European Commission

EU energy in figures

STATISTICAL POCKETBOOK 2023

Energy

Manuscript completed in September 2023

Luxembourg: Publications Office of the European Union, 2023

Print ISBN 978-92-68-01165-2 ISSN 1977-4559 doi:10.2833/184659 MJ-AB-23-001-EN-C
PDF ISBN 978-92-68-01166-9 ISSN 2363-247X doi:10.2833/502436 MJ-AB-23-001-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/macro-economic-database-ameco_en

DG Climate Action
Climate strategies, targets and progress reports:
https://ec.europa.eu/clima/eu-action/climate-strategies-targets_en

Websites of other EU bodies and international organisations:

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

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

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Summary

PART 1 Overview

PART 2 Energy in the EU

Appendices

1 Overview

1 Overview

Summary

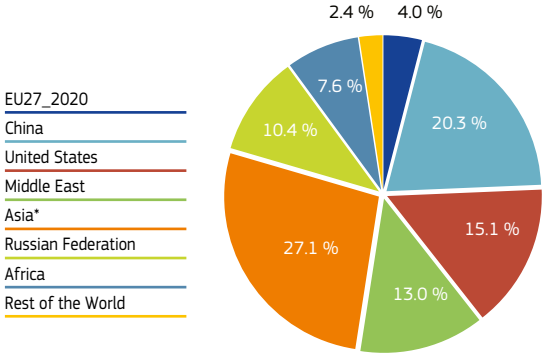
1.1 Energy in the World (Overview)

1.1.1 World Energy Production by Region

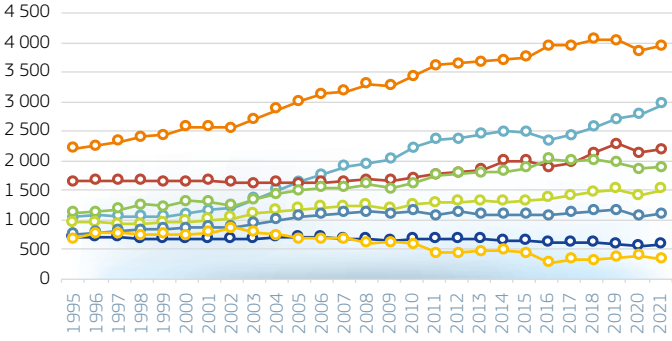
Mtoe

	2000	2010	2015	2019	2020	2021
EU27_2020	679	697	654	610	564	588
China	1124	2235	2504	2720	2798	2983
United States	1666	1723	2019	2306	2157	2214
Middle East	1328	1632	1896	1978	1882	1911
Asia*	2586	3451	3767	4060	3878	3975
Russian Federation	978	1280	1334	1530	1430	1530
Africa	881	1161	1104	1177	1076	1119
Rest of the World	762	601	450	373	405	354
World	10004	12781	13728	14754	14189	14673

TOTAL 2021 = 14673 Mtoe



World Energy Production by Region (Mtoe)



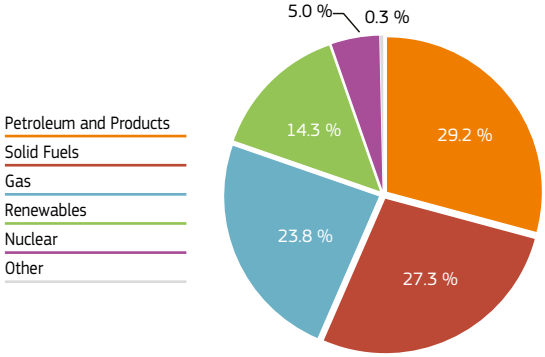
* non OECD and OECD Asia, excluding China
Source: IEA statistics, August 2023
Methodology and Notes: **see appendices**

1.1.2 World Energy Production by Fuel

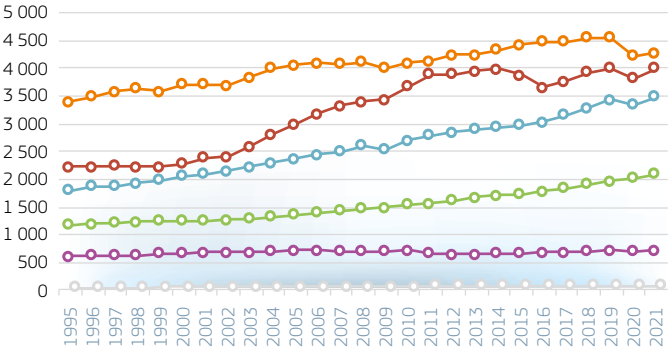
Mtoe

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

TOTAL 2021 = 14673 Mtoe



Mtoe



Source: IEA statistics, August 2023

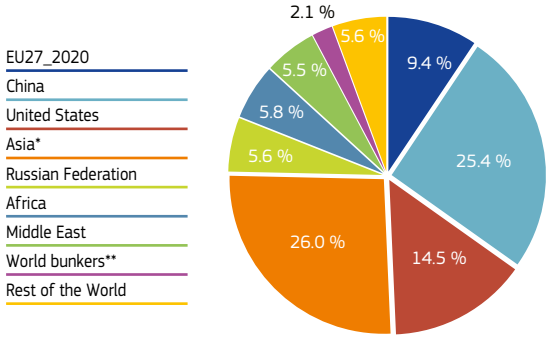
Methodology and Notes: **see appendices**

1.1.3 World Total Energy Supply by Region

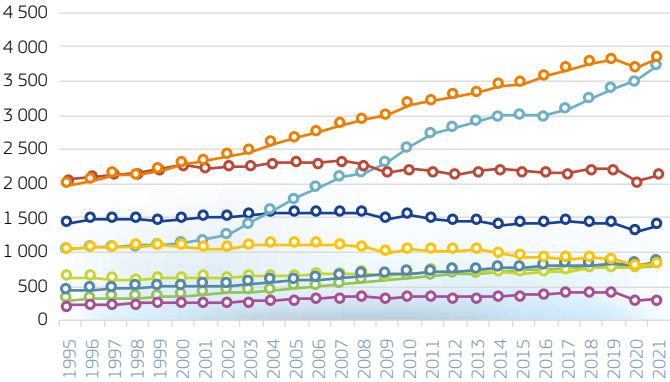
Mtoe

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

TOTAL 2021 = 14759 Mtoe



World Total Energy Supply by Region (Mtoe)



* non OECD and OECD Asia, excluding China

** International aviation and international navigation

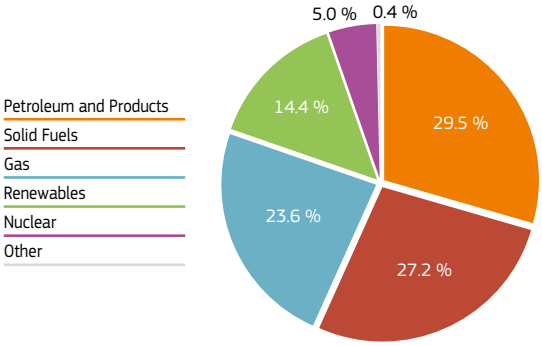
Source: IEA statistics, August 2023
Methodology and Notes: **see appendices**

1.1.4 World Total Energy Supply by Fuel

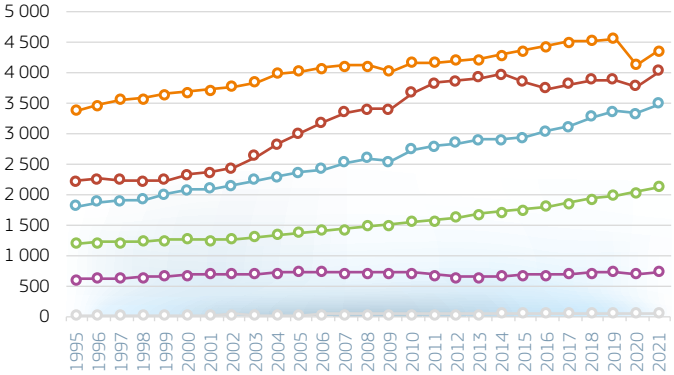
Mtoe

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

TOTAL 2021 = 14759 Mtoe



Mtoe



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

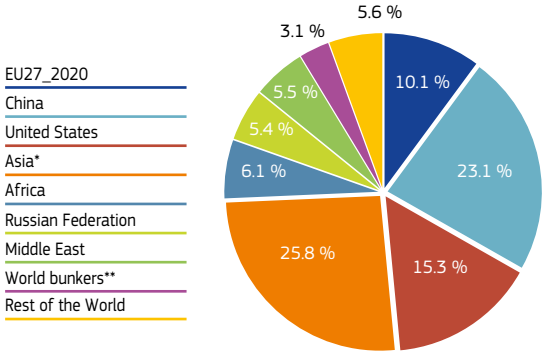
Source: IEA statistics, August 2023
Methodology and Notes: **see appendices**

1.1.5 World Total Final Consumption by Region

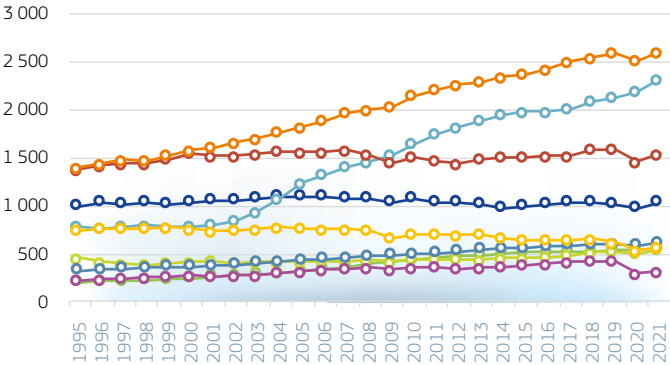
Mtoe

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

TOTAL 2021 = 10082 Mtoe



World Total Final Consumption by Region (Mtoe)



* non OECD and OECD Asia, excluding China

** International aviation and international navigation

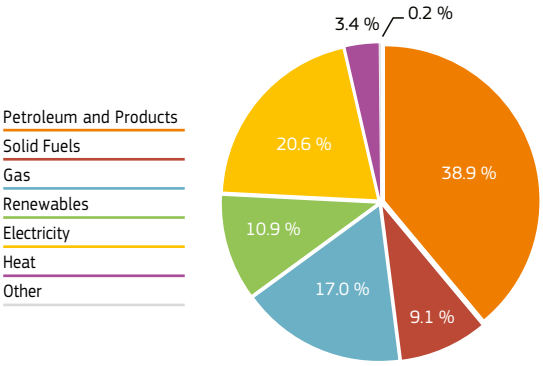
Source: IEA statistics, August 2023
Methodology and Notes: **see appendices**

1.1.6 World Total Final Consumption by Fuel

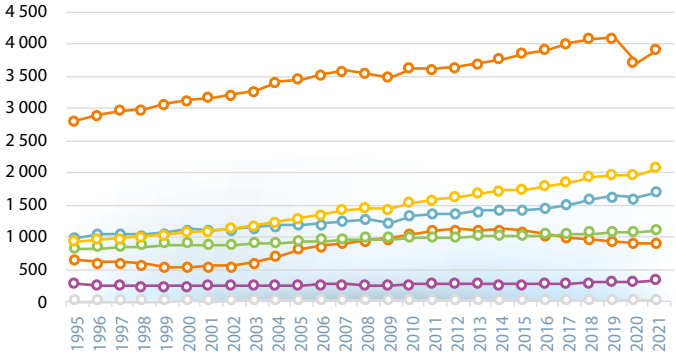
Mtoe

	2000	2010	2015	2019	2020	2021
Petroleum and Products	3130	3621	3855	4093	3707	3926
Solid Fuels	542	1061	1095	939	918	913
Gas	1120	1344	1420	1640	1612	1710
Renewables	878	982	1016	1070	1074	1094
Electricity	1087	1538	1741	1963	1963	2077
Heat	248	275	272	306	309	347
Other	7	9	11	15	15	15
Total	7012	8829	9410	10026	9598	10082

TOTAL 2021 = 10082 Mtoe



World Total Final Consumption by Fuel (Mtoe)



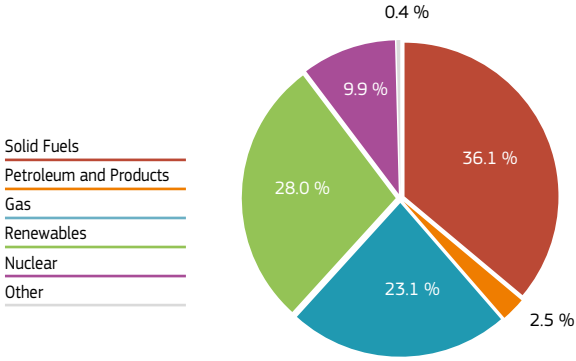
Source: IEA statistics, August 2023
Methodology and Notes: **see appendices**

1.1.7 World Electricity Generation by Fuel

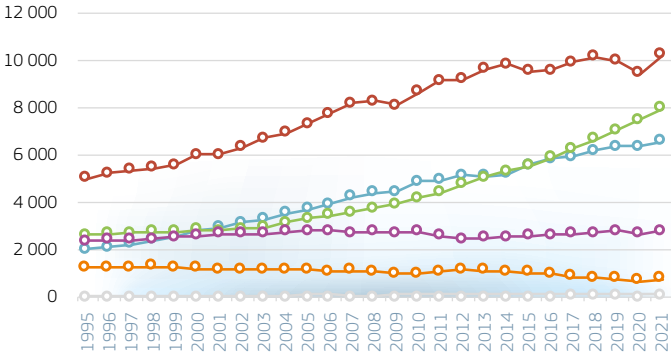
TWh

	2000	2010	2015	2019	2020	2021
Solid Fuels	5995	8674	9542	9954	9471	10252
Petroleum and Products	1184	963	1024	724	665	723
Gas	2772	4856	5553	6344	6344	6556
Renewables	2827	4200	5510	7035	7493	7948
**Hydro*	2611	3447	3893	4237	4346	4293
**Solar/Wind/Other*	54	408	1123	2173	2472	2935
**Biofuels and Waste*	163	362	507	651	685	735
**Geothermal*	52	68	81	92	95	96
Nuclear	2591	2756	2570	2790	2676	2808
Other	54	89	98	123	109	114
Total	15423	21538	24297	26969	26759	28402

TOTAL 2021 = 28402 TWh



TWh



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

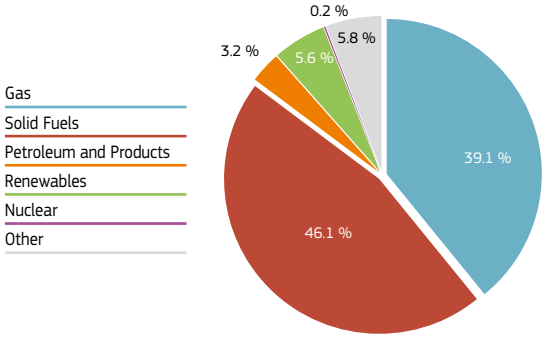
Source: IEA statistics, August 2023
Methodology and Notes: **see appendices**

1.1.8 World Heat Generation by Fuel

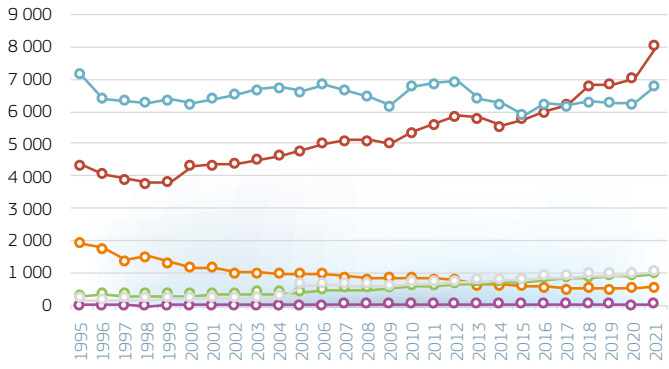
PJ

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

TOTAL 2021 = 17406 PJ



PJ



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

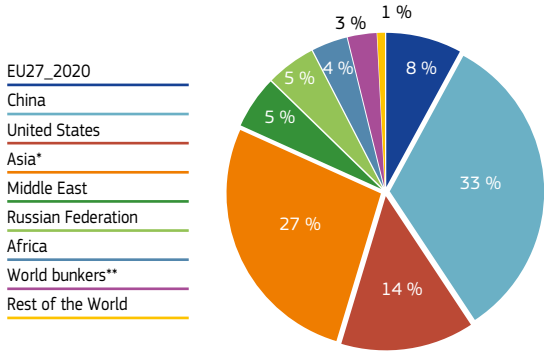
Source: IEA statistics, August 2023
Methodology and Notes: **see appendices**

1.1.9 World CO_2 Emissions by Region

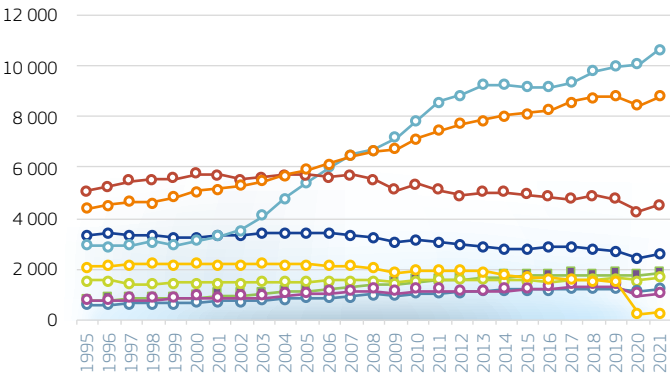
MT CO_2

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

TOTAL 2021 = 32587 Mt CO_2



World CO_2 Emissions by Region (Mt CO_2)



* non OECD and OECD Asia, excluding China

** International aviation and international navigation

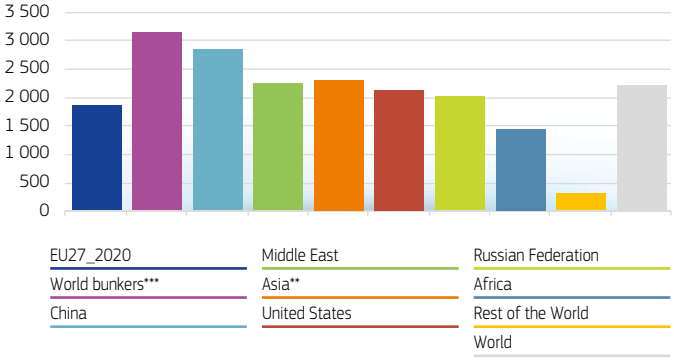
Source: IEA, May 2023, estimates of world CO_2 emissions from fuel combustion
Methodology and Notes: see appendices

1.1.10 World CO_2 Intensity by Region

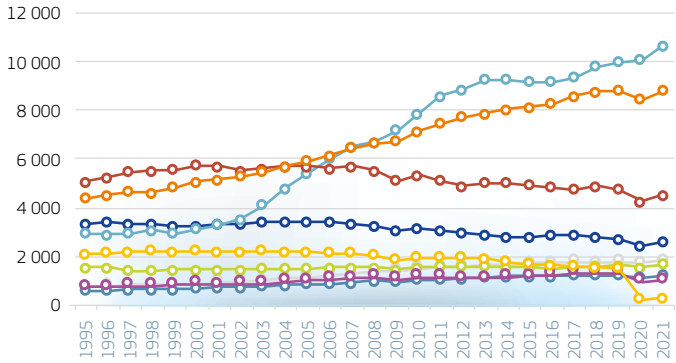
KG CO_2 PER TOE

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

WORLD AVERAGE 2021= 2208 Kg CO_2 per toe



Kg CO_2 per toe



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

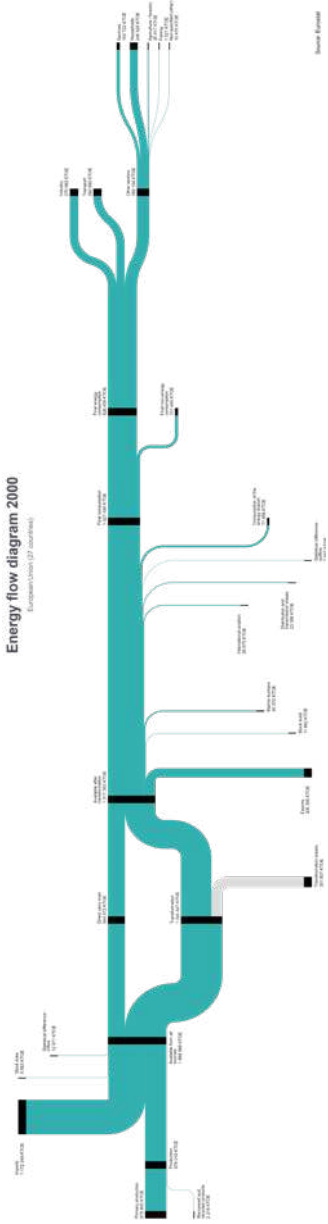
** non OECD and OECD Asia, excluding China and Middle East

*** International aviation and international navigation

Source: IEA statistics, August 2023
Methodology and Notes: **see appendices**

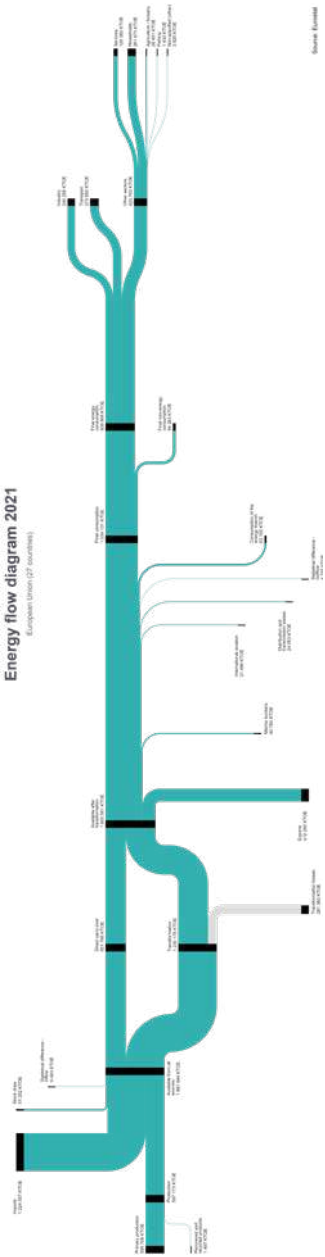
1.2 Energy in the EU (Overview)

1.2.1 Energy Flow - 2000



source: Eurostat April 2023
Methodology and Notes: see appendices

1.2.2 Energy Flow - 2021

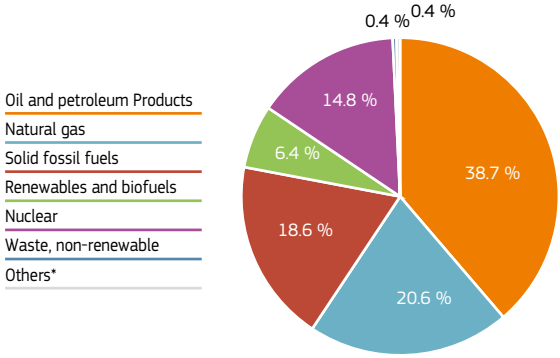


source: Eurostat April 2023
Methodology and Notes: **see appendices**

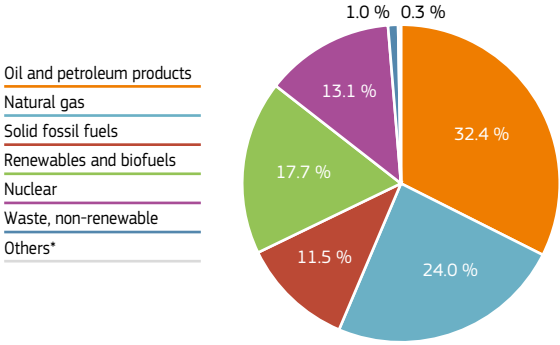
1.2.3 Gross Inland Consumption

ENERGY MIX (%) – PRIMARY PRODUCTS ONLY

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



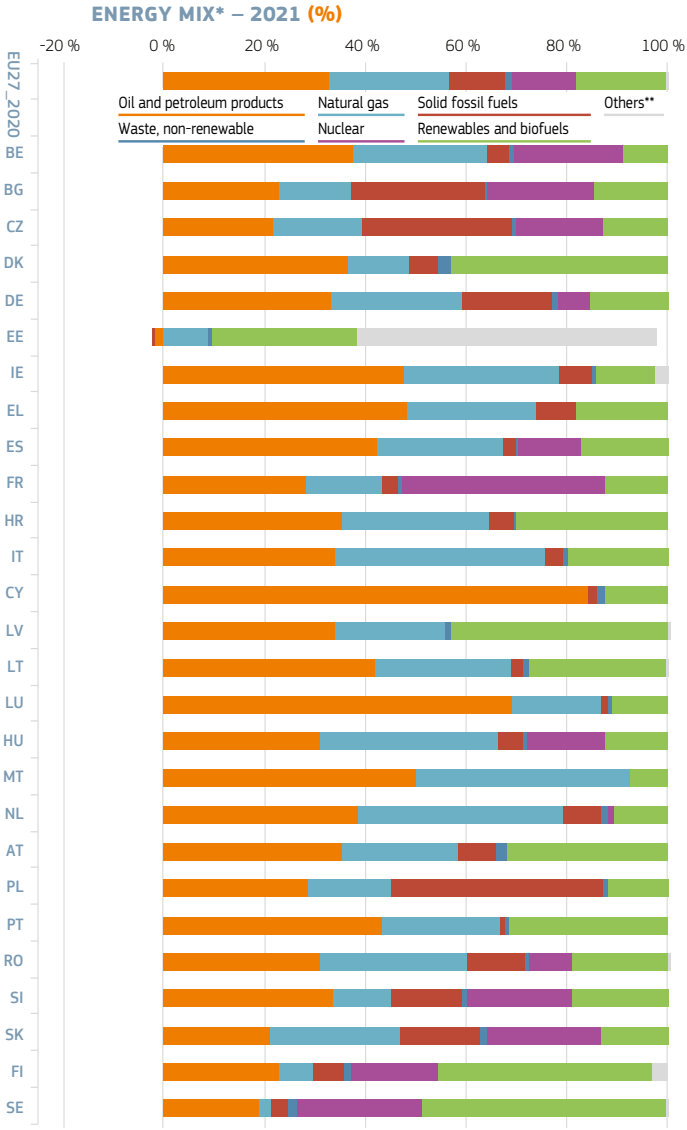
TOTAL PRIMARY PRODUCTS 2021: 1423.4 Mtoe
(Total Primary and secondary products 2021: 1421.6 Mtoe)



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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

1.2.3 Gross Inland Consumption



*Primary Products Only

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

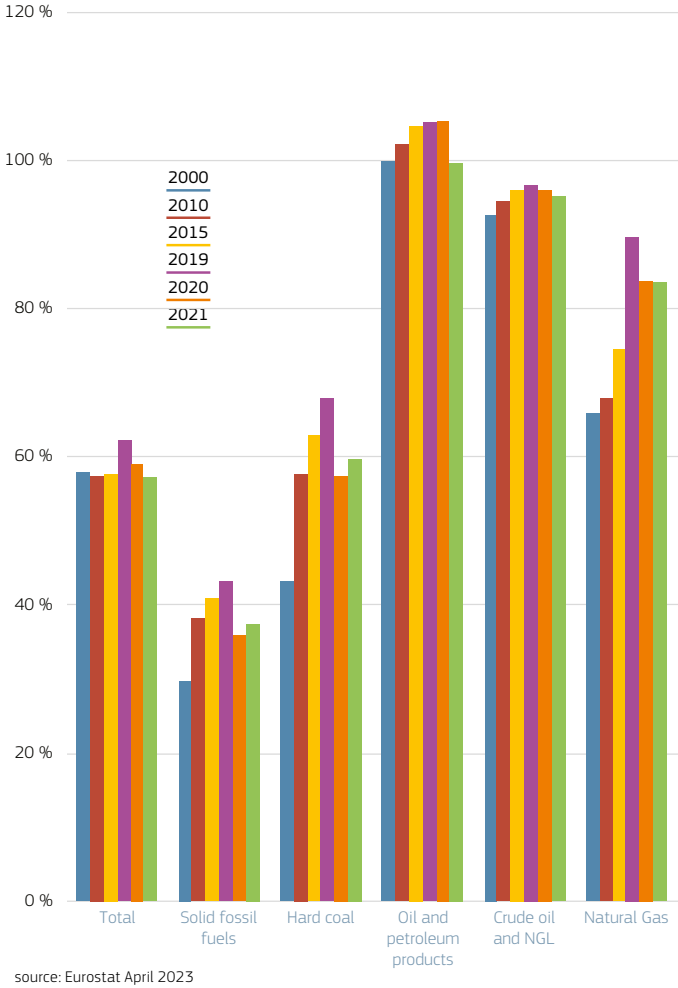
source: Eurostat April 2023
Methodology and Notes: **see appendices**

1.2.4 Energy Import Dependency

BY FUEL – (%)

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

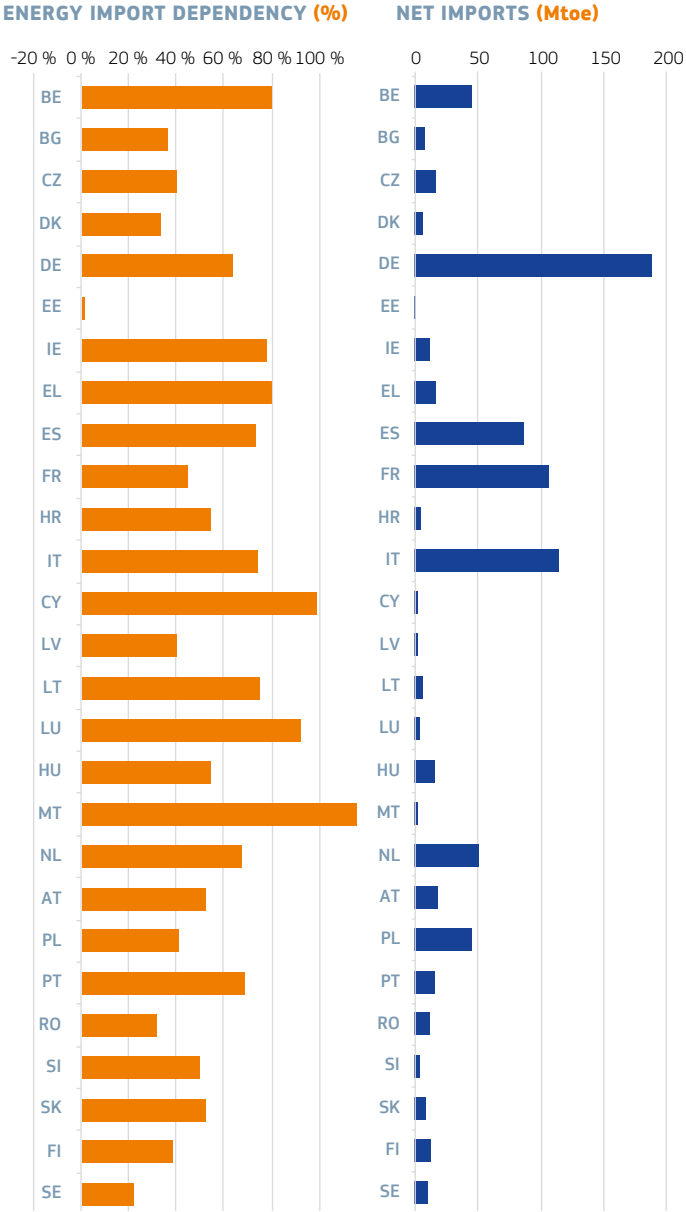
BY FUEL 2000 - 2021 (%)



source: Eurostat April 2023
Methodology and Notes: **see appendices**

1.2.5 Energy Import Dependency - Net Imports

2021

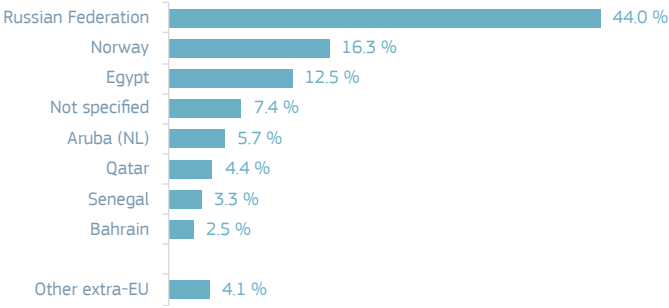


source: Eurostat April 2023
Methodology and Notes: see appendices

1.2.6 Imports by Country of Origin

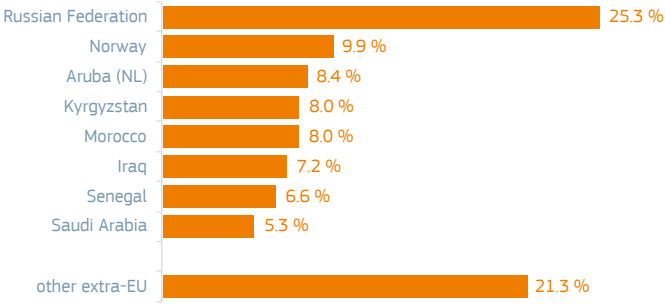
EU27_2020 IMPORTS* OF NATURAL GAS - 2021

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



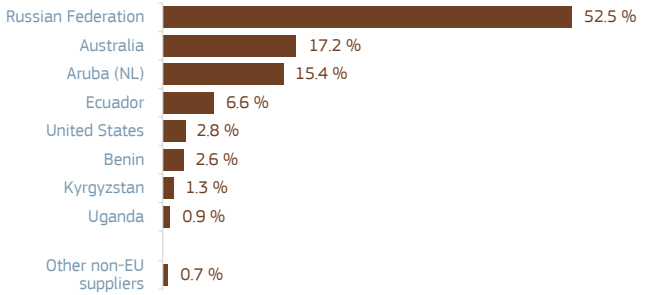
EU27_2020 IMPORTS* OF CRUDE OIL AND NGL - 2021

Total extra-EU = 447 795.4 kton



EU27_2020 imports* of hard coal - 2021

Total Extra-EU = 941 73.3 kton



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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

1.3 EU Targets

1.3.1 Renewable Energy Targets

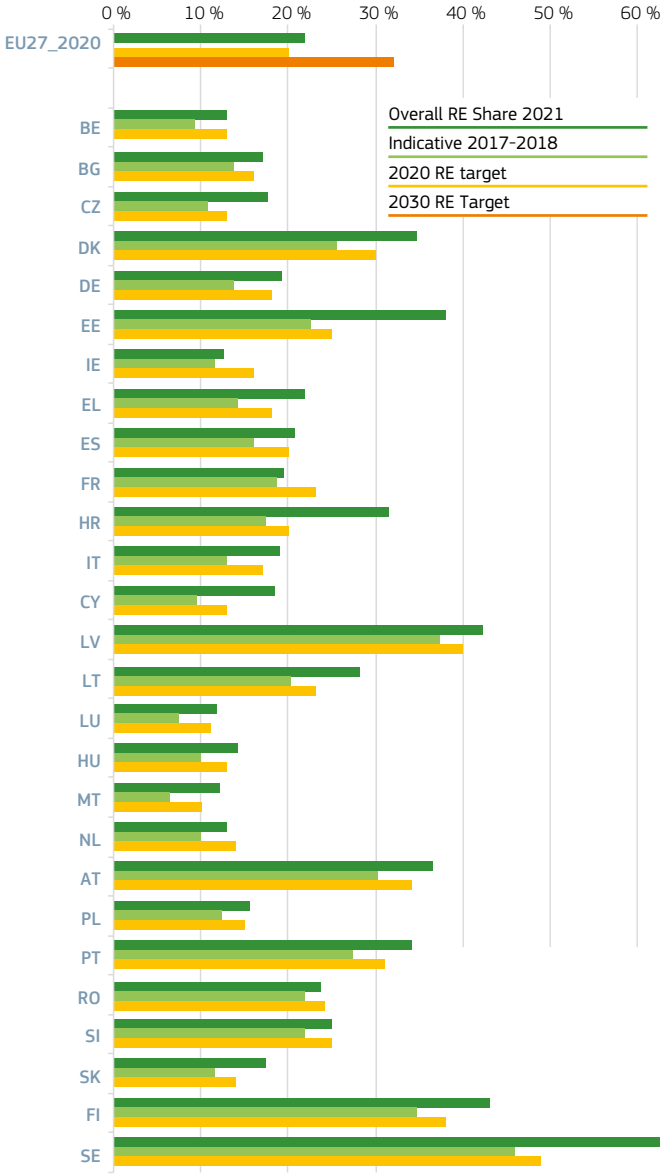
	2021 Renewable energy shares						
%	RE transport 2021	RE electricity 2021	RE Heating and cooling 2021	Overall RE Share 2021	Indicative 2017-2018	2020 RE target	2030 RE Target
EU27_2020	9.1%	37.6%	22.9%	21.8%	n.a.	20%	32%
BE	10.3%	26.0%	9.2%	13.0%	9.2%	13.0%	
BG	7.6%	18.8%	25.6%	17.0%	13.7%	16.0%	
CZ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

* in % of the Gross Final Energy Consumption

source: Eurostat-RES SHARES March 2023
Methodology and Notes: see appendices

1.3.1 Renewable Energy Targets

RENEWABLE ENERGY SHARES AND TARGETS* (%)

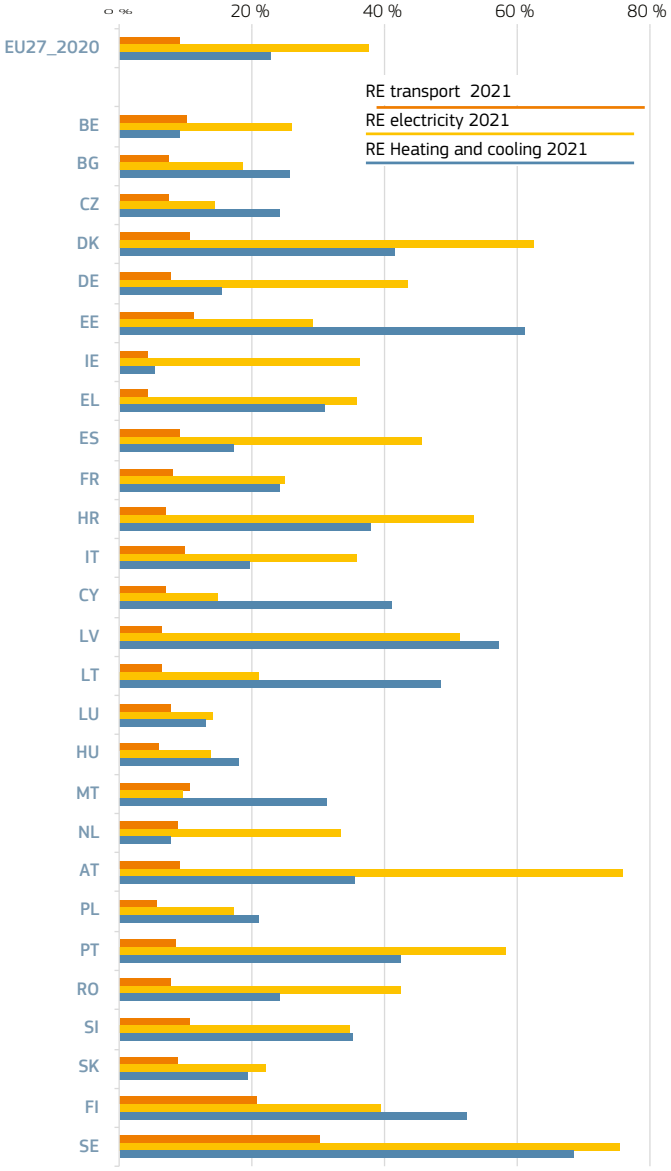


* in Gross Final Energy Consumption

source: Eurostat-RES SHARES March 2023
Methodology and Notes: **see appendices**

1.3.1 Renewable Energy Shares

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



* in Gross Final Energy Consumption

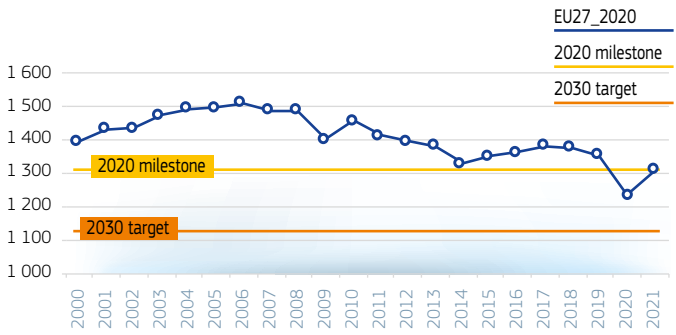
source: Eurostat-RES SHARES March 2023
Methodology and Notes: see appendices

1.3.2 Energy efficiency targets

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

	2010	2015	2019	2020	2021	2020 MILESTONE & TARGET	2030 TARGET
EU27_2020	1 457.6	1 352.7	1 354.1	1 235.8	1 311.1	*1 312**	1 128
BE	53.4	45.7	48.4	43.9	48.8		
BG	17.4	18.0	18.2	17.2	18.6		
CZ	42.5	39.4	39.7	37.6	39.6		
DK	19.9	16.8	16.9	15.5	16.4		
DE	315.2	295.9	285.2	262.2	268.7		
EE	5.8	4.8	4.8	4.3	4.5		
IE	14.7	14.0	14.7	13.5	13.9		
EL	27.2	23.4	22.3	19.2	20.3		
ES	123.0	118.2	120.6	105.0	112.1		
FR	254.5	244.3	235.1	208.0	224.8		
HR	8.9	8.0	8.2	7.8	8.3		
IT	167.3	149.1	145.9	132.3	145.3		
CY	2.7	2.3	2.5	2.2	2.3		
LV	4.6	4.3	4.6	4.3	4.5		
LT	6.2	5.8	6.3	6.2	6.6		
LU	4.6	4.1	4.5	3.9	4.2		
HU	24.6	23.3	24.6	23.9	24.9		
MT	0.9	0.8	0.9	0.7	0.8		
NL	71.7	64.0	63.6	58.5	60.8		
AT	32.9	31.7	32.3	29.8	31.6		
PL	96.6	90.1	100.2	96.9	104.0		
PT	22.7	21.6	22.1	19.5	19.5		
RO	32.9	30.7	32.1	30.9	33.1		
SI	7.0	6.3	6.5	6.1	6.3		
SK	16.7	15.2	16.0	15.2	16.4		
FI	35.4	31.2	32.1	29.9	31.5		
SE	48.3	43.8	45.8	41.3	43.5		

EU27_2020: PRIMARY ENERGY CONSUMPTION 2020-2030 (Mtoe)



*milestone for EU27_2020, based on the target for EU28

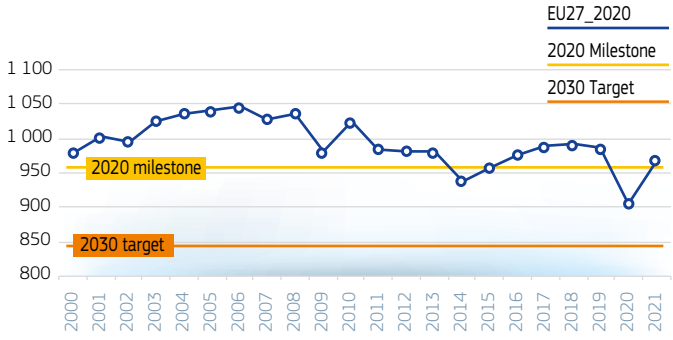
source: Eurostat April 2023
Methodology and Notes: see appendices

1.3.2 Energy efficiency targets

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

	2010	2015	2019	2020	2021	2020 MILESTONE & TARGET	2030 TARGET
EU27_2020	1 024.5	957.9	986.0	906.3	968.4	*959**	846
BE	38.2	36.0	35.8	33.2	35.9		
BG	8.8	9.5	9.9	9.5	10.2		
CZ	25.3	24.2	25.3	24.5	26.2		
DK	15.5	14.2	14.3	13.1	13.8		
DE	223.0	212.7	214.7	202.3	209.9		
EE	2.9	2.8	2.9	2.8	2.8		
IE	11.9	11.3	12.4	11.2	11.4		
EL	19.1	16.6	16.2	14.4	15.2		
ES	89.6	80.5	86.5	73.8	80.3		
FR	154.0	148.0	145.1	129.7	143.6		
HR	7.2	6.6	6.9	6.5	7.0		
IT	128.5	116.2	115.4	102.7	113.3		
CY	1.9	1.7	1.9	1.6	1.7		
LV	4.1	3.8	4.1	3.9	4.1		
LT	4.8	4.9	5.6	5.3	5.7		
LU	4.3	4.0	4.4	3.8	4.1		
HU	17.5	17.4	18.6	18.0	19.1		
MT	0.5	0.6	0.7	0.5	0.6		
NL	55.6	48.6	49.4	45.0	46.9		
AT	28.0	27.5	28.3	26.1	27.8		
PL	66.3	62.3	73.7	71.1	75.2		
PT	18.1	16.0	17.1	15.0	15.7		
RO	22.5	21.8	23.9	23.5	25.4		
SI	5.1	4.7	4.9	4.4	4.7		
SK	11.5	10.1	11.2	10.4	11.6		
FI	26.2	24.2	25.5	23.4	24.9		
SE	34.0	31.8	31.6	30.5	31.7		

EU27_2020: FINAL ENERGY CONSUMPTION 2020-2030 (Mtoe)



*milestone for EU27_2020, based on the target for EU28

source: Eurostat April 2023
Methodology and Notes: see appendices

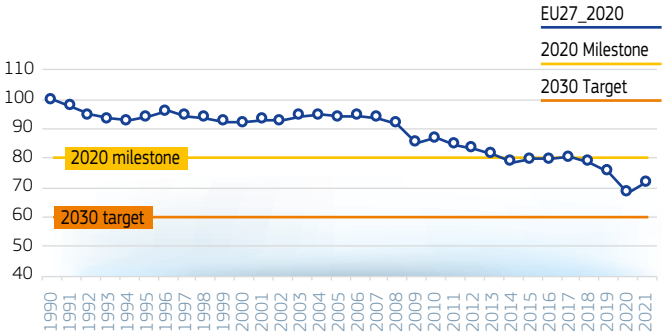
1.3.3 Greenhouse gas (GHG) Emissions Milestones and Targets

GHG EMISSIONS MILESTONES AND TARGETS

INDEX 100=1990

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

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



*milestone for EU27_2020, based on the target for EU28

Source: EEA, June 2023, Eurostat 2023

source: Eurostat April 2023

2 Energy in the EU

2 Energy in the EU

Summary

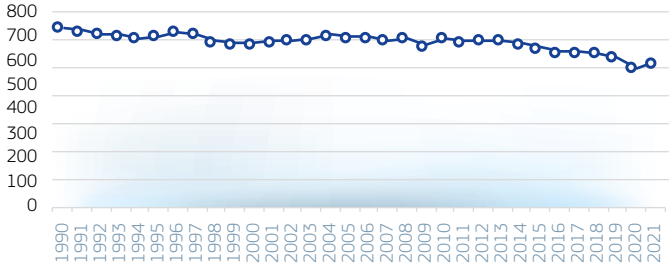
2.1 Energy Supply

2.1.1 Production*

ALL FUELS

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

PRODUCTION – ALL FUELS – 1990-2021 EU27_2020



* Primary production. recycled and recovered products

source: Eurostat April 2023
Methodology and Notes: see appendices

2.1.1 Production*

BY FUEL

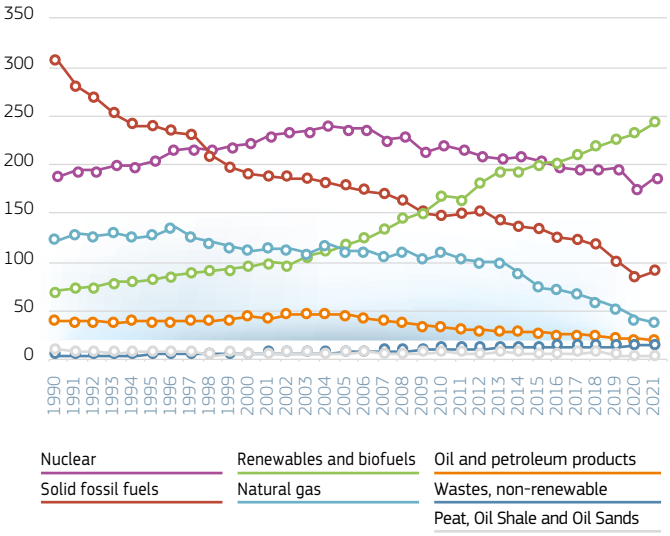
	2021						
Mtoe	Nuclear	Solid fossil fuels	Renewables and biofuels	Natural gas	Oil and petroleum products	Wastes, Non-Renewable	Peat, oil shale and oil sands
EU27_2020	186.7	91.0	244.0	38.0	20.1	13.9	2.9
Share (%)	31.2%	15.2%	40.8%	6.4%	3.4%	2.3%	0.5%
BE	12.22	0.00	4.17	0.00	0.00	0.66	0.00
BG	4.29	4.70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

* Primary production. recycled and recovered products

source: Eurostat April 2023
Methodology and Notes: **see appendices**

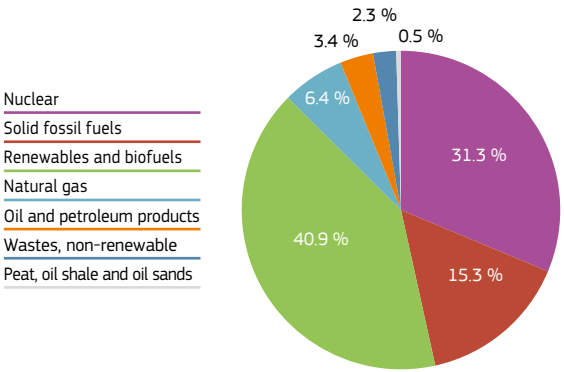
2.1.1 Production*

BY FUEL – EU27_2020 – 1990-2021 (Mtoe)



PRODUCTION* EU27_2020 IN 2021 (% TOTAL)

Total = 597.6 Mtoe



* Primary production. recycled and recovered products

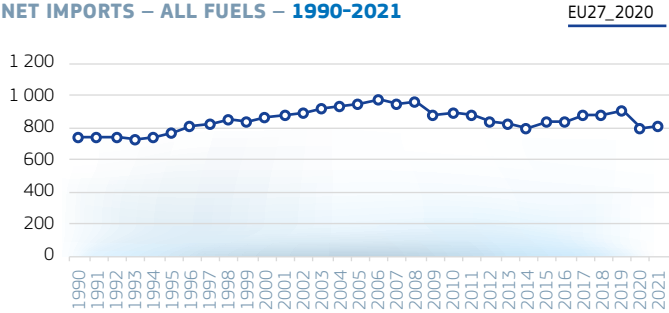
source: Eurostat April 2023
Methodology and Notes: see appendices

2.1.2 Net Imports

ALL FUELS

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

NET IMPORTS – ALL FUELS – 1990-2021



source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.1.2 Net Imports

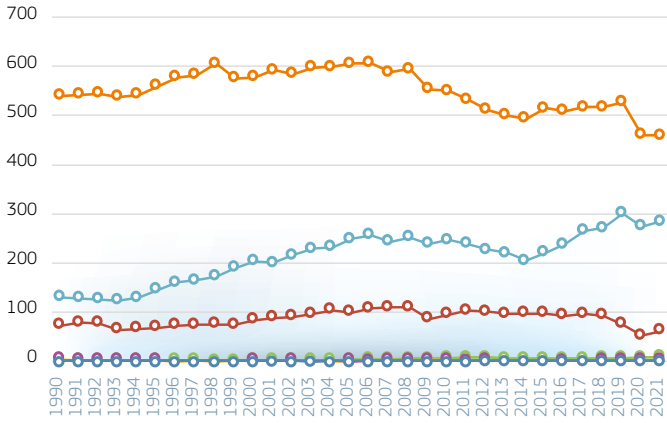
BY FUEL

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.1.2 Net Imports

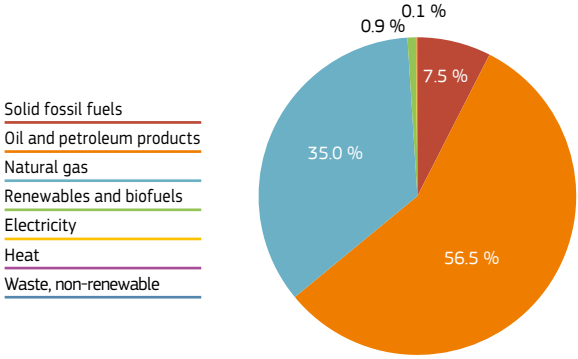
BY FUEL – EU27_2020 – 1990-2021 (Mtoe)



Solid fossil fuels
Oil and petroleum products
Natural gas
Renewables and biofuels
Electricity
Heat
Waste, Non-Renewable

BY FUEL – EU27_2020 – 2021

Total = 793 Mtoe



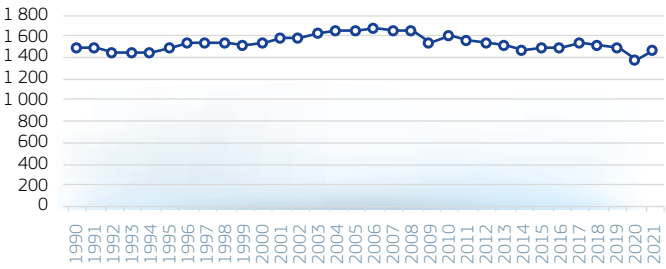
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.1.3 Gross Available Energy

ALL FUELS

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

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



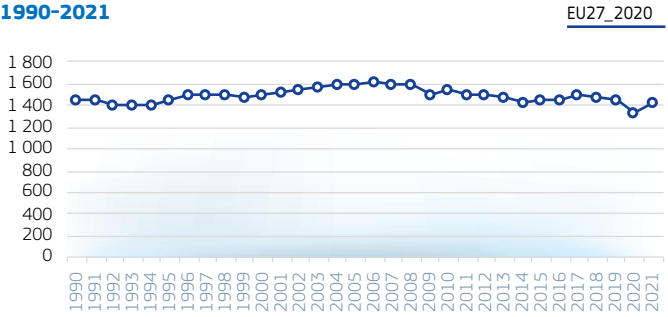
source: Eurostat April 2023
Methodology and Notes: see appendices

2.1.4 Gross Inland Consumption

ALL FUELS

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

GROSS INLAND CONSUMPTION – ALL FUELS – 1990-2021



source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.1.4 Gross Inland Consumption

BY FUEL

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

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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.1.4 Gross Inland Consumption

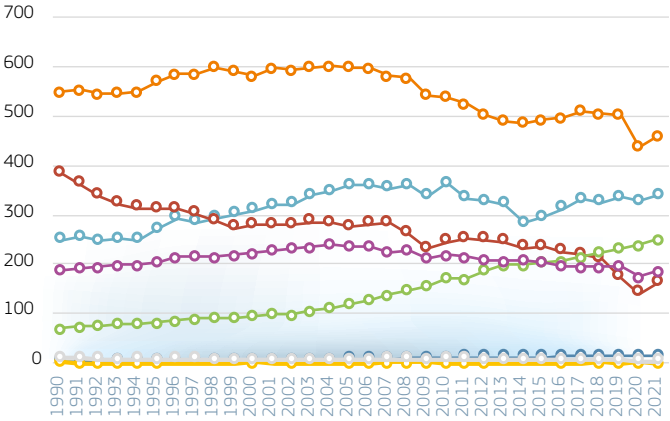
RENEWABLES AND BIOFUELS

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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

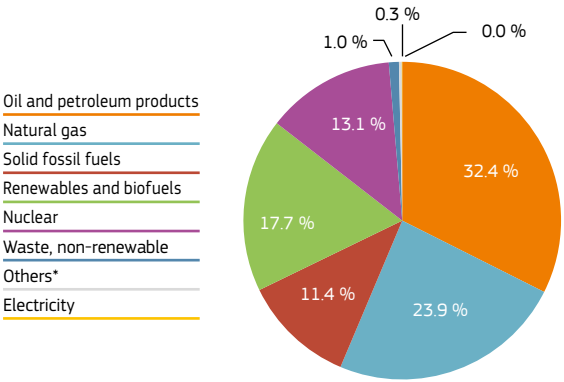
2.1.4 Gross Inland Consumption

BY FUEL – EU27_2020 – 1990-2021 (Mtoe)



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

Total = 1421.6 Mtoe



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

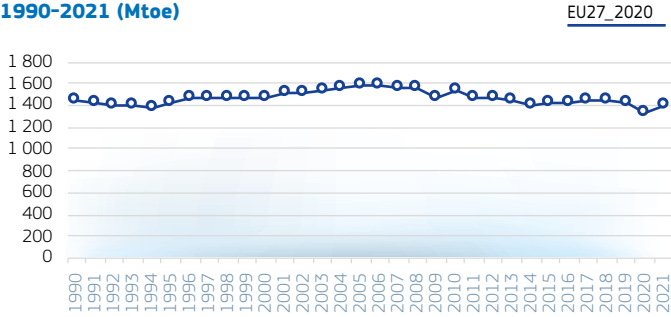
source: Eurostat April 2023
Methodology and Notes: see appendices

2.1.5 Total Energy Supply

ALL FUELS

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

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



source: Eurostat April 2023
Methodology and Notes: see appendices

2.2 Imports

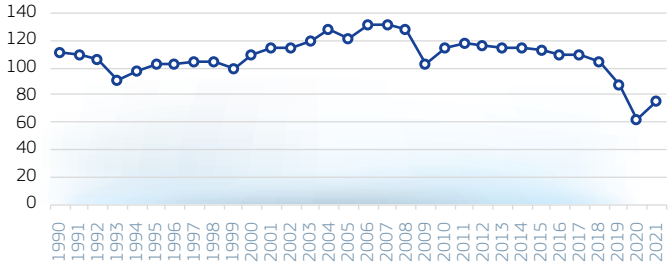
2.2.1 Imports – Solid Fossil Fuels

TOTAL

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

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

EU27_2020



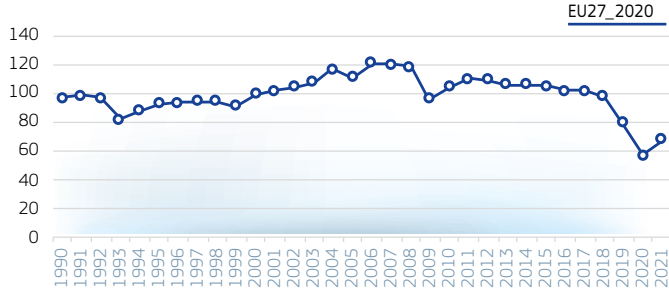
source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.1 Imports – Solid Fossil Fuels

HARD COAL

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

IMPORTS – HARD COAL – 1990-2021 (Mtoe)



source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.2.1 Imports – Solid Fossil Fuels

RANKING

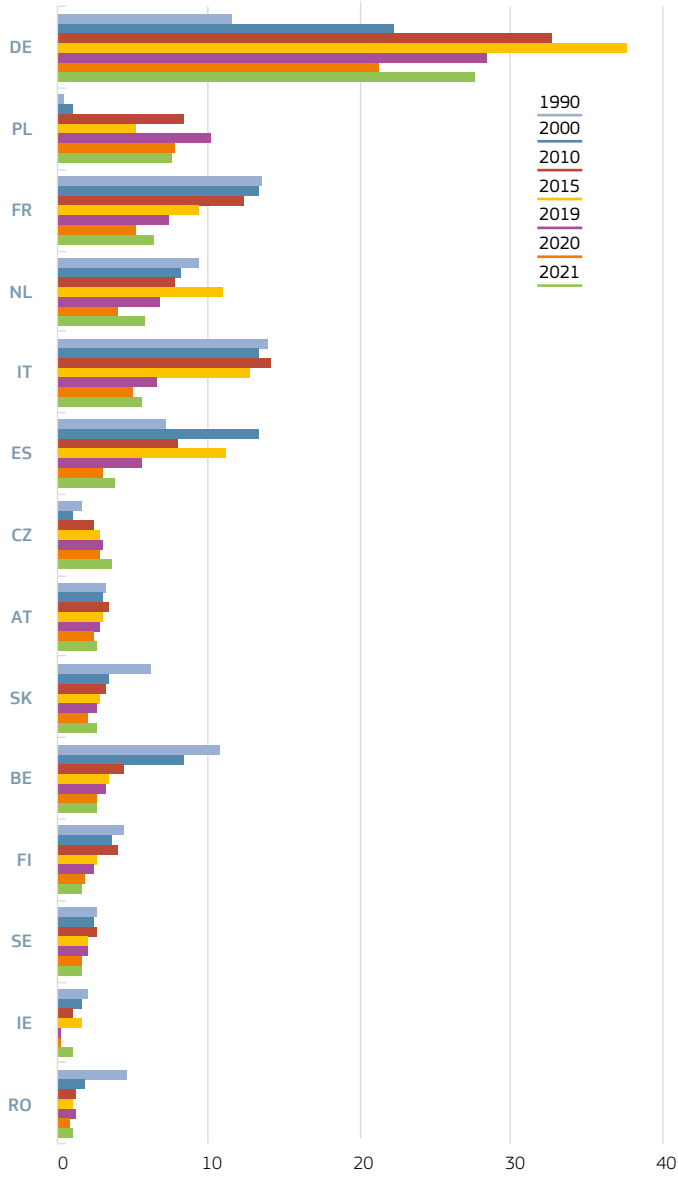
Mtoe and %	2000			2021		
Top 10 Ranking	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Solid fossil fuels						
1	DE	22.2	20.2%	DE	27.4	36.5%
2	FR	13.4	12.1%	PL	7.5	10.0%
3	ES	13.3	12.1%	FR	6.2	8.3%
4	IT	13.2	12.0%	NL	5.7	7.6%
5	BE	8.4	7.7%	IT	5.6	7.4%
6	NL	8.1	7.4%	ES	3.7	4.9%
7	PT	4.0	3.6%	CZ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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.1 Imports – Solid Fossil Fuels

BY MEMBER STATE – TOP 14 IMPORTERS

1990-2021

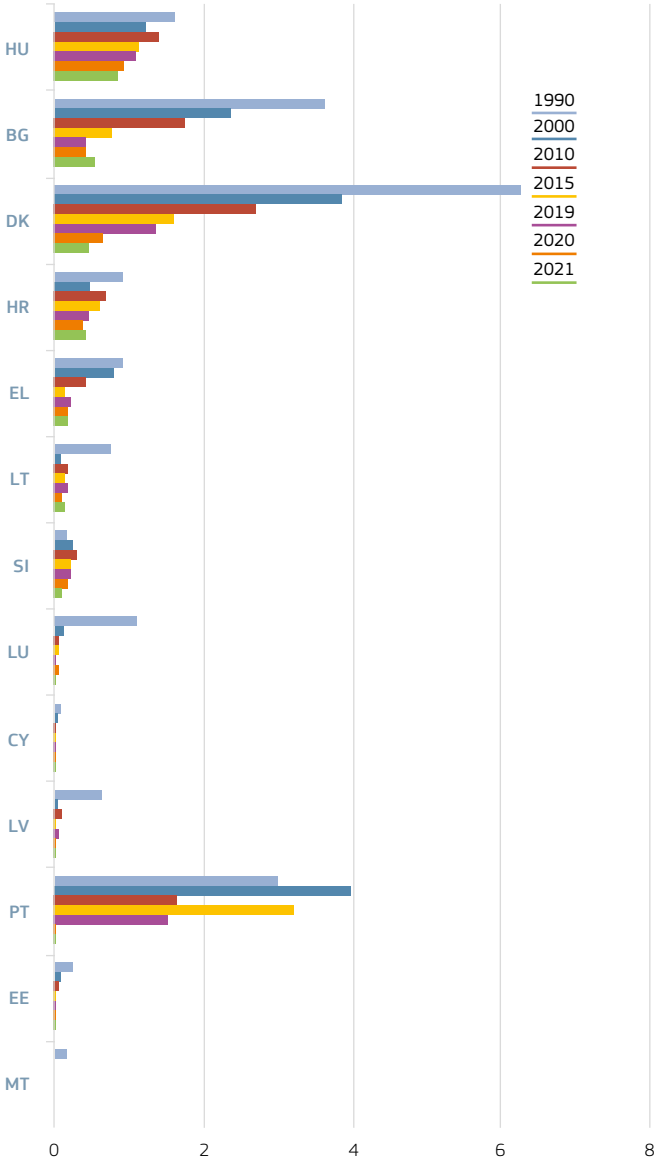


source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.1 Imports – Solid Fossil Fuels

BY MEMBER STATE – LEAST 13 IMPORTERS

1990-2021



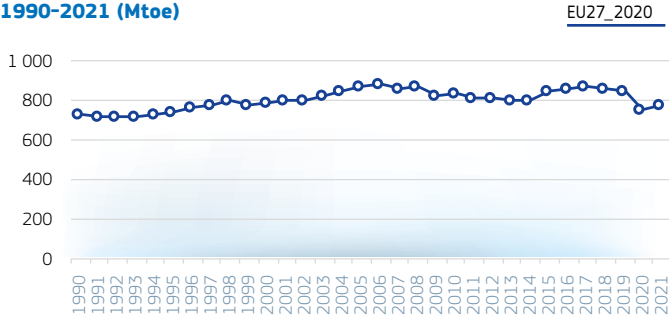
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.2.2 Imports – Oil and Petroleum Products

TOTAL

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

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



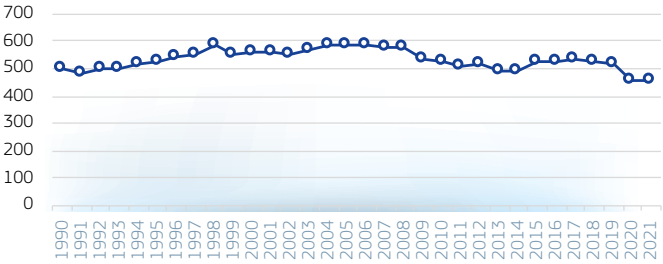
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.2.2 Imports – Oil and Petroleum Products

CRUDE OIL AND NGL

Mtoe	2000	2010	2015	2019	2020	2021
EU27_2020	560.3	528.3	526.5	518.8	452.4	457.3
Index2000	100%	94%	94%	93%	81%	82%
BE	34.16	33.48	32.44	34.64	27.72	29.08
BG	5.31	5.52	6.17	7.10	4.94	4.22
CZ	5.67	7.83	7.22	7.85	6.27	6.94
DK	3.81	2.79	4.28	5.17	4.79	5.32
DE	104.75	94.69	92.66	87.30	83.98	82.53
EE	0.00	0.00	0.00	0.00	0.00	0.00
IE	3.01	3.11	3.72	2.61	2.97	3.03
EL	19.22	19.97	21.91	22.65	22.59	23.22
ES	58.07	53.00	65.39	66.99	55.42	56.75
FR	85.45	65.48	59.20	49.58	33.84	34.59
HR	3.96	3.60	2.37	2.05	1.98	1.80
IT	83.64	78.60	62.46	63.14	50.36	57.02
CY	1.17	0.00	0.00	0.00	0.00	0.00
LV	0.00	0.00	0.00	0.00	0.00	0.00
LT	4.92	9.20	8.71	9.67	7.92	8.09
LU	0.00	0.00	0.00	0.00	0.00	0.00
HU	5.79	5.84	6.35	6.10	6.09	6.00
MT	0.00	0.00	0.00	0.00	0.00	0.00
NL	61.06	61.05	60.29	63.79	57.33	58.44
AT	7.43	6.90	8.23	8.72	7.73	7.68
PL	18.27	23.03	26.89	27.02	25.28	23.98
PT	11.73	11.48	14.36	11.48	11.02	9.63
RO	4.81	5.82	6.59	8.66	7.07	6.82
SI	0.12	0.00	0.00	0.00	0.00	0.00
SK	5.28	5.48	5.92	5.16	5.67	5.48
FI	11.86	11.44	11.12	12.70	11.60	8.58
SE	20.83	20.00	20.25	16.47	17.80	18.08

IMPORTS – CRUDE OIL AND NGL – 1990-2021 (Mtoe) EU27_2020



source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.2 Imports – Oil and Petroleum Products

RANKING

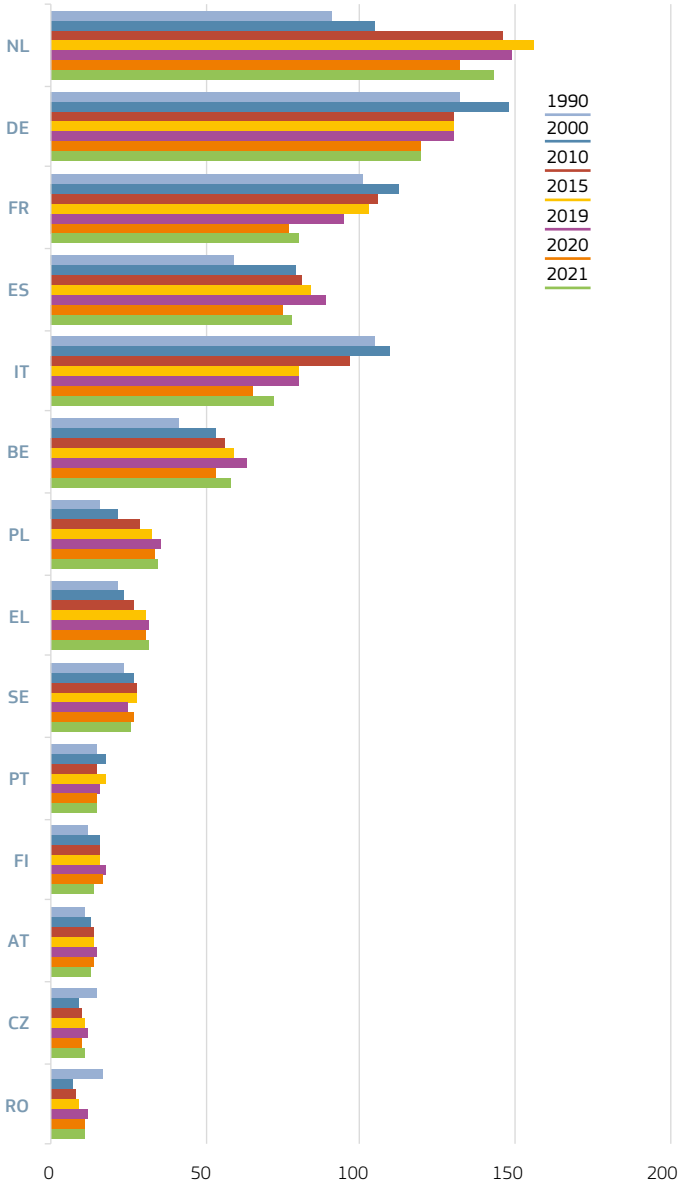
Mtoe and %	2000			2021		
Top 10 Ranking	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Oil and petroleum products						
1	DE	148.2	18.5%	NL	143.7	18.4%
2	FR	112.9	14.1%	DE	120.0	15.4%
3	IT	109.7	13.7%	FR	80.7	10.3%
4	NL	104.6	13.1%	ES	77.9	10.0%
5	ES	78.7	9.9%	IT	72.0	9.2%
6	BE	52.9	6.6%	BE	58.5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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.2 Imports – Oil and Petroleum Products

BY MEMBER STATE – TOP 14 IMPORTERS

1990-2021 (Mtoe)

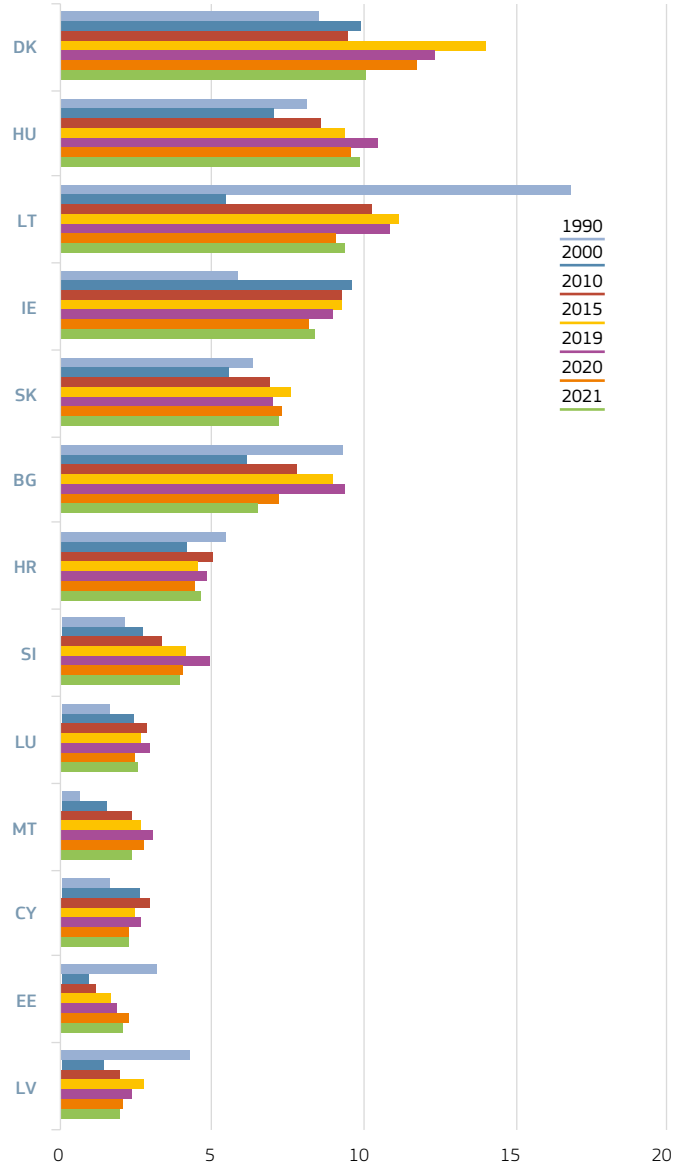


source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.2.2 Imports – Oil and Petroleum Products

BY MEMBER STATE – LEAST 13 IMPORTERS

1990-2020 (Mtoe)



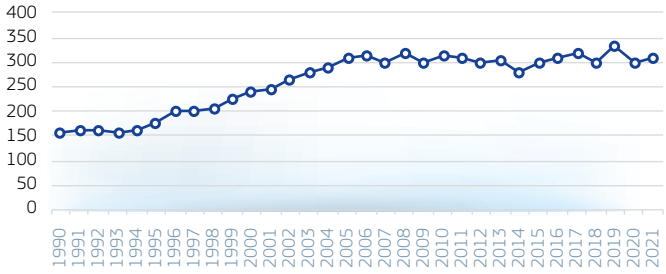
source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.3 Imports – Natural Gas

TOTAL

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

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



source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.3 Imports – Natural Gas

RANKING

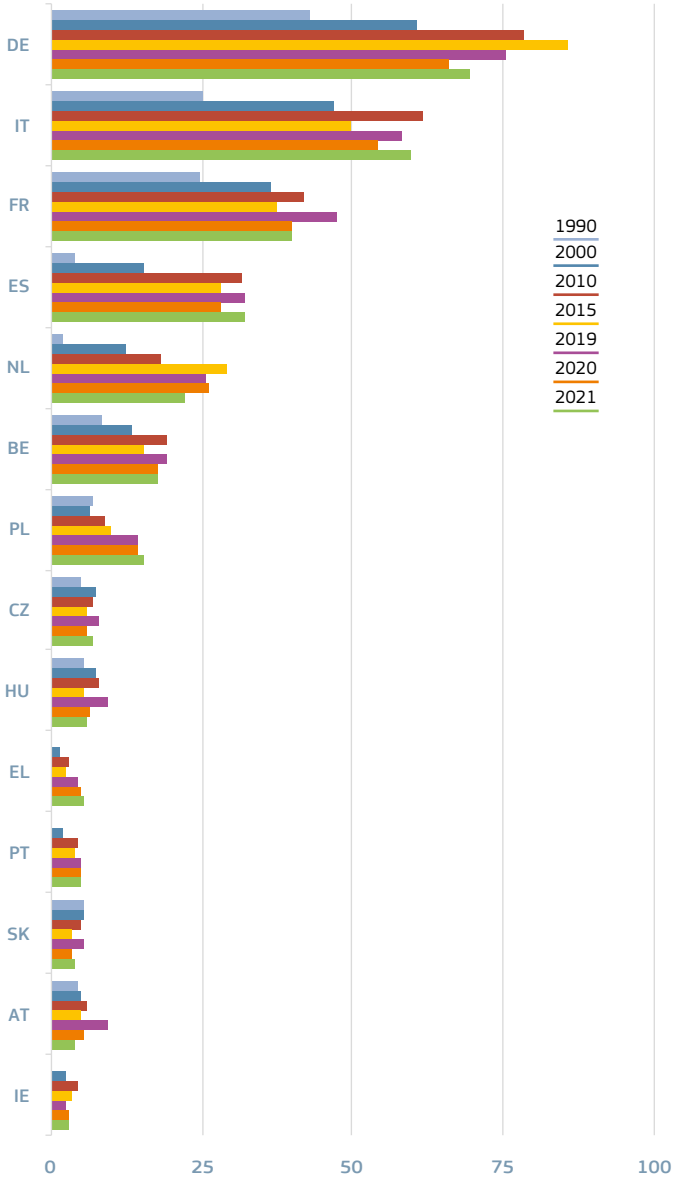
Mtoe and %	2000			2021		
EU27_2020 Ranking	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Natural gas						
1	DE	61.1	25.4%	DE	70.0	22.5%
2	IT	47.0	19.6%	IT	59.8	19.2%
3	FR	36.5	15.2%	FR	40.4	13.0%
4	ES	15.5	6.4%	ES	32.2	10.3%
5	BE	13.3	5.5%	NL	22.3	7.2%
6	NL	12.5	5.2%	BE	17.8	5.7%
7	CZ	7.5	3.1%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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.3 Imports – Natural Gas

BY MEMBER STATE – TOP 14 IMPORTERS

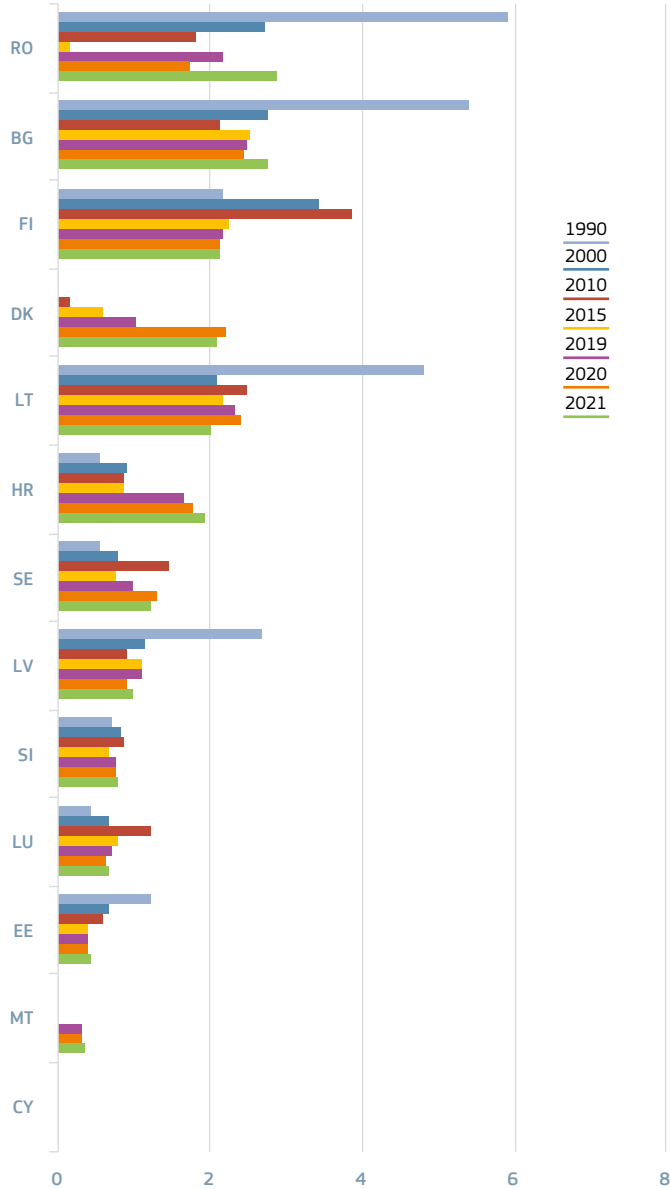
1990-2021



source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.3 Imports – Natural Gas

BY MEMBER STATE – LEAST 13 IMPORTERS
1990-2021

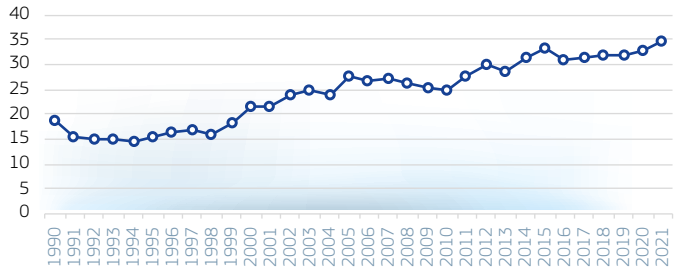


source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.4 Imports – Electricity

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

IMPORTS – ELECTRICITY – 1990-2021 (Mtoe)



source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.4 Imports – Electricity

RANKING

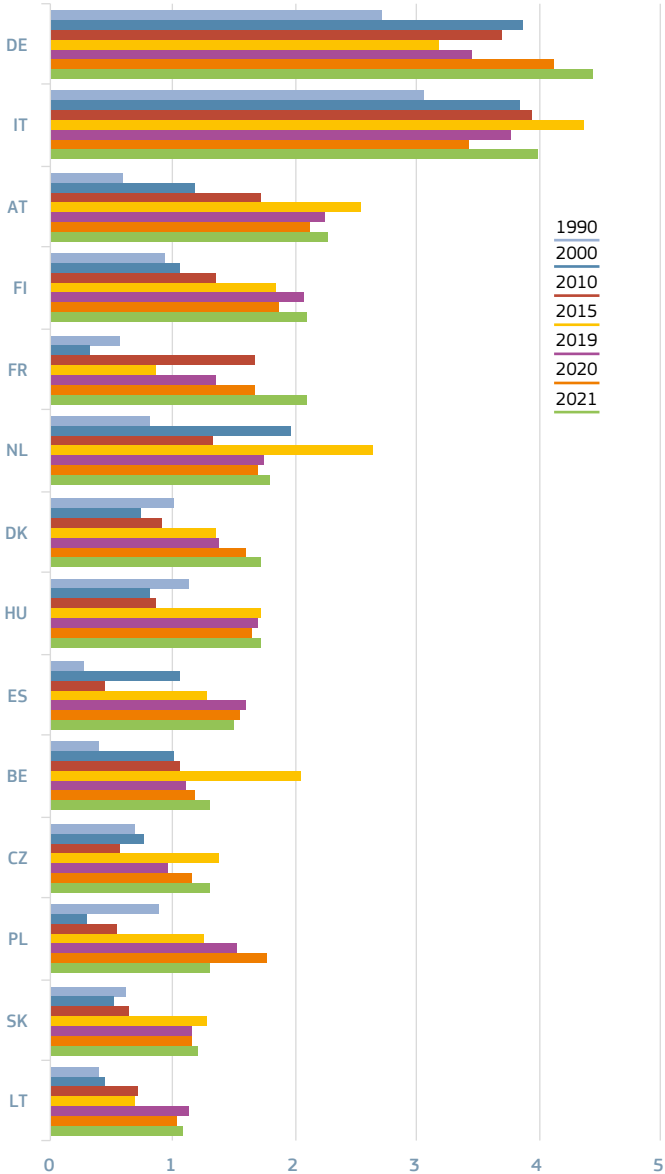
Mtoe and %	2000			2021		
	MS	Imports	EU27_2020 Share	MS	Imports	EU27_2020 Share
Electricity						
1	DE	3.88	17.9%	DE	4.45	12.9%
2	IT	3.85	17.8%	IT	4.00	11.6%
3	NL	1.97	9.1%	AT	2.27	6.6%
4	SE	1.57	7.3%	FI	2.11	6.1%
5	AT	1.19	5.5%	FR	2.09	6.1%
6	ES	1.05	4.9%	NL	1.80	5.2%
7	FI	1.05	4.8%	DK	1.73	5.0%
8	BE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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.4 Imports – Electricity

BY MEMBER STATE – TOP 14 IMPORTERS

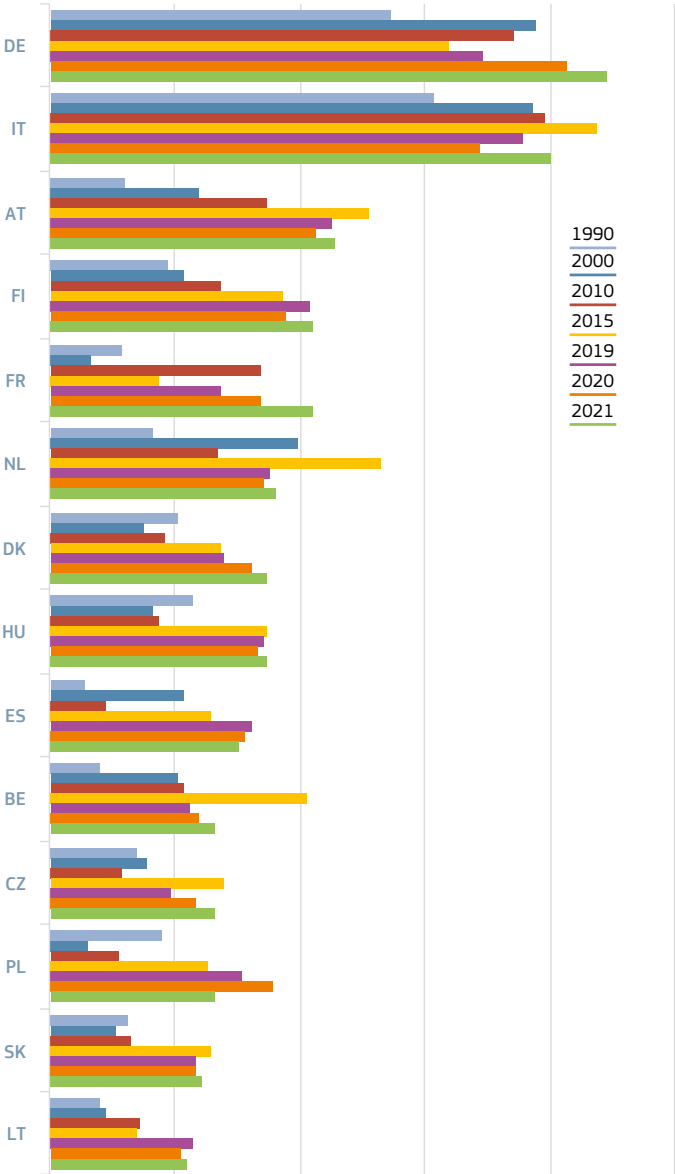
1990-2021 (Mtoe)



source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.4 Imports – Electricity

BY MEMBER STATE – LEAST 13 IMPORTERS
1990-2021



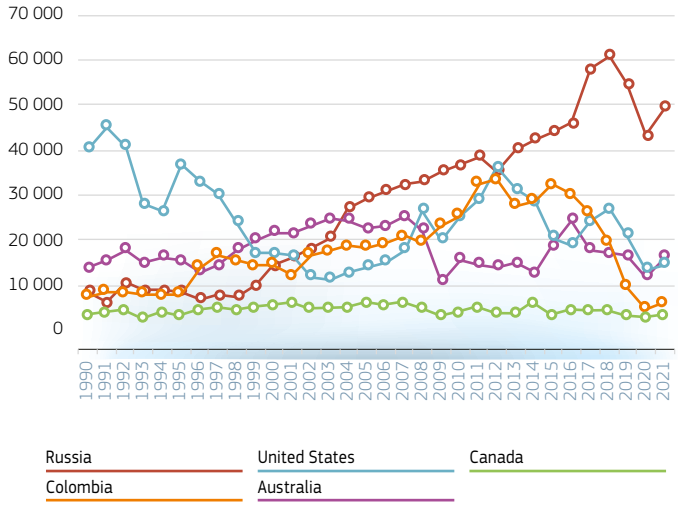
source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.5 Imports by Country of Origin

EU27_2020 – HARD COAL
TOP 15 ORDERED BY 2020 VOLUME

kton	2000	2010	2015	2019	2020	2021
Russian Federation	14179	36786	43913	54569	43075	49487
Australia	21576	15756	18559	16418	11917	16159
Aruba (NL)	16950	25248	20624	21077	13368	14518
Ecuador	14566	25414	32210	9626	4750	6189
United States	4675	3137	2707	2728	2022	2604
Benin	34466	15762	12862	3376	1088	2475
Kyrgyzstan	0	332	873	2629	1607	1221
Uganda	70	0	838	1849	745	884
Not specified	4984	7582	11382	0	10	196
United Kingdom	347	141	137	1299	967	158
Laos	7233	9051	7005	2596	67	77
Norway	750	930	572	192	27	76
Other American countries	3328	659	207	185	220	75
Hong Kong	1579	50	64	23	16	21
Bosnia and Herzegovina	2058	3024	817	58	16	12
Other extra-EU	402	116	311	105	4	21
Extra-EU	127162	143986	153080	116733	79898	94173
Intra-EU	28432	20515	13485	8700	7807	10202
Total Intra-EU and Extra-EU	155595	164501	166565	125433	87705	104376

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



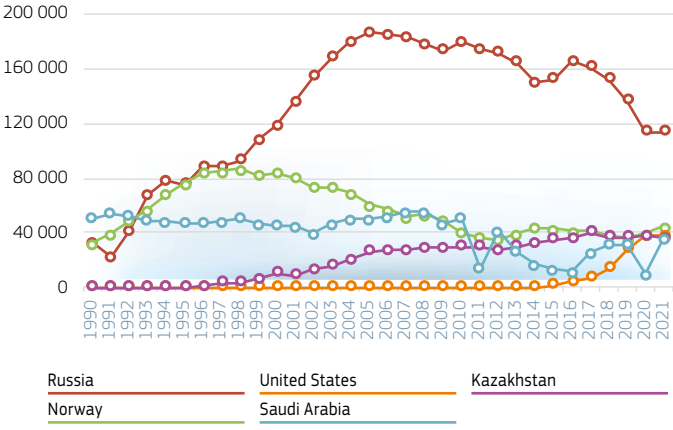
source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.5 Imports by Country of Origin

EU27_2020 – CRUDE OIL & NGL
TOP 15 ORDERED BY 2021 VOLUME

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

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



source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.5 Imports by Country of Origin

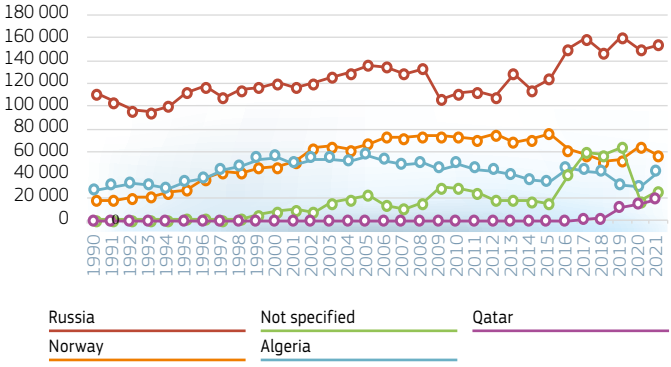
EU27_2020 – NATURAL GAS

TOP 8 ORDERED BY 2021 VOLUME

TJ (GCV)	2000	2010	2015	2019	2020	2021
Russian Federation	4582197	4255049	4766521	6170322	5729541	5927862
Norway	1880469	2809991	2902446	2057642	2523630	2195999
Egypt	2203075	1944865	1351879	1213050	1142346	1684062
Not specified	334765	1135196	581459	2336835	675802	991744
Aruba (NL)	0	0	0	481342	596888	763217
Qatar	12443	798681	472608	832924	638878	598121
Senegal	172020	562811	249094	543349	461187	441148
Bahrain	0	0	0	0	1619	334403
Other extra-EU	545957	1241357	881330	817322	721565	550315
Extra-EU	9730926	12747951	11205338	14452787	12491457	13486870
Intra-EU	1453115	1951064	2715810	1073144	1451515	965595
Total Intra-EU and Extra-EU	11184041	14699015	13921148	15525931	13942972	14452465

Mio m³	2000	2010	2015	2019	2020	2021
Russian Federation	120699	111743	124033	161023	149534	154028
Norway	46847	73240	75981	53137	65236	56878
Egypt	55513	49289	33770	30671	28995	42817
Not specified	8126	28823	14826	64227	16980	26406
Aruba (NL)	0	0	0	12346	15392	19701
Qatar	309	20045	12063	21089	16358	15333
Senegal	4385	13682	6163	13375	11357	10895
Bahrain	0	0	0	0	42	8710
Other extra-EU	15048	32630	23449	21325	18932	14319
Extra-EU	250927	329452	290286	377193	322827	349087
Intra-EU	41231	51444	71174	28238	39192	25575
Total Intra-EU and Extra-EU	292158	380896	361460	405431	362018	374662

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



* total imports through pipelines and LNG

source: Eurostat April 2023
Methodology and Notes: see appendices

2.2.5 Imports by Country of Origin

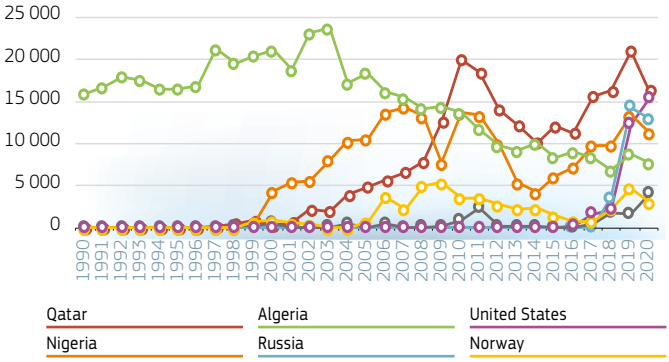
EU27_2020 – LNG

TOP 8 ORDERED BY 2020 VOLUME

TJ (GCV)	2000	2010	2015	2019	2020	2021
Aruba (NL)	0	0	0	481342	596888	763217
Qatar	12443	798681	472608	832924	638878	598121
Russian Federation	0	115	1077	566809	503613	493761
Senegal	172020	562811	249094	543349	461187	441148
Egypt	871464	568072	342158	354289	310750	317669
Not specified	22204	36092	192	63154	167299	116892
Belize	36334	145341	58103	187439	121319	67106
Gabon	0	0	0	13382	44640	38814
Other extra-EU	42500	325198	163562	322789	217976	99224
Extra-EU	1156965	2436310	1286794	3365478	3062549	2935952
Intra-EU	0	3153	202	27623	23922	25579
Total Intra-EU and Extra-EU	1156965	2439463	1286996	3393100	3086471	2961531

Mio m3	2000	2010	2015	2019	2020	2021
Aruba (NL)	0	0	0	12346	15392	19701
Qatar	309	20045	12063	21089	16358	15333
Russian Federation	0	3	29	14367	12977	12756
Senegal	4385	13682	6163	13375	11357	10895
Egypt	21093	13730	8358	8854	7755	7815
Not specified	552	891	7	1614	4048	2864
Belize	902	3594	1481	4743	3078	1695
Gabon	0	0	0	371	1119	980
Other extra-EU	1053	8055	4372	8530	5620	2585
Extra-EU	28294	60000	32474	85289	77704	74623
Intra-EU	0	78	5	681	576	637
Total Intra-EU and Extra-EU	28294	60078	32479	85970	78280	75261

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



source: Eurostat April 2023
Methodology and Notes: see appendices

2.3 Energy Import Dependency

2.3.1 Import Dependency – All Fuels*

(%)

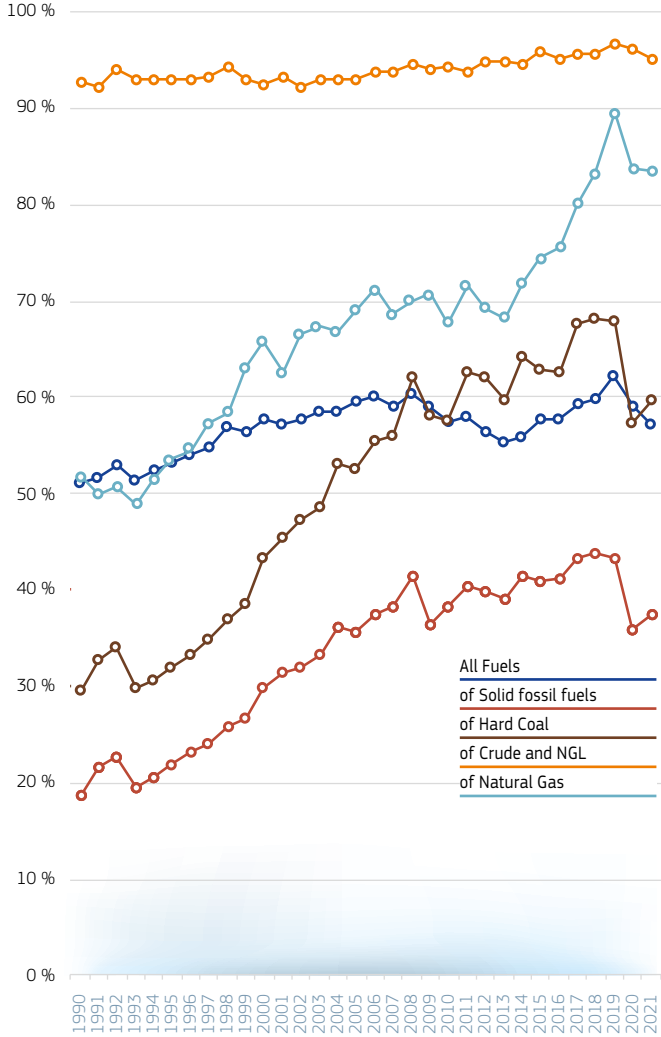
Imports From Extra-EU	2000	2010	2015	2019	2020	2021
EU27_2020						
Index2000	57.8	57.4	57.6	62.3	59.1	57.1
Intra and Extra-EU Imports						
BE	85.2	88.4	93.3	88.9	87.7	80.3
BG	46.6	40.4	36.6	38.3	38.1	36.3
CZ	22.7	25.4	32.1	40.8	38.8	40.0
DK	-38.3	-16.8	13.7	40.4	46.6	33.5
DE	59.8	60.5	62.6	67.4	64.0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

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.3.2 Import Dependency by Fuel

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



source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.3.3 Import Dependency – Solid Fuels*

(%)

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

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.3.4 Import Dependency – Hard Coal *
(%)

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

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.3.5 Import Dependency – Oil and Petroleum Products*

(%)

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

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.3.6 Import Dependency – Crude and NGL*
(%)

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

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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.3.7 Import Dependency – Natural Gas*

(%)

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

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

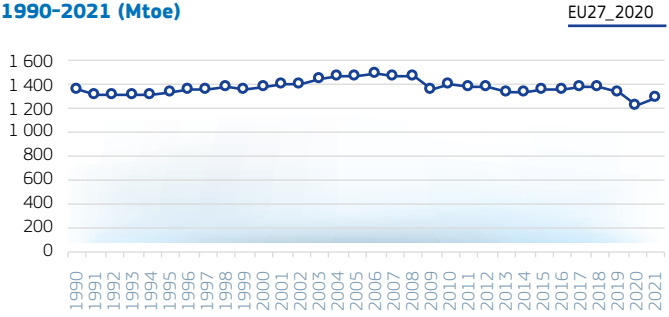
source: Eurostat April 2023
Methodology and Notes: see appendices

2.4 Energy Transformation

2.4.1 Transformation Input – All Fuels

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

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



source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.4.2 Transformation Input by Fuel

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.4.3 Transformation Input by Sector

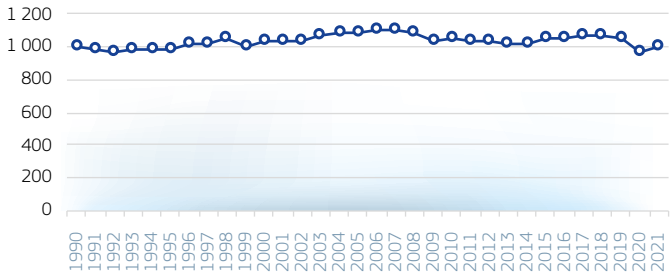
	2020					
Mtoe	Total, All Sectors	Electricity producers	Heat producers	CHP producers	Refineries, Petroleum and sub-products	Other transformation input
EU27_2020	1 290.8	394.3	20.2	147.8	637.7	90.8
Share - %	100.0%	30.5%	1.6%	11.5%	49.4%	7.0%
BE	63.73	16.64	0.01	2.87	40.13	4.08
BG	17.30	9.21	0.29	1.86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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.4.4 Transformation Output – All Fuels

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

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



source: Eurostat April 2023
Methodology and Notes: see appendices

2.4.5 Transformation Output by Fuel

	2021						
Mtoe	Transformation Output	Solid fossil fuels	Oil and petroleum products	Natural gas	Renewables and biofuels	Electricity	Heat
EU27_2020	1006.9	25.2	636.9	2.0	16.8	250.3	58.3
Share - %	100.0%	2.5%	63.3%	0.2%	1.7%	24.9%	5.8%
BE	52.09	0.92	40.20	0.01	0.78	8.64	0.73
BG	10.43	0.25	4.94	0.00	0.17	4.09	0.98
CZ	21.59	1.92	8.04	0.00	0.40	7.32	2.90
DK	16.31	0.00	9.37	0.47	0.26	2.84	3.37
DE	195.87	8.43	116.54	0.80	3.12	50.59	11.21
EE	2.61	0.01	1.18	0.00	0.00	0.62	0.54
IE	6.49	0.00	3.58	0.00	0.12	2.74	0.00
EL	39.25	0.00	34.25	0.00	0.25	4.70	0.05
ES	97.22	0.78	70.80	0.01	1.39	23.59	0.00
FR	98.42	0.10	40.77	0.34	3.17	47.75	4.56
HR	4.40	0.00	2.66	0.00	0.07	1.31	0.37
IT	111.54	0.96	78.19	0.14	1.42	24.86	5.34
CY	0.45	0.00	0.00	0.00	0.01	0.44	0.00
LV	1.31	0.00	0.00	0.00	0.06	0.50	0.75
LT	10.50	0.00	8.88	0.00	0.12	0.44	1.06
LU	0.34	0.00	0.00	0.00	0.00	0.19	0.15
HU	13.28	0.56	7.93	0.00	0.17	3.11	1.25
MT	0.20	0.00	0.00	0.00	0.01	0.19	0.00
NL	118.96	1.36	102.08	0.20	0.94	10.50	2.65
AT	19.10	0.94	8.55	0.01	0.29	6.08	2.20
PL	61.07	6.54	28.52	0.00	0.96	15.45	7.37
PT	17.17	0.00	12.06	0.00	0.33	4.38	0.40
RO	18.81	0.00	11.57	0.00	0.40	5.11	1.46
SI	1.70	0.00	0.00	0.00	0.09	1.37	0.24
SK	12.34	1.15	6.75	0.00	0.18	2.58	0.78
FI	25.40	0.62	12.67	0.01	0.73	6.20	4.62
SE	50.04	0.64	27.41	0.03	1.34	14.77	5.36

source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.4.6 Transformation Output by Sector

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.5 Final Energy

2.5.1 Available for Final Consumption

TOTAL

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

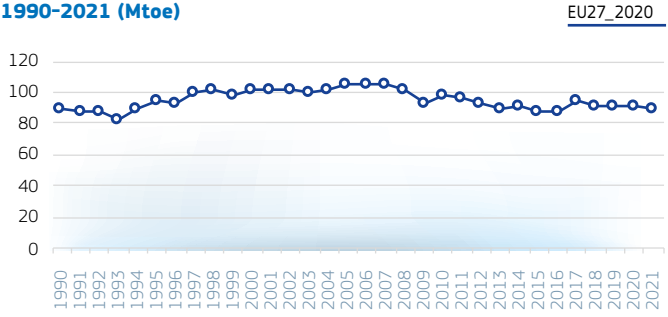
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.5.2 Final Non-Energy Consumption

TOTAL

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

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



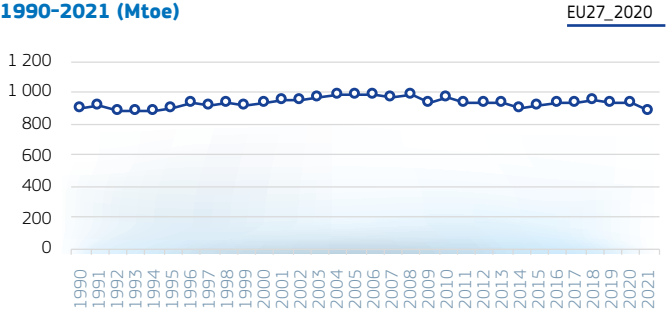
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.5.3 Final Energy Consumption

TOTAL

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

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



source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.5.3 Final Energy Consumption

BY FUEL

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.5.3 Final Energy Consumption

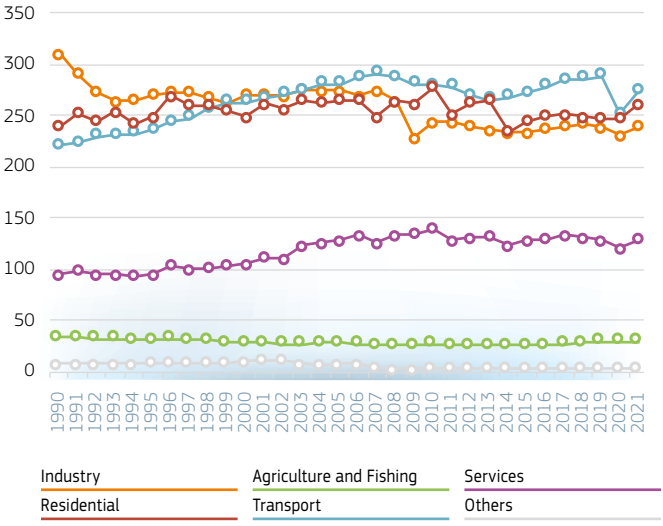
BY SECTOR

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

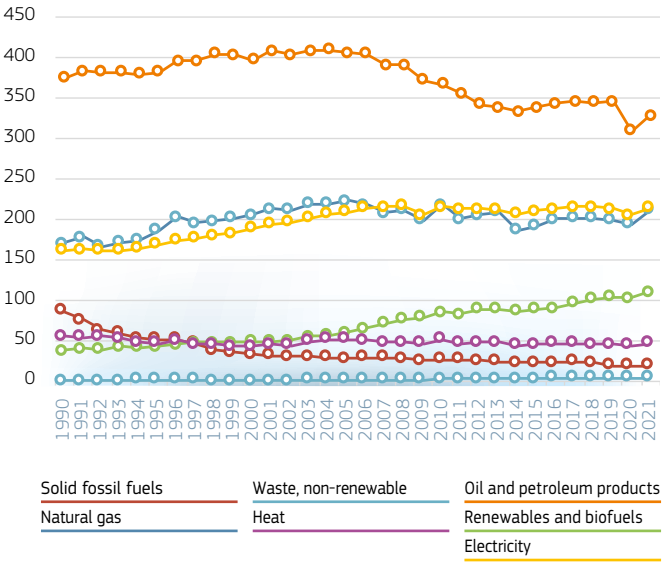
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.5.3 Final Energy Consumption

BY SECTOR – EU27_2020 – 1990-2021 (Mtoe)



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



source: Eurostat April 2023
Methodology and Notes: see appendices

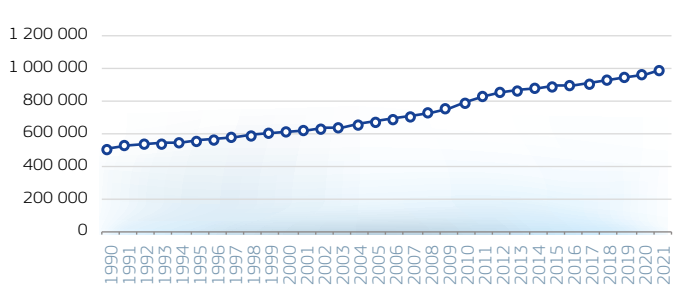
2.6 Electricity

2.6.1 Installed Electricity Capacity

TOTAL

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

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



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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.6.1 Installed Electricity Capacity

BY FUEL

MW	2021						
	Installed Electricity Capacity	Combustible Fuels	Wind	Hydro	Nuclear	Solar	Others
EU27_2020	991045	379382	188371	151668	105112	164185	2327
Share - %	100.0%	38.3%	19.0%	15.3%	10.6%	16.6%	0.2%
BE	26218	7986	4948	1418	5851	6012	3
BG	11208	3854	704	3369	2006	1275	0
CZ	21035	11874	339	2285	4290	2246	0
DK	16501	7769	7021	7	0	1704	0
DE	242105	99241	63833	10844	8113	59373	701
EE	2409	1693	315	6	0	395	0
IE	11142	6139	4339	529	0	135	0
EL	20716	8368	4649	3421	0	4277	0
ES	111014	39778	27908	20132	7117	16019	59
FR	141904	20435	18740	26291	61400	14810	227
HR	4873	1537	987	2201	0	138	10
IT	117160	59496	11254	22750	0	22594	1066
CY	1983	1511	158	0	0	315	0
LV	2940	1268	77	1587	0	7	0
LT	3709	1881	671	877	0	255	25
LU	1878	134	136	1331	0	277	0
HU	11574	6155	324	60	2027	2968	40
MT	800	595	0	0	0	206	0
NL	47252	23873	7769	37	512	14911	150
AT	27382	6443	3408	14748	0	2783	1
PL	52834	36053	6967	2398	0	7416	0
PT	21344	6987	5427	7255	0	1646	29
RO	18799	6316	3015	6662	1411	1394	0
SI	4080	1576	3	1352	688	461	0
SK	7490	2399	4	2531	2003	537	16
FI	17942	8295	3257	3171	2794	425	0
SE	44753	7725	12116	16407	6899	1606	0

source: Eurostat April 2023
Methodology and Notes: see appendices

2.6.1 Installed Electricity Capacity*

RENEWABLES

	2021						
MW	Total renewables	Hydro	Wind	Solar Thermal	Solar PV	Geothermal	Tide, Wave and Ocean
EU27_2020	505317	151668	188371	2306	161879	877	216
Share(%)	100.0%	30.0%	37.3%	0.5%	32.0%	0.2%	0.0%
BE	12379	1418	4948	0	6012	0	0
BG	5348	3369	704	0	1275	0	0
CZ	4870	2285	339	0	2246	0	0
DK	8732	7	7021	0	1704	0	0
DE	134096	10844	63833	2	59371	46	0
EE	716	6	315	0	395	0	0
IE	5003	529	4339	0	135	0	0
EL	12348	3421	4649	0	4277	0	0
ES	64064	20132	27908	2304	13715	0	5
FR	60069	26291	18740	0	14810	16	211
HR	3336	2201	987	0	138	10	0
IT	57369	22750	11254	0	22594	772	0
CY	472	0	158	0	315	0	0
LV	1672	1587	77	0	7	0	0
LT	1803	877	671	0	255	0	0
LU	1744	1331	136	0	277	0	0
HU	3355	60	324	0	2968	3	0
MT	206	0	0	0	206	0	0
NL	22717	37	7769	0	14911	0	0
AT	20939	14748	3408	0	2783	1	0
PL	16780	2398	6967	0	7416	0	0
PT	14357	7255	5427	0	1646	29	0
RO	11071	6662	3015	0	1394	0	0
SI	1817	1352	3	0	461	0	0
SK	3072	2531	4	0	537	0	0
FI	6853	3171	3257	0	425	0	0
SE	30129	16407	12116	0	1606	0	0

* Net maximum capacity

source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.6.2 Gross Electricity Generation

TOTAL

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.6.2 Gross Electricity Generation

BY FUEL

	2021						
TWh	Gross Electricity Generation	Solid Fossil Fuels, Peat, Oil Shale & Sands	Oil and petroleum products	Natural Gas & Manufactured Gases	Nuclear	Renewables and biofuel	Wastes non-RES
EU27_2020	2 906.5	425.0	46.7	579.8	731.7	1 101.9	21.4
Share - %	100.0%	14.6%	1.6%	19.9%	25.2%	37.9%	0.7%
BE	99.96	0.0	0.18	24.50	50.33	23.66	1.25
BG	47.53	17.1	0.36	3.05	16.49	10.56	0.00
CZ	84.95	34.2	0.09	7.92	30.73	11.92	0.10
DK	33.05	4.4	0.26	1.54	0.00	26.10	0.79
DE	586.68	164.5	4.58	105.62	69.13	236.12	6.72
EE	7.20	3.4	0.04	0.75	0.00	2.88	0.09
IE	31.87	3.0	1.45	15.16	0.00	11.90	0.32
EL	54.72	5.3	4.67	22.49	0.00	22.19	0.04
ES	274.03	4.9	10.04	72.66	56.56	128.97	0.94
FR	554.73	5.4	5.73	35.25	379.36	126.71	2.23
HR	15.21	1.5	0.03	3.10	0.00	10.63	0.00
IT	288.49	14.0	7.75	145.91	0.00	118.43	2.38
CY	5.12	0.0	4.34	0.00	0.00	0.77	0.00
LV	5.85	0.0	0.00	2.13	0.00	3.72	0.00
LT	4.89	0.0	0.10	1.22	0.00	3.33	0.24
LU	2.21	0.0	0.00	0.17	0.00	1.97	0.07
HU	35.98	3.0	0.06	9.74	15.99	6.92	0.25
MT	2.22	0.0	0.04	1.91	0.00	0.26	0.00
NL	121.61	14.6	1.33	59.40	3.83	40.47	1.99
AT	70.74	0.1	0.71	12.64	0.00	56.54	0.71
PL	179.55	127.6	2.00	18.06	0.00	31.33	0.58
PT	50.98	0.8	1.23	15.57	0.00	33.09	0.29
RO	59.47	10.7	0.76	10.06	11.28	26.68	0.00
SI	15.88	3.8	0.06	0.52	5.71	5.73	0.01
SK	29.96	1.7	0.40	4.89	15.73	7.07	0.17
FI	71.87	4.8	0.17	4.66	23.60	38.17	0.51
SE	171.80	0.1	0.35	0.92	52.97	115.78	1.68

source: Eurostat April 2023
Methodology and Notes: see appendices

2.6.2 Gross Electricity Generation

RENEWABLES

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.6.2 Gross Electricity Generation

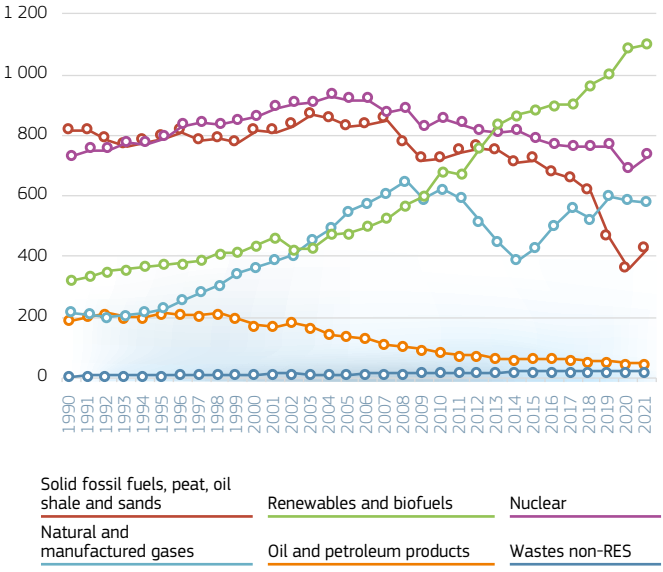
EU27_2020 – BY FUEL

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

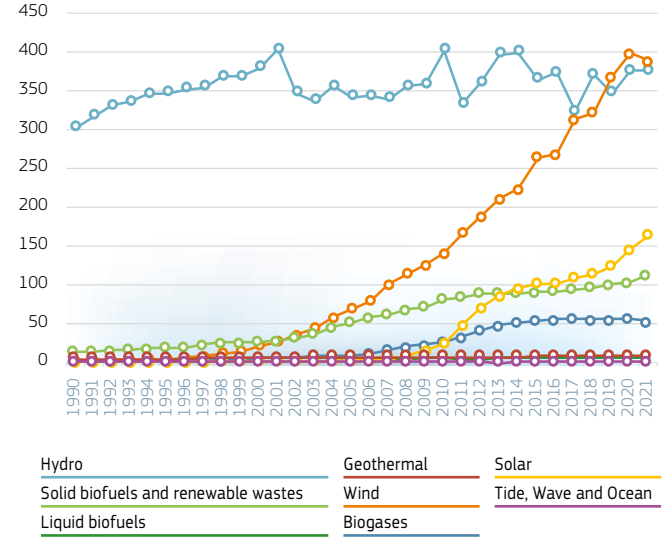
source: Eurostat April 2023
Methodology and Notes: see appendices

2.6.2 Gross Electricity Generation

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



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



source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.6.3 Market Share of the Largest Electricity Producer

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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.7 Solar and wind Energy

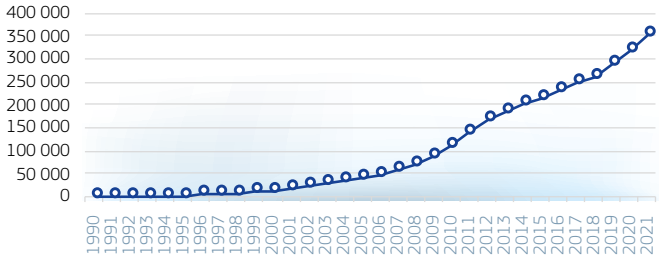
2.7.1 Solar and wind Energy – Cumulative Capacity

TOTAL

MW	2000	2010	2015	2019	2020	2021
EU27_2020	12472	109606	214861	287350	315541	352556
Index2000	100%	879%	1723%	2304%	2530%	2827%
BE	14	1919	5313	8500	10246	10961
BG	0	513	1727	1748	1803	1979
CZ	1	1940	2356	2450	2511	2586
DK	2391	3809	5859	7191	7571	8725
DE	6209	44961	83804	109656	115872	123206
EE	0	108	300	437	525	710
IE	117	1391	2454	4184	4397	4474
EL	226	1500	4695	6423	7407	8927
ES	2216	25298	29951	36701	39259	43927
FR	45	6956	17436	27235	29570	33550
HR	0	79	466	731	910	1125
IT	382	9386	28038	31545	32521	33848
CY	0	89	234	309	387	472
LV	2	30	68	81	83	84
LT	0	133	505	637	704	926
LU	14	73	180	296	339	414
HU	0	295	501	1723	2454	3292
MT	0	1	75	155	188	206
NL	460	2327	4917	11710	17756	22680
AT	55	1105	3426	4926	5269	6190
PL	4	1108	4994	7377	10253	14383
PT	84	3930	5384	6124	6223	7073
RO	0	389	4456	4435	4395	4409
SI	0	12	242	281	373	464
SK	0	22	536	594	539	541
FI	40	204	1022	2506	2904	3682
SE	212	2028	5923	9395	11083	13722

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

EU27_2020



source: Eurostat April 2023
Methodology and Notes: see appendices

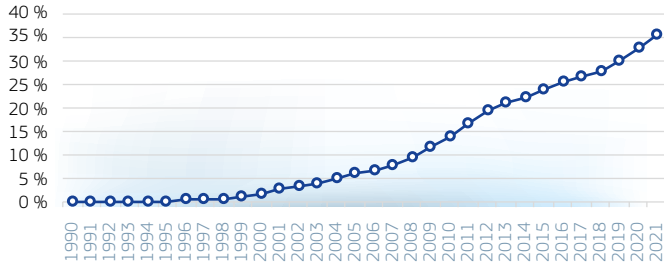
2.7.1 Solar and Wind Energy – Cumulative Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

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

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

EU27_2020



source: Eurostat April 2023
Methodology and Notes: see appendices

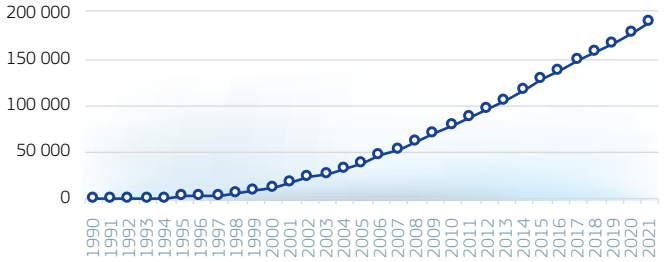
2.7.2 Wind Cumulative Installed Capacity

TOTAL

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

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

EU27_2020



source: Eurostat April 2023
Methodology and Notes: see appendices

2.7.2 Wind Cumulative Installed Capacity

SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

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

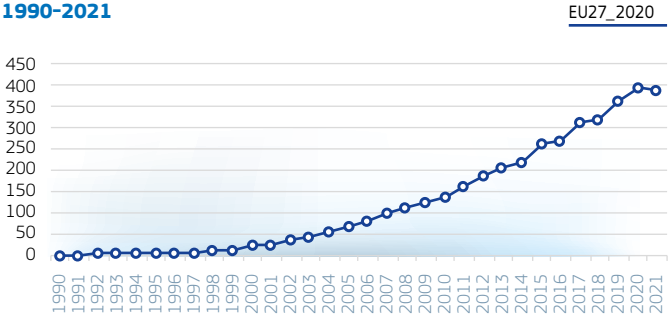
source: Eurostat April 2023
Methodology and Notes: **see appendices –**

2.7.3 Wind Gross Electricity Production

TOTAL

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

WIND GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2021



source: Eurostat April 2023
Methodology and Notes: see appendices

2.7.4 Wind Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

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

source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.7.5 Wind Capacity Factor

ANNUAL AVERAGE

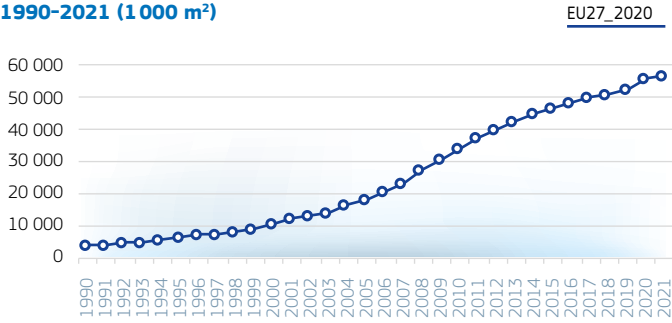
%	2000	2010	2015	2019	2020	2021
EU27_2020	19.8	20.2	23.6	25.1	25.6	23.4
BE	13.0	16.2	29.2	28.8	31.3	27.7
BG			23.7	21.4	24.0	23.2
CZ		18.0	23.3	23.5	23.5	20.2
DK	20.3	23.4	31.8	30.2	29.7	26.1
DE	17.5	16.3	20.6	23.7	24.2	20.5
EE		29.3	27.2	24.8	30.4	26.6
IE	23.9	23.1	30.6	27.7	30.6	25.7
EL	22.8	23.9	25.2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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.7.6 Solar Collectors' Surface

1 000 m²	2000	2010	2015	2019	2020	2021
EU27_2020	10759	34428	47092	52477	55810	56999
Index2000	100%	320%	438%	488%	519%	530%
BE	41	375	660	724	740	748
BG	0	194	344	425	446	470
CZ	0	307	480	555	567	586
DK	243	480	1016	1915	2051	2035
DE	3251	13914	18339	19326	21416	21785
EE	0	0	0	0	0	0
IE	4	185	320	337	346	345
EL	2941	4100	4390	4868	4991	5175
ES	405	2312	3293	4068	4236	4360
FR	513	1447	2917	3302	3398	3504
HR	20	92	183	272	288	300
IT	271	2415	3724	4344	4458	4658
CY	0	909	1009	1084	1102	1122
LV	0	0	0	22	22	22
LT	0	0	0	0	0	0
LU	0	29	56	70	74	77
HU	36	140	280	350	392	406
MT	0	40	70	73	74	75
NL	276	576	647	672	669	662
AT	2202	4559	5261	5050	4923	4775
PL	0	656	1900	2696	3007	3196
PT	238	752	1121	1348	1407	1479
RO	0	104	159	219	219	219
SI	101	178	224	224	222	220
SK	0	123	171	0	232	249
FI	10	31	50	73	80	88
SE	207	510	478	459	451	445

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



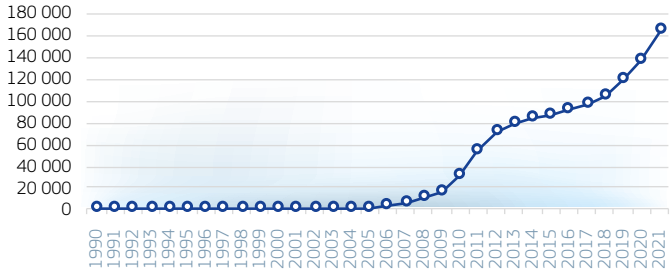
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.7.7 Solar Installed Capacity

TOTAL

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

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



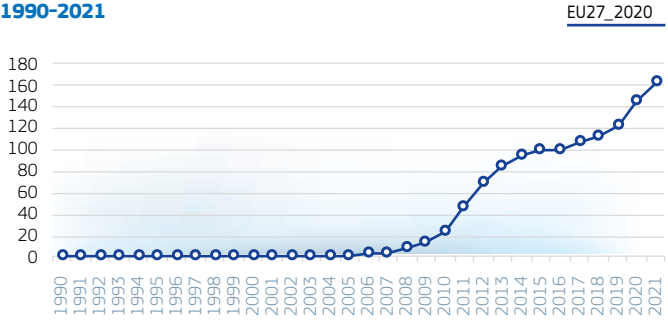
source: Eurostat April 2023
Methodology and Notes: see appendices

2.7.8 Solar Gross Electricity Production

TOTAL

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

SOLAR GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2021



source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.7.9 Solar Penetration Level

IN TOTAL GROSS ELECTRICITY GENERATION

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.8 CHP

2.8.1 CHP Electricity

GENERATION AND CAPACITY

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

source: Eurostat, July 2023
Methodology and Notes: see appendices

2.8.2 CHP Heat

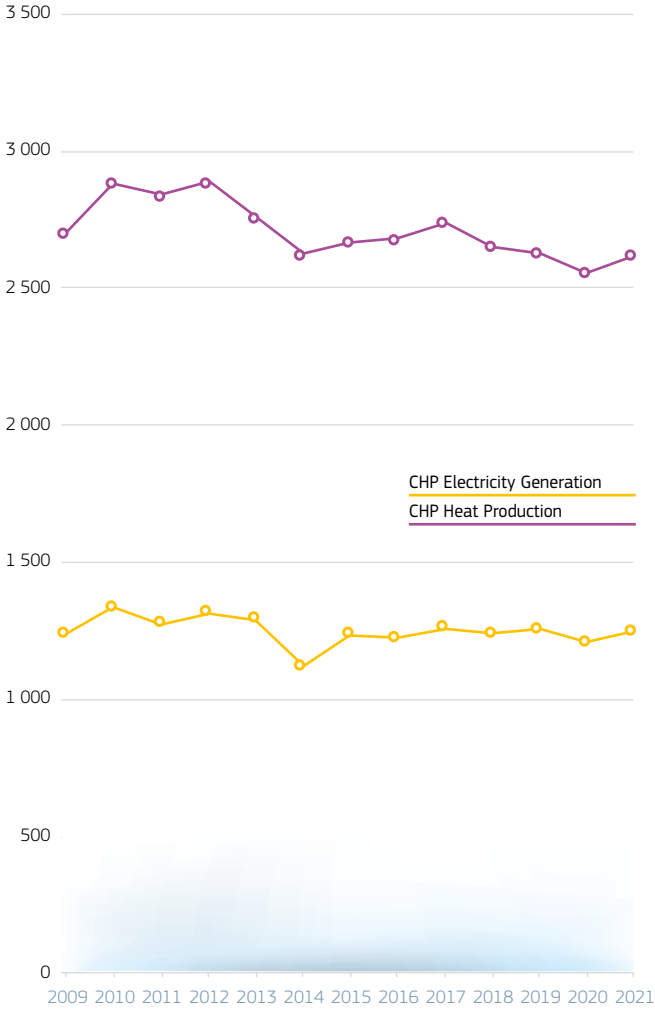
PRODUCTION AND CAPACITY

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

source: Eurostat, July 2023
Methodology and Notes: see appendices

2.8.3 CHP Electricity and Heat

EU27_2020 – CHP ELECTRICITY AND HEAT GENERATION (PJ)*



source: Eurostat July 2023

*data before 2009 is not consistent across the EU27
Methodology and Notes: **see appendices**

2.9 Heat*

2.9.1 Gross Heat Generation

TOTAL

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

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

source: Eurostat April 2023
Methodology and Notes: see appendices

2.9.1 Gross Heat Generation

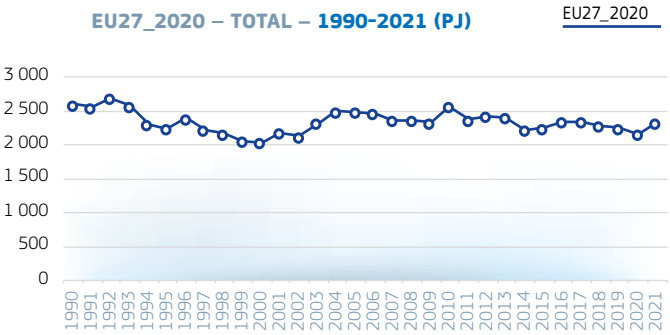
BY FUEL

	2021						
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	2344.7	472.0	74.7	882.7	3.9	768.0	141.2
Share - %	100.0%	20.1%	3.2%	37.6%	0.2%	32.8%	6.0%
BE	20.7	0.0	0.0	15.0	0.0	3.6	2.1
BG	38.7	6.3	0.1	23.0	0.7	8.5	0.2
CZ	119.9	59.7	1.3	43.4	0.9	13.0	1.5
DK	136.3	8.9	1.5	14.2	0.0	95.4	14.3
DE	462.6	102.1	6.3	232.2	0.0	78.6	43.5
EE	22.7	1.8	0.2	5.1	0.0	14.7	0.9
IE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EL	2.0	1.7	0.0	0.3	0.0	0.0	0.0
ES	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FR	185.7	4.5	9.1	70.4	0.0	83.3	18.4
HR	15.6	0.0	0.1	10.7	0.0	4.7	0.0
IT	223.7	0.0	24.4	157.8	0.0	36.2	5.4
CY	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LV	31.2	0.0	0.1	13.4	0.0	17.7	0.0
LT	35.9	0.1	0.5	8.0	0.0	25.1	2.2
LU	6.2	0.0	0.0	1.6	0.0	4.5	0.1
HU	49.2	0.9	0.0	38.9	0.4	7.8	1.2
MT	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NL	98.6	1.7	7.6	55.5	0.0	25.3	8.6
AT	92.0	0.1	3.3	33.9	0.0	48.2	6.5
PL	307.3	229.3	5.2	45.7	0.0	23.5	3.7
PT	16.7	0.0	0.2	16.5	0.0	0.0	0.0
RO	61.2	9.5	2.8	45.0	0.0	4.0	0.0
SI	10.1	4.5	0.2	3.2	0.0	2.0	0.2
SK	32.5	3.8	0.4	18.6	2.0	7.4	0.2
FI	174.2	35.6	8.7	21.8	0.0	101.7	6.4
SE	201.7	1.4	3.0	8.5	0.0	162.9	25.8

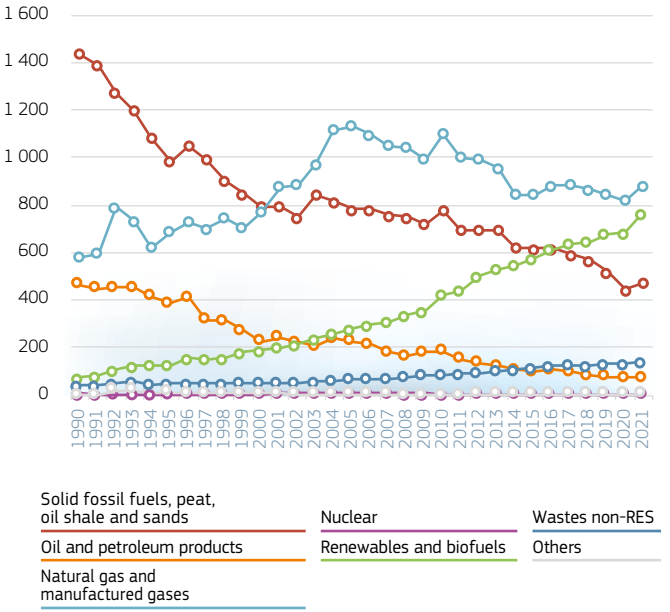
source: Eurostat April 2023
Methodology and Notes: see appendices

2.9.1 Gross Heat Generation

EU27_2020 – TOTAL – 1990-2021 (PJ)



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



source: Eurostat April 2023
Methodology and Notes: see appendices

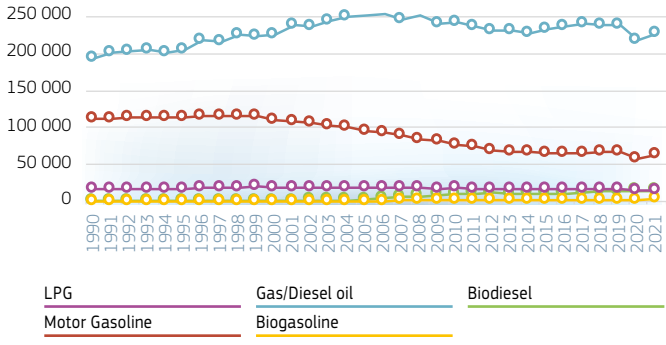
2.10 Transport

2.10.1 Fuels Final Consumption

PETROLEUM PRODUCTS AND BIOFUELS

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

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



source: Eurostat April 2023
Methodology and Notes: see appendices

2.10.2 Biofuels

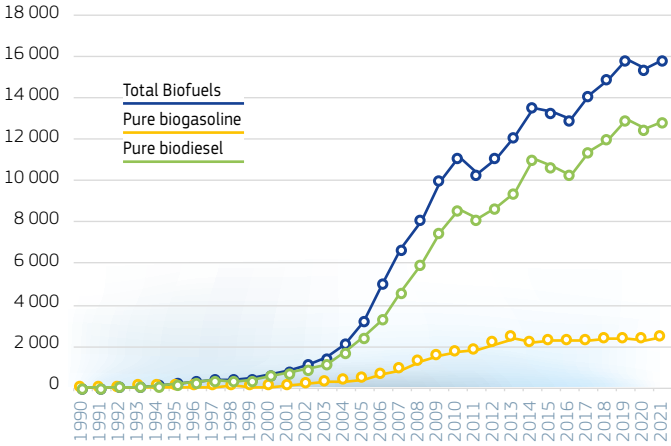
EU27_2020 – BY FUEL

	Production			Share in Transport Fuels		
	Total Biofuels	Pure biogasoline	Pure biodiesel	of liquid biofuels in total transport liquid fuels	of Biogasoline in Motor Gasoline %	of Biodiesel in Gas/Diesel Oil %
	ktoe			%		
1990	6	0	6	0.0%	0.0%	0.0%
1991	7	0	7	0.0%	0.0%	0.0%
1992	20	2	16	0.0%	0.0%	0.0%
1993	47	18	25	0.0%	0.0%	0.0%
1994	133	25	96	0.0%	0.0%	0.1%
1995	222	25	188	0.1%	0.0%	0.1%
1996	314	39	270	0.1%	0.0%	0.1%
1997	403	54	340	0.1%	0.0%	0.2%
1998	385	63	312	0.1%	0.1%	0.1%
1999	442	59	371	0.1%	0.1%	0.2%
2000	639	60	564	0.2%	0.1%	0.3%
2001	792	71	696	0.2%	0.1%	0.3%
2002	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	12144	2408	9399	3.9%	3.5%	4.3%
2014	13528	2188	11044	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	14114	2264	11408	4.5%	3.7%	5.0%
2018	14922	2368	12012	5.0%	4.0%	5.6%
2019	15836	2363	12935	5.1%	4.0%	5.8%
2020	15401	2289	12486	5.8%	4.6%	6.4%
2021	15869	2418	12846	5.8%	4.8%	6.4%

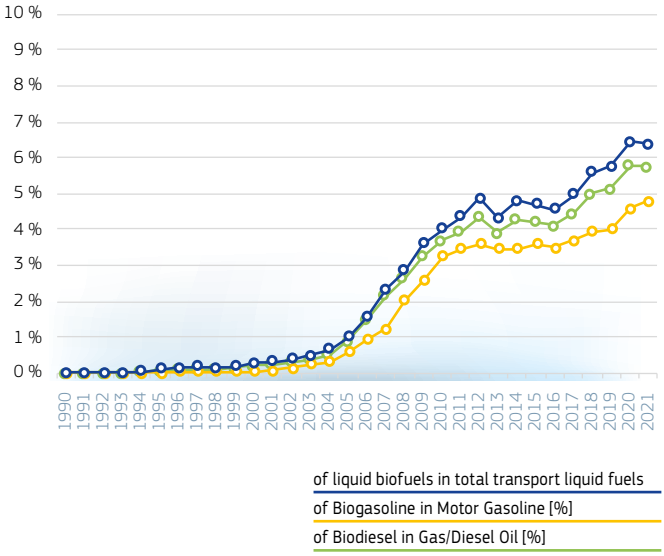
source: Eurostat April 2023
Methodology and Notes: see appendices

2.10.2 Biofuels

EU27-2020 – PRODUCTION BIOFUELS – 1990-2021 (ktoe)



EU27_2020 – BIOFUELS SHARE IN TRANSPORT LIQUID FUELS – 1990-2021 (%)



source: Eurostat April 2023
Methodology and Notes: see appendices

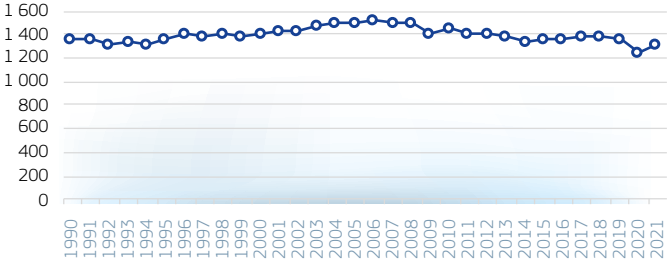
2.11 Energy Efficiency

2.11.1 Primary Energy Consumption 2020-2030*

ALL FUELS

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

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



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

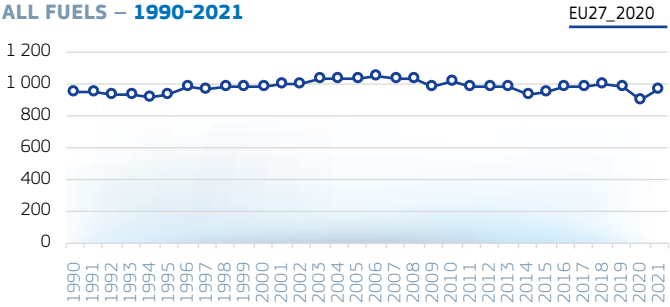
source: Eurostat April 2023
Methodology and Notes: see appendices

2.11.2 Final Energy Consumption 2020-2030*

ALL FUELS

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

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



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

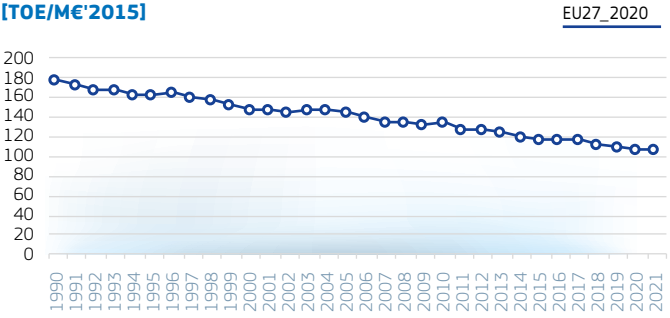
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.11.3 Energy Intensity

ALL FUELS

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

ENERGY INTENSITY – ALL FUELS – 1990-2021 [TOE/M€'2015]



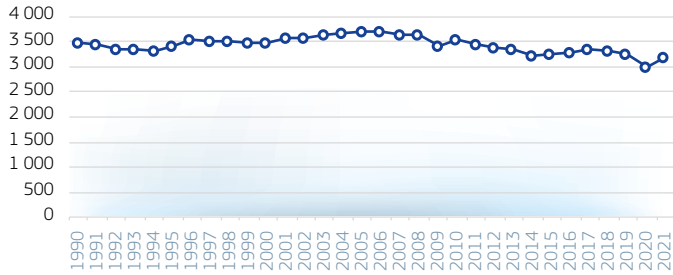
Source: Eurostat, DG Economic and Financial Affairs, April 2023
Methodology and Notes: see appendices

2.11.4 Energy Consumption per Capita

GROSS INLAND CONSUMPTION (ALL FUELS) PER POPULATION

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

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



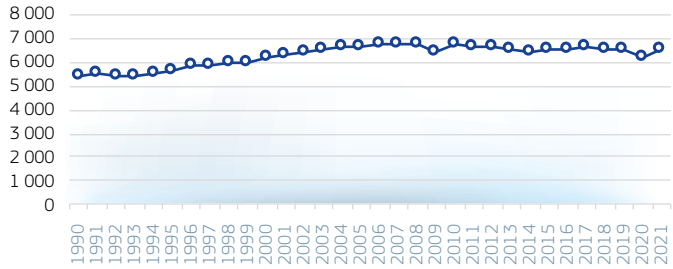
source: Eurostat April 2023
Methodology and Notes: **see appendices**

2.11.5 Final Electricity Consumption per Capita

ALL FUELS

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

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



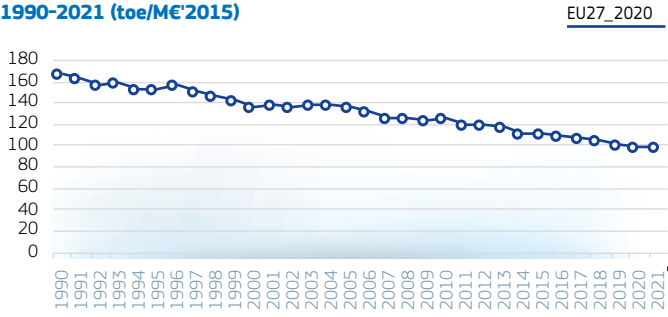
source: Eurostat April 2023
Methodology and Notes: see appendices

2.11.6 Primary Energy Intensity 2020-2030*

ALL FUELS

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

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



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

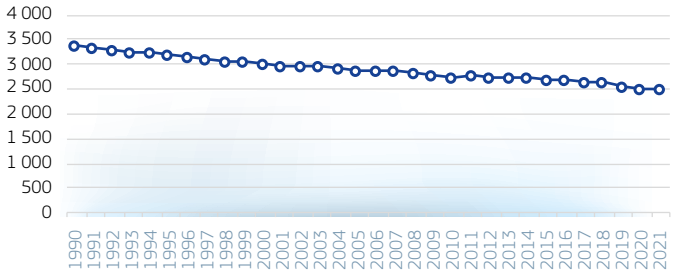
Source: Eurostat, DG Economic and Financial Affairs, April 2023
Methodology and Notes: **see appendices**

2.11.7 Greenhouse Gas (GHG) Intensity of Energy

ALL FUELS

kg CO_2/toe	2000	2010	2015	2019	2020	2021
EU27_2020	3028	2746	2708	2554	2507	2491
Index2000	100%	91%	89%	84%	83%	82%
BE	2584	2272	2299	2169	2156	2034
BG	3097	3347	3267	2904	2717	2823
CZ	3703	3126	3097	2920	2829	2792
DK	3815	3300	3029	2807	2748	2677
DE	3095	2829	2897	2676	2614	2632
EE	3720	3581	3736	3000	2552	2766
IE	4978	4339	4512	4304	4380	4435
EL	4631	4296	4104	3828	3756	3720
ES	3168	2823	2833	2594	2493	2505
FR	2142	2078	2178	2065	2341	2062
HR	3052	3006	2936	2891	2899	2846
IT	3254	3010	2924	2797	2746	2750
CY	3807	3760	3986	3809	3902	3861
LV	2659	2643	2533	2502	2448	2397
LT	2667	2954	2845	2648	2668	2577
LU	3588	2283	3423	2827	3392	3137
HU	3016	2529	2490	2457	2421	2359
MT	3493	3279	4310	3499	4278	4088
NL	2938	2611	2692	2539	2382	2354
AT	2817	2491	2403	2385	2318	2309
PL	4430	4028	4025	3678	3625	3672
PT	3334	2967	3031	2872	2791	2717
RO	3881	3633	3697	3500	3481	3372
SI	2871	2739	2614	2570	2524	2465
SK	2769	2594	2525	2361	2267	2323
FI	2177	2101	1746	1619	1516	1444
SE	1474	1318	1185	1072	1053	1027

GHG INTENSITY OF ENERGY – 1990-2021 (kg CO_2/toe) EU27_2020



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

2.12 Renewable Energy (RES) Indicators

2.12.1 Renewable Energy (RES) Shares*

OVERALL AND HEATING & COOLING

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

* of the Gross Final Energy

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

source: Eurostat-RES SHARES March 2023
Methodology and Notes: see appendices

2.12.1 Renewable Energy (RES) Shares*

ELECTRICITY AND TRANSPORT

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

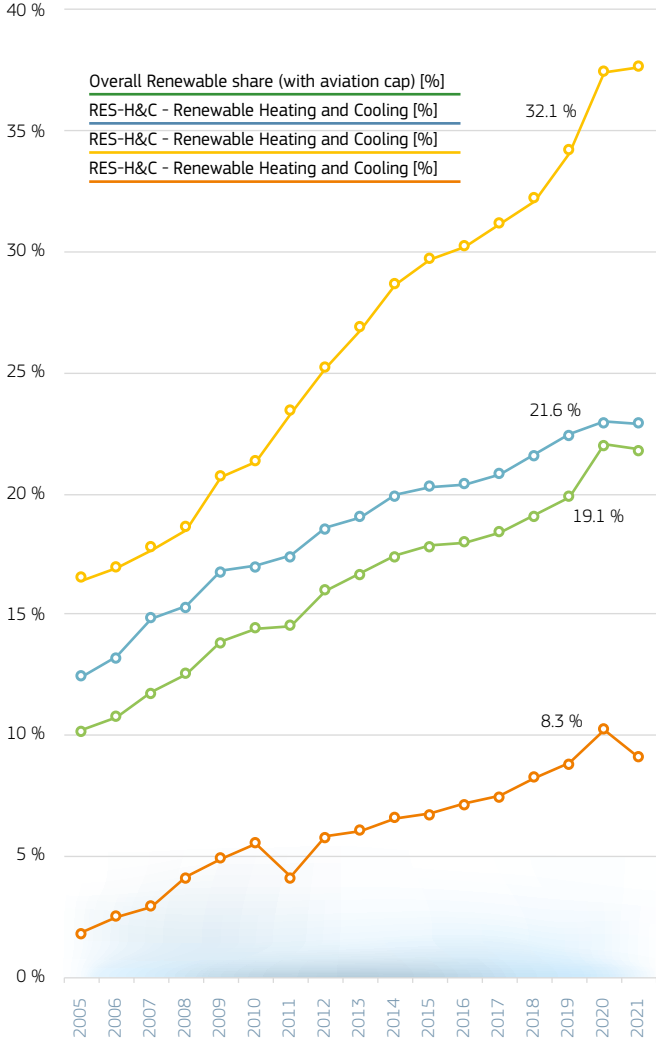
* of the Gross Final Energy

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

source: Eurostat-RES SHARES March 2023
Methodology and Notes: see appendices

2.12.1 Renewable Energy (RES) Shares*

IN THE GROSS FINAL ENERGY CONSUMPTION – EU27_2020 (%)



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

source: Eurostat-RES SHARES March 2023
Methodology and Notes: **see appendices**

2.13 Energy Prices and Taxes

2.13.1 Prices of Transport Fuels

AUTOMOTIVE DIESEL OIL – ALL TAXES INCLUDED*

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

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

2.13.1 Prices of Transport Fuels

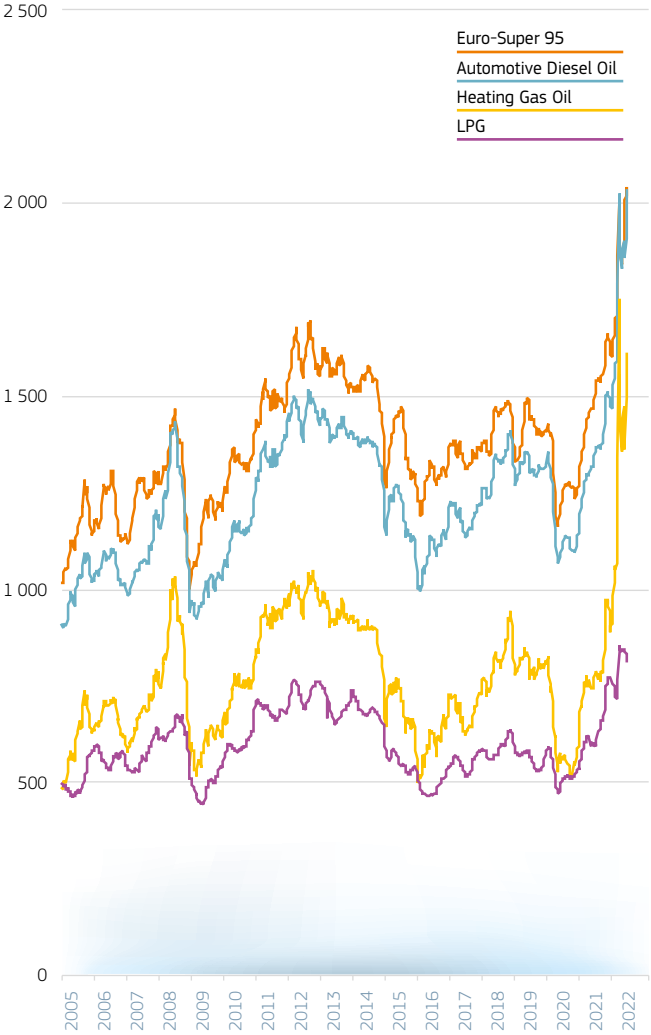
EURO-SUPER 95 – ALL TAXES INCLUDED*

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

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	2015	2019	2020	2021
EU27_2020	15.50	17.22	20.14	20.05	19.31	21.72
BE	14.33	16.78	17.24	15.92	13.84	18.78
BG	9.67	11.98	10.86	12.27	9.67	19.65
CZ	13.11	14.35	16.21	16.32	15.51	15.40
DK	23.64	26.81	24.48	21.41	20.74	34.64
DE	16.35	15.86	18.93	16.33	17.21	19.23
EE	10.07	11.14	10.68	12.38	11.43	20.82
IE	15.29	14.63	20.11	21.22	19.49	21.74
EL			20.83	16.30	14.37	28.16
ES	14.88	15.00	26.57	28.35	24.71	30.06
FR	16.20	15.98	20.35	23.31	20.87	21.89
HR	9.10	10.54	12.76	11.28	10.49	11.04
IT	14.84	21.86	25.13	25.96	24.92	27.91
CY						
LV	10.52	11.28	13.47	9.74	7.77	12.01
LT	11.29	12.59	12.12	11.27	8.21	11.38
LU	12.82	13.13	13.40	11.49	10.17	17.76
HU	13.23	15.38	9.78	9.29	8.56	8.47
MT						
NL	18.73	19.99	22.30	26.80	28.05	30.47
AT	17.23	16.71	19.75	18.73	18.23	19.30
PL	12.78	14.04	13.84	12.91	11.65	13.13
PT	16.52	17.49	27.28	21.56	21.74	21.46
RO	7.45	7.73	9.45	9.23	8.90	13.19
SI	14.96	18.68	16.91	15.59	15.26	16.32
SK	13.21	12.39	13.74	13.35	13.33	11.75
FI						
SE	26.12	29.48	32.58	32.43	39.50	57.18

* All Taxes and levies Included

**Prices from second semester each year

source: Eurostat June 2023
Methodology and Notes: **see appendices**

2.13.2 Fuel Prices* – Domestic Consumers

ELECTRICITY – BAND DC

2 500 kWh < CONSUMPTION < 5 000 kWh

2ND SEMESTER**

€/100 kWh	2009	2010	2015	2019	2020	2021
EU27_2020	16.77	17.77	20.89	21.68	21.32	23.69
BE	18.64	19.74	23.52	28.60	27.02	29.94
BG	8.18	8.30	9.57	9.58	9.82	10.91
CZ	15.33	15.49	14.08	17.70	17.95	18.83
DK	25.55	27.08	30.42	29.24	28.19	34.48
DE	22.94	24.38	29.46	28.78	30.06	32.34
EE	9.20	10.04	12.91	14.11	12.91	19.39
IE	18.55	18.75	24.54	25.46	26.16	29.74
EL	10.32	12.11	17.71	15.51	16.41	19.74
ES	16.84	18.51	23.70	23.94	22.98	28.16
FR	12.07	13.50	16.82	19.13	19.58	20.22
HR	11.64	11.53	13.12	13.24	13.07	13.13
IT	19.97	19.20	24.28	23.41	21.53	23.60
CY	16.42	20.21	18.38	22.36	16.98	23.04
LV	10.54	10.48	16.50	16.40	14.32	18.86
LT	9.26	12.16	12.43	12.54	13.21	14.77
LU	18.82	17.47	17.67	17.99	19.85	19.89
HU	16.62	15.74	11.45	10.97	10.09	10.01
MT	15.13	16.53	12.69	13.04	13.01	13.18
NL	19.06	17.89	18.46	20.55	13.61	14.49
AT	19.09	19.30	19.83	20.74	21.67	22.85
PL	12.91	13.82	14.18	13.76	15.10	15.74
PT	15.94	16.66	22.85	21.81	21.33	21.70
RO	9.79	10.52	13.19	14.21	14.49	16.02
SI	13.41	14.26	16.31	16.66	16.94	17.11
SK	15.60	16.37	15.17	15.85	17.24	16.24
FI	12.89	13.70	15.30	17.83	17.73	18.40
SE	16.46	19.58	18.74	20.52	20.17	26.04

* All Taxes and levies Included

**Prices from second semester each year

source: Eurostat June 2023
Methodology and Notes: see appendices

2.13.3 Fuel Prices*– Industrial Consumers

GAS – BAND I3

10 000 GJ < CONSUMPTION < 100 000 GJ

2ND SEMESTER**

€/GJ (GCV)	2009	2010	2015	2019	2020	2021
EU27_2020	8.61	9.42	9.53	8.53	7.73	11.55
BE	8.50	8.20	7.94	6.32	5.76	9.45
BG	5.96	8.41	7.49	7.75	5.60	14.11
CZ	7.56	10.07	8.17	7.95	7.01	9.12
DK	6.85	10.72	10.19	8.38	8.19	21.99
DE	9.61	11.09	10.47	8.32	8.02	10.54
EE	6.39	7.85	7.54	9.26	6.88	18.61
IE	7.31	8.80	10.28	8.94	8.73	15.49
EL			10.00	9.28	5.92	13.87
ES	7.53	8.08	8.81	8.53	6.52	9.38
FR	8.80	9.69	10.19	10.22	9.71	14.00
HR	7.43	10.95	9.74	8.32	7.51	10.61
IT	7.83	8.34	8.87	8.22	7.23	11.17
CY						
LV	7.69	8.84	8.17	7.76	5.89	12.53
LT	7.55	9.40	6.05	7.63	5.91	19.97
LU	10.03	11.72	10.33	7.90	7.88	12.67
HU	10.06	9.93	9.38	7.60	6.14	12.83
MT						
NL	9.72	8.62	8.91	7.90	7.72	12.47
AT	9.07	9.78	10.50	8.60	8.31	13.24
PL	8.36	9.02	9.39	9.33	8.09	11.43
PT	7.22	9.28	10.52	8.70	6.73	9.37
RO	5.93	6.11	8.05	8.76	6.78	12.15
SI	9.61	11.81	10.57	9.40	8.74	12.74
SK	8.91	10.22	9.63	9.92	8.88	9.13
FI	8.00	9.13	11.73	15.41	13.62	28.03
SE	12.47	13.43	11.61	9.92	14.97	28.47

* Excluding VAT and other recoverable taxes and levies

**Prices from second semester each year

source: Eurostat June 2023

Methodology and Notes: **see appendices**

2.13.3 Fuel Prices – Industrial Consumers

FUELS PRICES – INDUSTRIAL CONSUMERS*

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

2ND SEMESTER**

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

* Excluding VAT and other recoverable taxes and levies

**Prices from second semester each year

source: Eurostat June 2023
Methodology and Notes: see appendices

3 Socio-Economic indicators in the EU

3 Socio-Economic indicators in the EU

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

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

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

3.2.1 Number of Enterprises in the Energy Sector

NUMBER OF ENTERPRISES
ENTERPRISES SURVEY

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

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

3.2.1 Number of Enterprises in the Energy Sector

NUMBER OF ENTERPRISES

ENTERPRISES SURVEY

	Extraction of Peat (B08.92)				Support Activities for Petroleum and Natural Gas Extraction (B09.1)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020	*985*	*981*	964	*940*	*540*	*851*	1 040	*1 022*
BE	0	0		*0*			9	*0*
BG	10	4			6	14	7	*9*
CZ		17	9	*10*	7	6	6	*7*
DK	4	2	2	*2*	35	55	70	*6*
DE	74	91	87	*70*			75	*70*
EE	39	41	39	*40*	0	0	1	*59*
IE			39		34	35	36	*0*
EL	0		0			9	7	*43*
ES	6	7	10	*6*		46	38	*4*
FR	23	39	7	*8*	36	54	20	*38*
HR	0	0	0	*0*	7	4	4	*20*
IT	12	4				52		*4*
CY	0	0	0	*0*				*30*
LV	49	91	140	*97*	0	2	0	
LT	24	26	21	*24*	0	0	0	*0*
LU	0	0	0	*0*	0	0	0	*0*
HU	15	13	12	*12*	40	37	30	*0*
MT	0	0	0	*0*				*31*
NL	7	6	6	*6*	116	251	394	*11*
AT	7	5	4	*3*	8	7	7	*394*
PL	45	32	40	*43*	90	104	146	*7*
PT	1	1	1	*1*	1	4	6	*146*
RO	8	5	3	*4*	91	106	97	*5*
SI	0	0	0	*0*	3	2	2	*100*
SK		42	53					*2*
FI	463	450	433	*445*	0	0	0	
SE	82	70	53	*54*	45	63	36	*0*

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

3.2.1 Number of Enterprises in the Energy Sector

NUMBER OF ENTERPRISES
ENTERPRISES SURVEY

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

Italics, blue: DG ENER estimates

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

Methodology and Notes in the annexes

3.2.2 Turnover in the Energy Sector

TURNOVER
ENTERPRISES SURVEY
EU27_2020

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

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

3.2.2 Turnover in the Energy Sector

TURNOVER
ENTERPRISES SURVEY

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

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

3.2.2 Turnover in the Energy Sector

TURNOVER
ENTERPRISES SURVEY

Mio €	Extraction of Peat (B08.92)				Support Activities for Petroleum and Natural Gas Extraction (B09.1)			
	2010	2015	2020	2021	2010	2015	2020	2021
EU27_2020	*1 700*	1 288	*1 725*	*1 380*		4 455	5 283	*3 213*
BE	0	0		*0*			2	
BG	1					0		
CZ		7	3	*3*	46			
DK						633	601	*787*
DE	418	400	445	*459*			903	*932*
EE	77	84		*90*	0	0		*0*
IE			13		74	10	15	*21*
EL	0		0			29	0	*0*
ES	11	10	12	*13*		99	46	*52*
FR	74	52	46	*49*	302	266		*322*
HR	0	0	0	*0*				
IT	12	5		*5*		2 238		*338*
CY	0	0	0	*0*				
LV	101	151		*204*			0	*0*
LT	40	61			0	0	0	*0*
LU	0	0	0	*0*	0	0	0	*0*
HU	3	5	5	*6*	95	133	24	*26*
MT	0	0	0	*0*				
NL								
AT					14			
PL			80		378	326	294	*285*
PT							1	*1*
RO	0	1	3	*2*	874	638	519	*340*
SI	0	0	0	*0*				
SK		12	1					
FI	554	472		*455*	0	0	0	*0*
SE	31	29	17	*16*		84	4	*3*

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2023
Methodology and Notes in the annexes

3.2.2 Turnover in the Energy Sector

TURNOVER
ENTERPRISES SURVEY

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

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

3.2.3 Number of Persons Declared as Employed in the energy sector

NUMBER OF PERSONS DECLARED AS EMPLOYED ENTERPRISES SURVEY EU27_2020

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

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

3.2.3 Number of Persons Declared as Employed in the energy sector

NUMBER OF PERSONS DECLARED AS EMPLOYED ENTERPRISES SURVEY

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

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

3.2.3 Number of Persons Declared as Employed in the energy sector

NUMBER OF PERSONS DECLARED AS EMPLOYED ENTERPRISES SURVEY

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

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

3.2.3 Number of Persons Declared as Employed in the energy sector

NUMBER OF PERSONS DECLARED AS EMPLOYED ENTERPRISES SURVEY

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

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

3.3 Economy

3.3.1 GDP at Current Market Prices

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

* Units in Milliard - Long Scale = 1000 Million €
Source: DG Economic and Financial Affairs, AMECO, April 2022
Methodology and Notes in the annexes

3.3.2 GDP per Capita at Current Market Prices

GDP PER CAPITA AT CURRENT MARKET PRICES

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

* 1000 €' per Capita
Source: DG Economic and Financial Affairs, AMECO, April 2022
Source: Eurostat, Demography and migration, April 2022
Methodology and Notes in the annexes

3.3.3 GDP at 2015 Market Prices

GDP AT 2015 MARKET PRICES

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

*Units in Milliard - Long Scale = 1000 Millions Euro
Source: DG Economic and Financial Affairs, AMECO, April 2022
Source: Eurostat, Demography and migration, April 2022
Methodology and Notes in the annexes

3.3.4 GDP per Capita at 2015 Market Prices

GDP PER CAPITA AT 2015 MARKET PRICES

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

* 1000 €' 2010 per Capita
Source: DG Economic and Financial Affairs, AMECO, April 2022
Source: Eurostat, Demography and migration, April 2022
Methodology and Notes in the annexes

3.4 Demography

3.4.1 Population

POPULATION ON 1ST JANUARY

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

Source: Eurostat, Demography and migration, April 2022

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	249.3	245.2	207.9
B06 - Extraction of crude petroleum and natural gas	64.3	54.6	57.3	56.5
B0892 - Extraction of peat*	*10.7*	9.1	*0.2*	*0.2*
B091 - Support activities for petroleum and natural gas extraction*	*36.8*	*0.0*	14.9	*14.9*
C19 - Manufacture of coke and refined petroleum products	*160.7*	*165.5*	159.4	144.5
D35 - Electricity, gas, steam and air conditioning supply	1 370.3	1 409.8	1 457.4	1 495.3
Broad Sector - Total Employment**	1 931.4	1 888.3	1 934.3	*1 919.2*

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

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

Italics, blue: DG ENER estimates

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

Methodology and Notes in the annexes

3.5.2 Employment Rate

EMPLOYMENT RATE IN ALL ECONOMIC SECTORS (15-64 YEARS)* MEMBER STATES' DATA - ALL SECTORS

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

*Percentage of active population
Source: Eurostat, Labour Force Sourvey (LFS), April 2022
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	9.8	10.0	6.7	7.2	7.1
BE	8.5	8.3	8.5	5.4	5.8	5.6
BG	10.1	10.3	9.2	4.2	6.1	4.3
CZ	7.9	7.3	5.1	2.0	2.6	2.2
DK	4.8	7.7	6.3	5.0	5.6	4.5
DE	11.2	7.0	4.6	3.1	3.7	3.1
EE	8.0	16.7	6.2	4.4	6.9	5.6
IE	4.6	14.6	10.0	5.0	5.9	4.5
EL	10.0	12.7	24.9	17.3	17.6	12.5
ES	9.2	19.9	22.1	14.1	15.5	12.9
FR	8.5	8.9	10.1	8.1	7.5	7.3
HR	12.8	11.7	16.2	6.6	7.5	7
IT	7.7	8.4	11.9	10.0	9.3	8.1
CY	5.3	6.3	15.0	7.1	7.6	6.8
LV	10.0	19.5	9.9	6.3	8.1	6.9
LT	8.3	17.8	9.1	6.3	8.5	6
LU	4.5	4.4	6.7	5.6	6.8	4.6
HU	7.2	11.2	6.8	3.4	4.1	3.6
MT	6.9	6.9	5.4	3.6	4.4	2.9
NL	5.9	5.0	6.9	3.4	4.9	3.5
AT	5.6	4.8	5.7	4.5	6.0	4.8
PL	17.8	9.7	7.5	3.3	3.2	2.9
PT	7.7	11.0	12.6	6.5	7.0	6
RO	7.2	7.0	6.8	3.9	6.1	5.6
SI	6.5	7.3	9.0	4.5	5.0	4
SK	16.3	14.4	11.5	5.8	6.7	6.1
FI	8.4	8.4	9.4	6.7	7.7	6.8
SE	7.5	8.6	7.4	6.8	8.5	7.5

*Percentage of active population

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

Methodology and Notes in the annexes

4 Environment Indicators in the EU

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

*GHG emissions without LULUCF, with indirect CO_2 and including international aviation
Source: EEA, June 2023, Eurostat 2023
Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - ENERGY

[Million ton CO_2 equiv.]	2021								
	Energy	*of which:*							
		Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emissions
EU27_2020	2 669.7	840.4	439.5	782.1	129.9	324.7	77.9	6.9	68.1
Share [%]	100.3%	31.6%	16.5%	29.4%	4.9%	12.2%	2.9%	0.3%	2.6%
BE	82.2	18.2	14.0	23.9	5.9	16.6	2.9	0.1	0.8
BG	40.4	22.1	4.6	9.9	0.4	1.2	0.5	0.0	1.8
CZ	89.0	41.1	12.9	18.9	2.6	9.0	1.2	0.3	2.9
DK	28.7	8.3	3.8	12.2	0.8	1.6	1.4	0.2	0.4
DE	643.3	240.5	126.1	147.6	33.5	83.5	6.3	1.0	4.8
EE	10.4	7.0	0.4	2.4	0.3	0.2	0.2	0.0	0.0
IE	35.0	10.2	4.6	11.0	1.5	6.9	0.7	0.0	0.1
EL	53.6	25.5	4.8	16.8	0.6	4.8	0.6	0.0	0.5
ES	216.4	41.2	46.7	85.5	9.9	16.1	12.4	0.4	4.1
FR	338.6	54.7	52.7	134.5	21.2	52.4	12.0	2.7	8.3
HR	16.3	3.8	2.4	6.3	0.7	2.0	0.8	0.0	0.4
IT	333.1	86.4	53.9	103.3	25.0	50.4	7.8	0.3	6.0
CY	6.2	3.1	0.5	2.1	0.1	0.3	0.1	0.0	0.0
LV	7.1	1.4	0.7	3.2	0.5	0.6	0.5	0.0	0.1
LT	12.3	2.8	1.3	6.1	0.3	1.0	0.3	0.0	0.5
LU	10.6	1.0	1.3	6.9	0.3	1.1	0.0	0.0	0.1
HU	46.2	11.5	5.2	14.0	2.9	8.9	1.6	0.1	2.1
MT	2.6	1.9	0.0	0.6	0.0	0.0	0.0	0.0	0.0
NL	137.6	47.4	27.8	25.5	6.8	17.5	10.6	0.2	1.7
AT	52.2	8.9	10.9	21.9	1.6	7.5	1.0	0.0	0.4
PL	336.2	160.2	30.1	68.4	7.7	35.2	11.4	0.0	23.1
PT	37.0	8.2	7.3	15.9	1.0	2.1	1.4	0.1	1.1
RO	78.0	18.9	14.5	19.6	2.1	9.7	1.7	1.1	10.5
SI	12.8	4.2	1.7	5.2	0.3	0.8	0.2	0.0	0.4
SK	27.5	7.0	7.0	7.5	1.5	3.5	0.4	0.1	0.6
FI	34.2	13.4	6.4	10.0	1.2	1.1	1.4	0.8	:
SE	33.2	9.0	6.3	15.4	0.7	0.6	1.1	0.0	0.1

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

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NOT ENERGY RELATED

	2021					
		of which:				
[Million ton CO_2 equiv.]	GHG emissions other than from energy	Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO_2	International aviation
EU27_2020	809.0	317.9	378.4	109.3	3.3	69.8
Share [%]	100.0%	39.3%	46.8%	13.5%	0.4%	
BE	28.8	18.2	9.4	1.3	0.0	4.6
BG	13.5	4.5	6.1	2.8	0.1	0.5
CZ	30.4	16.2	7.8	5.7	0.7	0.4
DK	15.4	1.9	12.1	1.2	0.2	1.3
DE	118.0	57.2	56.3	4.5	0.0	18.3
EE	2.2	0.3	1.6	0.3	0.0	0.1
IE	27.1	3.2	23.0	0.9	0.0	1.3
EL	23.9	10.0	8.0	5.9	0.0	2.5
ES	72.8	24.1	34.4	14.3	0.0	8.3
FR	145.8	51.5	71.8	21.5	1.0	17.1
HR	8.2	3.6	2.7	1.9	0.0	0.3
IT	84.8	31.9	32.7	20.2	0.0	5.0
CY	2.6	1.3	0.6	0.7	0.0	0.6
LV	3.7	0.9	2.3	0.6	0.0	0.2
LT	8.0	2.8	4.3	0.9	0.0	0.2
LU	1.4	0.7	0.6	0.1	0.0	1.2
HU	18.1	7.1	7.2	3.7	0.0	0.4
MT	0.4	0.2	0.1	0.1	0.0	0.3
NL	30.3	8.3	18.0	3.5	0.5	7.3
AT	25.4	17.0	7.2	1.2	0.0	1.2
PL	63.8	24.6	34.0	4.7	0.5	2.5
PT	19.6	7.1	7.3	5.0	0.2	2.0
RO	38.5	12.8	19.2	6.5	0.0	0.2
SI	3.4	1.1	1.8	0.4	0.0	0.0
SK	13.9	9.5	2.4	1.9	0.0	0.1
FI	13.5	5.3	6.3	1.8	0.1	0.8
SE	14.6	7.0	6.7	1.0	0.0	1.0

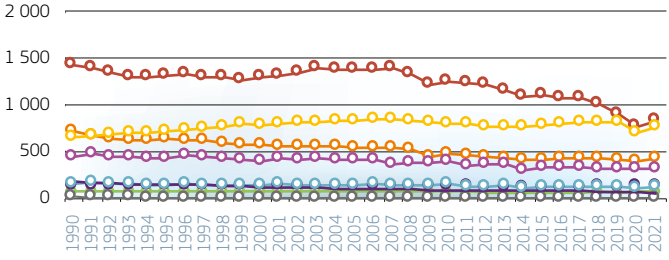
Source: EEA, June 2023, Eurostat 2023
Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS – NATIONAL TOTAL AND ENERGY RELATED EU27_2020

[Million ton CO_2 equiv.]	GHG emissions – National total *	*of which:* Energy	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emission
1990	4921	3747.1	1442.1	729.1	672.5	172.2	449.7	90.8	22.1	190.8
1995	4626	3520.5	1318.7	645.5	724.8	149.2	438.1	89.4	10.0	154.9
2000	4537	3454.1	1304.5	586.7	798.3	144.0	408.1	84.8	8.5	127.8
2001	4585	3519.7	1329.5	575.2	812.4	157.3	437.0	84.7	8.1	123.7
2002	4568	3516.6	1352.1	565.7	821.2	151.1	420.9	82.6	8.4	123.1
2003	4652	3593.9	1399.4	571.5	830.7	151.9	433.1	83.2	9.2	124.0
2004	4659	3586.8	1392.4	564.6	849.1	154.3	425.8	83.8	10.3	116.8
2005	4638	3569.0	1383.8	556.5	847.4	154.4	426.8	83.9	10.8	116.2
2006	4639	3568.8	1391.3	546.0	855.5	162.0	420.5	81.0	9.7	112.5
2007	4609	3525.6	1405.5	558.8	864.0	142.8	368.6	78.1	9.6	107.8
2008	4516	3461.8	1336.6	539.3	844.9	157.0	399.0	79.1	9.3	105.9
2009	4192	3225.4	1235.8	447.7	823.1	154.3	389.5	77.6	8.0	97.4
2010	4281	3305.4	1254.2	480.7	817.6	163.3	413.0	79.8	7.8	96.7
2011	4173	3200.4	1245.6	468.7	808.2	140.6	362.0	78.9	8.1	96.4
2012	4097	3142.1	1228.5	450.9	778.7	140.7	372.5	76.3	7.0	94.4
2013	4011	3060.5	1167.8	432.8	772.7	142.5	375.1	76.3	7.0	93.2
2014	3872	2912.4	1106.4	420.0	778.1	124.9	316.9	76.0	6.8	90.1
2015	3921	2966.8	1114.0	429.0	793.2	130.5	335.2	75.4	6.9	89.6
2016	3930	2967.3	1089.1	434.1	810.7	130.9	341.3	75.5	6.1	85.5
2017	3960	2980.3	1083.3	441.3	825.0	131.3	338.5	75.9	6.1	84.9
2018	3881	2906.2	1023.7	442.4	826.5	127.6	328.4	77.0	5.6	80.8
2019	3724	2764.0	905.3	428.6	832.7	125.2	321.2	76.5	6.1	74.5
2020	3360	2500.3	778.1	412.8	720.2	122.1	319.4	78.2	6.1	69.5
2021	3541	2662.7	840.4	439.5	782.1	129.9	324.7	77.9	6.9	68.1

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



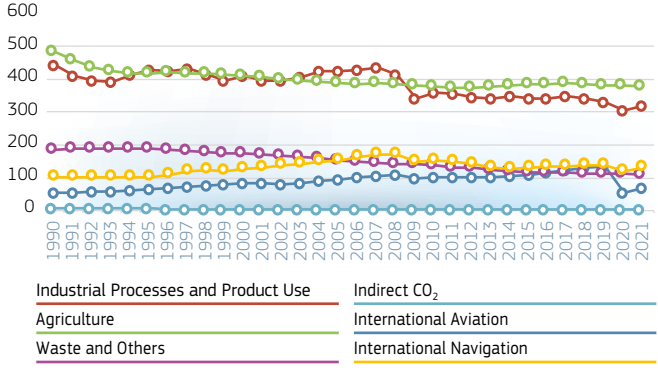
*GHG emissions without LULUCF, with indirect CO_2 and including international aviation
Source: EEA, June 2023, Eurostat 2023
Methodology and Notes: see appendices

4.1.1 Greenhouse gas (GHG) Emissions

GHG EMISSIONS - NOT ENERGY RELATED EU27_2020

[Million ton CO_2 equiv.]	GHG emissions - National total	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	4921	1119.9	444.7	484.6	184.2	6.4	54.1	102.1
1995	4626	1039.6	426.9	419.0	188.0	5.7	65.7	102.6
2000	4537	997.9	409.5	409.3	174.0	5.1	85.0	128.1
2001	4585	980.5	396.6	407.7	171.3	4.9	84.3	132.7
2002	4568	969.1	396.2	400.5	167.7	4.8	81.9	138.8
2003	4652	972.5	407.4	395.3	165.1	4.7	85.5	141.6
2004	4659	982.0	424.2	393.7	159.5	4.6	90.5	149.6
2005	4638	972.9	424.7	389.2	154.3	4.6	96.1	153.7
2006	4639	969.2	427.8	386.1	150.8	4.6	101.2	164.5
2007	4609	977.2	436.8	389.1	146.9	4.5	105.8	171.7
2008	4516	946.6	413.0	386.6	142.7	4.3	107.4	169.5
2009	4192	867.5	341.7	381.5	140.3	3.9	98.7	150.7
2010	4281	875.3	358.1	376.3	137.0	3.9	100.4	151.6
2011	4173	869.5	357.5	375.7	132.5	3.8	102.8	150.4
2012	4097	853.2	344.8	375.5	129.3	3.6	101.7	140.1
2013	4011	848.1	342.7	377.7	124.3	3.4	102.7	132.2
2014	3872	855.4	349.2	382.8	120.0	3.4	104.7	128.5
2015	3921	845.6	339.9	384.3	118.2	3.4	108.5	129.2
2016	3930	847.4	342.1	386.4	115.7	3.3	115.1	132.9
2017	3960	855.8	349.7	388.2	114.6	3.3	124.2	134.7
2018	3881	844.6	342.9	385.1	113.4	3.1	130.4	137.8
2019	3724	827.3	331.5	380.2	112.4	3.0	133.0	136.6
2020	3360	803.3	306.8	382.0	111.4	3.1	56.1	121.0
2021	3541	809.0	317.9	378.4	109.3	3.3	69.8	129.1

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



*GHG emissions without LULUCF, with indirect CO_2 and including international aviation
Source: EEA, June 2023, Eurostat 2023
Methodology and Notes: see appendices

4.1.2 CO_2 Emissions

CO_2 EMISSIONS – NATIONAL TOTAL*

[Million ton CO_2]	1990	2010	2015	2019	2020	2021
EU27_2020	3933.7	3544.2	3213.1	3048.8	2697.4	2886.3
Index1990	100.0%	90.1%	81.7%	77.5%	68.6%	73.4%
BE	123.4	118.8	105.5	104.6	94.7	100.2
BG	77.4	48.4	48.7	43.0	37.0	42.8
CZ	166.9	119.4	106.7	103.0	92.7	97.7
DK	56.3	52.1	38.0	34.3	29.5	31.1
DE	1066.8	855.4	822.6	737.2	660.9	696.9
EE	37.0	19.1	16.0	12.5	9.3	10.5
IE	34.0	44.1	41.2	40.6	36.3	38.9
EL	85.9	99.9	77.8	69.7	56.9	60.1
ES	235.2	295.5	285.3	269.6	220.0	238.5
FR	407.2	428.5	441.2	397.1	403.0	381.3
HR	23.5	21.3	18.2	18.5	17.0	17.7
IT	443.2	445.3	371.5	352.8	307.1	342.2
CY	5.4	8.9	7.7	8.4	7.2	7.6
LV	19.9	8.9	7.6	8.1	7.2	7.5
LT	36.2	14.0	13.3	14.1	13.7	14.1
LU	12.2	9.7	13.4	11.9	12.5	12.3
HU	73.9	52.8	47.3	50.2	47.6	48.9
MT	2.6	2.8	2.9	2.8	2.9	2.9
NL	168.2	193.0	175.6	164.8	143.7	147.7
AT	63.0	74.1	68.5	70.9	63.2	67.2
PL	377.6	336.2	315.1	321.4	304.4	333.3
PT	46.9	55.7	55.5	52.0	43.4	42.1
RO	177.3	86.6	78.7	77.3	74.2	77.4
SI	15.1	16.5	13.7	14.1	12.9	13.1
SK	61.6	38.6	34.7	34.0	31.2	35.3
FI	58.1	65.8	46.2	45.1	38.7	38.8
SE	58.8	55.2	45.6	43.7	37.6	39.5

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

Source: EEA, June 2023, Eurostat 2023

Methodology and Notes: see appendices

4.1.2 CO_2 Emissions

CO_2 EMISSIONS - ENERGY

	2021								
		of which:							
[Million ton CO_2]	Energy	Energy Industries	Manufacturing Industries and Construction	Transport	Commercial/Institutional	Residential	Agriculture/Forestry/Fisheries	Other Sectors	Other Combustion and Fugitive Emissions
EU27_2020	2577.1	831.6	433.7	773.4	128.5	305.9	72.4	6.9	24.7
Share [%]	100.0%	32.4%	16.9%	30.1%	5.0%	11.9%	2.8%	0.3%	1.0%
BE	80.5	18.0	13.8	23.6	5.8	16.2	2.6	0.1	0.2
BG	38.5	22.0	4.5	9.8	0.4	0.8	0.5	0.0	0.6
CZ	84.6	40.8	12.8	18.7	2.6	7.8	1.2	0.3	0.4
DK	28.0	8.1	3.7	12.1	0.8	1.4	1.4	0.2	0.3
DE	632.5	236.0	125.0	146.0	33.3	82.3	6.1	1.0	2.8
EE	10.3	6.9	0.4	2.3	0.3	0.2	0.2	0.0	0.0
IE	34.4	10.1	4.6	10.9	1.5	6.7	0.6	:	:
EL	52.5	25.4	4.8	16.5	0.6	4.5	0.6	0.0	0.0
ES	212.4	40.8	45.4	84.6	9.8	15.3	12.3	0.4	3.9
FR	330.6	54.4	52.1	133.1	21.1	49.5	11.1	2.7	6.6
HR	15.5	3.7	2.4	6.2	0.7	1.5	0.7	0.0	0.3
IT	321.8	86.0	52.8	102.2	24.6	46.7	7.1	0.3	2.1
CY	6.1	3.1	0.5	2.0	0.1	0.3	0.1	0.0	0.0
LV	6.6	1.4	0.6	3.2	0.4	0.4	0.5	0.0	0.0
LT	11.7	2.7	1.3	6.1	0.3	0.8	0.2	0.0	0.2
LU	10.5	1.0	1.3	6.8	0.3	1.1	0.0	0.0	0.0
HU	43.5	11.4	5.2	13.8	2.9	8.3	1.6	0.1	0.2
MT	2.6	1.9	0.0	0.6	0.0	0.0	0.0	0.0	0.0
NL	134.5	47.0	27.7	25.2	6.8	17.1	9.3	0.2	1.3
AT	51.0	8.7	10.8	21.7	1.6	7.2	0.9	0.0	0.1
PL	310.5	159.5	29.8	67.6	7.6	31.5	10.2	0.0	4.3
PT	36.1	8.1	7.2	15.7	1.0	1.7	1.3	0.1	1.0
RO	67.4	18.8	14.4	19.3	2.0	8.3	1.6	1.1	1.9
SI	12.2	4.2	1.7	5.1	0.3	0.6	0.2	0.0	0.1
SK	26.5	6.9	7.0	7.4	1.5	3.2	0.3	0.1	0.1
FI	33.4	13.1	6.2	9.9	1.2	0.8	1.4	0.8	:
SE	32.4	8.7	6.2	15.2	0.6	0.5	1.1	0.0	0.0

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

4.1.2 CO_2 Emissions

CO_2 EMISSIONS - NOT ENERGY RELATED

	2021					
		of which:				
[Million ton CO_2]	CO_2 emissions other than from energy	Industrial Processes and Product Use	Agriculture	Waste and Others	Indirect CO_2	International aviation
EU27_2020	247.6	231.7	9.8	2.7	3.3	68.5
Share [%]	100.0%	93.6%	4.0%	1.1%	1.3%	
BE	15.3	14.9	0.2	0.3	:	4.5
BG	3.8	3.7	0.1	0.0	0.1	0.5
CZ	13.0	11.9	0.3	0.1	0.7	0.4
DK	2.1	1.5	0.3	0.0	0.2	1.3
DE	47.3	44.7	2.6	:	:	18.1
EE	0.1	0.1	0.0	0.0	:	0.1
IE	3.2	2.4	0.7	0.0	:	1.3
EL	5.1	5.1	0.0	0.0	:	2.5
ES	18.3	17.9	0.4	0.0	0.0	8.3
FR	36.4	31.7	2.1	1.7	1.0	16.9
HR	1.9	1.8	0.1	0.0	0.0	0.3
IT	15.8	15.2	0.5	0.1	0.0	5.0
CY	0.9	0.9	0.0	0.0	0.0	0.6
LV	0.7	0.6	0.1	0.0	0.0	0.2
LT	2.2	2.1	0.1	0.0	0.0	0.2
LU	0.6	0.6	0.0	0.0	0.0	1.2
HU	5.1	4.9	0.2	0.0	0.0	0.4
MT	0.0	0.0	0.0	0.0	0.0	0.3
NL	6.1	5.5	0.1	0.0	0.5	7.3
AT	15.1	14.9	0.1	0.0	0.0	1.2
PL	21.1	18.9	1.4	0.3	0.5	1.8
PT	4.1	3.8	0.0	0.0	0.2	2.0
RO	10.9	10.7	0.2	0.0	0.0	0.2
SI	0.8	0.8	0.0	0.0	0.0	0.0
SK	8.8	8.7	0.1	0.0	0.0	0.1
FI	4.5	4.2	0.2	0.0	0.1	0.8
SE	6.1	5.9	0.1	0.1	0.0	1.0

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

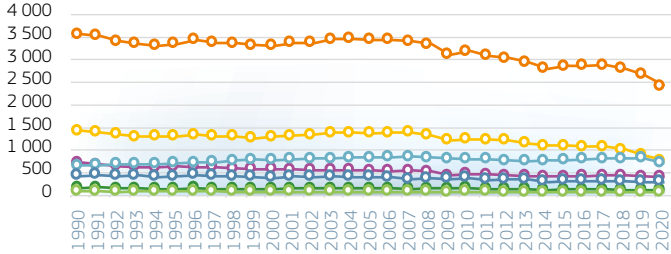
4.1.2 CO_2 Emissions

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

EU27_2020 - CO_2 EMISSIONS

Million ton CO_2



Energy
Energy Industries
Manufacturing Industries and Construction
Transport
Residential
Commercial/Institutional
Agriculture/Forestry/Fisheries

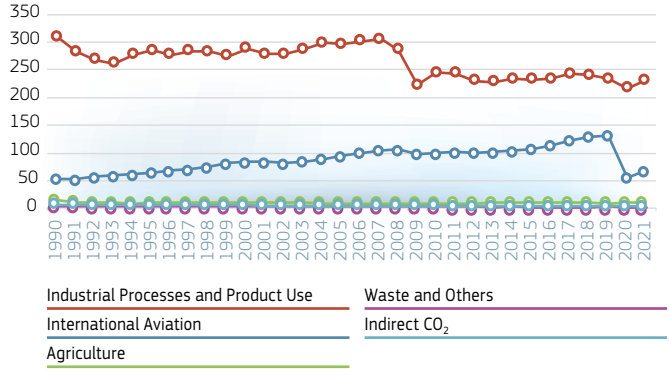
*CO_2 emissions without LULUCF, with indirect CO_2 and including international aviation
Source: EEA, June 2023, Eurostat 2023
Methodology and Notes: see appendices

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

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 2023, Eurostat 2023
Methodology and Notes: see appendices

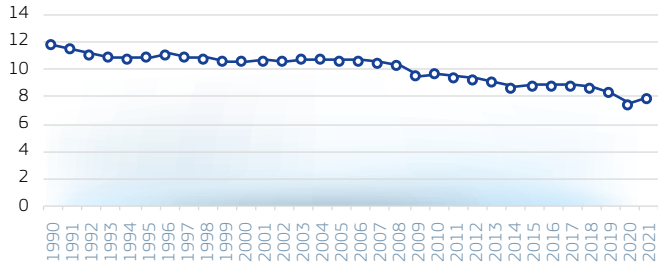
4.2 Main Emissions Indicators

4.2.1 Grenhouse Gas Emissions per Capita

MAIN EMISSIONS INDICATORS
GHG PER CAPITA

[t CO_2 eq./cap]	1990	2010	2015	2019	2020	2021
EU27_2020	11.8	9.7	8.8	8.3	7.5	7.9
Index1990	100.0%	82.5%	75.1%	70.9%	63.8%	67.3%
BE	15.0	12.7	11.0	10.6	9.6	10.0
BG	11.4	8.1	8.5	7.8	7.0	7.9
CZ	19.4	13.6	12.4	11.8	10.7	11.2
DK	14.3	12.1	9.2	8.4	7.5	7.7
DE	16.0	11.7	11.3	9.9	9.0	9.4
EE	25.7	15.9	13.8	11.1	8.6	9.6
IE	16.2	14.4	13.7	13.2	12.1	12.7
EL	10.5	11.0	9.1	8.4	7.2	7.5
ES	7.5	7.9	7.5	7.0	5.9	6.3
FR	9.5	8.7	8.5	7.7	7.8	7.4
HR	6.7	6.6	5.9	6.2	5.9	6.1
IT	9.3	9.0	7.5	7.3	6.5	7.1
CY	11.1	12.7	10.8	11.4	10.0	10.4
LV	9.9	5.8	5.6	6.1	5.6	5.8
LT	13.1	6.7	7.0	7.4	7.3	7.3
LU	34.6	21.1	25.4	20.9	21.5	20.9
HU	9.2	6.7	6.4	6.7	6.5	6.6
MT	7.9	7.4	7.4	6.4	6.3	6.3
NL	15.3	13.6	12.2	11.2	9.9	10.0
AT	10.5	10.4	9.4	9.4	8.4	8.8
PL	12.5	10.8	10.2	10.3	9.8	10.6
PT	6.1	6.8	6.9	6.7	5.8	5.7
RO	11.1	6.3	5.9	6.0	5.8	6.0
SI	9.4	9.7	8.2	8.3	7.6	7.6
SK	14.0	8.5	7.6	7.4	6.8	7.6
FI	14.5	14.4	10.4	10.0	8.8	8.8
SE	8.5	7.1	5.7	5.2	4.6	4.7

GHG PER CAPITA [t CO_2 eq./cap] EU27_2020



Source: EEA, June 2023, Eurostat 2023

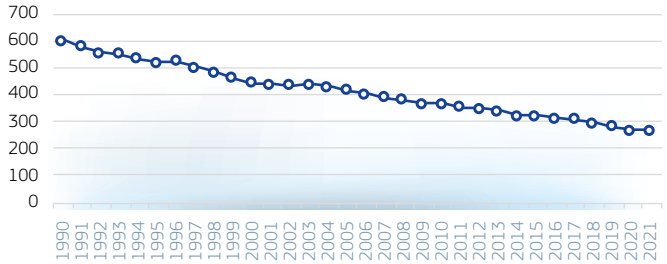
Methodology and Notes: see appendices

4.2.2 Greenhouse Gas to GDP Intensity

MAIN EMISSIONS INDICATORS
GHG TO GDP INTENSITY

[t CO_2/M€'15]	1990	2010	2015	2019	2020	2021
EU27_2020	599.0	367.9	321.0	279.8	267.5	267.5
Index1990	100.0%	61.4%	53.6%	46.7%	44.7%	44.6%
BE	563.3	352.9	296.2	272.6	262.5	257.3
BG	2921.3	1398.2	1332.1	1056.1	973.7	1017.0
CZ	1871.9	911.6	768.0	644.9	620.8	627.6
DK	402.2	262.0	191.6	161.6	149.1	146.3
DE	599.3	343.8	304.5	254.4	238.6	243.0
EE	3047.7	1211.9	878.5	608.5	476.2	489.5
IE	779.9	342.4	244.4	192.8	169.6	157.2
EL	745.7	563.4	560.5	490.6	459.2	441.3
ES	440.1	340.5	323.0	275.7	263.4	266.2
FR	369.3	268.3	257.6	220.1	240.5	214.7
HR	777.8	624.1	551.7	493.1	510.7	464.3
IT	372.4	310.8	275.1	251.5	247.1	251.0
CY	722.6	532.2	510.9	443.7	413.2	404.7
LV	1270.1	590.3	451.4	419.6	394.2	388.8
LT	1744.6	674.7	547.2	475.6	469.0	444.9
LU	614.3	217.8	264.1	215.5	227.5	213.2
HU	1183.7	660.1	556.4	494.2	499.1	475.3
MT	763.7	400.6	326.7	242.2	273.7	245.5
NL	542.3	338.4	298.5	255.3	235.6	229.3
AT	368.6	265.6	235.4	222.1	214.6	215.7
PL	2700.9	1110.2	897.6	757.7	739.9	745.9
PT	470.7	386.0	397.8	342.6	325.0	301.9
RO	2486.5	910.3	735.1	591.7	592.9	577.8
SI	768.8	522.1	437.2	380.6	368.3	343.1
SK	1949.3	648.4	512.6	448.2	430.2	454.8
FI	514.1	367.0	269.8	241.2	217.2	210.7
SE	273.0	162.6	122.4	107.5	97.2	95.5

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



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

5 Country Profiles

5 Country Profiles

Summary

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

5.1 European Union – 27 countries (from 2020)

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

Methodology and Notes: **see appendices**

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	613.2	790.2	889.7	946.4	962.9	991.0
Combustible Fuels	340.1	414.8	412.2	395.7	388.1	379.4
Nuclear	124.9	120.9	112.5	110.0	106.0	105.1
Hydro	134.7	143.0	148.2	150.8	151.1	151.7
Wind	12.3	79.0	127.2	167.1	177.1	188.4
Solar	0.2	30.6	87.7	120.2	138.5	164.2
Geothermal	0.6	0.8	0.8	0.9	0.9	0.9
Tide Wave and Ocean	0.2	0.2	0.2	0.2	0.2	0.2
Gross Electricity Generation by Fuel [TWh]	2656.9	2979.7	2900.6	2902.4	2784.9	2906.5
Solid fossil fuels peat and products oil shale	813.9	721.6	718.8	460.4	357.8	425.0
Oil and petroleum products	172.9	82.1	63.3	52.0	47.8	46.7
Natural gas	362.7	622.1	428.5	599.6	586.5	579.8
Nuclear	859.9	854.5	786.7	765.3	683.5	731.7
Renewables and biofuels	435.9	682.0	883.8	1003.6	1088.3	1101.9
Wastes non-RES	11.6	17.4	19.5	21.5	21.0	21.4
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			113.8	133.3	133.4	129.9
CHP Electricity Generation [TWh]			343.5	348.4	335.1	346.4
CHP in Total Electricity Generation [%]			11.9	11.7	12.0	11.9
CHP Heat Production [PJ]			2667.5	2629.2	2556.0	2620.2
Transport Fuels [ktoe]						
Final consumption petroleum products	355244	337044	314872	323110	291041	307148
of which LPG	19465	18039	16217	16597	15184	15648
of which motor gasoline	110381	76821	65318	67669	58206	63644
of which Gas/Diesel oil	225397	242184	233338	238843	217651	227856
Final consumption biofuels	713	12442	13330	16636	16886	17721
pure and blended biogasoline	59	2496	2345	2725	2678	3047
pure and blended biodiesel	640	9701	10927	13785	14030	14519
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	1396.4	1457.6	1352.7	1354.1	1235.8	1311.1
Final energy consumption 2020-2030 [Mtoe]	979.8	1024.5	957.9	986.0	906.3	968.4
Primary Energy Intensity 2020-2030 [toe/M€'15]	137	125	111	102	98	99
Energy Intensity (GAE/GDP2015) [toe/M€'15	147	134	119	110	107	107
Energy per Capita (GIC/pop) [kgoe/capita]	3496	3538	3264	3266	2996	3179
Final Electricity per Capita [KWh/capita]	6201	6762	6538	6501	6226	6499
Import Dependency [%]	57.8%	57.4%	57.6%	62.3%	59.1%	57.1%
of Solid fossil fuels	29.8%	38.2%	41.0%	43.3%	35.8%	37.5%
of Hard Coal	43.2%	57.7%	63.0%	67.9%	57.4%	59.7%
of Oil and petroleum products	99.8%	102.1%	104.7%	105.0%	105.3%	99.7%
of Crude and NGL	92.5%	94.4%	95.9%	96.6%	96.1%	95.1%
of Natural Gas	65.7%	67.8%	74.5%	89.7%	83.6%	83.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		14.41%	17.82%	19.89%	22.04%	21.81%
RE-T - Renewable energy in Transport [%]		5.50%	6.75%	8.80%	10.25%	9.09%
RES-E - Renewable Electricity Generation [%]		21.28%	29.65%	34.09%	37.41%	37.63%
RES-H&C - Renewable Heating and Cooling [%]		16.99%	20.31%	22.43%	22.98%	22.90%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	3697.3	3544.2	3213.1	3048.8	2697.4	2886.3
GHG emissions - National total*	4537.0	4281.1	3920.9	3724.3	3359.7	3541.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	92.2%	87.0%	79.7%	75.7%	68.3%	72.0%
Total GHG per capita [t CO_2 eq./capita]	10.6	9.7	8.8	8.3	7.5	7.9

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

5.2 Belgium

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	13.4	15.0	10.3	15.2	13.3	17.4
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
of which crude oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	12.4	11.6	6.3	10.6	8.4	12.2
Renewables and biofuels	0.5	2.5	3.1	3.6	4.0	4.2
Wastes, Non-Renewable	0.4	0.7	0.7	0.6	0.6	0.7
Net Imports	50.6	53.6	50.1	49.9	45.1	45.6
Solid fossil fuels	7.3	3.7	3.3	3.1	2.4	2.4
of which hard coal	6.6	3.7	2.8	2.5	2.1	2.0
Oil and petroleum products	29.6	32.5	30.4	30.6	26.8	27.7
of which crude oil and NGL	34.2	33.5	32.4	34.6	27.7	28.9
Natural gas	13.3	16.8	13.9	15.5	15.0	15.2
Renewables and biofuels	0.1	0.5	0.7	0.8	0.9	1.0
Electricity	0.4	0.0	1.8	-0.2	0.0	-0.7
Gross inland consumption	59.4	60.7	53.7	56.1	51.4	56.8
Solid fossil fuels	8.0	3.8	3.4	3.1	2.4	2.6
of which hard coal	7.0	3.7	2.9	2.5	2.0	2.1
of which brown coal	0.2	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	24.2	24.5	23.5	22.0	19.7	21.3
of which crude and NGL	34.1	33.5	32.4	34.6	27.6	29.1
Natural gas	13.4	16.8	14.0	15.2	15.2	15.2
Nuclear	12.4	11.6	6.3	10.6	8.4	12.2
Renewables and biofuels	0.6	3.0	3.7	4.4	4.9	5.1
Electricity	0.4	0.0	1.8	-0.2	0.0	-0.7
Waste, non-renewable	0.4	0.7	0.7	0.6	0.6	0.7
Available for final consumption	40.8	43.0	41.0	40.1	40.1	38.2
Final non-energy consumption	7.0	7.0	7.7	7.3	7.3	7.1
Final energy consumption	33.6	35.5	33.2	32.6	32.6	30.9
by Fuel/Product						
Solid fossil fuels	0.9	0.5	0.5	0.5	0.4	0.4
Oil and petroleum products	15.1	14.8	14.2	12.9	11.8	12.4
Natural gas	9.3	10.0	8.9	9.5	9.1	10.2
Renewables and biofuels	0.4	1.7	1.7	2.0	2.1	2.4
Solid biofuels and renewable waste	0.4	1.2	1.2	1.2	1.2	1.3
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.4	0.3	0.5	0.7	0.8
Biogases	0.0	0.0	0.1	0.1	0.1	0.1
Waste, non-renewable	0.1	0.2	0.2	0.2	0.1	0.1
Electricity	6.7	7.3	7.0	7.0	6.8	7.0
Heat	0.5	0.6	0.5	0.5	0.4	0.5
by Sector						
Industry	11.6	11.0	10.6	10.3	10.0	10.6
Transport	8.2	9.0	8.9	8.8	7.7	8.5
Residential	9.5	9.6	8.2	7.9	7.9	8.6
Services	3.5	5.0	4.6	4.6	4.4	4.5
Agriculture and Fishing	0.8	0.9	0.8	0.9	0.9	0.9
Others	0.1	0.1	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**15.7**	**18.8**	**21.2**	**23.9**	**25.7**	**26.2**
Combustible Fuels	8.5	9.5	8.5	8.1	8.1	8.0
Nuclear	5.7	5.9	5.9	5.9	5.9	5.9
Hydro	1.4	1.4	1.4	1.4	1.4	1.4
Wind	0.0	0.9	2.2	3.9	4.7	4.9
Solar	0.0	1.0	3.1	4.6	5.6	6.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**84.0**	**94.3**	**69.2**	**93.2**	**89.0**	**100.0**
Solid fossil fuels, peat and products, oil shale	12.9	4.2	2.1	0.1	0.1	0.0
Oil and petroleum products	0.8	0.4	0.2	0.1	0.1	0.2
Natural gas	19.1	32.6	24.1	28.0	28.6	24.5
Nuclear	48.2	47.9	26.1	43.5	34.4	50.3
Renewables and biofuels	2.3	8.0	15.6	20.4	24.5	23.7
Wastes non-RES	0.8	1.2	1.2	1.2	1.2	1.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			2.4	2.4	2.4	2.8
CHP Electricity Generation [TWh]			12.5	12.8	13.0	13.1
CHP in Total Electricity Generation [%]			17.7	13.7	13.0	13.1
CHP Heat Production [PJ]			104.4	94.8	93.4	95.0
Transport Fuels [ktoe]						
Final consumption petroleum products	13515	13265	12747	11951	10786	11264
of which LPG	414	337	400	460	463	474
of which motor gasoline	2359	1288	1375	1851	1539	1868
of which Gas/Diesel oil	10741	11639	10972	9640	8784	8922
Final consumption biofuels	0	384	266	490	706	779
pure and blended biogasoline	0	57	41	129	130	161
pure and blended biodiesel	0	316	223	359	576	617
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	52.4	53.4	45.7	48.4	43.9	48.8
Final energy consumption 2020-2030 [Mtoe]	37.7	38.2	36.0	35.8	33.2	35.9
Primary Energy Intensity 2020-2030 [toe/M€'15]	159	137	110	108	104	109
Energy Intensity (GAE/GDP2015) [toe/M€'15	180	155	129	126	122	126
Energy per Capita (GIC/pop) [kgoe/capita]	5805	5599	4777	4896	4464	4915
Final Electricity per Capita [KWh/capita]	8205	8701	6162	8137	7720	8651
Import Dependency [%]	**85.2%**	**88.4%**	**93.3%**	**88.9%**	**87.7%**	**80.3%**
of Solid fossil fuels	91.2%	97.5%	95.7%	101.8%	102.1%	92.4%
of Hard Coal	93.5%	100.0%	96.3%	102.7%	104.2%	93.5%
of Oil and petroleum products	122.3%	132.7%	129.5%	139.2%	136.0%	129.8%
of Crude and NGL	100.2%	99.9%	100.0%	100.0%	100.5%	99.2%
of Natural Gas	99.3%	100.3%	99.3%	101.9%	99.2%	99.9%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		6.00%	8.06%	9.93%	13.00%	13.01%
RE-T - Renewable energy in Transport [%]		4.80%	3.92%	6.82%	11.03%	10.26%
RES-E - Renewable Electricity Generation [%]		7.33%	15.57%	20.82%	25.12%	26.01%
RES-H&C - Renewable Heating and Cooling [%]		6.71%	7.94%	8.32%	8.45%	9.24%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	131.4	118.8	105.5	104.6	94.7	100.2
GHG emissions - National total*	153.6	137.9	123.4	121.7	110.9	115.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	103.1%	92.5%	82.8%	81.7%	74.4%	77.5%
Total GHG per capita [t CO_2 eq./capita]	15.0	12.7	11.0	10.6	9.6	10.0

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

5.3 Bulgaria

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	9.9	10.5	12.0	11.7	10.8	12.1
Solid fossil fuels	4.3	4.9	5.8	4.7	3.7	4.7
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	4.2	4.9	5.8	4.7	3.7	4.7
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
of which crude oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.1	0.1	0.0	0.0	0.0
Nuclear	4.7	3.8	3.9	4.3	4.3	4.3
Renewables and biofuels	0.8	1.5	2.1	2.5	2.6	3.0
Wastes, Non-Renewable	0.0	0.0	0.0	0.1	0.1	0.1
Net Imports	8.7	7.2	6.8	7.2	6.8	7.0
Solid fossil fuels	2.3	1.7	0.7	0.4	0.4	0.5
of which hard coal	2.2	1.7	0.7	0.4	0.4	0.5
Oil and petroleum products	4.1	4.2	4.5	5.0	4.3	4.5
of which crude oil and NGL	5.3	5.5	6.2	7.1	4.9	4.2
Natural gas	2.7	2.1	2.5	2.5	2.4	2.7
Renewables and biofuels	0.0	-0.1	0.0	-0.1	0.0	0.0
Electricity	-0.4	-0.7	-0.9	-0.5	-0.3	-0.8
Gross inland consumption	18.6	17.9	18.7	18.8	17.8	19.3
Solid fossil fuels	6.4	6.9	6.6	5.2	4.3	5.3
of which hard coal	2.2	1.9	0.7	0.6	0.5	0.5
of which brown coal	4.2	4.9	5.8	4.6	3.7	4.7
Oil and petroleum products	4.2	4.0	4.3	4.8	4.3	4.6
of which crude and NGL	5.4	5.6	6.1	6.9	5.0	4.3
Natural gas	2.9	2.3	2.6	2.4	2.5	2.8
Nuclear	4.7	3.8	3.9	4.3	4.3	4.3
Renewables and biofuels	0.8	1.5	2.1	2.5	2.5	2.9
Electricity	-0.4	-0.7	-0.9	-0.5	-0.3	-0.8
Waste, non-renewable	0.0	0.0	0.0	0.1	0.1	0.1
Available for final consumption	9.6	9.2	10.1	10.3	10.3	10.3
Final non-energy consumption	1.0	0.4	0.6	0.5	0.5	0.5
Final energy consumption	8.6	8.7	9.4	9.7	9.7	9.5
by Fuel/Product						
Solid fossil fuels	0.6	0.4	0.3	0.3	0.3	0.4
Oil and petroleum products	3.0	3.0	3.2	3.6	3.4	3.7
Natural gas	1.4	1.1	1.3	1.1	1.2	1.3
Renewables and biofuels	0.5	1.0	1.3	1.4	1.6	1.5
Solid biofuels and renewable waste	0.5	0.9	1.0	1.1	1.2	1.1
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.0	0.1	0.2	0.2	0.2
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.1	0.1	0.1
Electricity	2.1	2.3	2.4	2.6	2.5	2.7
Heat	0.9	1.0	0.8	0.5	0.6	0.6
by Sector						
Industry	3.6	2.5	2.7	2.7	2.6	2.8
Transport	1.9	2.7	3.2	3.4	3.2	3.4
Residential	2.1	2.2	2.2	2.2	2.4	2.4
Services	0.7	1.0	1.1	1.3	1.1	1.3
Agriculture and Fishing	0.3	0.2	0.2	0.2	0.2	0.2
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**11.1**	**10.0**	**10.9**	**11.2**	**11.0**	**11.2**
Combustible Fuels	5.7	4.6	4.0	4.1	3.8	3.9
Nuclear	3.5	1.9	2.0	2.0	2.0	2.0
Hydro	1.9	3.0	3.2	3.4	3.4	3.4
Wind	0.0	0.5	0.7	0.7	0.7	0.7
Solar	0.0	0.0	1.0	1.0	1.1	1.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**40.9**	**46.6**	**49.2**	**44.2**	**40.7**	**47.5**
Solid fossil fuels, peat and products, oil shale	16.9	22.6	22.5	17.2	13.5	17.1
Oil and petroleum products	0.7	0.4	0.2	0.4	0.3	0.4
Natural gas	2.2	2.0	1.9	2.2	2.3	3.0
Nuclear	18.2	15.2	15.4	16.6	16.6	16.5
Renewables and biofuels	3.0	6.4	9.2	7.9	8.0	10.6
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.1	1.2	1.3	1.3
CHP Electricity Generation [TWh]			2.9	3.9	3.8	4.2
CHP in Total Electricity Generation [%]			6.0	8.8	8.1	8.8
CHP Heat Production [PJ]			31.9	39.6	36.2	49.8
Transport Fuels [ktoe]						
Final consumption petroleum products	2 162	2 658	3 037	3 278	3 109	3 342
of which LPG	245	418	514	485	460	451
of which motor gasoline	697	611	520	473	459	501
of which Gas/Diesel oil	1 219	1 630	2 002	2 320	2 190	2 389
Final consumption biofuels	0	13	146	179	172	168
pure and blended biogasoline	0	0	32	32	27	21
pure and blended biodiesel	0	10	114	148	146	147
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	17.7	17.4	18.0	18.2	17.2	18.6
Final energy consumption 2020-2030 [Mtoe]	9.1	8.8	9.5	9.9	9.5	10.2
Primary Energy Intensity 2020-2030 [toe/M€'15]	644	406	392	351	345	347
Energy Intensity (GAE/GDP2015) [toe/M€'15	680	418	408	364	358	360
Energy per Capita (GIC/pop) [kgoe/capita]	2 275	2 414	2 594	2 692	2 566	2 790
Final Electricity per Capita [KWh/capita]	4 996	6 284	6 831	6 321	5 858	6 872
Import Dependency [%]	**46.6%**	**40.4%**	**36.6%**	**38.3%**	**38.1%**	**36.3%**
of Solid fossil fuels	35.2%	24.5%	11.2%	7.2%	9.2%	10.3%
of Hard Coal	101.0%	86.0%	96.1%	57.6%	69.0%	100.2%
of Oil and petroleum products	97.5%	104.3%	103.9%	104.2%	99.4%	99.0%
of Crude and NGL	98.7%	99.1%	100.5%	102.6%	99.4%	98.6%
of Natural Gas	93.5%	92.6%	97.0%	100.4%	96.4%	96.2%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.93%	18.26%	21.55%	23.32%	17.02%
RE-T - Renewable energy in Transport [%]		1.50%	6.49%	7.89%	9.10%	7.61%
RES-E - Renewable Electricity Generation [%]		12.36%	18.98%	23.51%	23.59%	18.79%
RES-H&C - Renewable Heating and Cooling [%]		24.33%	28.90%	35.42%	37.18%	25.62%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	45.7	48.4	48.7	43.0	37.0	42.8
GHG emissions - National total*	57.7	60.0	61.0	54.7	48.5	54.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	57.9%	60.1%	61.2%	54.9%	48.6%	54.6%
Total GHG per capita [t CO_2 eq./capita]	7.0	8.1	8.5	7.8	7.0	7.9

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

5.4 Czechia

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

Methodology and Notes: **see appendices**

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**15.3**	**20.1**	**21.9**	**22.0**	**21.5**	**21.0**
Combustible Fuels	11.5	12.0	13.0	13.0	12.4	11.9
Nuclear	1.8	3.9	4.3	4.3	4.3	4.3
Hydro	2.1	2.2	2.3	2.3	2.3	2.3
Wind	0.0	0.2	0.3	0.3	0.3	0.3
Solar	0.0	1.7	2.1	2.1	2.2	2.2
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**73.5**	**85.8**	**83.8**	**86.9**	**81.4**	**84.9**
Solid fossil fuels, peat and products, oil shale	52.8	46.9	41.1	37.3	31.0	34.2
Oil and petroleum products	0.4	0.2	0.1	0.1	0.1	0.1
Natural gas	3.9	4.2	5.0	7.9	8.5	7.9
Nuclear	13.6	28.0	26.8	30.2	30.0	30.7
Renewables and biofuels	2.8	6.5	10.7	11.2	11.7	11.9
Wastes non-RES	0.0	0.0	0.1	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			4.6	8.5	8.3	8.0
CHP Electricity Generation [TWh]			11.8	9.9	10.2	10.6
CHP in Total Electricity Generation [%]			14.0	11.4	12.0	12.5
CHP Heat Production [PJ]			106.0	99.1	100.2	99.0
Transport Fuels [ktoe]						
Final consumption petroleum products	4646	5924	6142	6625	6193	6690
of which LPG	199	117	182	177	174	181
of which motor gasoline	1922	1868	1570	1602	1456	1586
of which Gas/Diesel oil	2526	3939	4390	4847	4563	4923
Final consumption biofuels	62	231	297	340	372	361
pure and blended biogasoline	0	58	63	74	66	55
pure and blended biodiesel	62	173	233	267	307	306
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	39.1	42.5	39.4	39.7	37.6	39.6
Final energy consumption 2020-2030 [Mtoe]	25.1	25.3	24.2	25.3	24.5	26.2
Primary Energy Intensity 2020-2030 [toe/M€'15]	344	273	233	204	205	208
Energy Intensity (GAE/GDP2015) [toe/M€'15	363	292	248	221	219	225
Energy per Capita (GIC/pop) [kgoe/capita]	4017	4346	3990	4032	3771	3996
Final Electricity per Capita [KWh/capita]	7148	8203	7953	8163	7616	7938
Import Dependency [%]	**22.7%**	**25.4%**	**32.1%**	**40.8%**	**38.8%**	**40.0%**
of Solid fossil fuels	-22.0%	-15.3%	-1.8%	8.6%	12.8%	14.0%
of Hard Coal	-56.4%	-53.9%	-8.6%	41.5%	51.9%	50.7%
of Oil and petroleum products	95.3%	96.5%	97.8%	97.5%	101.2%	96.9%
of Crude and NGL	95.2%	97.5%	98.4%	98.6%	101.7%	96.2%
of Natural Gas	99.8%	84.8%	95.1%	109.8%	86.0%	92.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		10.51%	15.07%	16.24%	17.30%	17.67%
RE-T - Renewable energy in Transport [%]		5.22%	6.54%	7.84%	9.38%	7.49%
RES-E - Renewable Electricity Generation [%]		7.52%	14.07%	14.05%	14.81%	14.54%
RES-H&C - Renewable Heating and Cooling [%]		14.10%	19.79%	22.63%	23.53%	24.18%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	129.0	119.4	106.7	103.0	92.7	97.7
GHG emissions - National total*	152.9	142.1	130.2	125.4	114.1	119.4
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	75.9%	70.6%	64.7%	62.3%	56.6%	59.3%
Total GHG per capita [t CO_2 eq./capita]	14.9	13.6	12.4	11.8	10.7	11.2

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

5.5 Denmark

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**12.3**	**13.4**	**14.0**	**15.0**	**15.4**	**16.5**
Combustible Fuels	9.9	9.6	8.1	7.8	7.8	7.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	2.4	3.8	5.1	6.1	6.3	7.0
Solar	0.0	0.0	0.8	1.1	1.3	1.7
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**36.0**	**38.9**	**28.9**	**29.5**	**28.7**	**33.0**
Solid fossil fuels, peat and products, oil shale	16.7	17.0	7.1	3.3	3.1	4.4
Oil and petroleum products	4.4	0.8	0.3	0.2	0.3	0.3
Natural gas	8.8	7.9	1.8	2.1	1.2	1.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	5.6	12.4	18.9	23.1	23.4	26.1
Wastes non-RES	0.6	0.7	0.8	0.8	0.8	0.8
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			6.1	5.1	5.0	4.6
CHP Electricity Generation [TWh]			11.6	10.6	8.3	10.1
CHP in Total Electricity Generation [%]			40.0	35.9	25.0	30.5
CHP Heat Production [PJ]			93.3	91.9	80.8	86.9
Transport Fuels [ktoe]						
Final consumption petroleum products	5754	5586	4846	4768	4430	4529
of which LPG	81	59	55	64	63	69
of which motor gasoline	2055	1602	1412	1339	1194	1224
of which Gas/Diesel oil	3619	3925	3378	3365	3172	3236
Final consumption biofuels	0	28	215	226	251	257
pure and blended biogasoline	0	27	44	44	80	82
pure and blended biodiesel	0	1	171	183	172	175
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	19.1	19.9	16.8	16.9	15.5	16.4
Final energy consumption 2020-2030 [Mtoe]	14.7	15.5	14.2	14.3	13.1	13.8
Primary Energy Intensity 2020-2030 [toe/M€'15]	81	78	62	56	53	53
Energy Intensity (GAE/GDP2015) [toe/M€'15	82	79	63	58	54	55
Energy per Capita (GIC/pop) [kgoe/capita]	3658	3673	3050	2975	2739	2886
Final Electricity per Capita [KWh/capita]	6757	7021	5113	5084	4934	5659
Import Dependency [%]	**-38.3%**	**-16.8%**	**13.7%**	**40.4%**	**46.6%**	**33.5%**
of Solid fossil fuels	94.9%	69.4%	85.0%	154.0%	74.7%	12.7%
of Hard Coal	94.8%	69.3%	85.0%	154.5%	74.5%	11.9%
of Oil and petroleum products	-96.5%	-49.0%	6.0%	49.6%	60.6%	33.0%
of Crude and NGL	-120.5%	-68.8%	-4.9%	36.0%	50.7%	56.7%
of Natural Gas	-64.8%	-68.3%	-48.2%	-7.2%	37.4%	27.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		21.89%	30.47%	37.02%	31.68%	34.72%
RE-T - Renewable energy in Transport [%]		1.15%	6.43%	7.11%	9.70%	10.55%
RES-E - Renewable Electricity Generation [%]		32.74%	51.29%	65.35%	65.32%	62.65%
RES-H&C - Renewable Heating and Cooling [%]		30.37%	39.54%	47.30%	51.07%	41.53%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	57.5	52.1	38.0	34.3	29.5	31.1
GHG emissions - National total*	74.4	67.1	52.3	48.5	43.8	45.1
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	101.5%	91.5%	71.4%	66.2%	59.8%	61.6%
Total GHG per capita [t CO_2 eq./capita]	14.0	12.1	9.2	8.4	7.5	7.7

5.6 Germany

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**118.9**	**162.9**	**203.3**	**231.5**	**233.7**	**242.1**
Combustible Fuels	80.8	85.8	97.0	100.5	98.3	99.2
Nuclear	22.4	20.5	10.8	9.5	8.1	8.1
Hydro	9.5	11.2	11.3	10.7	10.8	10.8
Wind	6.1	27.0	44.6	60.7	62.2	63.8
Solar	0.1	18.0	39.2	48.9	53.7	59.4
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**576.5**	**631.0**	**646.5**	**605.4**	**573.8**	**586.7**
Solid fossil fuels, peat and products, oil shale	296.7	262.9	272.2	171.5	134.6	164.5
Oil and petroleum products	4.8	8.7	6.2	4.8	4.7	4.6
Natural gas	60.0	100.9	74.5	101.1	105.4	105.6
Nuclear	169.6	140.6	91.8	75.1	64.4	69.1
Renewables and biofuels	39.7	111.6	194.7	246.3	258.0	236.1
Wastes non-RES	5.8	6.4	7.1	6.8	6.7	6.7
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			37.1	54.8	53.4	50.2
CHP Electricity Generation [TWh]			78.8	86.9	85.5	90.1
CHP in Total Electricity Generation [%]			12.2	14.3	14.9	15.3
CHP Heat Production [PJ]			669.9	663.2	638.8	670.2
Transport Fuels [ktoe]						
Final consumption petroleum products	89321	72135	70165	70460	65956	63765
of which LPG	1909	2075	1607	1729	1665	1538
of which motor gasoline	30479	19204	17226	16989	15311	15409
of which Gas/Diesel oil	56933	50857	51332	51741	48981	46818
Final consumption biofuels	236	3166	2716	2827	3557	3114
pure and blended biogasoline	0	749	744	725	696	742
pure and blended biodiesel	222	2244	1926	2044	2801	2329
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	317.1	315.2	295.9	285.2	262.2	268.7
Final energy consumption 2020-2030 [Mtoe]	220.2	223.0	212.7	214.7	202.3	209.9
Primary Energy Intensity 2020-2030 [toe/M€'15]	124	113	98	88	84	84
Energy Intensity (GAE/GDP2015) [toe/M€'15	134	122	105	95	91	92
Energy per Capita (GIC/pop) [kgoe/capita]	4168	4135	3918	3712	3425	3558
Final Electricity per Capita [KWh/capita]	7017	7714	7962	7293	6900	7055
Import Dependency [%]	**59.8%**	**60.5%**	**62.6%**	**67.4%**	**64.0%**	**63.8%**
of Solid fossil fuels	25.6%	40.0%	45.4%	47.2%	44.1%	48.4%
of Hard Coal	39.2%	73.2%	87.6%	95.2%	92.9%	100.4%
of Oil and petroleum products	96.2%	99.1%	98.7%	98.5%	97.8%	96.9%
of Crude and NGL	93.8%	97.3%	97.1%	98.3%	98.3%	97.0%
of Natural Gas	79.1%	81.2%	90.1%	100.1%	89.1%	89.6%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		11.67%	14.90%	17.27%	19.09%	19.17%
RE-T - Renewable energy in Transport [%]		6.41%	6.57%	7.63%	10.01%	7.97%
RES-E - Renewable Electricity Generation [%]		18.24%	30.88%	40.60%	44.21%	43.68%
RES-H&C - Renewable Heating and Cooling [%]		12.06%	13.43%	14.50%	14.48%	15.44%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	918.4	855.4	822.6	737.2	660.9	696.9
GHG emissions - National total*	1059.8	956.9	921.4	824.6	744.7	778.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	83.9%	75.7%	72.9%	65.3%	58.9%	61.6%
Total GHG per capita [t CO_2 eq./capita]	12.9	11.7	11.3	9.9	9.0	9.4

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

5.7 Estonia

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**2.8**	**2.8**	**2.9**	**2.7**	**2.7**	**2.4**
Combustible Fuels	2.8	2.6	2.6	2.3	2.2	1.7
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.0	0.1	0.3	0.3	0.3	0.3
Solar	0.0	0.0	0.0	0.1	0.2	0.4
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**8.5**	**13.0**	**10.1**	**7.6**	**6.1**	**7.2**
Solid fossil fuels, peat and products, oil shale	7.7	11.2	7.9	4.3	2.2	3.4
Oil and petroleum products	0.1	0.0	0.1	0.0	0.0	0.0
Natural gas	0.8	0.7	0.5	1.1	0.8	0.8
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	1.0	1.6	2.1	3.0	2.9
Wastes non-RES	0.0	0.0	0.1	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.4	0.2	0.5	0.5
CHP Electricity Generation [TWh]			1.2	1.0	1.4	1.5
CHP in Total Electricity Generation [%]			11.9	13.6	19.3	21.0
CHP Heat Production [PJ]			12.5	3.6	12.8	16.5
Transport Fuels [ktoe]						
Final consumption petroleum products	655	883	945	956	885	871
of which LPG	8	11	20	30	27	21
of which motor gasoline	296	289	243	276	216	201
of which Gas/Diesel oil	351	583	683	650	642	650
Final consumption biofuels	0	8	3	27	39	46
pure and blended biogasoline	0	4	3	7	6	4
pure and blended biodiesel	0	3	0	20	33	41
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	4.6	5.8	4.8	4.8	4.3	4.5
Final energy consumption 2020-2030 [Mtoe]	2.4	2.9	2.8	2.9	2.8	2.8
Primary Energy Intensity 2020-2030 [toe/M€'15]	363	333	231	198	179	171
Energy Intensity (GAE/GDP2015) [toe/ M€'15	376	338	235	203	187	177
Energy per Capita (GIC/pop) [kgoe/ capita]	3361	4443	3690	3711	3384	3464
Final Electricity per Capita [KWh/capita]	6075	9723	7718	5748	4574	5417
Import Dependency [%]	**34.7%**	**15.2%**	**11.8%**	**4.9%**	**11.2%**	**1.5%**
of Solid fossil fuels	125.2%	132.6%	-6.8%	107.2%	391.7%	95.2%
of Hard Coal	116.1%	118.3%	24.1%	96.7%	28.5%	151.4%
of Oil and petroleum products	117.3%	130.2%	188.9%	547.2%	-1758.5%	-114.4%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	100.0%	100.0%	100.0%	105.4%	106.3%	106.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		24.57%	28.99%	31.73%	30.07%	38.01%
RE-T - Renewable energy in Transport [%]		0.43%	0.41%	6.24%	12.16%	11.24%
RES-E - Renewable Electricity Generation [%]		10.29%	16.15%	22.00%	28.29%	29.34%
RES-H&C - Renewable Heating and Cooling [%]		43.16%	50.03%	52.19%	58.83%	61.32%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	15.5	19.1	16.0	12.5	9.3	10.5
GHG emissions - National total*	17.5	21.2	18.1	14.7	11.5	12.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	43.4%	52.5%	44.9%	36.5%	28.4%	31.6%
Total GHG per capita [t CO_2 eq./capita]	12.5	15.9	13.8	11.1	8.6	9.6

5.8 Ireland

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**4.7**	**8.1**	**9.7**	**11.1**	**11.2**	**11.1**
Combustible Fuels	4.1	6.5	6.7	6.4	6.3	6.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.5	0.2	0.5	0.5	0.5	0.5
Wind	0.1	1.4	2.5	4.1	4.3	4.3
Solar	0.0	0.0	0.0	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**24.0**	**28.4**	**28.4**	**31.0**	**32.3**	**31.9**
Solid fossil fuels, peat and products, oil shale	8.6	5.7	7.4	2.4	1.6	3.0
Oil and petroleum products	4.6	0.6	0.4	0.3	0.4	1.5
Natural gas	9.3	18.1	12.4	15.9	16.2	15.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.5	3.9	8.1	12.0	13.8	11.9
Wastes non-RES	0.0	0.0	0.1	0.3	0.3	0.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.3	0.3	0.3	0.3
CHP Electricity Generation [TWh]			2.1	2.1	2.1	2.0
CHP in Total Electricity Generation [%]			7.5	6.7	6.5	6.4
CHP Heat Production [PJ]			12.6	11.2	11.1	11.1
Transport Fuels [ktoe]						
Final consumption petroleum products	4,839	4,893	4,544	4,826	4,192	4,415
of which LPG	153	148	153	180	174	178
of which motor gasoline	1,590	1,527	1,020	781	578	613
of which Gas/Diesel oil	3,096	3,218	3,371	3,865	3,440	3,624
Final consumption biofuels	0	93	122	188	175	178
pure and blended biogasoline	0	30	24	26	19	20
pure and blended biodiesel	0	62	98	162	155	158
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	13.7	14.7	14.0	14.7	13.5	13.9
Final energy consumption 2020-2030 [Mtoe]	10.8	11.9	11.3	12.4	11.2	11.4
Primary Energy Intensity 2020-2030 [toe/M€'15]	95	77	53	44	38	34
Energy Intensity (GAE/GDP2015) [toe/M€'15	100	79	54	45	39	35
Energy per Capita (GIC/pop) [kgoe/capita]	3,804	3,311	3,045	3,056	2,770	2,857
Final Electricity per Capita [KWh/capita]	6,347	6,232	6,070	6,313	6,501	6,366
Import Dependency [%]	**86.4%**	**88.3%**	**89.8%**	**69.3%**	**72.0%**	**77.9%**
of Solid fossil fuels	93.3%	77.7%	103.0%	67.9%	55.8%	105.9%
of Hard Coal	93.1%	77.5%	103.0%	67.0%	55.1%	106.0%
of Oil and petroleum products	100.6%	99.2%	107.0%	100.7%	105.9%	100.6%
of Crude and NGL	89.8%	101.6%	108.2%	100.9%	102.3%	98.1%
of Natural Gas	72.1%	95.3%	96.3%	53.0%	63.7%	71.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		5.76%	9.08%	11.98%	16.16%	12.55%
RE-T - Renewable energy in Transport [%]		2.49%	5.94%	8.92%	10.19%	4.30%
RES-E - Renewable Electricity Generation [%]		15.64%	25.73%	36.46%	39.05%	36.40%
RES-H&C - Renewable Heating and Cooling [%]		4.28%	6.18%	6.34%	6.26%	5.17%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	47.1	44.1	41.2	40.6	36.3	38.9
GHG emissions - National total*	71.5	65.4	64.3	64.5	60.2	63.4
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	126.1%	115.2%	113.3%	113.7%	106.2%	111.8%
Total GHG per capita [t CO_2 eq./capita]	18.9	14.4	13.7	13.2	12.1	12.7

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

5.9 Greece

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**10.9**	**15.3**	**18.9**	**20.5**	**20.8**	**20.7**
Combustible Fuels	7.6	10.6	10.9	10.6	10.0	8.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	3.1	3.2	3.4	3.4	3.4	3.4
Wind	0.2	1.3	2.1	3.6	4.1	4.6
Solar	0.0	0.2	2.6	2.8	3.3	4.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**53.8**	**57.4**	**51.9**	**48.6**	**48.3**	**54.7**
Solid fossil fuels, peat and products, oil shale	34.3	30.8	22.1	12.1	6.6	5.3
Oil and petroleum products	8.9	6.1	5.7	5.6	4.7	4.7
Natural gas	5.9	9.8	9.1	14.5	19.2	22.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	4.6	10.6	14.9	16.1	17.7	22.2
Wastes non-RES	0.2	0.1	0.1	0.3	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.6	0.4	0.4	0.4
CHP Electricity Generation [TWh]			2.0	2.2	2.3	2.3
CHP in Total Electricity Generation [%]			3.9	4.5	4.2	4.2
CHP Heat Production [PJ]			10.9	15.3	16.8	17.0
Transport Fuels [ktoe]						
Final consumption petroleum products	10038	9882	7138	6929	6350	6429
of which LPG	456	320	531	596	514	548
of which motor gasoline	3471	3894	2586	2357	1895	2027
of which Gas/Diesel oil	6111	5668	4021	3976	3941	3855
Final consumption biofuels	0	125	158	193	205	222
pure and blended biogasoline	0	0	0	25	63	68
pure and blended biodiesel	0	125	158	168	142	154
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	27.2	27.2	23.4	22.3	19.2	20.3
Final energy consumption 2020-2030 [Mtoe]	18.7	19.1	16.6	16.2	14.4	15.2
Primary Energy Intensity 2020-2030 [toe/M€'15]	150	126	133	121	115	112
Energy Intensity (GAE/GDP2015) [toe/M€'15	154	131	137	128	122	119
Energy per Capita (GIC/pop) [kgoe/capita]	2589	2549	2218	2196	1908	2014
Final Electricity per Capita [KWh/capita]	4997	5163	4778	4534	4502	5124
Import Dependency [%]	**78.0%**	**75.1%**	**76.3%**	**82.0%**	**87.9%**	**80.0%**
of Solid fossil fuels	8.5%	5.1%	2.8%	6.4%	10.2%	9.6%
of Hard Coal	105.8%	100.5%	91.5%	105.0%	114.6%	92.7%
of Oil and petroleum products	123.4%	117.1%	121.1%	116.1%	124.5%	109.6%
of Crude and NGL	99.6%	99.6%	101.5%	98.1%	102.0%	98.4%
of Natural Gas	99.1%	99.9%	99.9%	99.0%	100.7%	99.4%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		10.08%	15.69%	19.63%	21.75%	21.93%
RE-T - Renewable energy in Transport [%]		1.92%	1.10%	4.05%	5.34%	4.31%
RES-E - Renewable Electricity Generation [%]		12.31%	22.09%	31.30%	35.86%	35.93%
RES-H&C - Renewable Heating and Cooling [%]		18.66%	26.56%	30.05%	31.94%	31.15%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	105.5	99.9	77.8	69.7	56.9	60.1
GHG emissions - National total*	129.2	121.8	98.9	90.2	76.8	80.0
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	121.3%	114.4%	92.8%	84.7%	72.1%	75.2%
Total GHG per capita [t CO_2 eq./capita]	12.0	11.0	9.1	8.4	7.2	7.5

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

5.10 Spain

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**53.9**	**101.7**	**106.8**	**109.7**	**108.3**	**111.0**
Combustible Fuels	26.2	50.4	49.3	45.7	41.8	39.8
Nuclear	7.5	7.5	7.4	7.1	7.1	7.1
Hydro	18.0	18.5	20.1	20.1	20.1	20.1
Wind	2.2	20.7	22.9	25.6	26.8	27.9
Solar	0.0	4.6	7.0	11.1	12.4	16.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**224.5**	**301.4**	**280.7**	**273.1**	**263.2**	**274.0**
Solid fossil fuels, peat and products, oil shale	79.1	25.3	51.4	12.9	5.5	4.9
Oil and petroleum products	22.6	16.6	17.2	12.9	10.7	10.0
Natural gas	21.9	95.8	53.8	84.8	70.4	72.7
Nuclear	62.2	62.0	57.2	58.3	58.3	56.6
Renewables and biofuels	38.0	101.0	100.3	103.2	117.3	129.0
Wastes non-RES	0.6	0.7	0.8	1.0	1.0	0.9
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			3.5	5.0	5.0	4.8
CHP Electricity Generation [TWh]			22.7	29.7	26.9	27.5
CHP in Total Electricity Generation [%]			8.1	10.9	9.8	10.0
CHP Heat Production [PJ]			120.3	143.2	132.4	138.9
Transport Fuels [ktoe]						
Final consumption petroleum products	37047	37676	33209	34941	29967	33576
of which LPG	2775	2063	1500	1386	1216	1266
of which motor gasoline	9019	5620	4602	5473	4348	5361
of which Gas/Diesel oil	25253	29994	27107	28081	24403	26949
Final consumption biofuels	71	1453	1004	1672	1403	1403
pure and blended biogasoline	0	232	192	131	87	114
pure and blended biodiesel	71	1221	812	1541	1316	1289
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	114.5	123.0	118.2	120.6	105.0	112.1
Final energy consumption 2020-2030 [Mtoe]	80.0	89.6	80.5	86.5	73.8	80.3
Primary Energy Intensity 2020-2030 [toe/M€'15]	131	114	110	101	99	100
Energy Intensity (GAE/GDP2015) [toe/M€'15	142	121	114	106	106	106
Energy per Capita (GIC/pop) [kgoe/capita]	3065	2799	2646	2702	2362	2502
Final Electricity per Capita [KWh/capita]	5547	6483	6043	5819	5561	5781
Import Dependency [%]	**80.5%**	**82.0%**	**77.2%**	**79.3%**	**71.8%**	**73.4%**
of Solid fossil fuels	61.3%	92.8%	75.4%	89.5%	54.8%	105.7%
of Hard Coal	71.5%	95.7%	79.6%	91.6%	46.2%	106.1%
of Oil and petroleum products	110.5%	113.7%	116.7%	114.8%	113.2%	109.4%
of Crude and NGL	100.6%	99.3%	99.5%	101.0%	99.5%	98.7%
of Natural Gas	101.6%	99.4%	96.9%	101.6%	97.5%	100.4%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.78%	16.22%	17.85%	21.22%	20.73%
RE-T - Renewable energy in Transport [%]		5.02%	1.09%	7.61%	9.53%	9.19%
RES-E - Renewable Electricity Generation [%]		29.75%	36.97%	37.13%	42.94%	45.96%
RES-H&C - Renewable Heating and Cooling [%]		12.50%	16.85%	17.20%	17.97%	17.40%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	319.6	295.5	285.3	269.6	220.0	238.5
GHG emissions - National total*	392.9	367.4	348.3	328.9	278.7	297.2
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	134.3%	125.6%	119.1%	112.5%	95.3%	101.6%
Total GHG per capita [t CO_2 eq./capita]	9.7	7.9	7.5	7.0	5.9	6.3

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

5.11 France

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**114.5**	**124.1**	**132.2**	**136.3**	**136.9**	**141.9**
Combustible Fuels	25.9	28.4	25.9	19.8	19.8	20.4
Nuclear	63.2	63.1	63.1	63.1	61.4	61.4
Hydro	25.2	25.4	25.6	25.9	26.0	26.3
Wind	0.0	5.9	10.3	16.4	17.5	18.7
Solar	0.0	1.0	7.1	10.8	12.1	14.8
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.2	0.2	0.2	0.2	0.2	0.2
Gross Electricity Generation, by Fuel [TWh]	**540.0**	**569.2**	**578.9**	**570.4**	**531.8**	**554.7**
Solid fossil fuels, peat and products, oil shale	27.0	23.4	11.9	3.6	3.1	5.4
Oil and petroleum products	7.2	5.5	6.7	5.9	5.6	5.7
Natural gas	15.4	26.7	23.8	41.5	37.1	35.3
Nuclear	415.2	428.5	437.4	399.0	353.8	379.4
Renewables and biofuels	74.2	83.0	96.8	117.9	129.8	126.7
Wastes non-RES	1.1	2.0	2.3	2.4	2.3	2.2
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			5.6	6.6	6.5	7.0
CHP Electricity Generation [TWh]			13.9	18.1	17.5	18.5
CHP in Total Electricity Generation [%]			2.5	3.2	3.2	3.3
CHP Heat Production [PJ]			154.9	159.9	177.1	174.4
Transport Fuels [ktoe]						
Final consumption petroleum products	61952	55093	53455	50712	45062	48647
of which LPG	3815	2645	2035	1906	1782	1941
of which motor gasoline	14494	7744	7082	8213	7042	8298
of which Gas/Diesel oil	43643	44705	44338	40593	36238	38407
Final consumption biofuels	326	2420	3004	3481	2935	3172
pure and blended biogasoline	59	399	432	653	555	710
pure and blended biodiesel	268	2021	2565	2805	2356	2460
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	239.0	254.5	244.3	235.1	208.0	224.8
Final energy consumption 2020-2030 [Mtoe]	154.8	154.0	148.0	145.1	129.7	143.6
Primary Energy Intensity 2020-2030 [toe/M€'15]	130	122	111	100	96	97
Energy Intensity (GAE/GDP2015) [toe/M€'15	139	129	118	107	103	104
Energy per Capita (GIC/pop) [kgoe/capita]	4227	4171	3913	3742	3319	3574
Final Electricity per Capita [KWh/capita]	8918	8802	8710	8491	7899	8199
Import Dependency [%]	**51.8%**	**49.1%**	**46.2%**	**47.9%**	**44.6%**	**44.4%**
of Solid fossil fuels	86.3%	101.0%	98.4%	99.6%	96.3%	73.4%
of Hard Coal	87.2%	100.6%	97.0%	99.2%	95.8%	88.6%
of Oil and petroleum products	102.7%	100.6%	100.7%	100.6%	100.0%	98.8%
of Crude and NGL	98.5%	98.2%	98.8%	98.4%	97.9%	97.2%
of Natural Gas	100.0%	92.8%	98.5%	104.5%	94.7%	96.1%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		12.67%	14.80%	17.17%	19.11%	19.34%
RE-T - Renewable energy in Transport [%]		6.58%	8.37%	9.25%	9.21%	8.21%
RES-E - Renewable Electricity Generation [%]		14.81%	18.82%	22.39%	24.82%	25.02%
RES-H&C - Renewable Heating and Cooling [%]		16.16%	18.88%	22.36%	23.37%	24.21%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	407.1	428.5	441.2	397.1	403.0	381.3
GHG emissions - National total*	548.2	560.4	566.3	519.1	523.0	498.8
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	99.1%	101.3%	102.4%	93.9%	94.6%	90.2%
Total GHG per capita [t CO_2 eq./capita]	9.1	8.7	8.5	7.7	7.8	7.4

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

5.12 Croatia

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**2.1**	**4.1**	**4.8**	**4.7**	**4.7**	**4.9**
Combustible Fuels	0.0	1.9	2.1	1.8	1.5	1.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	2.1	2.1	2.2	2.2	2.2	2.2
Wind	0.0	0.1	0.4	0.6	0.8	1.0
Solar	0.0	0.0	0.0	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**11.3**	**14.9**	**11.4**	**12.8**	**13.4**	**15.2**
Solid fossil fuels, peat and products, oil shale	1.6	2.4	2.3	1.6	1.2	1.5
Oil and petroleum products	1.7	0.6	0.2	0.0	0.0	0.0
Natural gas	1.6	2.6	1.2	2.6	3.4	3.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	6.5	9.4	7.7	8.5	8.7	10.6
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.6	0.9	0.9	0.9
CHP Electricity Generation [TWh]			0.8	2.3	2.7	2.8
CHP in Total Electricity Generation [%]			7.1	18.3	17.6	18.0
CHP Heat Production [PJ]			10.0	17.6	20.0	20.0
Transport Fuels [ktoe]						
Final consumption petroleum products	2293	2629	2461	2609	2359	2507
of which LPG	100	183	157	150	129	136
of which motor gasoline	835	692	567	508	423	473
of which Gas/Diesel oil	1359	1755	1737	1951	1807	1898
Final consumption biofuels	0	3	24	63	66	91
pure and blended biogasoline	0	0	0	1	1	1
pure and blended biodiesel	0	3	24	62	65	90
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	7.8	8.9	8.0	8.2	7.8	8.3
Final energy consumption 2020-2030 [Mtoe]	6.0	7.2	6.6	6.9	6.5	7.0
Primary Energy Intensity 2020-2030 [toe/M€'15]	221	194	176	159	165	155
Energy Intensity (GAE/GDP2015) [toe/M€'15	239	208	188	171	176	163
Energy per Capita (GIC/pop) [kgoe/capita]	1883	2201	2013	2156	2046	2154
Final Electricity per Capita [KWh/capita]	2508	3463	2699	3130	3298	3768
Import Dependency [%]	**48.4%**	**46.7%**	**48.8%**	**56.4%**	**53.7%**	**54.7%**
of Solid fossil fuels	110.9%	102.6%	103.0%	107.3%	106.0%	100.7%
of Hard Coal	112.8%	102.8%	102.4%	108.6%	106.7%	100.7%
of Oil and petroleum products	61.0%	80.8%	81.5%	76.9%	74.2%	79.0%
of Crude and NGL	72.1%	82.3%	79.6%	71.1%	68.0%	67.3%
of Natural Gas	41.0%	18.1%	27.1%	66.4%	68.8%	74.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		25.10%	28.97%	28.47%	31.02%	31.33%
RE-T - Renewable energy in Transport [%]		1.12%	2.36%	5.85%	6.59%	6.98%
RES-E - Renewable Electricity Generation [%]		37.52%	45.41%	49.78%	53.82%	53.47%
RES-H&C - Renewable Heating and Cooling [%]		32.88%	38.62%	36.79%	36.93%	38.03%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	19.9	21.3	18.2	18.5	17.0	17.7
GHG emissions - National total*	25.9	28.5	25.0	25.4	24.1	24.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	80.9%	89.1%	78.1%	79.5%	75.3%	77.4%
Total GHG per capita [t CO_2 eq./capita]	5.7	6.6	5.9	6.2	5.9	6.1

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

5.13 Italy

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**75.5**	**106.6**	**117.0**	**116.4**	**116.4**	**117.2**
Combustible Fuels	54.0	74.7	65.6	61.3	60.1	59.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	20.3	21.5	22.2	22.5	22.7	22.7
Wind	0.4	5.8	9.1	10.7	10.9	11.3
Solar	0.0	3.6	18.9	20.9	21.7	22.6
Geothermal	0.6	0.7	0.8	0.8	0.8	0.8
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**275.9**	**301.3**	**282.4**	**293.2**	**280.0**	**288.5**
Solid fossil fuels, peat and products, oil shale	26.3	39.7	43.2	18.8	13.4	14.0
Oil and petroleum products	85.9	21.7	13.4	10.2	10.0	7.7
Natural gas	105.6	157.4	113.0	144.1	135.3	145.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	57.6	80.3	110.3	117.7	118.9	118.4
Wastes non-RES	0.5	2.1	2.4	2.4	2.4	2.4
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			9.0	8.6	9.2	7.4
CHP Electricity Generation [TWh]			39.5	40.5	39.9	34.7
CHP in Total Electricity Generation [%]			14.0	13.8	13.9	12.0
CHP Heat Production [PJ]			213.2	216.9	213.4	169.9
Transport Fuels [ktoe]						
Final consumption petroleum products	47568	41649	37803	36534	30351	35906
of which LPG	4286	3675	3572	3572	3190	3419
of which motor gasoline	17652	10462	8217	7850	6144	7396
of which Gas/Diesel oil	25629	27512	26014	25111	21017	25091
Final consumption biofuels	0	1419	1167	1276	1265	1415
pure and blended biogasoline	0	122	25	30	20	27
pure and blended biodiesel	0	1297	1142	1246	1245	1388
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	166.1	167.3	149.1	145.9	132.3	145.3
Final energy consumption 2020-2030 [Mtoe]	124.8	128.5	116.2	115.4	102.7	113.3
Primary Energy Intensity 2020-2030 [toe/M€'15]	100	98	90	84	84	86
Energy Intensity (GAE/GDP2015) [toe/M€'15	105	103	94	90	90	91
Energy per Capita (GIC/pop) [kgoe/capita]	3066	2988	2562	2598	2374	2594
Final Electricity per Capita [KWh/capita]	4846	5090	4645	4902	4695	4870
Import Dependency [%]	**87.3%**	**84.0%**	**78.0%**	**78.8%**	**74.7%**	**74.7%**
of Solid fossil fuels	104.6%	100.8%	100.2%	98.6%	93.0%	97.0%
of Hard Coal	105.7%	101.4%	100.5%	98.4%	93.1%	97.0%
of Oil and petroleum products	97.9%	97.6%	92.4%	97.1%	93.5%	88.5%
of Crude and NGL	95.1%	94.5%	92.2%	93.9%	90.2%	92.0%
of Natural Gas	81.1%	90.5%	90.4%	95.1%	92.8%	93.7%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		13.02%	17.53%	18.18%	20.36%	19.03%
RE-T - Renewable energy in Transport [%]		4.92%	6.50%	9.05%	10.74%	10.00%
RES-E - Renewable Electricity Generation [%]		20.09%	33.46%	34.97%	38.08%	36.00%
RES-H&C - Renewable Heating and Cooling [%]		15.64%	19.25%	19.70%	19.95%	19.71%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	478.5	445.3	371.5	352.8	307.1	342.2
GHG emissions - National total*	568.0	532.3	455.4	434.8	388.8	422.6
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	108.0%	101.2%	86.6%	82.7%	73.9%	80.4%
Total GHG per capita [t CO_2 eq./capita]	10.0	9.0	7.5	7.3	6.5	7.1

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

5.14 Cyprus

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	**0.0**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
of which crude oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.1	0.1	0.2	0.2	0.2
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**2.6**	**3.0**	**2.5**	**2.7**	**2.4**	**2.4**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	2.5	2.9	2.4	2.6	2.3	2.2
of which crude oil and NGL	1.2	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.0	0.0	0.0	0.1	0.1
Electricity	0.0	0.0	0.0	0.0	0.0	0.0
Gross inland consumption	**2.4**	**2.8**	**2.3**	**2.6**	**2.3**	**2.4**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	2.3	2.6	2.1	2.3	2.0	2.0
of which crude and NGL	1.2	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.1	0.2	0.2	0.3	0.3
Electricity	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for final consumption	**1.5**	**1.7**	**1.4**	**1.7**	**1.7**	**1.6**
Final non-energy consumption	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**
Final energy consumption	**1.4**	**1.6**	**1.4**	**1.6**	**1.6**	**1.5**
by Fuel/Product						
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	1.0	1.1	0.9	1.0	0.9	0.9
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.1	0.1	0.2	0.2	0.2
Solid biofuels and renewable waste	0.0	0.0	0.0	0.1	0.1	0.1
Solar thermal	0.0	0.1	0.1	0.1	0.1	0.1
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.3	0.4	0.4	0.4	0.4	0.4
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	0.4	0.2	0.2	0.2	0.2	0.2
Transport	0.6	0.8	0.6	0.7	0.6	0.7
Residential	0.2	0.3	0.3	0.4	0.4	0.4
Services	0.1	0.2	0.2	0.3	0.2	0.3
Agriculture and Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.1	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**1.0**	**1.6**	**1.8**	**1.8**	**1.9**	**2.0**
Combustible Fuels	1.0	1.5	1.5	1.5	1.5	1.5
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.0	0.1	0.2	0.2	0.2	0.2
Solar	0.0	0.0	0.1	0.2	0.2	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**3.4**	**5.3**	**4.5**	**5.1**	**4.8**	**5.1**
Solid fossil fuels, peat and products, oil shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	3.4	5.2	4.1	4.6	4.3	4.3
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.1	0.4	0.5	0.6	0.8
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.0	0.0	0.0	0.0
CHP Electricity Generation [TWh]			0.0	0.0	0.0	0.0
CHP in Total Electricity Generation [%]			0.1	0.6	0.8	0.7
CHP Heat Production [PJ]			0.2	0.1	0.2	0.2
Transport Fuels [ktoe]						
Final consumption petroleum products	833	949	800	881	779	819
of which LPG	60	60	61	69	62	62
of which motor gasoline	218	413	365	356	301	323
of which Gas/Diesel oil	556	476	374	457	416	434
Final consumption biofuels	0	15	10	11	25	25
pure and blended biogasoline	0	0	0	0	1	0
pure and blended biodiesel	0	15	10	11	25	25
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	2.3	2.7	2.3	2.5	2.2	2.3
Final energy consumption 2020-2030 [Mtoe]	1.6	1.9	1.7	1.9	1.6	1.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	167	137	127	112	102	101
Energy Intensity (GAE/GDP2015) [toe/M€'15	173	142	128	116	106	105
Energy per Capita (GIC/pop) [kgoe/capita]	3511	3370	2715	2998	2571	2689
Final Electricity per Capita [KWh/capita]	4881	6497	5354	5870	5461	5714
Import Dependency [%]	**106.4%**	**107.4%**	**107.6%**	**102.6%**	**104.4%**	**98.9%**
of Solid fossil fuels	102.0%	65.6%	100.0%	117.2%	105.4%	97.6%
of Hard Coal	102.0%	65.4%	100.0%	117.2%	105.4%	97.6%
of Oil and petroleum products	108.4%	111.5%	114.5%	111.6%	116.0%	110.7%
of Crude and NGL	98.5%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		6.16%	9.90%	13.78%	16.88%	18.42%
RE-T - Renewable energy in Transport [%]		1.99%	2.52%	3.32%	7.40%	7.19%
RES-E - Renewable Electricity Generation [%]		1.39%	8.45%	9.76%	12.04%	14.84%
RES-H&C - Renewable Heating and Cooling [%]		18.81%	24.07%	35.05%	37.12%	41.34%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	7.9	8.9	7.7	8.4	7.2	7.6
GHG emissions - National total*	9.2	10.4	9.2	10.0	8.9	9.3
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	144.7%	162.8%	143.8%	156.9%	139.7%	145.9%
Total GHG per capita [t CO_2 eq./capita]	13.4	12.7	10.8	11.4	10.0	10.4

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

5.15 Latvia

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	1.4	2.0	2.3	2.8	2.7	2.7
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
of which crude oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.4	2.0	2.3	2.8	2.7	2.7
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	2.4	2.2	2.4	2.2	2.1	1.8
Solid fossil fuels	0.1	0.1	0.0	0.0	0.0	0.0
of which hard coal	0.1	0.1	0.0	0.0	0.0	0.0
Oil and petroleum products	1.2	1.7	1.8	1.8	1.7	1.6
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	1.1	0.9	1.1	1.1	0.9	1.0
Renewables and biofuels	-0.2	-0.6	-0.7	-0.9	-0.8	-0.9
Electricity	0.2	0.1	0.2	0.1	0.1	0.2
Gross inland consumption	3.9	4.6	4.4	4.6	4.4	4.6
Solid fossil fuels	0.1	0.1	0.0	0.0	0.0	0.0
of which hard coal	0.1	0.1	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	1.3	1.5	1.5	1.5	1.4	1.5
of which crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	1.1	1.5	1.1	1.1	0.9	1.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	1.2	1.4	1.5	1.8	1.8	1.9
Electricity	0.2	0.1	0.2	0.1	0.1	0.2
Waste, non-renewable	0.0	0.0	0.1	0.0	0.1	0.0
Available for final consumption	3.3	4.1	3.8	4.0	4.0	3.9
Final non-energy consumption	0.1	0.1	0.1	0.1	0.1	0.1
Final energy consumption	3.2	4.0	3.7	3.9	3.9	3.8
by Fuel/Product						
Solid fossil fuels	0.1	0.1	0.0	0.0	0.0	0.0
Oil and petroleum products	1.0	1.3	1.3	1.3	1.3	1.3
Natural gas	0.3	0.5	0.3	0.3	0.3	0.4
Renewables and biofuels	0.8	0.9	0.9	1.0	1.0	1.0
Solid biofuels and renewable waste	0.8	0.9	0.9	1.0	0.9	1.0
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.1	0.0	0.1	0.0
Electricity	0.4	0.5	0.6	0.6	0.6	0.6
Heat	0.6	0.6	0.5	0.6	0.6	0.6
by Sector						
Industry	0.6	0.8	0.8	0.9	0.9	0.9
Transport	0.7	1.1	1.0	1.1	1.0	1.1
Residential	1.3	1.4	1.1	1.2	1.1	1.2
Services	0.5	0.6	0.6	0.6	0.6	0.6
Agriculture and Fishing	0.1	0.2	0.2	0.2	0.2	0.2
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**2.1**	**2.6**	**2.9**	**2.9**	**2.9**	**2.9**
Combustible Fuels	0.6	1.0	1.3	1.3	1.3	1.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	1.5	1.6	1.6	1.6	1.6	1.6
Wind	0.0	0.0	0.1	0.1	0.1	0.1
Solar	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**4.1**	**6.6**	**5.5**	**6.4**	**5.7**	**5.8**
Solid fossil fuels, peat and products, oil shale	0.1	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.1	0.0	0.0	0.0	0.0	0.0
Natural gas	1.1	3.0	2.8	3.2	2.1	2.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	2.8	3.6	2.8	3.2	3.6	3.7
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.1	1.3	1.3	1.3
CHP Electricity Generation [TWh]			2.5	2.6	2.1	2.6
CHP in Total Electricity Generation [%]			44.7	41.1	36.2	45.2
CHP Heat Production [PJ]			12.4	13.7	12.1	13.1
Transport Fuels [ktoe]						
Final consumption petroleum products	889	1,278	1,265	1,331	1,280	1,319
of which LPG	50	50	98	82	77	74
of which motor gasoline	354	302	213	182	175	172
of which Gas/Diesel oil	485	926	954	1,067	1,028	1,073
Final consumption biofuels	0	27	25	37	49	49
pure and blended biogasoline	0	8	8	7	13	12
pure and blended biodiesel	0	19	17	30	36	38
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	3.8	4.6	4.3	4.6	4.3	4.5
Final energy consumption 2020-2030 [Mtoe]	3.3	4.1	3.8	4.1	3.9	4.1
Primary Energy Intensity 2020-2030 [toe/M€'15]	264	220	174	164	157	158
Energy Intensity (GAE/GDP2015) [toe/M€'15	269	223	178	168	161	162
Energy per Capita (GIC/pop) [kgoe/capita]	1,623	2,183	2,205	2,421	2,286	2,419
Final Electricity per Capita [KWh/capita]	1,737	3,125	2,786	3,353	3,001	3,088
Import Dependency [%]	**61.1%**	**48.0%**	**54.2%**	**46.7%**	**47.6%**	**40.1%**
of Solid fossil fuels	84.1%	106.5%	85.2%	110.8%	89.6%	93.1%
of Hard Coal	82.5%	106.6%	85.2%	110.8%	89.6%	93.1%
of Oil and petroleum products	95.5%	110.0%	120.6%	119.2%	120.9%	106.6%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	101.9%	61.8%	98.6%	100.0%	100.1%	100.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		30.38%	37.54%	40.93%	42.13%	42.11%
RE-T - Renewable energy in Transport [%]		3.98%	3.64%	4.55%	6.73%	6.44%
RES-E - Renewable Electricity Generation [%]		42.05%	52.21%	53.42%	53.36%	51.40%
RES-H&C - Renewable Heating and Cooling [%]		40.74%	51.74%	57.75%	57.09%	57.38%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	7.2	8.9	7.6	8.1	7.2	7.5
GHG emissions - National total*	10.3	12.2	11.1	11.6	10.7	11.0
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	39.1%	46.5%	42.2%	44.2%	40.6%	41.8%
Total GHG per capita [t CO_2 eq./capita]	4.3	5.8	5.6	6.1	5.6	5.8

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

5.16 Lithuania

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**5.7**	**3.6**	**3.6**	**3.4**	**3.5**	**3.7**
Combustible Fuels	2.5	2.5	2.2	1.8	1.9	1.9
Nuclear	2.4	0.0	0.0	0.0	0.0	0.0
Hydro	0.9	0.9	0.9	0.9	0.9	0.9
Wind	0.0	0.1	0.4	0.5	0.5	0.7
Solar	0.0	0.0	0.1	0.1	0.2	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**11.3**	**5.5**	**4.7**	**3.7**	**5.3**	**4.9**
Solid fossil fuels, peat and products, oil shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.7	0.6	0.3	0.1	0.1	0.1
Natural gas	1.6	3.2	2.0	0.5	1.7	1.2
Nuclear	8.4	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.6	1.7	2.4	3.1	3.4	3.3
Wastes non-RES	0.0	0.0	0.1	0.1	0.1	0.2
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.0	0.6	0.6	0.5
CHP Electricity Generation [TWh]			1.5	1.1	1.2	1.3
CHP in Total Electricity Generation [%]			31.3	27.4	23.6	25.7
CHP Heat Production [PJ]			12.4	11.0	11.7	13.7
Transport Fuels [ktoe]						
Final consumption petroleum products	1,185	1,545	1,764	2,190	2,132	2,127
of which LPG	205	224	175	158	142	134
of which motor gasoline	400	298	201	244	238	238
of which Gas/Diesel oil	579	1,023	1,388	1,788	1,752	1,755
Final consumption biofuels	0	45	68	75	103	127
pure and blended biogasoline	0	10	10	10	16	17
pure and blended biodiesel	0	34	58	65	87	110
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	6.5	6.2	5.8	6.3	6.2	6.6
Final energy consumption 2020-2030 [Mtoe]	3.8	4.8	4.9	5.6	5.3	5.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	323	199	155	145	143	144
Energy Intensity (GAE/GDP2015) [toe/M€'15	363	228	192	180	176	173
Energy per Capita (GIC/pop) [kgoe/capita]	2,093	2,254	2,459	2,792	2,732	2,843
Final Electricity per Capita [KWh/capita]	3,227	1,750	1,598	1,342	1,901	1,748
Import Dependency [%]	**58.5%**	**80.6%**	**76.2%**	**77.1%**	**76.7%**	**75.0%**
of Solid fossil fuels	101.7%	95.7%	90.6%	108.1%	87.9%	91.9%
of Hard Coal	100.0%	109.7%	90.1%	109.1%	86.7%	91.2%
of Oil and petroleum products	105.2%	104.0%	103.6%	107.3%	109.2%	108.3%
of Crude and NGL	94.5%	99.0%	99.5%	100.8%	99.4%	100.3%
of Natural Gas	100.0%	99.7%	99.7%	100.0%	98.9%	100.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		19.64%	25.75%	25.47%	26.77%	28.23%
RE-T - Renewable energy in Transport [%]		3.79%	4.58%	4.05%	5.51%	6.46%
RES-E - Renewable Electricity Generation [%]		7.40%	15.54%	18.79%	20.17%	21.28%
RES-H&C - Renewable Heating and Cooling [%]		32.53%	46.08%	47.37%	50.35%	48.63%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	11.9	14.0	13.3	14.1	13.7	14.1
GHG emissions - National total*	19.6	20.9	20.4	20.7	20.4	20.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	40.4%	43.1%	42.1%	42.5%	41.9%	42.2%
Total GHG per capita [t CO_2 eq./capita]	5.6	6.7	7.0	7.4	7.3	7.3

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

5.17 Luxembourg

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**1.2**	**1.7**	**2.0**	**1.8**	**1.8**	**1.9**
Combustible Fuels	0.1	0.5	0.5	0.1	0.1	0.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	1.1	1.1	1.3	1.3	1.3	1.3
Wind	0.0	0.0	0.1	0.1	0.2	0.1
Solar	0.0	0.0	0.1	0.2	0.2	0.3
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**1.2**	**4.6**	**2.8**	**1.9**	**2.2**	**2.2**
Solid fossil fuels, peat and products, oil shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.2	2.9	0.8	0.2	0.2	0.2
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.9	1.6	1.9	1.6	2.0	2.0
Wastes non-RES	0.0	0.0	0.1	0.1	0.1	0.1
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.1	0.1	0.1	0.1
CHP Electricity Generation [TWh]			0.4	0.4	0.5	0.5
CHP in Total Electricity Generation [%]			12.7	22.1	22.7	24.2
CHP Heat Production [PJ]			2.4	3.8	4.8	5.3
Transport Fuels [ktoe]						
Final consumption petroleum products	1932	2405	2144	2306	1818	1915
of which LPG	26	13	11	10	8	11
of which motor gasoline	598	362	293	343	262	317
of which Gas/Diesel oil	1307	2031	1841	1953	1548	1586
Final consumption biofuels	0	42	83	130	142	138
pure and blended biogasoline	0	1	7	17	14	18
pure and blended biodiesel	0	41	76	113	129	120
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	3.6	4.6	4.1	4.5	3.9	4.2
Final energy consumption 2020-2030 [Mtoe]	3.5	4.3	4.0	4.4	3.8	4.1
Primary Energy Intensity 2020-2030 [toe/M€'15]	99	95	77	76	67	67
Energy Intensity (GAE/GDP2015) [toe/M€'15	100	95	77	76	67	68
Energy per Capita (GIC/pop) [kgoe/capita]	8433	9250	7422	7405	6339	6659
Final Electricity per Capita [KWh/capita]	2690	9145	4913	3109	3568	3483
Import Dependency [%]	**99.6%**	**97.1%**	**96.0%**	**95.0%**	**92.3%**	**92.5%**
of Solid fossil fuels	100.0%	102.2%	99.8%	93.1%	112.3%	97.5%
of Hard Coal	100.0%	102.5%	99.8%	92.3%	114.0%	97.1%
of Oil and petroleum products	102.1%	99.3%	99.3%	100.4%	99.9%	99.9%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		2.85%	4.99%	7.05%	11.70%	11.74%
RE-T - Renewable energy in Transport [%]		2.09%	6.70%	7.71%	12.58%	7.96%
RES-E - Renewable Electricity Generation [%]		3.79%	6.20%	10.86%	13.89%	14.22%
RES-H&C - Renewable Heating and Cooling [%]		4.70%	6.86%	8.69%	12.61%	12.92%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	12.2	9.7	13.4	11.9	12.5	12.3
GHG emissions - National total*	13.1	10.6	14.3	12.9	13.5	13.3
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	99.9%	80.7%	108.9%	97.9%	102.5%	101.0%
Total GHG per capita [t CO_2 eq./capita]	30.3	21.1	25.4	20.9	21.5	20.9

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

5.18 Hungary

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**8.3**	**9.0**	**8.6**	**10.0**	**10.7**	**11.6**
Combustible Fuels	6.4	6.6	6.1	6.2	6.1	6.2
Nuclear	1.9	2.0	2.0	2.0	2.0	2.0
Hydro	0.0	0.1	0.1	0.1	0.1	0.1
Wind	0.0	0.3	0.3	0.3	0.3	0.3
Solar	0.0	0.0	0.2	1.4	2.1	3.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**35.2**	**37.4**	**30.3**	**34.2**	**34.8**	**36.0**
Solid fossil fuels, peat and products, oil shale	9.6	6.2	5.8	4.0	3.7	3.0
Oil and petroleum products	4.4	0.5	0.1	0.1	0.0	0.1
Natural gas	6.7	11.7	5.2	8.8	9.2	9.7
Nuclear	14.2	15.8	15.8	16.3	16.1	16.0
Renewables and biofuels	0.2	3.0	3.2	4.7	5.5	6.9
Wastes non-RES	0.1	0.2	0.1	0.2	0.2	0.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.6	1.5	1.6	1.6
CHP Electricity Generation [TWh]			4.1	4.6	4.7	5.6
CHP in Total Electricity Generation [%]			13.5	13.4	13.0	15.4
CHP Heat Production [PJ]			24.4	27.5	27.6	30.1
Transport Fuels [ktoe]						
Final consumption petroleum products	3699	4263	4639	5541	4920	5369
of which LPG	368	211	295	256	269	266
of which motor gasoline	1414	1348	1283	1507	1308	1388
of which Gas/Diesel oil	1917	2703	3061	3778	3342	3715
Final consumption biofuels	0	175	175	202	279	285
pure and blended biogasoline	0	57	43	46	84	87
pure and blended biodiesel	0	118	133	157	195	198
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	23.6	24.6	23.3	24.6	23.9	24.9
Final energy consumption 2020-2030 [Mtoe]	16.2	17.5	17.4	18.6	18.0	19.1
Primary Energy Intensity 2020-2030 [toe/M€'15]	287	242	207	185	188	183
Energy Intensity (GAE/GDP2015) [toe/M€'15	306	261	223	201	206	201
Energy per Capita (GIC/pop) [kgoe/capita]	2468	2655	2557	2733	2676	2814
Final Electricity per Capita [KWh/capita]	3443	3732	3074	3497	3561	3697
Import Dependency [%]	**55.0%**	**56.9%**	**53.9%**	**69.7%**	**56.6%**	**54.1%**
of Solid fossil fuels	28.1%	41.9%	33.7%	45.7%	43.7%	38.5%
of Hard Coal	96.4%	99.2%	99.2%	98.8%	97.0%	98.5%
of Oil and petroleum products	75.9%	85.3%	93.7%	86.6%	87.1%	86.9%
of Crude and NGL	78.5%	85.3%	91.4%	84.6%	86.0%	85.2%
of Natural Gas	75.4%	78.7%	69.7%	115.2%	75.6%	67.2%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		12.74%	14.50%	12.63%	13.85%	14.11%
RE-T - Renewable energy in Transport [%]		6.16%	7.17%	8.06%	11.57%	6.16%
RES-E - Renewable Electricity Generation [%]		7.10%	7.34%	9.97%	11.90%	13.66%
RES-H&C - Renewable Heating and Cooling [%]		18.08%	21.33%	18.16%	17.72%	17.93%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	59.2	52.8	47.3	50.2	47.6	48.9
GHG emissions - National total*	76.1	67.3	62.8	65.6	63.3	64.6
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	79.7%	70.4%	65.7%	68.7%	66.3%	67.6%
Total GHG per capita [t CO_2 eq./capita]	7.4	6.7	6.4	6.7	6.5	6.6

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

5.19 Malta

Mtoe, unless otherwise stated	2000	2010	2015	2019	2020	2021
Production	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.0	0.0	0.0	0.0	0.0	0.0
of which crude oil	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Wastes, Non-Renewable	0.0	0.0	0.0	0.0	0.0	0.0
Net Imports	**1.5**	**2.4**	**2.2**	**3.1**	**2.9**	**2.7**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	1.5	2.4	2.1	2.7	2.5	2.3
of which crude oil and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.3	0.3	0.3
Renewables and biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.0	0.0	0.1	0.1	0.0	0.0
Gross inland consumption	**0.8**	**0.9**	**0.8**	**0.9**	**0.8**	**0.8**
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
of which hard coal	0.0	0.0	0.0	0.0	0.0	0.0
of which brown coal	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.8	0.9	0.6	0.5	0.3	0.4
of which crude and NGL	0.0	0.0	0.0	0.0	0.0	0.0
Natural gas	0.0	0.0	0.0	0.3	0.3	0.3
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.0	0.0	0.0	0.1	0.1
Electricity	0.0	0.0	0.1	0.1	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Available for final consumption	**0.3**	**0.4**	**0.5**	**0.6**	**0.6**	**0.5**
Final non-energy consumption	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Final energy consumption	**0.3**	**0.4**	**0.5**	**0.5**	**0.5**	**0.5**
by Fuel/Product						
Solid fossil fuels	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	0.2	0.2	0.3	0.3	0.3	0.3
Natural gas	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Solid biofuels and renewable waste	0.0	0.0	0.0	0.0	0.0	0.0
Solar thermal	0.0	0.0	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Liquid biofuels	0.0	0.0	0.0	0.0	0.0	0.0
Biogases	0.0	0.0	0.0	0.0	0.0	0.0
Waste, non-renewable	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.1	0.2	0.2	0.2	0.2	0.2
Heat	0.0	0.0	0.0	0.0	0.0	0.0
by Sector						
Industry	0.0	0.0	0.1	0.1	0.1	0.1
Transport	0.2	0.2	0.2	0.2	0.2	0.2
Residential	0.1	0.1	0.1	0.1	0.1	0.1
Services	0.0	0.1	0.1	0.1	0.1	0.1
Agriculture and Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**0.0**	**0.6**	**0.7**	**0.7**	**0.8**	**0.8**
Combustible Fuels	0.0	0.6	0.6	0.6	0.6	0.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.1	0.2	0.2	0.2
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**1.9**	**2.1**	**1.3**	**2.1**	**2.1**	**2.2**
Solid fossil fuels, peat and products, oil shale	0.0	0.0	0.0	0.0	0.0	0.0
Oil and petroleum products	1.9	2.1	1.2	0.0	0.1	0.0
Natural gas	0.0	0.0	0.0	1.8	1.8	1.9
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	0.0	0.0	0.1	0.2	0.2	0.3
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.0	0.1	0.1	0.1
CHP Electricity Generation [TWh]			0.0	0.2	0.2	0.1
CHP in Total Electricity Generation [%]			0.0	8.5	7.2	6.5
CHP Heat Production [PJ]			0.0	0.1	0.1	0.1
Transport Fuels [ktoe]						
Final consumption petroleum products	171	223	256	294	253	268
of which LPG	18	24	26	29	26	26
of which motor gasoline	75	75	78	85	72	78
of which Gas/Diesel oil	78	124	152	180	156	164
Final consumption biofuels	0	1	7	11	15	11
pure and blended biogasoline	0	0	0	0	0	0
pure and blended biodiesel	0	1	7	11	15	11
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	0.8	0.9	0.8	0.9	0.7	0.8
Final energy consumption 2020-2030 [Mtoe]	0.4	0.5	0.6	0.7	0.5	0.6
Primary Energy Intensity 2020-2030 [toe/M€'15]	134	121	75	67	62	58
Energy Intensity (GAE/GDP2015) [toe/M€'15	134	122	76	69	64	60
Energy per Capita (GIC/pop) [kgoe/capita]	2080	2266	1724	1826	1479	1548
Final Electricity per Capita [KWh/capita]	4931	5105	2967	4173	4165	4292
Import Dependency [%]	**181.8%**	**252.0%**	**294.6%**	**341.4%**	**377.7%**	**332.6%**
of Solid fossil fuels	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Hard Coal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Oil and petroleum products	181.8%	253.3%	330.7%	548.1%	719.7%	599.2%
of Crude and NGL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	0.0%	0.0%	0.0%	103.6%	96.2%	103.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		0.98%	5.12%	8.23%	10.71%	12.15%
RE-T - Renewable energy in Transport [%]		0.00%	4.68%	8.90%	10.59%	10.58%
RES-E - Renewable Electricity Generation [%]		0.03%	4.31%	7.49%	9.49%	9.66%
RES-H&C - Renewable Heating and Cooling [%]		7.28%	14.64%	23.60%	23.03%	31.36%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	2.6	2.8	2.9	2.8	2.9	2.9
GHG emissions - National total*	2.8	3.1	3.3	3.2	3.3	3.3
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	101.0%	110.0%	116.8%	112.7%	116.4%	116.8%
Total GHG per capita [t CO_2 eq./capita]	7.3	7.4	7.4	6.4	6.3	6.3

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

5.20 The Netherlands

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	21.1	26.7	33.9	37.1	42.4	47.3
Combustible Fuels	20.1	23.7	28.4	24.8	24.1	23.9
Nuclear	0.4	0.5	0.5	0.5	0.5	0.5
Hydro	0.0	0.0	0.0	0.0	0.0	0.0
Wind	0.4	2.2	3.4	4.5	6.6	7.8
Solar	0.0	0.1	1.5	7.2	11.1	14.9
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	89.4	119.1	108.8	120.8	122.8	121.6
Solid fossil fuels, peat and products, oil shale	24.3	22.6	39.4	17.7	7.6	14.6
Oil and petroleum products	2.6	1.3	1.3	1.4	1.3	1.3
Natural gas	54.4	78.5	48.6	73.0	75.0	59.4
Nuclear	3.9	4.0	4.1	3.9	4.1	3.8
Renewables and biofuels	3.0	11.2	13.7	22.8	32.7	40.5
Wastes non-RES	1.2	1.6	1.7	2.0	2.0	2.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			9.2	8.8	9.1	8.8
CHP Electricity Generation [TWh]			29.8	32.2	31.7	31.0
CHP in Total Electricity Generation [%]			27.1	26.6	26.1	25.4
CHP Heat Production [PJ]			189.6	174.2	171.6	172.2
Transport Fuels [ktoe]						
Final consumption petroleum products	12340	12756	10935	11109	9665	9651
of which LPG	723	487	301	306	262	267
of which motor gasoline	3964	4048	3782	4177	3463	3589
of which Gas/Diesel oil	7653	8221	6851	6626	5940	5795
Final consumption biofuels	0	243	321	720	610	683
pure and blended biogasoline	0	134	142	199	226	233
pure and blended biodiesel	0	95	179	480	355	429
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	66.9	71.7	64.0	63.6	58.5	60.8
Final energy consumption 2020-2030 [Mtoe]	52.4	55.6	48.6	49.4	45.0	46.9
Primary Energy Intensity 2020-2030 [toe/M€'15]	115	108	93	84	80	80
Energy Intensity (GAE/GDP2015) [toe/M€'15	135	130	111	101	99	97
Energy per Capita (GIC/pop) [kgoe/capita]	4934	5198	4527	4406	4136	4255
Final Electricity per Capita [KWh/capita]	5634	7186	6438	6990	7053	6959
Import Dependency [%]	44.7%	32.8%	57.1%	74.0%	79.2%	67.3%
of Solid fossil fuels	99.4%	101.4%	96.6%	102.1%	91.9%	99.6%
of Hard Coal	98.9%	101.6%	96.5%	101.8%	93.0%	98.6%
of Oil and petroleum products	138.8%	133.4%	144.3%	139.0%	141.7%	119.1%
of Crude and NGL	96.7%	97.6%	98.0%	99.9%	98.1%	96.8%
of Natural Gas	-49.1%	-60.4%	-36.7%	26.3%	45.2%	33.7%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		3.92%	5.71%	8.89%	14.00%	13.00%
RE-T - Renewable energy in Transport [%]		3.40%	5.60%	12.33%	12.63%	8.99%
RES-E - Renewable Electricity Generation [%]		9.60%	11.04%	18.23%	26.41%	33.36%
RES-H&C - Renewable Heating and Cooling [%]		3.10%	5.28%	7.22%	8.05%	7.85%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	182.4	193.0	175.6	164.8	143.7	147.7
GHG emissions - National total*	229.9	225.0	205.9	193.3	171.5	175.0
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	101.1%	99.0%	90.6%	85.0%	75.4%	77.0%
Total GHG per capita [t CO_2 eq./capita]	14.5	13.6	12.2	11.2	9.9	10.0

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

5.21 Austria

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**17.8**	**21.3**	**24.7**	**25.9**	**26.3**	**27.4**
Combustible Fuels	6.1	7.3	7.7	6.4	6.4	6.4
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	11.6	12.9	13.6	14.6	14.6	14.7
Wind	0.1	1.0	2.5	3.2	3.2	3.4
Solar	0.0	0.1	0.9	1.7	2.0	2.8
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**61.2**	**71.1**	**65.3**	**74.2**	**72.5**	**70.7**
Solid fossil fuels, peat and products, oil shale	5.7	4.9	3.0	1.5	0.6	0.1
Oil and petroleum products	1.7	1.3	0.9	0.7	0.7	0.7
Natural gas	8.9	16.1	9.8	13.2	11.8	12.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	44.8	48.2	51.0	58.0	58.8	56.5
Wastes non-RES	0.1	0.6	0.7	0.8	0.7	0.7
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			2.8	2.9	2.9	5.0
CHP Electricity Generation [TWh]			9.0	9.7	9.8	11.5
CHP in Total Electricity Generation [%]			13.8	13.1	13.9	16.3
CHP Heat Production [PJ]			105.9	110.2	111.3	112.2
Transport Fuels [ktoe]						
Final consumption petroleum products	8274	9352	8857	9351	8357	8751
of which LPG	166	177	73	73	71	79
of which motor gasoline	2016	1767	1542	1559	1293	1364
of which Gas/Diesel oil	6093	7408	7242	7718	6993	7307
Final consumption biofuels	17	532	683	515	433	484
pure and blended biogasoline	0	78	60	57	56	49
pure and blended biodiesel	17	454	623	459	377	434
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	27.5	32.9	31.7	32.3	29.8	31.6
Final energy consumption 2020-2030 [Mtoe]	23.7	28.0	27.5	28.3	26.1	27.8
Primary Energy Intensity 2020-2030 [toe/M€'15]	98	101	92	86	85	86
Energy Intensity (GAE/GDP2015) [toe/M€'15	104	107	98	93	93	93
Energy per Capita (GIC/pop) [kgoe/capita]	3652	4171	3928	3924	3633	3820
Final Electricity per Capita [KWh/capita]	7652	8515	7605	8378	8150	7919
Import Dependency [%]	**65.6%**	**62.8%**	**60.4%**	**71.6%**	**58.4%**	**52.0%**
of Solid fossil fuels	83.9%	99.6%	86.9%	96.7%	97.8%	100.2%
of Hard Coal	91.6%	97.3%	83.5%	98.4%	95.5%	100.7%
of Oil and petroleum products	89.2%	90.6%	94.0%	95.8%	97.6%	90.1%
of Crude and NGL	86.9%	86.5%	91.1%	94.0%	93.0%	91.7%
of Natural Gas	80.6%	75.3%	72.6%	122.8%	73.4%	51.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		31.21%	33.50%	33.75%	36.55%	36.44%
RE-T - Renewable energy in Transport [%]		10.71%	11.41%	10.05%	10.28%	9.35%
RES-E - Renewable Electricity Generation [%]		66.36%	71.49%	75.07%	78.20%	76.19%
RES-H&C - Renewable Heating and Cooling [%]		30.96%	33.23%	33.93%	34.99%	35.48%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	67.9	74.1	68.5	70.9	63.2	67.2
GHG emissions - National total*	82.3	86.8	81.0	82.9	75.0	78.8
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	103.0%	108.5%	101.4%	103.7%	93.8%	98.5%
Total GHG per capita [t CO_2 eq./capita]	10.3	10.4	9.4	9.4	8.4	8.8

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

5.22 Poland

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**30.6**	**33.4**	**37.3**	**43.4**	**49.4**	**52.8**
Combustible Fuels	28.4	29.9	30.0	33.6	36.7	36.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	2.2	2.3	2.4	2.4	2.4	2.4
Wind	0.0	1.1	4.9	5.8	6.3	7.0
Solar	0.0	0.0	0.1	1.5	4.0	7.4
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**145.2**	**157.6**	**164.8**	**163.8**	**157.9**	**179.5**
Solid fossil fuels, peat and products, oil shale	135.9	136.5	130.5	118.1	107.4	127.6
Oil and petroleum products	1.9	2.9	2.1	1.8	1.7	2.0
Natural gas	3.0	6.7	8.8	17.1	19.3	18.1
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	4.3	11.5	23.3	26.2	29.0	31.3
Wastes non-RES	0.1	0.0	0.1	0.6	0.5	0.6
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			8.6	9.7	10.0	10.8
CHP Electricity Generation [TWh]			26.5	29.9	30.1	31.3
CHP in Total Electricity Generation [%]			16.1	18.3	16.8	17.4
CHP Heat Production [PJ]			238.6	248.5	245.6	259.6
Transport Fuels [ktoe]						
Final consumption petroleum products	13789	19566	18333	24888	23848	25574
of which LPG	1153	2618	2504	2946	2659	2725
of which motor gasoline	5291	4252	3658	4544	4229	4677
of which Gas/Diesel oil	7344	12696	12170	17398	16959	18171
Final consumption biofuels	0	867	653	1026	1041	1121
pure and blended biogasoline	0	170	153	187	183	208
pure and blended biodiesel	0	698	500	838	857	912
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	84.8	96.6	90.1	100.2	96.9	104.0
Final energy consumption 2020-2030 [Mtoe]	55.1	66.3	62.3	73.7	71.1	75.2
Primary Energy Intensity 2020-2030 [toe/M€'15]	335	262	210	195	192	193
Energy Intensity (GAE/GDP2015) [toe/M€'15	352	276	223	206	204	203
Energy per Capita (GIC/pop) [kgoe/capita]	2332	2672	2522	2793	2713	2896
Final Electricity per Capita [KWh/capita]	3794	4144	4337	4312	4161	4745
Import Dependency [%]	**10.8%**	**31.6%**	**29.9%**	**45.4%**	**42.9%**	**40.6%**
of Solid fossil fuels	-29.0%	-5.0%	-11.4%	6.0%	0.3%	-3.6%
of Hard Coal	-29.9%	3.7%	-2.4%	17.8%	12.4%	8.3%
of Oil and petroleum products	101.2%	99.0%	100.3%	98.2%	97.9%	97.5%
of Crude and NGL	99.2%	98.4%	100.5%	96.7%	96.6%	94.6%
of Natural Gas	66.3%	69.3%	72.2%	82.4%	78.3%	83.6%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		9.28%	11.88%	15.38%	16.10%	15.62%
RE-T - Renewable energy in Transport [%]		6.64%	5.69%	6.20%	6.58%	5.66%
RES-E - Renewable Electricity Generation [%]		6.55%	13.40%	14.36%	16.24%	17.17%
RES-H&C - Renewable Heating and Cooling [%]		11.81%	14.79%	22.00%	22.14%	21.03%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	318.7	336.2	315.1	321.4	304.4	333.3
GHG emissions - National total*	395.3	409.3	385.8	390.1	373.3	402.4
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	83.1%	86.1%	81.1%	82.0%	78.5%	84.6%
Total GHG per capita [t CO_2 eq./capita]	10.3	10.8	10.2	10.3	9.8	10.6

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

5.23 Portugal

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**10.9**	**18.9**	**19.6**	**21.6**	**21.7**	**21.3**
Combustible Fuels	6.3	9.9	8.0	8.2	8.2	7.0
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Hydro	4.5	5.1	6.2	7.3	7.2	7.3
Wind	0.1	3.8	4.9	5.2	5.1	5.4
Solar	0.0	0.1	0.4	0.9	1.1	1.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**43.8**	**54.1**	**52.4**	**53.2**	**53.1**	**51.0**
Solid fossil fuels, peat and products, oil shale	14.6	7.1	14.7	5.5	2.4	0.8
Oil and petroleum products	8.4	3.0	1.3	1.3	1.2	1.2
Natural gas	7.2	14.9	10.6	17.3	17.6	15.6
Nuclear	0.0	0.0	0.0	0.0	0.0	0.0
Renewables and biofuels	13.3	28.8	25.5	28.8	31.6	33.1
Wastes non-RES	0.3	0.3	0.3	0.3	0.3	0.3
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.3	1.3	1.3	1.3
CHP Electricity Generation [TWh]			6.5	6.4	6.5	6.1
CHP in Total Electricity Generation [%]			12.3	12.1	12.8	11.9
CHP Heat Production [PJ]			59.3	62.1	59.8	59.3
Transport Fuels [ktoe]						
Final consumption petroleum products	8310	7439	6200	6566	5723	6017
of which LPG	1139	728	571	557	548	491
of which motor gasoline	2272	1459	1100	1108	918	998
of which Gas/Diesel oil	4899	5252	4528	4901	4258	4528
Final consumption biofuels	0	327	344	283	255	356
pure and blended biogasoline	0	0	21	8	6	17
pure and blended biodiesel	0	323	320	275	248	339
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	23.0	22.7	21.6	22.1	19.5	19.5
Final energy consumption 2020-2030 [Mtoe]	18.0	18.1	16.0	17.1	15.0	15.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	132	121	120	110	106	101
Energy Intensity (GAE/GDP2015) [toe/M€'15	146	130	131	119	116	111
Energy per Capita (GIC/pop) [kgoe/capita]	2476	2306	2274	2326	2079	2092
Final Electricity per Capita [KWh/capita]	4270	5115	5052	5172	5155	4950
Import Dependency [%]	**87.5%**	**76.6%**	**78.4%**	**76.8%**	**67.4%**	**69.0%**
of Solid fossil fuels	102.9%	98.3%	98.5%	122.1%	-6.5%	4.5%
of Hard Coal	103.4%	98.3%	98.5%	122.3%	-7.9%	1.2%
of Oil and petroleum products	103.6%	101.1%	108.0%	106.8%	105.0%	105.0%
of Crude and NGL	99.0%	98.8%	100.9%	100.4%	98.3%	98.6%
of Natural Gas	100.3%	100.4%	100.4%	99.9%	99.3%	100.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		24.15%	30.51%	30.62%	33.98%	33.98%
RE-T - Renewable energy in Transport [%]		5.55%	7.43%	9.09%	9.70%	8.61%
RES-E - Renewable Electricity Generation [%]		40.61%	52.62%	53.77%	58.03%	58.43%
RES-H&C - Renewable Heating and Cooling [%]		33.81%	40.10%	41.66%	41.55%	42.68%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	67.8	55.7	55.5	52.0	43.4	42.1
GHG emissions - National total*	84.6	72.4	71.5	68.7	59.7	58.5
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	138.5%	118.4%	117.0%	112.4%	97.8%	95.8%
Total GHG per capita [t CO_2 eq./capita]	8.3	6.8	6.9	6.7	5.8	5.7

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

5.24 Romania

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**16.8**	**19.9**	**23.8**	**20.9**	**20.6**	**18.8**
Combustible Fuels	10.0	11.6	11.2	8.4	8.1	6.3
Nuclear	0.7	1.4	1.4	1.4	1.4	1.4
Hydro	6.1	6.5	6.7	6.7	6.7	6.7
Wind	0.0	0.4	3.1	3.0	3.0	3.0
Solar	0.0	0.0	1.3	1.4	1.4	1.4
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**51.6**	**61.0**	**66.3**	**59.6**	**55.9**	**59.5**
Solid fossil fuels, peat and products, oil shale	18.9	20.7	18.1	13.6	9.4	10.7
Oil and petroleum products	3.4	0.7	0.5	0.6	0.6	0.8
Natural gas	9.0	7.3	9.5	9.1	9.6	10.1
Nuclear	5.5	11.6	11.6	11.3	11.5	11.3
Renewables and biofuels	14.8	20.7	26.6	25.1	24.9	26.7
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			1.8	1.3	1.4	1.5
CHP Electricity Generation [TWh]			5.6	5.1	4.6	4.7
CHP in Total Electricity Generation [%]			8.4	12.1	7.8	7.9
CHP Heat Production [PJ]			51.0	62.1	35.4	36.1
Transport Fuels [ktoe]						
Final consumption petroleum products	4355	5662	6172	7377	7148	7755
of which LPG	317	489	438	514	454	464
of which motor gasoline	1403	1457	1319	1395	1290	1382
of which Gas/Diesel oil	2634	3717	4415	5468	5404	5909
Final consumption biofuels	0	116	202	412	483	496
pure and blended biogasoline	0	47	61	98	92	121
pure and blended biodiesel	0	69	141	315	392	375
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	34.9	32.9	30.7	32.1	30.9	33.1
Final energy consumption 2020-2030 [Mtoe]	22.7	22.5	21.8	23.9	23.5	25.4
Primary Energy Intensity 2020-2030 [toe/M€'15]	377	236	192	163	163	165
Energy Intensity (GAE/GDP2015) [toe/M€'15	398	251	199	169	170	171
Energy per Capita (GIC/pop) [kgoe/capita]	1637	1725	1604	1710	1667	1786
Final Electricity per Capita [KWh/capita]	2296	3005	3336	3071	2894	3097
Import Dependency [%]	**21.9%**	**21.4%**	**16.7%**	**30.3%**	**28.2%**	**31.7%**
of Solid fossil fuels	25.5%	16.9%	16.7%	22.0%	22.0%	23.2%
of Hard Coal	96.3%	88.4%	96.9%	97.7%	106.4%	102.6%
of Oil and petroleum products	34.4%	52.7%	54.5%	65.6%	64.9%	68.4%
of Crude and NGL	43.5%	57.2%	63.0%	72.0%	66.9%	67.3%
of Natural Gas	19.8%	16.8%	1.8%	23.2%	16.6%	22.8%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		22.83%	24.79%	24.29%	24.48%	23.60%
RE-T - Renewable energy in Transport [%]		1.37%	5.49%	7.85%	8.54%	7.67%
RES-E - Renewable Electricity Generation [%]		30.38%	43.16%	42.62%	43.37%	42.49%
RES-H&C - Renewable Heating and Cooling [%]		27.23%	25.89%	25.74%	25.33%	24.48%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	93.8	86.6	78.7	77.3	74.2	77.4
GHG emissions - National total*	142.7	127.2	117.8	116.2	112.2	115.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	55.3%	49.3%	45.7%	45.1%	43.5%	44.8%
Total GHG per capita [t CO_2 eq./capita]	6.4	6.3	5.9	6.0	5.8	6.0

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

5.25 Slovenia

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**2.6**	**3.2**	**3.4**	**3.8**	**3.9**	**4.1**
Combustible Fuels	1.1	1.3	1.1	1.5	1.5	1.6
Nuclear	0.7	0.7	0.7	0.7	0.7	0.7
Hydro	0.8	1.3	1.3	1.4	1.4	1.4
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.2	0.3	0.4	0.5
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**13.6**	**16.4**	**15.1**	**16.1**	**17.2**	**15.9**
Solid fossil fuels, peat and products, oil shale	4.6	5.3	4.4	4.5	4.4	3.8
Oil and petroleum products	0.1	0.0	0.0	0.0	0.0	0.1
Natural gas	0.3	0.5	0.4	0.5	0.6	0.5
Nuclear	4.8	5.7	5.6	5.8	6.4	5.7
Renewables and biofuels	3.9	4.9	4.6	5.2	5.9	5.7
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			0.4	0.4	0.3	0.4
CHP Electricity Generation [TWh]			1.2	1.2	1.2	1.2
CHP in Total Electricity Generation [%]			7.7	7.3	7.3	7.5
CHP Heat Production [PJ]			10.4	11.0	11.2	11.2
Transport Fuels [ktoe]						
Final consumption petroleum products	2135	2407	2112	2159	1827	1986
of which LPG	104	92	88	96	84	85
of which motor gasoline	854	604	442	413	327	371
of which Gas/Diesel oil	1177	1710	1582	1651	1416	1531
Final consumption biofuels	0	46	29	95	93	103
pure and blended biogasoline	0	4	7	4	8	9
pure and blended biodiesel	0	41	23	91	85	95
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	6.3	7.0	6.3	6.5	6.1	6.3
Final energy consumption 2020-2030 [Mtoe]	4.6	5.1	4.7	4.9	4.4	4.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	217	185	163	144	141	135
Energy Intensity (GAE/GDP2015) [toe/M€'15	225	191	167	148	146	139
Energy per Capita (GIC/pop) [kgoe/capita]	3301	3544	3151	3231	3025	3103
Final Electricity per Capita [KWh/capita]	6854	8031	7320	7737	8202	7528
Import Dependency [%]	**51.9%**	**49.4%**	**49.8%**	**53.6%**	**46.5%**	**49.3%**
of Solid fossil fuels	18.8%	19.3%	19.1%	20.1%	17.7%	11.0%
of Hard Coal	118.2%	135.3%	124.2%	95.9%	97.7%	103.8%
of Oil and petroleum products	101.5%	99.9%	102.4%	109.6%	105.2%	103.5%
of Crude and NGL	87.2%	0.0%	0.0%	0.0%	0.0%	0.0%
of Natural Gas	99.3%	99.3%	99.6%	99.2%	99.4%	99.4%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		21.08%	22.88%	21.97%	25.00%	25.00%
RE-T - Renewable energy in Transport [%]		3.12%	2.24%	7.98%	10.91%	10.64%
RES-E - Renewable Electricity Generation [%]		32.20%	32.72%	32.63%	35.09%	34.98%
RES-H&C - Renewable Heating and Cooling [%]		29.54%	36.15%	32.13%	32.14%	35.22%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	15.1	16.5	13.7	14.1	12.9	13.1
GHG emissions - National total*	18.8	19.9	17.0	17.3	16.0	16.1
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	100.0%	105.4%	90.1%	91.7%	84.9%	85.6%
Total GHG per capita [t CO_2 eq./capita]	9.5	9.7	8.2	8.3	7.6	7.6

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

5.26 Slovakia

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**7.5**	**7.9**	**7.8**	**7.7**	**7.7**	**7.5**
Combustible Fuels	2.4	3.5	2.8	2.6	2.7	2.4
Nuclear	2.6	1.8	1.9	1.9	2.0	2.0
Hydro	2.4	2.5	2.5	2.5	2.5	2.5
Wind	0.0	0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.5	0.6	0.5	0.5
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**31.2**	**27.8**	**26.8**	**28.4**	**28.8**	**30.0**
Solid fossil fuels, peat and products, oil shale	5.6	3.6	2.8	2.3	1.9	1.7
Oil and petroleum products	0.2	0.6	0.4	0.5	0.4	0.4
Natural gas	3.9	2.7	2.1	3.4	3.9	4.9
Nuclear	16.5	14.6	15.1	15.3	15.4	15.7
Renewables and biofuels	5.0	6.3	6.3	6.9	7.1	7.1
Wastes non-RES	0.0	0.0	0.0	0.0	0.0	0.2
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			3.7	1.5	1.6	1.5
CHP Electricity Generation [TWh]			21.1	3.1	3.3	3.5
CHP in Total Electricity Generation [%]			78.5	10.8	11.0	11.8
CHP Heat Production [PJ]			27.3	34.9	35.1	41.0
Transport Fuels [ktoe]						
Final consumption petroleum products	1498	2179	1983	2496	2296	2434
of which LPG	33	42	54	49	49	57
of which motor gasoline	612	601	578	551	505	514
of which Gas/Diesel oil	852	1536	1351	1896	1742	1863
Final consumption biofuels	0	98	144	157	155	161
pure and blended biogasoline	0	24	23	20	26	26
pure and blended biodiesel	0	74	121	137	129	135
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	16.4	16.7	15.2	16.0	15.2	16.4
Final energy consumption 2020-2030 [Mtoe]	11.0	11.5	10.1	11.2	10.4	11.6
Primary Energy Intensity 2020-2030 [toe/M€'15]	378	235	190	178	175	181
Energy Intensity (GAE/GDP2015) [toe/M€'15	410	250	203	190	190	196
Energy per Capita (GIC/pop) [kgoe/capita]	3284	3286	3000	3123	3013	3259
Final Electricity per Capita [KWh/capita]	5771	5161	4944	5211	5278	5487
Import Dependency [%]	**65.1%**	**64.4%**	**60.1%**	**69.8%**	**56.3%**	**52.6%**
of Solid fossil fuels	80.2%	75.7%	84.5%	92.2%	86.2%	88.1%
of Hard Coal	103.8%	91.9%	97.5%	102.7%	97.3%	95.5%
of Oil and petroleum products	92.5%	98.4%	100.6%	101.3%	102.0%	98.3%
of Crude and NGL	97.6%	99.9%	99.3%	100.5%	101.4%	99.1%
of Natural Gas	98.8%	99.9%	95.1%	136.6%	88.1%	69.0%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		9.10%	12.88%	16.89%	17.34%	17.41%
RE-T - Renewable energy in Transport [%]		5.29%	8.63%	8.31%	9.26%	8.75%
RES-E - Renewable Electricity Generation [%]		17.77%	22.66%	22.10%	23.07%	22.37%
RES-H&C - Renewable Heating and Cooling [%]		7.90%	10.79%	19.70%	19.43%	19.52%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	41.3	38.6	34.7	34.0	31.2	35.3
GHG emissions - National total*	49.1	45.9	41.1	40.2	37.3	41.3
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	66.4%	62.2%	55.6%	54.4%	50.5%	55.9%
Total GHG per capita [t CO_2 eq./capita]	9.1	8.5	7.6	7.4	6.8	7.6

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

5.27 Finland

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**16.3**	**15.4**	**16.5**	**17.4**	**17.3**	**17.9**
Combustible Fuels	10.7	9.5	9.6	8.9	8.4	8.3
Nuclear	2.6	2.7	2.8	2.8	2.8	2.8
Hydro	2.9	3.0	3.1	3.2	3.2	3.2
Wind	0.0	0.2	1.0	2.3	2.6	3.3
Solar	0.0	0.0	0.0	0.2	0.3	0.4
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**69.8**	**80.4**	**68.4**	**68.4**	**69.0**	**71.9**
Solid fossil fuels, peat and products, oil shale	12.5	20.8	8.2	7.4	4.6	4.8
Oil and petroleum products	0.6	0.5	0.2	0.3	0.2	0.2
Natural gas	10.8	11.8	5.8	4.5	4.6	4.7
Nuclear	22.5	22.8	23.2	23.9	23.3	23.6
Renewables and biofuels	23.4	24.2	30.5	31.9	35.9	38.2
Wastes non-RES	0.1	0.2	0.4	0.5	0.4	0.5
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			5.8	6.4	6.4	6.3
CHP Electricity Generation [TWh]			21.7	22.5	18.9	20.6
CHP in Total Electricity Generation [%]			31.7	32.8	26.4	28.6
CHP Heat Production [PJ]			242.4	242.7	214.8	223.3
Transport Fuels [ktoe]						
Final consumption petroleum products	6137	6169	5499	5466	5201	4961
of which LPG	263	311	430	351	305	341
of which motor gasoline	1833	1613	1441	1323	1230	1240
of which Gas/Diesel oil	4041	4244	3628	3793	3665	3380
Final consumption biofuels	0	184	501	433	401	721
pure and blended biogasoline	0	81	70	94	99	119
pure and blended biodiesel	0	63	430	339	301	602
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	31.6	35.4	31.2	32.1	29.9	31.5
Final energy consumption 2020-2030 [Mtoe]	24.4	26.2	24.2	25.5	23.4	24.9
Primary Energy Intensity 2020-2030 [toe/M€'15]	179	168	148	140	134	136
Energy Intensity (GAE/GDP2015) [toe/M€'15	185	175	155	149	143	146
Energy per Capita (GIC/pop) [kgoe/capita]	6336	6875	5969	6200	5814	6093
Final Electricity per Capita [KWh/capita]	13495	15017	12491	12394	12495	12987
Import Dependency [%]	**56.6%**	**49.1%**	**48.4%**	**43.4%**	**43.6%**	**38.3%**
of Solid fossil fuels	97.6%	86.3%	91.3%	98.9%	92.2%	72.4%
of Hard Coal	97.7%	85.5%	88.6%	96.1%	89.9%	72.0%
of Oil and petroleum products	111.5%	94.2%	113.3%	98.9%	106.4%	99.2%
of Crude and NGL	101.5%	101.1%	104.2%	99.0%	99.7%	98.5%
of Natural Gas	100.0%	100.0%	100.0%	100.6%	100.4%	99.7%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		32.17%	39.23%	42.81%	43.94%	43.10%
RE-T - Renewable energy in Transport [%]		4.39%	24.57%	14.85%	14.31%	20.75%
RES-E - Renewable Electricity Generation [%]		27.22%	32.21%	37.97%	39.56%	39.53%
RES-H&C - Renewable Heating and Cooling [%]		43.97%	52.62%	56.88%	57.62%	52.59%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	58.2	65.8	46.2	45.1	38.7	38.8
GHG emissions - National total*	71.3	77.3	57.0	55.4	48.7	48.7
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	98.7%	106.9%	78.9%	76.6%	67.4%	67.4%
Total GHG per capita [t CO_2 eq./capita]	13.8	14.4	10.4	10.0	8.8	8.8

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

5.28 Sweden

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

Methodology and Notes: see appendices

	2000	2010	2015	2019	2020	2021
Installed Electricity Capacity [GW]	**33.7**	**36.5**	**39.7**	**42.8**	**43.7**	**44.8**
Combustible Fuels	7.5	8.7	7.8	8.3	8.4	7.7
Nuclear	9.5	9.0	9.7	8.6	7.8	6.9
Hydro	16.5	16.7	16.3	16.5	16.4	16.4
Wind	0.2	2.0	5.8	8.7	10.0	12.1
Solar	0.0	0.0	0.1	0.7	1.1	1.6
Geothermal	0.0	0.0	0.0	0.0	0.0	0.0
Tide, Wave and Ocean	0.0	0.0	0.0	0.0	0.0	0.0
Gross Electricity Generation, by Fuel [TWh]	**145.3**	**148.5**	**162.1**	**168.4**	**163.8**	**171.8**
Solid fossil fuels, peat and products, oil shale	1.7	1.8	0.6	0.4	0.1	0.1
Oil and petroleum products	1.5	1.8	0.3	0.2	0.1	0.3
Natural gas	1.3	3.8	1.1	1.1	0.7	0.9
Nuclear	57.3	57.8	56.3	66.1	49.2	53.0
Renewables and biofuels	83.2	82.2	102.6	99.0	112.2	115.8
Wastes non-RES	0.2	1.2	1.2	1.7	1.5	1.7
Cogeneration Heat and Power						
CHP Electrical Capacity [GW]			4.9	3.3	3.3	2.7
CHP Electricity Generation [TWh]			13.7	9.2	9.2	8.9
CHP in Total Electricity Generation [%]			8.4	5.5	5.5	5.2
CHP Heat Production [PJ]			151.3	94.0	94.0	94.5
Transport Fuels [ktoe]						
Final consumption petroleum products	9906	8578	7421	6564	6157	6261
of which LPG	397	463	367	364	314	343
of which motor gasoline	4208	3422	2601	2170	1990	2036
of which Gas/Diesel oil	5302	4692	4454	4030	3853	3882
Final consumption biofuels	0	383	963	1564	1657	1753
pure and blended biogasoline	0	203	141	101	107	126
pure and blended biodiesel	0	179	823	1463	1486	1541
Main Energy Indicators						
Primary energy consumption 2020-2030 [Mtoe]	46.0	48.3	43.8	45.8	41.3	43.5
Final energy consumption 2020-2030 [Mtoe]	35.0	34.0	31.8	31.6	30.5	31.7
Primary Energy Intensity 2020-2030 [toe/M€'15]	140	118	96	92	85	85
Energy Intensity (GAE/GDP2015) [toe/M€'15	145	123	103	100	92	93
Energy per Capita (GIC/pop) [kgoe/capita]	5384	5402	4826	4860	4334	4579
Final Electricity per Capita [KWh/capita]	16393	15903	16631	16465	15864	16552
Import Dependency [%]	**40.4%**	**39.5%**	**31.2%**	**31.3%**	**33.8%**	**22.4%**
of Solid fossil fuels	105.4%	113.7%	97.4%	103.2%	100.3%	94.2%
of Hard Coal	107.7%	115.2%	99.6%	98.1%	101.5%	101.8%
of Oil and petroleum products	110.4%	106.3%	136.7%	127.5%	153.6%	90.8%
of Crude and NGL	100.6%	99.0%	103.6%	100.0%	101.0%	97.4%
of Natural Gas	100.0%	100.0%	100.0%	101.8%	101.6%	101.5%
Renewable in gross final energy [%]						
Overall Renewable share (with aviation cap)		46.10%	52.22%	55.79%	60.12%	62.57%
RE-T - Renewable energy in Transport [%]		9.63%	21.49%	30.31%	31.85%	30.43%
RES-E - Renewable Electricity Generation [%]		55.77%	65.73%	71.23%	74.49%	75.70%
RES-H&C - Renewable Heating and Cooling [%]		57.07%	63.24%	64.39%	66.38%	68.64%
Greenhouse gas emissions [Mt CO_2]						
CO_2 emissions - National total*	56.9	55.2	45.6	43.7	37.6	39.5
GHG emissions - National total*	70.3	66.5	55.8	53.3	47.2	48.8
Main Emissions Indicators						
GHG national total emissions [index 1990=100]	96.5%	91.3%	76.6%	73.2%	64.7%	67.0%
Total GHG per capita [t CO_2 eq./capita]	7.9	7.1	5.7	5.2	4.6	4.7

** total emissions without LULUCF, with ind. 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€ '2010	millions of euro, chain-linked volumes, reference year 2010, at 2010 exchange rates
m^3	cubic meter
Mio	million
MS	European Union Member State
MSW	municipal solid waste
Mtoe	million ton of oil equivalent
M	million, mega
MW	megawatt
MWh	megawatt hour
NCV	net calorific value
NGL	natural gas liquid
p/cap	per capita
PJ	petajoule
PV	photovoltaic
RES	renewable energy
RES-E	renewable energy - electricity generation
RES-H&C	renewable energy - heating and cooling
RES-T	renewable energy - transport
SI Units	International System of Units
TJ	terajoule
toe	ton of oil equivalent
ton	metric ton, metric tonne, mt
TPES	Total Primary Energy Supply
TWh	terawatt hour
UNFCCC	United Nations Framework Convention on Climate Change
VAT	value added tax

Appendix 5
Conversion Factors

ENERGY

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

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