	0.0
NL	172.4	159.9	113.7	106.1	110.7	103.3
AT	47.9	78.4	83.9	84.4	92.6	82.4
PL	340.7	335.8	287.1	285.9	308.4	286.4
PT	5.6	21.1	20.9	20.5	16.7	11.5
RO	189.7	99.1	61.4	59.1	61.2	51.2
SI	9.4	9.8	9.1	9.3	10.1	8.9
SK	36.8	48.6	31.3	30.8	32.5	28.7
FI	150.6	211.0	185.3	171.0	194.2	181.8
SE	163.8	240.6	207.6	193.4	224.5	208.9

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

source: Eurostat April 2024
Methodology and Notes: see appendices

2.9.1 Gross Heat Generation

BY FUEL

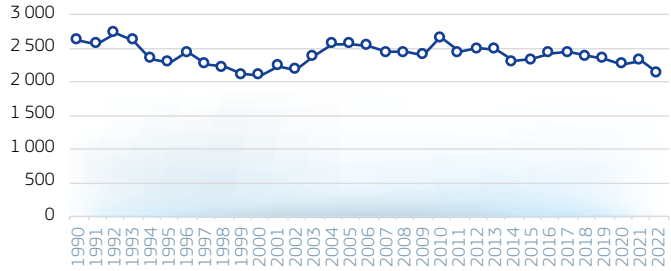
	2022						
PJ	Gross Heat Generation	Solid fossil fuels, peat, oil shale & sands	Oil and petroleum products	Natural gas and manufactured gases	Nuclear	Renewables and biofuels	Wastes non-RES and others
EU27_2020	2 119.9	442.5	68.0	668.2	3.7	711.1	136.7
Share - %	100.0%	20.9%	3.2%	31.5%	0.2%	33.5%	6.5%
BE	27.4	0.0	0.0	12.8	0.0	3.4	1.7
BG	36.4	5.7	0.1	20.9	0.6	6.3	0.3
CZ	110.2	55.9	1.5	37.4	0.9	11.7	1.3
DK	129.3	9.7	2.8	8.9	0.0	85.3	13.7
DE	427.6	97.0	10.2	196.1	0.0	77.7	41.4
EE	23.8	1.9	0.6	4.6	0.0	15.8	0.8
IE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EL	1.5	1.2	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	183.4	3.7	8.6	63.6	0.0	83.2	19.1
HR	14.4	0.0	0.4	9.6	0.0	4.4	0.0
IT	86.0	0.0	1.1	64.3	0.0	15.8	4.3
CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LV	27.8	0.0	0.8	9.2	0.0	17.8	0.0
LT	36.4	0.1	1.1	4.9	0.0	24.3	2.3
LU	6.2	0.0	0.0	1.6	0.0	4.5	0.1
HU	46.9	0.9	0.0	33.4	0.4	8.0	1.3
MT	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NL	103.3	1.4	10.7	49.2	0.0	22.9	8.3
AT	82.4	0.0	3.2	28.3	0.0	44.6	6.2
PL	286.4	209.0	5.7	43.5	0.0	23.4	4.1
PT	11.5	0.0	0.1	11.4	0.0	0.0	0.0
RO	51.2	9.7	2.4	35.6	0.0	3.4	0.0
SI	8.9	3.9	0.5	2.3	0.0	2.1	0.1
SK	28.7	3.6	0.4	15.8	1.8	6.6	0.3
FI	181.8	37.8	15.1	8.5	0.0	96.4	6.4
SE	208.9	0.8	2.7	6.2	0.0	153.5	25.1

source: Eurostat April 2024
Methodology and Notes: see appendices

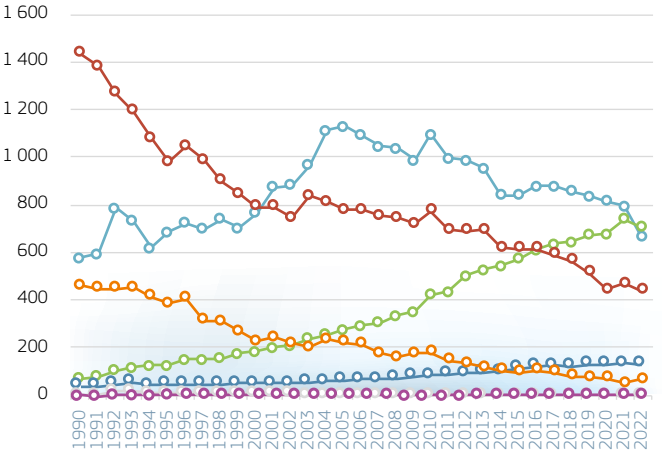
2.9.1 Gross Heat Generation

EU27_2020- GROSS HEAT GENERATION - TOTAL - 1990-2022 (PJ)

EU27_2020



EU27_2020 Gross Heat Generation (PJ)



Solid fossil fuels, peat, oil shale and sands
Nuclear
Wastes non-RES
Oil and petroleum products
Renewables and biofuels
Others
Natural gas and manufactured gases

source: Eurostat April 2024
Methodology and Notes: see appendices

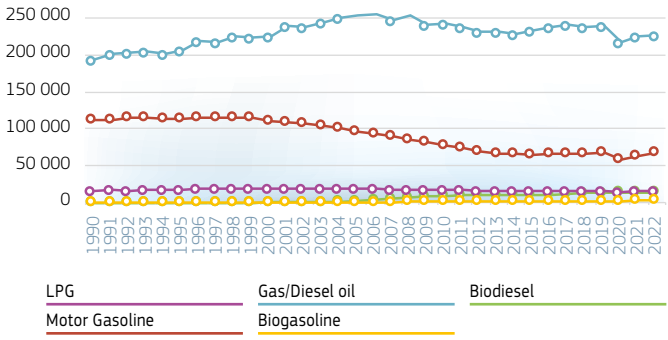
2.10 Transport

2.10.1 Fuels Final Consumption

EU27_2020 - PETROLEUM PRODUCTS AND BIOFUELS

ktoe	Final consumption petroleum products	LPG	Motor gasoline	Gas/Diesel oil	Final consumption biofuels	Biogasoline	Biodiesel
1990	321230	16192	111718	193320	6	0	6
1995	336944	17423	113998	205523	218	25	189
2000	355244	19465	110381	225397	713	59	640
2001	366591	19344	108744	238502	840	66	756
2002	363107	19100	107019	236988	1113	159	932
2003	366647	19092	103482	244074	1433	243	1160
2004	369254	19157	100230	249867	1963	306	1613
2005	367905	19409	95746	252751	3270	550	2532
2006	365886	18772	92404	254710	5465	849	3909
2007	353704	18181	89352	246171	7657	1100	5720
2008	355279	18070	84683	252526	9355	1707	7183
2009	339786	17680	81474	240631	11049	2084	8681
2010	337045	18039	76821	242184	12442	2496	9701
2011	327639	17159	73877	236603	12967	2552	10303
2012	316713	16751	69292	230670	13796	2491	11255
2013	314636	16862	66880	230894	12292	2314	9931
2014	310559	16179	66591	227790	13319	2303	10947
2015	314845	16219	65321	233305	13327	2345	10925
2016	319209	16606	65665	236938	13183	2306	10807
2017	323154	16340	66092	240722	14436	2437	11941
2018	321231	16865	66231	238136	16072	2623	13332
2019	323161	16607	67665	238889	16636	2725	13784
2020	290873	15189	58208	217475	16897	2689	14030
2021	304680	15647	63542	225491	17699	3056	14482
2022	309626	15979	67555	226092	17730	3266	14343

EU27_2020 – FUELS CONSUMPTION IN THE TRANSPORT SECTOR – 1990-2022 (ktoe)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.10.2 Biofuels

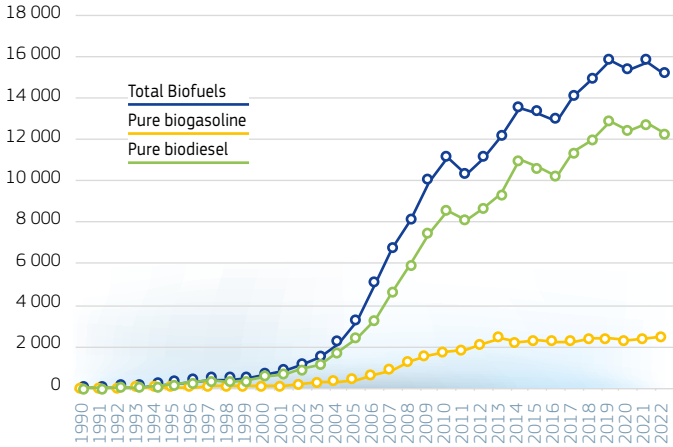
EU27_2020 BY FUEL

	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	1108	160	918	0.3%	0.1%	0.4%
2003	1460	264	1145	0.4%	0.2%	0.5%
2004	2139	312	1716	0.5%	0.3%	0.6%
2005	3229	383	2445	0.9%	0.6%	1.0%
2006	5036	636	3298	1.5%	0.9%	1.5%
2007	6711	865	4621	2.2%	1.2%	2.3%
2008	8102	1282	5975	2.6%	2.0%	2.8%
2009	9994	1538	7521	3.3%	2.6%	3.6%
2010	11158	1728	8614	3.7%	3.2%	4.0%
2011	10314	1824	8156	4.0%	3.5%	4.4%
2012	11111	2103	8703	4.4%	3.6%	4.9%
2013	12143	2408	9399	3.9%	3.5%	4.3%
2014	13527	2188	11042	4.3%	3.5%	4.8%
2015	13315	2274	10707	4.2%	3.6%	4.7%
2016	12962	2240	10289	4.1%	3.5%	4.6%
2017	14109	2264	11408	4.5%	3.7%	5.0%
2018	14922	2368	12012	5.0%	4.0%	5.6%
2019	15849	2364	12947	5.1%	4.0%	5.8%
2020	15407	2289	12492	5.8%	4.6%	6.5%
2021	15818	2406	12814	5.8%	4.8%	6.4%
2022	15214	2458	12347	5.7%	4.8%	6.3%

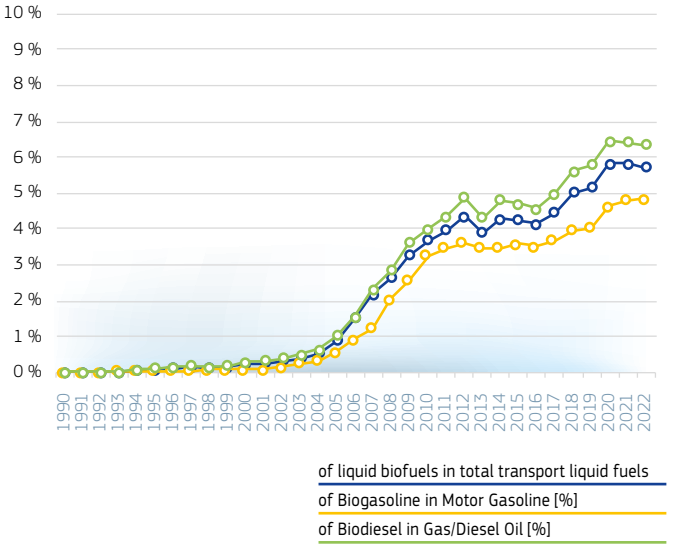
source: Eurostat April 2024
Methodology and Notes: see appendices

2.10.2 Biofuels

EU27-2020 – PRODUCTION BIOFUELS – 1990-2022 (ktoe)



EU27_2020 – BIOFUELS SHARE IN TRANSPORT LIQUID FUELS – 1990-2022 (%)



source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.11 Energy Efficiency

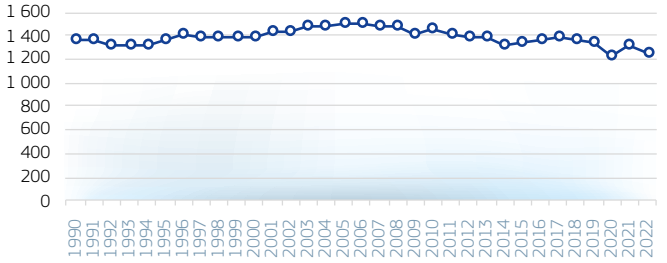
2.11.1 Primary energy consumption 2020-2030*

ALL FUELS

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	1396.4	1458.3	1354.4	1235.8	1313.3	1258.6
Index2000	100%	104%	97%	88%	94%	90%
BE	52.4	53.4	48.4	43.9	48.7	45.2
BG	17.7	17.4	18.0	17.1	18.6	18.9
CZ	39.1	42.5	39.7	37.6	39.5	38.6
DK	19.1	19.9	16.9	15.5	16.4	16.0
DE	317.1	315.2	285.2	262.2	271.5	260.6
EE	4.6	5.8	4.8	4.3	4.5	4.7
IE	13.7	14.7	14.7	13.5	13.8	14.3
EL	27.2	27.2	22.3	19.2	20.3	20.9
ES	114.5	123.0	120.6	105.0	111.5	113.2
FR	239.0	254.5	235.5	208.0	224.8	205.6
HR	7.8	8.9	8.2	7.8	8.3	8.3
IT	166.1	167.3	145.9	132.3	145.6	139.6
CY	2.3	2.7	2.5	2.2	2.3	2.5
LV	3.8	4.6	4.6	4.3	4.5	4.3
LT	6.5	6.2	6.3	6.2	6.6	6.3
LU	3.6	4.6	4.5	3.9	4.2	3.8
HU	23.6	24.6	24.6	23.9	24.9	23.9
MT	0.8	0.9	0.9	0.7	0.8	0.9
NL	66.9	71.7	63.8	58.5	60.7	56.1
AT	27.5	32.9	32.3	29.9	31.6	30.2
PL	84.8	96.6	100.2	96.8	104.0	98.6
PT	23.0	22.7	22.1	19.5	19.5	20.8
RO	34.9	32.9	32.1	30.9	33.1	31.0
SI	6.3	7.0	6.5	6.1	6.3	6.2
SK	16.4	17.4	16.0	15.2	16.4	15.4
FI	31.6	35.4	32.1	29.9	31.5	30.2
SE	46.0	48.3	45.8	41.3	43.3	42.5

PRIMARY ENERGY CONSUMPTION 2020-2030 – 1990-2022 (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 2024

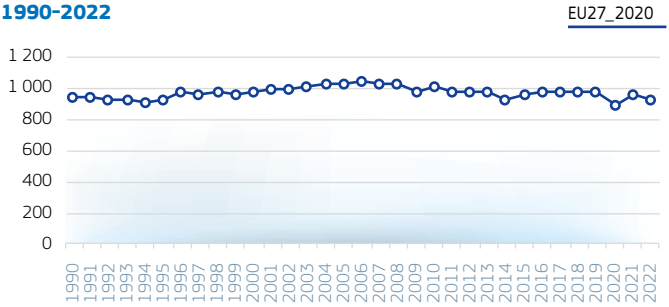
Methodology and Notes: see appendices

2.11.2 Final Energy Consumption 2020-2030*

ALL FUELS

Mtoe	2000	2010	2019	2020	2021	2022
EU27_2020	979.8	1.025.2	986.4	906.3	967.6	940.1
Index2000	100%	105%	101%	92%	99%	96%
BE	37.7	38.2	35.8	33.2	35.9	33.4
BG	9.1	8.8	9.9	9.5	10.2	9.9
CZ	25.1	25.3	25.3	24.5	26.1	24.9
DK	14.7	15.5	14.3	13.1	13.9	13.3
DE	220.2	223.0	214.7	202.3	207.9	202.8
EE	2.4	2.9	2.9	2.7	2.8	2.8
IE	10.8	11.9	12.4	11.2	11.4	12.0
EL	18.7	19.1	16.2	14.4	15.2	16.1
ES	80.0	89.6	86.5	73.8	80.3	81.2
FR	154.8	154.0	145.5	129.7	143.0	138.5
HR	6.0	7.2	6.9	6.5	7.0	6.9
IT	124.8	128.5	115.4	102.7	114.8	111.7
CY	1.6	1.9	1.9	1.6	1.7	1.8
LV	3.3	4.1	4.1	3.9	4.1	4.0
LT	3.8	4.8	5.6	5.3	5.7	5.4
LU	3.5	4.3	4.4	3.8	4.1	3.7
HU	16.2	17.5	18.6	18.0	19.1	18.3
MT	0.4	0.5	0.7	0.5	0.6	0.7
NL	52.4	55.6	49.5	45.1	46.8	43.4
AT	23.7	28.0	28.3	26.1	27.9	26.3
PL	55.1	66.3	73.7	71.1	75.2	72.4
PT	18.0	18.1	17.1	15.0	15.7	16.7
RO	22.7	22.5	23.9	23.5	25.4	24.0
SI	4.6	5.1	4.9	4.4	4.7	4.7
SK	11.0	12.3	11.2	10.4	11.6	10.6
FI	24.4	26.2	25.5	23.4	24.9	23.3
SE	35.0	34.0	31.5	30.5	31.7	30.9

FINAL ENERGY CONSUMPTION 2020-2030 – 1990-2022



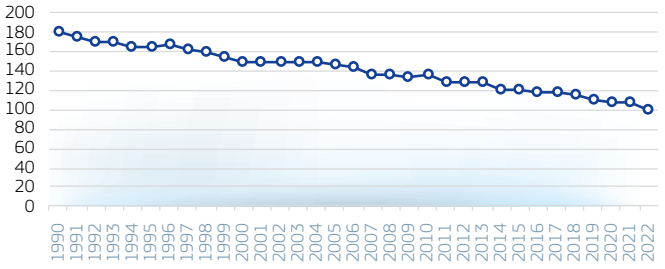
*This indicator should be used also for tracking progress towards Europe 2020/2030 energy efficiency targets. This indicator is in line to the previous Eurostat methodology, which was used to calculate the targets.
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.11.3 Energy Intensity

ALL FUELS

toe/M€ '2015	2000	2010	2019	2020	2021	2022
EU27_2020	147	134	110	107	107	98
Index2000	100%	91%	75%	73%	73%	67%
BE	180	155	126	122	126	112
BG	680	418	361	356	360	351
CZ	363	292	221	219	225	215
DK	82	79	58	55	54	52
DE	134	122	95	91	92	86
EE	375	338	202	187	178	189
IE	100	79	45	39	35	33
EL	154	131	128	123	119	114
ES	142	121	106	105	105	100
FR	139	129	107	103	104	92
HR	239	207	169	175	162	148
IT	105	103	90	90	90	84
CY	173	142	116	105	101	102
LV	269	223	171	166	164	153
LT	363	228	180	176	172	151
LU	100	95	76	67	66	59
HU	306	261	201	206	202	182
MT	134	122	68	63	59	62
NL	135	130	101	99	96	83
AT	104	107	93	93	94	85
PL	352	276	206	204	203	184
PT	146	130	119	116	111	109
RO	398	251	169	170	171	152
SI	225	191	148	146	139	132
SK	410	260	190	190	196	180
FI	185	175	149	143	146	139
SE	145	123	100	92	92	87

ENERGY INTENSITY – 1990-2022
[TOE/M€'2015]



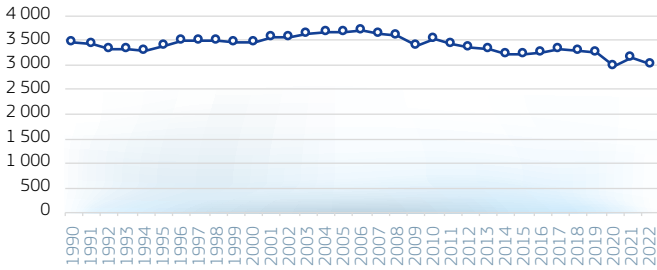
Source: Eurostat, DG Economic and Financial Affairs, April 2024
Methodology and Notes: **see appendices**

2.11.4 Energy consumption per Capita

GROSS INLAND CONSUMPTION (ALL FUELS) PER POPULATION

kgoe/cap	2000	2010	2019	2020	2021	2022
EU27_2020	3496	3539	3267	2996	3180	3031
Index2000	100%	101%	93%	86%	91%	87%
BE	5805	5599	4896	4465	4915	4500
BG	2275	2414	2668	2548	2788	2859
CZ	4017	4346	4031	3770	4073	3981
DK	3658	3673	2992	2752	2907	2836
DE	4168	4135	3712	3425	3564	3391
EE	3360	4443	3711	3384	3464	3644
IE	3804	3311	3053	2773	2853	2899
EL	2589	2549	2196	1908	2014	2086
ES	3065	2799	2702	2362	2488	2519
FR	4227	4171	3749	3322	3577	3239
HR	1883	2201	2156	2046	2154	2203
IT	3066	2988	2598	2374	2601	2508
CY	3511	3370	2998	2571	2689	2842
LV	1623	2183	2421	2286	2419	2347
LT	2093	2254	2792	2732	2843	2542
LU	8433	9250	7405	6339	6653	5931
HU	2468	2655	2733	2676	2813	2662
MT	2080	2266	1826	1479	1547	1758
NL	4934	5198	4415	4136	4249	3818
AT	3652	4171	3925	3633	3829	3609
PL	2332	2672	2793	2712	2956	2837
PT	2476	2306	2326	2079	2092	2182
RO	1637	1725	1710	1667	1786	1663
SI	3301	3544	3231	3025	3103	3022
SK	3284	3419	3122	3013	3259	3058
FI	6336	6875	6200	5814	6092	5857
SE	5384	5402	4860	4336	4545	4377

ENERGY PER CAPITA – 1990-2022 (kgoe/cap)



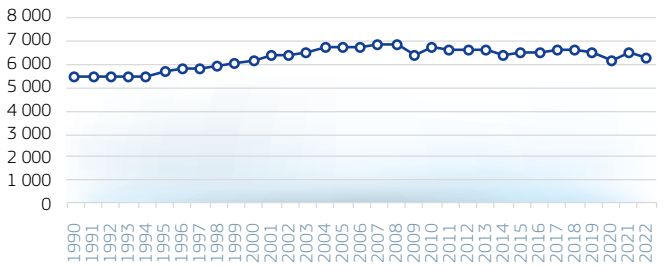
source: Eurostat April 2024
Methodology and Notes: **see appendices**

2.11.5 Final Electricity Consumption per Capita

ALL FUELS

kWh/cap	2000	2010	2019	2020	2021	2022
EU27_2020	6204	6772	6512	6236	6522	6321
Index2000	100%	109%	105%	101%	105%	102%
BE	8205	8725	8175	7764	8695	8259
BG	4996	6286	6325	5863	6877	7384
CZ	7148	8211	8172	7623	8101	8068
DK	6764	7021	5084	4934	5659	5981
DE	7017	7740	7311	6919	7129	6971
EE	6075	9723	5748	4574	5417	6710
IE	6347	6232	6312	6500	6364	6691
EL	4997	5163	4534	4502	5124	5030
ES	5547	6486	5822	5564	5787	6166
FR	8918	8804	8497	7906	8204	6995
HR	2508	3463	3130	3298	3768	3682
IT	4860	5103	4913	4704	4880	4810
CY	4881	6497	5870	5461	5714	5823
LV	1737	3125	3353	3001	3088	2664
LT	3253	1830	1421	1975	1817	1704
LU	2690	9145	3109	3568	3483	3468
HU	3443	3732	3509	3575	3712	3692
MT	4931	5105	4173	4165	4292	4402
NL	5650	7196	7025	7082	6987	6925
AT	7655	8517	8380	8152	7921	7710
PL	3794	4146	4319	4164	4845	4873
PT	4270	5116	5172	5155	4950	4715
RO	2296	3005	3071	2894	3097	2941
SI	6854	8031	7737	8202	7528	6461
SK	5771	5168	5217	5284	5498	4938
FI	13531	15075	12441	12536	13033	13017
SE	16393	15903	16465	15864	16552	16567

FINAL ELECTRICITY CONSUMPTION PER CAPITA – ALL FUELS – 1990-2022 [kwh/cap]



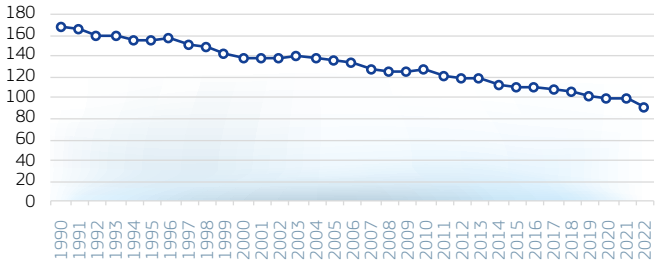
source: Eurostat April 2024
Methodology and Notes: see appendices

2.11.6 Primary Energy Intensity 2020-2030*

ALL FUELS

toe/M€'2015	2000	2010	2019	2020	2021	2022
EU27_2020	137	125	102	98	99	91
Index2000	100%	91%	74%	72%	72%	67%
BE	159	137	108	104	108	97
BG	644	406	348	343	347	340
CZ	344	273	204	205	208	198
DK	81	78	56	53	52	50
DE	124	113	88	84	84	80
EE	363	333	197	179	172	184
IE	95	77	44	38	34	32
EL	150	126	121	115	113	110
ES	131	114	101	99	99	95
FR	130	122	100	95	97	86
HR	221	194	158	163	154	144
IT	100	98	84	84	85	79
CY	167	137	112	101	97	99
LV	264	220	168	163	160	149
LT	323	199	144	143	144	133
LU	99	95	75	66	66	59
HU	287	242	185	188	184	168
MT	134	121	66	61	56	60
NL	115	108	84	80	79	70
AT	98	101	87	86	87	79
PL	335	262	195	192	193	173
PT	132	121	110	106	101	100
RO	377	236	163	163	165	149
SI	217	185	144	141	135	128
SK	378	245	178	175	181	166
FI	179	168	140	134	137	129
SE	140	118	92	85	84	80

PRIMARY ENERGY INTENSITY – ALL FUELS – 1990-2022 (toe/M€'2015)



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

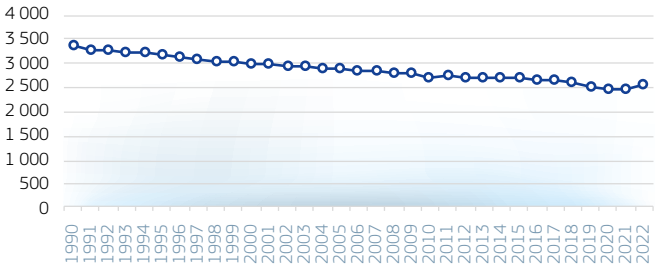
Source: Eurostat, DG Economic and Financial Affairs, April 2024
Methodology and Notes: see appendices **see appendices**

2.11.7 Greenhouse Gas (GHG) Intensity of energy

ALL FUELS

kg CO_2/toe	2000	2010	2019	2020	2021	2022
EU27_2020	3029	2739	2548	2499	2484	2573
Index2000	100%	90%	84%	82%	82%	85%
BE	2584	2270	2173	2159	2021	2082
BG	3103	3350	2934	2734	2831	3021
CZ	3709	3134	2932	2837	2805	2831
DK	3829	3302	2786	2718	2642	2656
DE	3095	2816	2683	2617	2625	2754
EE	3718	3578	2994	2539	2758	2910
IE	4955	4321	4288	4353	4417	4340
EL	4631	4298	3835	3775	3744	3769
ES	3167	2822	2587	2477	2517	2588
FR	2188	1937	1780	1778	1738	1864
HR	3156	3148	3064	3064	2988	3086
IT	3262	3004	2760	2704	2714	2833
CY	3773	3734	3782	3878	3853	3723
LV	2658	2646	2504	2450	2399	2401
LT	2653	2939	2631	2648	2567	2699
LU	2901	2898	2759	2693	2668	2651
HU	3019	2528	2453	2410	2342	2339
MT	3804	3473	2926	2997	2942	2890
NL	2935	2608	2529	2377	2349	2427
AT	2818	2494	2387	2322	2298	2309
PL	4434	4022	3673	3621	3660	3664
PT	3322	2937	2853	2767	2707	2682
RO	3877	3576	3483	3461	3369	3474
SI	2866	2732	2562	2517	2460	2461
SK	2761	2497	2356	2264	2320	2238
FI	2176	2097	1615	1511	1437	1457
SE	1469	1314	1063	1048	1033	1029

GHG INTENSITY OF ENERGY – 1990-2022 (kg CO_2/toe) EU27_2020



Source: EEA, June 2024, Eurostat 2024
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	2021	2022	2005	2015	2021	2022
EU27_2020	10.2%	17.8%	21.9%	23.0%	12.4%	20.3%	22.9%	24.9%
BE	2.3%	8.1%	13.0%	13.8%	3.4%	7.9%	9.2%	10.4%
BG	9.2%	18.3%	19.4%	19.1%	14.3%	28.9%	30.0%	31.7%
CZ	7.1%	15.1%	17.7%	18.2%	10.8%	19.8%	24.3%	25.8%
DK	16.0%	30.5%	41.0%	41.6%	22.6%	39.5%	49.2%	50.1%
DE	7.2%	14.9%	19.4%	20.8%	7.7%	13.4%	15.5%	17.5%
EE	17.5%	29.0%	37.4%	38.5%	32.4%	50.0%	61.3%	65.4%
IE	2.8%	9.1%	12.4%	13.1%	3.4%	6.2%	4.9%	6.3%
EL	7.3%	15.7%	22.0%	22.7%	13.4%	26.6%	31.1%	30.6%
ES	8.4%	16.2%	20.7%	22.1%	9.4%	16.9%	17.4%	20.0%
FR	9.3%	14.8%	19.2%	20.3%	12.4%	18.9%	23.9%	26.3%
HR	23.7%	29.0%	31.3%	29.4%	30.0%	38.6%	38.0%	37.2%
IT	7.5%	17.5%	18.9%	19.1%	8.2%	19.3%	19.3%	20.6%
CY	3.1%	9.9%	19.1%	19.4%	10.0%	24.1%	42.6%	41.6%
LV	32.3%	37.5%	42.1%	43.3%	42.7%	51.7%	57.4%	61.0%
LT	16.8%	25.7%	28.2%	29.6%	29.3%	46.1%	48.6%	51.5%
LU	1.4%	5.0%	11.7%	14.4%	3.6%	6.9%	12.9%	15.4%
HU	6.9%	14.5%	14.1%	15.2%	9.9%	21.3%	17.9%	20.3%
MT	0.1%	5.1%	12.7%	13.4%	1.0%	14.6%	32.8%	38.0%
NL	2.5%	5.7%	13.0%	15.0%	2.4%	5.3%	7.8%	8.6%
AT	24.4%	33.5%	34.6%	33.8%	22.8%	33.2%	33.0%	30.6%
PL	6.9%	11.9%	15.6%	16.9%	10.2%	14.8%	21.0%	22.7%
PT	19.5%	30.5%	34.0%	34.7%	32.1%	40.1%	42.7%	45.5%
RO	17.6%	24.8%	23.9%	24.1%	17.9%	25.9%	24.6%	26.3%
SI	19.8%	22.9%	25.0%	25.0%	26.4%	36.2%	35.2%	34.0%
SK	6.4%	12.9%	17.4%	17.5%	5.0%	10.8%	19.5%	19.9%
FI	28.8%	39.2%	42.9%	47.9%	39.1%	52.6%	52.1%	58.5%
SE	40.0%	52.2%	62.7%	66.0%	49.0%	63.2%	68.8%	69.4%

* 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 2024
Methodology and Notes: **see appendices**

2.12.1 Renewable Energy Shares*

ELECTRICITY AND TRANSPORT

	RES-E -Renewable Electricity Generation [%]				RES-T - Renewable energy in Transport [%]*			
%	2005	2015	2021	2022	2005	2015	2021	2022
EU27_2020	16.4%	29.7%	37.8%	41.2%	1.8%	6.8%	9.1%	9.6%
BE	2.4%	15.6%	26.0%	29.1%	0.7%	3.9%	10.3%	10.4%
BG	8.7%	19.0%	21.4%	20.2%	0.9%	6.5%	7.6%	7.7%
CZ	3.8%	14.1%	14.5%	15.5%	1.1%	6.5%	7.2%	7.2%
DK	24.6%	51.3%	72.9%	77.2%	0.4%	6.4%	10.5%	10.2%
DE	10.6%	30.9%	43.9%	47.6%	4.0%	6.6%	8.1%	9.9%
EE	1.1%	16.2%	29.2%	29.1%	0.2%	0.4%	11.1%	8.5%
IE	7.2%	25.7%	36.4%	36.8%	0.1%	5.9%	4.4%	5.5%
EL	8.2%	22.1%	35.9%	42.4%	0.1%	1.1%	4.4%	4.1%
ES	19.2%	37.0%	46.0%	50.9%	1.3%	1.1%	9.2%	9.7%
FR	13.7%	18.8%	24.8%	27.3%	0.8%	8.4%	8.3%	9.0%
HR	35.2%	45.4%	53.5%	55.5%	1.0%	2.4%	7.0%	2.4%
IT	16.3%	33.5%	36.0%	37.1%	1.0%	6.5%	9.9%	10.1%
CY	0.0%	8.4%	14.8%	17.0%	0.0%	2.5%	7.2%	7.2%
LV	43.0%	52.2%	51.4%	53.3%	2.4%	3.6%	6.4%	3.1%
LT	3.8%	15.5%	21.3%	26.5%	0.7%	4.6%	6.5%	6.7%
LU	3.2%	6.2%	14.2%	15.9%	0.2%	6.7%	8.0%	8.7%
HU	4.4%	7.3%	13.7%	15.3%	1.0%	7.2%	6.2%	7.8%
MT	0.0%	4.3%	9.6%	10.1%	0.0%	4.7%	10.5%	10.5%
NL	6.3%	11.0%	33.3%	39.9%	0.5%	5.6%	9.0%	10.8%
AT	62.9%	71.5%	74.0%	74.7%	5.1%	11.4%	9.5%	10.1%
PL	2.5%	13.4%	17.2%	21.0%	1.7%	5.7%	5.7%	5.8%
PT	27.7%	52.6%	58.4%	61.0%	0.5%	7.4%	8.6%	8.7%
RO	28.8%	43.2%	42.7%	43.7%	1.9%	5.5%	8.9%	8.2%
SI	28.7%	32.7%	35.0%	37.0%	0.8%	2.2%	10.6%	7.8%
SK	15.7%	22.7%	22.4%	22.9%	1.7%	8.6%	8.8%	8.9%
FI	26.9%	32.2%	39.6%	47.9%	0.9%	24.6%	20.7%	18.8%
SE	50.9%	65.7%	75.8%	83.3%	6.6%	21.5%	28.6%	29.2%

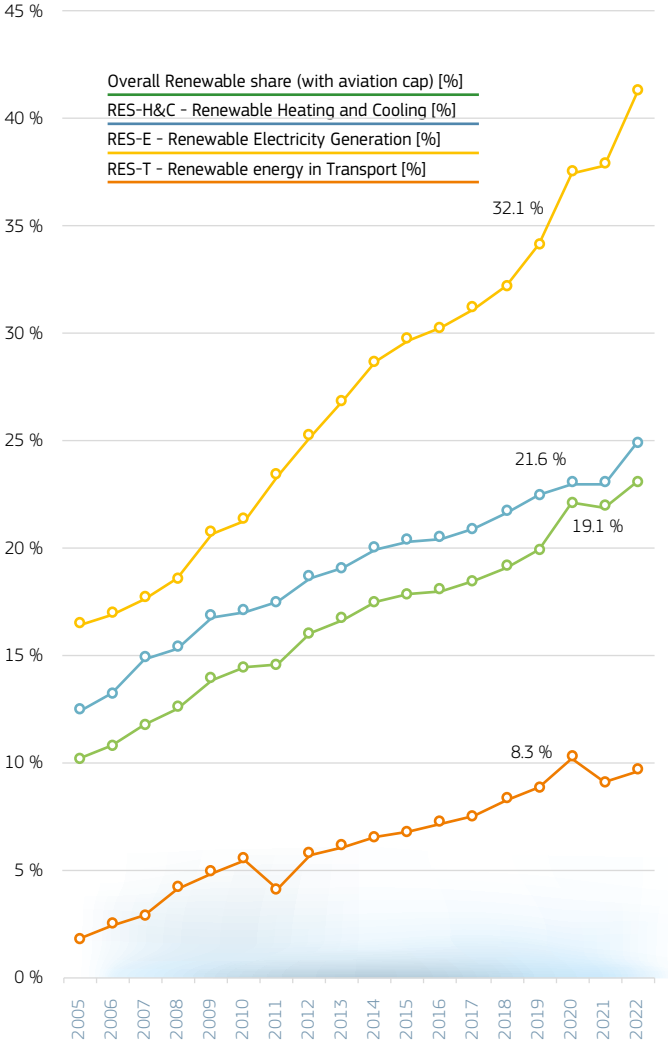
* of the Gross Final Energy

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

source: Eurostat-RES SHARES March 2024
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 2024
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	2019	2021	2022
EU27_2020	1.00	1.15	1.32	1.29	1.75
BE	0.99	1.14	1.44	1.42	1.88
BG		0.98	1.11	0.98	1.44
CZ	0.93	1.21	1.23	1.13	1.71
DK	1.03	1.21	1.39	1.34	1.89
DE	1.06	1.20	1.25	1.31	1.90
EE	0.80	1.10	1.33	1.19	1.70
IE	1.03	1.22	1.32	1.32	1.82
EL	0.89	1.24	1.38	1.30	1.74
ES	0.90	1.07	1.21	1.18	1.67
FR	1.02	1.14	1.44	1.37	1.81
HR			1.32	1.29	1.68
IT	1.11	1.21	1.48	1.42	1.76
CY	0.84	1.00	1.23	1.20	1.61
LV	0.80	1.06	1.20	1.17	1.66
LT	0.82	1.02	1.14	1.10	1.64
LU	0.84	0.99	1.10	1.14	1.68
HU	1.02	1.16	1.23	1.19	1.35
MT	0.88	1.04	1.25	1.21	1.21
NL	1.02	1.15	1.36	1.39	1.91
AT	0.95	1.10	1.21	1.16	1.69
PL	0.92	1.06	1.17	1.12	1.44
PT	0.94	1.15	1.36	1.36	1.77
RO		1.03	1.20	1.08	1.55
SI	0.91	1.15	1.25	1.19	1.50
SK	0.97	1.11	1.23	1.16	1.58
FI	0.97	1.13	1.41	1.45	2.06
SE	1.08	1.25	1.51	1.56	2.29

Source: DG Energy, Member States, Weekly Oil Bulletin
Methodology and Notes: see appendices

2.13.1 Prices of Transport Fuels

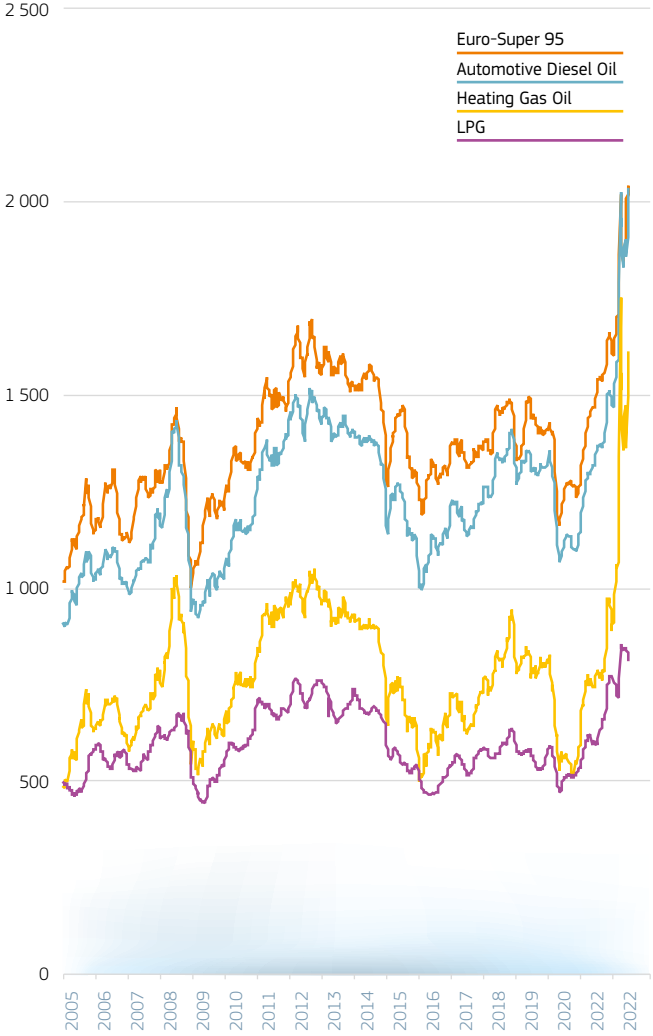
EURO SUPER 95 – ALL TAXES INCLUDED*

Current Prices (€/litre)	2005	2010	2019	2021	2022
EU27_2020	1.13	1.31	1.40	1.43	1.85
BE	1.22	1.40	1.39	1.40	1.82
BG		1.02	1.08	1.00	1.43
CZ	0.95	1.25	1.24	1.19	1.71
DK	1.21	1.44	1.61	1.61	2.10
DE	1.22	1.39	1.42	1.50	1.97
EE	0.80	1.11	1.34	1.35	1.83
IE	1.05	1.30	1.40	1.42	1.86
EL	0.89	1.43	1.59	1.57	2.05
ES	0.96	1.16	1.30	1.31	1.78
FR	1.16	1.34	1.50	1.49	1.88
HR			1.34	1.34	1.65
IT	1.22	1.36	1.57	1.55	1.88
CY	0.86	1.04	1.18	1.17	1.51
LV	0.81	1.09	1.26	1.27	1.76
LT	0.83	1.18	1.20	1.20	1.70
LU	1.02	1.16	1.21	1.25	1.70
HU	1.05	1.22	1.17	1.17	1.28
MT	0.94	1.19	1.38	1.34	1.34
NL	1.35	1.49	1.65	1.73	2.16
AT	1.03	1.19	1.24	1.20	1.70
PL	1.00	1.13	1.16	1.13	1.41
PT	1.15	1.37	1.49	1.55	1.92
RO		1.06	1.16	1.10	1.51
SI	0.92	1.20	1.28	1.15	1.48
SK	0.96	1.25	1.33	1.32	1.68
FI	1.22	1.43	1.52	1.59	2.15
SE	1.18	1.34	1.48	1.53	0.00

Source: DG Energy, Member States, Weekly Oil Bulletin
Methodology and Notes: **see appendices**

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 accesion 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	2019	2020	2021	2022
EU27_2020	15.50	17.22	20.05	19.31	21.72	31.59
BE	14.33	16.78	15.92	13.84	18.78	37.85
BG	9.67	11.98	12.27	9.67	19.65	32.59
CZ	13.11	14.35	16.32	15.51	15.40	29.61
DK	23.64	26.81	21.41	20.74	34.64	57.89
DE	16.35	15.86	16.33	17.21	19.23	26.15
EE	10.07	11.14	12.38	11.43	20.82	30.25
IE	15.29	14.63	21.22	19.49	21.74	42.88
EL			16.30	14.37	28.16	44.41
ES	14.88	15.00	28.35	24.71	30.06	43.71
FR	16.20	15.98	23.31	20.87	21.89	28.01
HR	9.10	10.54	11.28	10.49	11.04	12.50
IT	14.84	21.86	25.96	24.92	27.91	36.38
CY						
LV	10.52	11.28	9.74	7.77	12.01	30.85
LT	11.29	12.59	11.27	8.21	11.38	35.77
LU	12.82	13.13	11.49	10.17	17.76	24.75
HU	13.23	15.38	9.29	8.56	8.47	9.70
MT						
NL	18.73	19.99	26.80	28.05	30.47	53.48
AT	17.23	16.71	18.73	18.23	19.30	34.31
PL	12.78	14.04	12.91	11.65	13.13	15.36
PT	16.52	17.49	21.56	21.74	21.46	35.47
RO	7.45	7.73	9.23	8.90	13.19	35.14
SI	14.96	18.68	15.59	15.26	16.32	26.15
SK	13.21	12.39	13.35	13.33	11.75	13.85
FI						
SE	26.12	29.48	30.69	39.50	57.18	76.41

* All Taxes and levies Included

**Prices from second semester each year

source: Eurostat June 2024
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	2019	2020	2021	2022
EU27_2020	16.77	17.77	21.68	21.32	23.69	28.40
BE	18.64	19.74	28.60	27.02	29.94	44.89
BG	8.18	8.30	9.58	9.82	10.91	11.47
CZ	15.33	15.49	17.70	17.95	18.83	17.21
DK	25.55	27.08	29.24	28.19	34.48	58.71
DE	22.94	24.38	28.78	30.06	32.34	33.57
EE	9.20	10.04	14.11	12.91	19.39	26.50
IE	18.55	18.75	25.46	26.16	29.74	32.25
EL	10.32	12.11	15.51	16.41	19.74	24.38
ES	16.84	18.51	23.94	22.98	28.16	33.50
FR	12.07	13.50	19.13	19.58	20.22	22.04
HR	11.64	11.53	13.24	13.07	13.13	14.79
IT	19.97	19.20	23.41	21.53	23.60	36.41
CY	16.42	20.21	22.36	16.98	23.04	32.61
LV	10.54	10.48	16.40	14.32	18.86	29.92
LT	9.26	12.16	12.54	13.21	14.77	24.29
LU	18.82	17.47	17.99	19.85	19.89	20.42
HU	16.62	15.74	10.97	10.09	10.03	10.84
MT	15.13	16.53	13.04	13.01	13.18	12.84
NL	19.06	17.89	20.55	13.61	14.49	13.50
AT	19.09	19.30	20.74	21.67	22.85	23.70
PL	12.91	13.82	13.76	15.10	15.74	16.04
PT	15.94	16.66	21.81	21.33	21.70	22.22
RO	9.79	10.52	14.21	14.49	16.02	34.11
SI	13.41	14.26	16.66	16.94	17.11	19.56
SK	15.60	16.37	15.85	17.24	16.24	18.84
FI	12.89	13.70	17.83	17.73	18.40	24.74
SE	16.46	19.58	20.52	20.17	26.04	27.40

* All Taxes and levies Included

**Prices from second semester each year

source: Eurostat June 2024
Methodology and Notes: see appendices

2.13.3 Fuel Prices*– Industrial Consumers

GAS - BAND I3

10 000 GJ < CONSUMPTION < 100 000 GJ

2ND SEMESTER**

€/GJ (GCV)	2009	2010	2019	2020	2021	2022
EU27_2020	8.61	9.42	8.53	7.73	11.55	22.55
BE	8.50	8.20	6.32	5.76	9.45	17.67
BG	5.96	8.41	7.75	5.60	14.11	32.82
CZ	7.56	10.07	7.95	7.01	9.12	22.82
DK	6.85	10.72	8.38	8.19	21.99	38.28
DE	9.61	11.09	8.32	8.02	10.54	17.03
EE	6.39	7.85	9.26	6.88	18.61	37.24
IE	7.31	8.80	8.94	8.73	15.49	22.83
EL			9.28	5.92	13.87	35.89
ES	7.53	8.08	8.53	6.52	9.38	29.07
FR	8.80	9.69	10.22	9.71	14.00	20.37
HR	7.43	10.95	8.32	7.51	10.61	22.76
IT	7.83	8.34	8.22	7.23	11.17	31.33
CY						
LV	7.69	8.84	7.76	5.89	12.53	39.92
LT	7.55	9.40	7.63	5.91	19.97	33.56
LU	10.03	11.72	7.90	7.88	12.67	31.46
HU	10.06	9.93	7.60	6.14	12.83	43.35
MT						
NL	9.72	8.62	7.90	7.72	12.47	19.53
AT	9.07	9.78	8.60	8.31	13.24	23.39
PL	8.36	9.02	9.33	8.09	11.43	26.74
PT	7.22	9.28	8.70	6.73	9.37	27.94
RO	5.93	6.11	8.76	6.78	12.15	41.05
SI	9.61	11.81	9.40	8.74	12.74	22.46
SK	8.91	10.22	9.92	8.88	9.13	21.64
FI	8.00	9.13	15.41	13.62	28.03	50.42
SE	12.47	13.43	13.68	14.97	28.47	46.17

* Excluding VAT and other recoverable taxes and levies

**Prices from second semester each year

source: Eurostat June 2024

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	2019	2020	2021	2022
EU27_2020	10.11	10.42	11.90	12.51	14.42	21.04
BE	10.79	10.54	11.52	11.85	14.39	23.67
BG	6.39	6.64	8.68	8.43	15.64	17.94
CZ	11.22	10.81	7.84	8.42	9.05	18.40
DK	9.20	9.61	6.81	6.86	11.64	22.78
DE	11.34	11.90	16.08	18.18	18.60	20.56
EE	6.45	7.27	9.15	8.73	15.26	25.86
IE	11.75	11.31	13.28	13.39	18.81	28.76
EL	9.36	10.26	10.84	10.59	22.38	24.57
ES	11.20	10.93	11.04	11.75	14.59	22.02
FR	6.48	7.16	9.50	9.54	10.18	12.67
HR	9.04	9.04	10.55	10.23	11.42	23.91
IT	13.70	14.43	16.16	15.14	18.53	33.72
CY	14.94	17.30	18.00	13.64	19.46	31.62
LV	8.93	9.07	10.70	10.55	13.51	21.57
LT	7.90	10.46	9.45	10.26	13.96	32.97
LU	11.58	10.24	9.04	9.38	9.74	15.12
HU	12.97	10.53	9.54	9.40	10.32	22.49
MT	12.91	18.10	13.55	13.42	14.01	13.48
NL	10.61	9.70	8.99	10.35	12.38	18.02
AT	11.62	11.28	10.88	11.84	12.78	17.86
PL	9.33	9.87	8.28	10.77	11.04	17.02
PT	9.44	9.20	11.59	11.14	11.86	13.59
RO	8.28	8.08	10.14	10.19	12.93	35.73
SI	9.62	10.05	9.53	9.76	9.99	19.68
SK	14.03	11.98	13.17	13.16	13.45	24.29
FI	6.83	6.83	7.21	7.59	8.00	11.50
SE	6.89	8.41	6.94	6.72	9.82	15.25

* Excluding VAT and other recoverable taxes and levies

**Prices from second semester each year

source: Eurostat June 2024
Methodology and Notes: see appendices

3 Socio-Economic indicators in the EU

3 Socio-Economic Indicators in the EU

Summary

3.1 Classification of the Energy Sector *

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

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

	2019	2020	2021
B05 - Mining of coal and lignite	*245*	146	*140*
B06 - Extraction of crude petroleum and natural gas	207	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	860	876	*780*
D35 - Electricity, gas, steam and air conditioning supply	173000	166164	*174296*
D351 - Electric power generation, transmission and distribution	160000	155000	*162138*
D3511 - Production of electricity	153086	145912	*153086*
D3512 - Transmission of electricity		597	*649*
D3513 - Distribution of electricity	2598	2868	*2598*
D3514 - Trade of electricity	5165	5275	*5165*
D352 - Manufacture of gas; distribution of gaseous fuels through mains		5550	*5472*
D3521 - Manufacture of gas	4020	4213	*4020*
D3522 - Distribution of gaseous fuels through mains		572	*535*
D3523 - Trade of gas through mains	738	735	*645*
D353 - Steam and air conditioning supply	6060	5960	*6014*
D3530 - Steam and air conditioning supply	6060	5960	*6014*
Broad sector - no. of enterprises reported	176148	169394	*177377*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
Methodology and Notes in the annexes

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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020		163	146	*140*	245	207	202	*246*
BE	0	0	0	*0*	0	0	0	*0*
BG	22	17	16	*16*	4	4	4	*4*
CZ	12	9	8	*8*	5	5	5	*5*
DK	0	0	0	*0*	12	14	14	*14*
DE	7	7	2	*7*	4	5	9	*5*
EE	0	0	0	*0*	2	2	2	*2*
IE				*0*				
EL	12	10	10	*7*				*3*
ES	81	64	64	*51*	19			*11*
FR	1	0		*0*				*18*
HR	0	0	0	*0*	4	2	0	*0*
IT	0	0	0	*0*	12	11	12	*11*
CY	0	0	0	*0*	0	0	0	*0*
LV	0	0	0	*0*	2	1	1	*1*
LT	0	0	0	*0*	4	5	5	*5*
LU	0	0	0	*0*	0	0	0	*0*
HU	14	11	4	*4*	8	11	10	*10*
MT	0	0	0	*0*	0	0	0	*0*
NL	0	0	0	*0*	41	47	39	*39*
AT	0	0	0	*0*	2	2	2	*2*
PL	62	41	34	*33*	62	20	23	*23*
PT	0	0	0	*0*	0	0	0	*0*
RO	27	15	13	*13*	38	25	22	*25*
SI	1	1	1	*1*	1	2	2	*2*
SK				*0*				*0*
FI	0	0	0	*0*	0	0	0	*0*
SE	0	0	0	*0*	0	0	0	*0*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020	*991*		964	*940*	*559*	*1002*	1040	*1022*
BE	0	0		*0*		12	9	*0*
BG	4				14	10	7	*9*
CZ	17	10	9	*10*	6	6	6	*7*
DK	2	2	2	*2*	55	76	70	*6*
DE	91	70	87	*70*		59	75	*70*
EE	41	40	39	*40*	0	0	1	*59*
IE			39		35	36	36	*0*
EL			0		9	5	7	*43*
ES	7	6	10	*6*	46	46	38	*4*
FR	39	8	7	*8*	54	25	20	*38*
HR	0	0	0	*0*	4	4	4	*20*
IT	4				52	36		*4*
CY	0	0	0	*0*				*30*
LV	91	97	140	*97*	2	2	0	
LT	26	24	21	*24*	0	0	0	*0*
LU	0	0	0	*0*	0	0	0	*0*
HU	13	12	12	*12*	37	38	30	*0*
MT	0	0	0	*0*				*31*
NL	6	6	6	*6*	251	347	394	*11*
AT	5	3	4	*3*	7	7	7	*394*
PL	32	43	40	*43*	104	151	146	*7*
PT	1	1	1	*1*	4	9	6	*146*
RO	5	4	3	*4*	106	100	97	*5*
SI	0	0	0	*0*	2	4	2	*100*
SK	42	67	53					*2*
FI	450	445	433	*445*	0	0	0	
SE	70	54	53	*54*	63	41	36	*0*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020	866	860	876	*780*	96893	173000	166164	*174296*
BE		17	15	*15*	851	726	774	*734*
BG	11	10	12	*12*	1745	1625	1926	*2027*
CZ	25	22	23	*24*	10996	11894	12025	*11907*
DK	3	6	8	*8*	1745	1561	1400	*1516*
DE	54	89	93	*86*	2059	72797	62531	*72797*
EE	5	6	6	*6*	230	248	348	*346*
IE					515	663	760	*677*
EL	40	35	37	*34*	7036	7760	9237	*7544*
ES	14			*15*	14044	15003	14362	*14052*
FR	43	21	17	*18*	27062	29113	29904	*29717*
HR	14	9	8	*8*	573	599	565	*569*
IT	281	259	294	*250*	10775	9423	9454	*9423*
CY		3	3	*3*	58	95	87	*93*
LV	16	14	10	*10*	533	522	506	*503*
LT	9	7	6	*6*	1488	1338	1316	*1252*
LU	0	0	0	*1*	80	94	110	*97*
HU	8	8	6	*6*	610	1145	1325	*1258*
MT					3		14	*14*
NL	45	38	46	*46*	1130	1731	2112	*2112*
AT	5	5	5	*5*	2390	2352	2429	*2200*
PL	176	133	121	*123*	3192	3581	3922	*3938*
PT	18	20	17	*17*	1209	4501	4890	*5342*
RO	44	49	47	*46*	1460	1039	1038	*1073*
SI	4	3	3	*3*	1530	1375	1365	*1362*
SK					451	597	637	*592*
FI	17	14	16	*16*	907	952	981	*987*
SE	34	25	21	*22*	4221	2190	2146	*2164*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
Methodology and Notes in the annexes

3.2.2 Turnover in the Energy Sector

TURNOVER
ENTERPRISES SURVEY
EU27_2020

Mio €	2019	2020	2021
B05 - Mining of coal and lignite		5756	*6022*
B06 - Extraction of crude petroleum and natural gas	29951	18571	*17884*
B0721 - Mining of uranium and thorium ores			
B0892 - Extraction of peat	1738	*1725*	*1380*
B091 - Support activities for petroleum and natural gas extraction	3176	5283	*3213*
C19 - Manufacture of coke and refined petroleum products	461595	306897	*427128*
D35 - Electricity, gas, steam and air conditioning supply	1470000	1310000	*1334919*
D351 - Electric power generation, transmission and distribution	1221016	1095775	*1107358*
D3511 - Production of electricity	535685	458001	*366809*
D3512 - Transmission of electricity	77963	81611	*69407*
D3513 - Distribution of electricity	140798	137481	*123809*
D3514 - Trade of electricity	466570	418682	*394746*
D352 - Manufacture of gas; distribution of gaseous fuels through mains	210000	183353	*174321*
D3521 - Manufacture of gas	2418	3238	*2759*
D3522 - Distribution of gaseous fuels through mains	30962	25846	*21512*
D3523 - Trade of gas through mains	178746	154268	*139454*
D353 - Steam and air conditioning supply	36074	31500	*30261*
D3530 - Steam and air conditioning supply	36074	31500	*34267*
Broad sector - turnover reported	1966460	1648231	*1790545*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020			5756	*6022*	84723	29951	18571	*17884*
BE	0	0	0	*0*	0	0	0	*0*
BG	349				30			
CZ	1578	1336	1045	*1000*				
DK	0	0	0	*0*	3896	1815	1097	*1437*
DE	2162		1266	*1306*	2978	13720		*5500*
EE	0	0	0	*0*	245	203	134	*149*
IE								
EL	93			*40*				*65*
ES	236			*17*	126			*232*
FR	0	0		*0*				
HR	0	0	0	*0*			0	*0*
IT	0	0	0	*0*	46395	4840	3233	*3625*
CY	0	0	0	*0*	0	0	0	*0*
LV	0	0	0	*0*				
LT	0	0	0	*0*	39	32	18	*18*
LU	0	0	0	*0*	0	0	0	*0*
HU	9		3	*3*	33	207	132	*145*
MT	0	0	0	*0*	0	0	0	*0*
NL	0	0	0	*0*	26735	14369	8439	*6113*
AT	0	0	0	*0*				
PL	5755	4686	3761	*3649*		133		
PT	0	0	0	*0*	0	0	0	*0*
RO	21	10	12	*8*	4246	1478	913	*598*
SI								
SK								
FI	0	0	0	*0*	0	0	0	*0*
SE					0	0	0	*0*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020	*1 700*	1 738	*1 725*	*1 380*	4 455	3 176	5 283	*3 213*
BE	0	0		*0*		0	2	
BG					0			
CZ	7	3	3	*3*				
DK					633	1 288	601	*787*
DE	400	413	445	*459*		366	903	*932*
EE	84			*90*	0	0		*0*
IE			13		10	22	15	*21*
EL			0		29	24	0	*0*
ES	10	11	12	*13*	99	64	46	*52*
FR	52	44	46	*49*	266	314		*322*
HR	0	0	0	*0*		0		
IT	5			*5*	2 238	423		*338*
CY	0	0	0	*0*				
LV	151	204		*204*			0	*0*
LT	61				0	0	0	*0*
LU	0	0	0	*0*	0	0	0	*0*
HU	5	6	5	*6*	133	34	24	*26*
MT	0	0	0	*0*				
NL								
AT								
PL		68	80		326		294	*285*
PT							1	*1*
RO	1	3	3	*2*	638	633	519	*340*
SI	0	0	0	*0*		2		
SK	12	17	1					
FI	472	455		*455*	0	0	0	*0*
SE	29	17	17	*16*	84	5	4	*3*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020	*482002*	461595	306897	*427128*	*1077493*	1470000	1310000	*1334919*
BE		41444	24477	*50226*	36969	26439	28457	*30246*
BG		4045	1973		8357	8500	7963	*10530*
CZ					40927	52990	46185	*47154*
DK					21487	42620	30667	*32819*
DE	107408	102265	74438	*100748*	537677	625119	582226	*594820*
EE	254	305	246	*192*	1765	1966	1862	*1795*
IE					8013	10639	9527	*7277*
EL	14818	16689	11001	*22040*	19684	14829	15316	*16999*
ES	36051			*33460*	93787	93728	80773	*74781*
FR	39383	41865	25878	*19172*	110123	120099	111765	*113606*
HR					4359	3584	3966	*3996*
IT	35596	50198	30291	*64912*	195056	217027	157691	*163622*
CY		4	4		630	857	689	*775*
LV	8				2082	2071	1771	*1826*
LT					2376	2607	2426	*2464*
LU	0	0	0		4647	3879	3479	*3034*
HU	6529	9056	6760	*9332*	16727	15797	12161	*10391*
MT								*653*
NL	34362	35684	23112	*24814*	31409	30793	29241	*30906*
AT	7226	9647	6232	*5586*	35906	47682	43530	*41317*
PL	27045	34748	25526	*27394*	47826	52537	52712	*56915*
PT	7131	8105	4671	*15690*	21119	21379	19314	*19867*
RO	3374	12247	9567	*20023*	13175	13872	13506	*10522*
SI			1		6076	7263	7011	*6231*
SK					11284	12725	12156	*16190*
FI					12422	14524	13242	*13076*
SE	11225	11948	8279	*15158*	26220	25472	22368	*23107*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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

	2019	2020	2021
B05 - Mining of coal and lignite	113936	111829	*84127*
B06 - Extraction of crude petroleum and natural gas	16340	18800	*13656*
B0721 - Mining of uranium and thorium ores			
B0892 - Extraction of peat	*0*	9129	*150*
B091 - Support activities for petroleum and natural gas extraction	*0*	*0*	*14855*
C19 - Manufacture of coke and refined petroleum products	*0*	*0*	*133780*
D35 - Electricity, gas, steam and air conditioning supply	1300000	1310000	*1366966*
D351 - Electric power generation, transmission and distribution	1068927	1060015	*1023364*
D3511 - Production of electricity	453076	461664	*482025*
D3512 - Transmission of electricity	39330	39357	*40835*
D3513 - Distribution of electricity	202611	194209	*206381*
D3514 - Trade of electricity	135247	120950	*129320*
D352 - Manufacture of gas; distribution of gaseous fuels through mains	91980	100137	*102266*
D3521 - Manufacture of gas	10766	12068	*12390*
D3522 - Distribution of gaseous fuels through mains	33070	35510	*35812*
D3523 - Trade of gas through mains	21512	25250	*25680*
D353 - Steam and air conditioning supply	137029	136151	*140870*
D3530 - Steam and air conditioning supply	135799	134979	*139739*
Broad Sector - Employment Reported	1430276	1449758	*1613533*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020	148224	113936	111829	*84127*	56621	16340	18800	*13656*
BE	0	0	0	*0*	0	0	0	*0*
BG	11995							
CZ	18716	13676	12450	*10351*				
DK	0	0	0	*0*	1051	1565	1312	*1313*
DE	17468				3927			
EE	0	0	0	*0*	3043	2197	1523	*1523*
IE								
EL	316			*273*				*355*
ES	1684			*276*	368			*196*
FR	2	0						
HR	0	0	0	*0*	7852	50	0	*0*
IT	0	0	0	*0*	12681	2189	1767	*1488*
CY	0	0	0	*0*	0	0	0	*0*
LV	0	0	0	*0*	20	12	13	*13*
LT	0	0	0	*0*	212	137	109	*109*
LU	0	0	0	*0*	0	0	0	*0*
HU	124		54	*54*	68	129	114	*114*
MT	0	0	0	*0*	0	0	0	*0*
NL	0	0	0	*0*	3913	2933	2851	*3224*
AT	0	0	0	*0*				
PL	96076	84324	84528	*72937*		562		
PT	0	0	0	*0*	0	0	0	*0*
RO	1843	548	261	*235*	23486	6566	6436	*5320*
SI								
SK								*0*
FI	0	0	0	*0*	0	0	0	*0*
SE					0	0	0	*0*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020	8827		9129	*150*	19503			*14855*
BE	0	0		*0*		12	9	
BG	55				25	16	12	*12*
CZ	71	40	36	*36*				
DK					1587	2045	1875	*1835*
DE	1762	1654	1667	*1654*		1553	2459	*1525*
EE	963				0	0		*0*
IE			75		29	112	53	*115*
EL			0		276	100	4	*80*
ES	36	40	42	*39*	191	124	119	*152*
FR	130		127	*177*	386	457		
HR	0	0	0	*0*	2273	5	5	*5*
IT	21				2188	1580		*1527*
CY	0	0	0	*0*				
LV	2158	2200	2343	*2200*	2	1	0	*0*
LT	1149				0	0	0	*0*
LU	0	0	0	*0*	0	0	0	*0*
HU	97	63	69	*62*	1062	271	216	*217*
MT	0	0	0	*0*				
NL	104	239	243	*239*				
AT								
PL		671	658		4638		3913	*3990*
PT							10	*11*
RO	25	48	45	*59*	6771	5306	5564	*5127*
SI	0	0	0	*0*				
SK	114	112	54					
FI	1977	1923		*1923*	0	0	0	*0*
SE	165	98	87	*98*	75	49	48	*48*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
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)			
	2015	2019	2020	2021	2015	2019	2020	2021
EU27_2020	82452			*133780*	1090709	1300000	1310000	*1366966*
BE		5999	6222	*7351*	20293	22460	21506	*23179*
BG	2078	2460	2474	*2474*	31751	31525	31435	*28473*
CZ					34536	40468	40271	*39445*
DK					13815	11330	12944	*12076*
DE	22302	22401	21901	*21946*	224669	387355	381463	*411043*
EE	1679	1270	1193	*1193*	4949	4834	4814	*4646*
IE					8846	9562	10918	*11543*
EL	3588	5404	5129	*3782*	25764	31556	30711	*33583*
ES	8453			*13061*	39764	47311	44858	*47226*
FR					190364	211814	198695	*195585*
HR	262	9594	9006	*9006*	14893	14685	14663	*15007*
IT	11065	11881	11791	*8286*	89109	90618	90001	*87708*
CY		38	38		2130	2219	2229	*2356*
LV	65	55	26	*26*	11344	9882	9657	*10430*
LT					13522	12220	11999	*13755*
LU	0	0	0		1529	1771	1828	*1835*
HU	5691	11712	10548	*9025*	24601	27807	32820	*37803*
MT					10			*226*
NL	5299	5647	5579	*5091*	27969	28737	29645	*41253*
AT	1180	2217	2516	*2512*	29168	32186	32873	*30951*
PL	13495	20864	21024	*19717*	128183	152010	151869	*165366*
PT	1830	1871	1872	*1846*	9589	13357	13852	*11017*
RO	2560	20489	18877	*20682*	72333	65342	64456	*65753*
SI	26				8958	8637	8659	*7956*
SK					17873	17597	17299	*18891*
FI					13368	13665	14206	*12734*
SE	2879	3385	3182		31379	35920	36134	*37127*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2024
Methodology and Notes in the annexes

3.3 Economy

3.3.1 GDP at Current Market Prices

Mrd EUR*	2005	2010	2015	2020	2021	2022
EU27_2020	9559.5	10984.8	12234.2	13502.2	14690.0	15989.8
BE	310.0	363.1	416.7	460.5	508.1	554.2
BG	24.0	38.3	45.8	61.6	71.1	85.8
CZ	110.4	159.5	170.5	220.3	246.0	287.0
DK	213.4	243.4	272.2	312.1	345.2	382.3
DE	2288.3	2564.4	3026.2	3403.7	3617.5	3876.8
EE	11.3	14.7	20.6	27.4	31.2	36.0
IE	170.3	167.4	272.5	382.2	449.2	520.9
EL	199.2	224.1	176.4	165.0	181.5	206.6
ES	927.4	1072.7	1078.1	1119.0	1222.3	1346.4
FR	1762.0	1996.1	2201.4	2318.3	2508.1	2655.4
HR	36.8	45.9	45.5	50.9	58.9	68.4
IT	1493.6	1611.3	1655.4	1661.2	1821.9	1962.8
CY	15.0	19.5	17.9	22.1	24.9	27.8
LV	13.8	17.9	24.6	30.1	33.3	38.4
LT	21.0	28.0	37.3	49.9	56.5	67.4
LU	30.3	42.4	54.1	64.5	72.4	77.5
HU	91.1	99.8	112.8	137.9	154.0	168.5
MT	5.2	6.8	10.0	13.4	15.3	17.4
NL	553.1	643.0	699.2	816.5	891.6	993.8
AT	254.1	295.9	344.3	380.9	405.2	447.2
PL	246.2	359.1	429.8	526.1	576.4	656.2
PT	158.6	179.6	179.7	200.5	216.1	242.3
RO	79.2	128.3	160.3	220.5	241.6	284.2
SI	29.1	36.4	38.9	47.0	52.3	57.0
SK	39.4	68.8	80.1	93.4	100.2	109.8
FI	164.7	188.1	211.4	238.0	250.7	267.7
SE	315.3	372.4	452.4	478.9	538.6	551.8

* Units in Milliard - Long Scale = 1000 Million €
Source: DG Economic and Financial Affairs, AMECO, April 2024
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	2020	2021	2022
EU27_2020	22.0	24.9	27.6	30.2	32.9	35.8
BE	29.7	33.5	37.1	40.0	44.0	47.7
BG	3.1	5.2	6.5	9.4	10.9	13.2
CZ	10.8	15.2	16.2	20.6	23.4	27.3
DK	39.4	44.0	48.1	53.6	59.1	65.1
DE	27.7	31.3	37.3	40.9	43.5	46.6
EE	8.3	11.1	15.7	20.6	23.4	27.0
IE	41.4	36.8	58.3	77.0	89.7	103.0
EL	18.2	20.2	16.2	15.4	17.0	19.8
ES	21.4	23.1	23.2	23.6	25.8	28.4
FR	28.1	30.9	33.1	34.4	37.0	39.1
HR	8.5	10.7	10.9	13.0	15.1	17.7
IT	25.7	27.0	27.5	27.9	30.8	33.3
CY	20.5	23.8	21.2	24.9	27.8	30.7
LV	6.1	8.5	12.4	15.8	17.6	20.5
LT	6.3	8.9	12.7	17.7	20.1	24.0
LU	65.7	84.5	96.2	103.1	114.0	120.1
HU	9.0	10.0	11.4	14.1	15.8	17.4
MT	12.8	16.5	22.7	26.0	29.7	33.5
NL	33.9	38.8	41.4	46.9	51.0	56.5
AT	31.0	35.4	40.1	42.8	45.4	49.8
PL	6.4	9.4	11.3	13.9	15.5	17.8
PT	15.1	17.0	17.3	19.5	21.0	23.4
RO	3.7	6.3	8.1	11.4	12.6	14.9
SI	14.6	17.8	18.8	22.4	24.8	27.1
SK	7.3	12.8	14.8	17.1	18.4	20.2
FI	31.4	35.2	38.6	43.1	45.3	48.2
SE	35.0	39.9	46.4	46.4	51.9	52.8

* 1000 €' per Capita
Source: DG Economic and Financial Affairs, AMECO, April 2024
Source: Eurostat, Demography and migration, April 2024
Methodology and Notes in the annexes

3.3.3 GDP at 2015 Market Prices

GDP AT 2015 MARKET PRICES

Mrd EUR*	2005	2010	2015	2020	2021	2022
EU27_2020	11075.8	11639.2	12234.2	12580.6	13349.3	13808.0
BE	362.9	390.6	416.7	422.6	451.9	465.5
BG	36.1	42.9	45.8	49.7	53.6	55.7
CZ	139.5	157.4	170.5	185.5	193.0	198.5
DK	254.3	256.3	272.2	294.2	315.9	320.8
DE	2624.6	2783.2	3026.2	3118.2	3216.8	3274.9
EE	17.9	17.5	20.6	24.1	25.8	25.7
IE	189.7	193.3	272.5	367.5	427.3	464.1
EL	219.7	216.1	176.4	166.7	180.6	190.7
ES	1028.7	1079.0	1078.1	1060.0	1127.9	1192.9
FR	1990.0	2085.2	2201.4	2175.7	2325.5	2385.2
HR	44.3	45.7	45.5	47.5	53.7	57.5
IT	1737.6	1712.8	1655.4	1573.7	1704.5	1772.4
CY	17.1	19.5	17.9	21.8	23.9	25.1
LV	21.2	20.7	24.6	26.2	28.0	28.8
LT	29.2	31.0	37.3	43.4	46.2	47.3
LU	42.4	48.7	54.1	59.4	63.7	64.6
HU	102.5	101.9	112.8	126.8	135.8	142.0
MT	6.6	7.7	10.0	12.1	13.6	14.7
NL	623.8	668.8	699.2	740.2	786.7	826.1
AT	306.1	326.7	344.3	348.3	363.1	380.6
PL	294.1	368.6	429.8	504.5	539.5	569.9
PT	182.0	187.4	179.7	183.8	194.3	207.6
RO	121.5	139.7	160.3	189.2	200.0	208.2
SI	34.7	38.1	38.9	43.5	47.1	48.3
SK	55.3	70.9	80.1	86.7	90.8	92.5
FI	201.1	210.6	211.4	224.2	230.6	233.6
SE	376.1	407.7	452.4	482.8	511.5	519.0

*Units in Milliard - Long Scale = 1000 Millions Euro
Source: DG Economic and Financial Affairs, AMECO, April 2024
Source: Eurostat, Demography and migration, April 2024
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	2020	2021	2022
EU27_2020	25.5	26.4	27.6	28.1	29.9	30.9
BE	34.7	36.0	37.1	36.7	39.1	40.1
BG	4.7	5.8	6.5	7.6	8.2	8.6
CZ	13.7	15.0	16.2	17.3	18.4	18.9
DK	47.0	46.3	48.1	50.5	54.1	54.6
DE	31.8	34.0	37.3	37.5	38.7	39.3
EE	13.1	13.1	15.7	18.1	19.4	19.3
IE	46.1	42.5	58.3	74.0	85.3	91.7
EL	20.0	19.4	16.2	15.5	16.9	18.2
ES	23.8	23.2	23.2	22.4	23.8	25.2
FR	31.7	32.2	33.1	32.2	34.3	35.1
HR	10.3	10.6	10.9	12.1	13.8	14.9
IT	29.9	28.7	27.5	26.4	28.8	30.0
CY	23.3	23.8	21.2	24.5	26.7	27.8
LV	9.4	9.8	12.4	13.7	14.8	15.4
LT	8.7	9.9	12.7	15.4	16.4	16.9
LU	92.0	97.0	96.2	94.9	100.4	100.1
HU	10.2	10.2	11.4	13.0	14.0	14.7
MT	16.4	18.6	22.7	23.5	26.4	28.3
NL	38.3	40.3	41.4	42.5	45.0	47.0
AT	37.3	39.1	40.1	39.1	40.6	42.4
PL	7.7	9.7	11.3	13.3	14.6	15.4
PT	17.3	17.7	17.3	17.8	18.9	20.1
RO	5.7	6.9	8.1	9.8	10.4	10.9
SI	17.4	18.6	18.8	20.8	22.3	22.9
SK	10.3	13.1	14.8	15.9	16.6	17.0
FI	38.4	39.4	38.6	40.6	41.7	42.1
SE	41.7	43.6	46.4	46.8	49.3	49.7

* 1000 €' 2010 per Capita
Source: DG Economic and Financial Affairs, AMECO, April 2024
Source: Eurostat, Demography and migration, April 2024
Methodology and Notes in the annexes

3.4 Demography

3.4.1 Population

POPULATION ON 1ST JANUARY

1000 Inhabitants	2005	2010	2015	2020	2021	2022
EU27_2020	434416.3	440660.4	443666.8	447319.9	447073.9	446820.4
BE	10445.9	10839.9	11237.3	11522.4	11554.8	11617.6
BG	7688.6	7421.8	7029.7	6569.3	6532.1	6482.5
CZ	10198.9	10462.1	10538.3	10693.9	10494.8	10516.7
DK	5411.4	5534.7	5659.7	5822.8	5840.0	5873.4
DE	82500.8	81802.3	81197.5	83166.7	83155.0	83237.1
EE	1358.9	1333.3	1314.9	1329.0	1330.1	1331.8
IE	4111.7	4549.4	4677.6	4964.4	5006.3	5060.0
EL	10969.9	11119.3	10858.0	10718.6	10678.6	10459.8
ES	43296.3	46486.6	46449.6	47332.6	47398.7	47432.9
FR	62772.9	64658.9	66458.2	67473.7	67728.6	67957.1
HR	4310.9	4302.8	4180.9	3933.5	3893.0	3862.3
IT	58044.4	59690.3	60295.5	59641.5	59236.2	59030.1
CY	733.1	819.1	847.0	888.0	896.0	904.7
LV	2249.7	2120.5	1986.1	1907.7	1893.2	1875.8
LT	3355.2	3142.0	2947.9	2812.2	2810.0	2806.0
LU	461.2	502.1	563.0	626.1	634.7	645.4
HU	10097.5	10014.3	9855.6	9769.5	9730.8	9689.0
MT	402.7	414.0	439.7	514.6	516.1	521.0
NL	16305.5	16575.0	16900.7	17407.6	17475.4	17590.7
AT	8201.4	8351.6	8584.9	8901.1	8932.7	8978.9
PL	38173.8	38022.9	38005.6	37958.1	37073.4	36889.8
PT	10494.7	10573.5	10374.8	10295.9	10298.3	10352.0
RO	21382.4	20294.7	19870.6	19328.8	19201.7	19042.5
SI	1997.6	2047.0	2062.9	2095.9	2109.0	2107.2
SK	5372.7	5390.4	5421.3	5457.9	5459.8	5434.7
FI	5236.6	5351.4	5471.8	5525.3	5533.8	5548.2
SE	9011.4	9340.7	9747.4	10327.6	10379.3	10452.3

Source: Eurostat, Demography and migration, April 2024

Methodology and Notes in the annexes

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	251.1	248.3	210.5
B06 - Extraction of crude petroleum and natural gas	64.3	54.8	57.4	56.6
B0892 - Extraction of peat*	*0.0*	9.1	*0.2*	*0.2*
B091 - Support activities for petroleum and natural gas extraction*	*0.0*	*0.0*	14.9	*14.9*
C19 - Manufacture of coke and refined petroleum products	*160.7*	*165.6*	159.3	144.4
D35 - Electricity, gas, steam and air conditioning supply	1 370.3	1 413.8	1 462.4	1 502.9
Broad Sector - Total Employment**	1 883.9	1 894.4	1 942.4	*1 929.4*

*According to Structural Business Statistics Survey (SBS), May 2024

**Estimate of total emplo yment as a sum of available figures presented in the table
Italics, blue: DG ENER estimates
Source: Eurostat, Labour Force Sourvey (LFS), April 2024
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	73.2	72.4	73.6
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	78.5
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	74.8	76.0	77.1
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	70.1	70.2	72.9
PT	73.2	71.5	72.3	74.9	73.8	74.9
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	78.8	81.5	82.6	82.1	82.6

*Percentage of active population
Source: Eurostat, Labour Force Sourvey (LFS), April 2024
Methodology and Notes in the annexes

3.5.3 Uneployment Rate

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

%	2005	2010	2015	2019	2020	2021
EU27_2020	9.6	10.1	10.2	6.8	7.2	7.1
BE	8.5	8.4	8.7	5.5	5.8	6.3
BG	10.1	11.3	10.1	5.2	6.1	5.3
CZ	7.9	7.3	5.1	2.0	2.6	2.8
DK	4.8	7.7	6.3	5.0	5.6	5.1
DE	11.2	6.6	4.4	3.0	3.7	3.7
EE	8.0	16.6	6.4	4.5	6.9	6.2
IE	4.6	14.6	9.9	5.0	5.9	6.2
EL	10.0	12.9	25.0	17.9	17.6	14.7
ES	9.2	19.9	22.1	14.1	15.5	14.9
FR	8.5	8.9	10.1	8.1	7.5	7.3
HR	12.8	11.7	16.2	6.6	7.5	7.6
IT	7.7	8.5	12.0	9.9	9.3	9.5
CY	5.3	6.3	15.0	7.1	7.6	7.5
LV	10.0	19.7	9.9	6.3	8.1	7.6
LT	8.3	17.8	9.1	6.3	8.5	7.1
LU	4.5	4.4	6.7	5.6	6.8	5.3
HU	7.2	10.8	6.6	3.3	4.1	4.1
MT	6.9	6.9	5.4	4.1	4.9	3.8
NL	5.9	6.1	7.9	4.4	4.9	4.2
AT	5.6	5.2	6.1	4.8	6.0	6.2
PL	17.8	10.0	7.7	3.3	3.2	3.4
PT	7.7	12.6	13.0	6.7	7.0	6.7
RO	7.2	9.0	8.4	4.9	6.1	5.6
SI	6.5	7.3	9.0	4.4	5.0	4.8
SK	16.3	14.3	11.5	5.7	6.7	6.8
FI	8.4	8.6	9.4	6.8	7.7	7.7
SE	7.5	8.7	7.5	6.9	8.5	8.9

*Percentage of active population

Source: Eurostat, Labour Force Sourvey (LFS), April 2024

Methodology and Notes in the annexes

4 Environmental Indicators in the EU

4 Environmental Indicators in the EU

Summary

4.1 Gases Emissions

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS – NATIONAL TOTAL*

[Million ton CO_2 equiv.]	1990	2010	2019	2020	2021	2022
EU27_2020	4921.9	4272.4	3716.9	3348.7	3530.8	3484.5
Index1990	100.0%	86.8%	75.5%	68.0%	71.7%	70.8%
BE	149.0	137.7	121.9	111.1	114.8	108.9
BG	99.8	60.0	54.8	48.4	54.6	59.1
CZ	202.0	142.5	125.9	114.4	119.9	118.5
DK	73.4	67.1	48.4	43.6	44.8	44.2
DE	1262.8	952.4	826.8	745.6	777.9	777.4
EE	40.4	21.2	14.7	11.4	12.7	14.1
IE	56.3	65.1	64.2	59.9	63.1	63.7
EL	106.5	121.8	90.3	77.2	80.5	82.2
ES	292.1	367.2	328.1	276.9	296.8	309.3
FR	548.9	522.5	448.2	397.7	420.7	409.7
HR	32.5	29.8	26.9	25.4	26.0	26.3
IT	526.7	531.2	429.0	382.9	418.1	419.5
CY	6.3	10.3	9.9	8.9	9.3	9.6
LV	26.3	12.2	11.6	10.7	11.0	10.6
LT	48.5	20.8	20.5	20.2	20.4	19.2
LU	13.1	13.5	12.5	10.7	11.3	10.1
HU	95.6	67.2	65.5	63.0	64.1	60.3
MT	2.8	3.3	2.6	2.3	2.3	2.6
NL	227.3	224.7	193.0	171.1	174.4	163.0
AT	80.0	86.9	83.0	75.1	78.6	74.8
PL	476.4	408.7	389.6	372.8	401.1	383.4
PT	60.5	71.6	68.2	59.2	58.3	60.6
RO	257.4	125.2	115.7	111.5	115.5	110.0
SI	18.9	19.8	17.2	16.0	16.1	15.7
SK	73.5	46.0	40.1	37.2	41.3	37.2
FI	72.3	77.1	55.2	48.5	48.4	47.3
SE	72.6	66.3	52.9	46.9	48.7	47.1

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

Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - ENERGY

[Million ton CO_2 equiv.]	2022								
		of which:							
	Energy	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emissions
EU27_2020	2 603.8	866.7	392.6	803.3	105.8	294.5	74.5	7.0	59.4
Share [%]	100.0%	33.3%	15.1%	30.8%	4.1%	11.3%	2.9%	0.3%	2.3%
BE	76.4	18.5	12.6	24.2	4.9	13.1	2.4	0.1	0.6
BG	45.1	27.0	4.4	9.9	0.4	0.7	0.5	0.0	2.1
CZ	87.9	42.8	11.3	19.4	2.3	8.2	1.2	0.3	2.4
DK	27.4	8.2	3.5	12.0	0.6	1.2	1.5	0.2	0.2
DE	638.9	252.1	115.8	148.6	24.2	85.5	8.1	0.8	3.8
EE	11.8	8.4	0.3	2.6	0.2	0.1	0.1	0.0	0.0
IE	34.3	10.0	4.3	11.8	1.4	5.8	0.9	:	0.1
EL	54.5	24.7	4.5	17.9	0.6	5.3	0.6	0.3	0.5
ES	222.1	53.2	37.9	90.5	9.1	15.2	11.9	0.2	4.1
FR	276.3	40.0	40.1	128.0	17.4	34.6	11.7	2.0	2.5
HR	16.9	4.1	2.3	6.7	0.6	1.9	0.8	:	0.5
IT	335.1	94.9	51.3	109.4	20.6	45.3	7.9	0.5	5.1
CY	6.3	3.1	0.6	2.0	0.1	0.3	0.1	0.0	:
LV	6.4	1.0	0.6	3.1	0.5	0.5	0.5	0.0	0.1
LT	11.7	2.5	1.2	6.0	0.3	1.0	0.3	0.0	0.4
LU	6.9	0.2	1.0	4.2	0.5	0.9	0.0	0.0	0.0
HU	43.6	10.7	4.6	15.1	2.5	7.7	1.4	0.1	1.5
MT	1.8	0.8	0.1	0.7	0.1	0.0	0.1	0.0	0.0
NL	118.2	45.3	18.4	25.4	5.7	13.9	7.8	0.2	1.5
AT	48.5	8.5	10.6	20.7	1.2	6.2	0.9	0.0	0.3
PL	319.3	152.7	27.8	69.3	6.0	31.5	9.9	:	22.0
PT	37.8	8.4	6.8	17.1	1.0	1.9	1.3	0.1	1.3
RO	75.1	18.1	13.2	21.1	2.1	8.5	1.7	1.2	9.2
SI	12.4	3.4	1.6	5.8	0.3	0.7	0.2	0.0	0.3
SK	25.6	6.4	5.9	7.8	1.4	3.1	0.3	0.1	0.6
FI	32.9	12.9	5.9	9.8	1.1	0.9	1.4	0.8	0.1
SE	30.9	8.7	6.0	14.0	0.6	0.5	1.0	:	0.0

Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NOT ENERGY RELATED

[Million ton CO_2 equiv.]	2022					
	GHG emissions other than from energy	*of which:*				International aviation
		Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO_2	
EU27_2020	770.9	291.8	365.7	109.7	3.6	109.7
Share [%]	100.0%	37.9%	47.4%	14.2%	0.5%	
BE	27.2	16.9	9.1	1.2	:	5.3
BG	13.4	4.6	5.9	2.8	0.1	0.6
CZ	29.8	15.0	8.4	5.7	0.6	0.8
DK	14.6	1.7	11.5	1.2	0.2	2.2
DE	111.1	52.1	53.3	5.7	:	27.4
EE	2.2	0.3	1.6	0.3	:	0.2
IE	26.3	3.0	22.4	0.9	:	3.0
EL	23.8	9.6	8.0	6.2	:	4.0
ES	72.1	22.5	34.9	14.7	:	15.1
FR	119.3	38.3	63.6	16.6	0.8	14.1
HR	8.8	3.3	2.5	3.1	:	0.6
IT	75.2	23.6	30.8	20.1	0.7	9.2
CY	2.5	1.3	0.5	0.7	0.0	0.8
LV	3.7	0.9	2.3	0.6	0.0	0.4
LT	7.2	2.3	4.1	0.8	0.0	0.3
LU	1.3	0.5	0.7	0.1	:	2.0
HU	16.0	5.9	6.2	3.8	:	0.8
MT	0.5	0.2	0.1	0.2	:	0.4
NL	35.2	13.8	18.0	2.9	0.5	9.6
AT	24.4	15.9	7.3	1.2	:	2.0
PL	61.2	23.6	33.3	3.8	0.4	2.9
PT	18.6	5.9	6.9	5.6	0.1	4.2
RO	34.6	10.1	18.0	6.6	:	0.3
SI	3.2	1.1	1.7	0.4	:	0.1
SK	11.4	7.5	1.9	1.9	0.0	0.1
FI	12.8	5.0	6.1	1.7	0.1	1.6
SE	14.4	6.9	6.5	0.9	:	1.8

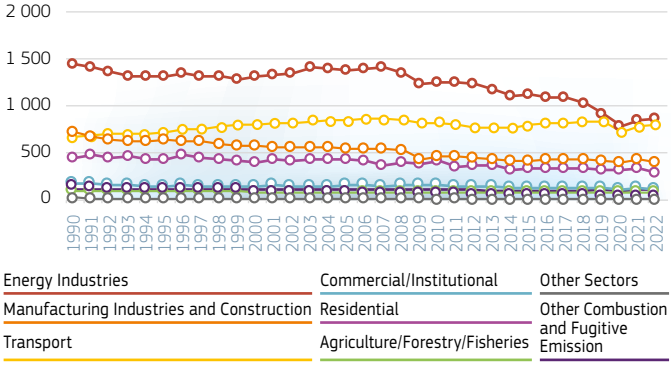
Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NATIONAL TOTAL AND ENERGY RELATED EU27_2020

[Million ton CO_2 equiv.]	GHG Greenhouse gases (CO_2, N_2O *)	of which: Energy	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emission
1990	4922	3741.2	1442.2	721.4	672.2	172.0	450.0	91.9	22.4	169.0
1995	4625	3515.9	1319.0	638.3	724.6	148.8	438.0	91.6	10.4	145.3
2000	4538	3449.0	1304.8	579.0	798.0	143.7	407.9	87.1	8.6	119.9
2005	4641	3566.3	1384.8	551.1	843.2	157.9	426.3	85.8	10.8	106.3
2010	4272	3290.3	1255.4	470.9	815.0	158.8	411.6	81.4	7.8	89.3
2011	4166	3187.7	1244.8	460.7	805.6	140.2	359.2	80.4	8.1	88.7
2012	4094	3134.8	1229.2	444.0	775.8	140.3	372.2	78.4	7.0	87.8
2013	4004	3051.0	1166.6	426.5	769.9	141.7	374.4	78.2	7.0	86.6
2014	3864	2902.3	1106.2	411.7	773.1	125.8	317.2	77.8	6.8	83.7
2015	3919	2962.3	1113.7	420.8	793.2	131.6	336.1	76.9	6.9	83.1
2016	3920	2955.0	1088.9	424.8	809.7	125.1	343.7	76.9	6.2	79.8
2017	3951	2970.4	1084.8	432.4	822.5	127.3	341.0	77.1	6.1	79.2
2018	3878	2902.3	1024.4	431.4	829.9	124.3	332.5	78.6	5.7	75.5
2019	3717	2758.1	905.2	419.2	833.1	121.8	326.0	78.0	6.0	68.9
2020	3349	2490.0	778.5	399.3	721.0	114.5	327.2	79.8	6.0	63.7
2021	3531	2652.4	841.2	430.4	778.7	120.7	333.6	79.6	6.7	61.4
2022	3484	2603.8	866.7	392.6	803.3	105.8	294.5	74.5	7.0	59.4

GHGS EMISSIONS - EU27_2020 - FUEL COMBUSTION (Million ton CO_2 equiv.)



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

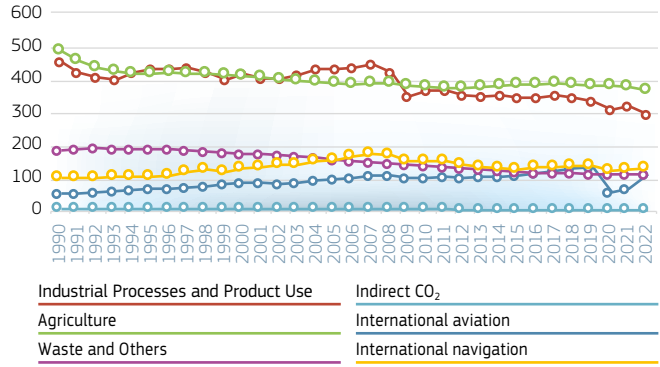
Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NOT ENERGY RELATED EU27_2020

[Million ton CO_2 equiv.]	GHG Greenhouse gases (CO_2, N_2O	GHG emissions other than from energy	*of which:* Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO_2	International aviation	International navigation
1990	4922	1126.0	450.6	483.2	184.6	7.7	54.6	102.2
1995	4625	1042.7	430.8	417.5	187.5	6.9	66.3	102.7
2000	4538	1003.7	414.8	407.9	174.8	6.2	85.5	128.2
2005	4641	977.9	429.9	386.8	155.5	5.6	96.3	153.9
2010	4272	881.5	364.5	374.8	137.4	4.8	100.6	151.7
2011	4166	875.7	364.2	373.9	133.0	4.7	102.9	150.4
2012	4094	857.1	348.9	373.7	130.1	4.4	101.7	140.1
2013	4004	850.4	345.4	376.0	124.8	4.2	102.7	132.2
2014	3864	857.2	352.0	380.5	120.6	4.2	104.7	128.4
2015	3919	848.3	342.6	382.7	118.9	4.1	108.1	126.5
2016	3920	850.3	344.8	384.9	116.6	4.0	114.6	132.9
2017	3951	856.9	351.3	386.1	115.5	4.0	123.7	134.7
2018	3878	846.2	344.2	383.7	114.5	3.9	129.9	137.8
2019	3717	826.3	331.0	378.4	113.1	3.8	132.5	136.6
2020	3349	802.9	307.2	379.9	112.0	3.8	55.9	121.2
2021	3531	808.7	318.0	376.0	110.8	3.9	69.8	127.2
2022	3484	770.9	291.8	365.7	109.7	3.6	109.7	130.6

GHGS EMISSIONS - EU27_2020 - OTHER THAN FUEL COMBUSTION (Million ton CO_2 equiv.)



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

Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.2 CO_2 Emissions

CO_2 EMISSIONS – NATIONAL TOTAL*

[Million ton CO_2]	1990	2010	2019	2020	2021	2022
EU27_2020	3935.2	3537.5	3049.1	2694.6	2884.1	2857.4
Index1990	100.0%	89.9%	77.5%	68.5%	73.3%	72.6%
BE	123.4	118.7	104.9	94.8	99.4	94.3
BG	77.5	48.5	43.0	37.1	42.9	47.6
CZ	166.8	119.4	102.9	92.7	97.8	96.5
DK	56.4	52.1	34.3	29.5	31.1	30.8
DE	1066.8	851.0	739.6	662.1	696.9	698.7
EE	37.0	19.1	12.5	9.3	10.5	11.9
IE	34.0	44.1	40.6	36.3	38.9	39.7
EL	85.9	99.9	69.7	56.9	60.0	62.0
ES	234.9	295.5	269.0	218.0	237.3	249.6
FR	408.0	402.7	344.1	297.7	323.8	316.6
HR	23.4	21.3	18.4	17.0	17.7	18.2
IT	443.8	445.4	352.8	307.1	343.4	347.9
CY	5.4	8.9	8.4	7.3	7.6	7.9
LV	19.9	8.9	8.1	7.2	7.5	7.1
LT	36.2	14.0	14.1	13.7	14.0	13.3
LU	12.2	12.5	11.6	9.7	10.3	9.2
HU	73.9	52.7	50.0	47.4	48.7	46.1
MT	2.6	2.9	2.2	1.8	1.9	2.2
NL	168.3	193.0	164.7	143.7	147.5	137.2
AT	63.1	74.1	70.9	63.2	67.0	63.5
PL	377.5	336.2	321.4	304.3	333.2	318.4
PT	46.9	55.7	52.1	43.4	42.5	45.0
RO	177.3	84.8	76.9	73.9	77.5	73.3
SI	15.1	16.5	14.1	12.9	13.1	12.8
SK	61.7	38.6	34.1	31.3	35.3	31.7
FI	58.1	65.8	45.1	38.6	38.7	38.0
SE	58.9	55.2	43.5	37.6	39.6	38.0

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

Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.2 CO_2 Emissions

CO_2 EMISSIONS - ENERGY

[Million ton CO_2]	2022								
		of which:							
	Energy	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emissions
EU27_2020	2515.7	857.7	387.1	794.4	104.5	277.1	69.5	7.0	18.3
Share [%]	100.0%	34.1%	15.4%	31.6%	4.2%	11.0%	2.8%	0.3%	0.7%
BE	74.8	18.4	12.4	23.9	4.9	12.8	2.2	0.1	0.1
BG	43.1	26.9	4.3	9.8	0.3	0.4	0.5	0.0	0.8
CZ	83.8	42.5	11.2	19.2	2.3	7.0	1.2	0.3	0.0
DK	26.8	8.0	3.4	11.9	0.6	1.1	1.5	0.2	0.1
DE	628.0	247.5	114.8	147.0	24.0	84.3	7.8	0.8	1.8
EE	11.6	8.4	0.3	2.6	0.2	0.1	0.1	0.0	0.0
IE	33.7	9.9	4.3	11.6	1.4	5.7	0.8	:	0.0
EL	53.2	24.7	4.4	17.6	0.6	5.0	0.6	0.3	0.0
ES	218.1	52.6	36.8	89.5	9.0	14.4	11.8	0.2	3.8
FR	270.5	39.8	39.5	126.6	17.3	32.9	10.8	2.0	1.6
HR	16.1	4.1	2.3	6.7	0.6	1.5	0.7	:	0.4
IT	324.6	94.4	50.3	108.3	20.2	41.8	7.3	0.5	1.8
CY	6.2	3.1	0.6	2.0	0.1	0.3	0.1	0.0	:
LV	5.9	1.0	0.5	3.1	0.4	0.4	0.5	0.0	0.0
LT	11.2	2.5	1.2	5.9	0.3	0.8	0.3	0.0	0.2
LU	6.8	0.2	1.0	4.2	0.5	0.9	0.0	0.0	0.0
HU	41.3	10.7	4.6	14.9	2.5	7.1	1.3	0.1	0.1
MT	1.8	0.8	0.1	0.7	0.1	0.0	0.1	0.0	0.0
NL	115.6	45.0	18.3	25.2	5.7	13.5	6.8	0.2	1.1
AT	47.3	8.4	10.5	20.5	1.2	5.9	0.8	0.0	0.1
PL	295.0	152.0	27.6	68.5	5.9	28.0	8.9	:	4.1
PT	36.9	8.3	6.6	16.9	1.0	1.6	1.2	0.1	1.2
RO	64.8	18.0	13.1	20.9	2.1	7.2	1.6	1.2	0.8
SI	11.9	3.4	1.6	5.7	0.3	0.6	0.2	0.0	0.1
SK	24.6	6.4	5.9	7.7	1.4	2.9	0.3	0.1	0.1
FI	32.1	12.6	5.7	9.7	1.1	0.6	1.4	0.8	0.1
SE	30.1	8.4	5.9	13.8	0.6	0.4	1.0	:	0.0

Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.2 CO_2 Emissions

CO_2 EMISSIONS - NOT ENERGY RELATED

[Million ton CO_2]	2022					
	CO_2 emissions other than from energy	*of which:* Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO_2	International aviation
EU27_2020	232.8	217.2	9.5	2.6	3.6	108.9
Share [%]	100.0%	93.3%	4.1%	1.1%	1.6%	
BE	14.2	13.8	0.2	0.2	:	5.3
BG	3.9	3.8	0.1	0.0	0.1	0.6
CZ	11.9	10.9	0.3	0.1	0.6	0.8
DK	1.9	1.4	0.3	0.0	0.2	2.2
DE	43.5	41.0	2.5	:	:	27.2
EE	0.1	0.1	0.0	0.0	:	0.2
IE	3.0	2.2	0.8	0.0	:	3.0
EL	4.9	4.8	0.0	0.0	:	3.9
ES	16.6	16.2	0.4	:	:	15.0
FR	32.2	27.8	1.9	1.6	0.8	14.0
HR	1.5	1.4	0.1	:	:	0.6
IT	14.2	13.1	0.2	0.1	0.7	9.1
CY	0.9	0.9	0.0	:	0.0	0.8
LV	0.7	0.6	0.1	:	0.0	0.4
LT	1.8	1.6	0.1	0.0	0.0	0.3
LU	0.5	0.5	0.0	:	:	1.9
HU	4.0	3.8	0.2	0.0	:	0.8
MT	0.0	0.0	:	0.0	:	0.4
NL	12.1	11.5	0.1	:	0.5	9.5
AT	14.1	14.0	0.1	0.0	:	2.0
PL	20.5	18.4	1.4	0.3	0.4	2.9
PT	4.0	3.8	0.0	0.0	0.1	4.2
RO	8.2	8.0	0.1	0.0	:	0.3
SI	0.8	0.7	0.0	0.0	:	0.1
SK	7.0	6.9	0.1	0.0	0.0	0.1
FI	4.3	4.0	0.3	:	0.1	1.6
SE	6.1	5.9	0.1	0.1	:	1.8

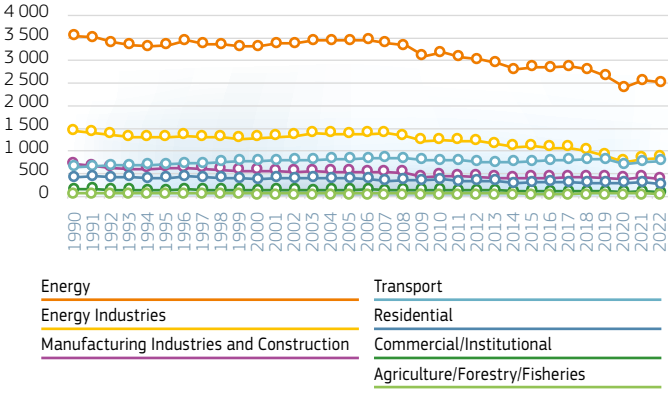
Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.2 CO_2 Emissions

CO_2 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/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emissions
1990	3935	3539.4	1434.9	715.8	660.1	169.4	426.4	87.7	21.9	23.2
1995	3713	3338.5	1311.8	633.1	710.6	147.4	417.3	86.8	10.2	21.3
2000	3697	3300.2	1297.3	573.5	785.4	142.5	389.5	82.5	8.5	20.9
2005	3845	3431.0	1376.1	544.8	833.7	156.7	407.0	81.2	10.6	21.1
2006	3867	3441.6	1383.5	533.5	850.7	162.8	400.2	78.3	9.5	23.1
2007	3822	3385.1	1394.2	543.1	854.2	139.5	346.5	75.1	9.5	22.9
2008	3746	3328.6	1327.5	524.6	840.5	152.3	376.3	75.7	9.1	22.6
2009	3442	3098.5	1228.4	434.0	814.7	151.5	367.4	73.9	7.9	20.7
2010	3538	3169.1	1245.7	465.5	806.6	157.2	389.0	76.0	7.7	21.3
2011	3443	3071.1	1235.1	455.2	797.4	138.7	339.9	75.0	8.0	21.8
2012	3372	3017.2	1219.3	438.6	767.8	138.8	350.9	73.3	6.9	21.7
2013	3290	2936.8	1156.9	421.1	761.8	140.3	353.3	73.1	6.9	23.3
2014	3155	2793.8	1096.8	406.5	764.9	124.5	298.8	72.9	6.7	22.7
2015	3215	2852.5	1104.2	415.4	784.8	130.3	316.9	71.8	6.8	22.3
2016	3220	2848.1	1079.3	419.4	801.0	123.9	324.6	71.9	6.1	21.8
2017	3253	2863.8	1075.1	426.9	813.6	125.9	321.9	71.9	6.0	22.4
2018	3192	2798.6	1015.0	425.7	820.9	122.9	313.1	73.2	5.7	22.1
2019	3049	2661.5	896.2	413.6	824.0	120.4	307.5	72.7	5.9	21.2
2020	2695	2398.6	770.0	393.9	713.0	113.2	309.3	74.3	5.9	19.1
2021	2884	2559.5	832.3	424.6	770.1	119.4	314.6	74.1	6.7	17.9
2022	2857	2515.7	857.7	387.1	794.4	104.5	277.1	69.5	7.0	18.3

EU27_2020 – CO_2 EMISSIONS
Million ton CO_2



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

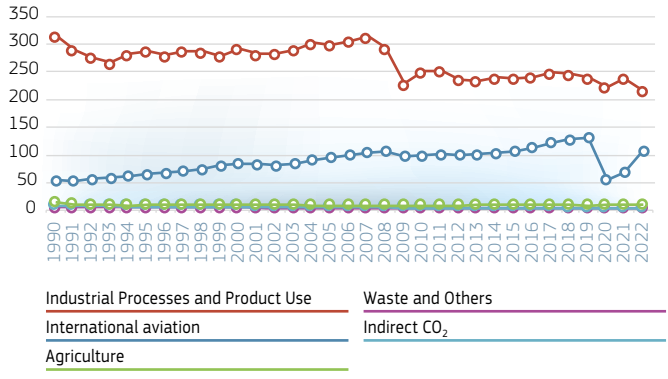
Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.1.2 CO_2 Emissions

CO_2 EMISSIONS – NOT ENERGY RELATED EU27_2020

[Million ton CO_2]	CO_2 emissions – National total*	CO_2 emissions other than from energy	*of which:* Industrial Processes and Product U	Agriculture	Waste and Others	Indirect CO_2	International aviation	International navigation
1990	3935.2	341.5	315.8	14.2	3.8	7.7	54.2	101.0
1995	3713.1	308.8	288.4	9.9	3.6	6.9	65.7	101.5
2000	3697.5	312.5	293.1	10.2	2.9	6.2	84.8	126.8
2005	3844.5	317.9	299.9	9.2	3.2	5.6	95.6	152.3
2006	3866.8	324.6	306.8	8.8	3.3	5.8	100.7	163.0
2007	3821.5	331.2	313.7	8.8	3.1	5.5	105.3	170.3
2008	3746.3	310.9	293.7	8.8	3.1	5.3	106.7	168.3
2009	3442.4	245.7	229.0	8.8	3.0	4.9	98.2	149.4
2010	3537.5	268.6	251.9	8.8	3.1	4.8	99.8	150.2
2011	3442.6	269.4	252.7	9.0	2.9	4.7	102.1	148.9
2012	3371.8	253.7	237.1	9.3	2.9	4.4	100.9	138.6
2013	3289.9	251.2	234.5	9.8	2.7	4.2	101.9	130.9
2014	3155.1	257.4	240.6	9.9	2.8	4.2	103.9	127.1
2015	3214.9	255.1	238.7	9.8	2.5	4.1	107.3	125.2
2016	3220.0	258.2	241.3	10.4	2.6	4.0	113.7	131.5
2017	3252.9	266.3	249.7	10.0	2.5	4.0	122.8	133.3
2018	3191.5	264.1	247.5	10.2	2.5	3.9	128.9	136.4
2019	3049.1	256.1	240.1	9.4	2.9	3.8	131.5	135.1
2020	2694.6	240.5	224.1	10.1	2.7	3.8	55.4	119.8
2021	2884.1	255.4	238.9	9.8	2.9	3.9	69.2	125.7
2022	2857.4	232.8	217.2	9.5	2.6	3.6	108.9	129.2

CO_2 EMISSIONS – EU27_2020 – OTHER THAN FUEL COMBUSTION
MILLION TON CO_2



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

Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

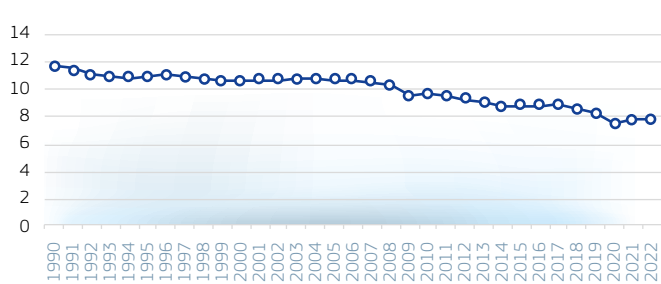
4.2 Main Emissions Indicators

4.2.1 Grenhouse Gas Emissions per Capita

MAIN EMISSIONS INDICATORS
GHG PER CAPITA

[t CO_2 eq./cap]	1990	2010	2019	2020	2021	2022
EU27_2020	11.8	9.7	8.3	7.5	7.9	7.8
Index1990	100.0%	82.3%	70.7%	63.6%	67.1%	66.2%
BE	15.0	12.7	10.6	9.6	9.9	9.4
BG	11.4	8.1	7.8	7.0	7.9	8.6
CZ	19.5	13.6	11.8	10.7	11.4	11.3
DK	14.3	12.1	8.3	7.5	7.7	7.5
DE	16.0	11.6	10.0	9.0	9.4	9.3
EE	25.7	15.9	11.1	8.6	9.6	10.6
IE	16.1	14.3	13.1	12.1	12.6	12.6
EL	10.5	11.0	8.4	7.2	7.5	7.9
ES	7.5	7.9	7.0	5.9	6.3	6.5
FR	9.4	8.1	6.7	5.9	6.2	6.0
HR	6.8	6.9	6.6	6.3	6.4	6.8
IT	9.3	9.0	7.2	6.4	7.1	7.1
CY	11.0	12.6	11.3	10.0	10.4	10.6
LV	9.9	5.8	6.1	5.6	5.8	5.6
LT	13.1	6.6	7.3	7.2	7.3	6.9
LU	34.6	26.8	20.4	17.1	17.7	15.7
HU	9.2	6.7	6.7	6.4	6.6	6.2
MT	8.0	7.9	5.3	4.4	4.5	5.1
NL	15.3	13.6	11.2	9.8	10.0	9.3
AT	10.5	10.4	9.4	8.4	8.8	8.3
PL	12.5	10.7	10.3	9.8	10.8	10.4
PT	6.1	6.8	6.6	5.8	5.7	5.9
RO	11.1	6.2	6.0	5.8	6.0	5.8
SI	9.4	9.7	8.3	7.6	7.6	7.4
SK	13.9	8.5	7.4	6.8	7.6	6.8
FI	14.5	14.4	10.0	8.8	8.8	8.5
SE	8.5	7.1	5.2	4.5	4.7	4.5

GHG PER CAPITA [t CO_2 eq./cap]



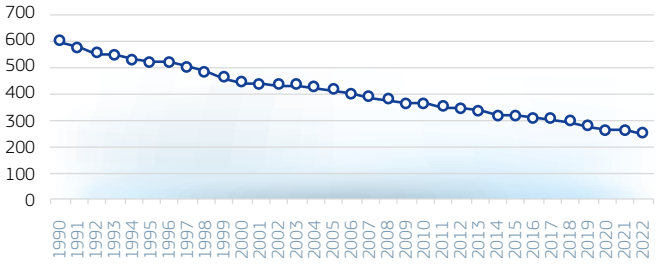
Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

4.2.2 Greenhouse Gas to GDP Intensity

MAIN EMISSIONS INDICATORS
GHG TO GDP INTENSITY

[t CO_2/M€'15]	1990	2010	2019	2020	2021	2022
EU27_2020	599.1	367.2	279.2	266.6	265.2	253.0
Index1990	100.0%	61.3%	46.6%	44.5%	44.3%	42.2%
BE	563.3	352.6	273.1	262.8	254.0	233.9
BG	2922.4	1399.2	1057.8	973.7	1019.4	1061.6
CZ	1877.3	913.9	647.3	622.5	630.1	608.5
DK	402.9	262.2	161.3	148.8	143.4	137.7
DE	599.0	342.2	255.0	239.1	241.8	237.4
EE	3047.5	1211.1	605.5	474.2	492.2	549.6
IE	774.2	342.4	191.8	167.9	153.5	141.5
EL	745.7	563.8	491.5	463.2	445.9	431.4
ES	439.5	340.3	275.0	261.2	263.2	259.3
FR	366.7	250.2	190.0	182.4	181.2	172.3
HR	792.0	651.9	518.6	535.6	483.9	456.9
IT	373.0	310.2	248.1	243.3	245.3	236.7
CY	714.1	528.5	440.5	406.7	388.1	380.8
LV	1270.0	591.0	428.1	407.3	392.5	366.7
LT	1740.5	671.2	472.3	465.2	441.8	406.9
LU	614.0	276.5	209.1	179.8	176.8	157.1
HU	1184.7	659.9	493.3	496.6	472.2	424.8
MT	771.0	424.4	200.0	188.4	172.3	179.8
NL	542.4	338.1	254.8	235.1	225.7	202.1
AT	368.7	265.9	222.4	215.5	216.5	196.6
PL	2705.9	1108.6	756.7	739.0	743.5	672.8
PT	466.1	382.1	340.3	322.3	300.1	291.8
RO	2481.8	896.1	588.8	589.4	577.6	528.3
SI	769.0	520.6	379.2	366.7	341.9	324.9
SK	1939.5	649.4	447.2	429.5	454.4	401.9
FI	514.6	366.3	240.6	216.5	210.1	202.6
SE	272.1	162.1	106.6	96.8	94.6	89.1

GHG TO GDP INTENSITY [t CO_2/M€'15] EU27_2020



Source: EEA, June 2024, Eurostat 2024
Methodology and Notes: see appendices

5 Country Profiles

5 Country Profiles

Summary

Data sources: ESTAT database May 2020; EEA UNFCCC database Jun. 2020; ECFIN AMECO database May. 2020; ESTAT SHARES Mar. 2020; ESTAT CHP Survey, data 2017 Jul. 2020; ESTAT Market Survey Jun. 2020

5.1 European Union – 27 countries (from 2020)

Mtoe unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	675.9	696.1	618.1	573.1	598.2	562.9
Solid fossil fuels	189.8	146.6	100.1	83.6	91.0	92.5
of which hard coal	99.7	62.8	37.1	32.6	33.2	31.1
of which brown coal	90.0	83.8	63.0	51.0	57.8	61.4
Oil and petroleum products	44.6	33.1	22.7	21.3	20.1	18.8
of which crude oil	42.4	30.8	20.4	19.3	18.1	16.8
Natural gas	112.2	109.5	52.2	41.2	37.9	34.9
Nuclear	222.1	219.6	196.2	175.2	186.7	155.5
Renewables and biofuels	96.0	168.8	227.4	233.5	244.6	243.3
Wastes, Non-Renewable	5.9	10.6	13.7	13.9	14.0	13.8
Net Imports	866.0	895.4	908.2	792.6	811.9	872.7
Solid fossil fuels	83.3	93.7	74.4	50.3	60.9	74.2
of which hard coal	79.0	92.0	74.6	51.7	61.4	74.6
Oil and petroleum products	578.5	550.2	527.4	460.5	458.9	502.6
of which crude oil and NGL	542.3	517.3	514.9	449.4	454.7	491.8
Natural gas	202.8	245.9	300.5	273.5	283.8	287.3
Renewables and biofuels	0.3	5.1	5.1	6.5	7.1	7.0
Electricity	0.8	0.4	0.3	1.2	0.6	1.1
Gross inland consumption	1 498.2	1 559.7	1 458.7	1 340.2	1 421.7	1 354.2
Solid fossil fuels	279.0	245.1	171.8	140.5	163.4	162.0
of which hard coal	182.7	159.4	109.7	90.1	103.7	100.3
of which brown coal	91.9	84.9	63.6	52.1	58.9	61.5
Oil and petroleum products	579.8	538.9	502.3	437.2	460.1	472.8
of which crude and NGL	586.0	548.2	532.8	467.9	478.0	503.9
Natural gas	308.6	362.8	335.1	327.0	339.1	294.2
Nuclear	222.1	219.6	196.2	175.2	186.7	155.5
Renewables and biofuels	96.4	174.0	232.5	239.4	252.1	249.2
Electricity	0.8	0.4	0.3	1.2	0.6	1.1
Waste, non-renewable	5.9	10.7	14.1	14.3	14.5	14.3
Available for final consumption	1 022.4	1 073.8	1 033.3	1 033.3	975.5	1 030.0
Final non-energy consumption	101.4	98.3	90.6	90.6	89.9	92.0
Final energy consumption	926.1	974.0	938.0	938.0	885.1	939.2
by Fuel/Product						
Solid fossil fuels	33.5	27.2	19.8	19.1	18.8	16.3
Oil and petroleum products	397.1	366.5	345.7	309.7	325.3	331.8
Natural gas	205.1	217.7	199.2	194.2	214.2	184.7
Renewables and biofuels	48.8	86.5	104.5	103.9	111.2	110.4
Solid biofuels and renewable waste	46.7	68.4	70.0	68.2	72.9	70.4
Solar thermal	0.5	1.5	2.4	2.5	2.5	2.7
Geothermal	0.4	0.4	0.6	0.6	0.6	0.6
Liquid biofuels	0.7	12.4	16.6	16.9	17.7	17.7
Biogases	0.3	1.4	2.6	2.7	2.6	2.7
Waste, non-renewable	1.0	2.8	4.7	4.9	5.0	5.0
Electricity	189.0	215.9	213.1	205.0	214.2	207.3
Heat	42.9	51.6	45.9	43.9	45.6	42.0
by Sector						
Industry	271.0	243.9	239.0	230.3	241.4	226.3
Transport	262.9	280.0	288.7	251.4	271.8	279.9
Residential	248.6	279.7	248.7	248.7	262.1	242.5
Services	104.8	140.0	128.9	121.4	130.0	121.3
Agriculture and Fishing	28.4	26.7	29.5	29.8	30.1	28.2
Others	10.5	3.7	3.3	3.6	3.7	4.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	613.2	790.2	947.0	964.3	992.6	1046.1
Combustible Fuels	340.1	414.8	396.0	389.2	381.4	380.0
Nuclear	124.9	120.9	110.0	106.0	105.1	100.2
Hydro	134.7	143.0	150.8	151.1	151.4	152.7
Wind	12.3	79.0	167.1	177.1	187.9	203.6
Solar	0.2	30.6	120.1	138.3	164.2	205.5
Geothermal	0.6	0.8	0.9	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]	2658.3	2984.0	2907.1	2789.5	2915.7	2824.3
Solid fossil fuels, peat and products, oil shale	813.9	721.6	460.4	357.8	425.1	456.3
Oil and petroleum products	172.9	82.1	52.0	47.9	46.7	55.7
Natural gas	362.7	622.1	599.6	586.4	581.4	566.4
Nuclear	859.9	854.5	765.3	683.5	731.7	609.3
Renewables and biofuels	407.0	652.5	978.0	1059.8	1077.9	1079.8
Wastes non-RES	11.6	17.4	21.5	21.0	21.3	20.9
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			133.3	133.4	129.2	129.4
CHP Electricity Generation [TWh]			348.4	335.1	346.4	313.2
CHP in Total Electricity Generation [%]			11.7	12.0	11.9	11.1
CHP Heat Production [PJ]			2629.2	2556.0	2621.1	2557.6
Transport Fuels [ktoe]						
Final consumption petroleum products	355244	337045	323161	290873	304680	309626
of which LPG	19465	18039	16607	15189	15647	15979
of which motor gasoline	110381	76821	67665	58208	63542	67555
of which Gas/Diesel oil	225397	242184	238889	217475	225491	226092
Final consumption biofuels	713	12442	16636	16897	17699	17730
pure and blended biogasoline	59	2496	2725	2689	3056	3266
pure and blended biodiesel	640	9701	13784	14030	14482	14343
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	1396.4	1458.3	1354.4	1235.8	1313.3	1258.6
Final energy consumption 2020-2030 [Mtoe]	979.8	1025.2	986.4	906.3	967.6	940.1
Primary Energy Intensity 2020-2030 [toe/M€'15]	137	125	102	98	99	91
Energy Intensity (GAE/GDP2015) [toe/M€'15	147	134	110	107	107	98
Energy per Capita (GIC/pop) [kgoe/capita]	3496	3539	3267	2996	3180	3031
Final Electricity per Capita [KWh/capita]	6204	6772	6512	6236	6522	6321
Import Dependency [%]	57.8%	57.4%	62.3%	59.1%	57.1%	64.4%
of Solid fossil fuels	29.8%	38.2%	43.3%	35.8%	37.3%	45.8%
of Hard Coal	43.2%	57.7%	68.0%	57.4%	59.2%	74.4%
of Oil and petroleum products	99.8%	102.1%	105.0%	105.3%	99.7%	106.3%
of Crude and NGL	92.5%	94.4%	96.6%	96.1%	95.1%	97.6%
of Natural Gas	65.7%	67.8%	89.7%	83.6%	83.7%	97.6%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		14.41%	19.89%	22.04%	21.89%	23.05%
RE-T - Renewable energy in Transport [%]		5.50%	8.80%	10.25%	9.08%	9.61%
RES-E - Renewable Electricity Generation [%]		21.28%	34.09%	37.41%	37.75%	41.17%
RES-H&C - Renewable Heating and Cooling [%]		16.99%	22.43%	22.98%	22.93%	24.86%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	3697.5	3537.5	3049.1	2694.6	2884.1	2857.4
GHG Greenhouse gases (CO_2, N_2O*	4538.2	4272.4	3716.9	3348.7	3530.8	3484.5
Main Emissions Indicators						
GHG total emissions [index 1990=100]	92.2%	86.8%	75.5%	68.0%	71.7%	70.8%
Total GHG per capita [t CO_2 eq./capita]	10.6	9.7	8.3	7.5	7.9	7.8

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

5.2 Belgium

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	13.4	15.0	15.2	13.3	17.4	15.9
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	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	10.6	8.4	12.2	10.7
Renewables and biofuels	0.5	2.5	3.6	4.0	4.2	4.3
Wastes, Non-Renewable	0.4	0.7	0.6	0.6	0.7	0.6
Net Imports	50.6	53.6	49.9	45.1	45.6	44.3
Solid fossil fuels	7.3	3.7	3.1	2.4	2.4	2.7
of which hard coal	6.6	3.7	2.5	2.1	2.0	2.1
Oil and petroleum products	29.6	32.5	30.6	26.8	27.7	28.1
of which crude oil and NGL	34.2	33.5	34.6	27.7	28.9	28.1
Natural gas	13.3	16.8	15.5	15.0	15.2	13.1
Renewables and biofuels	0.1	0.5	0.8	0.9	1.0	1.0
Electricity	0.4	0.0	-0.2	0.0	-0.7	-0.6
Gross inland consumption	59.4	60.7	56.1	51.4	56.8	52.3
Solid fossil fuels	8.0	3.8	3.1	2.4	2.6	2.7
of which hard coal	7.0	3.7	2.5	2.0	2.1	2.2
of which brown coal	0.2	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	24.2	24.5	22.0	19.7	21.3	20.3
of which crude and NGL	34.1	33.5	34.6	27.6	29.1	28.2
Natural gas	13.4	16.8	15.2	15.2	15.2	13.0
Nuclear	12.4	11.6	10.6	8.4	12.2	10.7
Renewables and biofuels	0.6	3.0	4.4	4.9	5.1	5.3
Electricity	0.4	0.0	-0.2	0.0	-0.7	-0.6
Waste, non-renewable	0.4	0.7	0.6	0.6	0.7	0.6
Available for final consumption	40.8	43.0	40.1	40.1	38.2	40.9
Final non-energy consumption	7.0	7.0	7.3	7.3	7.1	7.5
Final energy consumption	33.6	35.5	32.6	32.6	30.9	33.2
by Fuel/Product						
Solid fossil fuels	0.9	0.5	0.5	0.4	0.4	0.3
Oil and petroleum products	15.1	14.8	12.9	11.8	12.4	12.0
Natural gas	9.3	10.0	9.5	9.1	10.2	8.3
Renewables and biofuels	0.4	1.7	2.0	2.1	2.4	2.5
Solid biofuels and renewable waste	0.4	1.2	1.2	1.2	1.3	1.3
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.4	0.5	0.7	0.8	0.8
Biogases	0.0	0.0	0.1	0.1	0.1	0.1
Waste, non-renewable	0.1	0.2	0.2	0.1	0.1	0.1
Electricity	6.7	7.3	7.0	6.8	7.0	6.6
Heat	0.5	0.6	0.5	0.4	0.5	0.4
by Sector						
Industry	11.6	11.0	10.3	10.0	10.6	9.6
Transport	8.2	9.0	8.8	7.7	8.5	8.7
Residential	9.5	9.6	7.9	7.9	8.6	7.3
Services	3.5	5.0	4.6	4.4	4.5	4.0
Agriculture and Fishing	0.8	0.9	0.9	0.9	0.9	0.8
Others	0.1	0.1	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**15.7**	**18.8**	**23.9**	**25.7**	**26.2**	**26.6**
Combustible Fuels	8.5	9.5	8.1	8.1	8.0	8.2
Nuclear	5.7	5.9	5.9	5.9	5.9	4.8
Hydro	1.4	1.4	1.4	1.4	1.4	1.4
Wind	0.0	0.9	3.9	4.7	4.9	5.3
Solar	0.0	1.0	4.6	5.6	6.0	6.8
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]	**84.0**	**94.6**	**93.6**	**89.5**	**100.5**	**95.9**
Solid fossil fuels, peat and products, oil shale	12.9	4.2	0.1	0.1	0.0	0.1
Oil and petroleum products	0.8	0.4	0.1	0.1	0.2	0.3
Natural gas	19.1	32.6	28.0	28.6	24.5	24.2
Nuclear	48.2	47.9	43.5	34.4	50.3	43.9
Renewables and biofuels	1.0	6.6	19.5	23.5	22.7	24.4
Wastes non-RES	0.8	1.2	1.2	1.2	1.3	1.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			2.4	2.4	2.8	2.9
CHP Electricity Generation [TWh]			12.8	13.0	13.1	11.7
CHP in Total Electricity Generation [%]			13.7	13.0	13.1	12.2
CHP Heat Production [PJ]			94.8	93.4	95.0	88.0
Transport Fuels [ktoe]						
Final consumption petroleum products	13515	13265	11951	10788	11260	11010
of which LPG	414	337	460	463	474	453
of which motor gasoline	2359	1288	1851	1539	1868	2121
of which Gas/Diesel oil	10741	11639	9640	8786	8918	8436
Final consumption biofuels	0	384	490	706	779	808
pure and blended biogasoline	0	57	129	130	161	169
pure and blended biodiesel	0	316	359	576	617	639
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	52.4	53.4	48.4	43.9	48.7	45.2
Final energy consumption 2020-2030 [Mtoe]	37.7	38.2	35.8	33.2	35.9	33.4
Primary Energy Intensity 2020-2030 [toe/M€'15]	159	137	108	104	108	97
Energy Intensity (GAE/GDP2015) [toe/M€'15	180	155	126	122	126	112
Energy per Capita (GIC/pop) [kgoe/capita]	5805	5599	4896	4465	4915	4500
Final Electricity per Capita [KWh/capita]	8205	8725	8175	7764	8695	8259
Import Dependency [%]	**85.2%**	**88.4%**	**88.9%**	**87.7%**	**80.3%**	**84.8%**
of Solid fossil fuels	91.2%	97.5%	101.8%	102.1%	92.6%	99.5%
of Hard Coal	93.5%	100.0%	102.7%	104.2%	93.5%	99.0%
of Oil and petroleum products	122.3%	132.7%	139.2%	136.0%	129.8%	138.4%
of Crude and NGL	100.2%	99.9%	100.0%	100.5%	99.2%	99.7%
of Natural Gas	99.3%	100.3%	101.9%	99.2%	99.9%	100.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		6.00%	9.93%	13.00%	13.01%	13.76%
RE-T - Renewable energy in Transport [%]		4.80%	6.82%	11.03%	10.26%	10.35%
RES-E - Renewable Electricity Generation [%]		7.33%	20.82%	25.12%	26.01%	29.11%
RES-H&C - Renewable Heating and Cooling [%]		6.71%	8.32%	8.45%	9.22%	10.44%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	131.4	118.7	104.9	94.8	99.4	94.3
GHG Greenhouse gases (CO_2, N_2O*	153.6	137.7	121.9	111.1	114.8	108.9
Main Emissions Indicators						
GHG total emissions [index 1990=100]	103.1%	92.4%	81.8%	74.5%	77.0%	73.1%
Total GHG per capita [t CO_2 eq./capita]	15.0	12.7	10.6	9.6	9.9	9.4

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

5.3 Bulgaria

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	9.9	10.5	11.7	10.8	12.1	13.2
Solid fossil fuels	4.3	4.9	4.7	3.7	4.7	5.9
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	4.2	4.9	4.7	3.7	4.7	5.9
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
of which crude oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.1	0.0	0.0	0.0	0.0
Nuclear	4.7	3.8	4.3	4.3	4.3	4.3
Renewables and biofuels	0.8	1.5	2.5	2.6	3.0	2.8
Wastes, Non-Renewable	0.0	0.0	0.1	0.1	0.1	0.1
Net Imports	8.7	7.2	7.2	6.8	7.0	7.3
Solid fossil fuels	2.3	1.7	0.4	0.4	0.6	0.7
of which hard coal	2.2	1.7	0.4	0.4	0.5	0.7
Oil and petroleum products	4.1	4.2	5.0	4.3	4.5	5.2
of which crude oil and NGL	5.3	5.5	7.1	4.9	4.2	7.2
Natural gas	2.7	2.1	2.5	2.4	2.7	2.5
Renewables and biofuels	0.0	-0.1	-0.1	0.0	0.0	-0.1
Electricity	-0.4	-0.7	-0.5	-0.3	-0.8	-1.0
Gross inland consumption	18.6	17.9	18.7	17.7	19.3	19.6
Solid fossil fuels	6.4	6.9	5.1	4.2	5.3	6.3
of which hard coal	2.2	1.9	0.4	0.4	0.5	0.4
of which brown coal	4.2	4.9	4.7	3.8	4.7	5.8
Oil and petroleum products	4.2	4.0	4.8	4.3	4.6	4.8
of which crude and NGL	5.4	5.6	6.9	5.0	4.3	7.1
Natural gas	2.9	2.3	2.4	2.5	2.8	2.3
Nuclear	4.7	3.8	4.3	4.3	4.3	4.3
Renewables and biofuels	0.8	1.5	2.5	2.5	2.9	2.7
Electricity	-0.4	-0.7	-0.5	-0.3	-0.8	-1.0
Waste, non-renewable	0.0	0.0	0.1	0.1	0.1	0.1
Available for final consumption	9.6	9.2	10.2	10.2	10.2	10.8
Final non-energy consumption	1.0	0.4	0.5	0.5	0.5	0.5
Final energy consumption	8.6	8.7	9.7	9.7	9.5	10.2
by Fuel/Product						
Solid fossil fuels	0.6	0.4	0.3	0.3	0.4	0.3
Oil and petroleum products	3.0	3.0	3.6	3.4	3.7	3.7
Natural gas	1.4	1.1	1.1	1.2	1.3	1.1
Renewables and biofuels	0.5	1.0	1.4	1.6	1.5	1.5
Solid biofuels and renewable waste	0.5	0.9	1.1	1.2	1.1	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	0.2	0.2
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.1	0.1	0.1	0.1
Electricity	2.1	2.3	2.6	2.5	2.7	2.6
Heat	0.9	1.0	0.5	0.6	0.6	0.6
by Sector						
Industry	3.6	2.5	2.7	2.6	2.8	2.7
Transport	1.9	2.7	3.4	3.2	3.4	3.5
Residential	2.1	2.2	2.2	2.4	2.4	2.1
Services	0.7	1.0	1.3	1.1	1.3	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

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**11.1**	**10.0**	**11.2**	**11.0**	**11.2**	**11.9**
Combustible Fuels	5.7	4.6	4.1	3.8	3.9	4.0
Nuclear	3.5	1.9	2.0	2.0	2.0	2.0
Hydro	1.9	3.0	3.4	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	1.1	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]	**40.9**	**46.7**	**44.3**	**40.8**	**47.6**	**50.5**
Solid fossil fuels, peat and products, oil shale	16.9	22.6	17.2	13.5	17.1	21.8
Oil and petroleum products	0.7	0.4	0.4	0.3	0.4	0.5
Natural gas	2.2	2.0	2.2	2.3	3.0	2.1
Nuclear	18.2	15.2	16.6	16.6	16.5	16.5
Renewables and biofuels	2.6	5.8	7.5	7.5	10.3	9.6
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.2	1.3	1.3	1.7
CHP Electricity Generation [TWh]			3.9	3.8	4.2	3.7
CHP in Total Electricity Generation [%]			8.8	8.1	8.8	7.3
CHP Heat Production [PJ]			39.6	36.2	49.8	43.5
Transport Fuels [ktoe]						
Final consumption petroleum products	2 162	2 658	3 278	3 109	3 341	3 397
of which LPG	245	418	485	460	451	519
of which motor gasoline	697	611	473	459	501	524
of which Gas/Diesel oil	1 219	1 630	2 320	2 190	2 389	2 354
Final consumption biofuels	0	13	179	172	168	190
pure and blended biogasoline	0	0	32	27	21	21
pure and blended biodiesel	0	10	148	146	147	169
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	17.7	17.4	18.0	17.1	18.6	18.9
Final energy consumption 2020-2030 [Mtoe]	9.1	8.8	9.9	9.5	10.2	9.9
Primary Energy Intensity 2020-2030 [toe/M€'15]	644	406	348	343	347	340
Energy Intensity (GAE/GDP2015) [toe/M€'15	680	418	361	356	360	351
Energy per Capita (GIC/pop) [kgoe/capita]	2 275	2 414	2 668	2 548	2 788	2 859
Final Electricity per Capita [KWh/capita]	4 996	6 286	6 325	5 863	6 877	7 384
Import Dependency [%]	**46.6%**	**40.4%**	**38.6%**	**38.4%**	**36.3%**	**37.3%**
of Solid fossil fuels	35.2%	24.5%	7.5%	9.6%	10.5%	11.6%
of Hard Coal	101.0%	86.0%	91.5%	103.0%	108.2%	196.9%
of Oil and petroleum products	97.5%	104.3%	104.2%	99.4%	99.0%	107.6%
of Crude and NGL	98.7%	99.1%	102.6%	99.4%	98.6%	101.3%
of Natural Gas	93.5%	92.6%	100.4%	96.4%	96.2%	106.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.93%	21.55%	23.32%	19.45%	19.10%
RE-T - Renewable energy in Transport [%]		1.50%	7.89%	9.10%	7.61%	7.67%
RES-E - Renewable Electricity Generation [%]		12.36%	23.51%	23.59%	21.41%	20.24%
RES-H&C - Renewable Heating and Cooling [%]		24.33%	35.42%	37.18%	30.02%	31.67%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	45.8	48.5	43.0	37.1	42.9	47.6
GHG Greenhouse gases (CO_2, N_2O*	57.8	60.0	54.8	48.4	54.6	59.1
Main Emissions Indicators						
GHG total emissions [index 1990=100]	58.0%	60.2%	54.9%	48.6%	54.7%	59.2%
Total GHG per capita [t CO_2 eq./capita]	7.1	8.1	7.8	7.0	7.9	8.6

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

5.4 Czechia

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**30.8**	**31.9**	**26.6**	**23.5**	**24.4**	**25.3**
Solid fossil fuels	25.0	20.7	13.4	10.2	10.5	11.4
of which hard coal	9.4	7.4	2.2	1.4	1.5	1.1
of which brown coal	15.6	13.3	11.1	8.8	9.0	10.3
Oil and petroleum products	0.4	0.3	0.2	0.1	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	7.5	7.5	7.6	7.7
Renewables and biofuels	1.6	3.3	5.0	5.2	5.6	5.6
Wastes, Non-Renewable	0.1	0.2	0.4	0.4	0.4	0.4
Net Imports	**9.4**	**11.5**	**17.5**	**15.6**	**17.1**	**17.5**
Solid fossil fuels	-4.7	-2.9	1.2	1.6	1.8	1.9
of which hard coal	-3.5	-2.7	1.5	1.7	1.9	2.3
Oil and petroleum products	7.5	9.0	9.6	8.7	9.2	9.7
of which crude oil and NGL	5.6	7.8	7.9	6.3	6.9	7.5
Natural gas	7.5	6.8	7.9	6.3	7.2	7.2
Renewables and biofuels	0.0	-0.1	-0.1	0.0	-0.1	-0.1
Electricity	-0.9	-1.3	-1.1	-0.9	-1.0	-1.2
Gross inland consumption	**41.3**	**45.5**	**42.9**	**40.3**	**42.7**	**41.9**
Solid fossil fuels	21.6	18.8	14.2	12.3	12.9	13.4
of which hard coal	6.2	5.1	3.5	3.4	3.8	3.5
of which brown coal	15.6	13.5	10.7	8.9	9.1	10.0
Oil and petroleum products	7.9	9.3	9.9	8.6	9.5	9.7
of which crude and NGL	5.8	8.0	8.0	6.2	7.2	7.6
Natural gas	7.5	8.1	7.2	7.3	7.8	6.3
Nuclear	3.5	7.2	7.5	7.5	7.6	7.7
Renewables and biofuels	1.6	3.2	4.9	5.1	5.5	5.5
Electricity	-0.9	-1.3	-1.1	-0.9	-1.0	-1.2
Waste, non-renewable	0.1	0.2	0.4	0.4	0.4	0.4
Available for final consumption	**26.4**	**27.7**	**27.2**	**27.2**	**26.1**	**28.3**
Final non-energy consumption	**2.1**	**2.9**	**3.0**	**3.0**	**2.5**	**2.9**
Final energy consumption	**24.0**	**24.1**	**24.2**	**24.2**	**23.8**	**25.3**
by Fuel/Product						
Solid fossil fuels	4.2	1.9	1.4	1.4	1.4	1.4
Oil and petroleum products	5.2	6.3	6.7	6.4	6.8	6.9
Natural gas	5.9	6.1	5.2	5.2	5.5	4.7
Renewables and biofuels	1.2	2.3	3.2	3.4	3.7	3.6
Solid biofuels and renewable waste	1.1	2.0	2.5	2.6	2.9	2.7
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	0.4	0.4	0.3
Biogases	0.0	0.1	0.1	0.2	0.2	0.2
Waste, non-renewable	0.1	0.2	0.3	0.3	0.3	0.3
Electricity	4.2	4.7	5.0	4.9	5.2	5.0
Heat	2.6	2.4	2.0	2.0	2.2	2.0
by Sector						
Industry	9.2	6.9	6.6	6.6	7.0	6.6
Transport	4.2	5.9	6.8	6.4	6.8	6.9
Residential	6.4	7.4	7.0	7.1	7.9	7.2
Services	3.0	3.2	3.2	3.0	3.0	2.9
Agriculture and Fishing	0.7	0.5	0.6	0.6	0.6	0.6
Others	0.5	0.1	0.0	0.0	0.1	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**15.3**	**20.1**	**22.0**	**21.5**	**21.0**	**21.1**
Combustible Fuels	11.5	12.0	13.0	12.4	11.9	11.8
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	2.2	2.2	2.4
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]	**73.5**	**85.9**	**87.0**	**81.5**	**85.0**	**84.8**
Solid fossil fuels, peat and products, oil shale	52.8	46.9	37.3	31.0	34.2	36.9
Oil and petroleum products	0.4	0.2	0.1	0.1	0.1	0.1
Natural gas	3.9	4.2	7.9	8.5	7.9	4.9
Nuclear	13.6	28.0	30.2	30.0	30.7	31.0
Renewables and biofuels	2.3	5.9	10.1	10.4	10.6	10.8
Wastes non-RES	0.0	0.0	0.1	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			8.5	8.3	8.0	7.8
CHP Electricity Generation [TWh]			9.9	10.2	10.6	10.1
CHP in Total Electricity Generation [%]			11.4	12.0	12.5	11.9
CHP Heat Production [PJ]			99.1	100.2	99.0	90.2
Transport Fuels [ktoe]						
Final consumption petroleum products	4646	5924	6625	6193	6619	6759
of which LPG	199	117	177	174	181	168
of which motor gasoline	1922	1868	1602	1456	1515	1583
of which Gas/Diesel oil	2526	3939	4847	4563	4923	5008
Final consumption biofuels	62	231	340	372	361	342
pure and blended biogasoline	0	58	74	66	55	63
pure and blended biodiesel	62	173	267	307	306	278
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	39.1	42.5	39.7	37.6	39.5	38.6
Final energy consumption 2020-2030 [Mtoe]	25.1	25.3	25.3	24.5	26.1	24.9
Primary Energy Intensity 2020-2030 [toe/M€'15]	344	273	204	205	208	198
Energy Intensity (GAE/GDP2015) [toe/M€'15	363	292	221	219	225	215
Energy per Capita (GIC/pop) [kgoe/capita]	4017	4346	4031	3770	4073	3981
Final Electricity per Capita [KWh/capita]	7148	8211	8172	7623	8101	8068
Import Dependency [%]	**22.7%**	**25.4%**	**40.8%**	**38.8%**	**40.0%**	**41.8%**
of Solid fossil fuels	-22.0%	-15.3%	8.6%	12.8%	13.9%	13.9%
of Hard Coal	-56.4%	-53.9%	41.5%	51.9%	50.5%	65.6%
of Oil and petroleum products	95.3%	96.5%	97.5%	101.2%	96.9%	99.9%
of Crude and NGL	95.2%	97.5%	98.6%	101.7%	96.2%	99.6%
of Natural Gas	99.8%	84.8%	109.8%	86.0%	92.1%	113.4%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		10.51%	16.24%	17.30%	17.67%	18.19%
RE-T - Renewable energy in Transport [%]		5.22%	7.84%	9.38%	7.21%	7.20%
RES-E - Renewable Electricity Generation [%]		7.52%	14.05%	14.81%	14.47%	15.50%
RES-H&C - Renewable Heating and Cooling [%]		14.10%	22.63%	23.53%	24.35%	25.80%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	129.0	119.4	102.9	92.7	97.8	96.5
GHG Greenhouse gases (CO_2, N_2O*	153.1	142.5	125.9	114.4	119.9	118.5
Main Emissions Indicators						
GHG total emissions [index 1990=100]	75.8%	70.5%	62.3%	56.6%	59.4%	58.7%
Total GHG per capita [t CO_2 eq./capita]	14.9	13.6	11.8	10.7	11.4	11.3

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

5.5 Denmark

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	27.8	23.4	12.5	9.5	9.5	9.9
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	18.3	12.5	5.2	3.6	3.3	3.3
of which crude oil	18.3	12.5	5.2	3.6	3.3	3.3
Natural gas	7.4	7.3	2.8	1.2	1.3	1.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.8	3.1	4.2	4.3	4.6	5.1
Wastes, Non-Renewable	0.3	0.4	0.4	0.4	0.4	0.4
Net Imports	-7.5	-3.4	7.0	7.4	5.6	7.4
Solid fossil fuels	3.8	2.6	1.4	0.6	0.1	1.1
of which hard coal	3.8	2.6	1.4	0.5	0.1	1.1
Oil and petroleum products	-8.5	-3.8	3.4	3.5	2.0	3.8
of which crude oil and NGL	-10.0	-5.1	2.8	3.7	4.4	4.0
Natural gas	-2.9	-3.0	-0.2	0.8	0.5	0.4
Renewables and biofuels	0.1	0.9	1.8	1.9	2.5	1.9
Electricity	0.1	-0.1	0.5	0.6	0.4	0.1
Gross inland consumption	19.5	20.3	17.4	16.0	17.0	16.7
Solid fossil fuels	4.0	3.8	1.0	0.8	1.1	1.1
of which hard coal	4.0	3.8	1.0	0.8	1.1	1.1
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	8.8	7.8	6.9	5.9	6.0	6.6
of which crude and NGL	8.3	7.4	7.8	7.3	7.8	7.4
Natural gas	4.4	4.4	2.5	2.1	1.9	1.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.9	4.0	6.0	6.2	7.0	7.0
Electricity	0.1	-0.1	0.5	0.6	0.4	0.1
Waste, non-renewable	0.3	0.4	0.4	0.4	0.4	0.4
Available for final consumption	14.3	15.0	14.3	14.3	13.6	14.1
Final non-energy consumption	0.3	0.3	0.2	0.2	0.2	0.2
Final energy consumption	14.0	14.8	13.5	13.5	13.1	13.8
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	4.7	4.8	4.9
Natural gas	1.7	1.7	1.5	1.5	1.7	1.3
Renewables and biofuels	0.7	1.4	1.6	1.6	1.7	1.6
Solid biofuels and renewable waste	0.6	1.2	1.1	1.0	1.1	0.9
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	0.0	0.0	0.2	0.3	0.3	0.2
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	2.8	2.8	2.6	2.6	2.8	2.6
Heat	2.3	2.8	2.5	2.4	2.7	2.5
by Sector						
Industry	2.9	2.4	2.3	2.3	2.5	2.4
Transport	4.0	4.4	4.2	3.9	4.0	4.0
Residential	4.2	5.0	4.4	4.3	4.5	4.0
Services	1.8	2.1	1.9	1.8	2.0	1.9
Agriculture and Fishing	1.0	0.9	0.7	0.7	0.7	0.7
Others	0.0	0.0	0.1	0.1	0.1	0.1

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**12.3**	**13.4**	**15.0**	**15.1**	**16.2**	**17.6**
Combustible Fuels	9.9	9.6	7.8	7.6	7.5	7.4
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	6.1	6.3	7.0	7.1
Solar	0.0	0.0	1.1	1.3	1.7	3.1
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]	**36.1**	**38.9**	**29.5**	**28.7**	**33.1**	**35.1**
Solid fossil fuels, peat and products, oil shale	16.7	17.0	3.3	3.1	4.4	4.4
Oil and petroleum products	4.4	0.8	0.2	0.3	0.3	0.3
Natural gas	8.8	7.9	2.1	1.2	1.5	1.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	5.6	12.4	23.1	23.4	26.1	28.5
Wastes non-RES	0.6	0.7	0.8	0.8	0.8	0.8
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			5.1	5.0	4.6	4.5
CHP Electricity Generation [TWh]			10.6	8.3	10.1	9.8
CHP in Total Electricity Generation [%]			35.9	25.0	30.5	27.8
CHP Heat Production [PJ]			91.9	80.8	86.9	88.4
Transport Fuels [ktoe]						
Final consumption petroleum products	5754	5586	4768	4430	4544	4628
of which LPG	81	59	64	63	69	86
of which motor gasoline	2055	1602	1339	1194	1224	1214
of which Gas/Diesel oil	3619	3925	3365	3172	3251	3328
Final consumption biofuels	0	28	226	251	257	234
pure and blended biogasoline	0	27	44	80	82	80
pure and blended biodiesel	0	1	183	172	175	154
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	19.1	19.9	16.9	15.5	16.4	16.0
Final energy consumption 2020-2030 [Mtoe]	14.7	15.5	14.3	13.1	13.9	13.3
Primary Energy Intensity 2020-2030 [toe/M€'15]	81	78	56	53	52	50
Energy Intensity (GAE/GDP2015) [toe/M€'15	82	79	58	55	54	52
Energy per Capita (GIC/pop) [kgoe/capita]	3658	3673	2992	2752	2907	2836
Final Electricity per Capita [KWh/capita]	6764	7021	5084	4934	5659	5981
Import Dependency [%]	**-38.3%**	**-16.8%**	**40.5%**	**46.5%**	**33.2%**	**44.2%**
of Solid fossil fuels	94.9%	69.4%	145.3%	67.4%	10.9%	105.5%
of Hard Coal	94.8%	69.3%	145.7%	67.1%	10.3%	105.6%
of Oil and petroleum products	-96.5%	-49.0%	49.6%	60.6%	33.0%	57.1%
of Crude and NGL	-120.5%	-68.8%	36.0%	50.7%	56.7%	53.8%
of Natural Gas	-64.8%	-68.3%	-7.2%	37.4%	27.8%	28.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		21.89%	37.02%	31.68%	41.01%	41.60%
RE-T - Renewable energy in Transport [%]		1.15%	7.11%	9.70%	10.51%	10.24%
RES-E - Renewable Electricity Generation [%]		32.74%	65.35%	65.32%	72.92%	77.22%
RES-H&C - Renewable Heating and Cooling [%]		30.37%	47.30%	51.07%	49.20%	50.11%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	57.5	52.1	34.3	29.5	31.1	30.8
GHG Greenhouse gases (CO_2, N_2O*	74.6	67.1	48.4	43.6	44.8	44.2
Main Emissions Indicators						
GHG total emissions [index 1990=100]	101.7%	91.4%	65.9%	59.3%	61.1%	60.3%
Total GHG per capita [t CO_2 eq./capita]	14.0	12.1	8.3	7.5	7.7	7.5

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

5.6 Germany

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	135.2	131.7	105.3	97.9	103.6	97.3
Solid fossil fuels	60.6	45.9	28.4	23.4	27.5	28.5
of which hard coal	24.2	9.2	0.0	0.0	0.0	0.0
of which brown coal	36.4	36.7	28.4	23.4	27.5	28.5
Oil and petroleum products	4.4	3.7	3.2	3.1	3.0	2.8
of which crude oil	3.2	2.5	2.0	1.9	1.8	1.7
Natural gas	15.8	11.1	4.4	4.0	3.9	3.6
Nuclear	43.8	36.2	19.3	16.6	17.8	8.9
Renewables and biofuels	9.0	30.9	45.7	46.6	47.2	49.4
Wastes, Non-Renewable	1.7	3.9	4.2	4.2	4.3	4.1
Net Imports	204.9	204.6	207.5	182.2	188.8	194.5
Solid fossil fuels	21.7	31.6	26.7	19.7	25.8	27.8
of which hard coal	17.2	29.1	26.5	19.6	25.2	27.2
Oil and petroleum products	126.1	112.2	108.4	97.3	94.8	98.5
of which crude oil and NGL	101.5	94.0	87.2	84.0	82.5	89.5
Natural gas	56.9	61.6	75.7	66.5	70.0	70.7
Renewables and biofuels	0.0	0.4	-0.4	0.4	-0.2	-0.1
Electricity	0.3	-1.3	-2.8	-1.6	-1.6	-2.3
Gross inland consumption	342.4	338.2	308.1	284.9	296.3	282.3
Solid fossil fuels	84.8	79.1	56.5	44.7	53.9	55.5
of which hard coal	43.8	39.8	27.8	21.1	25.8	26.4
of which brown coal	37.2	36.7	28.5	23.4	27.5	28.5
Oil and petroleum products	131.1	113.2	110.0	99.5	97.8	100.1
of which crude and NGL	108.2	96.6	88.7	85.4	85.0	91.3
Natural gas	71.9	75.9	75.6	74.6	77.2	66.8
Nuclear	43.8	36.2	19.3	16.6	17.8	8.9
Renewables and biofuels	9.0	31.3	45.3	47.0	47.0	49.2
Electricity	0.3	-1.3	-2.8	-1.6	-1.6	-2.3
Waste, non-renewable	1.7	3.9	4.2	4.2	4.3	4.1
Available for final consumption	234.8	233.1	225.5	225.5	214.5	219.2
Final non-energy consumption	25.3	22.6	21.6	21.6	21.4	23.4
Final energy consumption	207.2	209.9	200.8	200.8	194.2	197.6
by Fuel/Product						
Solid fossil fuels	5.6	4.4	3.4	3.6	3.2	3.1
Oil and petroleum products	92.3	74.9	72.5	67.6	63.0	64.2
Natural gas	53.0	54.0	52.4	52.1	57.1	50.8
Renewables and biofuels	4.8	16.2	16.6	17.2	18.0	19.1
Solid biofuels and renewable waste	4.4	11.2	10.4	10.0	11.3	12.1
Solar thermal	0.1	0.5	0.7	0.8	0.7	0.8
Geothermal	0.0	0.1	0.1	0.1	0.1	0.1
Liquid biofuels	0.2	3.2	2.8	3.6	3.1	3.1
Biogases	0.1	0.8	1.4	1.4	1.3	1.3
Waste, non-renewable	0.0	1.0	1.3	1.3	1.3	1.2
Electricity	41.6	45.7	42.7	41.5	43.0	41.1
Heat	6.8	11.3	9.6	8.9	9.8	8.8
by Sector						
Industry	51.4	56.7	55.6	54.8	56.2	53.4
Transport	60.0	53.1	56.2	51.0	49.9	50.5
Residential	65.3	63.8	57.7	58.0	57.7	57.3
Services	25.8	34.8	27.5	26.8	30.0	25.5
Agriculture and Fishing	0.3	1.3	3.6	3.6	3.7	3.7
Others	4.3	0.2	0.1	0.1	0.1	0.1

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**118.9**	**162.9**	**231.5**	**233.7**	**242.6**	**250.3**
Combustible Fuels	80.8	85.8	100.5	98.3	99.2	100.9
Nuclear	22.4	20.5	9.5	8.1	8.1	4.2
Hydro	9.5	11.2	10.7	10.8	10.8	11.0
Wind	6.1	27.0	60.7	62.2	63.7	66.2
Solar	0.1	18.0	48.9	53.7	60.0	67.5
Geothermal	0.0	0.0	0.0	0.0	0.0	0.1
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**576.5**	**633.1**	**606.9**	**575.5**	**592.8**	**580.3**
Solid fossil fuels, peat and products, oil shale	296.7	262.9	171.5	134.6	164.7	180.0
Oil and petroleum products	4.8	8.7	4.8	4.7	4.6	5.2
Natural gas	60.0	100.9	101.1	105.4	107.2	95.6
Nuclear	169.6	140.6	75.1	64.4	69.1	34.7
Renewables and biofuels	35.5	105.2	240.3	251.5	233.6	251.1
Wastes non-RES	5.8	6.4	6.8	6.7	6.6	6.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			54.8	53.4	50.2	51.3
CHP Electricity Generation [TWh]			86.9	85.5	90.1	80.3
CHP in Total Electricity Generation [%]			14.3	14.9	15.2	13.8
CHP Heat Production [PJ]			663.2	638.8	670.2	617.4
Transport Fuels [ktoe]						
Final consumption petroleum products	89321	72135	70460	65956	61369	62515
of which LPG	1909	2075	1729	1665	1538	1670
of which motor gasoline	30479	19204	16989	15311	15409	15879
of which Gas/Diesel oil	56933	50857	51741	48981	44422	44966
Final consumption biofuels	236	3166	2827	3557	3109	3148
pure and blended biogasoline	0	749	725	696	742	755
pure and blended biodiesel	222	2244	2044	2801	2329	2361
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	317.1	315.2	285.2	262.2	271.5	260.6
Final energy consumption 2020-2030 [Mtoe]	220.2	223.0	214.7	202.3	207.9	202.8
Primary Energy Intensity 2020-2030 [toe/M€'15]	124	113	88	84	84	80
Energy Intensity (GAE/GDP2015) [toe/M€'15	134	122	95	91	92	86
Energy per Capita (GIC/pop) [kgoe/capita]	4168	4135	3712	3425	3564	3391
Final Electricity per Capita [KWh/capita]	7017	7740	7311	6919	7129	6971
Import Dependency [%]	**59.8%**	**60.5%**	**67.4%**	**64.0%**	**63.7%**	**68.9%**
of Solid fossil fuels	25.6%	40.0%	47.2%	44.1%	47.8%	50.0%
of Hard Coal	39.2%	73.2%	95.2%	92.9%	97.6%	102.9%
of Oil and petroleum products	96.2%	99.1%	98.5%	97.8%	96.9%	98.3%
of Crude and NGL	93.8%	97.3%	98.3%	98.3%	97.0%	98.0%
of Natural Gas	79.1%	81.2%	100.1%	89.1%	90.7%	105.9%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		11.67%	17.27%	19.09%	19.40%	20.80%
RE-T - Renewable energy in Transport [%]		6.41%	7.63%	10.01%	8.09%	9.94%
RES-E - Renewable Electricity Generation [%]		18.24%	40.60%	44.21%	43.88%	47.64%
RES-H&C - Renewable Heating and Cooling [%]		12.06%	14.50%	14.48%	15.52%	17.48%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	918.4	851.0	739.6	662.1	696.9	698.7
GHG Greenhouse gases (CO_2, N_2O*	1060.0	952.4	826.8	745.6	777.9	777.4
Main Emissions Indicators						
GHG total emissions [index 1990=100]	83.9%	75.4%	65.5%	59.0%	61.6%	61.6%
Total GHG per capita [t CO_2 eq./capita]	12.9	11.6	10.0	9.0	9.4	9.3

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

5.7 Estonia

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	3.4	5.1	5.1	4.4	4.4	4.7
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	0.5	1.0	1.9	1.8	1.9	1.9
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	1.6	0.9	0.2	0.5	0.1	0.3
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	0.3	0.3	0.1	0.5
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	0.3
Renewables and biofuels	0.0	-0.1	-0.6	-0.5	-0.7	-0.6
Electricity	-0.1	-0.3	0.2	0.3	0.2	0.1
Gross inland consumption	4.7	5.9	4.9	4.5	4.6	4.9
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	0.1	0.0	-0.1	0.2
of which crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	0.6	0.4	0.3	0.4	0.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.5	0.9	1.2	1.3	1.3	1.3
Electricity	-0.1	-0.3	0.2	0.3	0.2	0.1
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for final consumption	2.5	3.1	3.0	3.0	3.0	2.9
Final non-energy consumption	0.2	0.1	0.1	0.1	0.2	0.2
Final energy consumption	2.4	2.9	2.8	2.8	2.7	2.8
by Fuel/Product						
Solid fossil fuels	0.1	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.7	0.9	1.0	0.9	0.9	0.9
Natural gas	0.2	0.2	0.2	0.2	0.3	0.2
Renewables and biofuels	0.4	0.6	0.4	0.5	0.5	0.5
Solid biofuels and renewable waste	0.4	0.5	0.4	0.4	0.4	0.4
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.0	0.0	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	0.7	0.6
Heat	0.5	0.5	0.5	0.5	0.5	0.5
by Sector						
Industry	0.6	0.6	0.5	0.4	0.4	0.4
Transport	0.6	0.8	0.8	0.8	0.8	0.8
Residential	0.9	1.0	1.0	0.9	1.0	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

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**2.8**	**2.8**	**2.7**	**2.7**	**2.4**	**2.5**
Combustible Fuels	2.8	2.6	2.3	2.2	1.7	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	0.1	0.2	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]	**8.5**	**13.0**	**7.6**	**6.1**	**7.2**	**8.9**
Solid fossil fuels, peat and products, oil shale	7.7	11.2	4.3	2.2	3.4	5.1
Oil and petroleum products	0.1	0.0	0.0	0.0	0.0	0.0
Natural gas	0.8	0.7	1.1	0.8	0.8	0.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	1.0	2.1	3.0	2.9	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]			0.2	0.5	0.5	0.5
CHP Electricity Generation [TWh]			1.0	1.4	1.5	1.4
CHP in Total Electricity Generation [%]			13.6	19.3	21.0	15.6
CHP Heat Production [PJ]			3.6	12.8	16.5	15.8
Transport Fuels [ktoe]						
Final consumption petroleum products	655	883	956	885	871	926
of which LPG	8	11	30	27	21	24
of which motor gasoline	296	289	276	216	201	212
of which Gas/Diesel oil	351	583	650	642	650	690
Final consumption biofuels	0	8	27	39	46	28
pure and blended biogasoline	0	4	7	6	4	2
pure and blended biodiesel	0	3	20	33	41	26
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	4.6	5.8	4.8	4.3	4.5	4.7
Final energy consumption 2020-2030 [Mtoe]	2.4	2.9	2.9	2.7	2.8	2.8
Primary Energy Intensity 2020-2030 [toe/M€'15]	363	333	197	179	172	184
Energy Intensity (GAE/GDP2015) [toe/M€'15	375	338	202	187	178	189
Energy per Capita (GIC/pop) [kgoe/capita]	3360	4443	3711	3384	3464	3644
Final Electricity per Capita [KWh/capita]	6075	9723	5748	4574	5417	6710
Import Dependency [%]	**34.7%**	**15.2%**	**4.9%**	**11.2%**	**1.5%**	**6.6%**
of Solid fossil fuels	125.2%	132.6%	107.2%	391.7%	95.2%	95.8%
of Hard Coal	116.1%	118.3%	96.7%	28.5%	151.4%	112.0%
of Oil and petroleum products	117.3%	130.2%	547.2%	-1758.5%	-114.4%	265.0%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	100.0%	100.0%	105.4%	106.3%	106.1%	118.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		24.57%	31.73%	30.07%	37.44%	38.47%
RE-T - Renewable energy in Transport [%]		0.43%	6.24%	12.16%	11.10%	8.48%
RES-E - Renewable Electricity Generation [%]		10.29%	22.00%	28.29%	29.19%	29.11%
RES-H&C - Renewable Heating and Cooling [%]		43.16%	52.19%	58.83%	61.35%	65.44%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	15.5	19.1	12.5	9.3	10.5	11.9
GHG Greenhouse gases (CO_2, N_2O*	17.5	21.2	14.7	11.4	12.7	14.1
Main Emissions Indicators						
GHG total emissions [index 1990=100]	43.4%	52.5%	36.5%	28.3%	31.5%	35.0%
Total GHG per capita [t CO_2 eq./capita]	12.5	15.9	11.1	8.6	9.6	10.6

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

5.8 Ireland

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**2.2**	**1.8**	**4.2**	**3.6**	**3.0**	**3.1**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
of which crude oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	1.0	0.2	2.1	1.7	1.3	1.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.2	0.6	1.5	1.6	1.5	1.7
Wastes, Non-Renewable	0.0	0.0	0.1	0.1	0.1	0.1
Net Imports	**12.4**	**13.3**	**10.4**	**9.9**	**11.1**	**11.7**
Solid fossil fuels	1.7	1.0	0.3	0.3	1.0	0.9
of which hard coal	1.7	0.9	0.3	0.2	1.0	0.9
Oil and petroleum products	8.2	7.7	7.5	6.6	6.8	7.3
of which crude oil and NGL	3.0	3.0	2.6	3.0	3.0	3.1
Natural gas	2.5	4.5	2.4	2.9	3.1	3.3
Renewables and biofuels	0.0	0.1	0.2	0.2	0.1	0.2
Electricity	0.0	0.0	0.1	0.0	0.1	0.0
Gross inland consumption	**14.4**	**15.1**	**15.0**	**13.8**	**14.3**	**14.7**
Solid fossil fuels	1.8	1.2	0.4	0.4	0.9	0.7
of which hard coal	1.8	1.2	0.4	0.4	0.9	0.7
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	8.2	7.8	7.4	6.2	6.7	7.1
of which crude and NGL	3.4	3.0	2.6	2.9	3.1	3.1
Natural gas	3.4	4.7	4.6	4.6	4.4	4.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.2	0.7	1.6	1.8	1.6	1.8
Electricity	0.0	0.0	0.1	0.0	0.1	0.0
Waste, non-renewable	0.0	0.0	0.1	0.1	0.1	0.1
Available for final consumption	**10.4**	**11.3**	**11.6**	**11.6**	**11.1**	**11.4**
Final non-energy consumption	**0.7**	**0.3**	**0.2**	**0.2**	**0.2**	**0.4**
Final energy consumption	**10.2**	**11.2**	**11.3**	**11.3**	**10.9**	**11.1**
by Fuel/Product						
Solid fossil fuels	0.4	0.4	0.2	0.2	0.2	0.2
Oil and petroleum products	6.5	6.5	5.9	5.5	5.6	5.6
Natural gas	1.2	1.6	2.0	2.0	1.9	1.8
Renewables and biofuels	0.1	0.3	0.5	0.5	0.5	0.6
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	0.2	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	0.1	0.1	0.1
Electricity	1.7	2.2	2.4	2.5	2.6	2.6
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	2.5	1.9	2.2	2.2	2.2	2.1
Transport	3.5	3.9	4.1	3.5	3.7	4.0
Residential	2.7	3.6	3.0	3.2	3.1	2.7
Services	1.2	1.4	1.8	1.7	1.7	1.9
Agriculture and Fishing	0.4	0.3	0.3	0.3	0.3	0.3
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**4.7**	**8.1**	**11.1**	**11.2**	**11.1**	**11.3**
Combustible Fuels	4.1	6.5	6.4	6.3	6.1	6.0
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	4.1	4.3	4.3	4.5
Solar	0.0	0.0	0.0	0.1	0.1	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]	**24.0**	**28.4**	**31.0**	**32.3**	**31.9**	**33.9**
Solid fossil fuels, peat and products, oil shale	8.6	5.7	2.4	1.6	3.0	2.6
Oil and petroleum products	4.6	0.6	0.3	0.4	1.5	1.1
Natural gas	9.3	18.1	15.9	16.2	15.2	16.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.2	3.7	11.8	13.5	11.6	13.1
Wastes non-RES	0.0	0.0	0.3	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	2.0	2.1
CHP in Total Electricity Generation [%]			6.7	6.5	6.4	6.1
CHP Heat Production [PJ]			11.2	11.1	10.9	11.3
Transport Fuels [ktoe]						
Final consumption petroleum products	4839	4894	4826	4195	4415	4672
of which LPG	153	149	180	174	178	183
of which motor gasoline	1590	1527	781	578	613	698
of which Gas/Diesel oil	3096	3218	3865	3443	3624	3791
Final consumption biofuels	0	93	188	175	178	224
pure and blended biogasoline	0	30	26	19	20	23
pure and blended biodiesel	0	62	162	155	158	201
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	13.7	14.7	14.7	13.5	13.8	14.3
Final energy consumption 2020-2030 [Mtoe]	10.8	11.9	12.4	11.2	11.4	12.0
Primary Energy Intensity 2020-2030 [toe/M€'15]	95	77	44	38	34	32
Energy Intensity (GAE/GDP2015) [toe/M€'15	100	79	45	39	35	33
Energy per Capita (GIC/pop) [kgoe/capita]	3804	3311	3053	2773	2853	2899
Final Electricity per Capita [KWh/capita]	6347	6232	6312	6500	6364	6691
Import Dependency [%]	**86.4%**	**88.3%**	**69.3%**	**71.9%**	**77.9%**	**79.8%**
of Solid fossil fuels	93.3%	77.7%	67.9%	55.9%	106.0%	126.5%
of Hard Coal	93.1%	77.5%	67.0%	55.2%	106.1%	126.9%
of Oil and petroleum products	100.6%	99.2%	100.9%	105.8%	100.9%	102.3%
of Crude and NGL	89.8%	101.6%	100.9%	102.3%	98.1%	102.5%
of Natural Gas	72.1%	95.3%	53.0%	63.7%	71.1%	73.9%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		5.76%	11.98%	16.16%	12.38%	13.11%
RE-T - Renewable energy in Transport [%]		2.49%	8.92%	10.19%	4.40%	5.51%
RES-E - Renewable Electricity Generation [%]		15.64%	36.46%	39.05%	36.38%	36.78%
RES-H&C - Renewable Heating and Cooling [%]		4.28%	6.34%	6.26%	4.93%	6.30%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	47.1	44.1	40.6	36.3	38.9	39.7
GHG Greenhouse gases (CO_2, N_2O*	71.2	65.1	64.2	59.9	63.1	63.7
Main Emissions Indicators						
GHG total emissions [index 1990=100]	126.4%	115.6%	114.0%	106.4%	112.0%	113.0%
Total GHG per capita [t CO_2 eq./capita]	18.8	14.3	13.1	12.1	12.6	12.6

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

5.9 Greece

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**10.0**	**9.5**	**6.4**	**5.0**	**5.2**	**5.3**
Solid fossil fuels	8.2	7.3	3.1	1.6	1.4	1.7
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	8.2	7.3	3.1	1.6	1.4	1.7
Oil and petroleum products	0.3	0.1	0.2	0.1	0.1	0.0
of which crude oil	0.3	0.1	0.2	0.1	0.1	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	1.5	2.0	3.1	3.2	3.7	3.6
Wastes, Non-Renewable	0.1	0.0	0.0	0.0	0.0	0.0
Net Imports	**21.8**	**21.3**	**19.3**	**18.0**	**17.2**	**18.9**
Solid fossil fuels	0.8	0.4	0.2	0.2	0.2	0.0
of which hard coal	0.8	0.4	0.2	0.2	0.2	0.1
Oil and petroleum products	19.3	17.0	13.7	11.9	11.2	14.1
of which crude oil and NGL	19.2	19.1	22.4	22.5	23.2	21.8
Natural gas	1.7	3.2	4.4	5.0	5.4	4.5
Renewables and biofuels	0.0	0.2	0.1	0.1	0.1	0.1
Electricity	0.0	0.5	0.9	0.8	0.3	0.3
Gross inland consumption	**27.9**	**28.3**	**23.6**	**20.4**	**21.5**	**21.8**
Solid fossil fuels	9.0	7.9	3.2	1.8	1.7	1.6
of which hard coal	0.7	0.4	0.2	0.2	0.2	0.1
of which brown coal	8.3	7.5	3.0	1.7	1.5	1.5
Oil and petroleum products	15.6	14.5	11.8	9.6	10.2	11.9
of which crude and NGL	19.3	19.2	22.8	22.1	23.5	21.8
Natural gas	1.7	3.2	4.5	4.9	5.4	4.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.5	2.2	3.2	3.3	3.8	3.7
Electricity	0.0	0.5	0.9	0.8	0.3	0.3
Waste, non-renewable	0.1	0.0	0.0	0.0	0.0	0.0
Available for final consumption	**18.5**	**19.2**	**16.4**	**16.4**	**14.5**	**15.0**
Final non-energy consumption	**0.7**	**1.1**	**0.9**	**0.9**	**0.8**	**0.7**
Final energy consumption	**17.9**	**18.4**	**15.4**	**15.4**	**14.5**	**14.9**
by Fuel/Product						
Solid fossil fuels	0.9	0.3	0.2	0.2	0.2	0.1
Oil and petroleum products	11.9	11.4	8.2	7.4	7.4	8.3
Natural gas	0.3	0.8	0.9	1.1	1.2	1.2
Renewables and biofuels	1.1	1.2	1.7	1.7	1.8	1.6
Solid biofuels and renewable waste	0.9	0.9	0.8	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	0.0
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	3.7	4.6	4.3	4.1	4.2	4.1
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	4.5	3.5	2.6	2.5	2.6	2.6
Transport	6.5	7.5	6.0	5.1	5.5	5.9
Residential	4.6	4.7	4.1	4.3	4.3	4.3
Services	1.3	2.0	2.1	1.9	2.0	2.1
Agriculture and Fishing	1.1	0.8	0.3	0.3	0.3	0.3
Others	0.0	0.0	0.2	0.3	0.2	0.3

Methodology and Notes: **see appendices**

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**10.9**	**15.3**	**20.5**	**20.8**	**21.9**	**23.9**
Combustible Fuels	7.6	10.6	10.6	10.0	9.6	10.4
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	3.6	4.1	4.6	4.7
Solar	0.0	0.2	2.8	3.3	4.3	5.4
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]	**53.8**	**57.4**	**48.6**	**48.3**	**54.7**	**52.6**
Solid fossil fuels, peat and products, oil shale	34.3	30.8	12.1	6.6	5.3	5.8
Oil and petroleum products	8.9	6.1	5.6	4.7	4.7	5.1
Natural gas	5.9	9.8	14.5	19.2	22.5	19.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	4.1	10.5	16.1	17.6	22.1	22.4
Wastes non-RES	0.2	0.1	0.3	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.4	0.4	0.4	0.4
CHP Electricity Generation [TWh]			2.2	2.3	2.3	2.4
CHP in Total Electricity Generation [%]			4.5	4.2	4.2	4.6
CHP Heat Production [PJ]			15.3	16.8	17.0	15.6
Transport Fuels [ktoe]						
Final consumption petroleum products	10038	9882	6929	6350	6429	7121
of which LPG	456	320	596	514	548	601
of which motor gasoline	3471	3894	2357	1895	2027	2171
of which Gas/Diesel oil	6111	5668	3976	3941	3855	4349
Final consumption biofuels	0	125	193	205	222	0
pure and blended biogasoline	0	0	25	63	68	0
pure and blended biodiesel	0	125	168	142	154	0
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	27.2	27.2	22.3	19.2	20.3	20.9
Final energy consumption 2020-2030 [Mtoe]	18.7	19.1	16.2	14.4	15.2	16.1
Primary Energy Intensity 2020-2030 [toe/M€'15]	150	126	121	115	113	110
Energy Intensity (GAE/GDP2015) [toe/M€'15	154	131	128	123	119	114
Energy per Capita (GIC/pop) [kgoe/capita]	2589	2549	2196	1908	2014	2086
Final Electricity per Capita [KWh/capita]	4997	5163	4534	4502	5124	5030
Import Dependency [%]	**78.0%**	**75.1%**	**82.0%**	**87.9%**	**80.0%**	**86.7%**
of Solid fossil fuels	8.5%	5.1%	6.4%	10.2%	9.6%	-0.7%
of Hard Coal	105.8%	100.5%	105.0%	114.6%	92.7%	82.0%
of Oil and petroleum products	123.4%	117.1%	116.1%	124.5%	109.6%	118.5%
of Crude and NGL	99.6%	99.6%	98.1%	102.0%	98.4%	99.8%
of Natural Gas	99.1%	99.9%	99.0%	100.7%	99.4%	101.6%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		10.08%	19.63%	21.75%	22.02%	22.68%
RE-T - Renewable energy in Transport [%]		1.92%	4.05%	5.34%	4.41%	4.08%
RES-E - Renewable Electricity Generation [%]		12.31%	31.30%	35.86%	35.93%	42.41%
RES-H&C - Renewable Heating and Cooling [%]		18.66%	30.05%	31.94%	31.08%	30.61%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	105.5	99.9	69.7	56.9	60.0	62.0
GHG Greenhouse gases (CO_2, N_2O*	129.2	121.8	90.3	77.2	80.5	82.2
Main Emissions Indicators						
GHG total emissions [index 1990=100]	121.3%	114.4%	84.8%	72.5%	75.6%	77.2%
Total GHG per capita [t CO_2 eq./capita]	12.0	11.0	8.4	7.2	7.5	7.9

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

5.10 Spain

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**31.3**	**34.5**	**34.7**	**35.4**	**35.6**	**36.0**
Solid fossil fuels	8.0	3.3	0.0	0.0	0.0	0.0
of which hard coal	5.4	2.5	0.0	0.0	0.0	0.0
of which brown coal	2.6	0.8	0.0	0.0	0.0	0.0
Oil and petroleum products	0.2	0.1	0.0	0.0	0.0	0.0
of which crude oil	0.2	0.1	0.0	0.0	0.0	0.0
Natural gas	0.1	0.0	0.1	0.0	0.0	0.0
Nuclear	16.0	16.1	15.2	15.2	14.7	15.3
Renewables and biofuels	6.7	14.6	18.8	19.6	20.3	20.1
Wastes, Non-Renewable	0.2	0.3	0.5	0.5	0.5	0.5
Net Imports	**99.9**	**106.7**	**100.6**	**80.2**	**87.0**	**95.3**
Solid fossil fuels	12.8	6.8	4.5	1.7	3.3	5.2
of which hard coal	13.3	6.9	4.1	1.2	2.8	5.0
Oil and petroleum products	71.2	69.3	64.5	51.7	55.0	63.1
of which crude oil and NGL	58.1	53.0	67.0	55.4	56.8	64.3
Natural gas	15.5	31.0	31.4	27.2	29.5	29.3
Renewables and biofuels	0.0	0.4	-0.4	-0.7	-0.8	-0.6
Electricity	0.4	-0.7	0.6	0.3	0.1	-1.7
Gross inland consumption	**124.0**	**130.1**	**126.8**	**111.8**	**117.9**	**119.5**
Solid fossil fuels	20.9	7.3	5.1	3.1	3.1	3.6
of which hard coal	18.5	7.2	4.5	2.6	2.7	3.4
of which brown coal	2.8	0.2	0.2	0.0	0.0	0.0
Oil and petroleum products	64.4	60.9	56.2	45.7	50.3	53.8
of which crude and NGL	57.7	53.4	66.3	55.7	57.5	64.0
Natural gas	15.2	31.1	30.9	27.9	29.4	28.3
Nuclear	16.0	16.1	15.2	15.2	14.7	15.3
Renewables and biofuels	6.8	15.0	18.4	19.1	19.8	19.6
Electricity	0.4	-0.7	0.6	0.3	0.1	-1.7
Waste, non-renewable	0.2	0.3	0.5	0.5	0.5	0.5
Available for final consumption	**85.4**	**91.4**	**86.3**	**86.3**	**77.7**	**83.8**
Final non-energy consumption	**9.5**	**7.1**	**5.4**	**5.4**	**5.8**	**5.4**
Final energy consumption	**76.3**	**85.5**	**81.5**	**81.5**	**72.3**	**78.6**
by Fuel/Product						
Solid fossil fuels	0.8	0.5	0.4	0.3	0.3	0.4
Oil and petroleum products	43.7	43.9	39.5	32.6	36.8	38.5
Natural gas	11.8	14.4	14.5	13.8	14.9	12.5
Renewables and biofuels	3.5	5.4	6.7	6.5	6.6	6.9
Solid biofuels and renewable waste	3.3	3.7	3.8	3.7	3.7	3.8
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	1.7	1.4	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	20.2	18.9	19.6	19.3
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	24.5	20.8	20.6	18.8	20.2	17.9
Transport	30.5	34.3	32.9	26.1	30.4	32.5
Residential	12.1	17.0	14.4	14.6	14.7	14.3
Services	6.7	9.8	10.3	9.6	10.1	10.1
Agriculture and Fishing	2.6	2.2	2.9	3.0	3.1	2.9
Others	0.0	1.5	0.3	0.3	0.2	0.2

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**53.9**	**101.7**	**109.7**	**108.3**	**111.0**	**122.5**
Combustible Fuels	26.2	50.4	45.7	41.8	39.8	39.5
Nuclear	7.5	7.5	7.1	7.1	7.1	7.1
Hydro	18.0	18.5	20.1	20.1	20.1	20.1
Wind	2.2	20.7	25.6	26.8	27.9	30.1
Solar	0.0	4.6	11.1	12.4	16.0	25.6
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]	**224.5**	**301.5**	**273.3**	**263.4**	**274.3**	**292.5**
Solid fossil fuels, peat and products, oil shale	79.1	25.3	12.9	5.5	4.9	7.9
Oil and petroleum products	22.6	16.6	12.9	10.7	10.0	10.6
Natural gas	21.9	95.8	84.8	70.4	72.7	86.8
Nuclear	62.2	62.0	58.3	58.3	56.6	58.6
Renewables and biofuels	34.5	97.8	101.0	113.8	125.7	122.9
Wastes non-RES	0.6	0.7	1.0	1.0	0.9	0.9
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			5.0	5.0	4.8	4.8
CHP Electricity Generation [TWh]			29.7	26.9	27.5	19.3
CHP in Total Electricity Generation [%]			10.9	9.8	10.0	6.6
CHP Heat Production [PJ]			143.2	132.4	138.9	101.4
Transport Fuels [ktoe]						
Final consumption petroleum products	37047	37676	34941	29967	33576	34542
of which LPG	2775	2063	1386	1216	1266	1492
of which motor gasoline	9019	5620	5473	4348	5361	5916
of which Gas/Diesel oil	25253	29994	28081	24403	26949	27134
Final consumption biofuels	71	1453	1672	1403	1403	1375
pure and blended biogasoline	0	232	131	87	114	103
pure and blended biodiesel	71	1221	1541	1316	1289	1272
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	114.5	123.0	120.6	105.0	111.5	113.2
Final energy consumption 2020-2030 [Mtoe]	80.0	89.6	86.5	73.8	80.3	81.2
Primary Energy Intensity 2020-2030 [toe/M€'15]	131	114	101	99	99	95
Energy Intensity (GAE/GDP2015) [toe/M€'15	142	121	106	105	105	100
Energy per Capita (GIC/pop) [kgoe/capita]	3065	2799	2702	2362	2488	2519
Final Electricity per Capita [KWh/capita]	5547	6486	5822	5564	5787	6166
Import Dependency [%]	**80.5%**	**82.0%**	**79.3%**	**71.8%**	**73.8%**	**79.7%**
of Solid fossil fuels	61.3%	92.8%	89.5%	54.8%	105.7%	144.8%
of Hard Coal	71.5%	95.7%	91.6%	46.2%	106.1%	146.8%
of Oil and petroleum products	110.5%	113.7%	114.8%	113.2%	109.4%	117.2%
of Crude and NGL	100.6%	99.3%	101.0%	99.5%	98.7%	100.3%
of Natural Gas	101.6%	99.4%	101.6%	97.5%	100.4%	103.3%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.78%	17.85%	21.22%	20.74%	22.12%
RE-T - Renewable energy in Transport [%]		5.02%	7.61%	9.53%	9.19%	9.68%
RES-E - Renewable Electricity Generation [%]		29.75%	37.13%	42.94%	46.00%	50.90%
RES-H&C - Renewable Heating and Cooling [%]		12.50%	17.20%	17.97%	17.39%	20.04%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	319.6	295.5	269.0	218.0	237.3	249.6
GHG Greenhouse gases (CO_2, N_2O*	392.8	367.2	328.1	276.9	296.8	309.3
Main Emissions Indicators						
GHG total emissions [index 1990=100]	134.5%	125.7%	112.4%	94.8%	101.6%	105.9%
Total GHG per capita [t CO_2 eq./capita]	9.7	7.9	7.0	5.9	6.3	6.5

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

5.11 France

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	129.1	136.7	134.5	122.8	131.0	107.8
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	0.9	0.8	0.8	0.8
of which crude oil	1.7	0.9	0.7	0.7	0.7	0.6
Natural gas	1.5	0.6	0.0	0.0	0.0	0.0
Nuclear	107.1	111.6	104.0	92.2	98.9	76.8
Renewables and biofuels	15.6	22.0	27.8	28.1	29.6	28.4
Wastes, Non-Renewable	0.9	1.3	1.7	1.6	1.7	1.8
Net Imports	132.7	132.4	120.4	99.7	107.2	114.7
Solid fossil fuels	12.8	12.1	7.3	5.1	6.2	6.1
of which hard coal	12.3	11.2	6.8	4.8	5.2	5.2
Oil and petroleum products	90.0	83.2	77.8	64.7	67.8	69.5
of which crude oil and NGL	85.4	65.5	49.5	33.8	34.5	41.9
Natural gas	35.8	39.6	39.2	33.1	35.6	36.2
Renewables and biofuels	0.0	0.2	1.1	0.7	1.4	1.7
Electricity	-6.0	-2.6	-5.0	-3.9	-3.9	1.3
Gross inland consumption	255.9	269.7	251.8	223.6	242.0	219.8
Solid fossil fuels	14.9	12.0	7.3	5.3	8.5	7.5
of which hard coal	14.1	11.1	6.9	5.0	5.8	5.1
of which brown coal	0.1	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	87.6	82.7	77.3	64.7	68.7	69.2
of which crude and NGL	86.8	66.7	50.3	34.5	35.5	42.4
Natural gas	35.8	42.6	37.5	34.9	37.0	33.2
Nuclear	107.1	111.6	104.0	92.2	98.9	76.8
Renewables and biofuels	15.6	22.2	28.9	28.8	31.1	30.1
Electricity	-6.0	-2.6	-5.0	-3.9	-3.9	1.3
Waste, non-renewable	0.9	1.3	1.7	1.6	1.7	1.8
Available for final consumption	156.6	161.5	155.7	155.7	141.3	152.4
Final non-energy consumption	17.0	13.9	13.5	13.5	12.6	13.3
Final energy consumption	145.1	146.3	139.3	139.3	127.8	139.0
by Fuel/Product						
Solid fossil fuels	2.3	1.8	1.0	0.8	1.0	0.7
Oil and petroleum products	67.5	58.4	53.6	47.0	51.1	51.6
Natural gas	29.8	32.0	28.3	26.5	28.9	24.7
Renewables and biofuels	9.0	12.9	15.2	14.1	16.2	15.6
Solid biofuels and renewable waste	8.4	9.1	8.4	7.7	8.6	7.9
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	3.5	2.9	3.2	3.3
Biogases	0.1	0.1	0.2	0.2	0.3	0.3
Waste, non-renewable	0.2	0.1	0.5	0.4	0.5	0.5
Electricity	33.1	38.2	37.1	35.4	37.2	35.7
Heat	3.2	2.8	3.7	3.6	4.1	4.0
by Sector						
Industry	32.2	27.7	27.0	24.8	26.7	25.3
Transport	45.2	43.6	45.1	38.0	42.6	44.5
Residential	40.6	45.4	40.1	39.2	42.2	37.2
Services	18.7	24.1	22.2	20.7	22.0	20.2
Agriculture and Fishing	4.3	4.4	4.5	4.7	4.6	4.7
Others	4.1	1.0	0.6	0.5	0.7	0.8

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**114.5**	**124.1**	**137.2**	**138.0**	**142.2**	**148.7**
Combustible Fuels	25.9	28.4	20.8	20.9	21.0	21.0
Nuclear	63.2	63.1	63.1	61.4	61.4	61.4
Hydro	25.2	25.4	25.9	26.0	26.0	26.0
Wind	0.0	5.9	16.4	17.5	18.6	20.8
Solar	0.0	1.0	10.7	11.9	14.6	17.3
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**	**569.3**	**570.8**	**532.3**	**555.1**	**474.7**
Solid fossil fuels, peat and products, oil shale	27.0	23.4	3.6	3.1	5.4	4.3
Oil and petroleum products	7.2	5.5	5.9	5.6	5.7	6.4
Natural gas	15.4	26.7	41.5	37.1	35.2	47.5
Nuclear	415.2	428.5	399.0	353.8	379.4	294.7
Renewables and biofuels	67.8	76.7	113.1	125.2	122.3	113.5
Wastes non-RES	1.1	2.0	2.4	2.3	2.2	2.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			6.6	6.5	7.0	5.7
CHP Electricity Generation [TWh]			18.1	17.5	18.5	19.3
CHP in Total Electricity Generation [%]			3.2	3.2	3.3	4.1
CHP Heat Production [PJ]			159.9	177.1	174.4	178.0
Transport Fuels [ktoe]						
Final consumption petroleum products	61952	55093	50738	44844	48614	48699
of which LPG	3815	2645	1906	1782	1941	1750
of which motor gasoline	14494	7744	8208	7022	8278	9269
of which Gas/Diesel oil	43643	44705	40624	36039	38394	37680
Final consumption biofuels	326	2420	3481	2945	3181	3330
pure and blended biogasoline	59	399	653	565	716	850
pure and blended biodiesel	268	2021	2804	2357	2463	2477
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	239.0	254.5	235.5	208.0	224.8	205.6
Final energy consumption 2020-2030 [Mtoe]	154.8	154.0	145.5	129.7	143.0	138.5
Primary Energy Intensity 2020-2030 [toe/M€'15]	130	122	100	95	97	86
Energy Intensity (GAE/GDP2015) [toe/M€'15	139	129	107	103	104	92
Energy per Capita (GIC/pop) [kgoe/capita]	4227	4171	3749	3322	3577	3239
Final Electricity per Capita [KWh/capita]	8918	8804	8497	7906	8204	6995
Import Dependency [%]	**51.8%**	**49.1%**	**47.8%**	**44.6%**	**44.3%**	**52.2%**
of Solid fossil fuels	86.3%	101.0%	99.6%	96.3%	73.5%	81.6%
of Hard Coal	87.2%	100.6%	99.2%	95.8%	88.7%	103.4%
of Oil and petroleum products	102.7%	100.6%	100.6%	100.0%	98.7%	100.4%
of Crude and NGL	98.5%	98.2%	98.4%	97.9%	97.2%	98.9%
of Natural Gas	100.0%	92.8%	104.5%	94.7%	96.1%	109.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		12.67%	17.17%	19.11%	19.20%	20.26%
RE-T - Renewable energy in Transport [%]		6.58%	9.25%	9.21%	8.28%	9.03%
RES-E - Renewable Electricity Generation [%]		14.81%	22.39%	24.82%	24.77%	27.32%
RES-H&C - Renewable Heating and Cooling [%]		16.16%	22.36%	23.37%	23.94%	26.32%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	428.6	402.7	344.1	297.7	323.8	316.6
GHG Greenhouse gases (CO_2, N_2O*	559.9	522.5	448.2	397.7	420.7	409.7
Main Emissions Indicators						
GHG total emissions [index 1990=100]	102.0%	95.2%	81.7%	72.5%	76.6%	74.6%
Total GHG per capita [t CO_2 eq./capita]	9.2	8.1	6.7	5.9	6.2	6.0

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

5.12 Croatia

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**4.3**	**5.2**	**3.9**	**3.7**	**4.0**	**3.7**
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	1.3	0.8	0.7	0.7	0.6	0.6
of which crude oil	1.3	0.8	0.7	0.7	0.6	0.6
Natural gas	1.4	2.2	0.9	0.7	0.6	0.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.6	2.2	2.3	2.3	2.7	2.4
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**4.1**	**4.4**	**5.0**	**4.5**	**4.8**	**5.1**
Solid fossil fuels	0.5	0.7	0.4	0.4	0.4	0.4
of which hard coal	0.4	0.6	0.4	0.4	0.4	0.4
Oil and petroleum products	2.4	3.0	2.5	2.1	2.3	2.9
of which crude oil and NGL	3.9	3.6	1.9	1.4	1.3	1.3
Natural gas	0.9	0.5	1.6	1.7	1.8	1.7
Renewables and biofuels	0.0	-0.1	-0.1	-0.1	-0.1	-0.2
Electricity	0.3	0.3	0.5	0.4	0.3	0.4
Gross inland consumption	**8.5**	**9.5**	**8.8**	**8.3**	**8.7**	**8.5**
Solid fossil fuels	0.4	0.7	0.4	0.4	0.4	0.4
of which hard coal	0.4	0.6	0.4	0.3	0.4	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	3.3	2.8	3.0	3.3
of which crude and NGL	5.5	4.4	2.7	2.1	2.0	1.8
Natural gas	2.2	2.6	2.4	2.5	2.4	2.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.6	2.1	2.1	2.2	2.5	2.2
Electricity	0.3	0.3	0.5	0.4	0.3	0.4
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for final consumption	**6.6**	**7.7**	**7.3**	**7.3**	**7.0**	**7.3**
Final non-energy consumption	**0.7**	**0.6**	**0.6**	**0.6**	**0.5**	**0.4**
Final energy consumption	**5.9**	**7.1**	**6.7**	**6.7**	**6.4**	**6.9**
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	2.7	2.5	2.6	2.8
Natural gas	1.0	1.3	1.1	1.1	1.2	1.0
Renewables and biofuels	1.0	1.3	1.2	1.2	1.3	1.1
Solid biofuels and renewable waste	1.0	1.2	1.1	1.1	1.2	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	0.1	0.1	0.1	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	1.0	1.4	1.4	1.3	1.4	1.4
Heat	0.2	0.2	0.2	0.3	0.3	0.2
by Sector						
Industry	1.3	1.3	1.2	1.2	1.2	1.1
Transport	1.5	2.0	2.2	2.0	2.1	2.2
Residential	2.3	2.8	2.2	2.3	2.4	2.3
Services	0.5	0.8	0.8	0.8	0.8	0.8
Agriculture and Fishing	0.3	0.3	0.2	0.3	0.3	0.3
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: **see appendices**

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**2.1**	**4.1**	**4.7**	**4.7**	**4.9**	**5.0**
Combustible Fuels	0.0	1.9	1.8	1.5	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	0.6	0.8	1.0	1.0
Solar	0.0	0.0	0.1	0.1	0.1	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]	**11.3**	**14.9**	**12.8**	**13.4**	**15.2**	**14.2**
Solid fossil fuels, peat and products, oil shale	1.6	2.4	1.6	1.2	1.5	1.6
Oil and petroleum products	1.7	0.6	0.0	0.0	0.0	0.1
Natural gas	1.6	2.6	2.6	3.4	3.1	3.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	6.5	9.3	8.3	8.6	10.5	9.0
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.9	0.9	0.9	0.9
CHP Electricity Generation [TWh]			2.3	2.7	2.7	2.6
CHP in Total Electricity Generation [%]			18.3	17.6	18.0	18.3
CHP Heat Production [PJ]			17.6	20.0	20.0	17.5
Transport Fuels [ktoe]						
Final consumption petroleum products	2293	2629	2609	2359	2507	2691
of which LPG	100	183	150	129	136	116
of which motor gasoline	835	692	508	423	473	506
of which Gas/Diesel oil	1359	1755	1951	1807	1898	2068
Final consumption biofuels	0	3	63	66	91	21
pure and blended biogasoline	0	0	1	1	1	0
pure and blended biodiesel	0	3	62	65	90	21
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	7.8	8.9	8.2	7.8	8.3	8.3
Final energy consumption 2020-2030 [Mtoe]	6.0	7.2	6.9	6.5	7.0	6.9
Primary Energy Intensity 2020-2030 [toe/M€'15]	221	194	158	163	154	144
Energy Intensity (GAE/GDP2015) [toe/M€'15	239	207	169	175	162	148
Energy per Capita (GIC/pop) [kgoe/capita]	1883	2201	2156	2046	2154	2203
Final Electricity per Capita [KWh/capita]	2508	3463	3130	3298	3768	3682
Import Dependency [%]	**48.4%**	**46.7%**	**56.4%**	**53.7%**	**54.7%**	**60.4%**
of Solid fossil fuels	110.9%	102.6%	107.3%	106.0%	100.7%	100.9%
of Hard Coal	112.8%	102.8%	108.6%	106.7%	100.7%	101.3%
of Oil and petroleum products	61.0%	80.8%	76.9%	74.2%	79.0%	87.3%
of Crude and NGL	72.1%	82.3%	71.1%	68.0%	67.3%	70.3%
of Natural Gas	41.0%	18.1%	66.4%	68.8%	74.5%	77.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		25.10%	28.47%	31.02%	31.28%	29.35%
RE-T - Renewable energy in Transport [%]		1.12%	5.85%	6.59%	6.98%	2.40%
RES-E - Renewable Electricity Generation [%]		37.52%	49.78%	53.82%	53.47%	55.52%
RES-H&C - Renewable Heating and Cooling [%]		32.88%	36.79%	36.93%	38.01%	37.21%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	19.9	21.3	18.4	17.0	17.7	18.2
GHG Greenhouse gases (CO_2, N_2O*	26.7	29.8	26.9	25.4	26.0	26.3
Main Emissions Indicators						
GHG total emissions [index 1990=100]	82.2%	91.6%	82.8%	78.2%	79.9%	80.7%
Total GHG per capita [t CO_2 eq./capita]	5.9	6.9	6.6	6.3	6.4	6.8

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

5.13 Italy

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	28.2	32.9	36.9	37.5	37.1	34.7
Solid fossil fuels	0.0	0.1	0.0	0.0	0.0	0.0
of which hard coal	0.0	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	4.7	5.6	4.7	5.9	5.2	4.8
of which crude oil	4.6	5.1	4.3	5.4	4.8	4.5
Natural gas	13.6	6.9	3.9	3.3	2.6	2.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	9.6	19.4	27.1	27.1	28.1	26.2
Wastes, Non-Renewable	0.3	1.0	1.2	1.2	1.2	1.2
Net Imports	152.4	148.5	122.5	105.8	114.9	119.2
Solid fossil fuels	13.1	13.8	6.4	4.7	5.4	7.6
of which hard coal	12.9	13.8	6.2	4.7	5.1	7.6
Oil and petroleum products	88.0	66.8	52.4	42.0	45.1	50.2
of which crude oil and NGL	83.6	78.2	63.1	50.2	56.8	61.9
Natural gas	47.0	61.6	57.9	54.1	58.5	55.7
Renewables and biofuels	0.5	2.5	2.5	2.2	2.2	2.0
Electricity	3.8	3.8	3.3	2.8	3.7	3.7
Gross inland consumption	174.5	176.8	155.4	141.6	154.1	148.1
Solid fossil fuels	12.6	13.7	6.5	5.1	5.5	7.4
of which hard coal	12.2	13.6	6.3	5.0	5.3	7.4
of which brown coal	0.0	0.2	0.0	0.0	0.0	0.0
Oil and petroleum products	89.9	68.4	54.0	44.9	51.0	51.5
of which crude and NGL	87.9	82.8	67.3	55.7	61.8	65.8
Natural gas	57.9	68.1	60.9	58.3	62.4	56.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	10.1	21.9	29.5	29.3	30.3	28.2
Electricity	3.8	3.8	3.3	2.8	3.7	3.7
Waste, non-renewable	0.3	1.0	1.2	1.2	1.2	1.2
Available for final consumption	128.8	131.7	118.7	118.7	109.3	120.4
Final non-energy consumption	8.4	9.6	7.0	7.0	6.8	5.9
Final energy consumption	119.7	123.1	113.1	113.1	103.1	114.7
by Fuel/Product						
Solid fossil fuels	1.5	0.6	0.6	0.4	0.3	0.3
Oil and petroleum products	55.0	45.6	38.9	32.2	38.9	41.0
Natural gas	37.6	38.5	33.0	31.8	36.6	31.6
Renewables and biofuels	1.7	9.1	10.9	10.7	11.9	11.3
Solid biofuels and renewable waste	1.5	7.4	6.7	6.5	7.4	6.8
Solar thermal	0.0	0.1	0.2	0.2	0.2	0.3
Geothermal	0.2	0.1	0.1	0.1	0.1	0.1
Liquid biofuels	0.0	1.4	1.3	1.3	1.4	1.4
Biogases	0.0	0.0	0.0	0.0	0.1	0.1
Waste, non-renewable	0.1	0.2	0.3	0.3	0.3	0.3
Electricity	23.5	25.7	25.1	23.7	25.1	24.7
Heat	0.0	3.3	4.2	3.9	1.5	1.5
by Sector						
Industry	37.6	29.0	24.9	23.9	26.4	24.6
Transport	39.7	38.6	35.9	29.0	34.8	36.7
Residential	27.6	35.4	31.1	30.7	33.4	30.0
Services	11.5	17.0	18.2	16.6	16.8	16.1
Agriculture and Fishing	3.2	2.9	2.9	3.0	3.2	3.1
Others	0.2	0.2	0.1	0.0	0.1	0.2

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**75.5**	**106.6**	**116.4**	**116.4**	**116.8**	**120.4**
Combustible Fuels	54.0	74.7	61.3	60.1	59.5	60.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	20.3	21.5	22.5	22.7	22.7	22.9
Wind	0.4	5.8	10.7	10.9	11.3	11.8
Solar	0.0	3.6	20.9	21.7	22.3	24.6
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]	**276.6**	**302.1**	**293.9**	**280.5**	**289.1**	**284.0**
Solid fossil fuels, peat and products, oil shale	26.3	39.7	18.8	13.4	14.0	22.6
Oil and petroleum products	85.9	21.7	10.2	10.0	7.7	12.9
Natural gas	105.6	157.4	144.1	135.3	145.9	143.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	50.9	77.0	115.8	116.9	116.3	100.5
Wastes non-RES	0.5	2.1	2.4	2.4	2.4	2.4
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			8.6	9.2	7.4	6.9
CHP Electricity Generation [TWh]			40.5	39.9	34.7	32.6
CHP in Total Electricity Generation [%]			13.8	13.9	12.0	11.5
CHP Heat Production [PJ]			216.9	213.4	169.9	166.2
Transport Fuels [ktoe]						
Final consumption petroleum products	47568	41649	36534	30351	35895	37227
of which LPG	4286	3675	3572	3190	3419	3450
of which motor gasoline	17652	10462	7850	6144	7385	8263
of which Gas/Diesel oil	25629	27512	25111	21017	25091	25514
Final consumption biofuels	0	1419	1276	1265	1427	1395
pure and blended biogasoline	0	122	30	20	27	35
pure and blended biodiesel	0	1297	1246	1245	1388	1354
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	166.1	167.3	145.9	132.3	145.6	139.6
Final energy consumption 2020-2030 [Mtoe]	124.8	128.5	115.4	102.7	114.8	111.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	100	98	84	84	85	79
Energy Intensity (GAE/GDP2015) [toe/M€'15	105	103	90	90	90	84
Energy per Capita (GIC/pop) [kgoe/capita]	3066	2988	2598	2374	2601	2508
Final Electricity per Capita [KWh/capita]	4860	5103	4913	4704	4880	4810
Import Dependency [%]	**87.3%**	**84.0%**	**78.8%**	**74.7%**	**74.5%**	**80.5%**
of Solid fossil fuels	104.6%	100.8%	98.6%	93.0%	97.0%	102.4%
of Hard Coal	105.7%	101.4%	98.4%	93.1%	97.0%	102.3%
of Oil and petroleum products	97.9%	97.6%	97.1%	93.5%	88.5%	97.4%
of Crude and NGL	95.1%	94.5%	93.9%	90.2%	92.0%	94.1%
of Natural Gas	81.1%	90.5%	95.1%	92.8%	93.7%	99.2%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.02%	18.18%	20.36%	18.88%	19.13%
RE-T - Renewable energy in Transport [%]		4.92%	9.05%	10.74%	9.86%	10.05%
RES-E - Renewable Electricity Generation [%]		20.09%	34.97%	38.08%	36.00%	37.10%
RES-H&C - Renewable Heating and Cooling [%]		15.64%	19.70%	19.95%	19.34%	20.57%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	478.6	445.4	352.8	307.1	343.4	347.9
GHG Greenhouse gases (CO_2, N_2O*	569.3	531.2	429.0	382.9	418.1	419.5
Main Emissions Indicators						
GHG total emissions [index 1990=100]	108.1%	100.9%	81.4%	72.7%	79.4%	79.6%
Total GHG per capita [t CO_2 eq./capita]	10.0	9.0	7.2	6.4	7.1	7.1

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

5.14 Cyprus

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**0.0**	**0.1**	**0.2**	**0.2**	**0.2**	**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	0.2	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**	**2.7**	**2.4**	**2.4**	**2.6**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	2.5	2.9	2.6	2.3	2.2	2.5
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	0.1	0.1	0.1
Electricity	0.0	0.0	0.0	0.0	0.0	0.0
Gross inland consumption	**2.4**	**2.8**	**2.6**	**2.3**	**2.4**	**2.6**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	2.3	2.6	2.3	2.0	2.0	2.2
of which crude and NGL	1.2	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.1	0.2	0.3	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**	**1.7**	**1.7**	**1.6**	**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**	**1.6**	**1.6**	**1.5**	**1.6**
by Fuel/Product						
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	1.0	1.1	1.0	0.9	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	0.2	0.2	0.2	0.2
Solid biofuels and renewable waste	0.0	0.0	0.1	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	0.3
Transport	0.6	0.8	0.7	0.6	0.7	0.7
Residential	0.2	0.3	0.4	0.4	0.4	0.4
Services	0.1	0.2	0.3	0.2	0.3	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

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**1.0**	**1.6**	**1.8**	**1.9**	**2.0**	**2.1**
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	0.2	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]	**3.4**	**5.3**	**5.1**	**4.8**	**5.1**	**5.3**
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	4.6	4.3	4.3	4.4
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	0.5	0.6	0.8	0.9
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 [%]			0.6	0.8	0.7	0.6
CHP Heat Production [PJ]			0.1	0.2	0.2	0.1
Transport Fuels [ktoe]						
Final consumption petroleum products	833	949	881	779	819	824
of which LPG	60	60	69	62	62	66
of which motor gasoline	218	413	356	301	323	328
of which Gas/Diesel oil	556	476	457	416	434	430
Final consumption biofuels	0	15	11	25	25	24
pure and blended biogasoline	0	0	0	1	0	0
pure and blended biodiesel	0	15	11	25	25	24
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	2.3	2.7	2.5	2.2	2.3	2.5
Final energy consumption 2020-2030 [Mtoe]	1.6	1.9	1.9	1.6	1.7	1.8
Primary Energy Intensity 2020-2030 [toe/M€'15]	167	137	112	101	97	99
Energy Intensity (GAE/GDP2015) [toe/M€'15	173	142	116	105	101	102
Energy per Capita (GIC/pop) [kgoe/capita]	3511	3370	2998	2571	2689	2842
Final Electricity per Capita [KWh/capita]	4881	6497	5870	5461	5714	5823
Import Dependency [%]	**106.4%**	**107.4%**	**102.6%**	**104.4%**	**98.9%**	**102.3%**
of Solid fossil fuels	102.0%	65.6%	117.2%	105.4%	97.6%	147.3%
of Hard Coal	102.0%	65.4%	117.2%	105.4%	97.6%	147.3%
of Oil and petroleum products	108.4%	111.5%	111.6%	116.0%	110.7%	113.4%
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%	13.78%	16.88%	19.07%	19.43%
RE-T - Renewable energy in Transport [%]		1.99%	3.32%	7.40%	7.19%	7.22%
RES-E - Renewable Electricity Generation [%]		1.39%	9.76%	12.04%	14.84%	16.96%
RES-H&C - Renewable Heating and Cooling [%]		18.81%	35.05%	37.12%	42.59%	41.56%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	7.9	8.9	8.4	7.3	7.6	7.9
GHG Greenhouse gases (CO_2, N_2O*	9.1	10.3	9.9	8.9	9.3	9.6
Main Emissions Indicators						
GHG total emissions [index 1990=100]	145.1%	163.6%	157.6%	140.5%	147.3%	151.9%
Total GHG per capita [t CO_2 eq./capita]	13.2	12.6	11.3	10.0	10.4	10.6

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

5.15 Latvia

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	1.4	2.0	2.8	2.7	2.7	2.9
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
of which crude oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	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	2.8	2.7	2.7	2.9
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	2.4	2.2	2.2	2.1	1.8	1.7
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	1.7	1.6	1.7
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	0.9	1.0	0.7
Renewables and biofuels	-0.2	-0.6	-0.9	-0.8	-0.9	-0.9
Electricity	0.2	0.1	0.1	0.1	0.2	0.2
Gross inland consumption	3.9	4.6	4.6	4.4	4.6	4.4
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	1.4	1.5	1.5
of which crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	1.1	1.5	1.1	0.9	1.0	0.7
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.2	1.4	1.8	1.8	1.9	1.9
Electricity	0.2	0.1	0.1	0.1	0.2	0.2
Waste, non-renewable	0.0	0.0	0.0	0.1	0.0	0.1
Available for final consumption	3.3	4.1	4.0	4.0	3.9	4.1
Final non-energy consumption	0.1	0.1	0.1	0.1	0.1	0.1
Final energy consumption	3.2	4.0	3.9	3.9	3.8	4.0
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	0.4	0.3
Renewables and biofuels	0.8	0.9	1.0	1.0	1.0	1.0
Solid biofuels and renewable waste	0.8	0.9	1.0	0.9	1.0	1.0
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.1	0.0	0.1
Electricity	0.4	0.5	0.6	0.6	0.6	0.6
Heat	0.6	0.6	0.6	0.6	0.6	0.6
by Sector						
Industry	0.6	0.8	0.9	0.9	0.9	0.9
Transport	0.7	1.1	1.1	1.0	1.1	1.0
Residential	1.3	1.4	1.2	1.1	1.2	1.1
Services	0.5	0.6	0.6	0.6	0.6	0.6
Agriculture and Fishing	0.1	0.2	0.2	0.2	0.2	0.2
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**2.1**	**2.6**	**2.9**	**2.9**	**2.9**	**3.0**
Combustible Fuels	0.6	1.0	1.3	1.3	1.3	1.2
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	0.1
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]	**4.1**	**6.6**	**6.4**	**5.7**	**5.8**	**5.0**
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	3.2	2.1	2.1	1.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	2.8	3.6	3.2	3.6	3.7	3.8
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.3	1.3	1.3	1.2
CHP Electricity Generation [TWh]			2.6	2.1	2.6	1.8
CHP in Total Electricity Generation [%]			41.1	36.2	44.3	35.3
CHP Heat Production [PJ]			13.7	12.1	13.1	10.3
Transport Fuels [ktoe]						
Final consumption petroleum products	889	1 278	1 331	1 280	1 319	1 310
of which LPG	50	50	82	77	74	78
of which motor gasoline	354	302	182	175	172	148
of which Gas/Diesel oil	485	926	1 067	1 028	1 073	1 084
Final consumption biofuels	0	27	37	49	49	19
pure and blended biogasoline	0	8	7	13	12	10
pure and blended biodiesel	0	19	30	36	38	9
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	3.8	4.6	4.6	4.3	4.5	4.3
Final energy consumption 2020-2030 [Mtoe]	3.3	4.1	4.1	3.9	4.1	4.0
Primary Energy Intensity 2020-2030 [toe/M€'15]	264	220	168	163	160	149
Energy Intensity (GAE/GDP2015) [toe/M€'15	269	223	171	166	164	153
Energy per Capita (GIC/pop) [kgoe/capita]	1 623	2 183	2 421	2 286	2 419	2 347
Final Electricity per Capita [KWh/capita]	1 737	3 125	3 353	3 001	3 088	2 664
Import Dependency [%]	**61.1%**	**48.0%**	**46.7%**	**47.6%**	**40.1%**	**39.7%**
of Solid fossil fuels	84.1%	106.5%	110.8%	89.6%	93.1%	193.2%
of Hard Coal	82.5%	106.6%	110.8%	89.6%	93.1%	193.2%
of Oil and petroleum products	95.5%	110.0%	119.2%	120.9%	106.6%	108.8%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	101.9%	61.8%	100.0%	100.1%	100.0%	99.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		30.38%	40.93%	42.13%	42.10%	43.32%
RE-T - Renewable energy in Transport [%]		3.98%	4.55%	6.73%	6.44%	3.13%
RES-E - Renewable Electricity Generation [%]		42.05%	53.42%	53.36%	51.40%	53.30%
RES-H&C - Renewable Heating and Cooling [%]		40.74%	57.75%	57.09%	57.37%	60.99%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	7.2	8.9	8.1	7.2	7.5	7.1
GHG Greenhouse gases (CO_2, N_2O*	10.3	12.2	11.6	10.7	11.0	10.6
Main Emissions Indicators						
GHG total emissions [index 1990=100]	39.1%	46.6%	44.3%	40.6%	41.8%	40.2%
Total GHG per capita [t CO_2 eq./capita]	4.3	5.8	6.1	5.6	5.8	5.6

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

5.16 Lithuania

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**3.5**	**1.6**	**2.0**	**2.0**	**2.2**	**2.0**
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	0.3	0.1	0.0	0.0	0.0	0.0
of which crude oil	0.3	0.1	0.0	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	1.7	1.7	1.9	1.8
Wastes, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Net Imports	**4.3**	**5.7**	**6.0**	**5.9**	**6.0**	**5.3**
Solid fossil fuels	0.1	0.2	0.2	0.1	0.1	0.2
of which hard coal	0.0	0.1	0.2	0.1	0.1	0.2
Oil and petroleum products	2.3	2.7	3.2	3.1	3.1	3.1
of which crude oil and NGL	4.6	9.1	9.6	7.9	8.1	8.3
Natural gas	2.1	2.5	1.9	2.0	1.9	1.3
Renewables and biofuels	0.0	-0.1	-0.1	-0.1	0.0	0.0
Electricity	-0.1	0.5	0.8	0.7	0.8	0.7
Gross inland consumption	**7.3**	**7.1**	**7.8**	**7.6**	**7.9**	**7.1**
Solid fossil fuels	0.1	0.2	0.2	0.1	0.2	0.2
of which hard coal	0.0	0.1	0.2	0.1	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	3.0	2.9	2.9	3.0
of which crude and NGL	4.9	9.2	9.6	7.9	8.0	8.4
Natural gas	2.1	2.5	1.9	2.0	1.9	1.3
Nuclear	2.3	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.7	1.1	1.6	1.7	1.9	1.8
Electricity	-0.1	0.5	0.8	0.7	0.8	0.7
Waste, non-renewable	0.0	0.0	0.0	0.1	0.1	0.1
Available for final consumption	**4.3**	**5.4**	**6.6**	**6.6**	**6.4**	**6.7**
Final non-energy consumption	**0.7**	**0.7**	**1.2**	**1.2**	**1.1**	**1.0**
Final energy consumption	**3.7**	**4.8**	**5.5**	**5.5**	**5.3**	**5.7**
by Fuel/Product						
Solid fossil fuels	0.1	0.2	0.2	0.1	0.2	0.2
Oil and petroleum products	1.3	1.6	2.2	2.1	2.1	2.1
Natural gas	0.4	0.6	0.6	0.6	0.6	0.6
Renewables and biofuels	0.6	0.7	0.7	0.8	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	0.9	0.9	1.0	0.9
Heat	0.8	0.9	0.8	0.7	0.9	0.7
by Sector						
Industry	0.8	0.9	1.1	1.0	1.1	1.0
Transport	1.0	1.5	2.2	2.1	2.1	2.1
Residential	1.4	1.6	1.4	1.4	1.6	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

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**5.7**	**3.6**	**3.4**	**3.5**	**3.7**	**3.7**
Combustible Fuels	2.5	2.5	1.8	1.9	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	0.5	0.5	0.7	0.9
Solar	0.0	0.0	0.1	0.2	0.3	0.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**11.4**	**5.7**	**4.0**	**5.5**	**5.1**	**4.8**
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	0.1	0.1	0.1	0.4
Natural gas	1.6	3.2	0.5	1.7	1.2	0.5
Nuclear	8.4	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.3	0.9	2.5	2.6	2.6	3.0
Wastes non-RES	0.0	0.0	0.1	0.1	0.2	0.2
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.6	0.6	0.5	0.6
CHP Electricity Generation [TWh]			1.1	1.2	1.3	1.3
CHP in Total Electricity Generation [%]			27.4	23.6	25.7	27.8
CHP Heat Production [PJ]			11.0	11.7	13.7	13.5
Transport Fuels [ktoe]						
Final consumption petroleum products	1 185	1 545	2 190	2 132	2 127	2 121
of which LPG	205	224	158	142	134	143
of which motor gasoline	400	298	244	238	238	263
of which Gas/Diesel oil	579	1 023	1 788	1 752	1 755	1 715
Final consumption biofuels	0	45	75	103	127	120
pure and blended biogasoline	0	10	10	16	17	20
pure and blended biodiesel	0	34	65	87	110	100
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	6.5	6.2	6.3	6.2	6.6	6.3
Final energy consumption 2020-2030 [Mtoe]	3.8	4.8	5.6	5.3	5.7	5.4
Primary Energy Intensity 2020-2030 [toe/M€'15]	323	199	144	143	144	133
Energy Intensity (GAE/GDP2015) [toe/M€'15	363	228	180	176	172	151
Energy per Capita (GIC/pop) [kgoe/capita]	2 093	2 254	2 792	2 732	2 843	2 542
Final Electricity per Capita [KWh/capita]	3 253	1 830	1 421	1 975	1 817	1 704
Import Dependency [%]	**58.5%**	**80.6%**	**77.1%**	**76.7%**	**75.0%**	**74.0%**
of Solid fossil fuels	101.7%	95.7%	108.1%	87.9%	91.9%	127.8%
of Hard Coal	100.0%	109.7%	109.1%	86.7%	91.2%	132.1%
of Oil and petroleum products	105.2%	104.0%	107.3%	109.2%	108.3%	104.0%
of Crude and NGL	94.5%	99.0%	100.8%	99.4%	100.3%	99.2%
of Natural Gas	100.0%	99.7%	100.0%	98.9%	100.8%	101.2%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		19.64%	25.47%	26.77%	28.17%	29.60%
RE-T - Renewable energy in Transport [%]		3.79%	4.05%	5.51%	6.46%	6.68%
RES-E - Renewable Electricity Generation [%]		7.40%	18.79%	20.17%	21.28%	26.46%
RES-H&C - Renewable Heating and Cooling [%]		32.53%	47.37%	50.35%	48.62%	51.54%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	11.9	14.0	14.1	13.7	14.0	13.3
GHG Greenhouse gases (CO_2, N_2O*	19.5	20.8	20.5	20.2	20.4	19.2
Main Emissions Indicators						
GHG total emissions [index 1990=100]	40.2%	42.9%	42.4%	41.7%	42.1%	39.7%
Total GHG per capita [t CO_2 eq./capita]	5.6	6.6	7.3	7.2	7.3	6.9

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

5.17 Luxembourg

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**0.1**	**0.1**	**0.2**	**0.3**	**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	0.2	0.3	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**	**4.3**	**3.7**	**3.9**	**3.5**
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	3.0	2.4	2.6	2.3
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	1.2	0.7	0.6	0.7	0.5
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**	**4.5**	**4.0**	**4.2**	**3.8**
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
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	2.3	2.9	2.9	2.4	2.6	2.3
of which crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.7	1.2	0.7	0.6	0.7	0.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.1	0.3	0.4	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**	**3.8**	**3.8**	**3.3**	**3.5**
Final non-energy consumption	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Final energy consumption	**3.2**	**3.9**	**3.8**	**3.8**	**3.3**	**3.4**
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	2.3	1.8	1.9	1.7
Natural gas	0.6	0.7	0.6	0.6	0.6	0.5
Renewables and biofuels	0.0	0.1	0.2	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	0.6	0.5	0.5	0.5
Heat	0.0	0.1	0.1	0.1	0.1	0.1
by Sector						
Industry	0.7	0.8	0.6	0.6	0.6	0.5
Transport	1.6	2.2	2.2	1.7	1.8	1.6
Residential	0.5	0.5	0.5	0.5	0.5	0.5
Services	0.4	0.4	0.5	0.5	0.6	0.5
Agriculture and Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**1.2**	**1.7**	**1.8**	**1.8**	**1.9**	**2.0**
Combustible Fuels	0.1	0.5	0.1	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	0.2	0.1	0.2
Solar	0.0	0.0	0.2	0.2	0.3	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**	**1.9**	**2.2**	**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	0.2	0.2	0.2	0.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.2	0.3	0.8	1.0	1.0	1.0
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	0.5	0.5	0.4
CHP in Total Electricity Generation [%]			22.1	22.7	24.2	19.3
CHP Heat Production [PJ]			3.8	4.8	5.3	5.0
Transport Fuels [ktoe]						
Final consumption petroleum products	1932	2405	2306	1818	1915	1666
of which LPG	26	13	10	8	11	9
of which motor gasoline	598	362	343	262	317	322
of which Gas/Diesel oil	1307	2031	1953	1548	1586	1335
Final consumption biofuels	0	42	130	142	139	130
pure and blended biogasoline	0	1	17	14	18	20
pure and blended biodiesel	0	41	113	129	121	110
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	3.6	4.6	4.5	3.9	4.2	3.8
Final energy consumption 2020-2030 [Mtoe]	3.5	4.3	4.4	3.8	4.1	3.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	99	95	75	66	66	59
Energy Intensity (GAE/GDP2015) [toe/M€'15	100	95	76	67	66	59
Energy per Capita (GIC/pop) [kgoe/capita]	8433	9250	7405	6339	6653	5931
Final Electricity per Capita [KWh/capita]	2690	9145	3109	3568	3483	3468
Import Dependency [%]	**99.6%**	**97.1%**	**95.0%**	**92.3%**	**92.4%**	**91.3%**
of Solid fossil fuels	100.0%	102.2%	93.1%	112.3%	97.4%	101.5%
of Hard Coal	100.0%	102.5%	92.3%	114.0%	97.1%	101.7%
of Oil and petroleum products	102.1%	99.3%	100.4%	99.9%	99.8%	99.7%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		2.85%	7.05%	11.70%	11.73%	14.36%
RE-T - Renewable energy in Transport [%]		2.09%	7.71%	12.58%	7.96%	8.72%
RES-E - Renewable Electricity Generation [%]		3.79%	10.86%	13.89%	14.22%	15.94%
RES-H&C - Renewable Heating and Cooling [%]		4.70%	8.69%	12.61%	12.90%	15.41%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	9.7	12.5	11.6	9.7	10.3	9.2
GHG Greenhouse gases (CO_2, N_2O*	10.6	13.5	12.5	10.7	11.3	10.1
Main Emissions Indicators						
GHG total emissions [index 1990=100]	80.8%	102.5%	95.6%	81.4%	85.8%	77.3%
Total GHG per capita [t CO_2 eq./capita]	24.5	26.8	20.4	17.1	17.7	15.7

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

5.18 Hungary

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	11.6	11.7	10.8	10.6	10.6	10.6
Solid fossil fuels	2.9	1.6	1.0	0.9	0.8	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	1.0	0.9	0.8	0.8
Oil and petroleum products	1.7	1.1	1.2	1.0	1.1	1.1
of which crude oil	1.7	1.1	1.1	1.0	1.1	1.1
Natural gas	2.5	2.2	1.3	1.3	1.2	1.2
Nuclear	3.7	4.0	4.1	4.1	4.0	4.0
Renewables and biofuels	0.8	2.7	3.1	3.1	3.4	3.5
Wastes, Non-Renewable	0.0	0.1	0.1	0.1	0.1	0.1
Net Imports	13.9	15.1	18.6	14.8	14.8	16.6
Solid fossil fuels	1.1	1.1	0.8	0.7	0.5	0.5
of which hard coal	0.9	1.3	1.0	0.9	0.8	0.5
Oil and petroleum products	5.2	5.8	7.1	6.5	7.0	7.2
of which crude oil and NGL	5.8	5.8	5.9	5.9	5.9	5.9
Natural gas	7.3	7.7	9.8	6.6	6.2	7.8
Renewables and biofuels	0.0	0.0	-0.2	-0.1	-0.2	-0.1
Electricity	0.3	0.4	1.1	1.0	1.1	1.0
Gross inland consumption	25.2	26.6	26.7	26.1	27.4	25.8
Solid fossil fuels	3.8	2.7	1.8	1.7	1.4	1.2
of which hard coal	0.9	1.3	1.0	0.9	0.8	0.6
of which brown coal	3.0	1.7	1.0	1.0	0.8	0.8
Oil and petroleum products	6.9	6.8	8.2	7.5	8.1	8.1
of which crude and NGL	7.4	6.8	7.0	6.9	6.9	6.6
Natural gas	9.7	9.8	8.5	8.8	9.3	7.9
Nuclear	3.7	4.0	4.1	4.1	4.0	4.0
Renewables and biofuels	0.8	2.8	2.8	3.0	3.2	3.3
Electricity	0.3	0.4	1.1	1.0	1.1	1.0
Waste, non-renewable	0.0	0.1	0.2	0.2	0.2	0.2
Available for final consumption	17.2	18.9	19.9	19.9	19.7	21.2
Final non-energy consumption	1.6	2.0	2.1	2.1	2.2	2.4
Final energy consumption	15.6	16.9	18.0	18.0	17.6	18.8
by Fuel/Product						
Solid fossil fuels	0.4	0.2	0.2	0.2	0.1	0.1
Oil and petroleum products	4.0	4.4	5.9	5.3	5.7	5.9
Natural gas	6.4	6.1	5.5	5.7	6.1	5.2
Renewables and biofuels	0.8	2.0	1.8	1.9	2.0	2.1
Solid biofuels and renewable waste	0.7	1.7	1.5	1.5	1.6	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	0.3	0.3	0.3
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.1	0.1	0.1	0.1
Electricity	2.5	2.9	3.5	3.4	3.6	3.6
Heat	1.4	1.1	1.0	1.0	1.1	1.0
by Sector						
Industry	3.3	2.6	4.5	4.4	4.7	4.3
Transport	3.1	4.1	5.1	4.5	4.9	5.3
Residential	5.6	6.6	5.7	6.0	6.4	5.8
Services	3.0	3.0	2.1	2.0	2.1	1.9
Agriculture and Fishing	0.7	0.5	0.7	0.7	0.7	0.6
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**8.3**	**9.0**	**10.0**	**10.7**	**11.6**	**12.7**
Combustible Fuels	6.4	6.6	6.2	6.1	6.2	6.0
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	1.4	2.1	3.0	4.2
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]	**35.2**	**37.4**	**34.3**	**34.9**	**36.1**	**35.8**
Solid fossil fuels, peat and products, oil shale	9.6	6.2	4.0	3.7	3.0	3.0
Oil and petroleum products	4.4	0.5	0.1	0.0	0.1	0.1
Natural gas	6.7	11.7	8.8	9.2	9.7	8.9
Nuclear	14.2	15.8	16.3	16.1	16.0	15.8
Renewables and biofuels	0.2	3.0	4.7	5.5	6.9	7.7
Wastes non-RES	0.1	0.2	0.2	0.2	0.3	0.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.5	1.6	1.6	1.6
CHP Electricity Generation [TWh]			4.6	4.7	5.6	4.6
CHP in Total Electricity Generation [%]			13.4	13.0	15.4	12.7
CHP Heat Production [PJ]			27.5	27.6	30.1	27.6
Transport Fuels [ktoe]						
Final consumption petroleum products	3699	4263	5541	4920	5369	5654
of which LPG	368	211	256	269	266	233
of which motor gasoline	1414	1348	1507	1308	1388	1472
of which Gas/Diesel oil	1917	2703	3778	3342	3715	3949
Final consumption biofuels	0	175	202	279	285	304
pure and blended biogasoline	0	57	46	84	87	90
pure and blended biodiesel	0	118	157	195	198	214
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	23.6	24.6	24.6	23.9	24.9	23.9
Final energy consumption 2020-2030 [Mtoe]	16.2	17.5	18.6	18.0	19.1	18.3
Primary Energy Intensity 2020-2030 [toe/M€'15]	287	242	185	188	184	168
Energy Intensity (GAE/GDP2015) [toe/M€'15	306	261	201	206	202	182
Energy per Capita (GIC/pop) [kgoe/capita]	2468	2655	2733	2676	2813	2662
Final Electricity per Capita [KWh/capita]	3443	3732	3509	3575	3712	3692
Import Dependency [%]	**55.0%**	**56.9%**	**69.7%**	**56.6%**	**54.1%**	**64.2%**
of Solid fossil fuels	28.1%	41.9%	45.7%	43.7%	38.5%	41.5%
of Hard Coal	96.4%	99.2%	98.8%	97.0%	98.5%	96.5%
of Oil and petroleum products	75.9%	85.3%	86.6%	87.1%	86.9%	89.4%
of Crude and NGL	78.5%	85.3%	84.6%	86.0%	85.2%	89.8%
of Natural Gas	75.4%	78.7%	115.2%	75.6%	67.2%	99.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		12.74%	12.63%	13.85%	14.13%	15.19%
RE-T - Renewable energy in Transport [%]		6.16%	8.06%	11.57%	6.16%	7.76%
RES-E - Renewable Electricity Generation [%]		7.10%	9.97%	11.90%	13.66%	15.34%
RES-H&C - Renewable Heating and Cooling [%]		18.08%	18.16%	17.72%	17.90%	20.35%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	59.0	52.7	50.0	47.4	48.7	46.1
GHG Greenhouse gases (CO_2, N_2O*	76.2	67.2	65.5	63.0	64.1	60.3
Main Emissions Indicators						
GHG total emissions [index 1990=100]	79.7%	70.4%	68.5%	65.9%	67.1%	63.1%
Total GHG per capita [t CO_2 eq./capita]	7.5	6.7	6.7	6.4	6.6	6.2

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

5.19 Malta

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
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**	**3.1**	**2.9**	**2.7**	**3.0**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	1.5	2.4	2.7	2.5	2.3	2.6
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.3	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	0.0	0.0	0.1
Gross inland consumption	**0.8**	**0.9**	**0.9**	**0.8**	**0.8**	**0.9**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.8	0.9	0.5	0.3	0.4	0.5
of which crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.3	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	0.1	0.1	0.1
Electricity	0.0	0.0	0.1	0.0	0.0	0.1
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for final consumption	**0.3**	**0.4**	**0.6**	**0.6**	**0.5**	**0.5**
Final non-energy consumption	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Final energy consumption	**0.3**	**0.4**	**0.5**	**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	0.3
Residential	0.1	0.1	0.1	0.1	0.1	0.1
Services	0.0	0.1	0.1	0.1	0.1	0.1
Agriculture and Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**0.0**	**0.6**	**0.7**	**0.8**	**0.8**	**0.7**
Combustible Fuels	0.0	0.6	0.6	0.6	0.6	0.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.2	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**	**2.1**	**2.1**	**2.2**	**2.3**
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	0.0	0.1	0.0	0.1
Natural gas	0.0	0.0	1.8	1.8	1.9	1.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.0	0.2	0.2	0.3	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]			0.1	0.1	0.1	0.1
CHP Electricity Generation [TWh]			0.2	0.2	0.1	0.1
CHP in Total Electricity Generation [%]			8.5	7.2	6.5	5.6
CHP Heat Production [PJ]			0.1	0.1	0.1	0.1
Transport Fuels [ktoe]						
Final consumption petroleum products	171	223	294	253	268	314
of which LPG	18	24	29	26	26	28
of which motor gasoline	75	75	85	72	78	85
of which Gas/Diesel oil	78	124	180	156	164	201
Final consumption biofuels	0	1	11	15	11	13
pure and blended biogasoline	0	0	0	0	0	0
pure and blended biodiesel	0	1	11	15	11	13
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	0.8	0.9	0.9	0.7	0.8	0.9
Final energy consumption 2020-2030 [Mtoe]	0.4	0.5	0.7	0.5	0.6	0.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	134	121	66	61	56	60
Energy Intensity (GAE/GDP2015) [toe/M€'15	134	122	68	63	59	62
Energy per Capita (GIC/pop) [kgoe/capita]	2080	2266	1826	1479	1547	1758
Final Electricity per Capita [KWh/capita]	4931	5105	4173	4165	4292	4402
Import Dependency [%]	**181.8%**	**252.0%**	**341.4%**	**377.7%**	**333.0%**	**328.7%**
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%	548.1%	719.7%	599.3%	551.0%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	0.0%	0.0%	103.6%	96.2%	103.5%	100.2%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		0.98%	8.23%	10.71%	12.67%	13.40%
RE-T - Renewable energy in Transport [%]		0.00%	8.90%	10.59%	10.50%	10.47%
RES-E - Renewable Electricity Generation [%]		0.03%	7.49%	9.49%	9.65%	10.13%
RES-H&C - Renewable Heating and Cooling [%]		7.28%	23.60%	23.03%	32.78%	37.98%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	2.8	2.9	2.2	1.8	1.9	2.2
GHG Greenhouse gases (CO_2, N_2O*	3.1	3.3	2.6	2.3	2.3	2.6
Main Emissions Indicators						
GHG total emissions [index 1990=100]	108.9%	115.4%	93.4%	80.8%	83.1%	93.7%
Total GHG per capita [t CO_2 eq./capita]	7.9	7.9	5.3	4.4	4.5	5.1

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

5.20 The Netherlands

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	58.5	71.1	33.1	27.5	26.6	24.3
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	2.7	1.6	1.1	1.1	1.1	0.7
of which crude oil	2.4	1.5	0.9	0.9	0.9	0.5
Natural gas	52.8	64.7	23.9	17.3	15.5	12.9
Nuclear	1.0	0.9	0.9	1.0	0.9	1.0
Renewables and biofuels	1.4	3.1	6.2	7.1	8.0	8.7
Wastes, Non-Renewable	0.6	0.7	0.8	0.8	0.8	0.7
Net Imports	35.0	28.3	56.5	57.2	50.0	63.2
Solid fossil fuels	7.7	7.6	6.6	3.8	5.6	5.6
of which hard coal	7.7	7.5	6.6	3.9	5.5	5.7
Oil and petroleum products	42.9	44.5	42.0	39.5	33.9	42.0
of which crude oil and NGL	60.7	60.4	63.3	56.9	58.1	61.8
Natural gas	-17.2	-24.2	8.4	14.2	10.2	15.2
Renewables and biofuels	-0.1	0.1	-0.7	-0.2	0.2	0.6
Electricity	1.6	0.2	0.1	-0.2	0.0	-0.4
Gross inland consumption	78.3	86.2	76.3	72.0	74.3	67.2
Solid fossil fuels	7.8	7.5	6.4	4.1	5.6	5.5
of which hard coal	7.8	7.4	6.4	4.2	5.6	5.6
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	27.8	28.4	28.1
of which crude and NGL	62.8	61.9	63.4	58.0	60.0	59.6
Natural gas	35.0	40.1	32.1	31.4	30.2	23.4
Nuclear	1.0	0.9	0.9	1.0	0.9	1.0
Renewables and biofuels	1.3	3.3	5.4	6.8	8.0	8.5
Electricity	1.6	0.2	0.1	-0.2	0.0	-0.4
Waste, non-renewable	0.6	0.7	0.9	0.9	0.9	0.8
Available for final consumption	58.5	64.5	56.4	56.4	55.3	56.5
Final non-energy consumption	11.3	14.4	12.0	12.0	12.9	12.8
Final energy consumption	47.6	50.8	44.1	44.1	41.9	43.2
by Fuel/Product						
Solid fossil fuels	0.1	0.1	0.2	0.2	0.1	0.1
Oil and petroleum products	14.3	15.6	13.7	12.5	12.4	12.2
Natural gas	20.6	21.5	16.6	15.9	17.1	13.8
Renewables and biofuels	0.5	1.0	2.0	2.0	2.1	2.2
Solid biofuels and renewable waste	0.4	0.6	0.7	0.7	0.8	0.7
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.1	0.1	0.2	0.2
Liquid biofuels	0.0	0.2	0.7	0.6	0.7	0.6
Biogases	0.1	0.1	0.1	0.1	0.1	0.1
Waste, non-renewable	0.0	0.1	0.1	0.1	0.0	0.0
Electricity	8.2	9.3	9.3	9.1	9.2	8.9
Heat	3.7	3.0	2.1	1.9	2.0	1.8
by Sector						
Industry	15.2	14.3	13.2	13.2	13.2	12.3
Transport	10.6	11.7	10.6	9.1	9.2	9.2
Residential	10.8	12.5	9.3	9.1	10.1	8.6
Services	6.3	8.0	6.8	6.4	6.6	6.2
Agriculture and Fishing	4.5	4.2	4.1	4.0	4.0	3.0
Others	0.1	0.1	0.1	0.1	0.1	0.1

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**21.1**	**26.7**	**36.9**	**43.0**	**47.9**	**53.9**
Combustible Fuels	20.1	23.7	24.2	24.3	24.4	24.5
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	4.5	6.6	7.7	8.8
Solar	0.0	0.1	7.2	11.1	14.8	19.6
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]	**89.6**	**119.3**	**121.4**	**123.3**	**122.1**	**121.8**
Solid fossil fuels, peat and products, oil shale	24.3	22.6	17.7	7.6	14.6	14.8
Oil and petroleum products	2.6	1.3	1.4	1.4	1.3	1.6
Natural gas	54.4	78.5	73.1	75.0	59.5	50.3
Nuclear	3.9	4.0	3.9	4.1	3.8	4.2
Renewables and biofuels	3.0	11.2	22.8	32.7	40.4	48.3
Wastes non-RES	1.2	1.6	2.0	2.0	2.0	2.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			8.8	9.1	8.3	8.8
CHP Electricity Generation [TWh]			32.2	31.7	31.4	27.4
CHP in Total Electricity Generation [%]			26.6	26.1	25.7	22.5
CHP Heat Production [PJ]			174.2	171.6	173.4	154.9
Transport Fuels [ktoe]						
Final consumption petroleum products	12340	12756	11134	9709	9665	9586
of which LPG	723	487	316	267	270	255
of which motor gasoline	3964	4048	4179	3485	3589	3674
of which Gas/Diesel oil	7653	8221	6639	5958	5806	5658
Final consumption biofuels	0	243	720	610	683	646
pure and blended biogasoline	0	134	199	226	233	251
pure and blended biodiesel	0	95	480	355	429	362
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	66.9	71.7	63.8	58.5	60.7	56.1
Final energy consumption 2020-2030 [Mtoe]	52.4	55.6	49.5	45.1	46.8	43.4
Primary Energy Intensity 2020-2030 [toe/M€'15]	115	108	84	80	79	70
Energy Intensity (GAE/GDP2015) [toe/M€'15	135	130	101	99	96	83
Energy per Capita (GIC/pop) [kgoe/capita]	4934	5198	4415	4136	4249	3818
Final Electricity per Capita [KWh/capita]	5650	7196	7025	7082	6987	6925
Import Dependency [%]	**44.7%**	**32.8%**	**74.0%**	**79.4%**	**67.4%**	**94.1%**
of Solid fossil fuels	99.4%	101.4%	102.1%	91.9%	99.6%	102.1%
of Hard Coal	98.9%	101.6%	101.8%	92.9%	98.6%	102.2%
of Oil and petroleum products	138.8%	133.4%	138.7%	142.1%	119.2%	149.5%
of Crude and NGL	96.7%	97.6%	99.9%	98.1%	96.8%	103.6%
of Natural Gas	-49.1%	-60.4%	26.3%	45.2%	33.8%	64.9%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		3.92%	8.89%	14.00%	12.99%	14.97%
RE-T - Renewable energy in Transport [%]		3.40%	12.33%	12.63%	8.99%	10.81%
RES-E - Renewable Electricity Generation [%]		9.60%	18.23%	26.41%	33.27%	39.92%
RES-H&C - Renewable Heating and Cooling [%]		3.10%	7.22%	8.05%	7.83%	8.59%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	182.3	193.0	164.7	143.7	147.5	137.2
GHG Greenhouse gases (CO_2, N_2O*	229.8	224.7	193.0	171.1	174.4	163.0
Main Emissions Indicators						
GHG total emissions [index 1990=100]	101.1%	98.8%	84.9%	75.3%	76.7%	71.7%
Total GHG per capita [t CO_2 eq./capita]	14.5	13.6	11.2	9.8	10.0	9.3

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

5.21 Austria

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**9.8**	**12.1**	**12.4**	**12.4**	**12.6**	**12.1**
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	0.7	0.6	0.6	0.5
of which crude oil	1.1	1.1	0.7	0.6	0.6	0.5
Natural gas	1.5	1.4	0.8	0.6	0.6	0.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	6.6	9.0	10.4	10.5	10.8	10.4
Wastes, Non-Renewable	0.3	0.6	0.6	0.7	0.7	0.7
Net Imports	**19.2**	**21.9**	**24.9**	**18.9**	**17.7**	**24.1**
Solid fossil fuels	3.0	3.4	2.8	2.4	2.5	2.4
of which hard coal	2.3	2.4	2.1	1.8	1.9	1.8
Oil and petroleum products	11.0	11.8	12.3	10.9	10.7	10.8
of which crude oil and NGL	7.4	6.9	8.7	7.7	7.7	5.2
Natural gas	5.3	6.1	9.4	5.4	3.9	10.3
Renewables and biofuels	0.0	0.4	0.1	0.0	0.0	-0.1
Electricity	-0.1	0.2	0.3	0.2	0.6	0.7
Gross inland consumption	**29.2**	**34.8**	**34.8**	**32.3**	**34.2**	**32.4**
Solid fossil fuels	3.6	3.4	2.9	2.5	2.6	2.4
of which hard coal	2.5	2.5	2.2	1.9	1.9	1.8
of which brown coal	0.3	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	12.3	13.0	12.9	11.2	11.8	11.4
of which crude and NGL	8.5	8.0	9.3	8.3	8.4	5.7
Natural gas	6.6	8.1	7.7	7.3	7.7	6.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	6.6	9.5	10.4	10.5	10.8	10.3
Electricity	-0.1	0.2	0.3	0.2	0.6	0.7
Waste, non-renewable	0.3	0.6	0.6	0.7	0.7	0.7
Available for final consumption	**23.6**	**27.8**	**28.3**	**28.3**	**27.0**	**28.6**
Final non-energy consumption	**1.7**	**1.8**	**2.1**	**2.1**	**2.1**	**2.2**
Final energy consumption	**21.8**	**26.0**	**26.2**	**26.2**	**24.9**	**26.5**
by Fuel/Product						
Solid fossil fuels	0.7	0.4	0.3	0.3	0.3	0.3
Oil and petroleum products	9.0	9.7	9.5	8.4	8.8	8.4
Natural gas	4.0	4.7	4.8	4.7	4.9	4.3
Renewables and biofuels	2.4	4.1	4.2	4.1	4.6	4.3
Solid biofuels and renewable waste	2.3	3.2	3.1	3.0	3.5	3.2
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	0.5	0.4	0.4	0.4
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.1	0.2	0.2	0.3	0.2	0.3
Electricity	4.4	5.2	5.5	5.3	5.5	5.5
Heat	1.0	1.6	1.7	1.7	1.9	1.7
by Sector						
Industry	6.0	7.6	7.5	7.2	7.5	7.6
Transport	6.4	8.2	8.8	7.7	8.0	7.5
Residential	6.3	7.1	6.7	7.0	7.8	6.6
Services	2.6	2.6	2.6	2.4	2.6	2.5
Agriculture and Fishing	0.5	0.5	0.5	0.5	0.6	0.5
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**17.8**	**21.3**	**25.9**	**26.3**	**27.4**	**28.2**
Combustible Fuels	6.1	7.3	6.4	6.4	6.4	5.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	11.6	12.9	14.6	14.6	14.7	14.9
Wind	0.1	1.0	3.2	3.2	3.4	3.6
Solar	0.0	0.1	1.7	2.0	2.8	3.8
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]	**61.3**	**71.1**	**74.2**	**72.6**	**70.8**	**69.2**
Solid fossil fuels, peat and products, oil shale	5.7	4.9	1.5	0.6	0.1	0.1
Oil and petroleum products	1.7	1.3	0.7	0.7	0.7	0.7
Natural gas	8.9	16.1	13.2	11.8	12.6	12.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	43.4	45.0	54.6	55.4	52.8	50.4
Wastes non-RES	0.1	0.6	0.8	0.7	0.7	0.8
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			2.9	2.9	5.0	5.2
CHP Electricity Generation [TWh]			9.7	9.8	11.5	10.7
CHP in Total Electricity Generation [%]			13.1	13.9	16.3	15.5
CHP Heat Production [PJ]			110.2	111.3	112.2	108.1
Transport Fuels [ktoe]						
Final consumption petroleum products	8274	9352	9351	8357	8733	8307
of which LPG	166	177	73	71	76	81
of which motor gasoline	2016	1767	1559	1293	1364	1412
of which Gas/Diesel oil	6093	7408	7718	6993	7293	6814
Final consumption biofuels	17	532	515	433	445	430
pure and blended biogasoline	0	78	57	56	52	52
pure and blended biodiesel	17	454	459	377	393	379
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	27.5	32.9	32.3	29.9	31.6	30.2
Final energy consumption 2020-2030 [Mtoe]	23.7	28.0	28.3	26.1	27.9	26.3
Primary Energy Intensity 2020-2030 [toe/M€'15]	98	101	87	86	87	79
Energy Intensity (GAE/GDP2015) [toe/M€'15	104	107	93	93	94	85
Energy per Capita (GIC/pop) [kgoe/capita]	3652	4171	3925	3633	3829	3609
Final Electricity per Capita [KWh/capita]	7655	8517	8380	8152	7921	7710
Import Dependency [%]	**65.6%**	**62.8%**	**71.6%**	**58.4%**	**51.9%**	**74.5%**
of Solid fossil fuels	83.9%	99.6%	96.7%	97.8%	99.4%	99.9%
of Hard Coal	91.6%	97.3%	98.4%	95.5%	100.8%	99.2%
of Oil and petroleum products	89.2%	90.6%	95.8%	97.6%	90.5%	94.9%
of Crude and NGL	86.9%	86.5%	94.0%	93.0%	91.7%	91.3%
of Natural Gas	80.6%	75.3%	122.8%	73.4%	51.0%	149.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		31.21%	33.75%	36.55%	34.57%	33.76%
RE-T - Renewable energy in Transport [%]		10.71%	10.05%	10.28%	9.47%	10.14%
RES-E - Renewable Electricity Generation [%]		66.36%	75.07%	78.20%	73.97%	74.67%
RES-H&C - Renewable Heating and Cooling [%]		30.96%	33.93%	34.99%	33.01%	30.58%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	67.9	74.1	70.9	63.2	67.0	63.5
GHG Greenhouse gases (CO_2, N_2O*	82.4	86.9	83.0	75.1	78.6	74.8
Main Emissions Indicators						
GHG total emissions [index 1990=100]	103.0%	108.6%	103.8%	93.9%	98.3%	93.6%
Total GHG per capita [t CO_2 eq./capita]	10.3	10.4	9.4	8.4	8.8	8.3

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

5.22 Poland

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**78.6**	**66.8**	**62.1**	**58.0**	**60.1**	**59.4**
Solid fossil fuels	70.7	55.1	44.4	40.0	42.0	40.7
of which hard coal	58.6	43.5	34.8	31.2	31.7	30.1
of which brown coal	12.1	11.6	9.5	8.8	10.3	10.6
Oil and petroleum products	0.7	0.7	1.0	0.9	0.9	0.9
of which crude oil	0.7	0.7	1.0	0.9	0.9	0.9
Natural gas	3.3	3.7	3.4	3.4	3.3	3.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	3.8	6.9	12.3	12.5	12.8	13.4
Wastes, Non-Renewable	0.1	0.4	1.1	1.0	1.0	1.0
Net Imports	**9.6**	**32.1**	**48.1**	**44.2**	**44.5**	**48.3**
Solid fossil fuels	-16.3	-2.7	2.6	0.1	-1.7	3.4
of which hard coal	-13.8	1.8	6.9	4.5	3.3	7.7
Oil and petroleum products	19.8	25.7	30.7	28.8	30.5	32.6
of which crude oil and NGL	18.1	22.8	26.8	25.1	23.8	26.5
Natural gas	6.6	8.9	13.4	13.6	15.2	12.2
Renewables and biofuels	0.0	0.4	0.5	0.4	0.3	0.2
Electricity	-0.5	-0.1	0.9	1.1	0.1	-0.1
Gross inland consumption	**89.2**	**101.6**	**106.1**	**103.0**	**109.6**	**104.7**
Solid fossil fuels	56.3	55.2	43.8	40.9	45.9	42.1
of which hard coal	46.3	48.5	38.8	36.2	40.5	36.1
of which brown coal	12.1	11.6	9.5	8.8	10.4	10.6
Oil and petroleum products	19.6	26.0	31.3	29.4	31.3	32.9
of which crude and NGL	18.3	23.2	27.7	26.0	25.1	27.0
Natural gas	10.0	12.8	16.2	17.4	18.2	15.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	3.8	7.3	12.7	13.0	13.1	13.6
Electricity	-0.5	-0.1	0.9	1.1	0.1	-0.1
Waste, non-renewable	0.1	0.4	1.1	1.0	1.0	1.0
Available for final consumption	**57.1**	**70.4**	**77.7**	**77.7**	**77.1**	**80.5**
Final non-energy consumption	**4.4**	**5.0**	**5.6**	**5.6**	**5.8**	**5.2**
Final energy consumption	**53.6**	**65.3**	**71.9**	**71.9**	**70.2**	**74.2**
by Fuel/Product						
Solid fossil fuels	11.9	13.2	9.0	9.0	8.7	7.3
Oil and petroleum products	15.2	20.2	25.4	24.4	26.2	26.3
Natural gas	6.3	8.9	9.3	9.2	10.8	9.7
Renewables and biofuels	3.5	5.3	9.2	9.0	9.0	9.0
Solid biofuels and renewable waste	3.5	4.3	7.7	7.5	7.3	7.1
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	0.9	1.0	1.0	1.1	1.2
Biogases	0.0	0.0	0.1	0.1	0.1	0.1
Waste, non-renewable	0.1	0.4	0.8	0.8	0.8	0.8
Electricity	8.4	10.2	12.1	11.8	12.4	12.2
Heat	6.9	6.5	5.6	5.6	6.0	5.6
by Sector						
Industry	17.1	13.5	16.5	15.9	16.3	15.1
Transport	9.6	17.2	22.8	21.8	23.5	23.9
Residential	17.2	22.0	21.0	21.1	22.1	20.8
Services	5.0	8.8	7.8	7.6	8.4	8.2
Agriculture and Fishing	4.6	3.7	3.8	3.9	3.8	3.3
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**30.6**	**33.4**	**43.4**	**49.4**	**52.8**	**55.8**
Combustible Fuels	28.4	29.9	33.6	36.7	36.1	33.1
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	5.8	6.3	7.0	8.2
Solar	0.0	0.0	1.5	4.0	7.4	12.2
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**145.2**	**157.7**	**164.0**	**158.0**	**179.6**	**179.7**
Solid fossil fuels, peat and products, oil shale	135.9	136.5	118.1	107.4	127.6	124.7
Oil and petroleum products	1.9	2.9	1.8	1.7	2.0	2.4
Natural gas	3.0	6.7	17.1	19.3	18.1	13.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	2.3	10.9	25.5	28.2	30.6	37.7
Wastes non-RES	0.1	0.0	0.6	0.5	0.6	0.6
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			9.7	10.0	10.6	10.4
CHP Electricity Generation [TWh]			29.9	30.1	30.8	28.6
CHP in Total Electricity Generation [%]			18.3	16.8	17.1	15.9
CHP Heat Production [PJ]			248.5	245.6	259.6	247.9
Transport Fuels [ktoe]						
Final consumption petroleum products	13789	19566	24888	23848	25574	25872
of which LPG	1153	2618	2946	2659	2725	2745
of which motor gasoline	5291	4252	4544	4229	4677	4985
of which Gas/Diesel oil	7344	12696	17398	16959	18171	18141
Final consumption biofuels	0	867	1026	1041	1121	1205
pure and blended biogasoline	0	170	187	183	208	232
pure and blended biodiesel	0	698	838	857	912	971
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	84.8	96.6	100.2	96.8	104.0	98.6
Final energy consumption 2020-2030 [Mtoe]	55.1	66.3	73.7	71.1	75.2	72.4
Primary Energy Intensity 2020-2030 [toe/M€'15]	335	262	195	192	193	173
Energy Intensity (GAE/GDP2015) [toe/M€'15	352	276	206	204	203	184
Energy per Capita (GIC/pop) [kgoe/capita]	2332	2672	2793	2712	2956	2837
Final Electricity per Capita [KWh/capita]	3794	4146	4319	4164	4845	4873
Import Dependency [%]	**10.8%**	**31.6%**	**45.4%**	**42.9%**	**40.6%**	**46.1%**
of Solid fossil fuels	-29.0%	-5.0%	6.0%	0.3%	-3.6%	8.0%
of Hard Coal	-29.9%	3.7%	17.8%	12.4%	8.3%	21.4%
of Oil and petroleum products	101.2%	99.0%	98.2%	97.9%	97.5%	99.2%
of Crude and NGL	99.2%	98.4%	96.7%	96.6%	94.6%	98.0%
of Natural Gas	66.3%	69.3%	82.4%	78.3%	83.6%	81.2%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		9.28%	15.38%	16.10%	15.61%	16.88%
RE-T - Renewable energy in Transport [%]		6.64%	6.20%	6.58%	5.68%	5.79%
RES-E - Renewable Electricity Generation [%]		6.55%	14.36%	16.24%	17.17%	21.01%
RES-H&C - Renewable Heating and Cooling [%]		11.81%	22.00%	22.14%	21.00%	22.73%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	318.7	336.2	321.4	304.3	333.2	318.4
GHG Greenhouse gases (CO_2, N_2O*	395.6	408.7	389.6	372.8	401.1	383.4
Main Emissions Indicators						
GHG total emissions [index 1990=100]	83.0%	85.8%	81.8%	78.3%	84.2%	80.5%
Total GHG per capita [t CO_2 eq./capita]	10.3	10.7	10.3	9.8	10.8	10.4

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

5.23 Portugal

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**3.8**	**5.8**	**6.6**	**6.8**	**7.0**	**6.7**
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	3.8	5.6	6.4	6.7	6.8	6.6
Wastes, Non-Renewable	0.1	0.2	0.2	0.1	0.2	0.1
Net Imports	**22.2**	**18.7**	**18.4**	**14.4**	**14.9**	**16.6**
Solid fossil fuels	3.9	1.6	1.5	0.0	0.0	0.0
of which hard coal	4.0	1.6	1.5	0.0	0.0	0.0
Oil and petroleum products	16.2	12.5	11.6	9.4	9.6	10.8
of which crude oil and NGL	11.7	11.5	11.5	11.0	9.6	10.3
Natural gas	2.0	4.5	5.3	5.2	5.0	5.0
Renewables and biofuels	0.0	-0.2	-0.3	-0.3	-0.2	-0.1
Electricity	0.1	0.2	0.3	0.1	0.4	0.8
Gross inland consumption	**25.4**	**24.4**	**23.9**	**21.4**	**21.5**	**22.6**
Solid fossil fuels	3.8	1.7	1.2	0.6	0.2	0.0
of which hard coal	3.8	1.7	1.2	0.6	0.2	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	15.6	12.4	10.8	8.9	9.1	10.3
of which crude and NGL	11.8	11.6	11.4	11.2	9.8	10.4
Natural gas	2.0	4.5	5.3	5.2	5.0	4.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	3.8	5.5	6.1	6.4	6.6	6.5
Electricity	0.1	0.2	0.3	0.1	0.4	0.8
Waste, non-renewable	0.1	0.2	0.2	0.2	0.2	0.2
Available for final consumption	**19.5**	**19.0**	**17.6**	**17.6**	**16.4**	**16.9**
Final non-energy consumption	**2.4**	**1.7**	**1.2**	**1.2**	**1.2**	**1.3**
Final energy consumption	**17.2**	**17.3**	**16.4**	**16.4**	**15.2**	**15.8**
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	7.2	6.3	6.5	6.9
Natural gas	0.8	1.6	1.8	1.7	1.9	1.7
Renewables and biofuels	2.4	2.5	2.9	2.9	3.0	3.2
Solid biofuels and renewable waste	2.4	2.2	1.8	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	0.4	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	4.1	4.0	4.1	4.2
Heat	0.1	0.3	0.2	0.2	0.2	0.2
by Sector						
Industry	6.3	5.5	4.6	4.4	4.5	4.5
Transport	6.0	6.5	6.0	5.0	5.5	5.8
Residential	2.8	3.0	2.9	3.0	3.0	3.0
Services	1.4	1.9	2.4	2.2	2.2	2.4
Agriculture and Fishing	0.7	0.5	0.5	0.5	0.5	0.5
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**10.9**	**18.9**	**21.6**	**21.7**	**21.3**	**22.6**
Combustible Fuels	6.3	9.9	8.2	8.2	7.0	6.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	4.5	5.1	7.3	7.2	7.3	8.2
Wind	0.1	3.8	5.2	5.1	5.4	5.5
Solar	0.0	0.1	0.9	1.1	1.6	2.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**43.8**	**54.1**	**53.2**	**53.1**	**51.0**	**48.8**
Solid fossil fuels, peat and products, oil shale	14.6	7.1	5.5	2.4	0.8	0.0
Oil and petroleum products	8.4	3.0	1.3	1.2	1.2	1.3
Natural gas	7.2	14.9	17.3	17.6	15.6	17.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	12.9	28.4	27.4	30.1	31.5	27.6
Wastes non-RES	0.3	0.3	0.3	0.3	0.3	0.2
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.3	1.3	1.3	1.0
CHP Electricity Generation [TWh]			6.4	6.5	6.1	4.9
CHP in Total Electricity Generation [%]			12.1	12.8	11.9	10.1
CHP Heat Production [PJ]			62.1	59.8	59.3	51.5
Transport Fuels [ktoe]						
Final consumption petroleum products	8310	7439	6566	5723	6017	6264
of which LPG	1139	728	557	548	491	485
of which motor gasoline	2272	1459	1108	918	998	1086
of which Gas/Diesel oil	4899	5252	4901	4258	4528	4693
Final consumption biofuels	0	327	283	255	356	354
pure and blended biogasoline	0	0	8	6	17	26
pure and blended biodiesel	0	323	275	248	339	329
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	23.0	22.7	22.1	19.5	19.5	20.8
Final energy consumption 2020-2030 [Mtoe]	18.0	18.1	17.1	15.0	15.7	16.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	132	121	110	106	101	100
Energy Intensity (GAE/GDP2015) [toe/M€'15	146	130	119	116	111	109
Energy per Capita (GIC/pop) [kgoe/capita]	2476	2306	2326	2079	2092	2182
Final Electricity per Capita [KWh/capita]	4270	5116	5172	5155	4950	4715
Import Dependency [%]	**87.5%**	**76.6%**	**76.8%**	**67.4%**	**69.0%**	**73.5%**
of Solid fossil fuels	102.9%	98.3%	122.1%	-6.5%	4.5%	107.4%
of Hard Coal	103.4%	98.3%	122.3%	-7.9%	1.2%	107.9%
of Oil and petroleum products	103.6%	101.1%	106.8%	105.0%	105.0%	105.4%
of Crude and NGL	99.0%	98.8%	100.4%	98.3%	98.6%	99.2%
of Natural Gas	100.3%	100.4%	99.9%	99.3%	100.0%	104.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		24.15%	30.62%	33.98%	33.98%	34.68%
RE-T - Renewable energy in Transport [%]		5.55%	9.09%	9.70%	8.61%	8.71%
RES-E - Renewable Electricity Generation [%]		40.61%	53.77%	58.03%	58.43%	60.96%
RES-H&C - Renewable Heating and Cooling [%]		33.81%	41.66%	41.55%	42.68%	45.55%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	67.8	55.7	52.1	43.4	42.5	45.0
GHG Greenhouse gases (CO_2, N_2O*	84.3	71.6	68.2	59.2	58.3	60.6
Main Emissions Indicators						
GHG total emissions [index 1990=100]	139.4%	118.4%	112.7%	97.9%	96.4%	100.1%
Total GHG per capita [t CO_2 eq./capita]	8.2	6.8	6.6	5.8	5.7	5.9

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

5.24 Romania

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**28.5**	**27.4**	**24.5**	**22.4**	**23.0**	**22.2**
Solid fossil fuels	5.6	5.9	3.9	2.6	3.0	2.8
of which hard coal	0.2	0.0	0.0	0.0	0.0	0.0
of which brown coal	5.4	5.9	3.9	2.6	3.0	2.8
Oil and petroleum products	6.4	4.2	3.5	3.4	3.2	3.0
of which crude oil	6.4	4.2	3.5	3.4	3.2	3.0
Natural gas	11.0	8.6	8.3	7.4	7.4	7.5
Nuclear	1.4	2.9	2.8	2.9	2.9	2.8
Renewables and biofuels	4.0	5.7	5.8	5.8	6.1	5.7
Wastes, Non-Renewable	0.1	0.0	0.1	0.3	0.3	0.3
Net Imports	**8.0**	**7.5**	**10.1**	**9.1**	**10.9**	**10.3**
Solid fossil fuels	1.9	1.2	1.1	0.8	0.9	0.7
of which hard coal	1.6	0.1	0.1	0.1	0.1	0.0
Oil and petroleum products	3.5	4.6	6.5	6.3	7.2	7.7
of which crude oil and NGL	4.8	5.7	8.6	7.0	6.8	8.7
Natural gas	2.7	1.8	2.1	1.6	2.3	1.5
Renewables and biofuels	0.0	0.1	0.2	0.2	0.3	0.3
Electricity	-0.1	-0.2	0.1	0.2	0.2	0.1
Gross inland consumption	**36.8**	**35.0**	**33.2**	**32.2**	**34.3**	**31.7**
Solid fossil fuels	7.5	6.9	4.9	3.5	4.0	3.5
of which hard coal	1.7	0.1	0.1	0.1	0.1	0.0
of which brown coal	5.5	6.2	4.3	3.0	3.4	3.0
Oil and petroleum products	10.1	8.6	9.9	9.6	10.5	10.5
of which crude and NGL	11.1	10.0	12.0	10.5	10.1	11.6
Natural gas	13.7	10.8	9.3	9.7	9.9	8.4
Nuclear	1.4	2.9	2.8	2.9	2.9	2.8
Renewables and biofuels	4.0	5.9	6.0	6.0	6.4	6.0
Electricity	-0.1	-0.2	0.1	0.2	0.2	0.1
Waste, non-renewable	0.1	0.0	0.2	0.3	0.3	0.3
Available for final consumption	**24.1**	**24.8**	**25.1**	**25.1**	**25.1**	**26.7**
Final non-energy consumption	**1.9**	**2.1**	**1.1**	**1.1**	**1.3**	**1.2**
Final energy consumption	**21.9**	**22.0**	**23.7**	**23.7**	**23.5**	**25.3**
by Fuel/Product						
Solid fossil fuels	0.3	0.5	0.7	0.6	0.7	0.6
Oil and petroleum products	5.4	6.0	8.3	7.9	8.4	9.0
Natural gas	6.5	6.0	5.6	5.8	6.6	5.4
Renewables and biofuels	2.7	4.0	3.8	3.8	4.1	3.9
Solid biofuels and renewable waste	2.7	3.9	3.4	3.4	3.6	3.4
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.1	0.4	0.5	0.5	0.6
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.1	0.0	0.2	0.3	0.3	0.3
Electricity	2.9	3.6	3.9	3.8	4.0	3.7
Heat	3.6	1.6	1.1	1.0	1.0	0.9
by Sector						
Industry	8.6	6.5	6.7	6.4	6.9	5.7
Transport	3.3	5.0	6.6	6.5	6.9	7.4
Residential	8.4	8.1	7.8	8.0	8.8	7.9
Services	0.7	1.9	2.0	1.8	1.9	1.9
Agriculture and Fishing	0.4	0.4	0.6	0.5	0.6	0.6
Others	0.5	0.2	0.2	0.2	0.4	0.4

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**16.8**	**19.9**	**20.9**	**20.6**	**18.8**	**19.3**
Combustible Fuels	10.0	11.6	8.4	8.1	6.3	6.4
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	3.0	3.0	3.0	3.0
Solar	0.0	0.0	1.4	1.4	1.4	1.8
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]	**51.6**	**61.0**	**59.6**	**55.9**	**59.5**	**56.0**
Solid fossil fuels, peat and products, oil shale	18.9	20.7	13.6	9.4	10.7	10.4
Oil and petroleum products	3.4	0.7	0.6	0.6	0.8	1.1
Natural gas	9.0	7.3	9.1	9.6	10.1	9.4
Nuclear	5.5	11.6	11.3	11.5	11.3	11.1
Renewables and biofuels	14.8	20.3	24.6	24.6	26.3	23.6
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.3	1.4	1.5	1.4
CHP Electricity Generation [TWh]			5.1	4.6	4.7	3.9
CHP in Total Electricity Generation [%]			12.1	7.8	7.9	7.0
CHP Heat Production [PJ]			62.1	35.4	36.1	32.8
Transport Fuels [ktoe]						
Final consumption petroleum products	4355	5662	7377	7148	7755	8289
of which LPG	317	489	514	454	464	473
of which motor gasoline	1403	1457	1395	1290	1382	1407
of which Gas/Diesel oil	2634	3717	5468	5404	5909	6408
Final consumption biofuels	0	116	412	483	496	559
pure and blended biogasoline	0	47	98	92	121	144
pure and blended biodiesel	0	69	315	392	375	415
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	34.9	32.9	32.1	30.9	33.1	31.0
Final energy consumption 2020-2030 [Mtoe]	22.7	22.5	23.9	23.5	25.4	24.0
Primary Energy Intensity 2020-2030 [toe/M€'15]	377	236	163	163	165	149
Energy Intensity (GAE/GDP2015) [toe/M€'15	398	251	169	170	171	152
Energy per Capita (GIC/pop) [kgoe/capita]	1637	1725	1710	1667	1786	1663
Final Electricity per Capita [KWh/capita]	2296	3005	3071	2894	3097	2941
Import Dependency [%]	**21.9%**	**21.4%**	**30.3%**	**28.2%**	**31.7%**	**32.4%**
of Solid fossil fuels	25.5%	16.9%	22.0%	22.0%	23.2%	20.0%
of Hard Coal	96.3%	88.4%	97.7%	106.4%	102.6%	72.9%
of Oil and petroleum products	34.4%	52.7%	65.6%	64.9%	68.4%	72.8%
of Crude and NGL	43.5%	57.2%	72.0%	66.9%	67.3%	74.5%
of Natural Gas	19.8%	16.8%	23.2%	16.6%	22.8%	18.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		22.83%	24.29%	24.48%	23.87%	24.14%
RE-T - Renewable energy in Transport [%]		1.37%	7.85%	8.54%	8.92%	8.23%
RES-E - Renewable Electricity Generation [%]		30.38%	42.62%	43.37%	42.68%	43.73%
RES-H&C - Renewable Heating and Cooling [%]		27.23%	25.74%	25.33%	24.57%	26.25%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	93.8	84.8	76.9	73.9	77.5	73.3
GHG Greenhouse gases (CO_2, N_2O*	142.5	125.2	115.7	111.5	115.5	110.0
Main Emissions Indicators						
GHG total emissions [index 1990=100]	55.4%	48.6%	44.9%	43.3%	44.9%	42.7%
Total GHG per capita [t CO_2 eq./capita]	6.3	6.2	6.0	5.8	6.0	5.8

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

5.25 Slovenia

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**3.2**	**3.7**	**3.4**	**3.5**	**3.3**	**3.0**
Solid fossil fuels	1.1	1.2	0.9	0.9	0.7	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	0.7	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	1.4	1.5	1.4	1.3
Renewables and biofuels	0.9	1.1	1.0	1.1	1.2	1.0
Wastes, Non-Renewable	0.0	0.0	0.1	0.1	0.1	0.1
Net Imports	**3.4**	**3.6**	**3.6**	**2.9**	**3.2**	**3.4**
Solid fossil fuels	0.2	0.3	0.2	0.2	0.1	0.2
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	2.5	2.6	2.6	2.1	2.3	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	0.8	0.7
Renewables and biofuels	0.0	0.0	0.1	0.1	0.1	0.1
Electricity	-0.1	-0.2	0.0	-0.2	0.0	0.1
Gross inland consumption	**6.6**	**7.3**	**6.7**	**6.3**	**6.5**	**6.4**
Solid fossil fuels	1.3	1.5	1.1	1.0	0.9	0.7
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	1.2	1.4	1.0	1.0	0.9	0.7
Oil and petroleum products	2.4	2.6	2.4	2.0	2.2	2.4
of which crude and NGL	0.1	0.0	0.0	0.0	0.0	0.0
Natural gas	0.8	0.9	0.7	0.7	0.8	0.7
Nuclear	1.2	1.3	1.4	1.5	1.4	1.3
Renewables and biofuels	0.9	1.2	1.1	1.2	1.3	1.0
Electricity	-0.1	-0.2	0.0	-0.2	0.0	0.1
Waste, non-renewable	0.0	0.0	0.1	0.1	0.1	0.1
Available for final consumption	**4.8**	**5.3**	**5.0**	**5.0**	**4.6**	**4.9**
Final non-energy consumption	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**	**0.2**
Final energy consumption	**4.5**	**5.0**	**4.9**	**4.9**	**4.4**	**4.8**
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	2.2	1.9	2.0	2.2
Natural gas	0.6	0.6	0.6	0.6	0.6	0.6
Renewables and biofuels	0.5	0.7	0.6	0.6	0.7	0.6
Solid biofuels and renewable waste	0.5	0.6	0.5	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	0.1	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	0.1	0.0	0.0	0.0
Electricity	0.9	1.0	1.2	1.1	1.2	1.1
Heat	0.2	0.2	0.2	0.2	0.2	0.2
by Sector						
Industry	1.4	1.3	1.3	1.3	1.3	1.2
Transport	1.2	1.8	1.9	1.6	1.8	2.0
Residential	1.2	1.4	1.1	1.1	1.2	1.0
Services	0.5	0.5	0.5	0.4	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	0.1

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**2.6**	**3.2**	**3.8**	**3.9**	**4.1**	**4.2**
Combustible Fuels	1.1	1.3	1.5	1.5	1.6	1.6
Nuclear	0.7	0.7	0.7	0.7	0.7	0.7
Hydro	0.8	1.3	1.4	1.4	1.4	1.3
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.3	0.4	0.5	0.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**13.6**	**16.4**	**16.1**	**17.2**	**15.9**	**13.6**
Solid fossil fuels, peat and products, oil shale	4.6	5.3	4.5	4.4	3.8	3.1
Oil and petroleum products	0.1	0.0	0.0	0.0	0.1	0.1
Natural gas	0.3	0.5	0.5	0.6	0.5	0.5
Nuclear	4.8	5.7	5.8	6.4	5.7	5.6
Renewables and biofuels	3.9	4.7	5.0	5.6	5.4	4.1
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	0.3	0.4	0.3
CHP Electricity Generation [TWh]			1.2	1.2	1.2	1.1
CHP in Total Electricity Generation [%]			7.3	7.3	7.5	7.7
CHP Heat Production [PJ]			11.0	11.2	11.2	9.9
Transport Fuels [ktoe]						
Final consumption petroleum products	2135	2407	2159	1827	1986	2191
of which LPG	104	92	96	84	85	82
of which motor gasoline	854	604	413	327	371	431
of which Gas/Diesel oil	1177	1710	1651	1416	1531	1677
Final consumption biofuels	0	46	95	93	103	79
pure and blended biogasoline	0	4	4	8	9	6
pure and blended biodiesel	0	41	91	85	95	73
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	6.3	7.0	6.5	6.1	6.3	6.2
Final energy consumption 2020-2030 [Mtoe]	4.6	5.1	4.9	4.4	4.7	4.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	217	185	144	141	135	128
Energy Intensity (GAE/GDP2015) [toe/M€'15	225	191	148	146	139	132
Energy per Capita (GIC/pop) [kgoe/capita]	3301	3544	3231	3025	3103	3022
Final Electricity per Capita [KWh/capita]	6854	8031	7737	8202	7528	6461
Import Dependency [%]	**51.9%**	**49.4%**	**53.6%**	**46.5%**	**49.3%**	**54.0%**
of Solid fossil fuels	18.8%	19.3%	20.1%	17.7%	11.0%	28.1%
of Hard Coal	118.2%	135.3%	95.9%	97.7%	103.8%	95.6%
of Oil and petroleum products	101.5%	99.9%	109.6%	105.2%	103.5%	98.4%
of Crude and NGL	87.2%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	99.3%	99.3%	99.2%	99.4%	99.4%	99.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		21.08%	21.97%	25.00%	25.00%	25.00%
RE-T - Renewable energy in Transport [%]		3.12%	7.98%	10.91%	10.64%	7.83%
RES-E - Renewable Electricity Generation [%]		32.20%	32.63%	35.09%	34.98%	37.01%
RES-H&C - Renewable Heating and Cooling [%]		29.54%	32.13%	32.14%	35.22%	33.99%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	15.1	16.5	14.1	12.9	13.1	12.8
GHG Greenhouse gases (CO_2, N_2O*	18.8	19.8	17.2	16.0	16.1	15.7
Main Emissions Indicators						
GHG total emissions [index 1990=100]	99.8%	105.1%	91.4%	84.6%	85.4%	83.2%
Total GHG per capita [t CO_2 eq./capita]	9.5	9.7	8.3	7.6	7.6	7.4

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

5.26 Slovakia

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**6.3**	**6.7**	**6.9**	**6.8**	**7.0**	**6.7**
Solid fossil fuels	1.0	0.6	0.4	0.2	0.3	0.2
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	1.0	0.6	0.4	0.2	0.3	0.2
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	0.0	0.0
Nuclear	4.3	3.9	4.0	4.0	4.1	4.1
Renewables and biofuels	0.5	2.1	2.2	2.2	2.4	2.2
Wastes, Non-Renewable	0.3	0.0	0.2	0.2	0.2	0.2
Net Imports	**11.5**	**11.4**	**11.9**	**9.3**	**9.4**	**11.6**
Solid fossil fuels	3.4	3.0	2.5	2.0	2.5	2.3
of which hard coal	3.1	2.6	2.2	1.7	2.3	2.0
Oil and petroleum products	2.6	3.5	3.6	3.7	3.7	3.9
of which crude oil and NGL	5.3	5.5	5.2	5.7	5.5	5.5
Natural gas	5.7	5.0	5.6	3.6	3.1	5.2
Renewables and biofuels	0.0	-0.1	0.0	0.0	0.0	0.0
Electricity	-0.2	0.1	0.1	0.0	0.1	0.1
Gross inland consumption	**17.7**	**18.4**	**17.0**	**16.4**	**17.8**	**16.6**
Solid fossil fuels	4.3	3.9	2.7	2.3	2.8	2.4
of which hard coal	3.0	2.8	2.2	1.8	2.4	2.0
of which brown coal	1.2	0.8	0.5	0.5	0.4	0.4
Oil and petroleum products	2.9	3.5	3.6	3.6	3.7	3.8
of which crude and NGL	5.4	5.5	5.1	5.6	5.5	5.4
Natural gas	5.8	5.0	4.1	4.1	4.6	3.8
Nuclear	4.3	3.9	4.0	4.0	4.1	4.1
Renewables and biofuels	0.5	2.0	2.2	2.1	2.3	2.1
Electricity	-0.2	0.1	0.1	0.0	0.1	0.1
Waste, non-renewable	0.3	0.0	0.2	0.2	0.2	0.2
Available for final consumption	**11.7**	**12.2**	**11.3**	**11.3**	**10.8**	**11.8**
Final non-energy consumption	**1.4**	**1.1**	**1.0**	**1.0**	**1.2**	**1.3**
Final energy consumption	**9.9**	**11.1**	**10.2**	**10.2**	**9.6**	**10.5**
by Fuel/Product						
Solid fossil fuels	0.9	0.7	0.4	0.4	0.4	0.3
Oil and petroleum products	1.7	2.3	2.8	2.6	2.7	2.8
Natural gas	4.2	3.5	2.6	2.4	2.7	2.4
Renewables and biofuels	0.1	1.3	1.2	1.1	1.3	1.2
Solid biofuels and renewable waste	0.1	1.1	1.0	0.9	1.0	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	0.2	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	2.2	2.0	2.2	2.0
Heat	0.6	0.9	0.5	0.5	0.6	0.5
by Sector						
Industry	3.5	3.2	3.5	3.1	3.4	3.2
Transport	1.4	2.6	2.8	2.5	2.6	2.7
Residential	2.6	3.0	2.6	2.7	3.0	2.7
Services	2.2	2.1	1.2	1.1	1.4	1.3
Agriculture and Fishing	0.2	0.1	0.1	0.1	0.1	0.1
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**7.5**	**7.9**	**7.7**	**7.7**	**7.5**	**7.5**
Combustible Fuels	2.4	3.5	2.6	2.7	2.4	2.4
Nuclear	2.6	1.8	1.9	2.0	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	0.6	0.5	0.5	0.5
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**31.2**	**27.9**	**28.4**	**28.8**	**30.0**	**26.8**
Solid fossil fuels, peat and products, oil shale	5.6	3.6	2.3	1.9	1.7	1.6
Oil and petroleum products	0.2	0.6	0.5	0.4	0.4	0.5
Natural gas	3.9	2.7	3.4	3.9	4.9	2.5
Nuclear	16.5	14.6	15.3	15.4	15.7	15.9
Renewables and biofuels	4.6	5.9	6.6	6.9	6.8	5.8
Wastes non-RES	0.0	0.0	0.0	0.0	0.2	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.5	1.6	1.5	1.4
CHP Electricity Generation [TWh]			3.1	3.3	3.5	3.3
CHP in Total Electricity Generation [%]			10.8	11.0	11.8	12.3
CHP Heat Production [PJ]			34.9	35.1	41.0	36.1
Transport Fuels [ktoe]						
Final consumption petroleum products	1498	2179	2496	2296	2434	2490
of which LPG	33	42	49	49	57	60
of which motor gasoline	612	601	551	505	514	540
of which Gas/Diesel oil	852	1536	1896	1742	1863	1890
Final consumption biofuels	0	98	157	155	161	171
pure and blended biogasoline	0	24	20	26	26	28
pure and blended biodiesel	0	74	137	129	135	143
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	16.4	17.4	16.0	15.2	16.4	15.4
Final energy consumption 2020-2030 [Mtoe]	11.0	12.3	11.2	10.4	11.6	10.6
Primary Energy Intensity 2020-2030 [toe/M€'15]	378	245	178	175	181	166
Energy Intensity (GAE/GDP2015) [toe/M€'15	410	260	190	190	196	180
Energy per Capita (GIC/pop) [kgoe/capita]	3284	3419	3122	3013	3259	3058
Final Electricity per Capita [KWh/capita]	5771	5168	5217	5284	5498	4938
Import Dependency [%]	**65.1%**	**61.9%**	**69.8%**	**56.3%**	**52.6%**	**69.6%**
of Solid fossil fuels	80.2%	75.7%	92.2%	86.2%	88.1%	96.1%
of Hard Coal	103.8%	91.9%	102.7%	97.3%	95.5%	101.0%
of Oil and petroleum products	92.5%	98.4%	101.3%	102.0%	98.3%	103.0%
of Crude and NGL	97.6%	99.9%	100.5%	101.4%	99.1%	101.1%
of Natural Gas	98.8%	99.9%	136.6%	88.1%	69.0%	137.3%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		9.10%	16.89%	17.34%	17.42%	17.50%
RE-T - Renewable energy in Transport [%]		5.29%	8.31%	9.26%	8.75%	8.93%
RES-E - Renewable Electricity Generation [%]		17.77%	22.10%	23.07%	22.40%	22.90%
RES-H&C - Renewable Heating and Cooling [%]		7.90%	19.70%	19.43%	19.52%	19.92%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	41.3	38.6	34.1	31.3	35.3	31.7
GHG Greenhouse gases (CO_2, N_2O*	49.0	46.0	40.1	37.2	41.3	37.2
Main Emissions Indicators						
GHG total emissions [index 1990=100]	66.6%	62.6%	54.5%	50.6%	56.1%	50.6%
Total GHG per capita [t CO_2 eq./capita]	9.1	8.5	7.4	6.8	7.6	6.8

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

5.27 Finland

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	14.9	17.1	18.9	18.1	19.5	19.6
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.1	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	5.7	5.5	5.6	6.1
Renewables and biofuels	7.8	9.4	11.8	11.5	13.2	12.7
Wastes, Non-Renewable	0.1	0.1	0.3	0.3	0.3	0.3
Net Imports	18.6	18.1	14.9	14.0	12.9	13.4
Solid fossil fuels	3.5	4.0	2.1	1.7	1.5	2.7
of which hard coal	3.2	3.7	2.0	1.6	1.4	2.5
Oil and petroleum products	10.6	9.5	8.4	8.3	7.2	8.3
of which crude oil and NGL	11.9	11.4	12.7	11.6	8.6	10.1
Natural gas	3.4	3.8	2.1	2.1	2.1	1.1
Renewables and biofuels	0.0	-0.1	0.4	0.5	0.5	0.2
Electricity	1.0	0.9	1.7	1.3	1.5	1.1
Gross inland consumption	32.8	36.8	34.2	32.1	33.7	32.5
Solid fossil fuels	3.6	4.6	2.1	1.8	2.1	2.2
of which hard coal	3.3	4.3	2.1	1.8	1.9	2.1
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	9.5	10.0	8.5	7.8	7.3	7.8
of which crude and NGL	11.7	11.3	12.8	11.6	8.7	10.1
Natural gas	3.4	3.8	2.1	2.1	2.1	1.1
Nuclear	5.8	5.6	5.7	5.5	5.6	6.1
Renewables and biofuels	7.8	9.3	12.2	12.0	13.7	12.9
Electricity	1.0	0.9	1.7	1.3	1.5	1.1
Waste, non-renewable	0.1	0.1	0.3	0.3	0.3	0.3
Available for final consumption	23.7	26.3	25.7	25.7	24.7	25.7
Final non-energy consumption	1.0	1.2	1.4	1.4	1.5	1.3
Final energy consumption	23.3	25.0	24.8	24.8	23.2	24.8
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	5.9	5.6	5.3	5.2
Natural gas	0.9	0.8	0.7	0.7	0.8	0.6
Renewables and biofuels	4.5	4.8	6.8	6.3	7.1	6.5
Solid biofuels and renewable waste	4.5	4.6	5.6	5.2	5.5	4.9
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	0.0	0.2	0.4	0.4	0.7	0.6
Biogases	0.0	0.0	0.1	0.1	0.1	0.1
Waste, non-renewable	0.0	0.0	0.0	0.1	0.1	0.1
Electricity	6.5	7.2	7.0	6.6	7.1	6.6
Heat	3.3	4.6	3.9	3.6	4.1	3.9
by Sector						
Industry	11.5	10.7	11.0	10.3	10.8	9.8
Transport	3.9	4.3	4.2	3.9	4.0	3.9
Residential	4.5	5.8	5.6	5.3	6.0	5.6
Services	2.3	3.1	3.0	2.8	3.1	3.0
Agriculture and Fishing	0.8	0.8	0.8	0.8	0.8	0.7
Others	0.3	0.3	0.2	0.3	0.2	0.2

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**16.3**	**15.4**	**17.4**	**17.3**	**17.5**	**20.6**
Combustible Fuels	10.7	9.5	8.9	8.4	8.3	8.3
Nuclear	2.6	2.7	2.8	2.8	2.8	2.8
Hydro	2.9	3.0	3.2	3.2	3.2	3.2
Wind	0.0	0.2	2.3	2.6	3.3	5.7
Solar	0.0	0.0	0.2	0.3	0.4	0.7
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]	**70.0**	**80.7**	**68.7**	**69.3**	**72.1**	**72.2**
Solid fossil fuels, peat and products, oil shale	12.5	20.8	7.4	4.6	4.8	5.6
Oil and petroleum products	0.6	0.5	0.3	0.2	0.2	0.2
Natural gas	10.8	11.8	4.5	4.6	4.7	1.5
Nuclear	22.5	22.8	23.9	23.3	23.6	25.3
Renewables and biofuels	23.4	24.2	31.9	35.9	38.2	38.7
Wastes non-RES	0.1	0.2	0.5	0.4	0.5	0.5
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			6.4	6.4	6.3	6.2
CHP Electricity Generation [TWh]			22.5	18.9	20.6	17.6
CHP in Total Electricity Generation [%]			32.8	26.4	28.6	24.3
CHP Heat Production [PJ]			242.7	214.8	223.3	199.4
Transport Fuels [ktoe]						
Final consumption petroleum products	6137	6169	5466	5201	4961	4886
of which LPG	263	311	351	305	341	349
of which motor gasoline	1833	1613	1323	1230	1240	1150
of which Gas/Diesel oil	4041	4244	3793	3665	3380	3387
Final consumption biofuels	0	184	433	401	721	605
pure and blended biogasoline	0	81	94	99	119	124
pure and blended biodiesel	0	63	339	301	602	480
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	31.6	35.4	32.1	29.9	31.5	30.2
Final energy consumption 2020-2030 [Mtoe]	24.4	26.2	25.5	23.4	24.9	23.3
Primary Energy Intensity 2020-2030 [toe/M€'15]	179	168	140	134	137	129
Energy Intensity (GAE/GDP2015) [toe/M€'15	185	175	149	143	146	139
Energy per Capita (GIC/pop) [kgoe/capita]	6336	6875	6200	5814	6092	5857
Final Electricity per Capita [KWh/capita]	13531	15075	12441	12536	13033	13017
Import Dependency [%]	**56.6%**	**49.1%**	**43.4%**	**43.6%**	**38.3%**	**41.3%**
of Solid fossil fuels	97.6%	86.3%	98.9%	92.2%	72.4%	126.3%
of Hard Coal	97.7%	85.5%	96.1%	89.9%	72.0%	121.4%
of Oil and petroleum products	111.5%	94.2%	98.9%	106.4%	99.2%	106.1%
of Crude and NGL	101.5%	101.1%	99.0%	99.7%	98.5%	99.2%
of Natural Gas	100.0%	100.0%	100.6%	100.4%	99.7%	103.3%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		32.17%	42.81%	43.94%	42.85%	47.89%
RE-T - Renewable energy in Transport [%]		4.39%	14.85%	14.31%	20.72%	18.83%
RES-E - Renewable Electricity Generation [%]		27.22%	37.97%	39.56%	39.58%	47.93%
RES-H&C - Renewable Heating and Cooling [%]		43.97%	56.88%	57.62%	52.08%	58.55%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	58.2	65.8	45.1	38.6	38.7	38.0
GHG Greenhouse gases (CO_2, N_2O*	71.3	77.1	55.2	48.5	48.4	47.3
Main Emissions Indicators						
GHG total emissions [index 1990=100]	98.5%	106.6%	76.4%	67.1%	66.9%	65.4%
Total GHG per capita [t CO_2 eq./capita]	13.8	14.4	10.0	8.8	8.8	8.5

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

5.28 Sweden

Mtoe, unless otherwise stated	2000	2010	2019	2020	2021	2022
Production	**30.0**	**31.8**	**37.0**	**34.5**	**35.7**	**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	16.2	12.0	12.3	12.4
Renewables and biofuels	14.7	16.5	19.9	21.5	22.5	22.5
Wastes, Non-Renewable	0.3	0.5	0.7	0.9	0.8	0.8
Net Imports	**19.3**	**19.9**	**15.6**	**15.1**	**10.6**	**12.8**
Solid fossil fuels	2.3	2.4	1.9	1.5	1.6	1.6
of which hard coal	2.1	2.3	1.6	1.4	1.5	1.3
Oil and petroleum products	15.7	15.5	13.5	13.1	8.6	11.9
of which crude oil and NGL	20.8	20.0	16.5	17.8	18.1	19.0
Natural gas	0.8	1.5	1.0	1.3	1.0	0.6
Renewables and biofuels	0.0	0.2	1.4	1.4	1.4	1.4
Electricity	0.4	0.2	-2.2	-2.1	-2.2	-2.9
Gross inland consumption	**47.7**	**50.5**	**49.7**	**44.8**	**47.2**	**45.7**
Solid fossil fuels	2.2	2.1	1.9	1.5	1.7	1.5
of which hard coal	2.0	2.0	1.7	1.4	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	10.6	8.5	9.3	9.3
of which crude and NGL	20.7	20.2	16.5	17.6	18.6	18.5
Natural gas	0.8	1.5	0.9	1.3	1.0	0.6
Nuclear	14.8	14.5	16.2	12.0	12.3	12.4
Renewables and biofuels	14.7	16.8	21.4	22.6	24.0	23.8
Electricity	0.4	0.2	-2.2	-2.1	-2.2	-2.9
Waste, non-renewable	0.3	0.5	0.8	1.0	1.0	1.0
Available for final consumption	**34.9**	**35.1**	**33.6**	**33.6**	**32.7**	**34.3**
Final non-energy consumption	**1.7**	**2.1**	**2.3**	**2.3**	**1.7**	**2.1**
Final energy consumption	**33.7**	**32.5**	**31.3**	**31.3**	**31.0**	**32.2**
by Fuel/Product						
Solid fossil fuels	0.5	0.4	0.3	0.3	0.3	0.3
Oil and petroleum products	12.6	9.5	7.0	6.5	6.6	6.0
Natural gas	0.4	0.6	0.5	0.5	0.5	0.4
Renewables and biofuels	5.3	5.4	8.2	8.8	8.8	9.2
Solid biofuels and renewable waste	5.3	5.0	5.1	5.6	5.5	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	1.6	1.7	1.8	2.0
Biogases	0.0	0.1	0.1	0.1	0.1	0.1
Waste, non-renewable	0.0	0.0	0.0	0.1	0.1	0.1
Electricity	11.1	11.3	10.7	10.6	11.0	10.6
Heat	3.6	5.1	4.3	4.1	4.7	4.4
by Sector						
Industry	13.7	11.6	10.9	11.2	11.1	11.1
Transport	7.5	7.5	7.0	6.6	6.8	6.6
Residential	7.3	8.3	7.4	7.2	7.9	7.1
Services	4.4	4.3	4.0	4.0	4.3	4.2
Agriculture and Fishing	0.8	0.7	0.6	0.6	0.6	0.7
Others	0.0	0.0	1.4	1.5	1.5	1.5

Methodology and Notes: see appendices

	2000	2010	2019	2020	2021	2022
Installed Electricity Capacity [GW]	**33.7**	**36.5**	**42.8**	**43.7**	**44.8**	**47.8**
Combustible Fuels	7.5	8.7	8.3	8.4	7.7	7.8
Nuclear	9.5	9.0	8.6	7.8	6.9	6.9
Hydro	16.5	16.7	16.5	16.4	16.4	16.4
Wind	0.2	2.0	8.7	10.0	12.1	14.3
Solar	0.0	0.0	0.7	1.1	1.6	2.4
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]	**145.3**	**148.5**	**168.4**	**163.8**	**171.8**	**173.2**
Solid fossil fuels, peat and products, oil shale	1.7	1.8	0.4	0.1	0.1	0.1
Oil and petroleum products	1.5	1.8	0.2	0.1	0.3	0.5
Natural gas	1.3	3.8	1.1	0.7	0.9	0.7
Nuclear	57.3	57.8	66.1	49.2	53.0	51.9
Renewables and biofuels	83.1	82.1	98.9	112.1	115.7	118.2
Wastes non-RES	0.2	1.2	1.7	1.5	1.7	1.7
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			3.3	3.3	2.7	3.3
CHP Electricity Generation [TWh]			9.2	9.2	8.9	12.3
CHP in Total Electricity Generation [%]			5.5	5.5	5.2	7.1
CHP Heat Production [PJ]			94.0	94.0	94.5	227.2
Transport Fuels [ktoe]						
Final consumption petroleum products	9906	8578	6564	6157	6298	5664
of which LPG	397	463	364	314	343	379
of which motor gasoline	4208	3422	2170	1990	2036	1893
of which Gas/Diesel oil	5302	4692	4030	3853	3919	3393
Final consumption biofuels	0	383	1564	1657	1754	1975
pure and blended biogasoline	0	203	101	107	126	163
pure and blended biodiesel	0	179	1463	1486	1541	1768
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	46.0	48.3	45.8	41.3	43.3	42.5
Final energy consumption 2020-2030 [Mtoe]	35.0	34.0	31.5	30.5	31.7	30.9
Primary Energy Intensity 2020-2030 [toe/M€'15]	140	118	92	85	84	80
Energy Intensity (GAE/GDP2015) [toe/M€'15	145	123	100	92	92	87
Energy per Capita (GIC/pop) [kgoe/capita]	5384	5402	4860	4336	4545	4377
Final Electricity per Capita [KWh/capita]	16393	15903	16465	15864	16552	16567
Import Dependency [%]	**40.4%**	**39.5%**	**31.3%**	**33.8%**	**22.4%**	**28.1%**
of Solid fossil fuels	105.4%	113.7%	103.2%	98.8%	94.2%	104.7%
of Hard Coal	107.7%	115.2%	98.1%	99.9%	101.8%	95.3%
of Oil and petroleum products	110.4%	106.3%	127.5%	153.6%	92.1%	128.3%
of Crude and NGL	100.6%	99.0%	100.0%	101.0%	97.4%	102.6%
of Natural Gas	100.0%	100.0%	101.8%	101.6%	101.7%	100.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		46.10%	55.79%	60.12%	62.69%	66.00%
RE-T - Renewable energy in Transport [%]		9.63%	30.31%	31.85%	28.63%	29.16%
RES-E - Renewable Electricity Generation [%]		55.77%	71.23%	74.49%	75.76%	83.34%
RES-H&C - Renewable Heating and Cooling [%]		57.07%	64.39%	66.38%	68.76%	69.39%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	56.9	55.2	43.5	37.6	39.6	38.0
GHG Greenhouse gases (CO_2, N_2O*	70.1	66.3	52.9	46.9	48.7	47.1
Main Emissions Indicators						
GHG total emissions [index 1990=100]	96.5%	91.3%	72.8%	64.6%	67.1%	64.8%
Total GHG per capita [t CO_2 eq./capita]	7.9	7.1	5.2	4.5	4.7	4.5

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

Appendices

Appendices

Summary

Appendices – Methodology

Appendix 1
Country Nomenclature

Interinstitutional Style Guide (ISG) Country Code	ISG Short Name EN	ISG Short Name, Source Language*	ISG Protocol Order	ISO 3166 Alpha-2 Country Codes
BE	Belgium	Belgique / België	1	BE
BG	Bulgaria	Bulgaria*	2	BG
CZ	Czechia	Česko	3	CZ
DK	Denmark	Danmark	4	DK
DE	Germany	Deutschland	5	DE
EE	Estonia	Eesti	6	EE
IE	Ireland	Éire / Ireland	7	IE
EL	Greece	Elláda*	8	GR
ES	Spain	España	9	ES
FR	France	France	10	FR
HR	Croatia	Hrvatska	11	HR
IT	Italy	Italia	12	IT
CY	Cyprus	Kýpros*	13	CY
LV	Latvia	Latvija	14	LV
LT	Lithuania	Lietuva	15	LT
LU	Luxembourg	Luxembourg	16	LU
HU	Hungary	Magyarország	17	HU
MT	Malta	Malta	18	MT
NL	Netherlands	Nederland	19	NL
AT	Austria	Österreich	20	AT
PL	Poland	Polska	21	PL
PT	Portugal	Portugal	22	PT
RO	Romania	România	23	RO
SI	Slovenia	Slovenija	24	SI
SK	Slovakia	Slovensko	25	SK
FI	Finland	Suomi / Finland	26	FI
SE	Sweden	Sverige	27	SE
UK	United Kingdom	United Kingdom	28	GB
EU27_2020	European Union - 27 countries (from 2020)			

*Latin translitteration

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

Appendix 2
Main Energy Flows in Eurostat Energy Balances-EN

ESTAT Energy Database - EN	
Code	**Dissemination Label**
PPRD	Primary production
RCV_RCY	Recovered & 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
O4000XBIO	Oil and petroleum products
O4100_TOT	Crude oil
O4200	Natural gas liquids
O4300	Refinery feedstocks
O4400X4410	Additives and oxygenates (excluding biofuel portion)
O4500	Other hydrocarbons
O4610	Refinery gas
O4620	Ethane
O4630	Liquefied petroleum gas
O4652XR5210B	Motor gasoline (excluding biofuel portion)
O4651	Aviation gasoline
O4653	Gasoline-type jet fuel
O4661XR5230B	Kerosene-type jet fuel (excluding biofuel portion)
O4669	Other kerosene
O4640	Naphtha
O4671XR5220B	Gas oil and diesel oil (excluding biofuel portion)
O4680	Fuel oil
O4691	White spirit and special boiling point industrial spirits
O4692	Lubricants
O4695	Bitumen
O4694	Petroleum coke
O4693	Paraffin waxes

ESTAT Energy Database - EN	
Code	**Dissemination label**
04699	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€ '2015	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

FROM : \ TO:	TJ	Mtoe	GWh
	multiply by		
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

FROM: \ TO :	l	bbl	gal US	gal UK
	multiply by			
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

FROM: \ TO :	t	lt	st
	multiply by		
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 fluorocarbons, perfluorocarbons and sulphur hexafluoride.

GHG INTENSITY OF THE ENERGY CONSUMPTION

GHG Intensity of the Energy Consumption [kg CO_2 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:	to the next:
	multiply by 1 000 000	multiply by 1 000

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

MANUFACTURED GASES

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

NACE

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

NET CALORIFIC VALUE (NCV)

The net calorific value is the amount of heat released by a unit quantity of fuel, when it is burned completely with oxygen, and when the products

of combustion are returned to ambient temperature. This quantity does not include the heat of condensation of any water vapour contained in the fuel nor of the water vapour formed by the combustion of any hydrogen contained in the fuel.

NET IMPORTS

Net import is calculated as the difference between imports [IMP] and exports [EXP].

NET ELECTRICITY GENERATION

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

OIL AND PETROLEUM PRODUCTS

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

PRIMARY ENERGY CONSUMPTION

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

PRIMARY ENERGY CONSUMPTION 2020-2030

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

PRIMARY ENERGY INTENSITY 2020-2030

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

PRIMARY ENERGY PRODUCTION – INDIGENOUS PRODUCTION

Primary production [PPRD] is any kind of extraction of energy products from natural sources to a usable form is called primary production. Primary production takes place when the natural sources are exploited, for example in coal mines, crude oil fields, hydro power plants or fabrication of biofuels. Transformation of energy from one form to another, such as electricity or heat generation in thermal power plants, or coke production in coke ovens, is not included in primary production. In general for solid fossil fuels and peat, production includes the quantities consumed by the producer during the production as well as any quantities supplied to other on-site producers of energy for transformation or other uses. For oil and petroleum products, production includes only marketable production, and excludes any quantities returned to formation. For natural gas, the production includes all quantities used within the natural gas industry, in gas extraction, pipeline systems and processing plants. For nuclear, the production is the actual heat produced or the heat calculated on the basis of the gross electricity generated and the thermal efficiency of the nuclear plant. For renewables generating electricity (hydro, wind, solar thermal-electric and photovoltaic) production is calculated on the basis of the gross electricity generated and a conversion factor of 3600 kJ/kWh. For geothermal, production is calculated on the basis of the difference between the enthalpy of the fluid produced in the production borehole and that of the fluid disposed of via the re-injection borehole. In the case of municipal solid wastes (MSW), wood, wood wastes and other solid wastes, production is the heat produced after combustion and corresponds to the heat content (NCV) of the fuel. In the case of anaerobic digestion of wet wastes, production is the heat content (NCV) of the biogases produced. The production includes all quantities of gas consumed in the installation for the fermentation processes, and excludes all quantities of flared gases. In the case of bioliquids, the production is the heat content (NCV) of the fuel.

PUMPING, PUMPED STORAGE

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

RENEWABLES AND BIOFUELS (RES):

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

SOLAR ENERGY

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

SBS

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

SOLID FOSSIL FUELS

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

TONNE OF OIL EQUIVALENT (TOE)

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

TOTAL ENERGY SUPPLY

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

TOTAL PRIMARY ENERGY SUPPLY

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

TRANSFORMATION INPUT

Transformation input [TI_E] covers all inputs into the transformation plants destined to be converted into derived products. Transformation is only recorded when the energy products are physically or chemically modified to produce other energy products, electricity and/or heat. Quantities of fuels used for heating, operation of equipment and in general in support of the transformation are not included in Transformation input but in Energy sector [NRG_E].
Transformation Input is the sum of the inputs for electricity & heat generation plants [TI_EHG_E], coke ovens [TI_CO_E], blast furnaces [TI_BF_E], gas works [TI_GW_E], refineries & petrochemical industry [TI_RPI_E], patent fuel plants [TI_PF_E], BKB & PB plants [TI_BKBPB_E], coal liquefaction plants [TI_CL_E], for blended natural gas [TI_BNG_E], liquid biofuels blended [TI_LBB_E], charcoal production plants [TI_CPP_E], gas-TI-liquids plants [TI_GTL_E] and others not elsewhere specified [TI_NSP_E].

TRANSFORMATION OUTPUT

Transformation output [TO_E] is the result of the transformation process of energy products. This output covers production of derived products (secondary products, by-products and co-products). Transformation output refers always to gross production of derived products, i.e. the products used for the own consumption of the transformation plants are included in the transformation output and their use is reported in the Energy sector.
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, feedstock, additives as well as other hydrocarbons.
RES (renewables) is equal to the sum of hydro, geothermal, solar PV, solar thermal, tide, wind, municipal waste, primary solid biofuels, biogases, bio gasoline, biodiesel, other liquid biofuels, non-specified biofuels and charcoal energy. Industrial waste not included.

1.1.3, 1.1.4, PAGES 12, 13

Total Energy Supply according to EUROSTAT methodology (see glossary) corresponds to the Total Primary Energy Supply (see glossary TPES), of the IEA methodology.
Asia aggregation does not include China data.

1.1.5, 1.1.6, PAGES 14, 15

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

1.1.8, PAGE 17

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

1.1.10, PAGE 19

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

1.3.1, PAGE 27

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

APPENDIX 8.2

2.1.1, PAGES 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.

Notes

Getting in touch with the EU

IN PERSON

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you online european-union.europa.eu/contact-eu/meet-us_en

ON THE PHONE OR IN WRITING

Europe Direct is a service that answers your questions about the European Union. You can contact this service:
– by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls);
– at the following standard number: +32 22999696 or
– via the following form: european-union.europa.eu/contact-eu/write-us_en

Finding information about the EU

ONLINE

Information about the European Union in all the official languages of the EU is available on the Europa website (europa.eu)

EU PUBLICATIONS

You can download or order free and priced EU publications at: op.europa.eu/en/publications.
Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (european-union.europa.eu/contact-eu/meet-us_en).

EU LAW AND RELATED DOCUMENTS

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex (eur-lex.europa.eu).

OPEN DATA FROM THE EU

The portal data.europa.eu provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.

https://ec.europa.eu/energy/data-analysis/energy-statistical-pocketbook_en

Publications Office
of the European Union