European Commission

# EU energy in figures

STATISTICAL POCKETBOOK 2022

*Energy*

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# Introduction

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

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

The data contained in this pocketbook is drawn from several sources: Eurostat and other European Commission's services, the European Environment Agency, the International Energy Agency.

The publication comprises five parts:

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

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

The appendices include a glossary and methodological notes.

This publication comprises the most recently available data at the time of release. Corrections and updates will be released periodically in the energy statistical datasheets at:
https://energy.ec.europa.eu/data-and-analysis/eu-energy-statistical-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/

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

# Summary

## PART 1 Overview



## PART 2 Energy in the EU

## Appendices

# 1 Overview

# 1 Overview

# Summary

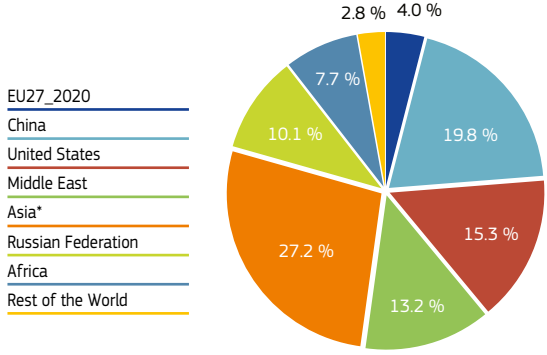
# 1.1 Energy in the World (Overview)

## 1.1.1 World Energy Production by Region

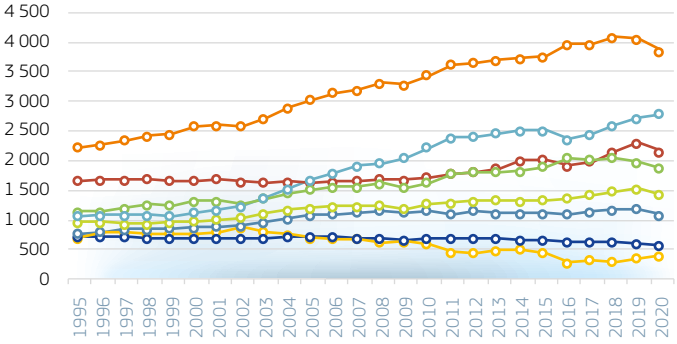
**Mtoe**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 679 | 706 | 698 | 654 | 610 | 565 |
| | | | | | | |
| China | 1124 | 1671 | 2235 | 2504 | 2720 | 2796 |
| United States | 1666 | 1630 | 1723 | 2022 | 2310 | 2160 |
| Middle East | 1328 | 1521 | 1632 | 1896 | 1979 | 1866 |
| Asia* | 2585 | 3027 | 3447 | 3765 | 4055 | 3853 |
| Russian Federation | 978 | 1203 | 1280 | 1334 | 1530 | 1430 |
| Africa | 882 | 1079 | 1164 | 1109 | 1186 | 1087 |
| Rest of the World | 764 | 701 | 601 | 442 | 359 | 398 |
| World | 10007 | 11538 | 12780 | 13726 | 14749 | 14155 |

**Total 2020 = 14 155 Mtoe**




**World Energy Production by Region (Mtoe)**



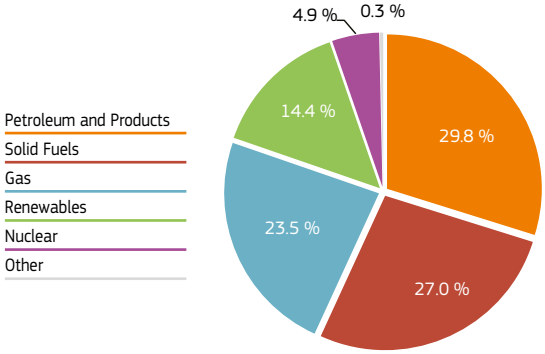

* non OECD and OECD Asia, excluding China
Source: IEA statistics, August 2022
Methodology and Notes: see appendices

## 1.1.2 World Energy Production by Fuel

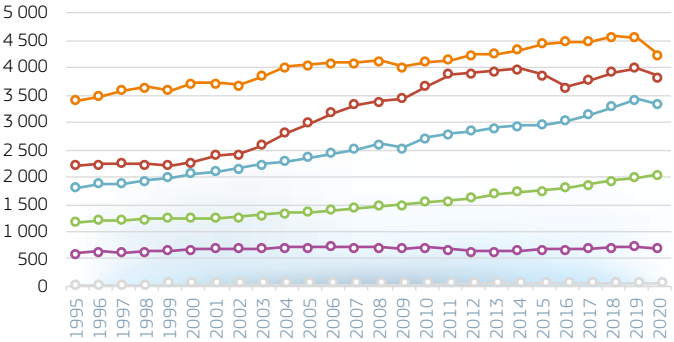
**Mtoe**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Petroleum and Products | 3711 | 4059 | 4104 | 4432 | 4552 | 4223 |
| Solid Fuels | 2279 | 2999 | 3665 | 3869 | 4000 | 3822 |
| Gas | 2060 | 2366 | 2710 | 2963 | 3426 | 3322 |
| Renewables | 1260 | 1369 | 1548 | 1750 | 1995 | 2042 |
| Nuclear | 675 | 722 | 719 | 670 | 727 | 697 |
| Other | 22 | 23 | 34 | 41 | 49 | 49 |
| Total | 10007 | 11538 | 12780 | 13726 | 14749 | 14155 |

**TOTAL 2020 = 14155 Mtoe**




**Mtoe**




Source: IEA statistics, August 2022

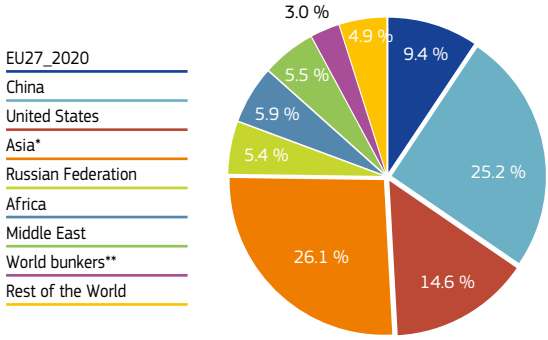
Methodology and Notes: **see appendices**

## 1.1.3 World Total Energy Supply by Region

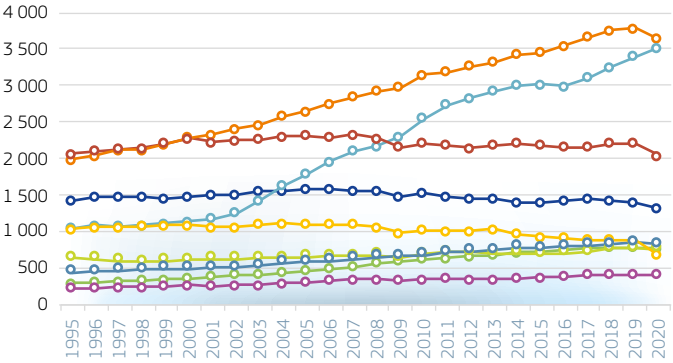
**Mtoe**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1471 | 1574 | 1527 | 1408 | 1407 | 1311 |
| | | | | | | |
| China | 1147 | 1794 | 2550 | 3013 | 3403 | 3512 |
| United States | 2273 | 2318 | 2216 | 2186 | 2215 | 2038 |
| Asia* | 2286 | 2650 | 3144 | 3452 | 3787 | 3642 |
| Russian Federation | 619 | 652 | 693 | 692 | 773 | 758 |
| Africa | 496 | 590 | 688 | 778 | 847 | 830 |
| Middle East | 363 | 476 | 626 | 738 | 789 | 771 |
| World bunkers** | 274 | 317 | 359 | 381 | 420 | 417 |
| Rest of the World | 1092 | 1107 | 1031 | 936 | 879 | 684 |
| World | 10022 | 11478 | 12833 | 13586 | 14519 | 13963 |

**TOTAL 2020 = 13963 Mtoe**




**World Total Energy Supply by Region (Mtoe)**




* non OECD and OECD Asia, excluding China

** International aviation and international navigation

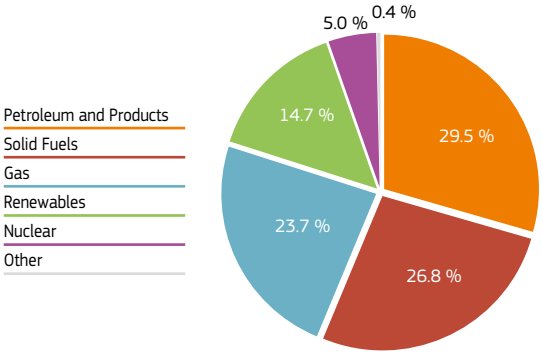
Source: IEA statistics, August 2022
Methodology and Notes: **see appendices**

## 1.1.4 World Total Energy Supply by Fuel

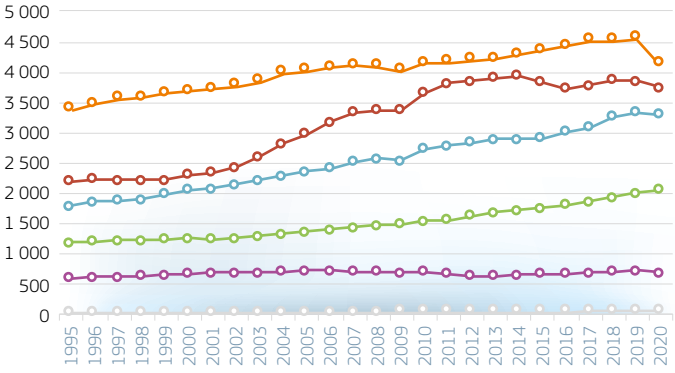
**Mtoe**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Petroleum and Products | 3681 | 4017 | 4144 | 4356 | 4539 | 4115 |
| Solid Fuels | 2315 | 2991 | 3654 | 3840 | 3853 | 3741 |
| Gas | 2067 | 2355 | 2732 | 2921 | 3347 | 3306 |
| Renewables | 1261 | 1370 | 1551 | 1756 | 2004 | 2053 |
| *Hydro | 225 | 252 | 297 | 335 | 364 | 373 |
| *Geothermal | 52 | 53 | 61 | 77 | 101 | 107 |
| *Solar/Wind/Other | 8 | 17 | 49 | 127 | 221 | 247 |
| *Biofuels and Waste | 997 | 1070 | 1177 | 1256 | 1365 | 1374 |
| Nuclear | 675 | 722 | 719 | 670 | 727 | 697 |
| Other | 22 | 23 | 34 | 43 | 50 | 50 |
| Total | 10022 | 11478 | 12833 | 13586 | 14519 | 13963 |

**TOTAL 2020 = 13 963 Mtoe**




**Mtoe**




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

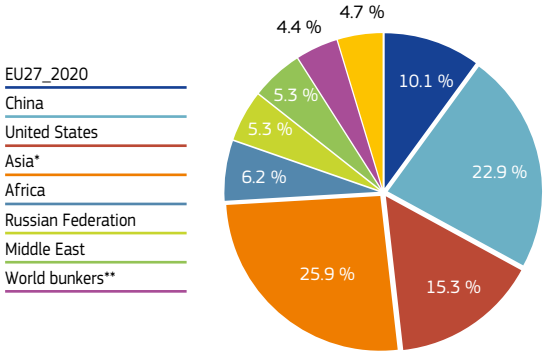
Source: IEA statistics, August 2022
Methodology and Notes: **see appendices**

## 1.1.5 World Total Final Consumption by Region

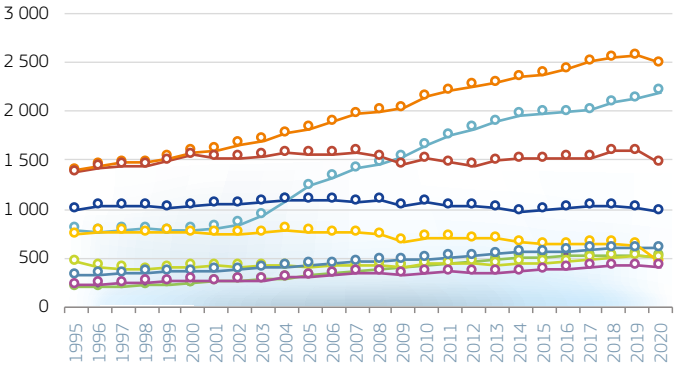
**Mtoe**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1027 | 1093 | 1070 | 994 | 1018 | 963 |
| | | | | | | |
| China | 791 | 1234 | 1652 | 1979 | 2124 | 2190 |
| United States | 1546 | 1563 | 1513 | 1511 | 1588 | 1461 |
| Asia* | 1581 | 1820 | 2140 | 2367 | 2564 | 2477 |
| Africa | 365 | 432 | 494 | 564 | 605 | 598 |
| Russian Federation | 418 | 412 | 447 | 453 | 521 | 506 |
| Middle East | 249 | 319 | 436 | 514 | 532 | 512 |
| World bunkers** | 274 | 317 | 359 | 381 | 420 | 417 |
| Rest of the World | 763 | 769 | 709 | 645 | 634 | 449 |
| World | 7014 | 7959 | 8820 | 9407 | 10008 | 9573 |

**TOTAL 2020 = 9573 Mtoe**




**World Total Final Consumption by Region (Mtoe)**




* non OECD and OECD Asia, excluding China

** International aviation and international navigation

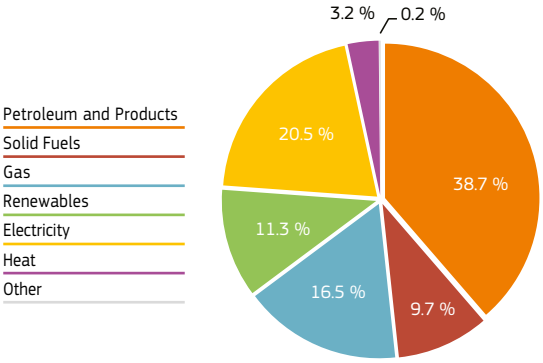
Source: IEA statistics, August 2022
Methodology and Notes: **see sppendices**

## 1.1.6 World Total Final Consumption by Fuel

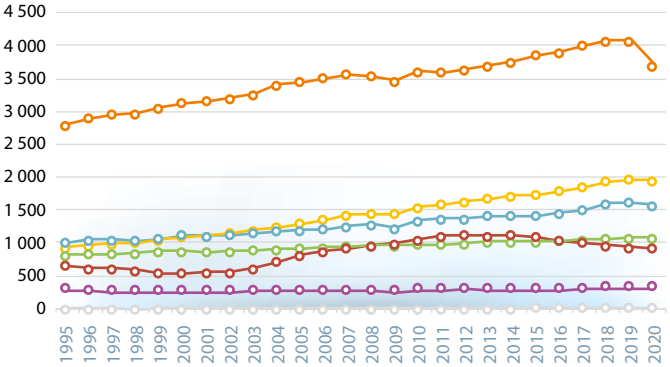
**Mtoe**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Petroleum and Products | 3126 | 3451 | 3615 | 3851 | 4084 | 3700 |
| Solid Fuels | 542 | 825 | 1057 | 1093 | 935 | 924 |
| Gas | 1119 | 1194 | 1344 | 1419 | 1623 | 1580 |
| Renewables | 879 | 920 | 982 | 1024 | 1082 | 1086 |
| Electricity | 1092 | 1301 | 1538 | 1736 | 1962 | 1958 |
| Heat | 248 | 260 | 275 | 272 | 306 | 309 |
| Other | 7 | 7 | 9 | 11 | 15 | 15 |
| Total | 7014 | 7959 | 8820 | 9407 | 10008 | 9573 |

**TOTAL 2020 = 9573 Mtoe**




**World Total Final Consumption by Fuel (Mtoe)**



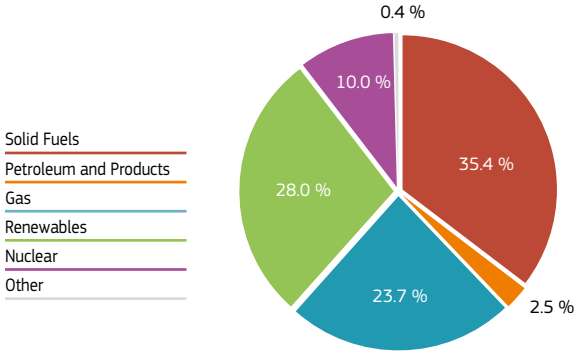

Source: IEA statistics, August 2022
Methodology and Notes: **see appendices**

## 1.1.7 World Electricity Generation by Fuel

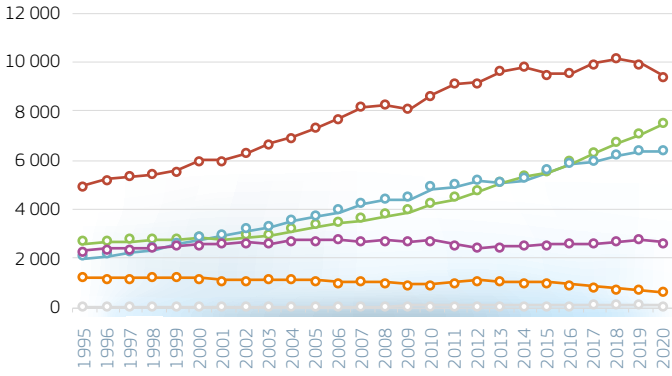
**TWh**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Solid Fuels | 5995 | 7326 | 8670 | 9536 | 9941 | 9452 |
| Petroleum and Products | 1188 | 1129 | 969 | 1021 | 722 | 668 |
| Gas | 2771 | 3701 | 4856 | 5550 | 6350 | 6335 |
| Renewables | 2828 | 3295 | 4201 | 5511 | 7032 | 7482 |
| **Hydro* | 2613 | 2933 | 3449 | 3893 | 4236 | 4341 |
| **Solar/Wind/Other* | 54 | 140 | 408 | 1123 | 2171 | 2467 |
| **Biofuels and Waste* | 162 | 228 | 362 | 509 | 652 | 685 |
| **Geothermal* | 52 | 58 | 68 | 81 | 92 | 95 |
| Nuclear | 2591 | 2768 | 2756 | 2570 | 2789 | 2674 |
| Other | 54 | 67 | 88 | 99 | 123 | 109 |
| Total | 15428 | 18285 | 21539 | 24287 | 26958 | 26721 |

**TOTAL 2020 = 26721 TWh**




**TWh**




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

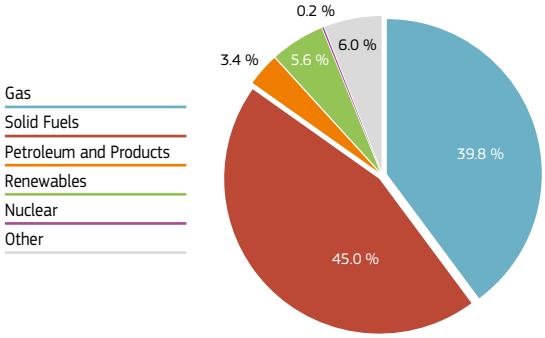
Source: IEA statistics, August 2022
Methodology and Notes: **see appendices**

## 1.1.8 World Heat Generation by Fuel

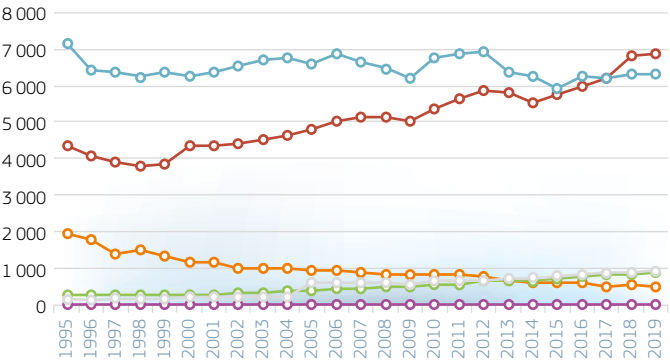
**PJ**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Gas | 6240 | 6617 | 6776 | 5896 | 6284 | 6237 |
| Solid Fuels | 4332 | 4794 | 5367 | 5774 | 6852 | 7040 |
| Petroleum and Products | 1160 | 970 | 845 | 593 | 498 | 536 |
| Renewables | 296 | 395 | 585 | 727 | 880 | 878 |
| **Geothermal* | 18 | 24 | 31 | 41 | 51 | 49 |
| **Solar/Wind/Other* | 16 | 396 | 363 | 395 | 457 | 457 |
| **Biofuels and Waste* | 414 | 531 | 777 | 949 | 1171 | 1204 |
| Nuclear | 19 | 21 | 27 | 26 | 26 | 25 |
| Other | 207 | 613 | 658 | 765 | 932 | 939 |
| Total | 12254 | 13409 | 14258 | 13780 | 15472 | 15655 |

**TOTAL 2020 = 15 655 PJ**




**PJ**




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

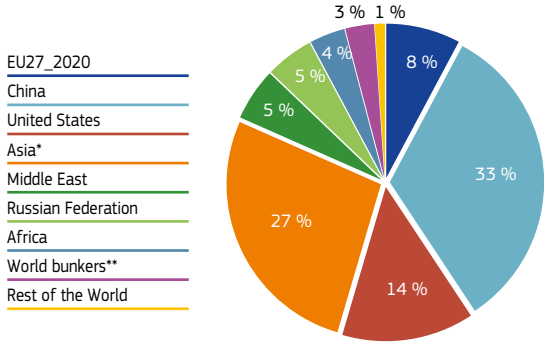
Source: IEA statistics, August 2022
Methodology and Notes: **see sppendices**

## 1.1.9 World $CO_2$ Emissions by Region

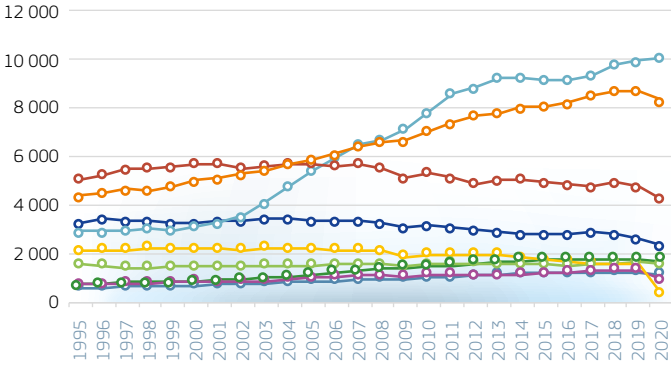
**MT $CO_2$**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 3267 | 3391 | 3137 | 2827 | 2656 | 2394 |
| | | | | | | |
| China | 3138 | 5449 | 7872 | 9177 | 9975 | 10116 |
| United States | 5730 | 5703 | 5352 | 4929 | 4744 | 4258 |
| Asia* | 5025 | 5882 | 7095 | 8090 | 8744 | 8320 |
| Middle East | 882 | 1146 | 1478 | 1717 | 1752 | 1696 |
| Russian Federation | 1474 | 1482 | 1529 | 1533 | 1640 | 1552 |
| Africa | 661 | 865 | 1021 | 1162 | 1241 | 1144 |
| World bunkers** | 857 | 993 | 1122 | 1189 | 1312 | 929 |
| Rest of the World | 2211 | 2172 | 1973 | 1726 | 1601 | 327 |
| World | 23245 | 27083 | 30579 | 32349 | 32265 | 30736 |

**TOTAL 2020: 30736 Mt $CO_2$**




**World $CO_2$ Emissions by Region (Mt $CO_2$)**




* non OECD and OECD Asia, excluding China

** International aviation and international navigation

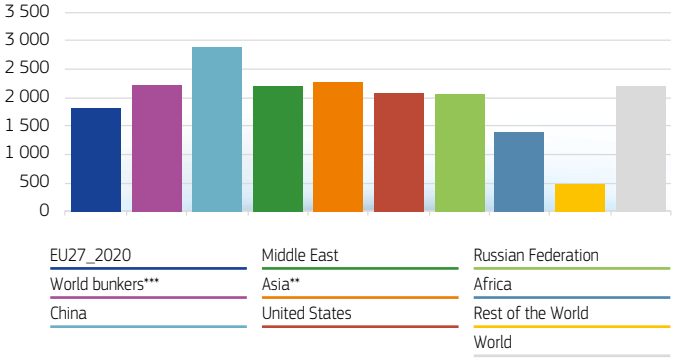
Source: IEA, May 2022, estimates of world $CO_2$ emissions from fuel combustion
Methodology and Notes: see appendices

# 1.1.10 World $CO_2$ Intensity by Region

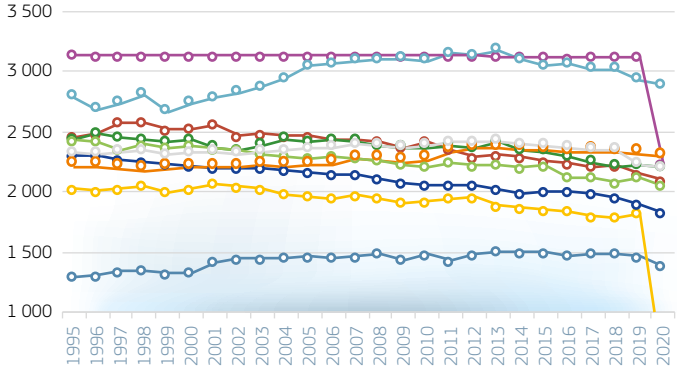
## KG $CO_2$ PER TOE

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 2221 | 2155 | 2054 | 2007 | 1888 | 1827 |
| | | | | | | |
| World bunkers*** | 3128 | 3126 | 3128 | 3120 | 3124 | 2226 |
| China | 2735 | 3038 | 3087 | 3045 | 2931 | 2880 |
| Middle East | 2431 | 2408 | 2363 | 2326 | 2220 | 2199 |
| Asia** | 2198 | 2219 | 2257 | 2343 | 2309 | 2284 |
| United States | 2521 | 2461 | 2415 | 2254 | 2142 | 2089 |
| Russian Federation | 2380 | 2274 | 2206 | 2215 | 2123 | 2048 |
| Africa | 1331 | 1466 | 1483 | 1494 | 1464 | 1378 |
| Rest of the World | 2024 | 1962 | 1914 | 1843 | 1823 | 479 |
| World | 2319 | 2360 | 2383 | 2381 | 2222 | 2201 |

**WORLD AVERAGE 2020 = 2 201 Kg $CO_2$ per toe**




**Kg $CO_2$ per toe**




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

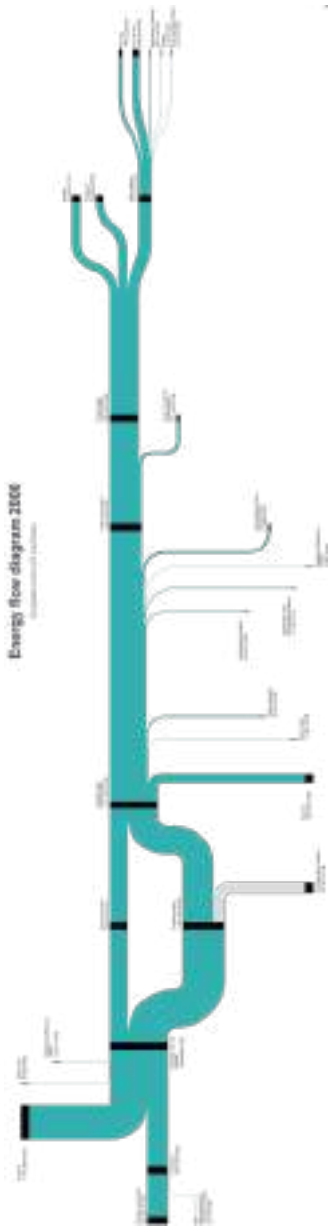
** non OECD and OECD Asia, excluding China and Middle East

*** International aviation and international navigation

Source: IEA statistics, August 2022
Methodology and Notes: **see appendices**

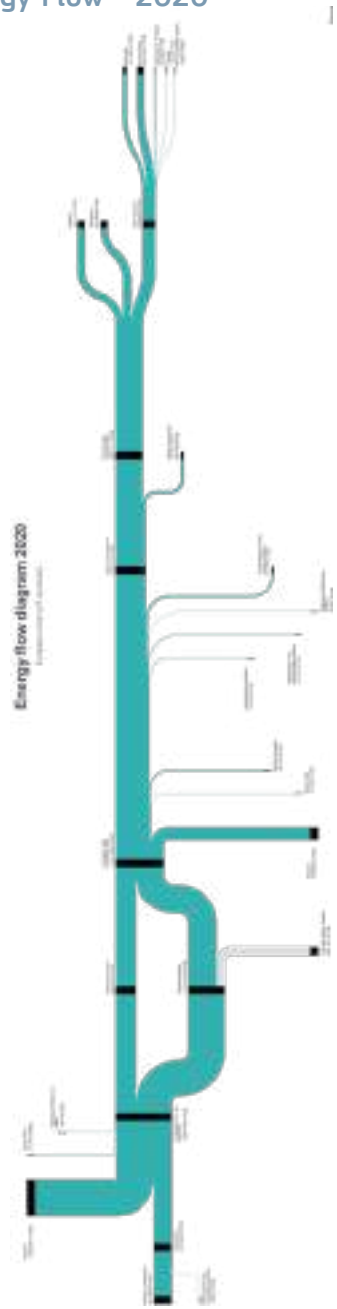
# 1.2 Energy in the EU (Overview)

## 1.2.1 Energy Flow - 2000




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 1.2.2 Energy Flow - 2020

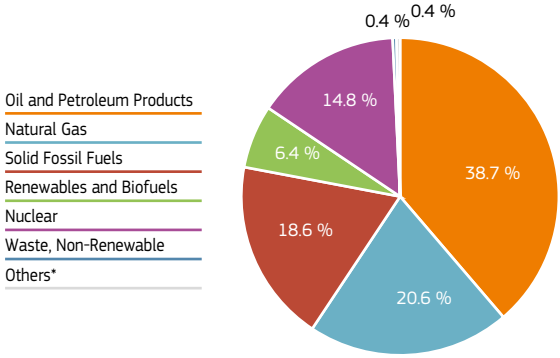



source: Eurostat April 2022
Methodology and Notes: **see appendices**

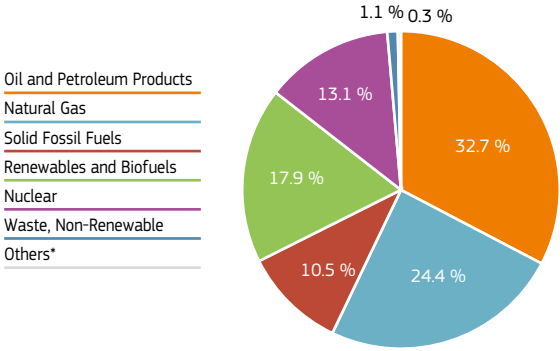
## 1.2.3 Gross Inland Consumption

### ENERGY MIX (%) – PRIMARY PRODUCTS ONLY

**TOTAL PRIMARY PRODUCTS 2000: 1 497.5 Mtoe**
(Total Primary and secondary products 2000: 1 498.3 Mtoe)



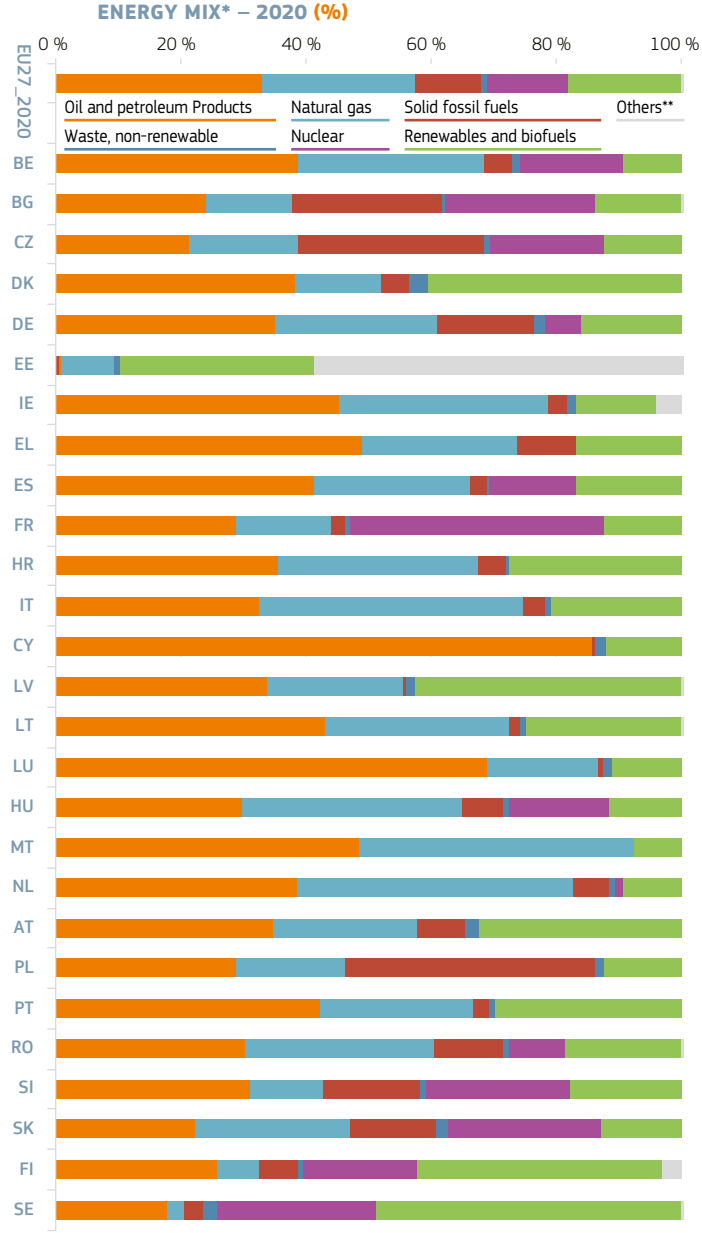

**TOTAL PRIMARY PRODUCTS 2020: 1 341.2 Mtoe**
(Total Primary and secondary products 2020: 1 340.1 Mtoe)




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

source: Eurostat April 2022
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

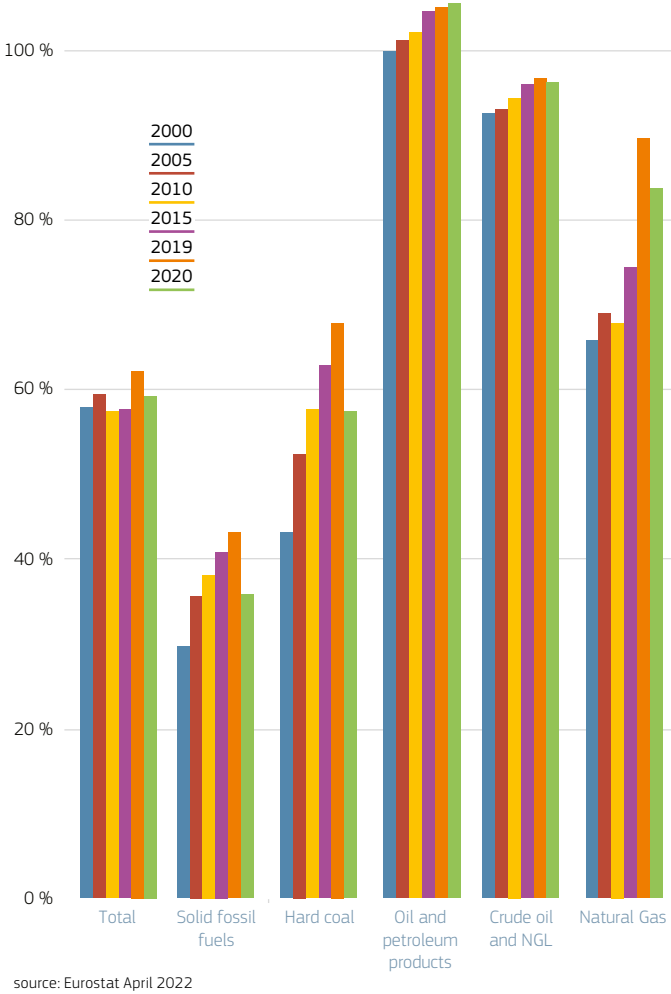
source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 1.2.4 Energy Import Dependency

### BY FUEL – (%)

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Total | 57.8 % | 59.5 % | 57.4 % | 57.6 % | 62.3 % | 59.2 % |
| | | | | | | |
| Solid fossil fuels | 29.8 % | 35.7 % | 38.2 % | 41.0 % | 43.3 % | 35.8 % |
| of which Hard Coal | 43.2 % | 52.5 % | 57.7 % | 63.0 % | 67.9 % | 57.4 % |
| Oil and petroleum products | 99.8 % | 101.2 % | 102.1 % | 104.7 % | 105.0 % | 105.6 % |
| of which Crude and NGL | 92.5 % | 93.0 % | 94.4 % | 95.9 % | 96.6 % | 96.2 % |
| Natural Gas | 65.7 % | 69.0 % | 67.8 % | 74.5 % | 89.7 % | 83.6 % |

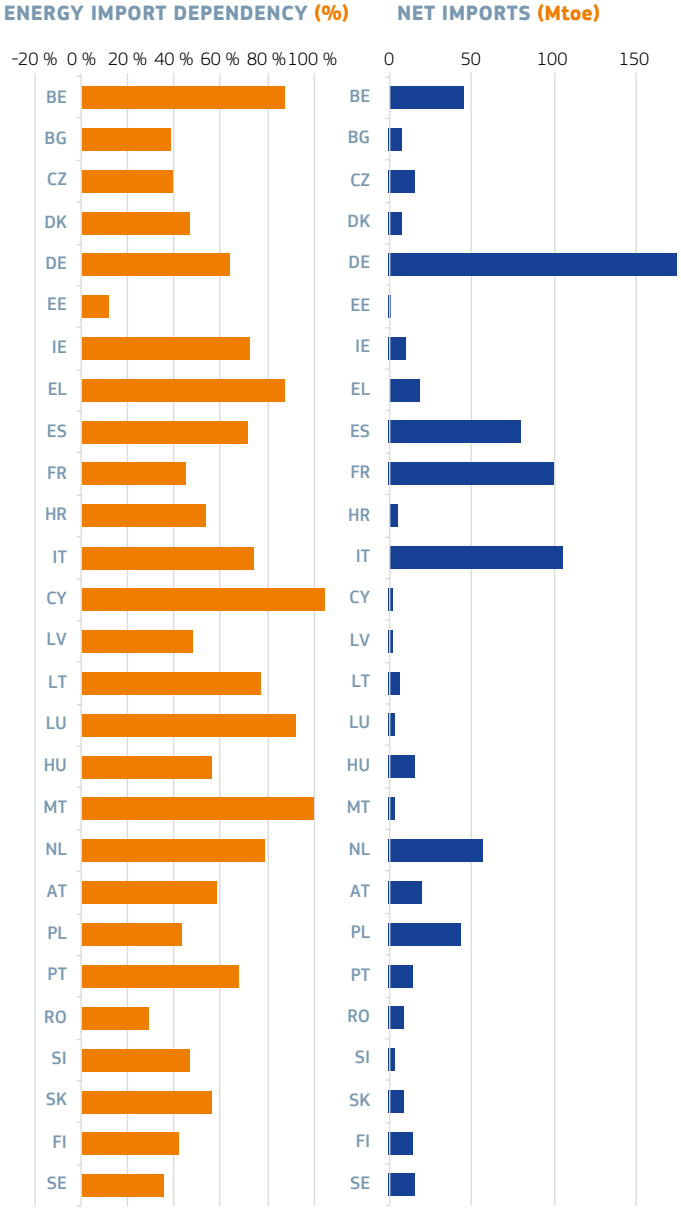
### BY FUEL 2000 - 2020 (%)




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 1.2.5 Energy Import Dependency - Net Imports

### 2020

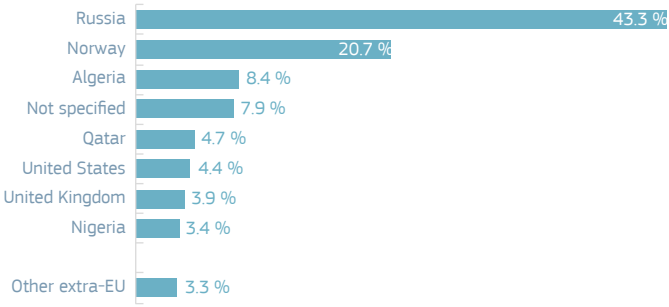



source: Eurostat April 2022
Methodology and Notes: see appendices

## 1.2.6 Imports by Country of Origin

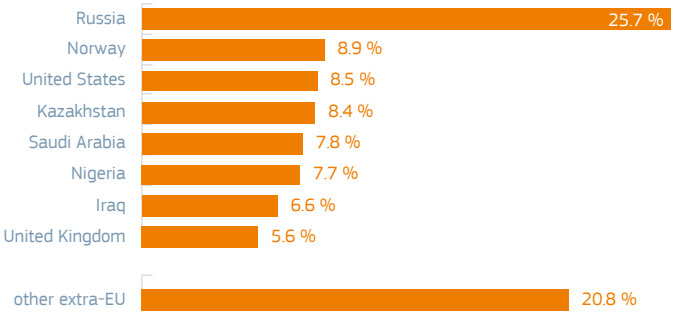
### EU27_2020 IMPORTS* OF NATURAL GAS - 2020

Total extra-EU= 13 680 174.7 TJ-GCV (356.5 bn m³)



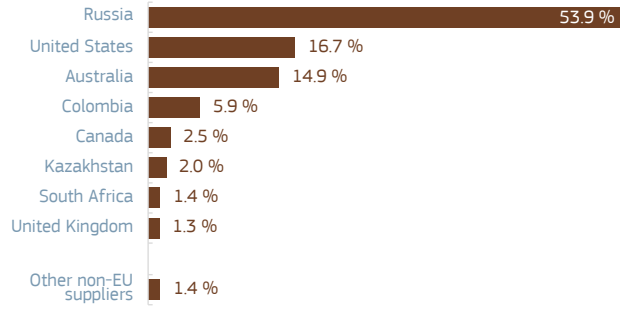

### EU27_2020 IMPORTS* OF CRUDE OIL AND NGL - 2020

Total extra-EU = 442 521 kton




### EU27_2020 imports* of hard coal - 2020

Total Extra-EU = 79 888.6 kton




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

source: Eurostat April 2022
Methodology and Notes: **see appendices**

# 1.3 EU Targets

## 1.3.1 Renewable Energy Targets

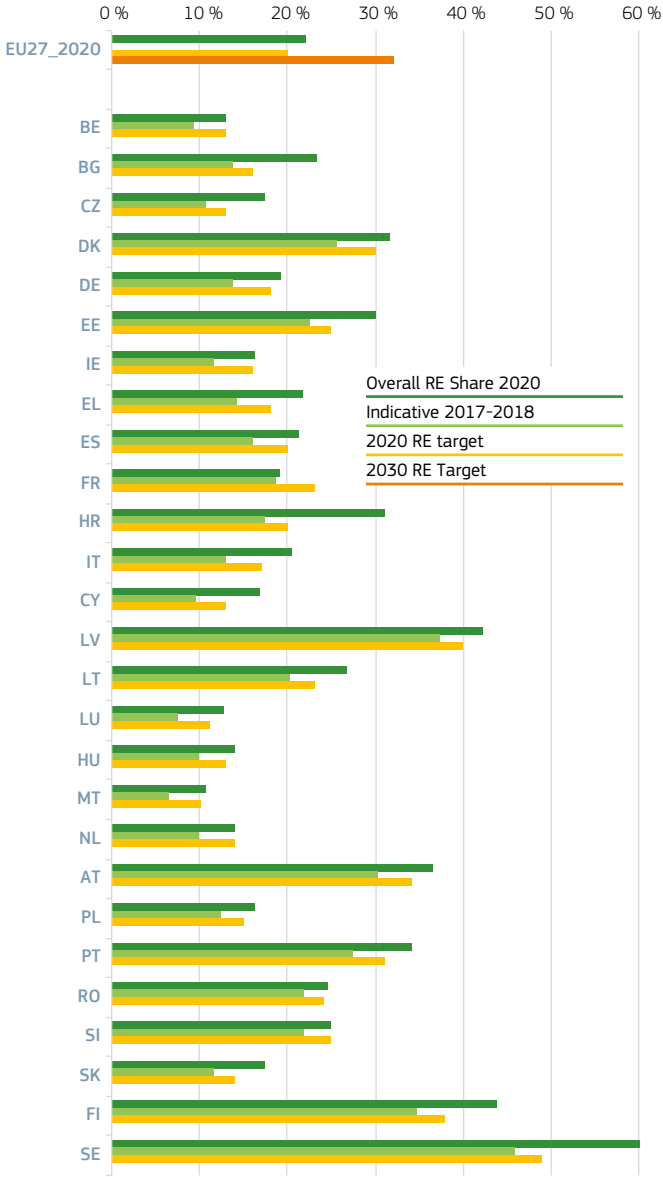
| % | 2020 Renewable energy shares | | | | | | |
|---|---|---|---|---|---|---|---|
| | RE transport 2020 | RE electricity 2020 | RE Heating and cooling 2020 | Overall RE Share 2020 | Indicative 2017-2018 | 2020 RE target | 2030 RE Target |
| EU27_2020 | 10.2 % | 37.5 % | 23.1 % | 22.1 % | n.a. | 20% | 32% |
| | | | | | | | |
| BE | 11.0 % | 25.1 % | 8.4 % | 13.0 % | 9.2 % | 13.0 % | |
| BG | 9.1 % | 23.6 % | 37.2 % | 23.3 % | 13.7 % | 16.0 % | |
| CZ | 9.4 % | 14.8 % | 23.5 % | 17.3 % | 10.6 % | 13.0 % | |
| DK | 9.7 % | 65.3 % | 51.1 % | 31.7 % | 25.5 % | 30.0 % | |
| DE | 9.9 % | 44.7 % | 14.8 % | 19.3 % | 13.7 % | 18.0 % | |
| EE | 12.2 % | 28.3 % | 58.8 % | 30.1 % | 22.6 % | 25.0 % | |
| IE | 10.2 % | 39.1 % | 6.3 % | 16.2 % | 11.5 % | 16.0 % | |
| EL | 5.3 % | 35.9 % | 31.9 % | 21.7 % | 14.1 % | 18.0 % | |
| ES | 9.5 % | 42.9 % | 18.0 % | 21.2 % | 16.0 % | 20.0 % | |
| FR | 9.2 % | 24.8 % | 23.4 % | 19.1 % | 18.6 % | 23.0 % | |
| HR | 6.6 % | 53.8 % | 36.9 % | 31.0 % | 17.4 % | 20.0 % | |
| IT | 10.7 % | 38.1 % | 19.9 % | 20.4 % | 12.9 % | 17.0 % | |
| CY | 7.4 % | 12.0 % | 37.1 % | 16.9 % | 9.5 % | 13.0 % | |
| LV | 6.7 % | 53.4 % | 57.1 % | 42.1 % | 37.4 % | 40.0 % | |
| LT | 5.5 % | 20.2 % | 50.4 % | 26.8 % | 20.2 % | 23.0 % | |
| LU | 12.6 % | 13.9 % | 12.6 % | 12.6 % | 7.5 % | 11.0 % | |
| HU | 11.6 % | 11.9 % | 17.7 % | 13.9 % | 10.0 % | 13.0 % | |
| MT | 10.6 % | 9.5 % | 23.0 % | 10.7 % | 6.5 % | 10.0 % | |
| NL | 12.6 % | 26.4 % | 8.1 % | 14.0 % | 9.9 % | 14.0 % | |
| AT | 10.3 % | 78.2 % | 35.0 % | 36.5 % | 30.3 % | 34.0 % | |
| PL | 6.6 % | 16.2 % | 22.1 % | 16.1 % | 12.3 % | 15.0 % | |
| PT | 9.7 % | 58.0 % | 41.5 % | 34.0 % | 27.3 % | 31.0 % | |
| RO | 8.5 % | 43.4 % | 25.3 % | 24.5 % | 21.8 % | 24.0 % | |
| SI | 10.9 % | 35.1 % | 32.1 % | 25.0 % | 21.9 % | 25.0 % | |
| SK | 9.3 % | 23.1 % | 19.4 % | 17.3 % | 11.4 % | 14.0 % | |
| FI | 13.4 % | 39.6 % | 57.6 % | 43.8 % | 34.7 % | 38.0 % | |
| SE | 31.9 % | 74.5 % | 66.4 % | 60.1 % | 45.8 % | 49.0 % | |

* in % of the Gross Final Energy Consumption

source: Eurostat-RES SHARES March 2022
Methodology and Notes: see appendices

## 1.3.1 Renewable Energy Targets

**RENEWABLE ENERGY SHARES AND TARGETS* (%)**

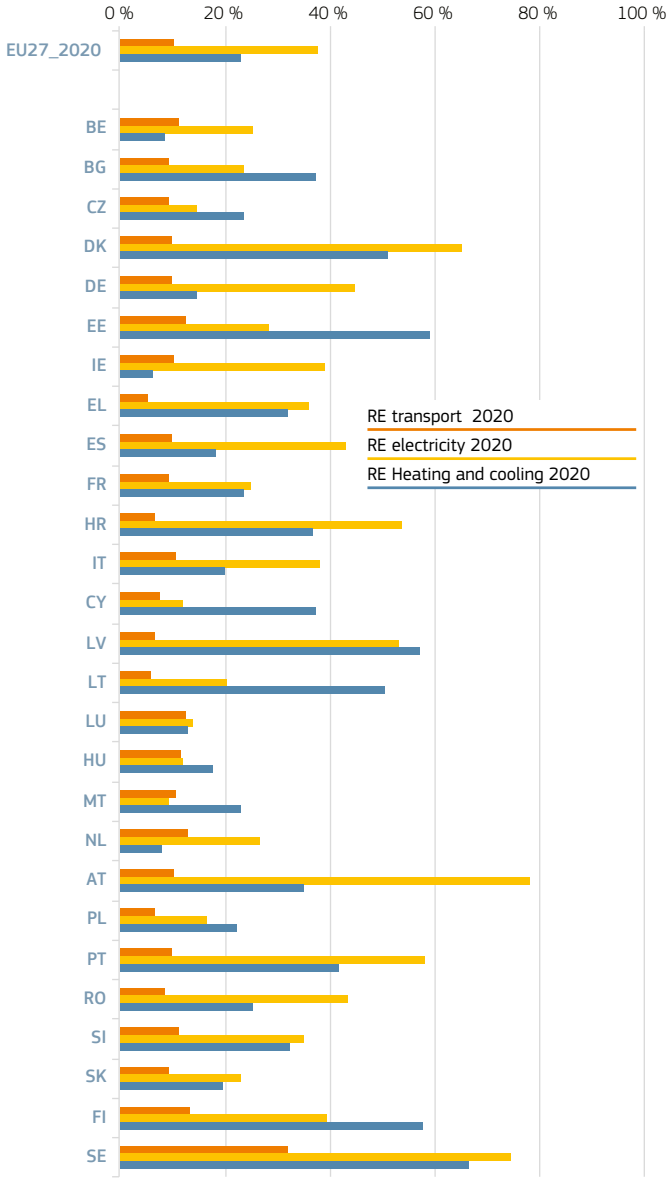



* in Gross Final Energy Consumption

source: Eurostat-RES SHARES March 2022
Methodology and Notes: **see appendices**

## 1.3.1 Renewable Energy Shares

### RES SHARES IN HEATING AND COOLING, ELECTRICITY, AND TRANSPORT 2020 (%)




* in Gross Final Energy Consumption

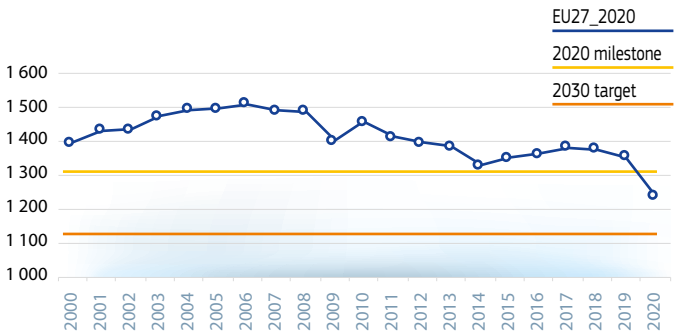
source: Eurostat-RES SHARES March 2022
Methodology and Notes: see appendices

## 1.3.2 Energy efficiency targets

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

| | 2005 | 2010 | 2015 | 2019 | 2020 | 2020 MILESTONE & TARGET | 2030 TARGET |
|---|---|---|---|---|---|---|---|
| EU27_2020 | 1 497.9 | 1 457.7 | 1 352.7 | 1 353.8 | 1 236.3 | *1 312** | 1 128 |
| | | | | | | | |
| BE | 51.6 | 53.4 | 45.7 | 48.4 | 43.9 | | |
| BG | 19.2 | 17.4 | 18.0 | 18.2 | 17.2 | | |
| CZ | 42.5 | 42.5 | 39.4 | 39.8 | 37.5 | | |
| DK | 19.4 | 20.0 | 16.8 | 16.8 | 15.3 | | |
| DE | 321.6 | 315.2 | 295.9 | 285.2 | 262.3 | | |
| EE | 5.3 | 5.8 | 4.8 | 4.7 | 4.3 | | |
| IE | 14.9 | 14.7 | 14.0 | 14.7 | 13.4 | | |
| EL | 30.3 | 27.2 | 23.4 | 22.3 | 19.2 | | |
| ES | 136.0 | 123.0 | 118.2 | 120.6 | 105.0 | | |
| FR | 261.0 | 254.6 | 244.4 | 235.2 | 208.4 | | |
| HR | 9.1 | 8.9 | 8.0 | 8.2 | 7.8 | | |
| IT | 180.8 | 167.3 | 149.1 | 145.9 | 132.3 | | |
| CY | 2.5 | 2.7 | 2.3 | 2.5 | 2.2 | | |
| LV | 4.5 | 4.6 | 4.3 | 4.6 | 4.3 | | |
| LT | 8.0 | 6.2 | 5.8 | 6.3 | 6.2 | | |
| LU | 4.8 | 4.6 | 4.1 | 4.5 | 3.9 | | |
| HU | 26.3 | 24.6 | 23.3 | 24.6 | 23.9 | | |
| MT | 0.9 | 0.9 | 0.8 | 0.9 | 0.7 | | |
| NL | 70.1 | 71.7 | 63.9 | 63.5 | 58.4 | | |
| AT | 32.7 | 32.9 | 31.7 | 32.3 | 29.7 | | |
| PL | 88.0 | 96.6 | 90.1 | 100.2 | 96.9 | | |
| PT | 24.9 | 22.7 | 21.6 | 22.1 | 19.5 | | |
| RO | 36.1 | 32.9 | 30.7 | 32.1 | 30.9 | | |
| SI | 7.2 | 7.0 | 6.3 | 6.5 | 6.1 | | |
| SK | 17.4 | 16.7 | 15.2 | 16.0 | 15.2 | | |
| FI | 33.6 | 35.4 | 31.2 | 32.1 | 29.9 | | |
| SE | 49.0 | 48.3 | 43.8 | 45.8 | 41.7 | | |

### EU27_2020: PRIMARY ENERGY CONSUMPTION 2020-2030 (Mtoe)




*milestone for EU27_2020, based on the target for EU28

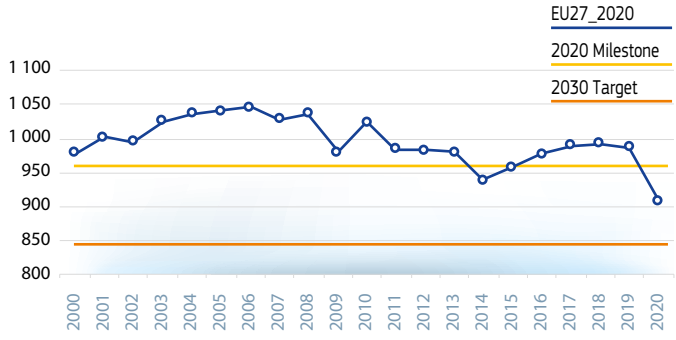
source: Eurostat April 2022
Methodology and Notes: see appendices

## 1.3.2 Energy efficiency targets

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

| | 2005 | 2010 | 2015 | 2019 | 2020 | 2020 MILESTONE & TARGET | 2030 TARGET |
|---|---|---|---|---|---|---|---|
| EU27_2020 | 1040.9 | 1024.1 | 958.4 | 986.4 | 907.0 | *959** | 846 |
| | | | | | | | |
| BE | 36.8 | 38.1 | 35.9 | 35.8 | 33.3 | | |
| BG | 10.1 | 8.8 | 9.5 | 9.8 | 9.5 | | |
| CZ | 26.1 | 25.3 | 24.2 | 25.3 | 24.5 | | |
| DK | 15.5 | 15.5 | 14.2 | 14.3 | 13.1 | | |
| DE | 219.7 | 223.0 | 212.7 | 214.7 | 201.7 | | |
| EE | 2.9 | 2.9 | 2.8 | 2.9 | 2.8 | | |
| IE | 12.6 | 11.9 | 11.3 | 12.4 | 11.2 | | |
| EL | 21.0 | 19.1 | 16.6 | 16.2 | 14.5 | | |
| ES | 98.1 | 89.6 | 80.5 | 86.5 | 73.8 | | |
| FR | 160.1 | 154.0 | 148.4 | 145.4 | 130.1 | | |
| HR | 7.2 | 7.2 | 6.6 | 6.9 | 6.5 | | |
| IT | 137.2 | 128.5 | 116.2 | 115.4 | 102.7 | | |
| CY | 1.8 | 1.9 | 1.7 | 1.9 | 1.6 | | |
| LV | 4.0 | 4.1 | 3.8 | 4.1 | 3.9 | | |
| LT | 4.7 | 4.8 | 4.9 | 5.6 | 5.3 | | |
| LU | 4.5 | 4.3 | 4.0 | 4.4 | 3.8 | | |
| HU | 18.7 | 17.5 | 17.4 | 18.6 | 18.0 | | |
| MT | 0.5 | 0.5 | 0.6 | 0.7 | 0.5 | | |
| NL | 54.1 | 55.3 | 48.8 | 49.7 | 45.5 | | |
| AT | 27.9 | 28.0 | 27.5 | 28.3 | 26.1 | | |
| PL | 58.5 | 66.3 | 62.3 | 73.7 | 71.1 | | |
| PT | 19.0 | 18.1 | 16.0 | 17.1 | 15.0 | | |
| RO | 24.6 | 22.5 | 21.8 | 23.9 | 23.5 | | |
| SI | 5.1 | 5.1 | 4.7 | 4.9 | 4.4 | | |
| SK | 11.6 | 11.5 | 10.1 | 11.2 | 10.4 | | |
| FI | 25.2 | 26.2 | 24.2 | 25.4 | 23.3 | | |
| SE | 33.2 | 34.0 | 31.8 | 31.5 | 30.9 | | |

### EU27_2020: FINAL ENERGY CONSUMPTION 2020-2030 (Mtoe)




*milestone for EU27_2020, based on the target for EU28

source: Eurostat April 2022
Methodology and Notes: see appendices

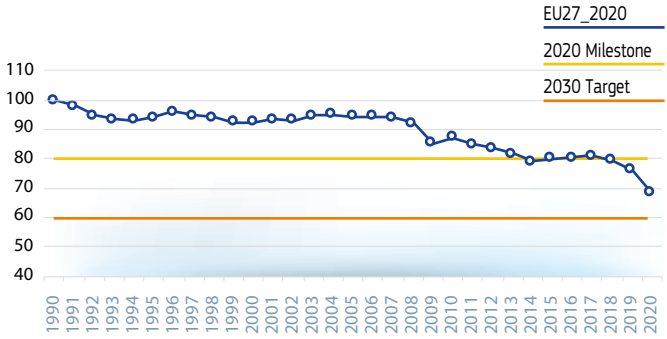
## 1.3.3 Greenhouse gas (GHG) Emissions Milestones and Targets

### GHG EMISSIONS MILESTONES AND TARGETS

**INDEX 100=1990**

| | 1990 | 2000 | 2005 | 2010 | 2020 | 2020 GHG MILESTONE & TARGET | 2030 GHG TARGET |
|---|---|---|---|---|---|---|---|
| EU27_2020 | 100 | 92.4 | 94.5 | 87.3 | 68.4 | *80** | 60 |
| | | | | | | | |
| BE | 100 | 103.2 | 100.2 | 92.6 | 74.0 | | |
| BG | 100 | 57.7 | 63.2 | 60.4 | 50.1 | | |
| CZ | 100 | 75.9 | 75.3 | 70.9 | 57.0 | | |
| DK | 100 | 101.3 | 95.5 | 90.9 | 58.6 | | |
| DE | 100 | 84.2 | 80.5 | 76.6 | 59.2 | | |
| EE | 100 | 43.6 | 47.9 | 52.8 | 28.9 | | |
| IE | 100 | 126.7 | 131.2 | 115.9 | 106.2 | | |
| EL | 100 | 121.8 | 131.2 | 114.3 | 71.9 | | |
| ES | 100 | 134.9 | 154.0 | 125.8 | 95.4 | | |
| FR | 100 | 101.9 | 102.6 | 94.7 | 72.5 | | |
| HR | 100 | 80.5 | 93.8 | 88.4 | 74.9 | | |
| IT | 100 | 107.8 | 114.4 | 100.5 | 73.5 | | |
| CY | 100 | 144.9 | 159.6 | 163.5 | 146.0 | | |
| LV | 100 | 38.9 | 42.6 | 46.6 | 40.7 | | |
| LT | 100 | 40.4 | 47.4 | 43.3 | 42.2 | | |
| LU | 100 | 81.0 | 109.0 | 102.6 | 81.6 | | |
| HU | 100 | 79.4 | 81.3 | 70.0 | 66.2 | | |
| MT | 100 | 111.4 | 116.1 | 115.8 | 83.0 | | |
| NL | 100 | 101.3 | 99.4 | 98.7 | 76.0 | | |
| AT | 100 | 103.1 | 118.5 | 108.7 | 94.1 | | |
| PL | 100 | 83.4 | 85.2 | 87.0 | 79.2 | | |
| PT | 100 | 139.4 | 146.8 | 119.3 | 98.6 | | |
| RO | 100 | 55.7 | 58.8 | 49.2 | 43.9 | | |
| SI | 100 | 100.0 | 110.1 | 105.7 | 85.1 | | |
| SK | 100 | 66.4 | 69.0 | 62.3 | 50.5 | | |
| FI | 100 | 98.8 | 98.7 | 107.1 | 67.4 | | |
| SE | 100 | 96.6 | 94.5 | 91.8 | 64.9 | | |

### EU27_2020: GHG EMISSIONS (index100=1990) 1990 - 2020




*milestone for EU27_2020, based on the target for EU28

Source: EEA, June 2022, Eurostat 2022

source: Eurostat April 2022

# 2 Energy in the EU

# 2 Energy in the EU

# Summary

# 2.1 Energy Supply

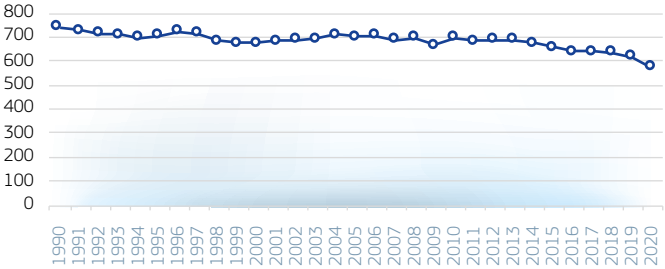
## 2.1.1 Production*

### ALL FUELS

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 676.0 | 703.3 | 695.5 | 657.1 | 617.8 | 573.7 |
| Index2000 | 100 % | 104 % | 103 % | 97 % | 91 % | 85 % |
| | | | | | | |
| BE | 13.40 | 13.83 | 15.03 | 10.30 | 15.19 | 13.33 |
| BG | 9.86 | 10.64 | 10.45 | 12.03 | 11.69 | 10.83 |
| CZ | 30.81 | 33.23 | 31.86 | 28.55 | 26.60 | 23.50 |
| DK | 27.82 | 31.34 | 23.36 | 16.16 | 12.50 | 9.53 |
| DE | 135.24 | 137.78 | 131.67 | 120.55 | 105.28 | 97.80 |
| EE | 3.38 | 4.04 | 5.05 | 4.89 | 4.97 | 4.38 |
| IE | 2.16 | 1.70 | 1.83 | 1.96 | 4.14 | 3.54 |
| EL | 10.04 | 10.38 | 9.49 | 8.53 | 6.37 | 4.95 |
| ES | 31.32 | 30.00 | 34.55 | 34.12 | 34.67 | 35.42 |
| FR | 129.26 | 135.91 | 136.87 | 140.78 | 134.08 | 122.62 |
| HR | 4.26 | 4.76 | 5.17 | 4.41 | 3.90 | 3.73 |
| IT | 28.17 | 30.21 | 32.94 | 36.10 | 36.91 | 37.67 |
| CY | 0.04 | 0.05 | 0.09 | 0.13 | 0.21 | 0.22 |
| LV | 1.41 | 1.86 | 1.98 | 2.34 | 2.83 | 2.71 |
| LT | 3.49 | 4.15 | 1.56 | 1.86 | 2.04 | 2.03 |
| LU | 0.06 | 0.11 | 0.12 | 0.15 | 0.23 | 0.30 |
| HU | 11.61 | 10.86 | 11.71 | 11.10 | 10.79 | 10.59 |
| MT | 0.00 | 0.00 | 0.00 | 0.02 | 0.04 | 0.04 |
| NL | 58.45 | 62.45 | 71.12 | 48.11 | 33.12 | 27.43 |
| AT | 9.80 | 9.89 | 12.12 | 12.23 | 12.41 | 12.39 |
| PL | 78.63 | 77.93 | 66.83 | 67.76 | 62.14 | 57.98 |
| PT | 3.85 | 3.61 | 5.80 | 5.91 | 6.55 | 6.80 |
| RO | 28.53 | 27.91 | 27.37 | 26.37 | 24.53 | 22.36 |
| SI | 3.20 | 3.73 | 3.69 | 3.32 | 3.38 | 3.51 |
| SK | 6.28 | 6.44 | 6.01 | 6.39 | 6.94 | 6.75 |
| FI | 14.91 | 16.69 | 17.08 | 17.21 | 19.27 | 18.41 |
| SE | 30.01 | 33.81 | 31.76 | 35.82 | 37.02 | 34.87 |

**PRODUCTION – ALL FUELS – 1990-2020**

EU27_2020




* Primary production. recycled and recovered products

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.1.1 Production*

### BY FUEL

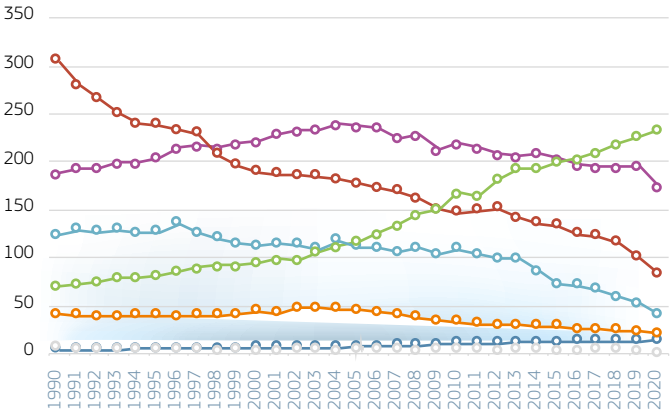
| Mtoe | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Nuclear | Solid fossil fuels | Renewables and biofuels | Natural gas | Oil and petroleum products | Wastes, Non-Renewable | Peat, oil shale and oil sands |
| EU27_2020 | 175.2 | 83.6 | 234.2 | 41.2 | 21.3 | 13.8 | 3.3 |
| Share (%) | 30.5 % | 14.6 % | 40.8 % | 7.2 % | 3.7 % | 2.4 % | 0.6 % |
| | | | | | | | |
| BE | 8.37 | 0.00 | 3.99 | 0.00 | 0.00 | 0.65 | 0.00 |
| BG | 4.33 | 3.73 | 2.58 | 0.05 | 0.00 | 0.07 | 0.01 |
| CZ | 7.50 | 10.17 | 5.18 | 0.16 | 0.10 | 0.37 | 0.00 |
| DK | 0.00 | 0.00 | 4.34 | 1.19 | 3.62 | 0.38 | 0.00 |
| DE | 16.58 | 23.39 | 46.51 | 4.03 | 3.11 | 4.19 | 0.00 |
| EE | 0.00 | 0.00 | 1.84 | 0.00 | 0.00 | 0.03 | 2.51 |
| IE | 0.00 | 0.00 | 1.61 | 1.65 | 0.00 | 0.15 | 0.13 |
| EL | 0.00 | 1.63 | 3.21 | 0.01 | 0.09 | 0.01 | 0.00 |
| ES | 15.17 | 0.00 | 19.64 | 0.04 | 0.03 | 0.54 | 0.00 |
| FR | 92.21 | 0.00 | 27.96 | 0.02 | 0.80 | 1.63 | 0.00 |
| HR | 0.00 | 0.00 | 2.33 | 0.71 | 0.66 | 0.04 | 0.00 |
| IT | 0.00 | 0.00 | 27.34 | 3.29 | 5.86 | 1.19 | 0.00 |
| CY | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.01 | 0.00 |
| LV | 0.00 | 0.00 | 2.69 | 0.00 | 0.00 | 0.02 | 0.00 |
| LT | 0.00 | 0.00 | 1.70 | 0.00 | 0.03 | 0.06 | 0.00 |
| LU | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.04 | 0.00 |
| HU | 4.05 | 0.93 | 3.10 | 1.32 | 1.03 | 0.15 | 0.00 |
| MT | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 |
| NL | 0.96 | 0.00 | 7.13 | 17.26 | 1.07 | 0.71 | 0.00 |
| AT | 0.00 | 0.00 | 10.51 | 0.63 | 0.57 | 0.67 | 0.00 |
| PL | 0.00 | 40.03 | 12.52 | 3.40 | 0.93 | 1.07 | 0.00 |
| PT | 0.00 | 0.00 | 6.66 | 0.00 | 0.00 | 0.14 | 0.00 |
| RO | 2.89 | 2.59 | 5.80 | 7.39 | 3.41 | 0.28 | 0.00 |
| SI | 1.50 | 0.87 | 1.08 | 0.00 | 0.00 | 0.06 | 0.00 |
| SK | 4.04 | 0.24 | 2.18 | 0.05 | 0.00 | 0.23 | 0.00 |
| FI | 5.55 | 0.00 | 11.86 | 0.00 | 0.00 | 0.29 | 0.58 |
| SE | 12.03 | 0.00 | 21.91 | 0.00 | 0.00 | 0.88 | 0.06 |

* Primary production. recycled and recovered products

source: Eurostat April 2022
Methodology and Notes: see appendices

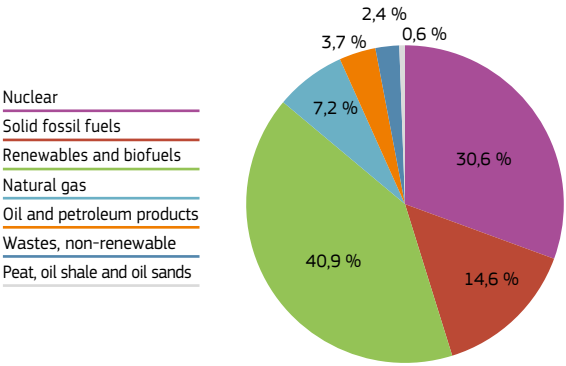
## 2.1.1 Production*

### BY FUEL – EU27_2020 – 1990-2020 (Mtoe)




### PRODUCTION* EU27_2020 IN 2020 (% TOTAL)

Total = 573.7 Mtoe




* Primary production. recycled and recovered products

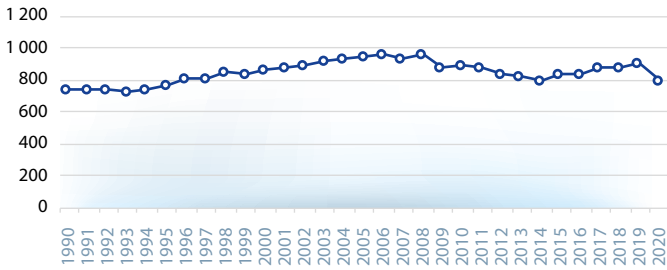
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.1.2 Net Imports

### ALL FUELS

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 865.95 | 954.57 | 895.46 | 834.48 | 907.61 | 792.97 |
| Index2000 | 100 % | 110 % | 103 % | 96 % | 105 % | 92 % |
| | | | | | | |
| BE | 50.63 | 53.46 | 53.64 | 50.07 | 49.88 | 45.13 |
| BG | 8.68 | 9.56 | 7.23 | 6.84 | 7.21 | 6.79 |
| CZ | 9.37 | 12.68 | 11.54 | 13.49 | 17.53 | 15.64 |
| DK | -7.47 | -10.42 | -3.37 | 2.35 | 6.97 | 7.38 |
| DE | 204.85 | 211.96 | 204.59 | 199.14 | 207.54 | 182.24 |
| EE | 1.64 | 1.51 | 0.90 | 0.57 | 0.24 | 0.50 |
| IE | 12.41 | 13.96 | 13.30 | 12.79 | 10.39 | 9.89 |
| EL | 21.75 | 23.14 | 21.30 | 18.38 | 19.32 | 17.97 |
| ES | 99.86 | 124.25 | 106.68 | 94.85 | 100.56 | 80.23 |
| FR | 132.66 | 144.61 | 132.38 | 120.23 | 120.34 | 99.90 |
| HR | 4.10 | 5.17 | 4.43 | 4.15 | 4.95 | 4.46 |
| IT | 152.44 | 159.77 | 148.48 | 121.42 | 122.49 | 105.80 |
| CY | 2.58 | 2.86 | 2.96 | 2.47 | 2.69 | 2.38 |
| LV | 2.36 | 3.10 | 2.22 | 2.37 | 2.17 | 2.08 |
| LT | 4.30 | 5.05 | 5.71 | 5.48 | 6.01 | 5.85 |
| LU | 3.64 | 4.68 | 4.51 | 4.01 | 4.32 | 3.67 |
| HU | 13.87 | 17.75 | 15.14 | 13.58 | 18.62 | 14.81 |
| MT | 1.47 | 1.59 | 2.36 | 2.23 | 3.08 | 2.88 |
| NL | 34.99 | 37.53 | 28.28 | 43.68 | 56.26 | 57.05 |
| AT | 19.17 | 24.69 | 21.88 | 20.37 | 24.91 | 18.80 |
| PL | 9.60 | 16.49 | 32.14 | 28.67 | 48.11 | 44.16 |
| PT | 22.21 | 24.81 | 18.69 | 18.49 | 18.35 | 14.41 |
| RO | 8.04 | 10.63 | 7.49 | 5.33 | 10.07 | 9.10 |
| SI | 3.40 | 3.85 | 3.58 | 3.24 | 3.60 | 2.95 |
| SK | 11.54 | 12.34 | 11.41 | 9.78 | 11.88 | 9.26 |
| FI | 18.55 | 19.25 | 18.08 | 15.80 | 14.55 | 13.63 |
| SE | 19.29 | 20.31 | 19.91 | 14.69 | 15.56 | 16.01 |

**NET IMPORTS – ALL FUELS – 1990-2020**




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.1.2 Net Imports

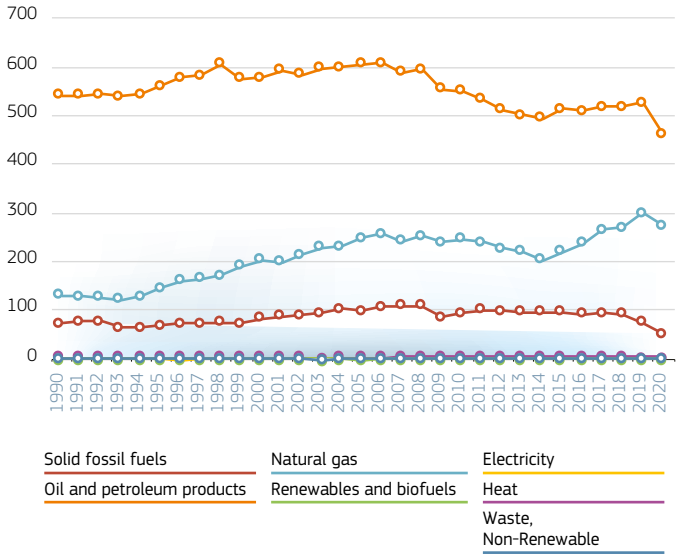
### BY FUEL

| | 2020 | | | | | |
|---|---|---|---|---|---|---|
| Mtoe | Net Imports | Solid fossil fuels | Oil and petroleum products | Natural gas | Renewables and biofuels | Electricity |
| EU27_2020 | 793.0 | 50.3 | 461.5 | 273.5 | 6.1 | 1.2 |
| Share (%) | 100 % | 6.3 % | 58.2 % | 34.5 % | 0.8 % | 0.2 % |
| | | | | | | |
| BE | 45.13 | 2.41 | 26.75 | 15.05 | 0.94 | -0.03 |
| BG | 6.79 | 0.40 | 4.29 | 2.43 | -0.03 | -0.29 |
| CZ | 15.64 | 1.58 | 8.72 | 6.26 | -0.04 | -0.87 |
| DK | 7.38 | 0.53 | 3.50 | 0.79 | 1.89 | 0.59 |
| DE | 182.24 | 19.68 | 97.30 | 66.47 | 0.43 | -1.64 |
| EE | 0.50 | -0.01 | 0.33 | 0.37 | -0.50 | 0.31 |
| IE | 9.89 | 0.27 | 6.58 | 2.90 | 0.16 | -0.01 |
| EL | 17.97 | 0.19 | 11.91 | 4.96 | 0.15 | 0.76 |
| ES | 80.23 | 1.70 | 51.71 | 27.23 | -0.70 | 0.28 |
| FR | 99.90 | 5.10 | 64.97 | 33.05 | 0.65 | -3.87 |
| HR | 4.46 | 0.38 | 2.07 | 1.74 | -0.13 | 0.40 |
| IT | 105.80 | 4.74 | 42.01 | 54.12 | 2.16 | 2.77 |
| CY | 2.38 | 0.01 | 2.27 | 0.00 | 0.07 | 0.00 |
| LV | 2.08 | 0.02 | 1.72 | 0.91 | -0.75 | 0.14 |
| LT | 5.85 | 0.12 | 3.15 | 1.95 | -0.05 | 0.68 |
| LU | 3.67 | 0.04 | 2.39 | 0.62 | 0.14 | 0.47 |
| HU | 14.81 | 0.74 | 6.51 | 6.63 | -0.13 | 1.00 |
| MT | 2.88 | 0.00 | 2.52 | 0.31 | 0.02 | 0.04 |
| NL | 57.05 | 3.78 | 39.38 | 14.21 | -0.16 | -0.23 |
| AT | 18.80 | 2.42 | 10.83 | 5.33 | 0.02 | 0.19 |
| PL | 44.16 | 0.14 | 28.80 | 13.65 | 0.43 | 1.14 |
| PT | 14.41 | -0.04 | 9.40 | 5.15 | -0.28 | 0.13 |
| RO | 9.10 | 0.77 | 6.26 | 1.61 | 0.20 | 0.24 |
| SI | 2.95 | 0.18 | 2.12 | 0.73 | 0.10 | -0.17 |
| SK | 9.26 | 1.99 | 3.67 | 3.60 | -0.03 | 0.03 |
| FI | 13.63 | 1.70 | 8.35 | 2.12 | 0.16 | 1.29 |
| SE | 16.01 | 1.46 | 13.96 | 1.27 | 1.36 | -2.15 |

source: Eurostat April 2022
Methodology and Notes: see appendices

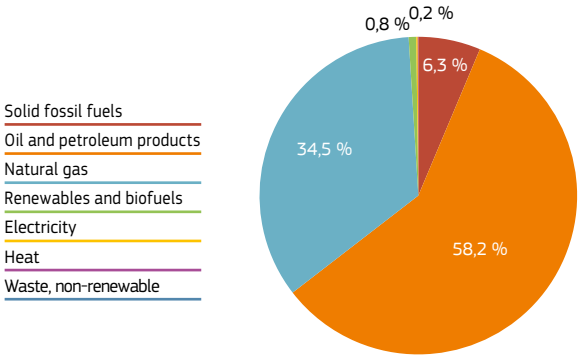
## 2.1.2 Net Imports

### BY FUEL – EU27_2020 – 1990-2020 (Mtoe)




### BY FUEL – EU27_2020 – 2020

Total = 793 Mtoe



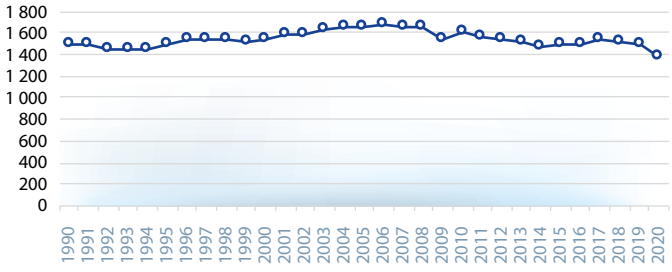

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.1.3 Gross Available Energy

### ALL FUELS

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1538.64 | 1651.09 | 1605.84 | 1488.33 | 1501.06 | 1379.15 |
| Index2000 | 100% | 107% | 104% | 97% | 98% | 90% |
| | | | | | | |
| BE | 64.78 | 66.91 | 68.28 | 59.51 | 64.28 | 57.82 |
| BG | 18.70 | 20.19 | 18.01 | 18.77 | 18.92 | 17.92 |
| CZ | 41.29 | 45.53 | 45.47 | 42.05 | 42.94 | 40.21 |
| DK | 20.79 | 20.59 | 21.06 | 18.02 | 18.02 | 16.44 |
| DE | 344.63 | 348.97 | 341.02 | 320.52 | 309.51 | 286.05 |
| EE | 4.81 | 5.61 | 6.14 | 5.14 | 4.98 | 4.78 |
| IE | 14.52 | 15.57 | 15.20 | 14.40 | 15.12 | 13.87 |
| EL | 31.50 | 33.93 | 31.06 | 25.87 | 26.07 | 22.08 |
| ES | 130.04 | 152.39 | 138.54 | 130.40 | 134.02 | 118.17 |
| FR | 258.87 | 279.83 | 272.13 | 261.75 | 253.06 | 224.69 |
| HR | 8.46 | 9.84 | 9.48 | 8.51 | 8.81 | 8.33 |
| IT | 176.19 | 191.69 | 179.82 | 157.63 | 158.09 | 144.03 |
| CY | 2.61 | 2.84 | 2.95 | 2.54 | 2.90 | 2.56 |
| LV | 3.87 | 4.85 | 4.88 | 4.63 | 4.94 | 4.57 |
| LT | 7.44 | 9.12 | 7.22 | 7.26 | 8.00 | 7.81 |
| LU | 3.66 | 4.80 | 4.64 | 4.18 | 4.54 | 3.96 |
| HU | 25.23 | 28.51 | 26.59 | 25.20 | 26.71 | 26.15 |
| MT | 1.47 | 1.59 | 2.39 | 2.29 | 3.16 | 2.95 |
| NL | 91.43 | 99.32 | 100.01 | 89.05 | 87.49 | 83.81 |
| AT | 29.24 | 34.40 | 34.85 | 33.74 | 34.78 | 32.23 |
| PL | 89.50 | 92.91 | 101.82 | 96.06 | 106.35 | 103.28 |
| PT | 26.05 | 28.02 | 24.84 | 24.23 | 24.85 | 22.07 |
| RO | 36.76 | 38.69 | 35.02 | 31.92 | 33.24 | 32.25 |
| SI | 6.56 | 7.58 | 7.27 | 6.56 | 6.91 | 6.44 |
| SK | 17.73 | 18.70 | 17.71 | 16.26 | 17.02 | 16.45 |
| FI | 33.44 | 35.35 | 37.00 | 32.96 | 34.55 | 32.43 |
| SE | 49.07 | 53.35 | 52.42 | 48.87 | 51.79 | 47.79 |

**GROSS AVAILABLE ENERGY – ALL FUELS – 1990-2020 (Mtoe)**



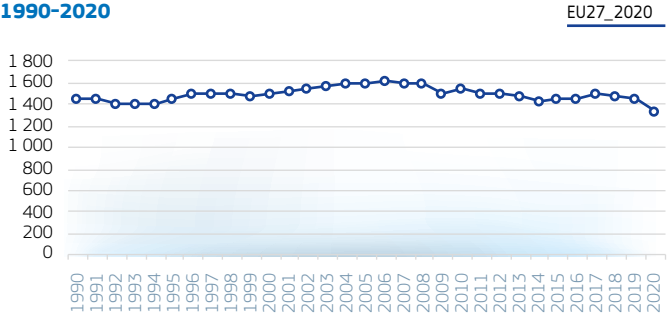

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.1.4 Gross Inland Consumption

### ALL FUELS

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1 498.27 | 1 603.89 | 1 559.13 | 1 448.02 | 1 457.95 | 1 340.14 |
| Index2000 | 100 % | 107 % | 104 % | 97 % | 97 % | 89 % |
| | | | | | | |
| BE | 59.44 | 59.28 | 60.69 | 53.68 | 56.08 | 51.44 |
| BG | 18.63 | 20.08 | 17.92 | 18.68 | 18.85 | 17.84 |
| CZ | 41.29 | 45.53 | 45.47 | 42.05 | 42.94 | 40.21 |
| DK | 19.50 | 19.82 | 20.37 | 17.25 | 17.28 | 15.89 |
| DE | 342.43 | 346.48 | 338.25 | 318.09 | 308.15 | 284.72 |
| EE | 4.71 | 5.50 | 5.92 | 4.85 | 4.80 | 4.49 |
| IE | 14.37 | 15.47 | 15.06 | 14.24 | 14.98 | 13.72 |
| EL | 27.90 | 31.06 | 28.35 | 24.09 | 23.55 | 20.45 |
| ES | 124.02 | 144.47 | 130.12 | 122.91 | 126.83 | 111.79 |
| FR | 256.05 | 277.27 | 269.84 | 260.02 | 251.36 | 223.72 |
| HR | 8.44 | 9.82 | 9.47 | 8.50 | 8.79 | 8.31 |
| IT | 174.54 | 189.45 | 176.84 | 155.73 | 155.43 | 141.60 |
| CY | 2.42 | 2.55 | 2.76 | 2.30 | 2.63 | 2.29 |
| LV | 3.86 | 4.59 | 4.63 | 4.38 | 4.65 | 4.36 |
| LT | 7.35 | 8.98 | 7.08 | 7.18 | 7.80 | 7.63 |
| LU | 3.66 | 4.80 | 4.64 | 4.18 | 4.54 | 3.96 |
| HU | 25.23 | 28.51 | 26.59 | 25.20 | 26.71 | 26.15 |
| MT | 0.81 | 0.94 | 0.94 | 0.76 | 0.90 | 0.76 |
| NL | 78.27 | 83.70 | 86.15 | 76.37 | 76.06 | 71.93 |
| AT | 29.22 | 34.38 | 34.83 | 33.72 | 34.76 | 32.21 |
| PL | 89.22 | 92.58 | 101.60 | 95.87 | 106.07 | 102.98 |
| PT | 25.38 | 27.44 | 24.38 | 23.59 | 23.89 | 21.39 |
| RO | 36.76 | 38.69 | 35.01 | 31.87 | 33.21 | 32.21 |
| SI | 6.56 | 7.56 | 7.25 | 6.50 | 6.72 | 6.32 |
| SK | 17.73 | 18.70 | 17.71 | 16.26 | 17.02 | 16.45 |
| FI | 32.76 | 34.84 | 36.79 | 32.66 | 34.22 | 32.12 |
| SE | 47.71 | 51.41 | 50.46 | 47.04 | 49.72 | 45.21 |

**GROSS INLAND CONSUMPTION – ALL FUELS – 1990-2020**




source: Eurostat April 2022
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 | 437.2 | 326.9 | 140.3 | 239.7 | 175.2 | 14.3 | 1.2 | 4.2 |
| Share - % | 32.6 % | 24.4 % | 10.5 % | 17.9 % | 13.1 % | 1.1 % | 0.1 % | 0.3 % |
| | | | | | | | | |
| BE | 19.7 | 15.2 | 2.4 | 4.9 | 8.4 | 0.6 | 0.0 | 0.0 |
| BG | 4.3 | 2.5 | 4.3 | 2.6 | 4.3 | 0.1 | -0.3 | 0.0 |
| CZ | 8.6 | 7.3 | 12.2 | 5.1 | 7.5 | 0.4 | -0.9 | 0.0 |
| DK | 5.8 | 2.1 | 0.7 | 6.2 | 0.0 | 0.4 | 0.6 | 0.0 |
| DE | 99.5 | 74.6 | 44.6 | 46.9 | 16.6 | 4.2 | -1.6 | 0.0 |
| EE | 0.0 | 0.3 | 0.0 | 1.3 | 0.0 | 0.0 | 0.3 | 2.5 |
| IE | 6.2 | 4.6 | 0.4 | 1.8 | 0.0 | 0.1 | 0.0 | 0.6 |
| EL | 9.6 | 4.9 | 1.8 | 3.3 | 0.0 | 0.0 | 0.8 | 0.0 |
| ES | 45.7 | 27.9 | 3.1 | 19.1 | 15.2 | 0.5 | 0.3 | 0.0 |
| FR | 65.0 | 34.9 | 5.3 | 28.6 | 92.2 | 1.6 | -3.9 | 0.0 |
| HR | 2.8 | 2.5 | 0.4 | 2.2 | 0.0 | 0.0 | 0.4 | 0.0 |
| IT | 44.9 | 58.3 | 5.1 | 29.3 | 0.0 | 1.2 | 2.8 | 0.0 |
| CY | 2.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| LV | 1.4 | 0.9 | 0.0 | 1.8 | 0.0 | 0.1 | 0.1 | 0.0 |
| LT | 2.9 | 2.0 | 0.1 | 1.7 | 0.0 | 0.1 | 0.7 | 0.0 |
| LU | 2.4 | 0.6 | 0.0 | 0.4 | 0.0 | 0.0 | 0.5 | 0.0 |
| HU | 7.5 | 8.8 | 1.7 | 3.0 | 4.1 | 0.2 | 1.0 | 0.0 |
| MT | 0.4 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 27.8 | 31.4 | 4.1 | 6.8 | 1.0 | 0.8 | -0.2 | 0.0 |
| AT | 11.1 | 7.3 | 2.5 | 10.5 | 0.0 | 0.7 | 0.2 | 0.0 |
| PL | 29.4 | 17.4 | 40.9 | 13.0 | 0.0 | 1.1 | 1.1 | 0.0 |
| PT | 8.9 | 5.2 | 0.6 | 6.4 | 0.0 | 0.2 | 0.1 | 0.0 |
| RO | 9.6 | 9.7 | 3.5 | 6.0 | 2.9 | 0.3 | 0.2 | 0.0 |
| SI | 2.0 | 0.7 | 1.0 | 1.2 | 1.5 | 0.1 | -0.2 | 0.0 |
| SK | 3.6 | 4.1 | 2.3 | 2.1 | 4.0 | 0.2 | 0.0 | 0.0 |
| FI | 7.8 | 2.1 | 1.8 | 12.0 | 5.5 | 0.3 | 1.3 | 1.0 |
| SE | 8.4 | 1.3 | 1.5 | 23.2 | 12.0 | 1.0 | -2.1 | 0.1 |

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

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.1.4 Gross Inland Consumption

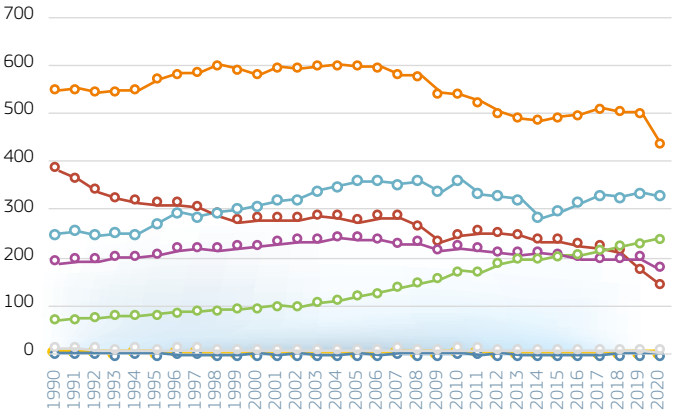
### RENEWABLES AND BIOFUELS

| | 2020 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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 | 239.7 | 29.8 | 34.2 | 12.0 | 4.5 | 0.0 | 139.3 | 6.9 | 13.1 |
| Share (%) | 100.0 % | 12.4 % | 14.3 % | 5.0 % | 1.9 % | 0.0 % | 58.1 % | 2.9 % | 5.5 % |
| | | | | | | | | | |
| BE | 4.93 | 0.02 | 1.10 | 0.44 | 0.03 | 0.00 | 3.21 | 0.00 | 0.13 |
| BG | 2.55 | 0.24 | 0.13 | 0.13 | 0.03 | 0.00 | 1.88 | 0.04 | 0.11 |
| CZ | 5.12 | 0.18 | 0.06 | 0.20 | 0.02 | 0.00 | 4.43 | 0.00 | 0.23 |
| DK | 6.22 | 0.00 | 1.40 | 0.10 | 0.08 | 0.00 | 4.29 | 0.00 | 0.34 |
| DE | 46.94 | 1.58 | 11.36 | 4.18 | 0.75 | 0.00 | 27.33 | 0.36 | 1.38 |
| EE | 1.31 | 0.00 | 0.07 | 0.01 | 0.00 | 0.00 | 1.22 | 0.00 | 0.00 |
| IE | 1.77 | 0.08 | 0.99 | 0.01 | 0.01 | 0.00 | 0.62 | 0.00 | 0.06 |
| EL | 3.35 | 0.29 | 0.80 | 0.38 | 0.29 | 0.00 | 1.19 | 0.01 | 0.39 |
| ES | 19.09 | 2.62 | 4.85 | 1.35 | 2.29 | 0.00 | 7.02 | 0.00 | 0.96 |
| FR | 28.60 | 5.34 | 3.42 | 1.15 | 0.19 | 0.04 | 15.21 | 0.48 | 2.77 |
| HR | 2.20 | 0.49 | 0.15 | 0.01 | 0.02 | 0.00 | 1.46 | 0.06 | 0.01 |
| IT | 29.34 | 4.09 | 1.61 | 2.14 | 0.24 | 0.00 | 13.44 | 5.34 | 2.48 |
| CY | 0.28 | 0.00 | 0.02 | 0.03 | 0.07 | 0.00 | 0.11 | 0.00 | 0.05 |
| LV | 1.81 | 0.22 | 0.02 | 0.00 | 0.00 | 0.00 | 1.57 | 0.00 | 0.00 |
| LT | 1.66 | 0.03 | 0.13 | 0.01 | 0.00 | 0.00 | 1.46 | 0.00 | 0.03 |
| LU | 0.40 | 0.01 | 0.03 | 0.01 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 |
| HU | 2.97 | 0.02 | 0.06 | 0.21 | 0.01 | 0.00 | 2.49 | 0.15 | 0.02 |
| MT | 0.06 | 0.00 | 0.00 | 0.02 | 0.01 | 0.00 | 0.02 | 0.00 | 0.01 |
| NL | 6.78 | 0.00 | 1.32 | 0.75 | 0.03 | 0.00 | 4.22 | 0.15 | 0.31 |
| AT | 10.50 | 3.61 | 0.58 | 0.18 | 0.18 | 0.00 | 5.51 | 0.04 | 0.40 |
| PL | 12.95 | 0.18 | 1.36 | 0.17 | 0.08 | 0.00 | 10.84 | 0.03 | 0.30 |
| PT | 6.37 | 1.04 | 1.06 | 0.15 | 0.10 | 0.00 | 3.11 | 0.20 | 0.72 |
| RO | 5.99 | 1.32 | 0.60 | 0.15 | 0.00 | 0.00 | 3.90 | 0.02 | 0.00 |
| SI | 1.18 | 0.42 | 0.00 | 0.03 | 0.01 | 0.00 | 0.65 | 0.01 | 0.05 |
| SK | 2.15 | 0.39 | 0.00 | 0.06 | 0.01 | 0.00 | 1.63 | 0.01 | 0.05 |
| FI | 12.02 | 1.37 | 0.68 | 0.02 | 0.00 | 0.00 | 9.38 | 0.00 | 0.57 |
| SE | 23.21 | 6.22 | 2.37 | 0.09 | 0.01 | 0.00 | 12.75 | 0.00 | 1.77 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.1.4 Gross Inland Consumption

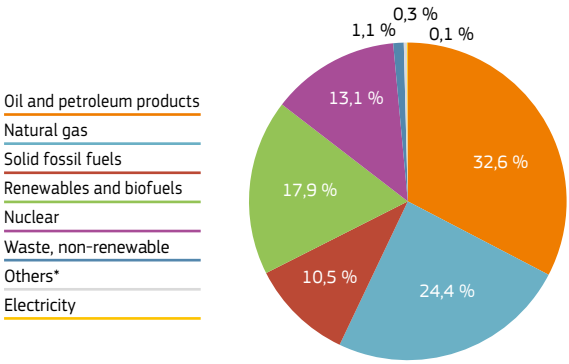
### BY FUEL – EU27_2020 – 1990-2020 (Mtoe)




Oil and petroleum products
Natural gas
Solid fossil fuels
Renewables and biofuels
Nuclear
Waste, non-renewable
Electricity
Others*

### GROSS INLAND CONSUMPTION – BY FUEL – EU27_2020 – 2020 (% TOTAL)

Total = 1 340.1 Mtoe




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

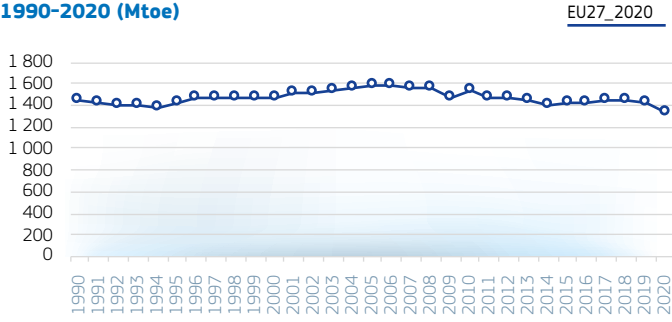
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.1.5 Total Energy Supply

### ALL FUELS

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1 469.69 | 1 572.74 | 1 527.01 | 1 413.45 | 1 416.16 | 1 322.15 |
| Index2000 | 100 % | 107 % | 104 % | 96 % | 96 % | 90 % |
| | | | | | | |
| BE | 57.93 | 58.12 | 59.31 | 52.24 | 54.38 | 50.24 |
| BG | 18.55 | 19.89 | 17.75 | 18.50 | 18.60 | 17.70 |
| CZ | 41.13 | 45.22 | 45.15 | 41.76 | 42.52 | 40.10 |
| DK | 18.71 | 18.96 | 19.56 | 16.37 | 16.23 | 15.55 |
| DE | 335.81 | 339.03 | 330.30 | 310.08 | 298.40 | 280.17 |
| EE | 4.69 | 5.44 | 5.89 | 4.80 | 4.73 | 4.47 |
| IE | 13.77 | 14.65 | 14.32 | 13.41 | 13.87 | 13.32 |
| EL | 27.06 | 30.26 | 27.66 | 23.26 | 22.42 | 20.09 |
| ES | 121.24 | 141.29 | 127.00 | 118.95 | 121.94 | 110.22 |
| FR | 250.83 | 271.84 | 264.33 | 254.30 | 245.15 | 221.10 |
| HR | 8.38 | 9.73 | 9.37 | 8.39 | 8.59 | 8.25 |
| IT | 171.71 | 186.45 | 173.68 | 152.56 | 151.46 | 140.10 |
| CY | 2.14 | 2.24 | 2.48 | 2.05 | 2.32 | 2.19 |
| LV | 3.84 | 4.53 | 4.51 | 4.27 | 4.49 | 4.30 |
| LT | 7.33 | 8.94 | 7.03 | 7.10 | 7.68 | 7.58 |
| LU | 3.34 | 4.37 | 4.21 | 3.72 | 3.94 | 3.42 |
| HU | 24.99 | 28.25 | 26.36 | 25.03 | 26.43 | 26.05 |
| MT | 0.68 | 0.85 | 0.84 | 0.64 | 0.74 | 0.70 |
| NL | 74.97 | 80.06 | 82.74 | 72.57 | 72.09 | 69.72 |
| AT | 28.67 | 33.74 | 34.17 | 33.02 | 33.81 | 31.91 |
| PL | 88.94 | 92.25 | 101.10 | 95.22 | 105.00 | 102.52 |
| PT | 24.71 | 26.68 | 23.51 | 22.54 | 22.43 | 20.86 |
| RO | 36.63 | 38.56 | 34.84 | 31.63 | 33.05 | 32.16 |
| SI | 6.54 | 7.54 | 7.23 | 6.47 | 6.70 | 6.31 |
| SK | 17.70 | 18.66 | 17.67 | 16.22 | 16.98 | 16.42 |
| FI | 32.42 | 34.42 | 36.25 | 32.02 | 33.38 | 31.83 |
| SE | 46.99 | 50.76 | 49.75 | 46.28 | 48.83 | 44.86 |

**TOTAL ENERGY SUPPLY – ALL FUELS – 1990-2020 (Mtoe)**




source: Eurostat April 2022
Methodology and Notes: **see appendices**

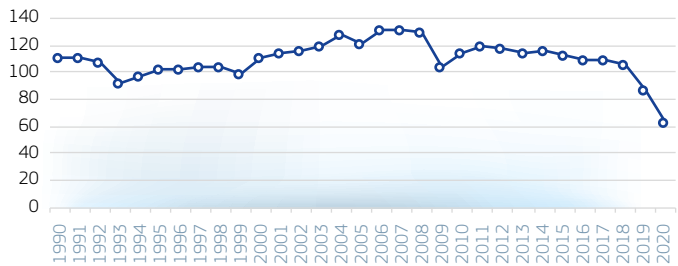
# 2.2 Imports

## 2.2.1 Imports – Solid Fossil Fuels

### TOTAL

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 110.2 | 121.1 | 114.0 | 113.0 | 86.9 | 62.9 |
| Index2000 | 100% | 110% | 103% | 103% | 79% | 57% |
| | | | | | | |
| BE | 8.43 | 6.01 | 4.39 | 3.37 | 3.19 | 2.57 |
| BG | 2.38 | 2.56 | 1.75 | 0.76 | 0.40 | 0.41 |
| CZ | 1.04 | 1.34 | 2.36 | 2.84 | 2.91 | 2.79 |
| DK | 3.86 | 3.56 | 2.68 | 1.60 | 1.37 | 0.64 |
| DE | 22.22 | 26.58 | 32.59 | 37.48 | 28.18 | 21.09 |
| EE | 0.07 | 0.04 | 0.05 | 0.00 | 0.03 | 0.00 |
| IE | 1.70 | 1.91 | 0.97 | 1.52 | 0.27 | 0.27 |
| EL | 0.81 | 0.40 | 0.40 | 0.16 | 0.20 | 0.19 |
| ES | 13.35 | 14.83 | 7.85 | 10.95 | 5.53 | 2.95 |
| FR | 13.38 | 13.98 | 12.25 | 9.19 | 7.30 | 5.11 |
| HR | 0.48 | 0.62 | 0.70 | 0.62 | 0.45 | 0.38 |
| IT | 13.23 | 16.53 | 14.00 | 12.58 | 6.59 | 4.95 |
| CY | 0.03 | 0.04 | 0.01 | 0.00 | 0.02 | 0.01 |
| LV | 0.06 | 0.08 | 0.11 | 0.04 | 0.05 | 0.02 |
| LT | 0.08 | 0.17 | 0.19 | 0.15 | 0.18 | 0.12 |
| LU | 0.11 | 0.08 | 0.07 | 0.05 | 0.04 | 0.04 |
| HU | 1.21 | 1.46 | 1.41 | 1.11 | 1.07 | 0.92 |
| MT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NL | 8.13 | 8.46 | 7.76 | 10.78 | 6.61 | 3.97 |
| AT | 3.07 | 4.05 | 3.37 | 2.85 | 2.82 | 2.44 |
| PL | 1.02 | 2.15 | 8.27 | 5.06 | 10.07 | 7.74 |
| PT | 3.97 | 3.23 | 1.63 | 3.21 | 1.52 | 0.01 |
| RO | 1.92 | 2.93 | 1.22 | 1.05 | 1.08 | 0.77 |
| SI | 0.25 | 0.33 | 0.28 | 0.20 | 0.21 | 0.18 |
| SK | 3.47 | 3.90 | 3.22 | 2.82 | 2.60 | 2.02 |
| FI | 3.56 | 3.36 | 3.99 | 2.59 | 2.26 | 1.80 |
| SE | 2.36 | 2.48 | 2.46 | 1.98 | 1.95 | 1.47 |

**IMPORTS – SOLID FOSSIL FUELS – TOTAL – 1990-2020 (Mtoe)**



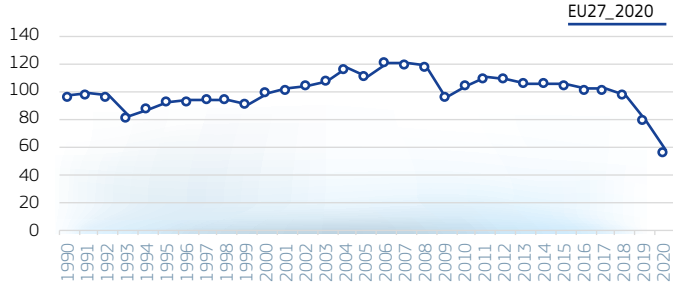

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.1 Imports – Solid Fossil Fuels

### HARD COAL

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 99.3 | 111.3 | 104.1 | 105.1 | 79.8 | 57.1 |
| Index2000 | 100 % | 112 % | 105 % | 106 % | 80 % | 58 % |
| | | | | | | |
| BE | 7.46 | 5.70 | 4.09 | 2.85 | 2.58 | 2.12 |
| BG | 2.25 | 2.49 | 1.70 | 0.70 | 0.36 | 0.36 |
| CZ | 0.63 | 0.76 | 1.41 | 1.96 | 2.42 | 2.33 |
| DK | 3.82 | 3.54 | 2.67 | 1.59 | 1.36 | 0.64 |
| DE | 17.39 | 23.93 | 29.33 | 35.35 | 26.80 | 19.93 |
| EE | 0.06 | 0.04 | 0.05 | 0.00 | 0.03 | 0.00 |
| IE | 1.68 | 1.88 | 0.95 | 1.50 | 0.26 | 0.26 |
| EL | 0.81 | 0.40 | 0.40 | 0.16 | 0.20 | 0.19 |
| ES | 13.25 | 14.74 | 7.71 | 10.73 | 4.99 | 2.37 |
| FR | 12.33 | 12.85 | 11.30 | 8.79 | 6.83 | 4.75 |
| HR | 0.44 | 0.57 | 0.64 | 0.58 | 0.42 | 0.36 |
| IT | 12.87 | 15.94 | 13.81 | 11.92 | 6.19 | 4.66 |
| CY | 0.03 | 0.04 | 0.01 | 0.00 | 0.02 | 0.01 |
| LV | 0.05 | 0.07 | 0.11 | 0.04 | 0.05 | 0.02 |
| LT | 0.01 | 0.00 | 0.11 | 0.14 | 0.17 | 0.11 |
| LU | 0.10 | 0.07 | 0.06 | 0.04 | 0.04 | 0.04 |
| HU | 0.88 | 1.00 | 1.28 | 0.97 | 0.97 | 0.86 |
| MT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NL | 7.74 | 8.19 | 7.52 | 10.73 | 6.55 | 3.92 |
| AT | 2.32 | 3.00 | 2.45 | 2.11 | 2.13 | 1.84 |
| PL | 1.01 | 2.05 | 8.16 | 4.91 | 9.86 | 7.57 |
| PT | 3.97 | 3.22 | 1.63 | 3.20 | 1.52 | 0.00 |
| RO | 1.65 | 2.05 | 0.14 | 0.08 | 0.10 | 0.08 |
| SI | 0.01 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 |
| SK | 3.15 | 3.48 | 2.57 | 2.53 | 2.25 | 1.72 |
| FI | 3.21 | 3.01 | 3.68 | 2.28 | 2.03 | 1.59 |
| SE | 2.14 | 2.22 | 2.29 | 1.92 | 1.64 | 1.39 |

**IMPORTS – HARD COAL – 1990-2020 (Mtoe)**




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.2.1 Imports – Solid Fossil Fuels

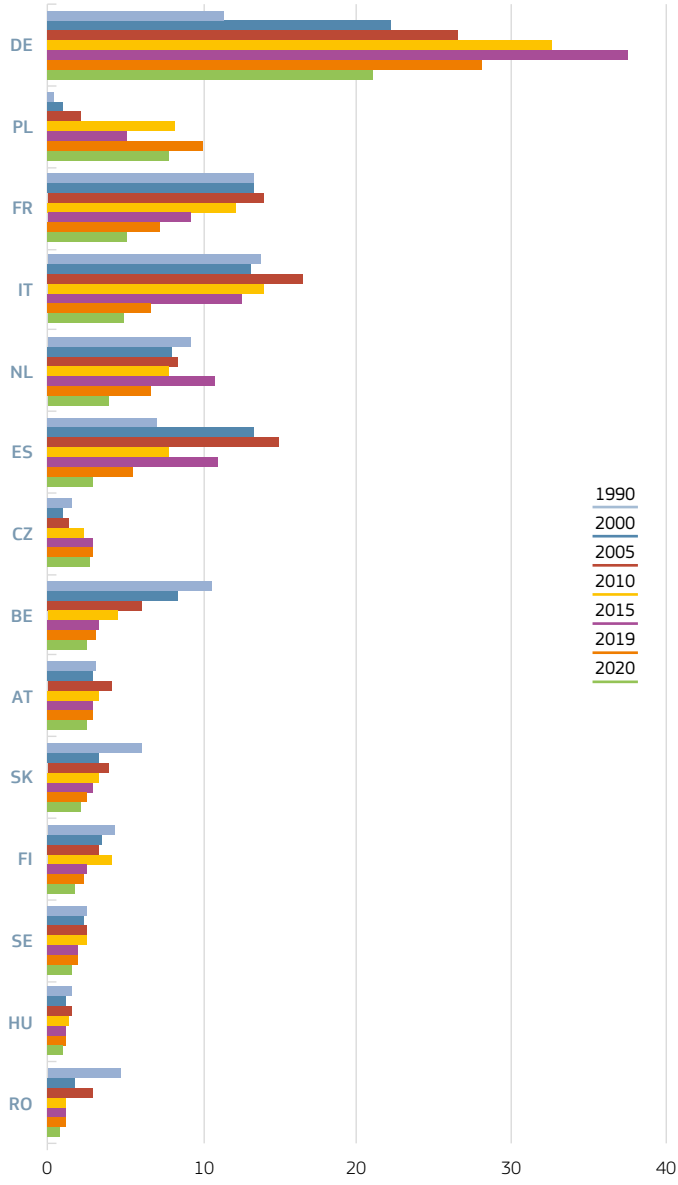
### RANKING

| Mtoe and % | 2000 | | | 2020 | | |
|---|---|---|---|---|---|---|
| Top 10 Ranking | MS | Imports | EU27_2020 Share | MS | Imports | EU27_2020 Share |
| **Solid fossil fuels** | | | | | | |
| 1 | DE | 22.2 | 20.2 % | DE | 21.1 | 33.5 % |
| 2 | FR | 13.4 | 12.1 % | PL | 7.7 | 12.3 % |
| 3 | ES | 13.3 | 12.1 % | FR | 5.1 | 8.1 % |
| 4 | IT | 13.2 | 12.0 % | IT | 4.9 | 7.9 % |
| 5 | BE | 8.4 | 7.7 % | NL | 4.0 | 6.3 % |
| 6 | NL | 8.1 | 7.4 % | ES | 3.0 | 4.7 % |
| 7 | PT | 4.0 | 3.6 % | CZ | 2.8 | 4.4 % |
| 8 | DK | 3.9 | 3.5 % | BE | 2.6 | 4.1 % |
| 9 | FI | 3.6 | 3.2 % | AT | 2.4 | 3.9 % |
| 10 | SK | 3.5 | 3.1 % | SK | 2.0 | 3.2 % |
| Top 5 Total | | 70.6 | 64.1 % | | 42.9 | 68.2 % |
| Total EU27_2020 | | 110.2 | 100.0 % | | 62.9 | 100.0 % |
| **Of Which: hard coal** | | | | | | |
| 1 | DE | 17.4 | 17.5 % | DE | 19.9 | 34.9 % |
| 2 | ES | 13.3 | 13.4 % | PL | 7.6 | 13.3 % |
| 3 | IT | 12.9 | 13.0 % | FR | 4.8 | 8.3 % |
| 4 | FR | 12.3 | 12.4 % | IT | 4.7 | 8.2 % |
| 5 | NL | 7.7 | 7.8 % | NL | 3.9 | 6.9 % |
| 6 | BE | 7.5 | 7.5 % | ES | 2.4 | 4.2 % |
| 7 | PT | 4.0 | 4.0 % | CZ | 2.3 | 4.1 % |
| 8 | DK | 3.8 | 3.9 % | BE | 2.1 | 3.7 % |
| 9 | FI | 3.2 | 3.2 % | AT | 1.8 | 3.2 % |
| 10 | SK | 3.1 | 3.2 % | SK | 1.7 | 3.0 % |
| Top 5 Total | | 63.6 | 64.1 % | | 40.8 | 71.5 % |
| Total EU27_2020 | | 99.3 | 100.0 % | | 57.1 | 100.0 % |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.1 Imports – Solid Fossil Fuels

**BY MEMBER STATE – TOP 14 IMPORTERS**
1990-2020

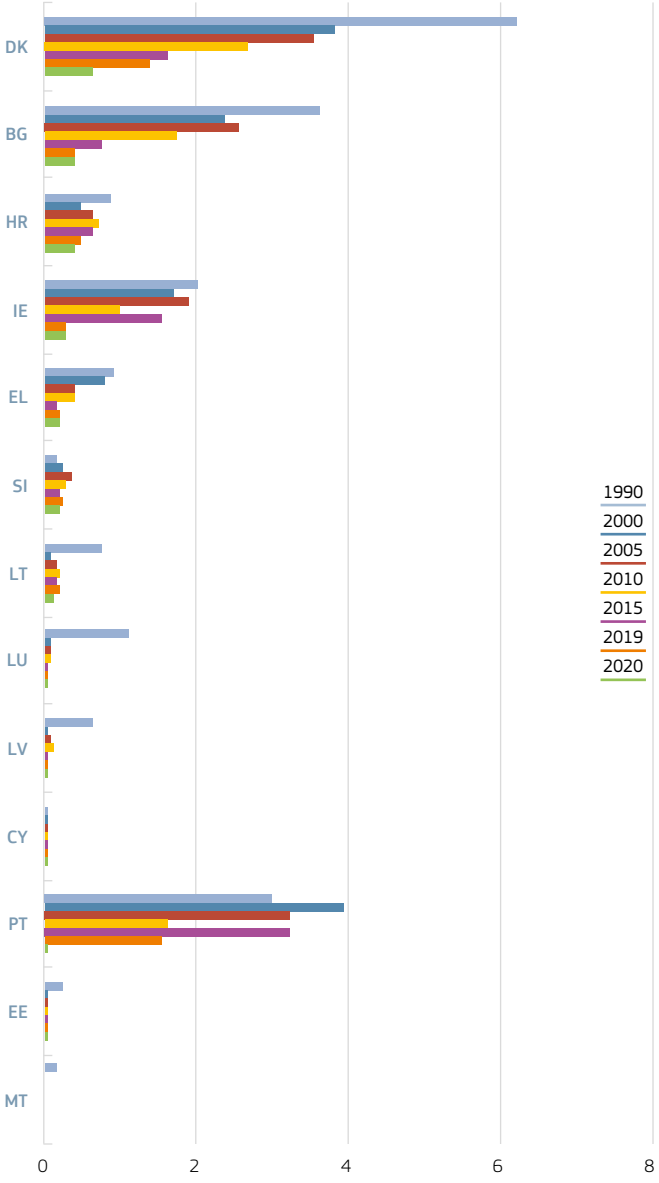



source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.1 Imports – Solid Fossil Fuels

### BY MEMBER STATE – LEAST 13 IMPORTERS

1990-2020



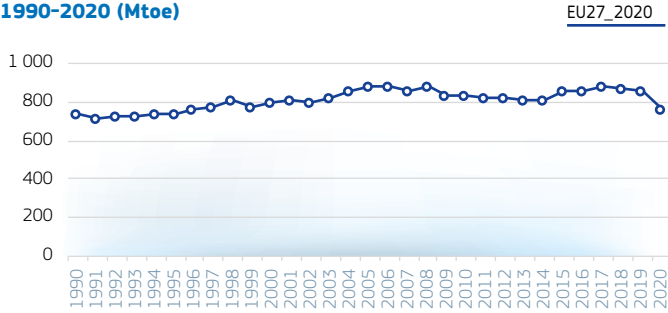

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.2.2 Imports – Oil and Petroleum Products

### TOTAL

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 799.0 | 877.2 | 838.6 | 857.6 | 856.0 | 756.4 |
| Index2000 | 100 % | 110 % | 105 % | 107 % | 107 % | 95 % |
| | | | | | | |
| BE | 52.91 | 58.44 | 56.76 | 59.88 | 63.14 | 53.81 |
| BG | 6.10 | 7.85 | 7.76 | 8.99 | 9.32 | 7.20 |
| CZ | 8.58 | 10.96 | 10.61 | 11.17 | 11.86 | 10.52 |
| DK | 9.93 | 8.79 | 9.52 | 13.99 | 12.36 | 11.71 |
| DE | 148.18 | 150.88 | 130.79 | 130.77 | 130.16 | 119.35 |
| EE | 0.91 | 1.15 | 1.15 | 1.68 | 1.83 | 2.19 |
| IE | 9.63 | 10.35 | 9.21 | 9.28 | 9.01 | 8.12 |
| EL | 23.43 | 26.08 | 26.61 | 30.93 | 32.25 | 30.96 |
| ES | 78.71 | 88.14 | 80.88 | 84.21 | 88.77 | 75.15 |
| FR | 112.87 | 123.36 | 106.38 | 103.19 | 95.29 | 78.15 |
| HR | 4.21 | 5.53 | 4.97 | 4.54 | 4.85 | 4.45 |
| IT | 109.73 | 108.25 | 96.89 | 80.73 | 80.59 | 65.73 |
| CY | 2.54 | 2.81 | 2.93 | 2.46 | 2.60 | 2.27 |
| LV | 1.35 | 2.29 | 1.94 | 2.76 | 2.33 | 2.02 |
| LT | 5.46 | 9.63 | 10.25 | 11.17 | 10.81 | 9.02 |
| LU | 2.39 | 3.16 | 2.86 | 2.62 | 2.97 | 2.40 |
| HU | 7.00 | 9.13 | 8.53 | 9.33 | 10.43 | 9.52 |
| MT | 1.47 | 1.59 | 2.38 | 2.67 | 3.07 | 2.71 |
| NL | 104.61 | 125.35 | 146.70 | 156.29 | 149.13 | 132.57 |
| AT | 12.45 | 15.47 | 13.96 | 14.03 | 15.16 | 13.61 |
| PL | 21.78 | 24.96 | 29.22 | 32.53 | 36.16 | 33.49 |
| PT | 17.62 | 19.52 | 15.40 | 18.10 | 16.46 | 14.71 |
| RO | 6.36 | 9.71 | 8.17 | 9.62 | 12.07 | 10.72 |
| SI | 2.69 | 2.85 | 3.29 | 4.09 | 4.95 | 4.06 |
| SK | 5.56 | 6.83 | 6.85 | 7.57 | 7.02 | 7.30 |
| FI | 15.65 | 16.04 | 16.30 | 16.53 | 18.10 | 17.23 |
| SE | 26.83 | 28.07 | 28.34 | 28.43 | 25.26 | 27.42 |

**IMPORTS – OIL AND PETROLEUM PRODUCTS – TOTAL – 1990-2020 (Mtoe)**



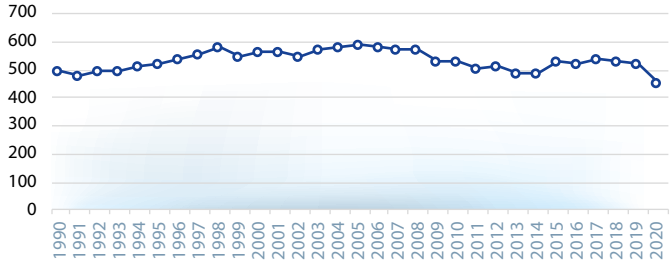

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.2 Imports – Oil and Petroleum Products

### CRUDE OIL AND NGL

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 560.3 | 588.1 | 528.3 | 526.5 | 518.8 | 453.2 |
| Index2000 | 100 % | 105 % | 94 % | 94 % | 93 % | 81 % |
| | | | | | | |
| BE | 34.16 | 31.99 | 33.48 | 32.44 | 34.64 | 27.72 |
| BG | 5.31 | 6.14 | 5.52 | 6.17 | 7.10 | 4.94 |
| CZ | 5.67 | 7.76 | 7.83 | 7.22 | 7.85 | 6.27 |
| DK | 3.81 | 2.79 | 2.79 | 4.28 | 5.17 | 4.79 |
| DE | 104.75 | 115.21 | 94.69 | 92.66 | 87.30 | 83.98 |
| EE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| IE | 3.01 | 3.34 | 3.11 | 3.72 | 2.61 | 2.97 |
| EL | 19.22 | 18.55 | 19.97 | 21.91 | 22.65 | 22.59 |
| ES | 58.07 | 60.16 | 53.00 | 65.39 | 66.99 | 55.42 |
| FR | 85.45 | 86.00 | 65.48 | 59.20 | 49.58 | 33.84 |
| HR | 3.96 | 4.05 | 3.60 | 2.37 | 2.05 | 1.98 |
| IT | 83.64 | 89.30 | 78.60 | 62.46 | 63.14 | 50.36 |
| CY | 1.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| LV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| LT | 4.92 | 9.08 | 9.20 | 8.71 | 9.67 | 7.92 |
| LU | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HU | 5.79 | 6.59 | 5.84 | 6.35 | 6.10 | 6.09 |
| MT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NL | 61.06 | 62.48 | 61.05 | 60.29 | 63.79 | 57.33 |
| AT | 7.43 | 7.95 | 6.90 | 8.23 | 8.72 | 7.64 |
| PL | 18.27 | 18.18 | 23.03 | 26.89 | 27.02 | 25.28 |
| PT | 11.73 | 13.42 | 11.48 | 14.36 | 11.48 | 11.02 |
| RO | 4.81 | 8.69 | 5.82 | 6.59 | 8.66 | 7.07 |
| SI | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SK | 5.28 | 5.37 | 5.48 | 5.92 | 5.16 | 5.67 |
| FI | 11.86 | 10.84 | 11.44 | 11.12 | 12.70 | 11.60 |
| SE | 20.83 | 20.24 | 20.00 | 20.25 | 16.47 | 18.70 |

**IMPORTS – CRUDE OIL AND NGL – 1990-2020 (Mtoe)** EU27_2020




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.2 Imports – Oil and Petroleum Products

### RANKING

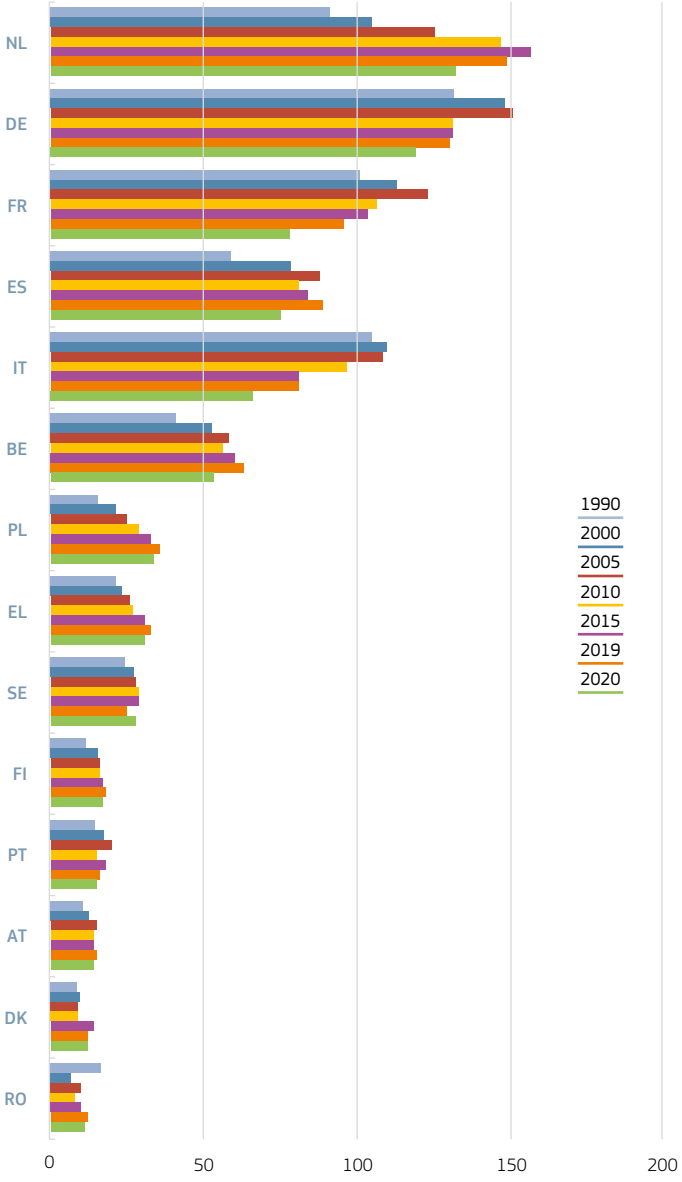
| Mtoe and % | 2000 | | | 2020 | | |
|---|---|---|---|---|---|---|
| Top 10 Ranking | MS | Imports | EU27_2020 Share | MS | Imports | EU27_2020 Share |
| **Oil and petroleum products** | | | | | | |
| 1 | DE | 148.2 | 18.5 % | NL | 132.6 | 17.5 % |
| 2 | FR | 112.9 | 14.1 % | DE | 119.3 | 15.8 % |
| 3 | IT | 109.7 | 13.7 % | FR | 78.1 | 10.3 % |
| 4 | NL | 104.6 | 13.1 % | ES | 75.1 | 9.9 % |
| 5 | ES | 78.7 | 9.9 % | IT | 65.7 | 8.7 % |
| 6 | BE | 52.9 | 6.6 % | BE | 53.8 | 7.1 % |
| 7 | SE | 26.8 | 3.4 % | PL | 33.5 | 4.4 % |
| 8 | EL | 23.4 | 2.9 % | EL | 31.0 | 4.1 % |
| 9 | PL | 21.8 | 2.7 % | SE | 27.4 | 3.6 % |
| 10 | PT | 17.6 | 2.2 % | FI | 17.2 | 2.3 % |
| Top 5 Total | | 554.1 | 69.4 % | | 470.9 | 62.3 % |
| Total EU27_2020 | | 799.0 | 100.0 % | | 756.4 | 100.0 % |
| **Of Which: crude oil and NGL** | | | | | | |
| 1 | DE | 104.8 | 18.7 % | DE | 84.0 | 18.5 % |
| 2 | FR | 85.4 | 15.2 % | NL | 57.3 | 12.7 % |
| 3 | IT | 83.6 | 14.9 % | ES | 55.4 | 12.2 % |
| 4 | NL | 61.1 | 10.9 % | IT | 50.4 | 11.1 % |
| 5 | ES | 58.1 | 10.4 % | FR | 33.8 | 7.5 % |
| 6 | BE | 34.2 | 6.1 % | BE | 27.7 | 6.1 % |
| 7 | SE | 20.8 | 3.7 % | PL | 25.3 | 5.6 % |
| 8 | EL | 19.2 | 3.4 % | EL | 22.6 | 5.0 % |
| 9 | PL | 18.3 | 3.3 % | SE | 18.7 | 4.1 % |
| 10 | FI | 11.9 | 2.1 % | FI | 11.6 | 2.6 % |
| Top 5 Total | | 393.0 | 70.1 % | | 280.9 | 62.0 % |
| Total EU27_2020 | | 560.3 | 100.0 % | | 453.2 | 100.0 % |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.2 Imports – Oil and Petroleum Products

### BY MEMBER STATE – TOP 14 IMPORTERS

1990-2020 (Mtoe)

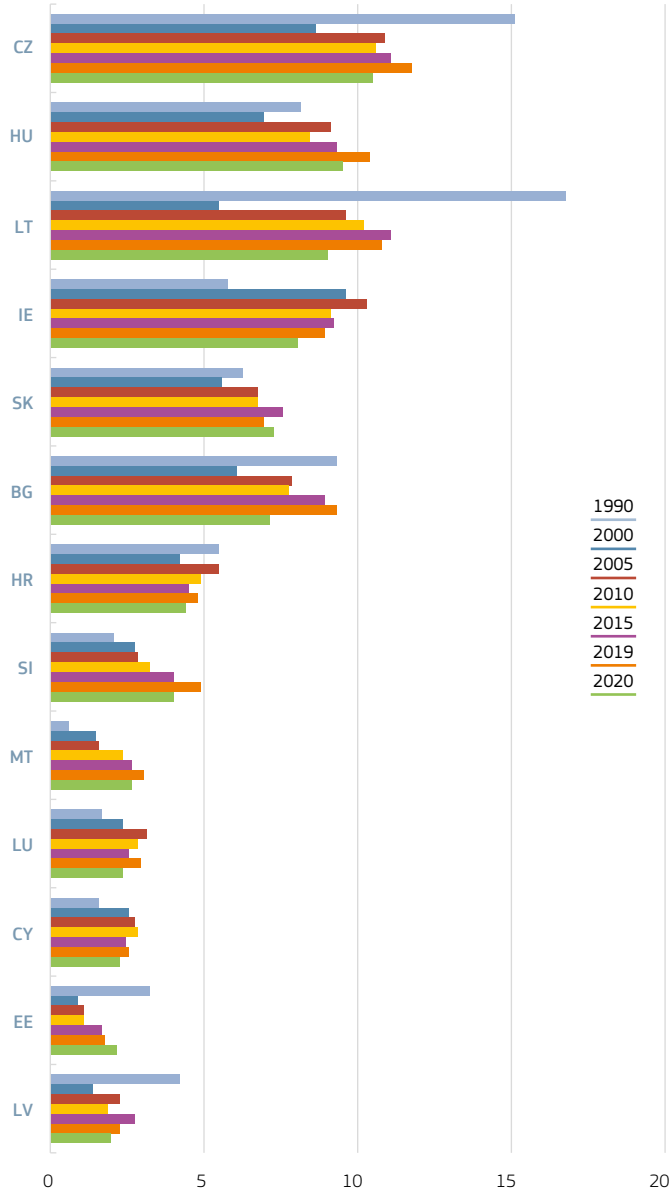



source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.2 Imports – Oil and Petroleum Products

**BY MEMBER STATE – LEAST 13 IMPORTERS**

1990-2020 (Mtoe)



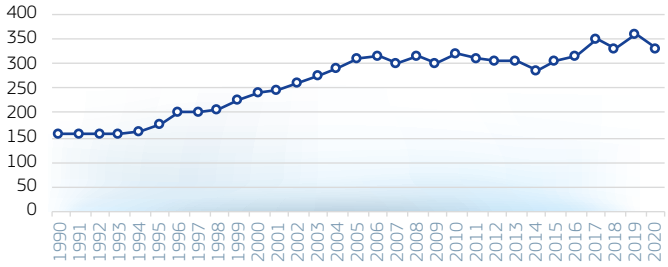

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.3 Imports – Natural Gas

### TOTAL

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 240.41 | 310.39 | 320.11 | 305.99 | 360.28 | 329.27 |
| Index2000 | 100% | 129% | 133% | 127% | 150% | 137% |
| | | | | | | |
| BE | 13.28 | 14.87 | 19.61 | 15.33 | 19.28 | 17.96 |
| BG | 2.74 | 2.46 | 2.13 | 2.52 | 2.46 | 2.43 |
| CZ | 7.48 | 7.60 | 6.98 | 6.16 | 7.86 | 6.26 |
| DK | 0.00 | 0.00 | 0.14 | 0.59 | 1.00 | 2.21 |
| DE | 61.09 | 78.90 | 78.80 | 85.92 | 75.67 | 66.47 |
| EE | 0.66 | 0.80 | 0.56 | 0.39 | 0.40 | 0.37 |
| IE | 2.48 | 3.01 | 4.48 | 3.62 | 2.42 | 2.90 |
| EL | 1.69 | 2.33 | 3.23 | 2.67 | 4.46 | 4.99 |
| ES | 15.47 | 30.25 | 31.96 | 28.18 | 32.37 | 28.25 |
| FR | 36.46 | 41.62 | 42.11 | 39.38 | 48.90 | 41.22 |
| HR | 0.91 | 0.93 | 0.87 | 0.87 | 1.66 | 1.78 |
| IT | 47.05 | 60.16 | 61.72 | 50.18 | 58.20 | 54.38 |
| CY | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| LV | 1.11 | 1.43 | 0.90 | 1.08 | 1.10 | 0.91 |
| LT | 2.06 | 2.49 | 2.48 | 2.14 | 2.30 | 2.38 |
| LU | 0.67 | 1.18 | 1.20 | 0.77 | 0.68 | 0.62 |
| HU | 7.35 | 9.81 | 7.91 | 5.68 | 15.58 | 10.19 |
| MT | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 | 0.31 |
| NL | 12.47 | 16.44 | 18.45 | 29.16 | 42.49 | 42.86 |
| AT | 5.32 | 8.04 | 10.19 | 9.82 | 11.76 | 13.68 |
| PL | 6.64 | 8.57 | 8.91 | 9.99 | 14.47 | 14.47 |
| PT | 2.04 | 3.89 | 4.50 | 4.07 | 5.30 | 5.15 |
| RO | 2.71 | 4.19 | 1.82 | 0.16 | 2.16 | 1.73 |
| SI | 0.82 | 0.93 | 0.86 | 0.66 | 0.73 | 0.73 |
| SK | 5.71 | 6.05 | 5.00 | 3.69 | 5.58 | 3.60 |
| FI | 3.43 | 3.61 | 3.84 | 2.24 | 2.14 | 2.12 |
| SE | 0.78 | 0.84 | 1.47 | 0.72 | 0.98 | 1.30 |

**IMPORTS – NATURAL GAS – TOTAL – 1990-2020 (Mtoe)** EU27_2020




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.3 Imports – Natural Gas

### RANKING

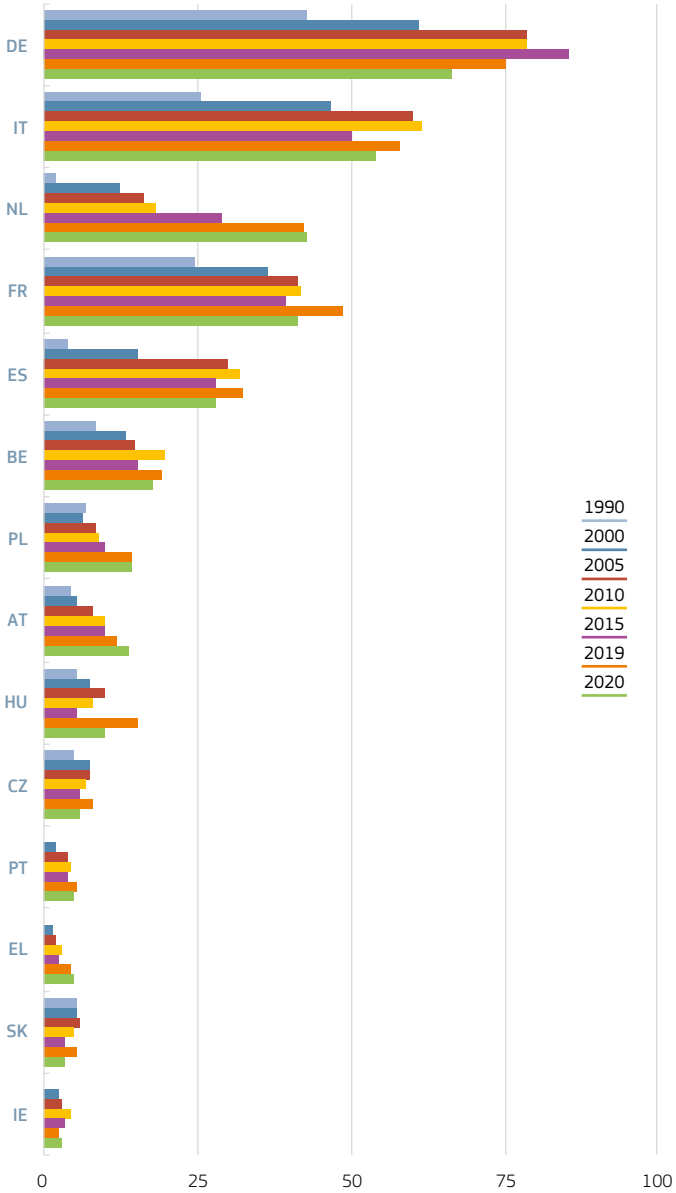
| Mtoe and % | 2000 | | | 2020 | | |
|---|---|---|---|---|---|---|
| EU27_2020 Ranking | MS | Imports | EU27_2020 Share | MS | Imports | EU27_2020 Share |
| **Natural gas** | | | | | | |
| 1 | DE | 61.1 | 25.4% | DE | 66.5 | 20.2% |
| 2 | IT | 47.0 | 19.6% | IT | 54.4 | 16.5% |
| 3 | FR | 36.5 | 15.2% | NL | 42.9 | 13.0% |
| 4 | ES | 15.5 | 6.4% | FR | 41.2 | 12.5% |
| 5 | BE | 13.3 | 5.5% | ES | 28.2 | 8.6% |
| 6 | NL | 12.5 | 5.2% | BE | 18.0 | 5.5% |
| 7 | CZ | 7.5 | 3.1% | PL | 14.5 | 4.4% |
| 8 | HU | 7.3 | 3.1% | AT | 13.7 | 4.2% |
| 9 | PL | 6.6 | 2.8% | HU | 10.2 | 3.1% |
| 10 | SK | 5.7 | 2.4% | CZ | 6.3 | 1.9% |
| 11 | AT | 5.3 | 2.2% | PT | 5.2 | 1.6% |
| 12 | FI | 3.4 | 1.4% | EL | 5.0 | 1.5% |
| 13 | BG | 2.7 | 1.1% | SK | 3.6 | 1.1% |
| 14 | RO | 2.7 | 1.1% | IE | 2.9 | 0.9% |
| 15 | IE | 2.5 | 1.0% | BG | 2.4 | 0.7% |
| 16 | LT | 2.1 | 0.9% | LT | 2.4 | 0.7% |
| 17 | PT | 2.0 | 0.8% | DK | 2.2 | 0.7% |
| 18 | EL | 1.7 | 0.7% | FI | 2.1 | 0.6% |
| 19 | LV | 1.1 | 0.5% | HR | 1.8 | 0.5% |
| 20 | HR | 0.9 | 0.4% | RO | 1.7 | 0.5% |
| 21 | SI | 0.8 | 0.3% | SE | 1.3 | 0.4% |
| 22 | SE | 0.8 | 0.3% | LV | 0.9 | 0.3% |
| 23 | LU | 0.7 | 0.3% | SI | 0.7 | 0.2% |
| 24 | EE | 0.7 | 0.3% | LU | 0.6 | 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% | | 233.2 | 70.8% |
| Total EU27_2020 | | 240.4 | 100.0% | | 329.3 | 100.0% |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.3 Imports – Natural Gas

### BY MEMBER STATE – TOP 14 IMPORTERS

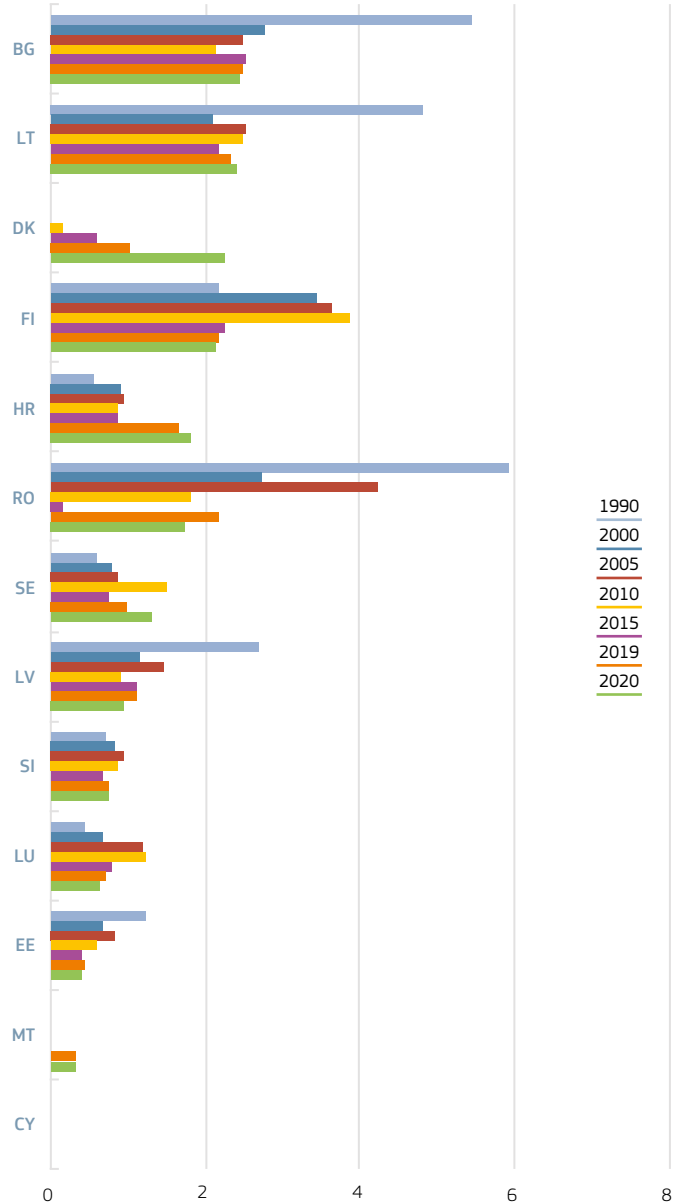
1990-2020




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.3 Imports – Natural Gas

### BY MEMBER STATE – LEAST 13 IMPORTERS
1990-2020

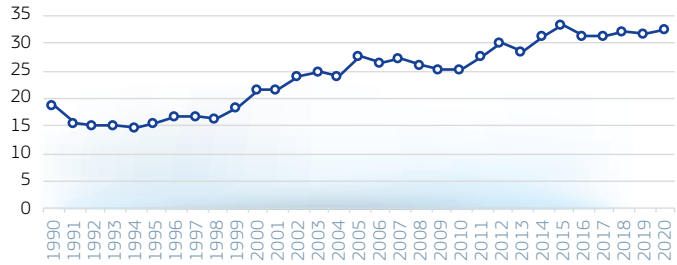



source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.4 Imports – Electricity

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 21.7 | 27.9 | 25.1 | 33.3 | 31.8 | 32.7 |
| Index2000 | 100 % | 129 % | 116 % | 154 % | 147 % | 151 % |
| | | | | | | |
| BE | 1.00 | 1.23 | 1.07 | 2.04 | 1.09 | 1.18 |
| BG | 0.08 | 0.07 | 0.10 | 0.37 | 0.26 | 0.32 |
| CZ | 0.75 | 1.06 | 0.57 | 1.39 | 0.95 | 1.15 |
| DK | 0.72 | 1.11 | 0.91 | 1.35 | 1.37 | 1.60 |
| DE | 3.88 | 4.89 | 3.69 | 3.18 | 3.45 | 4.11 |
| EE | 0.03 | 0.03 | 0.09 | 0.47 | 0.42 | 0.63 |
| IE | 0.01 | 0.18 | 0.07 | 0.15 | 0.19 | 0.15 |
| EL | 0.15 | 0.48 | 0.73 | 0.95 | 0.95 | 0.85 |
| ES | 1.05 | 0.88 | 0.45 | 1.29 | 1.61 | 1.54 |
| FR | 0.32 | 0.69 | 1.67 | 0.86 | 1.34 | 1.68 |
| HR | 0.38 | 0.75 | 1.07 | 1.13 | 0.98 | 0.90 |
| IT | 3.85 | 4.32 | 3.95 | 4.37 | 3.78 | 3.42 |
| CY | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| LV | 0.18 | 0.25 | 0.34 | 0.45 | 0.40 | 0.36 |
| LT | 0.44 | 0.49 | 0.70 | 0.68 | 1.14 | 1.03 |
| LU | 0.55 | 0.55 | 0.63 | 0.65 | 0.59 | 0.56 |
| HU | 0.82 | 1.34 | 0.85 | 1.71 | 1.71 | 1.65 |
| MT | 0.00 | 0.00 | 0.00 | 0.09 | 0.06 | 0.04 |
| NL | 1.97 | 2.04 | 1.34 | 2.64 | 1.75 | 1.70 |
| AT | 1.19 | 1.75 | 1.71 | 2.53 | 2.24 | 2.11 |
| PL | 0.28 | 0.43 | 0.54 | 1.24 | 1.54 | 1.77 |
| PT | 0.40 | 0.83 | 0.50 | 0.69 | 0.70 | 0.65 |
| RO | 0.07 | 0.20 | 0.07 | 0.39 | 0.47 | 0.71 |
| SI | 0.36 | 0.80 | 0.74 | 0.78 | 0.78 | 0.61 |
| SK | 0.51 | 0.69 | 0.63 | 1.29 | 1.16 | 1.14 |
| FI | 1.05 | 1.54 | 1.35 | 1.85 | 2.06 | 1.86 |
| SE | 1.57 | 1.25 | 1.28 | 0.80 | 0.78 | 1.02 |

**IMPORTS – ELECTRICITY – 1990-2020 (Mtoe)**




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.4 Imports – Electricity

### RANKING

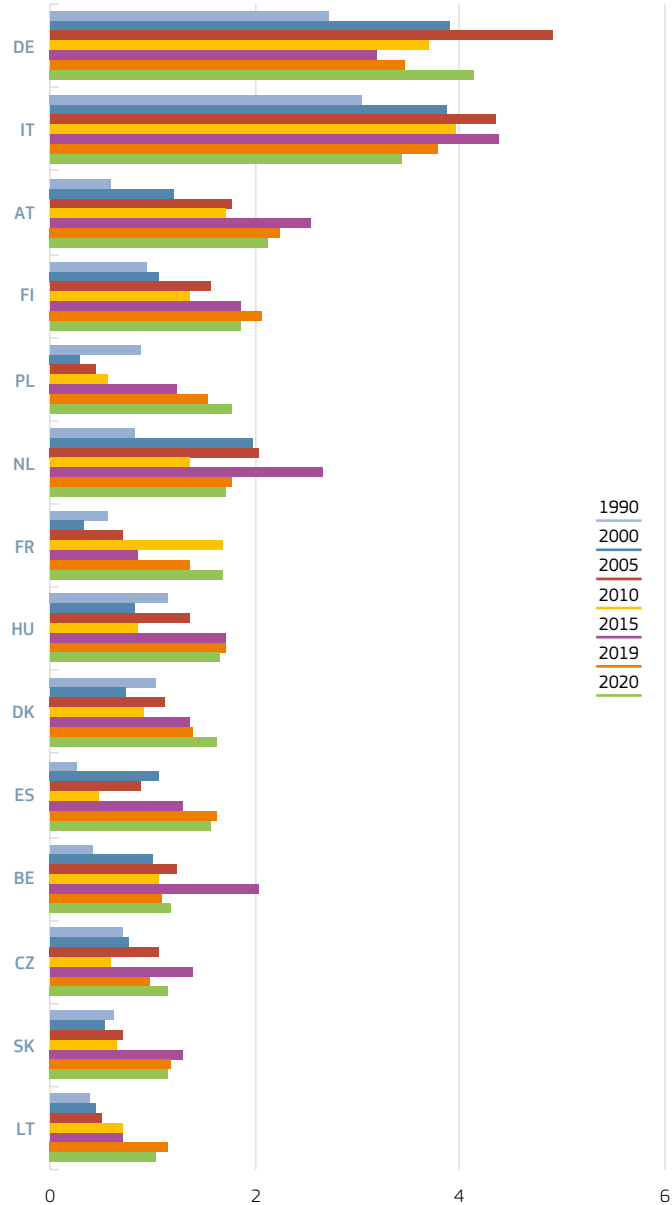
| Mtoe and % | 2000 | | | 2020 | | |
|---|---|---|---|---|---|---|
| | MS | Imports | EU27_2020 Share | MS | Imports | EU27_2020 Share |
| **Electricity** | | | | | | |
| 1 | DE | 3.88 | 17.9% | DE | 4.11 | 12.6% |
| 2 | IT | 3.85 | 17.8% | IT | 3.42 | 10.4% |
| 3 | NL | 1.97 | 9.1% | AT | 2.11 | 6.4% |
| 4 | SE | 1.57 | 7.3% | FI | 1.86 | 5.7% |
| 5 | AT | 1.19 | 5.5% | PL | 1.77 | 5.4% |
| 6 | ES | 1.05 | 4.9% | NL | 1.70 | 5.2% |
| 7 | FI | 1.05 | 4.8% | FR | 1.68 | 5.1% |
| 8 | BE | 1.00 | 4.6% | HU | 1.65 | 5.0% |
| 9 | HU | 0.82 | 3.8% | DK | 1.60 | 4.9% |
| 10 | CZ | 0.75 | 3.5% | ES | 1.54 | 4.7% |
| 11 | DK | 0.72 | 3.3% | BE | 1.18 | 3.6% |
| 12 | LU | 0.55 | 2.6% | CZ | 1.15 | 3.5% |
| 13 | SK | 0.51 | 2.4% | SK | 1.14 | 3.5% |
| 14 | LT | 0.44 | 2.0% | LT | 1.03 | 3.2% |
| 15 | PT | 0.40 | 1.9% | SE | 1.02 | 3.1% |
| 16 | HR | 0.38 | 1.7% | HR | 0.90 | 2.8% |
| 17 | SI | 0.36 | 1.7% | EL | 0.85 | 2.6% |
| 18 | FR | 0.32 | 1.5% | RO | 0.71 | 2.2% |
| 19 | PL | 0.28 | 1.3% | PT | 0.65 | 2.0% |
| 20 | LV | 0.18 | 0.8% | EE | 0.63 | 1.9% |
| 21 | EL | 0.15 | 0.7% | SI | 0.61 | 1.9% |
| 22 | BG | 0.08 | 0.4% | LU | 0.56 | 1.7% |
| 23 | RO | 0.07 | 0.3% | LV | 0.36 | 1.1% |
| 24 | EE | 0.03 | 0.1% | BG | 0.32 | 1.0% |
| 25 | IE | 0.01 | 0.1% | IE | 0.15 | 0.5% |
| 26 | CY | 0.00 | 0.0% | MT | 0.04 | 0.1% |
| 27 | MT | 0.00 | 0.0% | CY | 0.00 | 0.0% |
| Top 5 Total | | 12.5 | 57.6% | | 13.3 | 40.5% |
| Total EU27_2020 | | 21.7 | 100.0% | | 32.7 | 100.0% |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.4 Imports – Electricity

**BY MEMBER STATE – TOP 14 IMPORTERS**

1990-2020 (Mtoe)



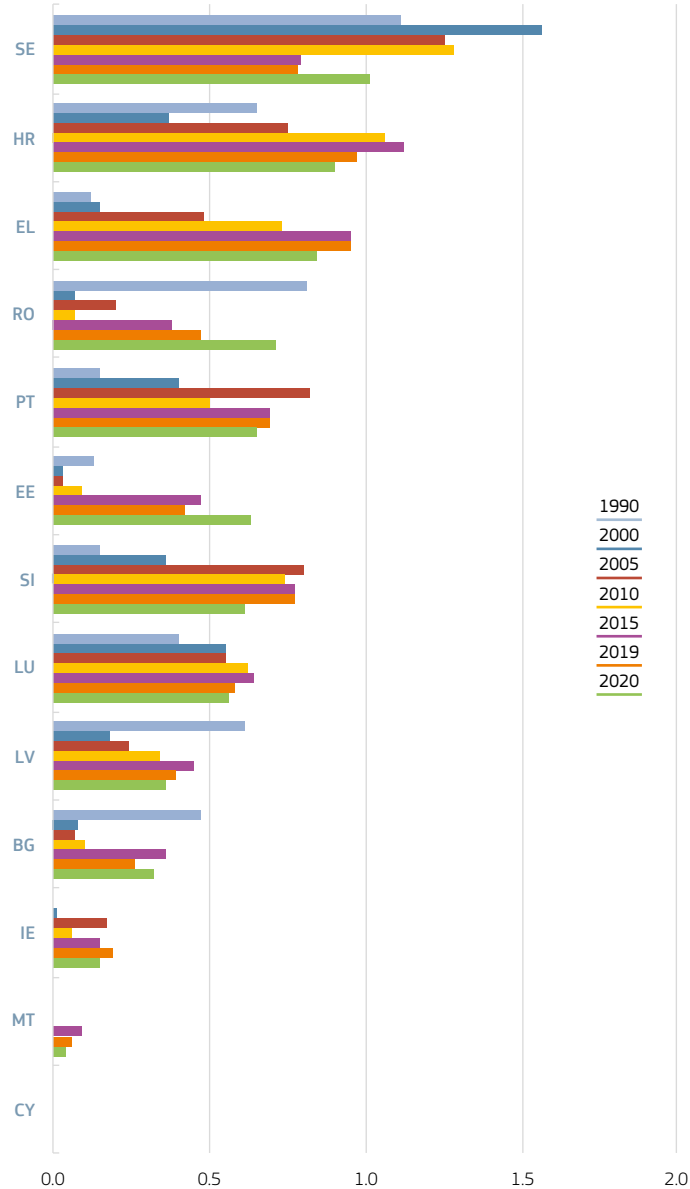

source: Eurostat April 2022

Methodology and Notes: **see appendices**

## 2.2.4 Imports – Electricity

### BY MEMBER STATE – LEAST 13 IMPORTERS

1990-2020



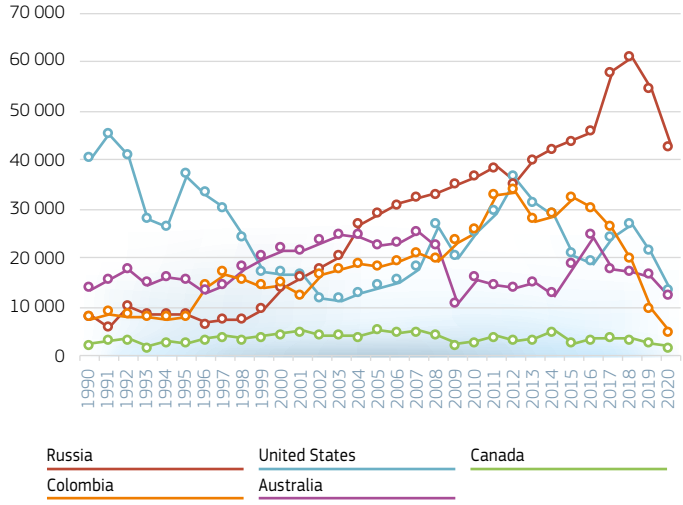

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.5 Imports by Country of Origin

### EU27_2020 – HARD COAL
TOP 15 ORDERED BY 2020 VOLUME

| kton | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Russia | 14179 | 29302 | 36786 | 43914 | 54569 | 43051 |
| United States | 16950 | 14023 | 25248 | 20624 | 21077 | 13369 |
| Australia | 21576 | 22596 | 15756 | 18559 | 16418 | 11921 |
| Colombia | 14566 | 18282 | 25414 | 32211 | 9626 | 4729 |
| Canada | 4675 | 5531 | 3137 | 2707 | 2728 | 2022 |
| Kazakhstan | 0 | 932 | 332 | 873 | 2629 | 1607 |
| South Africa | 34466 | 36295 | 15762 | 12862 | 3376 | 1095 |
| United Kingdom | 347 | 181 | 141 | 137 | 1299 | 1001 |
| Mozambique | 70 | 0 | 0 | 838 | 1849 | 745 |
| Venezuela | 3328 | 1988 | 659 | 207 | 185 | 220 |
| Indonesia | 7233 | 12314 | 9051 | 7005 | 2596 | 67 |
| Norway | 750 | 1045 | 930 | 572 | 192 | 27 |
| Ukraine | 2058 | 4209 | 3024 | 817 | 58 | 16 |
| China including Hong Kong | 1579 | 390 | 50 | 64 | 23 | 16 |
| Switzerland | 23 | 0 | 0 | 0 | 2 | 2 |
| Other extra-EU | 5363 | 3385 | 7698 | 11693 | 103 | 2 |
| | | | | | | |
| Extra-EU | 127163 | 150473 | 143986 | 153083 | 116733 | 79889 |
| Intra-EU | 28432 | 24324 | 20515 | 13485 | 8700 | 7845 |
| Total Intra-EU and Extra-EU | 155595 | 174797 | 164501 | 166567 | 125433 | 87733 |

### EU27_2020 – HARD COAL – IMPORTS FROM EXTRA-EU (1990-2020) TOP 5 ORDERED BY 2020 VOLUME (kton)



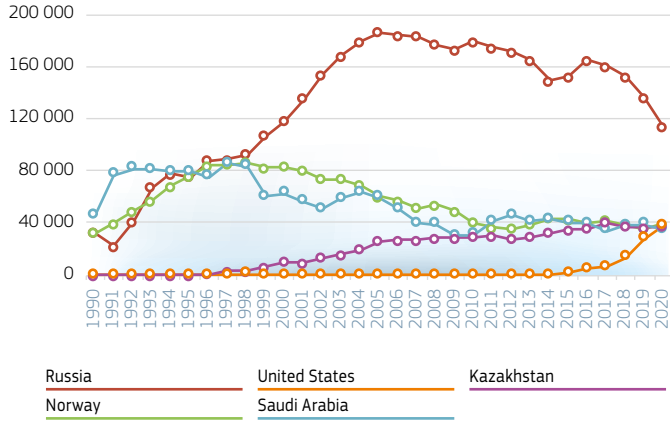

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.5 Imports by Country of Origin

### EU27_2020 – CRUDE OIL & NGL
TOP 15 ORDERED BY 2020 VOLUME

| kton | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Russia | 118282 | 186376 | 179253 | 152630 | 136557 | 113829 |
| Norway | 83622 | 60053 | 40523 | 42990 | 35984 | 39231 |
| United States | 0 | 0 | 28 | 1798 | 27523 | 37663 |
| Kazakhstan | 9993 | 26349 | 29654 | 35185 | 36811 | 37277 |
| Saudi Arabia | 63036 | 59427 | 30759 | 40264 | 38885 | 34558 |
| Nigeria | 22530 | 18293 | 19746 | 39233 | 39742 | 34007 |
| Iraq | 31317 | 12290 | 16945 | 40078 | 45506 | 29117 |
| United Kingdom | 45810 | 29133 | 28609 | 20291 | 24953 | 24895 |
| Azerbaijan | 3712 | 7255 | 22840 | 27297 | 22743 | 20284 |
| Algeria | 20565 | 20972 | 6990 | 17644 | 12729 | 10473 |
| Libya | 45540 | 50136 | 50929 | 12678 | 31444 | 9195 |
| Mexico | 9041 | 10205 | 6782 | 12980 | 10025 | 8443 |
| Brazil | 133 | 2658 | 4103 | 2971 | 5175 | 7804 |
| Angola | 3861 | 7025 | 8367 | 19436 | 7326 | 5758 |
| Not specified | 5271 | 10 | 180 | 206 | 539 | 5026 |
| other extra-EU | 79367 | 72741 | 66620 | 45068 | 32003 | 24960 |
| | | | | | | |
| Extra-EU | 542081 | 562923 | 512328 | 510749 | 507944 | 442521 |
| Intra-EU | 13908 | 16945 | 9485 | 9282 | 4797 | 4946 |
| Total Intra-EU and Extra-EU | 555989 | 579867 | 521813 | 520031 | 512741 | 447467 |
| **Mio barrels** | **2000** | **2005** | **2010** | **2015** | **2019** | **2020** |
| Extra-EU | 3974 | 4127 | 3756 | 3744 | 3724 | 3244 |
| Intra-EU | 102 | 124 | 70 | 68 | 35 | 36 |
| Total Intra-EU and Extra-EU | 4076 | 4251 | 3826 | 3813 | 3759 | 3281 |

### EU27_2020 – CRUDE OIL & NGL – IMPORTS FROM EXTRA-EU (1990-2020) TOP 5 ORDERED BY 2020 VOLUME (kton)




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.2.5 Imports by Country of Origin

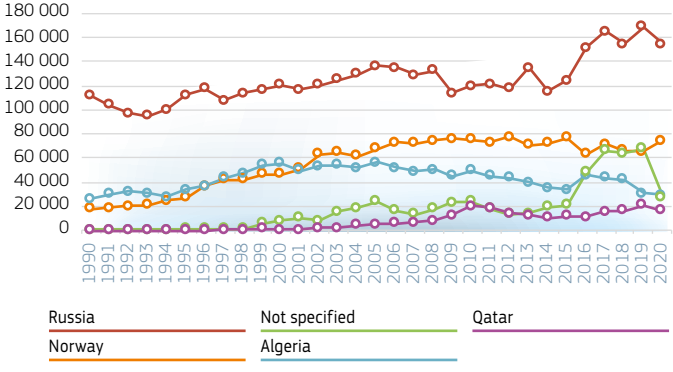
### EU27_2020 – NATURAL GAS

TOP 8 ORDERED BY 2020 VOLUME

| TJ (GCV) | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Russia | 4582197 | 5207617 | 4555369 | 4778474 | 6461869 | 5929770 |
| Norway | 1880469 | 2579666 | 2876470 | 2946396 | 2456344 | 2829957 |
| Algeria | 2203075 | 2240256 | 1944865 | 1351879 | 1213946 | 1142422 |
| Not specified | 334765 | 937384 | 957962 | 818395 | 2472926 | 1080404 |
| Qatar | 12443 | 195713 | 798681 | 472608 | 833417 | 639769 |
| United States | 0 | 0 | 0 | 0 | 488485 | 606558 |
| United Kingdom | 427099 | 263085 | 490364 | 479978 | 420602 | 528278 |
| Nigeria | 172020 | 436319 | 562811 | 249094 | 545386 | 465116 |
| Other extra-EU | 118858 | 711631 | 750993 | 401352 | 593384 | 457900 |
| Extra-EU | 9730926 | 12571671 | 12937515 | 11498176 | 15486360 | 13680175 |
| Intra-EU | 1453115 | 1865252 | 1951064 | 2734232 | 1268757 | 1633443 |
| Total Intra-EU and Extra-EU | 11184041 | 14436923 | 14888579 | 14232408 | 16755117 | 15313617 |

| Mio m³ | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Russia | 120699 | 136283 | 119665 | 124320 | 168860 | 155020 |
| Norway | 46847 | 67641 | 74994 | 77033 | 65135 | 74563 |
| Algeria | 55513 | 56588 | 49289 | 33770 | 30698 | 28997 |
| Not specified | 8126 | 23866 | 24111 | 20964 | 67753 | 27431 |
| Qatar | 309 | 4859 | 20045 | 12063 | 21103 | 16385 |
| United States | 0 | 0 | 0 | 0 | 12560 | 15682 |
| United Kingdom | 12044 | 7046 | 13481 | 13047 | 11912 | 15156 |
| Nigeria | 4385 | 10586 | 13682 | 6163 | 13436 | 11461 |
| Other extra-EU | 3004 | 18078 | 19149 | 10402 | 15367 | 11791 |
| Extra-EU | 250927 | 324947 | 334416 | 297763 | 406824 | 356486 |
| Intra-EU | 41231 | 49492 | 51444 | 71646 | 33475 | 44103 |
| Total Intra-EU and Extra-EU | 292158 | 374439 | 385860 | 369410 | 440299 | 400589 |

### EU27_2020 – NATURAL GAS – IMPORTS FROM EXTRA-EU (1990-2020) TOP 5 BY 2020 VOLUME (Mio m³)




* total imports through pipelines and LNG

source: Eurostat April 2022
Methodology and Notes: see appendices

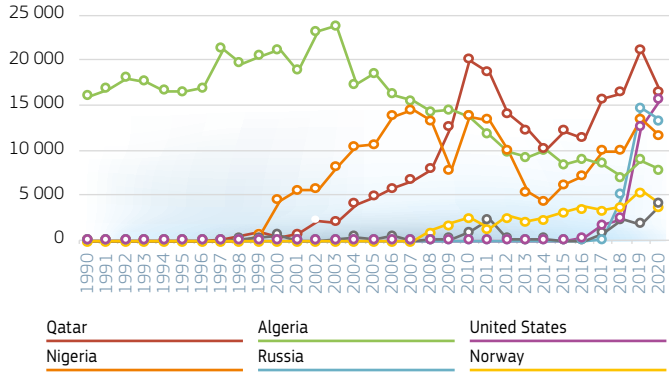
## 2.2.5 Imports by Country of Origin

### EU27_2020 – LNG

TOP 8 ORDERED BY 2020 VOLUME

| TJ (GCV) | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Qatar | 12443 | 195713 | 798681 | 472608 | 833417 | 639769 |
| United States | 0 | 0 | 0 | 0 | 488485 | 606558 |
| Russia | 0 | 0 | 115 | 1077 | 576341 | 512705 |
| Nigeria | 172020 | 436319 | 562811 | 249094 | 545386 | 465116 |
| Algeria | 871464 | 758810 | 568072 | 342158 | 355185 | 310750 |
| Not specified | 22204 | 3014 | 36092 | 192 | 67784 | 168077 |
| Norway | 0 | 0 | 104694 | 117798 | 205466 | 152332 |
| Trinidad and Tobago | 36334 | 26453 | 145341 | 58103 | 187750 | 122489 |
| Other extra-EU | 42500 | 332996 | 220504 | 45764 | 140386 | 115523 |
| Extra-EU | 1156965 | 1753305 | 2436310 | 1286794 | 3400199 | 3093318 |
| Intra-EU | 0 | 0 | 3153 | 202 | 27623 | 23922 |
| Total Intra-EU and Extra-EU | 1156965 | 1753305 | 2439463 | 1286996 | 3427822 | 3117240 |
| **Mio m³** | **2000** | **2005** | **2010** | **2015** | **2019** | **2020** |
| Qatar | 309 | 4859 | 20045 | 12063 | 21103 | 16385 |
| United States | 0 | 0 | 0 | 0 | 12560 | 15682 |
| Russia | 0 | 0 | 3 | 29 | 14653 | 13270 |
| Nigeria | 4385 | 10586 | 13682 | 6163 | 13436 | 11461 |
| Algeria | 21093 | 18436 | 13730 | 8358 | 8881 | 7755 |
| Not specified | 552 | 75 | 891 | 7 | 1753 | 4071 |
| Norway | 0 | 0 | 2598 | 3244 | 5500 | 3954 |
| Trinidad and Tobago | 902 | 671 | 3594 | 1481 | 4752 | 3113 |
| Other extra-EU | 1053 | 8172 | 5457 | 1128 | 3691 | 2942 |
| Extra-EU | 28294 | 42799 | 60000 | 32474 | 86330 | 78634 |
| Intra-EU | 0 | 0 | 78 | 5 | 681 | 576 |
| Total Intra-EU and Extra-EU | 28294 | 42799 | 60078 | 32479 | 87011 | 79210 |

### EU27_2020 – LNG – IMPORTS FROM EXTRA-EU (1990-2020) TOP 5 BY 2020 VOLUME (Mio m³)




source: Eurostat April 2022

Methodology and Notes: **see appendices**

# 2.3 Energy Import Dependency

## 2.3.1 Import Dependency – All Fuels*

(%)

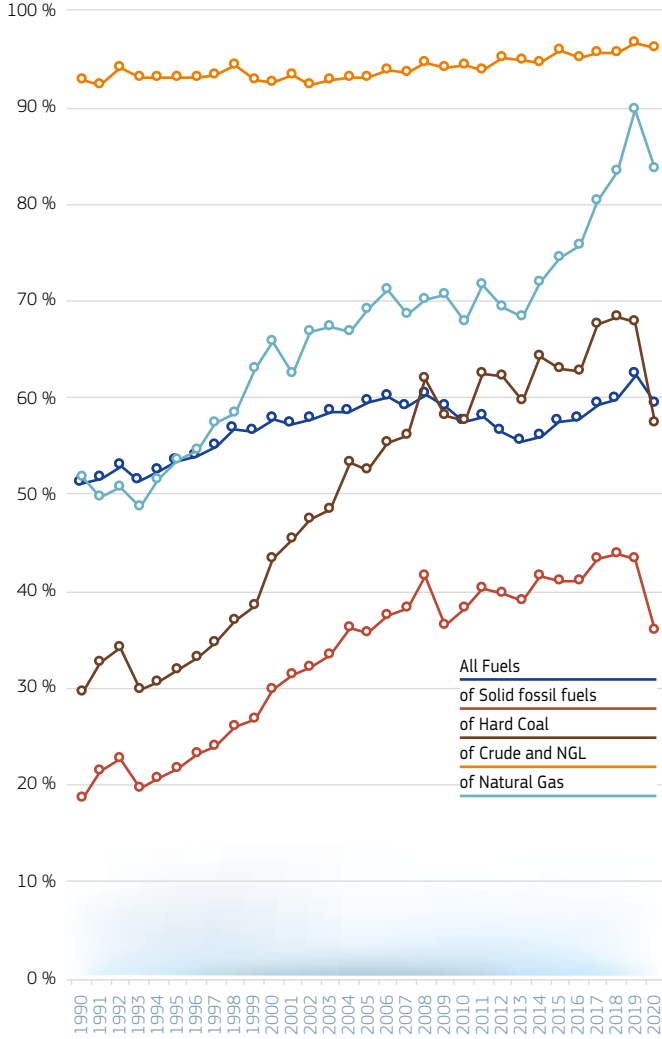
| Imports From Extra-EU | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 57.8 | 59.5 | 57.4 | 57.6 | 62.3 | 59.2 |
| Index2000 | 100.0 | 103.0 | 99.4 | 99.7 | 107.7 | 102.4 |
| **Intra and Extra-EU Imports** | | | | | | |
| BE | 85.2 | 90.2 | 88.4 | 93.3 | 88.9 | 87.7 |
| BG | 46.6 | 47.6 | 40.4 | 36.6 | 38.3 | 38.1 |
| CZ | 22.7 | 27.8 | 25.4 | 32.1 | 40.8 | 38.9 |
| DK | -38.3 | -52.6 | -16.6 | 13.6 | 40.4 | 46.4 |
| DE | 59.8 | 61.2 | 60.5 | 62.6 | 67.4 | 64.0 |
| EE | 34.7 | 27.5 | 15.2 | 11.8 | 5.0 | 11.2 |
| IE | 86.4 | 90.3 | 88.3 | 89.8 | 69.4 | 72.1 |
| EL | 78.0 | 74.5 | 75.1 | 76.3 | 82.0 | 87.9 |
| ES | 80.5 | 86.0 | 82.0 | 77.2 | 79.3 | 71.8 |
| FR | 51.8 | 52.2 | 49.1 | 46.2 | 47.9 | 44.7 |
| HR | 48.6 | 52.7 | 46.7 | 48.8 | 56.4 | 53.7 |
| IT | 87.3 | 84.3 | 84.0 | 78.0 | 78.8 | 74.7 |
| CY | 106.4 | 112.0 | 107.4 | 107.6 | 102.6 | 104.3 |
| LV | 61.1 | 67.5 | 48.0 | 54.2 | 46.7 | 47.6 |
| LT | 58.5 | 56.2 | 80.6 | 76.2 | 77.1 | 76.7 |
| LU | 99.6 | 97.4 | 97.1 | 96.0 | 95.0 | 92.5 |
| HU | 55.0 | 62.3 | 56.9 | 53.9 | 69.7 | 56.6 |
| MT | 181.8 | 170.3 | 252.0 | 294.6 | 341.5 | 377.7 |
| NL | 44.7 | 44.8 | 32.8 | 57.2 | 74.0 | 79.3 |
| AT | 65.6 | 71.8 | 62.8 | 60.4 | 71.7 | 58.3 |
| PL | 10.8 | 17.8 | 31.6 | 29.9 | 45.4 | 42.9 |
| PT | 87.5 | 90.4 | 76.6 | 78.4 | 76.8 | 67.4 |
| RO | 21.9 | 27.5 | 21.4 | 16.7 | 30.3 | 28.2 |
| SI | 51.9 | 51.0 | 49.4 | 49.8 | 53.6 | 46.6 |
| SK | 65.1 | 66.0 | 64.4 | 60.1 | 69.8 | 56.3 |
| FI | 56.6 | 55.3 | 49.1 | 48.4 | 42.5 | 42.4 |
| SE | 40.4 | 39.5 | 39.5 | 31.2 | 31.3 | 35.4 |

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

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.3.2 Import Dependency by Fuel

EU27_2020 – IMPORTS FROM EXTRA-EU – 1990-2020 (%)




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.3.3 Import Dependency – Solid Fuels*

(%)

| Imports From Extra-EU | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 29.8 | 35.7 | 38.2 | 41.0 | 43.3 | 35.8 |
| Index2000 | 100.0 | 119.6 | 128.1 | 137.3 | 144.9 | 120.1 |
| **Intra and Extra-EU Imports** | | | | | | |
| BE | 91.2 | 101.3 | 97.5 | 95.7 | 102.1 | 102.7 |
| BG | 35.2 | 36.9 | 24.5 | 11.2 | 7.2 | 9.2 |
| CZ | -22.0 | -16.2 | -15.3 | -1.8 | 8.7 | 13.0 |
| DK | 94.9 | 94.4 | 69.4 | 85.0 | 154.0 | 74.9 |
| DE | 25.6 | 31.7 | 40.0 | 45.4 | 47.2 | 44.1 |
| EE | 125.2 | 88.4 | 132.6 | -6.8 | 107.2 | 391.7 |
| IE | 93.3 | 100.8 | 77.7 | 103.0 | 68.2 | 60.3 |
| EL | 8.5 | 4.1 | 5.1 | 2.8 | 6.4 | 10.2 |
| ES | 61.3 | 70.3 | 92.8 | 75.4 | 89.5 | 54.8 |
| FR | 86.3 | 94.4 | 101.0 | 98.4 | 99.6 | 96.3 |
| HR | 110.9 | 91.3 | 102.5 | 103.0 | 107.3 | 106.0 |
| IT | 104.6 | 99.4 | 100.8 | 100.2 | 98.6 | 93.0 |
| CY | 102.0 | 121.1 | 65.6 | 100.0 | 117.2 | 105.4 |
| LV | 84.1 | 97.7 | 106.5 | 85.2 | 110.8 | 89.6 |
| LT | 101.7 | 101.0 | 95.7 | 90.6 | 108.1 | 87.9 |
| LU | 100.0 | 100.0 | 102.2 | 99.8 | 93.1 | 112.3 |
| HU | 28.1 | 42.5 | 41.9 | 33.7 | 45.7 | 43.7 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 99.4 | 101.3 | 101.4 | 96.6 | 102.1 | 91.9 |
| AT | 83.9 | 99.4 | 99.6 | 86.9 | 96.7 | 97.8 |
| PL | -29.0 | -23.8 | -5.0 | -11.4 | 6.0 | 0.3 |
| PT | 102.9 | 96.3 | 98.3 | 98.5 | 122.1 | -6.5 |
| RO | 25.5 | 33.2 | 16.9 | 16.7 | 22.0 | 22.0 |
| SI | 18.8 | 21.0 | 19.3 | 19.1 | 20.1 | 17.6 |
| SK | 80.2 | 88.3 | 75.7 | 84.5 | 92.2 | 86.2 |
| FI | 97.6 | 102.0 | 86.3 | 91.3 | 98.9 | 92.2 |
| SE | 105.4 | 105.9 | 113.7 | 97.4 | 103.2 | 100.3 |

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

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.3.4 Import Dependency – Hard Coal *
(%)

| Imports From Extra-EU | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 43.2 | 52.5 | 57.7 | 63.0 | 67.9 | 57.4 |
| Index2000 | 100.0 | 121.5 | 133.4 | 145.6 | 157.0 | 132.7 |
| **Intra and Extra-EU Imports** | | | | | | |
| BE | 93.5 | 102.0 | 100.0 | 96.3 | 102.7 | 104.2 |
| BG | 101.0 | 94.0 | 86.0 | 96.1 | 57.6 | 69.0 |
| CZ | -56.4 | -49.4 | -53.9 | -8.6 | 41.7 | 52.0 |
| DK | 94.8 | 94.3 | 69.3 | 85.0 | 154.5 | 74.0 |
| DE | 39.2 | 57.7 | 73.2 | 87.6 | 95.2 | 92.8 |
| EE | 116.1 | 96.4 | 118.3 | 24.1 | 96.7 | 28.5 |
| IE | 93.1 | 100.8 | 77.5 | 103.0 | 67.4 | 59.2 |
| EL | 105.8 | 112.4 | 100.5 | 91.5 | 105.0 | 114.6 |
| ES | 71.5 | 79.1 | 95.7 | 79.6 | 91.6 | 46.2 |
| FR | 87.2 | 92.8 | 100.6 | 97.0 | 99.2 | 95.8 |
| HR | 112.8 | 90.6 | 102.7 | 102.4 | 108.6 | 106.7 |
| IT | 105.7 | 99.7 | 101.4 | 100.5 | 98.4 | 93.1 |
| CY | 102.0 | 121.2 | 65.4 | 100.0 | 117.2 | 105.4 |
| LV | 82.5 | 96.7 | 106.6 | 85.2 | 110.8 | 89.6 |
| LT | 100.0 | 100.0 | 109.7 | 90.1 | 109.1 | 86.7 |
| LU | 100.0 | 100.0 | 102.5 | 99.8 | 92.3 | 114.0 |
| HU | 96.4 | 108.3 | 99.2 | 99.2 | 98.8 | 97.0 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 98.9 | 100.0 | 101.6 | 96.5 | 101.8 | 93.0 |
| AT | 91.6 | 106.8 | 97.3 | 83.5 | 98.4 | 95.5 |
| PL | -29.9 | -21.3 | 3.7 | -2.4 | 17.8 | 12.4 |
| PT | 103.4 | 96.3 | 98.3 | 98.5 | 122.3 | -7.9 |
| RO | 96.3 | 103.1 | 88.4 | 96.9 | 97.7 | 106.4 |
| SI | 118.2 | 100.0 | 135.3 | 124.2 | 95.9 | 97.7 |
| SK | 103.8 | 105.2 | 91.9 | 97.5 | 102.7 | 97.3 |
| FI | 97.7 | 102.6 | 85.5 | 88.6 | 96.1 | 90.0 |
| SE | 107.7 | 104.3 | 115.2 | 99.6 | 98.1 | 101.5 |

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

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.3.5 Import Dependency – Oil and Petroleum Products*

(%)

| Imports From Extra-EU | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 99.8 | 101.2 | 102.1 | 104.7 | 105.0 | 105.6 |
| Index2000 | 100.0 | 101.5 | 102.3 | 104.9 | 105.2 | 105.8 |
| **Intra and Extra-EU Imports** | | | | | | |
| BE | 122.3 | 131.9 | 132.7 | 129.5 | 139.2 | 136.0 |
| BG | 97.5 | 104.9 | 104.3 | 103.9 | 104.2 | 99.4 |
| CZ | 95.3 | 97.5 | 96.5 | 97.8 | 97.5 | 101.2 |
| DK | -96.5 | -114.2 | -48.3 | 5.9 | 49.6 | 60.3 |
| DE | 96.2 | 99.3 | 99.1 | 98.7 | 98.5 | 97.8 |
| EE | 117.3 | 113.2 | 130.2 | 188.9 | 547.2 | -1580.2 |
| IE | 100.6 | 101.2 | 99.2 | 107.0 | 100.7 | 105.8 |
| EL | 123.4 | 113.6 | 117.1 | 121.1 | 116.1 | 124.5 |
| ES | 110.5 | 112.6 | 113.7 | 116.7 | 114.8 | 113.2 |
| FR | 102.7 | 102.1 | 100.6 | 100.7 | 100.6 | 100.0 |
| HR | 61.3 | 79.8 | 80.8 | 81.5 | 76.9 | 74.2 |
| IT | 97.9 | 94.3 | 97.6 | 92.4 | 97.1 | 93.5 |
| CY | 108.4 | 114.3 | 111.5 | 114.5 | 111.6 | 116.0 |
| LV | 95.5 | 120.1 | 110.0 | 120.6 | 119.2 | 120.9 |
| LT | 105.2 | 98.4 | 104.0 | 103.6 | 107.3 | 109.2 |
| LU | 102.1 | 99.4 | 99.3 | 99.3 | 100.4 | 100.0 |
| HU | 75.9 | 82.0 | 85.3 | 93.7 | 86.6 | 87.1 |
| MT | 181.8 | 170.4 | 253.3 | 330.7 | 548.1 | 719.1 |
| NL | 138.8 | 139.5 | 133.4 | 144.3 | 139.0 | 141.7 |
| AT | 89.2 | 92.2 | 90.6 | 94.0 | 95.8 | 97.6 |
| PL | 101.2 | 99.9 | 99.0 | 100.3 | 98.2 | 97.9 |
| PT | 103.6 | 106.0 | 101.1 | 108.0 | 106.8 | 105.0 |
| RO | 34.4 | 38.6 | 52.7 | 54.5 | 65.6 | 65.0 |
| SI | 101.5 | 102.1 | 99.9 | 102.4 | 109.6 | 105.3 |
| SK | 92.5 | 97.4 | 98.4 | 100.6 | 101.3 | 102.0 |
| FI | 111.5 | 103.9 | 94.2 | 113.3 | 98.9 | 106.4 |
| SE | 110.4 | 117.4 | 106.3 | 136.7 | 127.5 | 166.9 |

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

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.3.6 Import Dependency – Crude and NGL*
(%)

| Imports From Extra-EU | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 92.5 | 93.0 | 94.4 | 95.9 | 96.6 | 96.2 |
| Index2000 | 100.0 | 100.5 | 102.0 | 103.7 | 104.4 | 104.0 |
| **Intra and Extra-EU Imports** | | | | | | |
| BE | 100.2 | 99.5 | 99.9 | 100.0 | 100.0 | 100.5 |
| BG | 98.7 | 97.7 | 99.1 | 100.5 | 102.6 | 99.4 |
| CZ | 95.2 | 99.3 | 97.5 | 98.4 | 98.6 | 101.7 |
| DK | -120.5 | -141.3 | -68.8 | -4.9 | 36.0 | 50.7 |
| DE | 93.8 | 97.3 | 97.3 | 97.1 | 98.3 | 98.3 |
| EE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| IE | 89.8 | 98.9 | 101.6 | 108.2 | 100.9 | 102.3 |
| EL | 99.6 | 95.2 | 99.6 | 101.5 | 98.1 | 102.0 |
| ES | 100.6 | 100.1 | 99.3 | 99.5 | 101.0 | 99.5 |
| FR | 98.5 | 98.2 | 98.2 | 98.8 | 98.4 | 97.9 |
| HR | 72.1 | 78.9 | 82.3 | 79.6 | 71.1 | 68.0 |
| IT | 95.1 | 94.0 | 94.5 | 92.2 | 93.9 | 90.2 |
| CY | 98.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LV | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LT | 94.5 | 95.3 | 99.0 | 99.5 | 100.8 | 99.4 |
| LU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| HU | 78.5 | 81.8 | 85.3 | 91.4 | 84.6 | 86.0 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 96.7 | 96.7 | 97.6 | 98.0 | 99.9 | 98.1 |
| AT | 86.9 | 88.8 | 86.5 | 91.1 | 94.0 | 92.9 |
| PL | 99.2 | 97.4 | 98.4 | 100.5 | 96.7 | 96.6 |
| PT | 99.0 | 100.2 | 98.8 | 100.9 | 100.4 | 98.3 |
| RO | 43.5 | 62.0 | 57.2 | 63.0 | 72.0 | 66.9 |
| SI | 87.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| SK | 97.6 | 97.8 | 99.9 | 99.3 | 100.5 | 101.4 |
| FI | 101.5 | 97.5 | 101.1 | 104.2 | 99.0 | 99.7 |
| SE | 100.6 | 100.4 | 99.0 | 103.6 | 100.0 | 106.1 |

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

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.3.7 Import Dependency – Natural Gas*

(%)

| Imports From Extra-EU | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 65.7 | 69.0 | 67.8 | 74.5 | 89.7 | 83.6 |
| Index2000 | 100.0 | 105.0 | 103.1 | 113.3 | 136.4 | 127.3 |
| **Intra and Extra-EU Imports** | | | | | | |
| BE | 99.3 | 100.5 | 100.3 | 99.3 | 101.9 | 99.2 |
| BG | 93.5 | 87.7 | 92.6 | 97.0 | 100.4 | 96.4 |
| CZ | 99.8 | 97.8 | 84.8 | 95.1 | 109.8 | 86.0 |
| DK | -64.8 | -113.9 | -68.3 | -48.2 | -7.2 | 37.4 |
| DE | 79.1 | 79.6 | 81.2 | 90.1 | 100.1 | 89.1 |
| EE | 100.0 | 100.0 | 100.0 | 100.0 | 105.4 | 106.3 |
| IE | 72.1 | 86.1 | 95.3 | 96.3 | 53.0 | 63.7 |
| EL | 99.1 | 99.1 | 99.9 | 99.9 | 99.0 | 100.7 |
| ES | 101.6 | 101.4 | 99.4 | 96.9 | 101.6 | 97.5 |
| FR | 100.0 | 99.3 | 92.8 | 98.5 | 104.5 | 94.7 |
| HR | 41.0 | 23.7 | 18.1 | 27.1 | 66.4 | 68.8 |
| IT | 81.1 | 84.7 | 90.5 | 90.4 | 95.1 | 92.8 |
| CY | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LV | 101.9 | 105.6 | 61.8 | 98.6 | 100.0 | 100.1 |
| LT | 100.0 | 100.7 | 99.7 | 99.7 | 100.0 | 98.9 |
| LU | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| HU | 75.4 | 81.1 | 78.7 | 69.7 | 115.2 | 75.6 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 103.6 | 96.2 |
| NL | -49.1 | -59.3 | -60.4 | -36.7 | 26.0 | 45.2 |
| AT | 80.6 | 88.5 | 75.3 | 72.6 | 122.8 | 73.2 |
| PL | 66.3 | 69.7 | 69.3 | 72.2 | 82.4 | 78.3 |
| PT | 100.3 | 103.8 | 100.4 | 100.4 | 99.9 | 99.3 |
| RO | 19.8 | 30.1 | 16.8 | 1.8 | 23.2 | 16.6 |
| SI | 99.3 | 99.6 | 99.3 | 99.6 | 99.2 | 99.4 |
| SK | 98.8 | 97.5 | 99.9 | 95.1 | 136.6 | 88.1 |
| FI | 100.0 | 100.0 | 100.0 | 100.0 | 100.6 | 100.4 |
| SE | 100.0 | 100.0 | 100.0 | 100.0 | 101.8 | 101.6 |

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

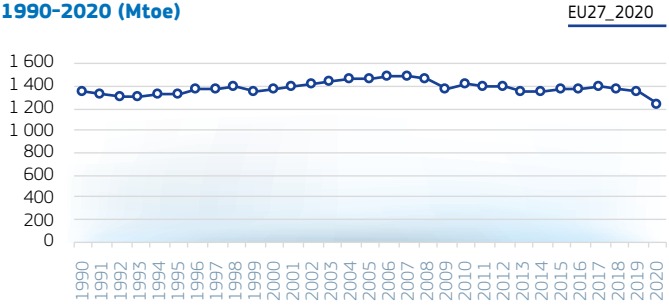
source: Eurostat April 2022
Methodology and Notes: see appendices

# 2.4 Energy Transformation

## 2.4.1 Transformation Input – All Fuels

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1383.7 | 1471.7 | 1414.5 | 1373.3 | 1351.2 | 1224.2 |
| Index2000 | 100% | 106% | 102% | 99% | 98% | 88% |
| | | | | | | |
| BE | 68.63 | 67.67 | 67.88 | 60.50 | 65.34 | 55.90 |
| BG | 18.65 | 20.99 | 18.84 | 19.72 | 19.46 | 16.39 |
| CZ | 31.82 | 37.02 | 37.33 | 34.33 | 34.70 | 31.26 |
| DK | 18.06 | 16.31 | 16.61 | 17.83 | 16.83 | 16.19 |
| DE | 292.34 | 313.34 | 291.21 | 280.71 | 260.47 | 242.87 |
| EE | 3.63 | 4.07 | 4.93 | 4.56 | 4.20 | 3.73 |
| IE | 8.59 | 8.85 | 8.53 | 8.55 | 7.98 | 8.25 |
| EL | 35.80 | 35.59 | 35.28 | 40.12 | 41.77 | 40.40 |
| ES | 115.16 | 126.81 | 121.90 | 133.10 | 130.89 | 114.54 |
| FR | 234.01 | 242.48 | 227.74 | 213.12 | 197.08 | 169.15 |
| HR | 7.72 | 7.88 | 6.78 | 5.40 | 5.17 | 4.97 |
| IT | 163.61 | 176.39 | 161.45 | 136.66 | 138.58 | 121.21 |
| CY | 2.08 | 1.09 | 1.21 | 0.97 | 1.06 | 1.01 |
| LV | 1.39 | 1.66 | 1.49 | 1.39 | 1.58 | 1.43 |
| LT | 9.43 | 14.78 | 12.53 | 11.86 | 12.17 | 10.73 |
| LU | 0.20 | 0.69 | 0.74 | 0.43 | 0.35 | 0.43 |
| HU | 19.87 | 21.66 | 23.01 | 18.92 | 18.23 | 18.03 |
| MT | 0.50 | 0.61 | 0.58 | 0.28 | 0.34 | 0.38 |
| NL | 104.43 | 111.74 | 113.01 | 117.66 | 129.72 | 116.39 |
| AT | 20.35 | 22.52 | 22.53 | 23.10 | 23.70 | 22.17 |
| PL | 72.87 | 72.58 | 79.74 | 83.18 | 81.21 | 76.38 |
| PT | 20.97 | 22.98 | 20.73 | 25.26 | 22.24 | 21.03 |
| RO | 29.11 | 32.20 | 26.03 | 26.06 | 26.22 | 23.39 |
| SI | 3.11 | 3.41 | 3.41 | 2.95 | 3.14 | 3.30 |
| SK | 16.91 | 18.73 | 17.34 | 17.09 | 15.61 | 15.75 |
| FI | 32.41 | 34.11 | 38.80 | 32.92 | 35.80 | 33.43 |
| SE | 52.05 | 55.51 | 54.86 | 56.67 | 57.38 | 55.51 |

**TRANSFORMATION INPUT – ALL FUELS – 1990-2020 (Mtoe)**




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.4.2 Transformation Input by Fuel

| Mtoe | 2020 Transformation Input | Solid fossil fuels | Oil and petroleum products | Natural gas | Nuclear | Renewables and biofuels | Waste, non-renewable |
|---|---|---|---|---|---|---|---|
| EU27_2020 | 1 224.2 | 143.8 | 624.7 | 104.6 | 175.2 | 151.2 | 9.2 |
| Share - % | 100.0 % | 11.7 % | 51.0 % | 8.5 % | 14.3 % | 12.3 % | 0.8 % |
| | | | | | | | |
| BE | 55.90 | 2.55 | 35.84 | 4.12 | 8.37 | 3.49 | 0.48 |
| BG | 16.39 | 4.00 | 5.69 | 1.04 | 4.33 | 1.17 | 0.01 |
| CZ | 31.26 | 12.32 | 6.71 | 1.87 | 7.50 | 2.14 | 0.07 |
| DK | 16.19 | 0.69 | 9.67 | 0.50 | 0.00 | 4.84 | 0.41 |
| DE | 242.87 | 48.80 | 119.92 | 19.21 | 16.58 | 32.58 | 2.87 |
| EE | 3.73 | 0.00 | 0.05 | 0.09 | 0.00 | 0.83 | 0.03 |
| IE | 8.25 | 0.19 | 3.57 | 2.61 | 0.00 | 1.44 | 0.09 |
| EL | 40.40 | 1.66 | 33.66 | 3.20 | 0.00 | 1.86 | 0.01 |
| ES | 114.54 | 2.94 | 70.88 | 10.66 | 15.17 | 14.00 | 0.35 |
| FR | 169.15 | 6.17 | 44.32 | 6.58 | 92.21 | 17.58 | 1.24 |
| HR | 4.97 | 0.26 | 2.80 | 0.83 | 0.00 | 1.07 | 0.00 |
| IT | 121.21 | 5.50 | 69.98 | 24.22 | 0.00 | 19.96 | 0.88 |
| CY | 1.01 | 0.00 | 0.94 | 0.00 | 0.00 | 0.07 | 0.00 |
| LV | 1.43 | 0.00 | 0.00 | 0.56 | 0.00 | 0.86 | 0.00 |
| LT | 10.73 | 0.00 | 8.90 | 0.39 | 0.00 | 1.00 | 0.06 |
| LU | 0.43 | 0.00 | 0.00 | 0.06 | 0.00 | 0.22 | 0.02 |
| HU | 18.03 | 2.14 | 8.01 | 2.39 | 4.05 | 1.20 | 0.10 |
| MT | 0.38 | 0.00 | 0.02 | 0.32 | 0.00 | 0.04 | 0.00 |
| NL | 116.39 | 5.22 | 91.29 | 11.37 | 0.96 | 5.82 | 0.75 |
| AT | 22.17 | 3.04 | 9.17 | 2.09 | 0.00 | 6.66 | 0.38 |
| PL | 76.38 | 36.91 | 29.79 | 3.69 | 0.00 | 4.88 | 0.24 |
| PT | 21.03 | 0.56 | 13.13 | 3.37 | 0.00 | 3.71 | 0.09 |
| RO | 23.39 | 2.97 | 11.99 | 2.75 | 2.89 | 2.71 | 0.00 |
| SI | 3.30 | 0.97 | 0.00 | 0.15 | 1.50 | 0.63 | 0.01 |
| SK | 15.75 | 2.74 | 6.57 | 1.12 | 4.04 | 1.18 | 0.02 |
| FI | 33.43 | 2.26 | 16.77 | 1.31 | 5.55 | 6.07 | 0.24 |
| SE | 55.51 | 1.96 | 24.98 | 0.04 | 12.03 | 15.19 | 0.90 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.4.3 Transformation Input by Sector

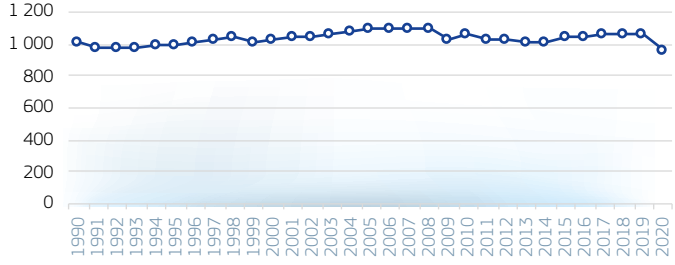
| | 2020 | | | | | |
|---|---|---|---|---|---|---|
| Mtoe | Total, All Sectors | Electricity producers | Heat producers | CHP producers | Refineries, Petroleum and sub-products | Other transformation input |
| EU27_2020 | 1 224.2 | 371.1 | 17.5 | 141.7 | 612.0 | 81.9 |
| Share - % | 100.0 % | 30.3 % | 1.4 % | 11.6 % | 50.0 % | 6.7 % |
| | | | | | | |
| BE | 55.90 | 13.46 | 0.01 | 2.98 | 35.83 | 3.63 |
| BG | 16.39 | 8.00 | 0.29 | 1.58 | 5.63 | 0.88 |
| CZ | 31.26 | 14.29 | 0.69 | 5.26 | 6.67 | 4.35 |
| DK | 16.19 | 1.51 | 0.89 | 3.52 | 9.59 | 0.67 |
| DE | 242.87 | 73.70 | 2.98 | 24.80 | 118.52 | 22.86 |
| EE | 3.73 | 0.91 | 0.27 | 0.66 | 0.04 | 1.85 |
| IE | 8.25 | 4.20 | 0.00 | 0.30 | 3.46 | 0.30 |
| EL | 40.40 | 5.82 | 0.00 | 1.80 | 32.50 | 0.28 |
| ES | 114.54 | 38.37 | 0.00 | 4.15 | 68.72 | 3.30 |
| FR | 169.15 | 109.10 | 2.00 | 6.01 | 43.14 | 8.89 |
| HR | 4.97 | 0.96 | 0.05 | 1.03 | 2.79 | 0.15 |
| IT | 121.21 | 28.29 | 0.44 | 22.28 | 66.48 | 3.73 |
| CY | 1.01 | 0.98 | 0.00 | 0.01 | 0.00 | 0.01 |
| LV | 1.43 | 0.24 | 0.42 | 0.71 | 0.00 | 0.06 |
| LT | 10.73 | 0.17 | 0.56 | 0.86 | 8.87 | 0.27 |
| LU | 0.43 | 0.05 | 0.01 | 0.24 | 0.00 | 0.13 |
| HU | 18.03 | 5.27 | 0.73 | 2.47 | 8.00 | 1.57 |
| MT | 0.38 | 0.36 | 0.00 | 0.00 | 0.00 | 0.01 |
| NL | 116.39 | 10.11 | 0.80 | 9.60 | 90.82 | 5.05 |
| AT | 22.17 | 6.10 | 0.96 | 2.59 | 8.95 | 3.56 |
| PL | 76.38 | 2.84 | 2.71 | 31.01 | 29.39 | 10.42 |
| PT | 21.03 | 5.85 | 0.00 | 1.69 | 12.89 | 0.61 |
| RO | 23.39 | 8.01 | 0.43 | 2.38 | 11.76 | 0.82 |
| SI | 3.30 | 2.74 | 0.05 | 0.39 | 0.00 | 0.12 |
| SK | 15.75 | 0.79 | 0.27 | 5.68 | 6.50 | 2.50 |
| FI | 33.43 | 8.25 | 1.80 | 4.49 | 16.54 | 2.35 |
| SE | 55.51 | 20.72 | 1.16 | 5.25 | 24.92 | 3.47 |

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.4.4 Transformation Output – All Fuels

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1 031.9 | 1 090.4 | 1 059.7 | 1 045.4 | 1 056.7 | 961.6 |
| Index2000 | 100 % | 106 % | 103 % | 101 % | 102 % | 93 % |
| | | | | | | |
| BE | 54.28 | 53.91 | 54.67 | 51.92 | 54.08 | 46.51 |
| BG | 11.62 | 13.30 | 12.01 | 12.91 | 12.75 | 10.41 |
| CZ | 19.91 | 22.89 | 23.27 | 21.58 | 22.16 | 19.77 |
| DK | 15.59 | 14.06 | 14.18 | 16.83 | 16.36 | 15.71 |
| DE | 210.06 | 227.68 | 210.02 | 207.63 | 202.79 | 191.72 |
| EE | 1.84 | 2.15 | 2.53 | 2.54 | 2.62 | 2.46 |
| IE | 5.62 | 5.89 | 5.98 | 6.47 | 6.14 | 6.50 |
| EL | 29.13 | 28.38 | 28.76 | 35.62 | 37.85 | 37.05 |
| ES | 87.21 | 96.39 | 96.91 | 105.39 | 107.03 | 93.14 |
| FR | 154.62 | 151.28 | 139.32 | 126.18 | 117.48 | 98.70 |
| HR | 7.01 | 7.07 | 6.14 | 4.85 | 4.58 | 4.33 |
| IT | 129.85 | 141.64 | 131.20 | 111.22 | 115.34 | 99.35 |
| CY | 1.47 | 0.38 | 0.46 | 0.39 | 0.45 | 0.43 |
| LV | 1.18 | 1.47 | 1.29 | 1.12 | 1.28 | 1.19 |
| LT | 7.38 | 12.36 | 11.86 | 11.46 | 11.93 | 10.34 |
| LU | 0.11 | 0.43 | 0.47 | 0.30 | 0.26 | 0.33 |
| HU | 14.07 | 15.67 | 17.08 | 13.98 | 13.36 | 13.25 |
| MT | 0.16 | 0.19 | 0.18 | 0.12 | 0.19 | 0.20 |
| NL | 93.36 | 99.32 | 100.58 | 106.39 | 120.12 | 107.53 |
| AT | 17.16 | 18.53 | 18.59 | 19.51 | 20.37 | 19.18 |
| PL | 49.29 | 49.66 | 57.00 | 60.84 | 61.42 | 58.29 |
| PT | 17.04 | 18.73 | 17.75 | 21.36 | 19.02 | 18.08 |
| RO | 22.32 | 25.96 | 20.64 | 20.65 | 21.15 | 19.11 |
| SI | 1.57 | 1.54 | 1.69 | 1.53 | 1.69 | 1.78 |
| SK | 12.09 | 13.68 | 12.72 | 12.48 | 11.30 | 11.49 |
| FI | 25.53 | 26.94 | 31.14 | 26.95 | 30.23 | 28.29 |
| SE | 42.47 | 40.91 | 43.28 | 45.20 | 44.72 | 46.48 |

**TRANSFORMATION OUTPUT – ALL FUELS – 1990-2020 (Mtoe)**




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.4.5 Transformation Output by Fuel

| | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| Mtoe | Transformation Output | Solid fossil fuels | Oil and petroleum products | Natural gas | Renewables and biofuels | Electricity | Heat |
| EU27_2020 | 961.6 | 24.2 | 611.7 | 0.8 | 16.1 | 239.6 | 53.7 |
| Share - % | 100.0 % | 2.5 % | 63.6 % | 0.1 % | 1.7 % | 24.9 % | 5.6 % |
| | | | | | | | |
| BE | 46.51 | 0.80 | 35.90 | 0.00 | 0.70 | 7.69 | 0.72 |
| BG | 10.41 | 0.19 | 5.60 | 0.00 | 0.18 | 3.51 | 0.93 |
| CZ | 19.77 | 1.73 | 6.83 | 0.00 | 0.39 | 7.01 | 2.70 |
| DK | 15.71 | 0.00 | 9.59 | 0.34 | 0.25 | 2.47 | 3.06 |
| DE | 191.72 | 8.03 | 116.03 | 0.00 | 3.47 | 49.24 | 10.20 |
| EE | 2.46 | 0.01 | 1.14 | 0.00 | 0.00 | 0.51 | 0.51 |
| IE | 6.50 | 0.00 | 3.54 | 0.00 | 0.12 | 2.78 | 0.00 |
| EL | 37.05 | 0.00 | 32.61 | 0.00 | 0.24 | 4.15 | 0.05 |
| ES | 93.14 | 0.38 | 68.30 | 0.01 | 1.38 | 22.65 | 0.00 |
| FR | 98.70 | 1.64 | 42.82 | 0.17 | 2.91 | 45.72 | 3.94 |
| HR | 4.33 | 0.00 | 2.81 | 0.00 | 0.05 | 1.15 | 0.33 |
| IT | 99.35 | 0.89 | 66.98 | 0.08 | 1.27 | 24.12 | 5.47 |
| CY | 0.43 | 0.00 | 0.00 | 0.00 | 0.01 | 0.42 | 0.00 |
| LV | 1.19 | 0.00 | 0.00 | 0.00 | 0.06 | 0.49 | 0.65 |
| LT | 10.34 | 0.00 | 8.84 | 0.00 | 0.12 | 0.47 | 0.91 |
| LU | 0.33 | 0.00 | 0.00 | 0.01 | 0.00 | 0.19 | 0.13 |
| HU | 13.25 | 0.62 | 7.98 | 0.00 | 0.18 | 3.00 | 1.16 |
| MT | 0.20 | 0.00 | 0.00 | 0.00 | 0.01 | 0.18 | 0.00 |
| NL | 107.53 | 1.35 | 90.67 | 0.19 | 1.03 | 10.62 | 2.55 |
| AT | 19.18 | 0.95 | 8.82 | 0.01 | 0.22 | 6.24 | 2.02 |
| PL | 58.29 | 5.49 | 29.46 | 0.00 | 0.97 | 13.59 | 6.83 |
| PT | 18.08 | 0.00 | 12.79 | 0.00 | 0.24 | 4.56 | 0.49 |
| RO | 19.11 | 0.00 | 12.23 | 0.00 | 0.43 | 4.81 | 1.41 |
| SI | 1.78 | 0.00 | 0.00 | 0.00 | 0.09 | 1.48 | 0.22 |
| SK | 11.49 | 0.82 | 6.65 | 0.00 | 0.18 | 2.48 | 0.73 |
| FI | 28.29 | 0.56 | 16.83 | 0.01 | 0.40 | 5.93 | 4.10 |
| SE | 46.48 | 0.72 | 25.27 | 0.00 | 1.26 | 14.09 | 4.62 |

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.4.6 Transformation Output by Sector

| | 2020 | | | | | |
|---|---|---|---|---|---|---|
| Mtoe | Total, All Sectors | Electricity producers | Heat producers | CHP producers | Refineries, Petroleum and sub-products | Other transformation output |
| EU27_2020 | 961.6 | 184.1 | 14.2 | 89.2 | 608.4 | 65.6 |
| Share - % | 100.0 % | 19.1 % | 1.5 % | 9.3 % | 63.3 % | 6.8 % |
| | | | | | | |
| BE | 46.51 | 6.15 | 0.00 | 1.89 | 35.75 | 2.71 |
| BG | 10.41 | 3.00 | 0.19 | 1.14 | 5.38 | 0.69 |
| CZ | 19.77 | 5.52 | 0.61 | 3.42 | 6.83 | 3.40 |
| DK | 15.71 | 1.51 | 0.84 | 2.97 | 9.59 | 0.81 |
| DE | 191.72 | 38.53 | 2.43 | 17.61 | 116.03 | 17.12 |
| EE | 2.46 | 0.36 | 0.20 | 0.46 | 0.04 | 1.40 |
| IE | 6.50 | 2.57 | 0.00 | 0.18 | 3.49 | 0.25 |
| EL | 37.05 | 3.53 | 0.00 | 0.66 | 32.61 | 0.24 |
| ES | 93.14 | 19.66 | 0.00 | 2.67 | 68.30 | 2.50 |
| FR | 98.70 | 43.41 | 1.63 | 4.06 | 42.82 | 6.77 |
| HR | 4.33 | 0.76 | 0.04 | 0.67 | 2.74 | 0.12 |
| IT | 99.35 | 15.27 | 0.37 | 13.74 | 66.98 | 2.99 |
| CY | 0.43 | 0.41 | 0.00 | 0.01 | 0.00 | 0.01 |
| LV | 1.19 | 0.24 | 0.37 | 0.53 | 0.00 | 0.06 |
| LT | 10.34 | 0.17 | 0.42 | 0.51 | 8.84 | 0.40 |
| LU | 0.33 | 0.05 | 0.01 | 0.18 | 0.00 | 0.09 |
| HU | 13.25 | 2.12 | 0.61 | 1.36 | 7.94 | 1.23 |
| MT | 0.20 | 0.18 | 0.00 | 0.00 | 0.00 | 0.01 |
| NL | 107.53 | 6.29 | 0.44 | 6.10 | 90.67 | 4.03 |
| AT | 19.18 | 5.10 | 0.81 | 2.04 | 8.82 | 2.40 |
| PL | 58.29 | 2.14 | 2.36 | 15.82 | 28.90 | 9.07 |
| PT | 18.08 | 3.81 | 0.00 | 1.11 | 12.63 | 0.53 |
| RO | 19.11 | 4.17 | 0.37 | 1.66 | 12.13 | 0.79 |
| SI | 1.78 | 1.35 | 0.04 | 0.28 | 0.00 | 0.11 |
| SK | 11.49 | 0.63 | 0.23 | 2.33 | 6.36 | 1.95 |
| FI | 28.29 | 4.30 | 1.46 | 3.73 | 16.54 | 2.26 |
| SE | 46.48 | 12.91 | 0.81 | 4.06 | 25.01 | 3.69 |

source: Eurostat April 2022
Methodology and Notes: see appendices

# 2.5 Final Energy

## 2.5.1 Available for Final Consumption

### TOTAL

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1022.9 | 1091.9 | 1073.5 | 993.8 | 1032.8 | 976.4 |
| Index2000 | 100% | 107% | 105% | 97% | 101% | 95% |
| | | | | | | |
| BE | 40.82 | 41.61 | 43.01 | 40.99 | 40.07 | 38.21 |
| BG | 9.64 | 10.51 | 9.24 | 10.07 | 10.32 | 10.29 |
| CZ | 26.42 | 28.19 | 27.75 | 25.91 | 27.16 | 26.00 |
| DK | 14.32 | 14.67 | 14.97 | 13.46 | 13.92 | 13.49 |
| DE | 234.79 | 235.94 | 233.13 | 220.83 | 225.46 | 214.64 |
| EE | 2.52 | 3.18 | 3.14 | 2.45 | 2.84 | 2.95 |
| IE | 10.37 | 11.13 | 11.27 | 10.85 | 11.57 | 11.08 |
| EL | 18.46 | 20.82 | 19.16 | 16.55 | 16.42 | 14.56 |
| ES | 85.40 | 101.80 | 91.44 | 78.98 | 86.29 | 77.75 |
| FR | 156.74 | 167.10 | 161.69 | 157.35 | 155.46 | 141.64 |
| HR | 6.59 | 7.84 | 7.73 | 7.02 | 7.29 | 6.96 |
| IT | 128.77 | 139.59 | 131.73 | 117.63 | 118.66 | 109.28 |
| CY | 1.47 | 1.49 | 1.69 | 1.44 | 1.66 | 1.57 |
| LV | 3.26 | 4.05 | 4.06 | 3.79 | 3.97 | 3.87 |
| LT | 4.25 | 5.34 | 5.42 | 5.90 | 6.65 | 6.43 |
| LU | 3.24 | 4.10 | 3.93 | 3.57 | 3.83 | 3.29 |
| HU | 17.22 | 20.33 | 18.86 | 18.54 | 19.97 | 19.71 |
| MT | 0.32 | 0.40 | 0.42 | 0.46 | 0.56 | 0.51 |
| NL | 58.80 | 62.10 | 64.82 | 55.20 | 56.36 | 55.33 |
| AT | 23.58 | 27.35 | 27.77 | 27.28 | 28.35 | 26.90 |
| PL | 57.13 | 61.70 | 70.38 | 65.17 | 77.75 | 77.13 |
| PT | 19.54 | 20.94 | 18.98 | 16.85 | 17.59 | 16.38 |
| RO | 24.12 | 25.96 | 24.80 | 22.81 | 25.07 | 25.08 |
| SI | 4.79 | 5.44 | 5.28 | 4.85 | 5.04 | 4.58 |
| SK | 11.68 | 11.69 | 11.47 | 10.02 | 11.28 | 10.82 |
| FI | 23.73 | 25.26 | 26.30 | 24.05 | 25.73 | 24.77 |
| SE | 34.91 | 33.36 | 35.07 | 31.86 | 33.59 | 33.15 |

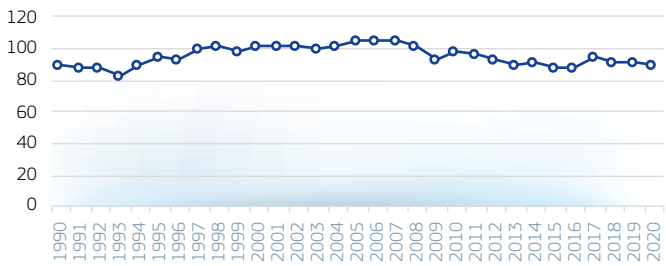
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.5.2 Final Non-Energy Consumption

### TOTAL

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2018 | 2019 |
|---|---|---|---|---|---|---|
| EU27_2020 | 101.4 | 104.9 | 98.3 | 88.2 | 90.7 | 89.6 |
| Index2000 | 100 % | 103 % | 97 % | 87 % | 89 % | 88 % |
| | | | | | | |
| BE | 7.00 | 7.49 | 7.05 | 7.68 | 7.25 | 7.10 |
| BG | 0.98 | 0.85 | 0.42 | 0.60 | 0.46 | 0.47 |
| CZ | 2.14 | 3.01 | 2.88 | 2.50 | 2.97 | 2.48 |
| DK | 0.30 | 0.29 | 0.26 | 0.25 | 0.20 | 0.23 |
| DE | 25.30 | 24.66 | 22.58 | 21.26 | 21.65 | 21.03 |
| EE | 0.15 | 0.22 | 0.09 | 0.09 | 0.12 | 0.18 |
| IE | 0.68 | 0.52 | 0.34 | 0.22 | 0.24 | 0.23 |
| EL | 0.73 | 0.77 | 1.11 | 0.70 | 0.92 | 0.82 |
| ES | 9.49 | 8.43 | 7.11 | 4.35 | 5.35 | 5.80 |
| FR | 16.95 | 16.08 | 13.93 | 13.88 | 13.46 | 12.55 |
| HR | 0.66 | 0.68 | 0.60 | 0.53 | 0.57 | 0.53 |
| IT | 8.43 | 8.61 | 9.56 | 6.61 | 7.04 | 6.80 |
| CY | 0.09 | 0.07 | 0.09 | 0.02 | 0.04 | 0.04 |
| LV | 0.07 | 0.10 | 0.07 | 0.11 | 0.09 | 0.10 |
| LT | 0.66 | 0.73 | 0.66 | 1.12 | 1.20 | 1.15 |
| LU | 0.05 | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 |
| HU | 1.59 | 2.17 | 1.97 | 1.91 | 2.12 | 2.25 |
| MT | 0.00 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 |
| NL | 11.33 | 13.58 | 14.37 | 12.15 | 12.07 | 12.90 |
| AT | 1.72 | 1.59 | 1.81 | 1.80 | 2.12 | 2.08 |
| PL | 4.37 | 4.60 | 4.97 | 5.63 | 5.60 | 5.79 |
| PT | 2.42 | 2.59 | 1.73 | 1.34 | 1.15 | 1.13 |
| RO | 1.89 | 2.63 | 2.06 | 1.12 | 1.14 | 1.29 |
| SI | 0.24 | 0.31 | 0.21 | 0.13 | 0.16 | 0.14 |
| SK | 1.38 | 1.28 | 1.05 | 1.05 | 1.00 | 1.22 |
| FI | 1.04 | 1.15 | 1.22 | 1.33 | 1.38 | 1.49 |
| SE | 1.75 | 2.42 | 2.12 | 1.78 | 2.30 | 1.71 |

**FINAL NON-ENERGY CONSUMPTION – TOTAL – 1990-2020 (Mtoe)**



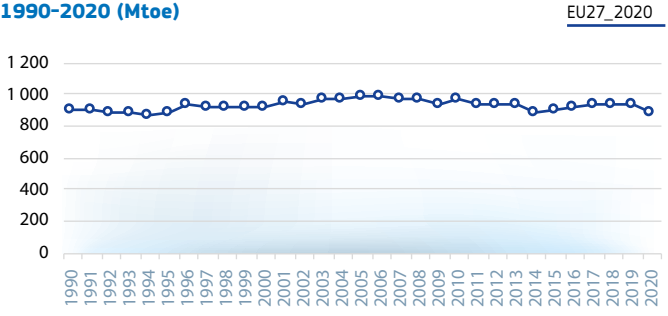

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.5.3 Final Energy Consumption

### TOTAL

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 926.0 | 986.6 | 973.1 | 909.4 | 937.9 | 885.8 |
| Index2000 | 100 % | 107 % | 105 % | 98 % | 101 % | 96 % |
| | | | | | | |
| BE | 33.64 | 34.19 | 35.40 | 33.15 | 32.58 | 31.04 |
| BG | 8.59 | 9.60 | 8.70 | 9.39 | 9.71 | 9.51 |
| CZ | 23.99 | 24.89 | 24.12 | 23.09 | 24.22 | 23.75 |
| DK | 14.02 | 14.73 | 14.85 | 13.46 | 13.55 | 13.13 |
| DE | 207.17 | 207.29 | 209.92 | 200.03 | 200.80 | 193.62 |
| EE | 2.41 | 2.81 | 2.88 | 2.75 | 2.82 | 2.73 |
| IE | 10.19 | 11.80 | 11.19 | 10.51 | 11.32 | 10.84 |
| EL | 17.91 | 20.23 | 18.37 | 15.74 | 15.40 | 14.48 |
| ES | 76.34 | 93.71 | 85.49 | 75.94 | 81.51 | 72.32 |
| FR | 145.13 | 150.75 | 146.26 | 140.87 | 139.13 | 128.17 |
| HR | 5.94 | 7.16 | 7.13 | 6.48 | 6.73 | 6.43 |
| IT | 119.74 | 131.51 | 123.05 | 112.11 | 113.12 | 103.06 |
| CY | 1.37 | 1.53 | 1.65 | 1.42 | 1.63 | 1.53 |
| LV | 3.23 | 3.96 | 4.00 | 3.68 | 3.92 | 3.80 |
| LT | 3.74 | 4.62 | 4.76 | 4.78 | 5.46 | 5.28 |
| LU | 3.18 | 4.05 | 3.90 | 3.53 | 3.79 | 3.27 |
| HU | 15.64 | 18.16 | 16.88 | 16.83 | 17.97 | 17.60 |
| MT | 0.32 | 0.38 | 0.40 | 0.46 | 0.54 | 0.50 |
| NL | 47.52 | 48.96 | 50.75 | 43.50 | 44.32 | 42.26 |
| AT | 21.81 | 25.73 | 25.96 | 25.48 | 26.23 | 24.82 |
| PL | 53.56 | 57.48 | 65.26 | 60.86 | 71.89 | 70.25 |
| PT | 17.21 | 18.26 | 17.27 | 15.55 | 16.36 | 15.22 |
| RO | 21.95 | 23.59 | 22.04 | 21.60 | 23.71 | 23.47 |
| SI | 4.54 | 5.11 | 5.05 | 4.72 | 4.86 | 4.43 |
| SK | 9.93 | 10.40 | 10.37 | 8.94 | 10.25 | 9.61 |
| FI | 23.28 | 24.01 | 25.03 | 23.05 | 24.73 | 23.19 |
| SE | 33.67 | 31.71 | 32.47 | 31.51 | 31.30 | 31.45 |

**FINAL ENERGY CONSUMPTION – TOTAL – 1990-2020 (Mtoe)**




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.5.3 Final Energy Consumption

### BY FUEL

| Mtoe | 2020 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Oil and petroleum products | Natural gas | Renewables and biofuels | Solid fossil fuels | Waste, non-renewable | Electricity | Heat | Manufactured gases, peat & products |
| EU27_2020 | 310.3 | 193.9 | 104.2 | 19.0 | 5.0 | 205.1 | 44.0 | 4.3 |
| Share - % | 35.0% | 21.9% | 11.8% | 2.1% | 0.6% | 23.2% | 5.0% | 0.5% |
| | | | | | | | | |
| BE | 11.88 | 9.09 | 2.13 | 0.37 | 0.16 | 6.80 | 0.47 | 0.1 |
| BG | 3.42 | 1.18 | 1.55 | 0.29 | 0.06 | 2.46 | 0.55 | 0.0 |
| CZ | 6.36 | 5.16 | 3.38 | 1.41 | 0.30 | 4.90 | 1.98 | 0.3 |
| DK | 4.72 | 1.51 | 1.63 | 0.11 | 0.04 | 2.69 | 2.44 | 0.0 |
| DE | 67.60 | 51.81 | 17.31 | 3.42 | 1.31 | 41.26 | 8.99 | 1.9 |
| EE | 0.91 | 0.25 | 0.48 | 0.01 | 0.00 | 0.62 | 0.46 | 0.0 |
| IE | 5.45 | 1.95 | 0.48 | 0.25 | 0.05 | 2.46 | 0.00 | 0.2 |
| EL | 7.35 | 1.10 | 1.73 | 0.17 | 0.00 | 4.09 | 0.05 | 0.0 |
| ES | 32.56 | 13.82 | 6.48 | 0.34 | 0.19 | 18.89 | 0.00 | 0.1 |
| FR | 47.57 | 26.47 | 13.95 | 0.84 | 0.39 | 35.37 | 3.58 | 0.0 |
| HR | 2.45 | 1.10 | 1.17 | 0.10 | 0.04 | 1.31 | 0.25 | 0.0 |
| IT | 32.23 | 31.81 | 10.66 | 0.41 | 0.31 | 23.66 | 3.88 | 0.1 |
| CY | 0.88 | 0.00 | 0.23 | 0.01 | 0.03 | 0.38 | 0.00 | 0.0 |
| LV | 1.28 | 0.32 | 1.00 | 0.02 | 0.05 | 0.56 | 0.55 | 0.0 |
| LT | 2.15 | 0.58 | 0.78 | 0.13 | 0.00 | 0.89 | 0.74 | 0.0 |
| LU | 1.82 | 0.56 | 0.18 | 0.04 | 0.02 | 0.53 | 0.12 | 0.0 |
| HU | 5.27 | 5.69 | 1.92 | 0.16 | 0.12 | 3.43 | 0.99 | 0.0 |
| MT | 0.26 | 0.00 | 0.04 | 0.00 | 0.00 | 0.20 | 0.00 | 0.0 |
| NL | 12.68 | 15.90 | 1.98 | 0.17 | 0.04 | 9.38 | 1.92 | 0.2 |
| AT | 8.45 | 4.65 | 4.06 | 0.34 | 0.25 | 5.26 | 1.72 | 0.1 |
| PL | 24.38 | 9.24 | 9.04 | 8.96 | 0.83 | 11.81 | 5.60 | 0.4 |
| PT | 6.26 | 1.74 | 2.91 | 0.01 | 0.10 | 3.98 | 0.23 | 0.0 |
| RO | 7.93 | 5.85 | 3.85 | 0.60 | 0.28 | 3.79 | 1.02 | 0.2 |
| SI | 1.86 | 0.58 | 0.63 | 0.03 | 0.05 | 1.11 | 0.17 | 0.0 |
| SK | 2.58 | 2.43 | 1.15 | 0.36 | 0.22 | 2.05 | 0.55 | 0.3 |
| FI | 5.50 | 0.69 | 6.31 | 0.11 | 0.05 | 6.61 | 3.64 | 0.3 |
| SE | 6.51 | 0.47 | 9.24 | 0.30 | 0.09 | 10.58 | 4.08 | 0.2 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.5.3 Final Energy Consumption

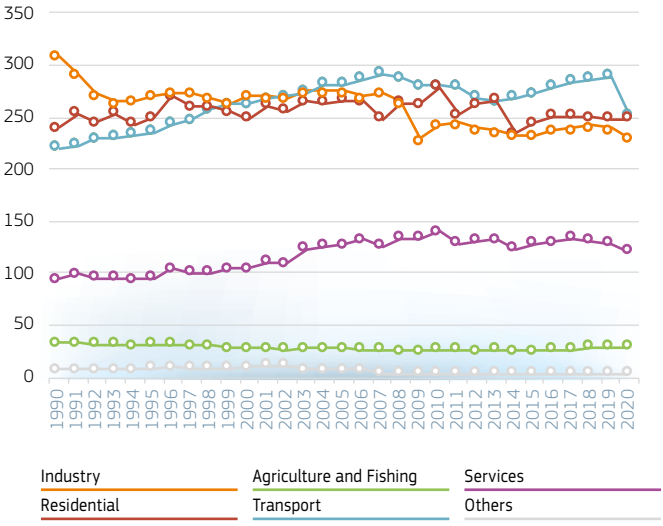
### BY SECTOR

| | 2020 | | | | | |
|---|---|---|---|---|---|---|
| Mtoe | Industry | Transport | Residential | Services | Agriculture and Fishing | Others |
| EU27_2020 | 231.2 | 252.0 | 248.2 | 121.4 | 29.3 | 3.6 |
| Share - % | 26.1 % | 28.4 % | 28.0 % | 13.7 % | 3.3 % | 0.4 % |
| | | | | | | |
| BE | 10.02 | 7.76 | 7.93 | 4.47 | 0.81 | 0.04 |
| BG | 2.65 | 3.22 | 2.38 | 1.08 | 0.19 | 0.00 |
| CZ | 6.55 | 6.38 | 7.15 | 2.99 | 0.64 | 0.05 |
| DK | 2.30 | 3.94 | 4.32 | 1.82 | 0.68 | 0.07 |
| DE | 54.19 | 50.97 | 57.99 | 26.77 | 3.65 | 0.05 |
| EE | 0.41 | 0.79 | 0.94 | 0.47 | 0.11 | 0.00 |
| IE | 2.17 | 3.48 | 3.12 | 1.83 | 0.24 | 0.00 |
| EL | 2.52 | 5.14 | 4.29 | 1.90 | 0.29 | 0.33 |
| ES | 18.84 | 26.16 | 14.56 | 9.45 | 3.00 | 0.31 |
| FR | 25.80 | 38.22 | 38.71 | 20.34 | 4.50 | 0.60 |
| HR | 1.17 | 1.97 | 2.28 | 0.76 | 0.26 | 0.00 |
| IT | 23.86 | 28.98 | 30.66 | 16.56 | 2.96 | 0.04 |
| CY | 0.24 | 0.62 | 0.36 | 0.24 | 0.05 | 0.02 |
| LV | 0.87 | 1.05 | 1.12 | 0.55 | 0.21 | 0.00 |
| LT | 1.02 | 2.13 | 1.43 | 0.58 | 0.11 | 0.01 |
| LU | 0.58 | 1.67 | 0.50 | 0.49 | 0.02 | 0.00 |
| HU | 4.43 | 4.46 | 5.97 | 2.00 | 0.71 | 0.04 |
| MT | 0.06 | 0.20 | 0.10 | 0.12 | 0.01 | 0.00 |
| NL | 13.12 | 9.30 | 9.31 | 6.47 | 3.98 | 0.08 |
| AT | 7.32 | 7.73 | 6.68 | 2.57 | 0.51 | 0.00 |
| PL | 15.92 | 21.78 | 21.10 | 7.58 | 3.87 | 0.00 |
| PT | 4.50 | 5.01 | 3.01 | 2.16 | 0.50 | 0.03 |
| RO | 6.44 | 6.46 | 8.01 | 1.83 | 0.53 | 0.20 |
| SI | 1.26 | 1.58 | 1.07 | 0.42 | 0.07 | 0.03 |
| SK | 3.14 | 2.49 | 2.74 | 1.11 | 0.13 | 0.00 |
| FI | 10.25 | 3.88 | 5.29 | 2.81 | 0.70 | 0.26 |
| SE | 11.56 | 6.62 | 7.20 | 4.01 | 0.60 | 1.46 |

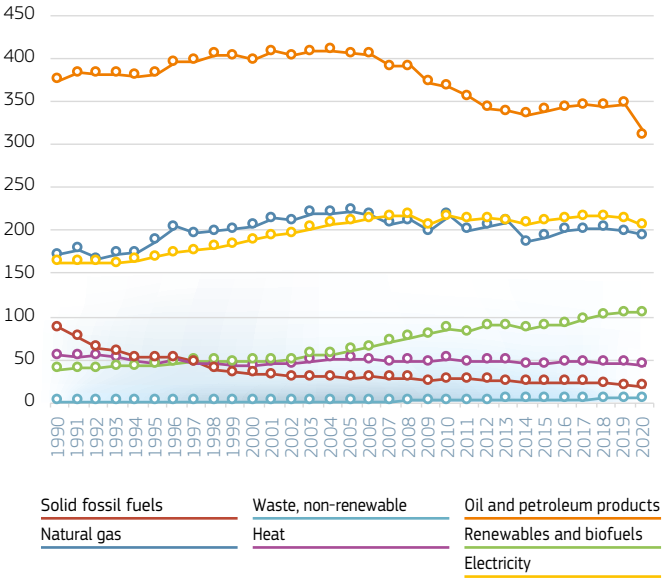
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.5.3 Final Energy Consumption

### BY SECTOR – EU27_2020 – 1990-2020 (Mtoe)




### FINAL ENERGY CONSUMPTION – BY FUEL – EU27_2020 – 1990-2020 (Mtoe)




source: Eurostat April 2022
Methodology and Notes: see appendices

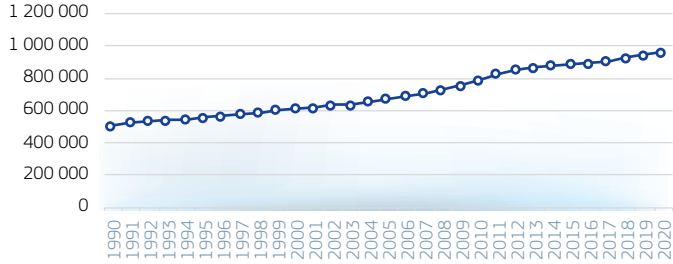
# 2.6 Electricity

## 2.6.1 Installed Electricity Capacity

### TOTAL

| MW | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020* | 613221 | 675657 | 790216 | 889720 | 946587 | 962601 |
| Index2000 | 100% | 110% | 129% | 145% | 154% | 157% |
| | | | | | | |
| BE | 15685 | 16096 | 18796 | 21166 | 23926 | 25702 |
| BG | 11085 | 12260 | 10031 | 10913 | 11233 | 10989 |
| CZ | 15323 | 17406 | 20073 | 21866 | 22012 | 21402 |
| DK | 12316 | 13036 | 13438 | 14002 | 15135 | 15489 |
| DE | 118884 | 128497 | 162924 | 203257 | 231489 | 233747 |
| EE | 2800 | 2559 | 2751 | 2857 | 2746 | 2738 |
| IE | 4709 | 6102 | 8143 | 9680 | 11131 | 11244 |
| EL | 10904 | 13306 | 15312 | 18942 | 20478 | 20795 |
| ES | 53922 | 76566 | 101740 | 106758 | 109670 | 108421 |
| FR | 114518 | 115730 | 124138 | 132218 | 136284 | 136637 |
| HR | 2067 | 3867 | 4103 | 4768 | 4712 | 4662 |
| IT | 75510 | 85498 | 106610 | 116964 | 116435 | 116383 |
| CY | 988 | 1125 | 1560 | 1756 | 1819 | 1897 |
| LV | 2092 | 2166 | 2557 | 2931 | 2938 | 2944 |
| LT | 5716 | 4556 | 3570 | 3587 | 3378 | 3491 |
| LU | 1217 | 1682 | 1712 | 2024 | 1775 | 1808 |
| HU | 8282 | 8586 | 8993 | 8634 | 9994 | 10708 |
| MT | 0 | 0 | 572 | 668 | 750 | 783 |
| NL | 21062 | 21800 | 26688 | 33877 | 37135 | 42233 |
| AT | 17802 | 19102 | 21345 | 24741 | 25902 | 26312 |
| PL | 30559 | 32257 | 33360 | 37327 | 43440 | 49368 |
| PT | 10908 | 13374 | 18932 | 19625 | 21575 | 21655 |
| RO | 16820 | 18951 | 19912 | 23830 | 20899 | 20585 |
| SI | 2614 | 2992 | 3193 | 3358 | 3832 | 3929 |
| SK | 7454 | 8257 | 7873 | 7782 | 7724 | 7707 |
| FI | 16260 | 16468 | 15438 | 16500 | 17352 | 17301 |
| SE | 33724 | 33419 | 36452 | 39691 | 42824 | 43672 |

**INSTALLED ELECTRICITY CAPACITY – TOTAL – 1990-2020 (MW)**




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

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.6.1 Installed Electricity Capacity

### BY FUEL

| | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| MW | Installed Electricity Capacity | Combustible Fuels | Wind | Hydro | Nuclear | Solar | Others |
| EU27_2020 | 962601 | 388223 | 176985 | 150771 | 106008 | 138443 | 2171 |
| Share - % | 100.0% | 40.3% | 18.4% | 15.7% | 11.0% | 14.4% | 0.2% |
| | | | | | | | |
| BE | 25702 | 8086 | 4681 | 1416 | 5942 | 5575 | 3 |
| BG | 10989 | 3806 | 703 | 3376 | 2006 | 1097 | 0 |
| CZ | 21402 | 12384 | 339 | 2265 | 4290 | 2123 | 0 |
| DK | 15489 | 7918 | 6259 | 7 | 0 | 1304 | 0 |
| DE | 233747 | 98311 | 62188 | 10792 | 8113 | 53721 | 622 |
| EE | 2738 | 2205 | 317 | 8 | 0 | 208 | 0 |
| IE | 11244 | 6316 | 4307 | 529 | 0 | 93 | 0 |
| EL | 20795 | 9971 | 4119 | 3417 | 0 | 3288 | 0 |
| ES | 108421 | 41719 | 26819 | 20117 | 7117 | 12589 | 59 |
| FR | 136637 | 19791 | 17484 | 25712 | 61400 | 12022 | 228 |
| HR | 4662 | 1543 | 801 | 2200 | 0 | 109 | 10 |
| IT | 116383 | 60106 | 10871 | 22695 | 0 | 21650 | 1062 |
| CY | 1897 | 1510 | 158 | 0 | 0 | 229 | 0 |
| LV | 2944 | 1274 | 78 | 1586 | 0 | 5 | 0 |
| LT | 3491 | 1885 | 540 | 877 | 0 | 164 | 25 |
| LU | 1808 | 138 | 153 | 1331 | 0 | 187 | 0 |
| HU | 10708 | 6145 | 321 | 58 | 2013 | 2131 | 40 |
| MT | 783 | 595 | 0 | 0 | 0 | 188 | 0 |
| NL | 42233 | 24066 | 6619 | 37 | 485 | 10950 | 76 |
| AT | 26312 | 6437 | 3226 | 14605 | 0 | 2043 | 1 |
| PL | 49368 | 36715 | 6298 | 2400 | 0 | 3955 | 0 |
| PT | 21655 | 8163 | 5122 | 7241 | 0 | 1100 | 29 |
| RO | 20585 | 8126 | 3013 | 6652 | 1411 | 1383 | 0 |
| SI | 3929 | 1516 | 3 | 1352 | 688 | 370 | 0 |
| SK | 7707 | 2652 | 4 | 2529 | 1971 | 535 | 16 |
| FI | 17301 | 8439 | 2586 | 3164 | 2794 | 318 | 0 |
| SE | 43672 | 8406 | 9976 | 16406 | 7777 | 1107 | 0 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.6.1 Installed Electricity Capacity*

### RENEWABLES

| | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| **MW** | Total renewables | Hydro | Wind | Solar Thermal | Solar PV | Geothermal | Tide, Wave and Ocean |
| EU27_2020 | 467287 | 150771 | 176985 | 2306 | 136137 | 871 | 217 |
| Share(%) | 100.0% | 32.3% | 37.9% | 0.5% | 29.1% | 0.2% | 0.0% |
| | | | | | | | |
| BE | 11672 | 1416 | 4681 | 0 | 5575 | 0 | 0 |
| BG | 5177 | 3376 | 703 | 0 | 1097 | 0 | 0 |
| CZ | 4728 | 2265 | 339 | 0 | 2123 | 0 | 0 |
| DK | 7571 | 7 | 6259 | 0 | 1304 | 0 | 0 |
| DE | 126741 | 10792 | 62188 | 2 | 53719 | 40 | 0 |
| EE | 533 | 8 | 317 | 0 | 208 | 0 | 0 |
| IE | 4928 | 529 | 4307 | 0 | 93 | 0 | 0 |
| EL | 10824 | 3417 | 4119 | 0 | 3288 | 0 | 0 |
| ES | 59530 | 20117 | 26819 | 2304 | 10285 | 0 | 5 |
| FR | 55447 | 25712 | 17484 | 0 | 12022 | 16 | 212 |
| HR | 3119 | 2200 | 801 | 0 | 109 | 10 | 0 |
| IT | 55987 | 22695 | 10871 | 0 | 21650 | 772 | 0 |
| CY | 387 | 0 | 158 | 0 | 229 | 0 | 0 |
| LV | 1669 | 1586 | 78 | 0 | 5 | 0 | 0 |
| LT | 1581 | 877 | 540 | 0 | 164 | 0 | 0 |
| LU | 1670 | 1331 | 153 | 0 | 187 | 0 | 0 |
| HU | 2513 | 58 | 321 | 0 | 2131 | 3 | 0 |
| MT | 188 | 0 | 0 | 0 | 188 | 0 | 0 |
| NL | 17605 | 37 | 6619 | 0 | 10950 | 0 | 0 |
| AT | 19874 | 14605 | 3226 | 0 | 2043 | 1 | 0 |
| PL | 12653 | 2400 | 6298 | 0 | 3955 | 0 | 0 |
| PT | 13492 | 7241 | 5122 | 0 | 1100 | 29 | 0 |
| RO | 11048 | 6652 | 3013 | 0 | 1383 | 0 | 0 |
| SI | 1725 | 1352 | 3 | 0 | 370 | 0 | 0 |
| SK | 3068 | 2529 | 4 | 0 | 535 | 0 | 0 |
| FI | 6068 | 3164 | 2586 | 0 | 318 | 0 | 0 |
| SE | 27489 | 16406 | 9976 | 0 | 1107 | 0 | 0 |

* Net maximum capacity

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.6.2 Gross Electricity Generation

### TOTAL

| TWh | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 2656.9 | 2916.3 | 2979.7 | 2900.5 | 2902.3 | 2781.3 |
| Index2000 | 100% | 110% | 112% | 109% | 109% | 105% |
| | | | | | | |
| BE | 84.01 | 85.41 | 94.32 | 69.24 | 93.20 | 88.89 |
| BG | 40.92 | 44.36 | 46.64 | 49.20 | 44.27 | 40.73 |
| CZ | 73.46 | 82.58 | 85.82 | 83.81 | 86.91 | 81.40 |
| DK | 36.01 | 36.25 | 38.86 | 28.94 | 29.52 | 28.73 |
| DE | 576.54 | 620.20 | 631.04 | 646.48 | 605.43 | 571.09 |
| EE | 8.51 | 10.21 | 12.96 | 10.15 | 7.62 | 5.96 |
| IE | 23.98 | 25.97 | 28.35 | 28.39 | 30.96 | 32.29 |
| EL | 53.84 | 60.02 | 57.40 | 51.87 | 48.63 | 48.25 |
| ES | 224.47 | 289.09 | 301.37 | 280.70 | 273.12 | 263.21 |
| FR | 539.95 | 576.06 | 569.15 | 578.87 | 570.35 | 531.20 |
| HR | 11.28 | 13.16 | 14.90 | 11.40 | 12.76 | 13.39 |
| IT | 275.86 | 302.59 | 301.28 | 282.40 | 293.20 | 280.03 |
| CY | 3.37 | 4.38 | 5.32 | 4.53 | 5.14 | 4.85 |
| LV | 4.14 | 4.91 | 6.63 | 5.53 | 6.44 | 5.72 |
| LT | 11.33 | 14.58 | 5.50 | 4.67 | 3.75 | 5.31 |
| LU | 1.17 | 4.13 | 4.59 | 2.77 | 1.91 | 2.23 |
| HU | 35.19 | 35.76 | 37.37 | 30.30 | 34.18 | 34.79 |
| MT | 1.92 | 2.24 | 2.11 | 1.30 | 2.06 | 2.14 |
| NL | 89.38 | 99.66 | 119.12 | 108.78 | 120.81 | 123.04 |
| AT | 61.24 | 66.83 | 71.11 | 65.28 | 74.22 | 72.56 |
| PL | 145.18 | 156.63 | 157.58 | 164.83 | 163.75 | 157.95 |
| PT | 43.76 | 46.57 | 54.09 | 52.41 | 53.15 | 53.08 |
| RO | 51.56 | 59.41 | 60.98 | 66.29 | 59.62 | 55.93 |
| SI | 13.62 | 15.12 | 16.44 | 15.10 | 16.10 | 17.19 |
| SK | 31.16 | 31.44 | 27.82 | 26.80 | 28.40 | 28.81 |
| FI | 69.78 | 70.34 | 80.36 | 68.35 | 68.39 | 68.72 |
| SE | 145.27 | 158.43 | 148.55 | 162.11 | 168.44 | 163.83 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.6.2 Gross Electricity Generation

### BY FUEL

| | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| 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 | 2 781.3 | 356.8 | 48.1 | 586.2 | 683.5 | 1 086.1 | 20.7 |
| Share - % | 100.0 % | 12.8 % | 1.7 % | 21.1 % | 24.6 % | 39.0 % | 0.7 % |
| | | | | | | | |
| BE | 88.89 | 0.1 | 0.12 | 28.57 | 34.43 | 24.46 | 1.23 |
| BG | 40.73 | 13.5 | 0.30 | 2.29 | 16.63 | 7.98 | 0.00 |
| CZ | 81.40 | 31.0 | 0.09 | 8.53 | 30.04 | 11.64 | 0.09 |
| DK | 28.73 | 3.1 | 0.26 | 1.18 | 0.00 | 23.45 | 0.77 |
| DE | 571.09 | 133.6 | 4.89 | 104.95 | 64.38 | 256.71 | 6.58 |
| EE | 5.96 | 2.2 | 0.02 | 0.77 | 0.00 | 2.85 | 0.07 |
| IE | 32.29 | 1.6 | 0.39 | 16.24 | 0.00 | 13.77 | 0.30 |
| EL | 48.25 | 6.6 | 4.73 | 19.23 | 0.00 | 17.65 | 0.04 |
| ES | 263.21 | 5.5 | 10.70 | 70.37 | 58.30 | 117.27 | 1.05 |
| FR | 531.20 | 3.1 | 5.61 | 37.17 | 353.83 | 129.18 | 2.32 |
| HR | 13.39 | 1.2 | 0.03 | 3.44 | 0.00 | 8.70 | 0.00 |
| IT | 280.03 | 13.4 | 10.04 | 135.35 | 0.00 | 118.86 | 2.40 |
| CY | 4.85 | 0.0 | 4.25 | 0.00 | 0.00 | 0.60 | 0.00 |
| LV | 5.72 | 0.0 | 0.00 | 2.08 | 0.00 | 3.65 | 0.00 |
| LT | 5.31 | 0.0 | 0.12 | 1.70 | 0.00 | 3.35 | 0.13 |
| LU | 2.23 | 0.0 | 0.00 | 0.18 | 0.00 | 1.98 | 0.07 |
| HU | 34.79 | 3.7 | 0.05 | 9.21 | 16.06 | 5.53 | 0.24 |
| MT | 2.14 | 0.0 | 0.06 | 1.84 | 0.00 | 0.24 | 0.00 |
| NL | 123.04 | 7.6 | 1.34 | 75.14 | 4.09 | 33.00 | 1.87 |
| AT | 72.56 | 0.6 | 0.73 | 11.75 | 0.00 | 58.78 | 0.74 |
| PL | 157.95 | 107.4 | 1.75 | 19.26 | 0.00 | 29.05 | 0.50 |
| PT | 53.08 | 2.4 | 1.20 | 17.60 | 0.00 | 31.65 | 0.26 |
| RO | 55.93 | 9.4 | 0.60 | 9.58 | 11.47 | 24.93 | 0.00 |
| SI | 17.19 | 4.4 | 0.01 | 0.58 | 6.35 | 5.87 | 0.01 |
| SK | 28.81 | 1.9 | 0.41 | 3.91 | 15.44 | 7.14 | 0.04 |
| FI | 68.72 | 4.6 | 0.20 | 4.61 | 23.29 | 35.61 | 0.45 |
| SE | 163.83 | 0.1 | 0.14 | 0.67 | 49.20 | 112.19 | 1.54 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.6.2 Gross Electricity Generation

### RENEWABLES

| | 2020 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TWh | Renewables and biofuels | Wind | Hydro | Solar | Solid & liquid biofuels, renewable waste | Biogases | Geothermal | Tide, Wave and Ocean |
| EU27_2020 | 1 086.1 | 397.4 | 374.5 | 144.2 | 106.9 | 55.8 | 6.7 | 0.5 |
| Share - % | 100.0 % | 36.6 % | 34.5 % | 13.3 % | 9.8 % | 5.1 % | 0.6 % | 0.0 % |
| | | | | | | | | |
| BE | 24.46 | 12.76 | 1.31 | 5.11 | 4.26 | 1.01 | 0.00 | 0.00 |
| BG | 7.98 | 1.48 | 3.32 | 1.48 | 1.47 | 0.23 | 0.00 | 0.00 |
| CZ | 11.64 | 0.70 | 3.44 | 2.29 | 2.62 | 2.60 | 0.00 | 0.00 |
| DK | 23.45 | 16.33 | 0.02 | 1.18 | 5.25 | 0.68 | 0.00 | 0.00 |
| DE | 256.71 | 132.10 | 24.88 | 48.64 | 17.36 | 33.50 | 0.23 | 0.00 |
| EE | 2.85 | 0.84 | 0.03 | 0.12 | 1.82 | 0.03 | 0.00 | 0.00 |
| IE | 13.77 | 11.55 | 1.22 | 0.06 | 0.76 | 0.18 | 0.00 | 0.00 |
| EL | 17.65 | 9.31 | 3.44 | 4.45 | 0.05 | 0.40 | 0.00 | 0.00 |
| ES | 117.27 | 56.44 | 34.00 | 20.67 | 5.26 | 0.88 | 0.00 | 0.03 |
| FR | 129.18 | 39.79 | 66.53 | 13.40 | 6.10 | 2.74 | 0.13 | 0.48 |
| HR | 8.70 | 1.72 | 5.81 | 0.10 | 0.56 | 0.42 | 0.09 | 0.00 |
| IT | 118.86 | 18.76 | 49.50 | 24.94 | 11.47 | 8.17 | 6.03 | 0.00 |
| CY | 0.60 | 0.24 | 0.00 | 0.30 | 0.00 | 0.06 | 0.00 | 0.00 |
| LV | 3.65 | 0.18 | 2.60 | 0.00 | 0.52 | 0.34 | 0.00 | 0.00 |
| LT | 3.35 | 1.55 | 1.08 | 0.13 | 0.44 | 0.15 | 0.00 | 0.00 |
| LU | 1.98 | 0.35 | 1.09 | 0.16 | 0.31 | 0.06 | 0.00 | 0.00 |
| HU | 5.53 | 0.66 | 0.24 | 2.46 | 1.83 | 0.32 | 0.02 | 0.00 |
| MT | 0.24 | 0.00 | 0.00 | 0.24 | 0.00 | 0.01 | 0.00 | 0.00 |
| NL | 33.00 | 15.34 | 0.05 | 8.77 | 7.98 | 0.87 | 0.00 | 0.00 |
| AT | 58.78 | 6.79 | 45.35 | 2.04 | 3.96 | 0.63 | 0.00 | 0.00 |
| PL | 29.05 | 15.80 | 2.94 | 1.96 | 7.12 | 1.23 | 0.00 | 0.00 |
| PT | 31.65 | 12.30 | 13.63 | 1.72 | 3.53 | 0.26 | 0.22 | 0.00 |
| RO | 24.93 | 6.95 | 15.70 | 1.73 | 0.49 | 0.05 | 0.00 | 0.00 |
| SI | 5.87 | 0.01 | 5.22 | 0.37 | 0.16 | 0.11 | 0.00 | 0.00 |
| SK | 7.14 | 0.00 | 4.80 | 0.66 | 1.16 | 0.51 | 0.00 | 0.00 |
| FI | 35.61 | 7.94 | 15.88 | 0.22 | 11.27 | 0.30 | 0.00 | 0.00 |
| SE | 112.19 | 27.53 | 72.44 | 1.05 | 11.17 | 0.01 | 0.00 | 0.00 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.6.2 Gross Electricity Generation

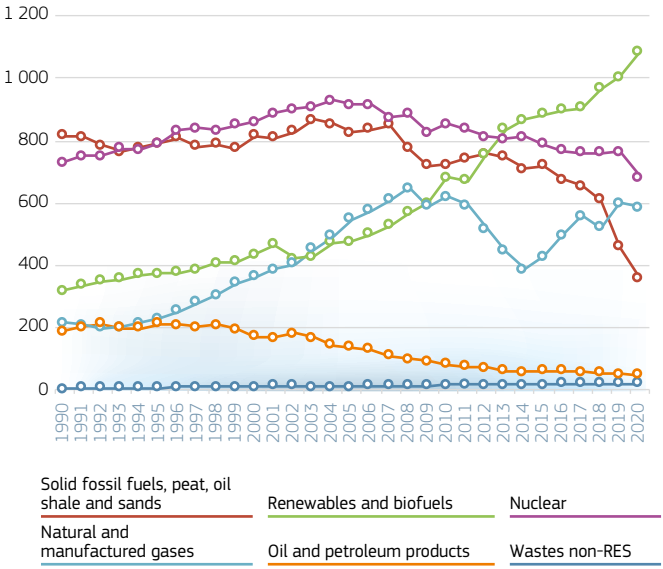
### EU27_2020 – BY FUEL

| | 2020 | | | | | |
|---|---|---|---|---|---|---|
| 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 | 17.1 | 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 | 24.6 | 39.0 | 0.7 |

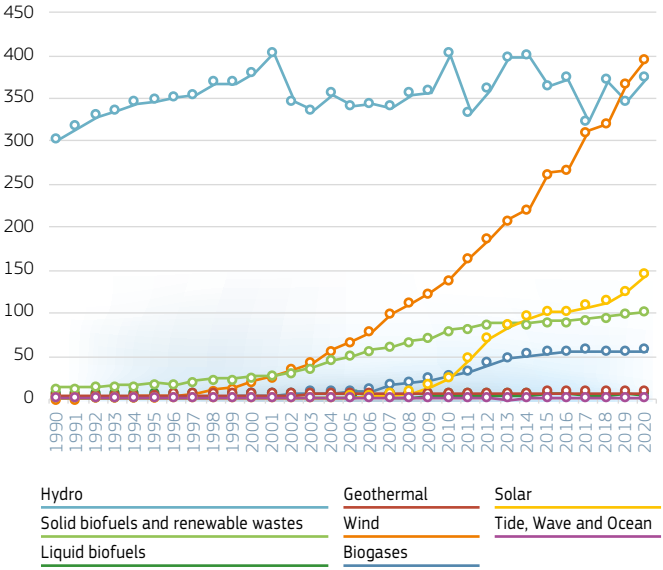
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.6.2 Gross Electricity Generation

### EU27_2020 – BY FUEL – ALL FUELS – 1990-2020 (TWh)




### EU27_2020 – BY FUEL – GROSS ELECTRICITY GENERATION, BY FUEL: RENEWABLES – 1990-2020 (TWh)




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.6.3 Market Share of the Largest Electricity Producer

| % | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| BE | 91.1 | 85.0 | 79.1 | 48.5 | 55.2 | 53.0 |
| BG | | | | 32.5 | 39.0 | 42.5 |
| CZ | 69.2 | 72.0 | 73.0 | 67.7 | 69.0 | 71.1 |
| DK | 36.0 | 33.0 | 46.0 | 37.2 | 28.1 | 27.0 |
| DE | 34.0 | 31.0 | 28.4 | 32.0 | 26.0 | 25.3 |
| EE | 91.0 | 92.0 | 89.0 | 79.8 | 67.4 | 52.0 |
| IE | 97.0 | 71.0 | 34.0 | 45.0 | 44.0 | 44.0 |
| EL | 97.0 | 97.0 | 85.1 | 70.7 | 49.4 | 40.8 |
| ES | 42.4 | 35.0 | 24.0 | 24.5 | 22.4 | 19.8 |
| FR | 90.2 | 89.1 | 86.5 | 85.7 | 79.8 | 77.8 |
| HR | | 87.0 | 88.0 | 77.8 | 77.8 | 75.7 |
| IT | 46.7 | 38.6 | 28.0 | 27.0 | 16.0 | 16.0 |
| CY | 99.6 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| LV | 95.8 | 92.7 | 88.0 | 57.4 | 66.6 | 57.1 |
| LT | 72.8 | 70.3 | 35.4 | 22.7 | 15.5 | 22.9 |
| LU | | | 85.4 | 43.8 | 18.7 | 17.9 |
| HU | 41.3 | 38.7 | 42.1 | 53.1 | 56.3 | 55.3 |
| MT | 100.0 | 100.0 | 100.0 | 100.0 | 37.0 | 37.4 |
| NL | | | | | 0.0 | |
| AT | 32.6 | | | | 0.0 | |
| PL | 19.5 | 18.5 | 17.4 | 17.4 | 18.4 | 17.4 |
| PT | 58.5 | 53.9 | 47.2 | 42.5 | 37.7 | 39.1 |
| RO | | 36.4 | 33.6 | 25.7 | 26.7 | 27.8 |
| SI | | 50.1 | 56.3 | 51.3 | 50.3 | 50.1 |
| SK | 85.1 | 83.6 | 80.9 | 73.1 | 66.1 | 64.4 |
| FI | 23.3 | 23.0 | 26.6 | 22.3 | 24.6 | 24.8 |
| SE | 49.5 | 47.0 | 42.0 | 40.6 | 41.4 | 38.4 |

source: Eurostat April 2022
Methodology and Notes: **see appendices**

# 2.7 Solar and wind Energy

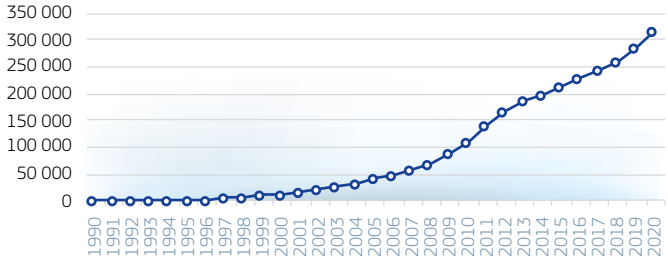
## 2.7.1 Solar and wind Energy – Cumulative Capacity

**TOTAL**

| MW | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 12472 | 41041 | 109606 | 214856 | 287384 | 315428 |
| Index2000 | 100% | 329% | 879% | 1723% | 2304% | 2529% |
| | | | | | | |
| BE | 14 | 169 | 1919 | 5308 | 8500 | 10256 |
| BG | 0 | 8 | 513 | 1728 | 1751 | 1800 |
| CZ | 1 | 23 | 1940 | 2356 | 2426 | 2462 |
| DK | 2391 | 3131 | 3809 | 5859 | 7183 | 7564 |
| DE | 6209 | 20316 | 44961 | 83804 | 109656 | 115909 |
| EE | 0 | 31 | 108 | 300 | 437 | 525 |
| IE | 117 | 493 | 1391 | 2454 | 4185 | 4399 |
| EL | 226 | 492 | 1500 | 4695 | 6423 | 7407 |
| ES | 2216 | 9970 | 25298 | 29951 | 36733 | 39409 |
| FR | 45 | 703 | 6956 | 17436 | 27265 | 29506 |
| HR | 0 | 6 | 79 | 466 | 731 | 910 |
| IT | 382 | 1669 | 9386 | 28038 | 31545 | 32521 |
| CY | 0 | 1 | 89 | 234 | 309 | 387 |
| LV | 2 | 26 | 30 | 68 | 81 | 83 |
| LT | 0 | 1 | 133 | 505 | 637 | 704 |
| LU | 14 | 58 | 73 | 180 | 296 | 339 |
| HU | 0 | 17 | 295 | 501 | 1723 | 2452 |
| MT | 0 | 0 | 1 | 75 | 155 | 188 |
| NL | 460 | 1275 | 2327 | 4917 | 11710 | 17568 |
| AT | 55 | 846 | 1105 | 3426 | 4926 | 5269 |
| PL | 4 | 121 | 1108 | 4994 | 7377 | 10253 |
| PT | 84 | 1066 | 3930 | 5384 | 6124 | 6223 |
| RO | 0 | 1 | 389 | 4456 | 4435 | 4395 |
| SI | 0 | 0 | 12 | 242 | 281 | 373 |
| SK | 0 | 5 | 22 | 536 | 594 | 539 |
| FI | 40 | 86 | 204 | 1022 | 2506 | 2904 |
| SE | 212 | 526 | 2028 | 5923 | 9395 | 11083 |

**SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – TOTAL – 1990-2020 (MW)**

EU27_2020



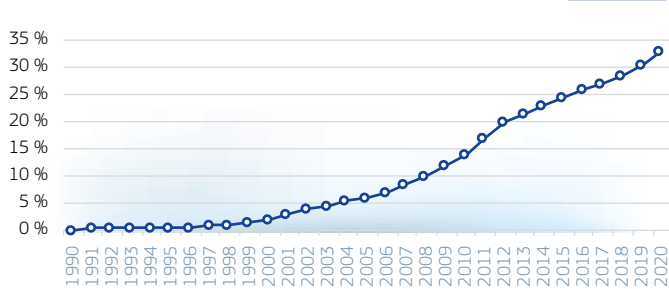

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.7.1 Solar and Wind Energy – Cumulative Capacity

### SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

| % | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 2.0 | 6.1 | 13.9 | 24.1 | 30.4 | 32.8 |
| | | | | | | |
| BE | 0.09 | 1.05 | 10.21 | 25.08 | 35.53 | 39.90 |
| BG | 0.00 | 0.07 | 5.11 | 15.83 | 15.59 | 16.38 |
| CZ | 0.01 | 0.13 | 9.66 | 10.77 | 11.02 | 11.50 |
| DK | 19.41 | 24.02 | 28.34 | 41.85 | 47.46 | 48.83 |
| DE | 5.22 | 15.81 | 27.60 | 41.23 | 47.37 | 49.59 |
| EE | 0.00 | 1.21 | 3.93 | 10.50 | 15.90 | 19.16 |
| IE | 2.47 | 8.08 | 17.08 | 25.35 | 37.60 | 39.13 |
| EL | 2.07 | 3.70 | 9.80 | 24.79 | 31.36 | 35.62 |
| ES | 4.11 | 13.02 | 24.87 | 28.06 | 33.49 | 36.35 |
| FR | 0.04 | 0.61 | 5.60 | 13.19 | 20.01 | 21.59 |
| HR | 0.00 | 0.16 | 1.93 | 9.77 | 15.52 | 19.52 |
| IT | 0.51 | 1.95 | 8.80 | 23.97 | 27.09 | 27.94 |
| CY | 0.00 | 0.11 | 5.72 | 13.31 | 16.98 | 20.39 |
| LV | 0.10 | 1.20 | 1.17 | 2.33 | 2.77 | 2.83 |
| LT | 0.00 | 0.02 | 3.73 | 14.08 | 18.86 | 20.17 |
| LU | 1.15 | 3.48 | 4.27 | 8.90 | 16.65 | 18.77 |
| HU | 0.00 | 0.20 | 3.28 | 5.80 | 17.24 | 22.90 |
| MT | 0.00 | 0.00 | 0.14 | 11.21 | 20.71 | 24.02 |
| NL | 2.18 | 5.85 | 8.72 | 14.51 | 31.53 | 41.60 |
| AT | 0.31 | 4.43 | 5.18 | 13.85 | 19.02 | 20.02 |
| PL | 0.01 | 0.38 | 3.32 | 13.38 | 16.98 | 20.77 |
| PT | 0.77 | 7.97 | 20.76 | 27.43 | 28.39 | 28.73 |
| RO | 0.00 | 0.01 | 1.95 | 18.70 | 21.22 | 21.35 |
| SI | 0.00 | 0.00 | 0.38 | 7.21 | 7.34 | 9.49 |
| SK | 0.00 | 0.06 | 0.28 | 6.89 | 7.69 | 6.99 |
| FI | 0.25 | 0.52 | 1.32 | 6.19 | 14.44 | 16.79 |
| SE | 0.63 | 1.57 | 5.56 | 14.92 | 21.94 | 25.38 |

### SOLAR AND WIND ENERGY – CUMULATIVE CAPACITY – SHARE OF TOTAL – **1990-2020 (%)**



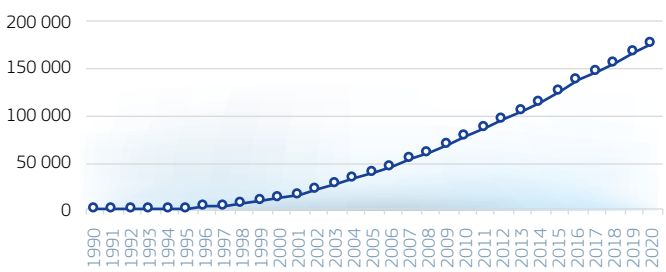

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.7.2 Wind Cumulative Installed Capacity

### TOTAL

| MW | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 12297 | 38773 | 78989 | 127169 | 167162 | 176985 |
| Index2000 | 100% | 315% | 642% | 1034% | 1359% | 1439% |
| | | | | | | |
| BE | 14 | 167 | 912 | 2176 | 3863 | 4681 |
| BG | 0 | 8 | 488 | 699 | 703 | 703 |
| CZ | 1 | 22 | 213 | 281 | 339 | 339 |
| DK | 2390 | 3128 | 3802 | 5077 | 6103 | 6259 |
| DE | 6095 | 18260 | 26955 | 44580 | 60742 | 62188 |
| EE | 0 | 31 | 108 | 300 | 316 | 317 |
| IE | 117 | 493 | 1390 | 2451 | 4126 | 4307 |
| EL | 226 | 491 | 1298 | 2091 | 3589 | 4119 |
| ES | 2206 | 9918 | 20693 | 22943 | 25590 | 26819 |
| FR | 38 | 690 | 5912 | 10298 | 16457 | 17484 |
| HR | 0 | 6 | 79 | 418 | 646 | 801 |
| IT | 363 | 1635 | 5794 | 9137 | 10679 | 10871 |
| CY | 0 | 0 | 82 | 158 | 158 | 158 |
| LV | 2 | 26 | 30 | 68 | 78 | 78 |
| LT | 0 | 1 | 133 | 436 | 534 | 540 |
| LU | 14 | 35 | 44 | 64 | 136 | 153 |
| HU | 0 | 17 | 293 | 329 | 323 | 321 |
| MT | 0 | 0 | 0 | 0 | 0 | 0 |
| NL | 447 | 1224 | 2237 | 3391 | 4484 | 6619 |
| AT | 50 | 825 | 1016 | 2489 | 3224 | 3226 |
| PL | 4 | 121 | 1108 | 4886 | 5838 | 6298 |
| PT | 83 | 1064 | 3796 | 4937 | 5223 | 5122 |
| RO | 0 | 1 | 389 | 3130 | 3038 | 3013 |
| SI | 0 | 0 | 0 | 3 | 3 | 3 |
| SK | 0 | 5 | 3 | 3 | 4 | 4 |
| FI | 38 | 82 | 197 | 1005 | 2284 | 2586 |
| SE | 209 | 522 | 2017 | 5819 | 8681 | 9976 |

**WIND CUMULATIVE INSTALLED CAPACITY – TOTAL – 1990-2020 (MW)**




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.7.2 Wind Cumulative Installed Capacity

### SHARE OF TOTAL INSTALLED ELECTRICITY CAPACITY

| % | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 2.0 | 5.7 | 10.0 | 14.3 | 17.7 | 18.4 |
| | | | | | | |
| BE | 0.1 | 1.0 | 4.9 | 10.3 | 16.1 | 18.2 |
| BG | 0.0 | 0.1 | 4.9 | 6.4 | 6.3 | 6.4 |
| CZ | 0.0 | 0.1 | 1.1 | 1.3 | 1.5 | 1.6 |
| DK | 19.4 | 24.0 | 28.3 | 36.3 | 40.3 | 40.4 |
| DE | 5.1 | 14.2 | 16.5 | 21.9 | 26.2 | 26.6 |
| EE | 0.0 | 1.2 | 3.9 | 10.5 | 11.5 | 11.6 |
| IE | 2.5 | 8.1 | 17.1 | 25.3 | 37.1 | 38.3 |
| EL | 2.1 | 3.7 | 8.5 | 11.0 | 17.5 | 19.8 |
| ES | 4.1 | 13.0 | 20.3 | 21.5 | 23.3 | 24.7 |
| FR | 0.0 | 0.6 | 4.8 | 7.8 | 12.1 | 12.8 |
| HR | 0.0 | 0.2 | 1.9 | 8.8 | 13.7 | 17.2 |
| IT | 0.5 | 1.9 | 5.4 | 7.8 | 9.2 | 9.3 |
| CY | 0.0 | 0.0 | 5.3 | 9.0 | 8.7 | 8.3 |
| LV | 0.1 | 1.2 | 1.2 | 2.3 | 2.7 | 2.7 |
| LT | 0.0 | 0.0 | 3.7 | 12.2 | 15.8 | 15.5 |
| LU | 1.2 | 2.1 | 2.6 | 3.2 | 7.7 | 8.4 |
| HU | 0.0 | 0.2 | 3.3 | 3.8 | 3.2 | 3.0 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 2.1 | 5.6 | 8.4 | 10.0 | 12.1 | 15.7 |
| AT | 0.3 | 4.3 | 4.8 | 10.1 | 12.4 | 12.3 |
| PL | 0.0 | 0.4 | 3.3 | 13.1 | 13.4 | 12.8 |
| PT | 0.8 | 8.0 | 20.1 | 25.2 | 24.2 | 23.7 |
| RO | 0.0 | 0.0 | 2.0 | 13.1 | 14.5 | 14.6 |
| SI | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| SK | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 |
| FI | 0.2 | 0.5 | 1.3 | 6.1 | 13.2 | 14.9 |
| SE | 0.6 | 1.6 | 5.5 | 14.7 | 20.3 | 22.8 |

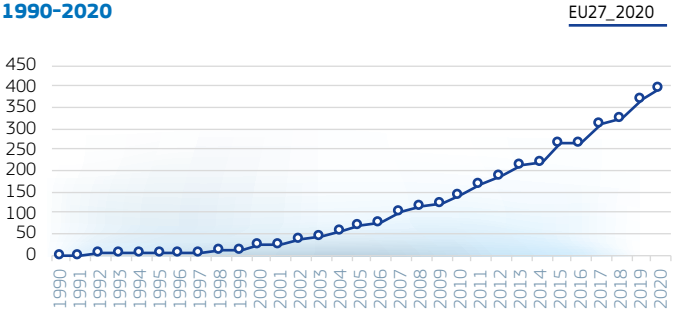
source: Eurostat April 2022
Methodology and Notes: **see appendices –**

## 2.7.3 Wind Gross Electricity Production

### TOTAL

| TWh | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 21.3 | 68.1 | 139.8 | 263.2 | 367.2 | 397.4 |
| Index2000 | 100 % | 320 % | 657 % | 1 237 % | 1 726 % | 1 868 % |
| | | | | | | |
| BE | 0.0 | 0.2 | 1.3 | 5.6 | 9.8 | 12.8 |
| BG | 0.0 | 0.0 | 0.7 | 1.5 | 1.3 | 1.5 |
| CZ | 0.0 | 0.0 | 0.3 | 0.6 | 0.7 | 0.7 |
| DK | 4.2 | 6.6 | 7.8 | 14.1 | 16.1 | 16.3 |
| DE | 9.4 | 27.8 | 38.5 | 80.6 | 125.9 | 132.1 |
| EE | 0.0 | 0.1 | 0.3 | 0.7 | 0.7 | 0.8 |
| IE | 0.2 | 1.1 | 2.8 | 6.6 | 10.0 | 11.5 |
| EL | 0.5 | 1.3 | 2.7 | 4.6 | 7.3 | 9.3 |
| ES | 4.7 | 21.2 | 44.3 | 49.3 | 55.6 | 56.4 |
| FR | 0.0 | 1.0 | 9.9 | 21.4 | 34.8 | 39.8 |
| HR | 0.0 | 0.0 | 0.1 | 0.8 | 1.5 | 1.7 |
| IT | 0.6 | 2.3 | 9.1 | 14.8 | 20.2 | 18.8 |
| CY | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 |
| LV | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 |
| LT | 0.0 | 0.0 | 0.2 | 0.8 | 1.5 | 1.6 |
| LU | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 |
| HU | 0.0 | 0.0 | 0.5 | 0.7 | 0.7 | 0.7 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 0.8 | 2.1 | 4.0 | 7.5 | 11.5 | 15.3 |
| AT | 0.1 | 1.3 | 2.1 | 4.8 | 7.5 | 6.8 |
| PL | 0.0 | 0.1 | 1.7 | 10.9 | 15.1 | 15.8 |
| PT | 0.2 | 1.8 | 9.2 | 11.6 | 13.7 | 12.3 |
| RO | 0.0 | 0.0 | 0.3 | 7.1 | 6.8 | 6.9 |
| SI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| SK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| FI | 0.1 | 0.2 | 0.3 | 2.3 | 6.0 | 7.9 |
| SE | 0.5 | 0.9 | 3.5 | 16.3 | 19.8 | 27.5 |

**WIND GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2020**




source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.7.4 Wind Penetration Level

### IN TOTAL GROSS ELECTRICITY GENERATION

| % | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 0.8 | 2.3 | 4.7 | 9.1 | 12.7 | 14.3 |
| | | | | | | |
| BE | 0.0 | 0.3 | 1.4 | 8.1 | 10.5 | 14.4 |
| BG | 0.0 | 0.0 | 1.5 | 3.0 | 3.0 | 3.6 |
| CZ | 0.0 | 0.0 | 0.4 | 0.7 | 0.8 | 0.9 |
| DK | 11.8 | 18.2 | 20.1 | 48.8 | 54.7 | 56.8 |
| DE | 1.6 | 4.5 | 6.1 | 12.5 | 20.8 | 23.1 |
| EE | 0.0 | 0.5 | 2.1 | 7.0 | 9.0 | 14.2 |
| IE | 1.0 | 4.3 | 9.9 | 23.2 | 32.4 | 35.8 |
| EL | 0.8 | 2.1 | 4.7 | 8.9 | 14.9 | 19.3 |
| ES | 2.1 | 7.3 | 14.7 | 17.6 | 20.4 | 21.4 |
| FR | 0.0 | 0.2 | 1.7 | 3.7 | 6.1 | 7.5 |
| HR | 0.0 | 0.1 | 0.9 | 7.0 | 11.5 | 12.9 |
| IT | 0.2 | 0.8 | 3.0 | 5.3 | 6.9 | 6.7 |
| CY | 0.0 | 0.0 | 0.6 | 4.9 | 4.6 | 5.0 |
| LV | 0.1 | 1.0 | 0.7 | 2.7 | 2.4 | 3.1 |
| LT | 0.0 | 0.0 | 4.1 | 17.4 | 40.0 | 29.2 |
| LU | 2.1 | 1.3 | 1.2 | 3.7 | 14.7 | 15.7 |
| HU | 0.0 | 0.0 | 1.4 | 2.3 | 2.1 | 1.9 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 0.9 | 2.1 | 3.4 | 6.9 | 9.5 | 12.5 |
| AT | 0.1 | 2.0 | 2.9 | 7.4 | 10.0 | 9.4 |
| PL | 0.0 | 0.1 | 1.1 | 6.6 | 9.2 | 10.0 |
| PT | 0.4 | 3.8 | 17.0 | 22.1 | 25.7 | 23.2 |
| RO | 0.0 | 0.0 | 0.5 | 10.7 | 11.4 | 12.4 |
| SI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| SK | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| FI | 0.1 | 0.2 | 0.4 | 3.4 | 8.8 | 11.6 |
| SE | 0.3 | 0.6 | 2.3 | 10.1 | 11.8 | 16.8 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.7.5 Wind Capacity Factor

### ANNUAL AVERAGE

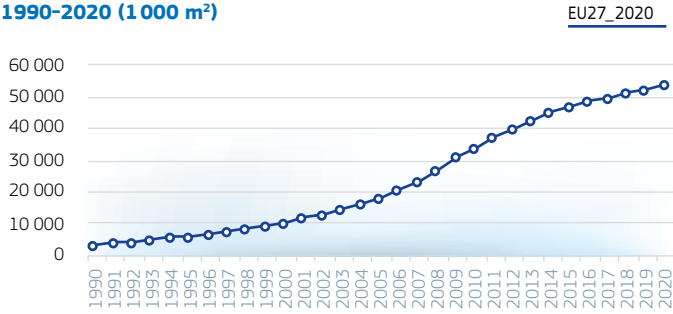
| % | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 19.8 | 20.0 | 20.2 | 23.6 | 25.1 | 25.6 |
| | | | | | | |
| BE | 13.0 | 15.5 | 16.2 | 29.2 | 28.8 | 31.1 |
| BG | | | 15.9 | 23.7 | 21.4 | 24.0 |
| CZ | | 11.0 | 18.0 | 23.3 | 23.5 | 23.5 |
| DK | 20.3 | 24.1 | 23.4 | 31.8 | 30.2 | 29.8 |
| DE | 17.5 | 17.4 | 16.3 | 20.6 | 23.7 | 24.2 |
| EE | | 19.9 | 29.3 | 27.2 | 24.8 | 30.4 |
| IE | 23.9 | 25.7 | 23.1 | 30.6 | 27.7 | 30.6 |
| EL | 22.8 | 29.4 | 23.9 | 25.2 | 23.1 | 25.8 |
| ES | 24.5 | 24.4 | 24.4 | 24.5 | 24.8 | 24.0 |
| FR | 14.5 | 15.9 | 19.2 | 23.7 | 24.1 | 26.0 |
| HR | | 19.0 | 20.1 | 21.7 | 25.9 | 24.5 |
| IT | 17.7 | 16.4 | 18.0 | 18.5 | 21.6 | 19.7 |
| CY | | | 4.4 | 16.1 | 17.3 | 17.4 |
| LV | | 20.6 | 18.7 | 24.6 | 22.5 | 25.9 |
| LT | | | 19.2 | 21.2 | 32.1 | 32.8 |
| LU | 20.2 | 17.1 | 14.4 | 18.2 | 23.6 | 26.2 |
| HU | | 6.8 | 20.8 | 24.1 | 25.8 | 23.3 |
| MT | | | | | | |
| NL | 21.2 | 19.3 | 20.4 | 25.4 | 29.3 | 26.5 |
| AT | 15.2 | 18.4 | 23.2 | 22.2 | 26.4 | 24.0 |
| PL | 14.3 | 12.8 | 17.1 | 25.4 | 29.5 | 28.6 |
| PT | 23.1 | 19.0 | 27.6 | 26.8 | 29.9 | 27.4 |
| RO | | | 9.0 | 25.8 | 25.5 | 26.3 |
| SI | | | | 22.9 | 21.3 | 21.6 |
| SK | | 13.7 | 22.8 | 22.8 | 17.1 | 11.4 |
| FI | 23.4 | 23.7 | 17.1 | 26.4 | 30.1 | 35.0 |
| SE | 25.0 | 20.4 | 19.7 | 32.0 | 26.1 | 31.5 |

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.7.6 Solar Collectors' Surface

| 1 000 m² | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 10759 | 17902 | 34428 | 47092 | 52477 | 53861 |
| Index2000 | 100 % | 166 % | 320 % | 438 % | 488 % | 501 % |
| | | | | | | |
| BE | 41 | 77 | 375 | 660 | 724 | 740 |
| BG | 0 | 0 | 194 | 344 | 425 | 446 |
| CZ | 0 | 85 | 307 | 480 | 555 | 577 |
| DK | 243 | 286 | 480 | 1016 | 1915 | 2051 |
| DE | 3251 | 7085 | 13914 | 18339 | 19326 | 19455 |
| EE | 0 | 0 | 0 | 0 | 0 | 0 |
| IE | 4 | 13 | 185 | 320 | 337 | 347 |
| EL | 2941 | 3047 | 4100 | 4390 | 4868 | 4991 |
| ES | 405 | 777 | 2312 | 3293 | 4068 | 4236 |
| FR | 513 | 583 | 1447 | 2917 | 3302 | 3398 |
| HR | 20 | 41 | 92 | 183 | 272 | 288 |
| IT | 271 | 680 | 2415 | 3724 | 4344 | 4458 |
| CY | 0 | 730 | 909 | 1009 | 1084 | 1102 |
| LV | 0 | 0 | 0 | 0 | 22 | 22 |
| LT | 0 | 0 | 0 | 0 | 0 | 0 |
| LU | 0 | 6 | 29 | 56 | 70 | 74 |
| HU | 36 | 45 | 140 | 280 | 350 | 392 |
| MT | 0 | 0 | 40 | 70 | 73 | 74 |
| NL | 276 | 422 | 576 | 647 | 672 | 669 |
| AT | 2202 | 3083 | 4559 | 5261 | 5050 | 4923 |
| PL | 0 | 95 | 656 | 1900 | 2696 | 3007 |
| PT | 238 | 289 | 752 | 1121 | 1348 | 1407 |
| RO | 0 | 0 | 104 | 159 | 219 | 219 |
| SI | 101 | 107 | 178 | 224 | 224 | 223 |
| SK | 0 | 64 | 123 | 171 | 0 | 232 |
| FI | 10 | 16 | 31 | 50 | 73 | 80 |
| SE | 207 | 371 | 510 | 478 | 459 | 451 |

**SOLAR THERMAL COLLECTORS – 1990-2020 (1 000 m²)**



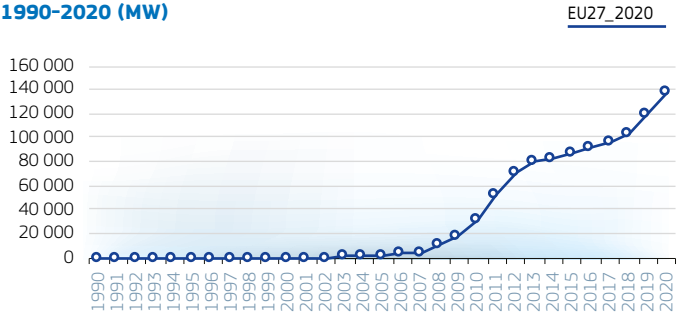

source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.7.7 Solar Installed Capacity

### TOTAL

| MW | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 175 | 2268 | 30616 | 87688 | 120222 | 138443 |
| | | | | | | |
| BE | 0 | 2 | 1007 | 3132 | 4637 | 5575 |
| BG | 0 | 0 | 25 | 1029 | 1048 | 1097 |
| CZ | 0 | 1 | 1727 | 2075 | 2086 | 2123 |
| DK | 1 | 3 | 7 | 782 | 1080 | 1304 |
| DE | 114 | 2056 | 18006 | 39224 | 48914 | 53721 |
| EE | 0 | 0 | 0 | 0 | 121 | 208 |
| IE | 0 | 0 | 1 | 2 | 58 | 93 |
| EL | 0 | 1 | 202 | 2604 | 2834 | 3288 |
| ES | 10 | 52 | 4605 | 7008 | 11143 | 12589 |
| FR | 7 | 13 | 1044 | 7138 | 10808 | 12022 |
| HR | 0 | 0 | 0 | 48 | 85 | 109 |
| IT | 19 | 34 | 3592 | 18901 | 20865 | 21650 |
| CY | 0 | 1 | 7 | 76 | 151 | 229 |
| LV | 0 | 0 | 0 | 0 | 3 | 5 |
| LT | 0 | 0 | 0 | 69 | 103 | 164 |
| LU | 0 | 24 | 29 | 116 | 160 | 187 |
| HU | 0 | 0 | 2 | 172 | 1400 | 2131 |
| MT | 0 | 0 | 1 | 75 | 155 | 188 |
| NL | 13 | 51 | 90 | 1526 | 7226 | 10950 |
| AT | 5 | 21 | 89 | 937 | 1702 | 2043 |
| PL | 0 | 0 | 0 | 108 | 1539 | 3955 |
| PT | 1 | 2 | 134 | 447 | 901 | 1100 |
| RO | 0 | 0 | 0 | 1326 | 1398 | 1383 |
| SI | 0 | 0 | 12 | 239 | 278 | 370 |
| SK | 0 | 0 | 19 | 533 | 590 | 535 |
| FI | 2 | 4 | 7 | 17 | 222 | 318 |
| SE | 3 | 4 | 11 | 104 | 714 | 1107 |

**SOLAR INSTALLED CAPACITY – TOTAL – 1990-2020 (MW)**



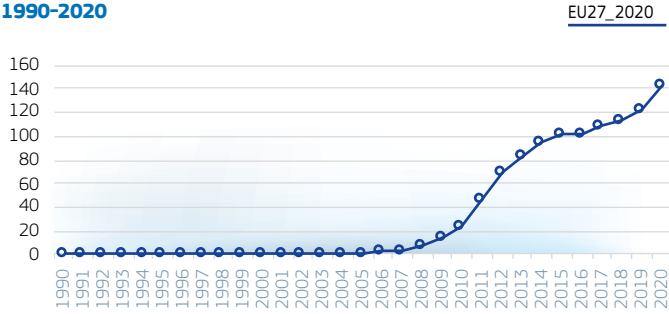

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.7.8 Solar Gross Electricity Production

### TOTAL

| TWh | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 0.1 | 1.5 | 23.2 | 100.9 | 123.8 | 144.2 |
| | | | | | | |
| BE | 0.0 | 0.0 | 0.6 | 3.1 | 4.3 | 5.1 |
| BG | 0.0 | 0.0 | 0.0 | 1.4 | 1.4 | 1.5 |
| CZ | 0.0 | 0.0 | 0.6 | 2.3 | 2.3 | 2.3 |
| DK | 0.0 | 0.0 | 0.0 | 0.6 | 1.0 | 1.2 |
| DE | 0.1 | 1.3 | 11.7 | 38.7 | 44.4 | 48.6 |
| EE | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| IE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| EL | 0.0 | 0.0 | 0.2 | 3.9 | 4.4 | 4.4 |
| ES | 0.0 | 0.0 | 7.2 | 13.9 | 15.1 | 20.7 |
| FR | 0.0 | 0.0 | 0.6 | 7.8 | 12.2 | 13.4 |
| HR | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| IT | 0.0 | 0.0 | 1.9 | 22.9 | 23.7 | 24.9 |
| CY | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 |
| LV | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LT | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| LU | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 |
| HU | 0.0 | 0.0 | 0.0 | 0.1 | 1.5 | 2.5 |
| MT | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.2 |
| NL | 0.0 | 0.0 | 0.1 | 1.1 | 5.4 | 8.8 |
| AT | 0.0 | 0.0 | 0.1 | 0.9 | 1.7 | 2.0 |
| PL | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 2.0 |
| PT | 0.0 | 0.0 | 0.2 | 0.8 | 1.3 | 1.7 |
| RO | 0.0 | 0.0 | 0.0 | 2.0 | 1.8 | 1.7 |
| SI | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.4 |
| SK | 0.0 | 0.0 | 0.0 | 0.5 | 0.6 | 0.7 |
| FI | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| SE | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 1.1 |

**SOLAR GROSS ELECTRICITY PRODUCTION – TOTAL – 1990-2020**




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.7.9 Solar Penetration Level

### IN TOTAL GROSS ELECTRICITY GENERATION

| % | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 0.0 | 0.1 | 0.8 | 3.5 | 4.3 | 5.2 |
| | | | | | | |
| BE | 0.0 | 0.0 | 0.6 | 4.4 | 4.6 | 5.7 |
| BG | 0.0 | 0.0 | 0.0 | 2.8 | 3.3 | 3.6 |
| CZ | 0.0 | 0.0 | 0.7 | 2.7 | 2.7 | 2.8 |
| DK | 0.0 | 0.0 | 0.0 | 2.1 | 3.3 | 4.1 |
| DE | 0.0 | 0.2 | 1.9 | 6.0 | 7.3 | 8.5 |
| EE | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 2.1 |
| IE | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| EL | 0.0 | 0.0 | 0.3 | 7.5 | 9.1 | 9.2 |
| ES | 0.0 | 0.0 | 2.4 | 4.9 | 5.5 | 7.9 |
| FR | 0.0 | 0.0 | 0.1 | 1.3 | 2.1 | 2.5 |
| HR | 0.0 | 0.0 | 0.0 | 0.5 | 0.7 | 0.7 |
| IT | 0.0 | 0.0 | 0.6 | 8.1 | 8.1 | 8.9 |
| CY | 0.0 | 0.0 | 0.1 | 2.8 | 4.2 | 6.1 |
| LV | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| LT | 0.0 | 0.0 | 0.0 | 1.6 | 2.4 | 2.4 |
| LU | 0.0 | 0.4 | 0.5 | 3.7 | 6.8 | 7.2 |
| HU | 0.0 | 0.0 | 0.0 | 0.5 | 4.4 | 7.1 |
| MT | 0.0 | 0.0 | 0.0 | 7.3 | 9.5 | 11.1 |
| NL | 0.0 | 0.0 | 0.0 | 1.0 | 4.5 | 7.1 |
| AT | 0.0 | 0.0 | 0.1 | 1.4 | 2.3 | 2.8 |
| PL | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 1.2 |
| PT | 0.0 | 0.0 | 0.4 | 1.5 | 2.5 | 3.2 |
| RO | 0.0 | 0.0 | 0.0 | 3.0 | 3.0 | 3.1 |
| SI | 0.0 | 0.0 | 0.1 | 1.8 | 1.9 | 2.1 |
| SK | 0.0 | 0.0 | 0.1 | 1.9 | 2.1 | 2.3 |
| FI | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 |
| SE | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.6 |

source: Eurostat April 2022
Methodology and Notes: see appendices

# 2.8 CHP

## 2.8.1 CHP Electricity

### GENERATION AND CAPACITY

| | CHP Electricity Generation | | | CHP Electrical Capacity | | |
|---|---|---|---|---|---|---|
| | TWh | | | GW | | |
| | 2018 | 2019 | 2020 | 2018 | 2019 | 2020 |
| EU27_2020 | 344,6 | 348,4 | 337,6 | 133,6 | 133,3 | 133,4 |
| | | | | | | |
| BE | 11,4 | 12,8 | 13,0 | 2,3 | 2,4 | 2,4 |
| BG | 3,6 | 3,9 | 3,8 | 1,1 | 1,2 | 1,3 |
| CZ | 10,0 | 9,9 | 10,2 | 8,5 | 8,5 | 8,3 |
| DK | 11,4 | 10,6 | 8,3 | 5,9 | 5,1 | 5,0 |
| DE | 88,5 | 86,9 | 85,5 | 53,9 | 54,8 | 53,4 |
| EE | 1,1 | 1,0 | 1,4 | 0,2 | 0,2 | 0,5 |
| IE | 2,1 | 2,1 | 2,1 | 0,3 | 0,3 | 0,3 |
| EL | 2,4 | 2,2 | 2,3 | 0,4 | 0,4 | 0,4 |
| ES | 29,0 | 29,7 | 26,9 | 4,7 | 5,0 | 5,0 |
| FR | 17,3 | 18,1 | 17,5 | 6,6 | 6,6 | 6,5 |
| HR | 2,0 | 2,3 | 2,7 | 0,9 | 0,9 | 0,9 |
| IT | 39,7 | 40,5 | 39,9 | 8,6 | 8,6 | 9,2 |
| CY | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| LV | 3,1 | 2,6 | 2,1 | 1,3 | 1,3 | 1,3 |
| LT | 0,9 | 1,1 | 1,2 | 0,6 | 0,6 | 0,6 |
| LU | 0,4 | 0,4 | 0,5 | 0,1 | 0,1 | 0,1 |
| HU | 4,5 | 4,6 | 4,7 | 1,5 | 1,5 | 1,6 |
| MT | 0,2 | 0,2 | 0,2 | 0,1 | 0,1 | 0,1 |
| NL | 31,2 | 32,2 | 31,7 | 8,8 | 8,8 | 9,1 |
| AT | 9,4 | 9,7 | 9,7 | 2,8 | 2,9 | 2,9 |
| PL | 28,8 | 29,9 | 30,1 | 10,1 | 9,7 | 10,0 |
| PT | 6,2 | 6,4 | 6,5 | 1,2 | 1,3 | 1,3 |
| RO | 5,4 | 5,1 | 4,6 | 1,6 | 1,3 | 1,4 |
| SI | 1,3 | 1,2 | 1,2 | 0,4 | 0,4 | 0,3 |
| SK | | 3,1 | 3,3 | | 1,5 | 1,6 |
| FI | 22,8 | 22,5 | 18,9 | 6,4 | 6,4 | 6,4 |
| SE | 9,1 | 9,2 | 9,2 | 3,3 | 3,3 | 3,3 |

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

## 2.8.2 CHP Heat

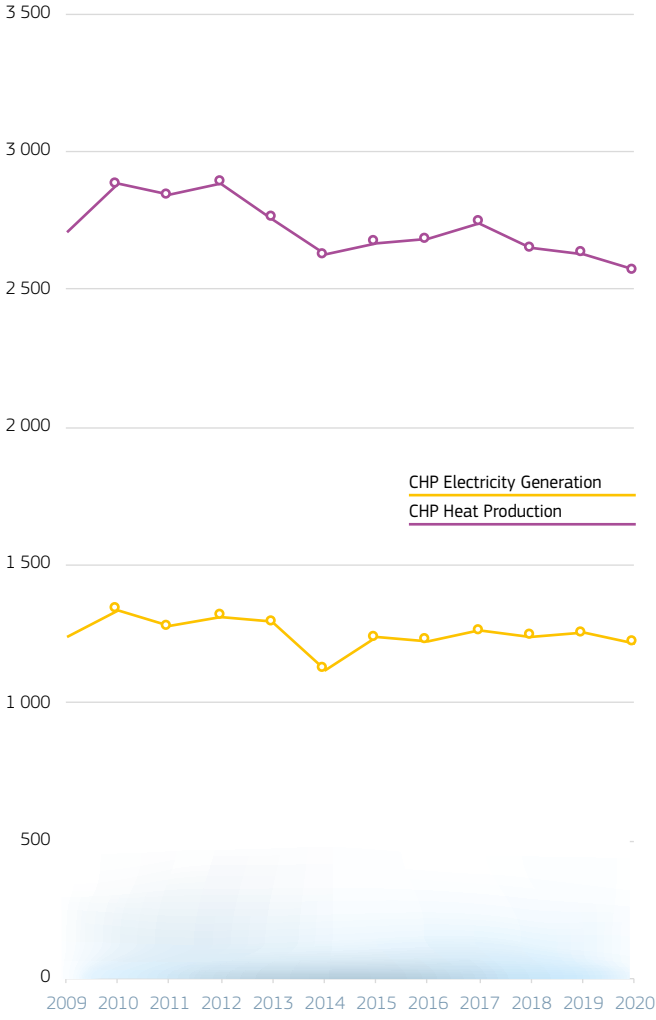
### PRODUCTION AND CAPACITY

| | CHP Heat Production | | | CHP Heat Capacity | | |
|---|---|---|---|---|---|---|
| | PJ | | | GW | | |
| | 2018 | 2019 | 2020 | 2018 | 2019 | 2020 |
| EU27_2020 | 2650.9 | 2629.2 | 2568.2 | 280.5 | 285.4 | 252.8 |
| | | | | | | |
| BE | 89.5 | 94.8 | 93.4 | 4.9 | 4.9 | 5.1 |
| BG | 40.1 | 39.6 | 36.2 | 4.3 | 4.4 | 4.6 |
| CZ | 102.1 | 99.1 | 100.2 | 21.7 | 20.4 | 19.2 |
| DK | 95.2 | 91.9 | 80.8 | 9.0 | 8.6 | 8.5 |
| DE | 676.1 | 663.2 | 638.8 | 98.0 | 96.5 | 63.7 |
| EE | 3.5 | 3.6 | 12.8 | 0.7 | 0.7 | 1.5 |
| IE | 11.6 | 11.2 | 11.1 | 0.6 | 0.6 | 0.6 |
| EL | 17.4 | 15.3 | 16.8 | 0.9 | 0.9 | 0.8 |
| ES | 141.9 | 143.2 | 132.4 | 10.3 | 10.7 | 10.7 |
| FR | 176.4 | 159.9 | 177.1 | 15.7 | 21.4 | 21.6 |
| HR | 15.8 | 17.6 | 20.0 | 2.2 | 2.2 | 2.1 |
| IT | 214.6 | 216.9 | 213.4 | 18.4 | 21.9 | 21.5 |
| CY | 0.6 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 |
| LV | 15.1 | 13.7 | 12.1 | 1.2 | 1.2 | 1.2 |
| LT | 10.2 | 11.0 | 11.7 | 1.5 | 1.5 | 1.6 |
| LU | 2.9 | 3.8 | 4.8 | 0.2 | 0.3 | 0.3 |
| HU | 24.7 | 27.5 | 27.6 | 3.0 | 3.1 | 3.1 |
| MT | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| NL | 173.8 | 174.2 | 171.6 | 15.9 | 15.4 | 16.3 |
| AT | 110.8 | 110.2 | 111.3 | 8.8 | 8.9 | 8.7 |
| PL | 247.1 | 248.5 | 245.6 | 25.1 | 24.5 | 24.2 |
| PT | 59.6 | 62.1 | 59.8 | 4.2 | 4.4 | 4.9 |
| RO | 42.2 | 62.1 | 35.4 | 4.9 | 4.4 | 4.2 |
| SI | 11.3 | 11.0 | 11.2 | 0.9 | 0.9 | 0.9 |
| SK | | 34.9 | 35.1 | | 3.4 | 3.4 |
| FI | 245.7 | 242.7 | 214.8 | 16.5 | 16.2 | 16.2 |
| SE | 90.6 | 94.0 | 94.0 | 7.8 | 7.9 | 7.9 |

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

## 2.8.3 CHP Electricity and Heat

**EU27_2020 – CHP ELECTRICITY AND HEAT GENERATION (PJ)***




source: Eurostat July 2022

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

# 2.9 Heat*

## 2.9.1 Gross Heat Generation

### TOTAL

| PJ | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 2044.7 | 2498.7 | 2580.7 | 2258.1 | 2248.0 | 2157.9 |
| Index2000 | 100% | 122% | 126% | 110% | 110% | 106% |
| | | | | | | |
| BE | 23.2 | 30.5 | 33.9 | 26.4 | 20.6 | 20.4 |
| BG | 50.8 | 52.1 | 57.1 | 48.7 | 36.6 | 36.6 |
| CZ | 139.2 | 138.9 | 147.0 | 119.4 | 114.7 | 111.2 |
| DK | 115.5 | 125.8 | 147.9 | 126.9 | 128.0 | 123.5 |
| DE | 315.9 | 485.8 | 508.6 | 448.8 | 451.6 | 419.8 |
| EE | 27.0 | 26.8 | 25.5 | 20.9 | 22.0 | 21.3 |
| IE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| EL | 1.2 | 2.0 | 1.9 | 2.1 | 2.2 | 2.2 |
| ES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| FR | 135.5 | 178.3 | 152.9 | 146.3 | 163.9 | 161.0 |
| HR | 11.5 | 13.3 | 12.5 | 11.1 | 13.2 | 13.9 |
| IT | 0.0 | 193.1 | 205.3 | 216.9 | 231.4 | 228.9 |
| CY | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| LV | 31.9 | 31.1 | 28.7 | 25.5 | 28.6 | 27.1 |
| LT | 42.8 | 42.9 | 40.0 | 31.9 | 31.7 | 29.8 |
| LU | 0.5 | 3.2 | 3.1 | 2.4 | 4.0 | 5.6 |
| HU | 69.2 | 63.6 | 53.0 | 50.2 | 45.3 | 45.9 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 172.4 | 178.5 | 159.9 | 120.4 | 104.8 | 94.3 |
| AT | 47.7 | 59.1 | 78.2 | 82.7 | 83.8 | 84.3 |
| PL | 340.7 | 335.5 | 335.1 | 280.1 | 286.2 | 285.2 |
| PT | 5.6 | 13.7 | 21.1 | 19.5 | 20.9 | 20.5 |
| RO | 189.7 | 127.7 | 99.1 | 76.6 | 61.4 | 59.1 |
| SI | 9.4 | 10.1 | 9.8 | 8.7 | 9.1 | 9.2 |
| SK | 36.8 | 52.5 | 48.5 | 36.6 | 31.3 | 30.7 |
| FI | 147.5 | 175.4 | 206.9 | 172.5 | 170.1 | 154.2 |
| SE | 131.0 | 158.8 | 204.6 | 183.5 | 186.3 | 173.1 |

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

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.9.1 Gross Heat Generation

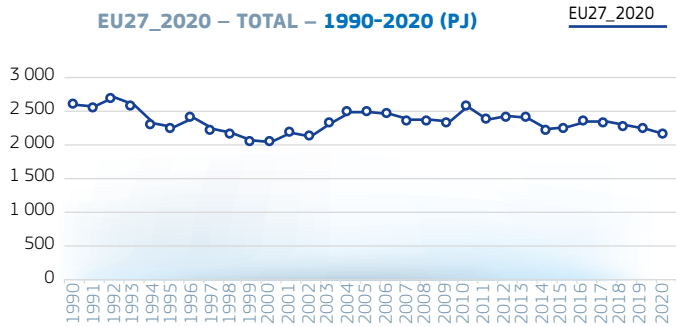
### BY FUEL

| | 2020 | | | | | | |
|---|---|---|---|---|---|---|---|
| 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 | 2157.9 | 447.2 | 66.2 | 823.9 | 3.7 | 682.6 | 132.5 |
| Share - % | 100.0 % | 20.7 % | 3.1 % | 38.2 % | 0.2 % | 31.6 % | 6.1 % |
| | | | | | | | |
| BE | 20.4 | 0.0 | 0.0 | 15.9 | 0.0 | 2.8 | 1.7 |
| BG | 36.6 | 7.9 | 0.0 | 21.8 | 0.5 | 6.1 | 0.3 |
| CZ | 111.2 | 57.1 | 0.9 | 39.3 | 0.8 | 11.6 | 1.5 |
| DK | 123.5 | 7.3 | 0.9 | 14.2 | 0.0 | 84.9 | 14.9 |
| DE | 419.8 | 89.5 | 4.6 | 206.6 | 0.0 | 79.6 | 39.5 |
| EE | 21.3 | 1.9 | 0.2 | 4.1 | 0.0 | 14.6 | 0.6 |
| IE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| EL | 2.2 | 2.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| ES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| FR | 161.0 | 4.3 | 0.7 | 66.9 | 0.0 | 73.2 | 16.0 |
| HR | 13.9 | 0.0 | 0.1 | 9.9 | 0.0 | 3.9 | 0.0 |
| IT | 228.9 | 0.9 | 31.5 | 149.3 | 0.0 | 41.3 | 5.9 |
| CY | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LV | 27.1 | 0.0 | 0.1 | 12.1 | 0.0 | 14.9 | 0.0 |
| LT | 29.8 | 0.1 | 0.2 | 5.7 | 0.0 | 22.2 | 1.4 |
| LU | 5.6 | 0.0 | 0.0 | 1.4 | 0.0 | 4.2 | 0.0 |
| HU | 45.9 | 0.8 | 0.0 | 36.2 | 0.5 | 7.2 | 1.1 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 94.3 | 1.5 | 8.7 | 56.7 | 0.0 | 21.1 | 6.2 |
| AT | 84.3 | 1.8 | 2.5 | 29.8 | 0.0 | 44.1 | 6.1 |
| PL | 285.2 | 214.8 | 3.3 | 41.6 | 0.0 | 21.2 | 4.4 |
| PT | 20.5 | 0.0 | 0.4 | 20.1 | 0.0 | 0.0 | 0.0 |
| RO | 59.1 | 8.0 | 3.2 | 44.1 | 0.0 | 3.8 | 0.0 |
| SI | 9.2 | 4.3 | 0.1 | 2.7 | 0.0 | 1.9 | 0.1 |
| SK | 30.7 | 6.4 | 0.3 | 15.6 | 1.8 | 6.4 | 0.2 |
| FI | 154.2 | 37.2 | 6.9 | 23.5 | 0.0 | 80.8 | 6.0 |
| SE | 173.1 | 1.3 | 1.5 | 6.2 | 0.0 | 136.8 | 26.8 |

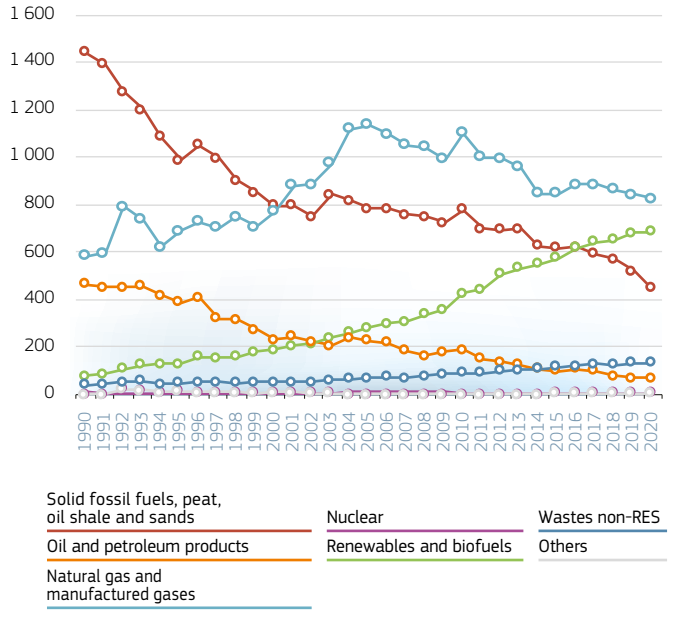
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.9.1 Gross Heat Generation

### EU27_2020 – TOTAL – 1990-2020 (PJ)




### EU27_2020 – GROSS HEAT GENERATION – 1990-2020 (PJ)




source: Eurostat April 2022
Methodology and Notes: see appendices

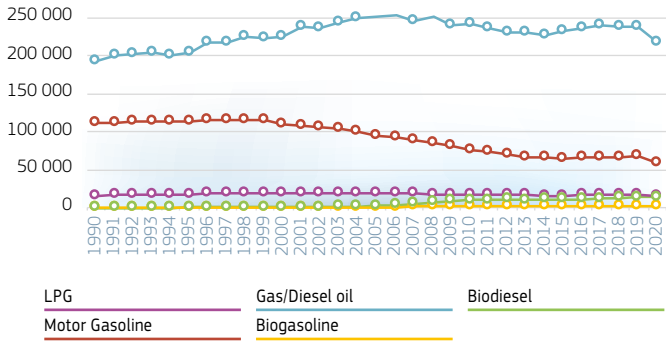
# 2.10 Transport

## 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 | 320890 | 16192 | 111718 | 192980 | 6 | 0 | 6 |
| 1995 | 336595 | 17423 | 113998 | 205174 | 218 | 25 | 189 |
| 2000 | 354896 | 19465 | 110381 | 225049 | 713 | 59 | 640 |
| 2001 | 366242 | 19344 | 108744 | 238154 | 840 | 66 | 756 |
| 2002 | 362782 | 19102 | 107019 | 236660 | 1113 | 159 | 932 |
| 2003 | 366325 | 19092 | 103482 | 243752 | 1433 | 243 | 1160 |
| 2004 | 368937 | 19157 | 100230 | 249550 | 1963 | 306 | 1613 |
| 2005 | 367556 | 19408 | 95746 | 252402 | 3270 | 550 | 2532 |
| 2006 | 365556 | 18771 | 92404 | 254381 | 5465 | 849 | 3909 |
| 2007 | 353404 | 18181 | 89352 | 245871 | 7657 | 1100 | 5720 |
| 2008 | 354999 | 18069 | 84683 | 252247 | 9355 | 1707 | 7183 |
| 2009 | 339425 | 17680 | 81459 | 240285 | 11049 | 2084 | 8681 |
| 2010 | 336673 | 18039 | 76807 | 241827 | 12442 | 2496 | 9701 |
| 2011 | 327290 | 17157 | 73858 | 236275 | 12975 | 2552 | 10311 |
| 2012 | 316525 | 16751 | 69274 | 230501 | 13795 | 2491 | 11254 |
| 2013 | 314636 | 16860 | 66862 | 230914 | 12310 | 2314 | 9949 |
| 2014 | 310708 | 16179 | 66573 | 227957 | 13307 | 2303 | 10936 |
| 2015 | 315054 | 16217 | 65300 | 233537 | 13329 | 2344 | 10927 |
| 2016 | 319444 | 16608 | 65645 | 237191 | 13183 | 2306 | 10807 |
| 2017 | 323158 | 16333 | 66006 | 240819 | 14441 | 2437 | 11940 |
| 2018 | 321342 | 16862 | 66215 | 238264 | 16065 | 2623 | 13327 |
| 2019 | 323230 | 16584 | 67652 | 238993 | 16629 | 2725 | 13779 |
| 2020 | 291235 | 15195 | 58221 | 217820 | 16875 | 2677 | 14024 |

**EU27_2020 – FUELS CONSUMPTION IN THE TRANSPORT SECTOR – 1990-2020 (ktoe)**




source: Eurostat April 2022
Methodology and Notes: **see appendices**

## 2.10.2 Biofuels

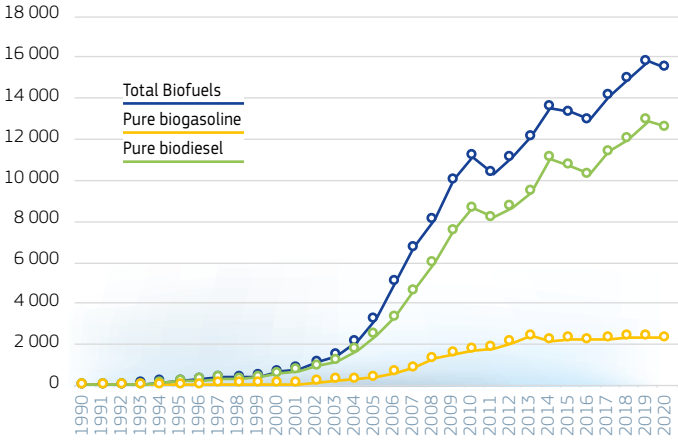
### EU27_2020 – BY FUEL

| | 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 % | 0.2 % |
| 1999 | 442 | 59 | 371 | 0.1 % | 0.1 % | 0.2 % |
| 2000 | 639 | 60 | 564 | 0.2 % | 0.1 % | 0.3 % |
| 2001 | 792 | 71 | 696 | 0.2 % | 0.1 % | 0.3 % |
| 2002 | 1108 | 160 | 918 | 0.3 % | 0.1 % | 0.4 % |
| 2003 | 1460 | 264 | 1145 | 0.4 % | 0.2 % | 0.5 % |
| 2004 | 2139 | 312 | 1716 | 0.5 % | 0.3 % | 0.6 % |
| 2005 | 3229 | 383 | 2445 | 0.9 % | 0.6 % | 1.0 % |
| 2006 | 5036 | 636 | 3298 | 1.5 % | 0.9 % | 1.5 % |
| 2007 | 6711 | 865 | 4621 | 2.2 % | 1.2 % | 2.3 % |
| 2008 | 8102 | 1282 | 5975 | 2.6 % | 2.0 % | 2.8 % |
| 2009 | 9994 | 1538 | 7521 | 3.3 % | 2.6 % | 3.6 % |
| 2010 | 11158 | 1728 | 8614 | 3.7 % | 3.2 % | 4.0 % |
| 2011 | 10314 | 1824 | 8156 | 4.0 % | 3.5 % | 4.4 % |
| 2012 | 11111 | 2103 | 8703 | 4.4 % | 3.6 % | 4.9 % |
| 2013 | 12143 | 2408 | 9399 | 3.9 % | 3.5 % | 4.3 % |
| 2014 | 13530 | 2188 | 11044 | 4.3 % | 3.5 % | 4.8 % |
| 2015 | 13314 | 2274 | 10707 | 4.2 % | 3.6 % | 4.7 % |
| 2016 | 12962 | 2240 | 10289 | 4.1 % | 3.5 % | 4.6 % |
| 2017 | 14111 | 2264 | 11406 | 4.5 % | 3.7 % | 5.0 % |
| 2018 | 14911 | 2368 | 12002 | 5.0 % | 4.0 % | 5.6 % |
| 2019 | 15810 | 2352 | 12919 | 5.1 % | 4.0 % | 5.8 % |
| 2020 | 15481 | 2294 | 12585 | 5.8 % | 4.6 % | 6.4 % |

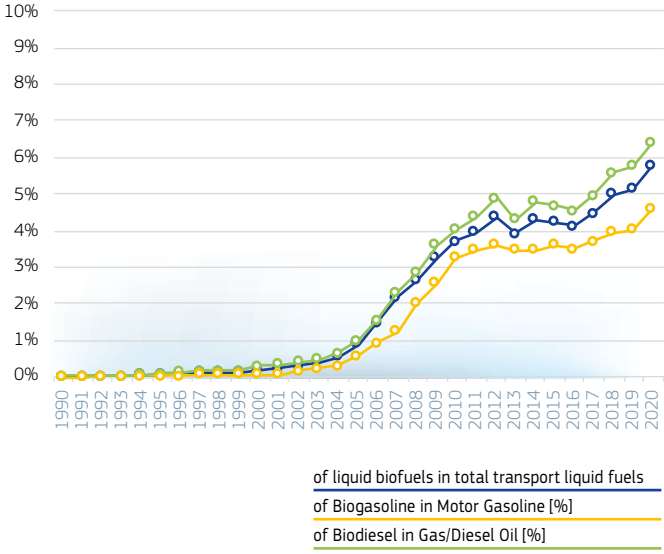
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.10.2 Biofuels

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




**EU27_2020 – BIOFUELS SHARE IN TRANSPORT LIQUID FUELS – 1990-2020 (%)**




source: Eurostat April 2022
Methodology and Notes: see appendices

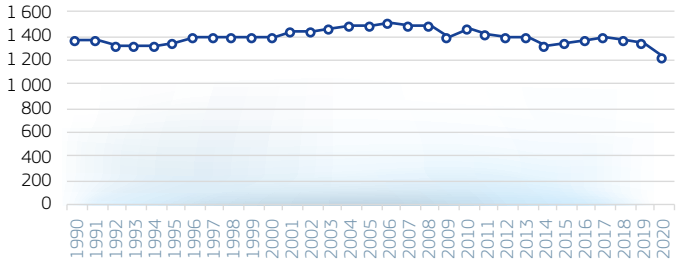
# 2.11 Energy Efficiency

## 2.11.1 Primary Energy Consumption 2020-2030*

### ALL FUELS

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1 396.5 | 1 497.9 | 1 457.7 | 1 352.7 | 1 353.8 | 1 236.3 |
| Index2000 | 100 % | 107 % | 104 % | 97 % | 97 % | 89 % |
| | | | | | | |
| BE | 52.4 | 51.6 | 53.4 | 45.7 | 48.4 | 43.9 |
| BG | 17.7 | 19.2 | 17.4 | 18.0 | 18.2 | 17.2 |
| CZ | 39.1 | 42.5 | 42.5 | 39.4 | 39.8 | 37.5 |
| DK | 19.1 | 19.4 | 20.0 | 16.8 | 16.8 | 15.3 |
| DE | 317.1 | 321.6 | 315.2 | 295.9 | 285.2 | 262.3 |
| EE | 4.6 | 5.3 | 5.8 | 4.8 | 4.7 | 4.3 |
| IE | 13.7 | 14.9 | 14.7 | 14.0 | 14.7 | 13.4 |
| EL | 27.2 | 30.3 | 27.2 | 23.4 | 22.3 | 19.2 |
| ES | 114.5 | 136.0 | 123.0 | 118.2 | 120.6 | 105.0 |
| FR | 239.1 | 261.0 | 254.6 | 244.4 | 235.2 | 208.4 |
| HR | 7.8 | 9.1 | 8.9 | 8.0 | 8.2 | 7.8 |
| IT | 166.1 | 180.8 | 167.3 | 149.1 | 145.9 | 132.3 |
| CY | 2.3 | 2.5 | 2.7 | 2.3 | 2.5 | 2.2 |
| LV | 3.8 | 4.5 | 4.6 | 4.3 | 4.6 | 4.3 |
| LT | 6.5 | 8.0 | 6.2 | 5.8 | 6.3 | 6.2 |
| LU | 3.6 | 4.8 | 4.6 | 4.1 | 4.5 | 3.9 |
| HU | 23.6 | 26.3 | 24.6 | 23.3 | 24.6 | 23.9 |
| MT | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 0.7 |
| NL | 66.9 | 70.1 | 71.7 | 63.9 | 63.5 | 58.4 |
| AT | 27.5 | 32.7 | 32.9 | 31.7 | 32.3 | 29.7 |
| PL | 84.8 | 88.0 | 96.6 | 90.1 | 100.2 | 96.9 |
| PT | 23.0 | 24.9 | 22.7 | 21.6 | 22.1 | 19.5 |
| RO | 34.9 | 36.1 | 32.9 | 30.7 | 32.1 | 30.9 |
| SI | 6.3 | 7.2 | 7.0 | 6.3 | 6.5 | 6.1 |
| SK | 16.4 | 17.4 | 16.7 | 15.2 | 16.0 | 15.2 |
| FI | 31.6 | 33.6 | 35.4 | 31.2 | 32.1 | 29.9 |
| SE | 46.0 | 49.0 | 48.3 | 43.8 | 45.8 | 41.7 |

**PRIMARY ENERGY CONSUMPTION 2020-2030 – 1990-2020 (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.

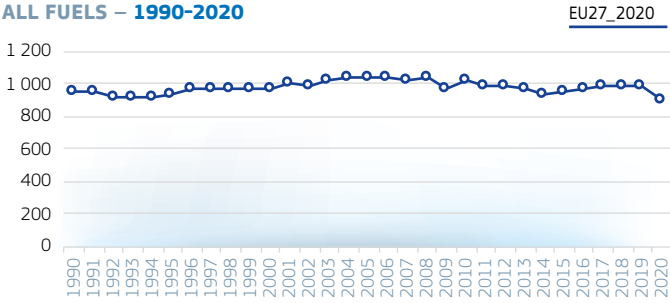
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.11.2 Final Energy Consumption 2020-2030*

### ALL FUELS

| Mtoe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 979,5 | 1 040,9 | 1 024,1 | 958,4 | 986,4 | 907,0 |
| Index2000 | 100 % | 106 % | 105 % | 98 % | 101 % | 93 % |
| | | | | | | |
| BE | 37.7 | 36.8 | 38.1 | 35.9 | 35.8 | 33.3 |
| BG | 9.1 | 10.1 | 8.8 | 9.5 | 9.8 | 9.5 |
| CZ | 25.1 | 26.1 | 25.3 | 24.2 | 25.3 | 24.5 |
| DK | 14.7 | 15.5 | 15.5 | 14.2 | 14.3 | 13.1 |
| DE | 220.2 | 219.7 | 223.0 | 212.7 | 214.7 | 201.7 |
| EE | 2.4 | 2.9 | 2.9 | 2.8 | 2.9 | 2.8 |
| IE | 10.8 | 12.6 | 11.9 | 11.3 | 12.4 | 11.2 |
| EL | 18.7 | 21.0 | 19.1 | 16.6 | 16.2 | 14.5 |
| ES | 80.0 | 98.1 | 89.6 | 80.5 | 86.5 | 73.8 |
| FR | 154.8 | 160.1 | 154.0 | 148.4 | 145.4 | 130.1 |
| HR | 6.0 | 7.2 | 7.2 | 6.6 | 6.9 | 6.5 |
| IT | 124.8 | 137.2 | 128.5 | 116.2 | 115.4 | 102.7 |
| CY | 1.6 | 1.8 | 1.9 | 1.7 | 1.9 | 1.6 |
| LV | 3.3 | 4.0 | 4.1 | 3.8 | 4.1 | 3.9 |
| LT | 3.8 | 4.7 | 4.8 | 4.9 | 5.6 | 5.3 |
| LU | 3.5 | 4.5 | 4.3 | 4.0 | 4.4 | 3.8 |
| HU | 16.2 | 18.7 | 17.5 | 17.4 | 18.6 | 18.0 |
| MT | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.5 |
| NL | 52.1 | 54.1 | 55.3 | 48.8 | 49.7 | 45.5 |
| AT | 23.7 | 27.9 | 28.0 | 27.5 | 28.3 | 26.1 |
| PL | 55.1 | 58.5 | 66.3 | 62.3 | 73.7 | 71.1 |
| PT | 18.0 | 19.0 | 18.1 | 16.0 | 17.1 | 15.0 |
| RO | 22.7 | 24.6 | 22.5 | 21.8 | 23.9 | 23.5 |
| SI | 4.6 | 5.1 | 5.1 | 4.7 | 4.9 | 4.4 |
| SK | 11.0 | 11.6 | 11.5 | 10.1 | 11.2 | 10.4 |
| FI | 24.4 | 25.2 | 26.2 | 24.2 | 25.4 | 23.3 |
| SE | 35.0 | 33.2 | 34.0 | 31.8 | 31.5 | 30.9 |

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




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

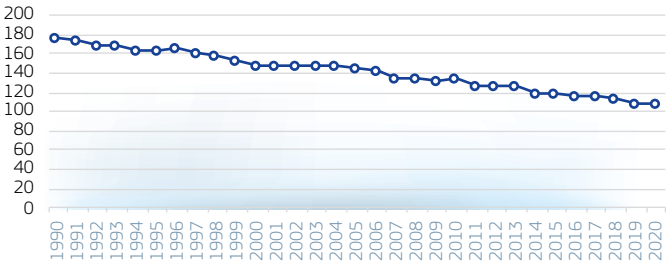
source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.11.3 Energy Intensity

### ALL FUELS

| toe/M€ '2015 | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 147 | 145 | 134 | 119 | 110 | 107 |
| Index2000 | 100 % | 98 % | 91 % | 81 % | 74 % | 73 % |
| | | | | | | |
| BE | 180 | 163 | 155 | 129 | 126 | 122 |
| BG | 680 | 556 | 418 | 408 | 364 | 360 |
| CZ | 363 | 330 | 292 | 248 | 221 | 220 |
| DK | 82 | 78 | 80 | 63 | 57 | 54 |
| DE | 134 | 132 | 122 | 105 | 95 | 92 |
| EE | 376 | 308 | 338 | 235 | 197 | 190 |
| IE | 101 | 84 | 80 | 54 | 45 | 39 |
| EL | 154 | 141 | 131 | 137 | 128 | 122 |
| ES | 142 | 140 | 121 | 114 | 106 | 105 |
| FR | 139 | 138 | 129 | 118 | 107 | 103 |
| HR | 238 | 222 | 208 | 188 | 171 | 175 |
| IT | 105 | 109 | 103 | 94 | 90 | 90 |
| CY | 173 | 149 | 142 | 129 | 117 | 107 |
| LV | 269 | 216 | 223 | 178 | 168 | 164 |
| LT | 363 | 307 | 228 | 192 | 180 | 176 |
| LU | 100 | 113 | 95 | 77 | 75 | 67 |
| HU | 306 | 278 | 261 | 223 | 202 | 207 |
| MT | 134 | 142 | 122 | 76 | 70 | 64 |
| NL | 135 | 135 | 130 | 111 | 100 | 99 |
| AT | 104 | 112 | 107 | 98 | 93 | 92 |
| PL | 352 | 314 | 273 | 223 | 207 | 205 |
| PT | 146 | 151 | 130 | 131 | 119 | 117 |
| RO | 400 | 320 | 252 | 199 | 170 | 171 |
| SI | 225 | 218 | 191 | 167 | 148 | 146 |
| SK | 410 | 338 | 251 | 204 | 191 | 193 |
| FI | 185 | 173 | 175 | 155 | 149 | 143 |
| SE | 145 | 137 | 123 | 103 | 100 | 93 |

**ENERGY INTENSITY – ALL FUELS – 1990-2020 [TOE/M€'2015]**



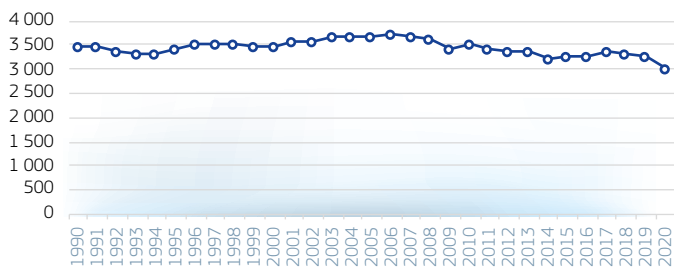

Source: Eurostat, DG Economic and Financial Affairs, April 2022
Methodology and Notes: see appendices

## 2.11.4 Energy Consumption per Capita

### GROSS INLAND CONSUMPTION (ALL FUELS) PER POPULATION

| kgoe/cap | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 3497 | 3692 | 3538 | 3264 | 3266 | 2996 |
| Index2000 | 100% | 106% | 101% | 93% | 93% | 86% |
| | | | | | | |
| BE | 5805 | 5675 | 5599 | 4777 | 4896 | 4464 |
| BG | 2275 | 2612 | 2414 | 2594 | 2692 | 2566 |
| CZ | 4017 | 4465 | 4346 | 3990 | 4032 | 3760 |
| DK | 3658 | 3663 | 3680 | 3049 | 2975 | 2728 |
| DE | 4168 | 4200 | 4135 | 3918 | 3712 | 3424 |
| EE | 3361 | 4044 | 4443 | 3690 | 3621 | 3378 |
| IE | 3804 | 3762 | 3311 | 3045 | 3054 | 2763 |
| EL | 2589 | 2831 | 2549 | 2218 | 2196 | 1908 |
| ES | 3065 | 3337 | 2799 | 2646 | 2702 | 2362 |
| FR | 4229 | 4417 | 4173 | 3913 | 3742 | 3323 |
| HR | 1877 | 2278 | 2201 | 2013 | 2156 | 2047 |
| IT | 3066 | 3273 | 2988 | 2562 | 2598 | 2374 |
| CY | 3511 | 3476 | 3370 | 2715 | 2998 | 2574 |
| LV | 1623 | 2040 | 2183 | 2205 | 2421 | 2286 |
| LT | 2093 | 2677 | 2254 | 2459 | 2792 | 2732 |
| LU | 8433 | 10411 | 9250 | 7421 | 7402 | 6331 |
| HU | 2468 | 2823 | 2655 | 2557 | 2733 | 2677 |
| MT | 2080 | 2324 | 2266 | 1724 | 1826 | 1480 |
| NL | 4934 | 5133 | 5198 | 4519 | 4401 | 4132 |
| AT | 3652 | 4192 | 4171 | 3928 | 3924 | 3619 |
| PL | 2332 | 2425 | 2672 | 2522 | 2793 | 2713 |
| PT | 2476 | 2614 | 2306 | 2274 | 2325 | 2077 |
| RO | 1637 | 1809 | 1725 | 1604 | 1710 | 1666 |
| SI | 3301 | 3786 | 3544 | 3151 | 3231 | 3016 |
| SK | 3284 | 3480 | 3286 | 3000 | 3123 | 3013 |
| FI | 6336 | 6654 | 6875 | 5969 | 6201 | 5813 |
| SE | 5384 | 5705 | 5402 | 4826 | 4860 | 4377 |

**ENERGY PER CAPITA – 1990-2020 (kgoe/cap)**



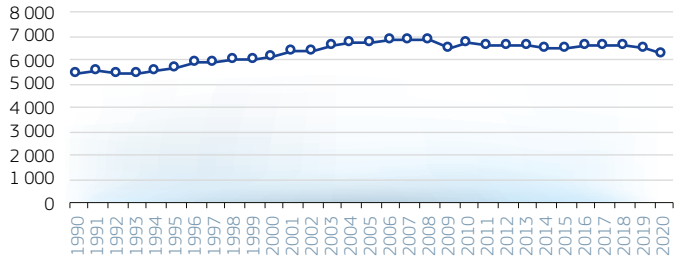

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.11.5 Final Electricity Consumption per Capita

### ALL FUELS

| kWh/cap | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 6201 | 6713 | 6762 | 6538 | 6501 | 6218 |
| Index2000 | 100% | 108% | 109% | 105% | 105% | 100% |
| | | | | | | |
| BE | 8205 | 8176 | 8701 | 6162 | 8136 | 7715 |
| BG | 4996 | 5770 | 6284 | 6832 | 6324 | 5859 |
| CZ | 7148 | 8097 | 8203 | 7953 | 8160 | 7612 |
| DK | 6757 | 6698 | 7021 | 5113 | 5085 | 4935 |
| DE | 7017 | 7517 | 7714 | 7962 | 7293 | 6867 |
| EE | 6075 | 7510 | 9723 | 7718 | 5748 | 4482 |
| IE | 6347 | 6316 | 6232 | 6069 | 6313 | 6504 |
| EL | 4997 | 5471 | 5163 | 4778 | 4534 | 4502 |
| ES | 5547 | 6677 | 6483 | 6043 | 5819 | 5561 |
| FR | 8918 | 9177 | 8802 | 8710 | 8490 | 7891 |
| HR | 2508 | 3053 | 3463 | 2699 | 3130 | 3298 |
| IT | 4846 | 5228 | 5090 | 4645 | 4902 | 4695 |
| CY | 4881 | 5971 | 6497 | 5354 | 5870 | 5461 |
| LV | 1737 | 2181 | 3125 | 2786 | 3353 | 3001 |
| LT | 3227 | 4347 | 1750 | 1598 | 1342 | 1901 |
| LU | 2690 | 8952 | 9145 | 4913 | 3109 | 3568 |
| HU | 3443 | 3541 | 3732 | 3074 | 3497 | 3561 |
| MT | 4931 | 5563 | 5105 | 2967 | 4173 | 4165 |
| NL | 5634 | 6112 | 7186 | 6437 | 6990 | 7068 |
| AT | 7652 | 8149 | 8515 | 7605 | 8378 | 8151 |
| PL | 3794 | 4103 | 4144 | 4337 | 4312 | 4161 |
| PT | 4270 | 4438 | 5115 | 5052 | 5172 | 5155 |
| RO | 2296 | 2779 | 3005 | 3336 | 3071 | 2894 |
| SI | 6854 | 7567 | 8031 | 7320 | 7737 | 8202 |
| SK | 5771 | 5851 | 5161 | 4944 | 5211 | 5278 |
| FI | 13495 | 13432 | 15017 | 12491 | 12394 | 12438 |
| SE | 16393 | 17582 | 15903 | 16631 | 16465 | 15864 |

**FINAL ELECTRICITY CONSUMPTION PER CAPITA – ALL FUELS – 1990-2020 [kwh/cap]**



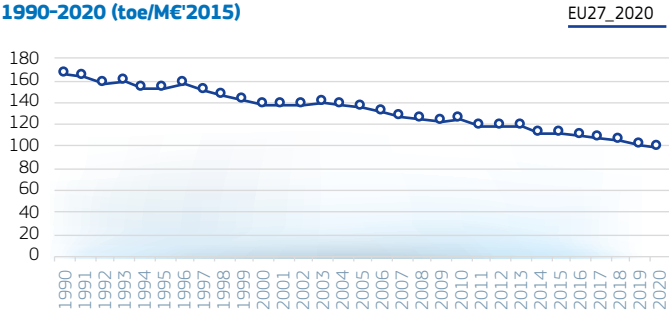

source: Eurostat April 2022
Methodology and Notes: see appendices

## 2.11.6 Primary Energy Intensity 2020-2030*

### ALL FUELS

| toe/M€'2015 | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 137 | 135 | 125 | 111 | 102 | 99 |
| Index2000 | 100% | 99% | 91% | 81% | 74% | 72% |
| | | | | | | |
| BE | 159 | 142 | 137 | 110 | 109 | 104 |
| BG | 644 | 532 | 406 | 392 | 352 | 347 |
| CZ | 344 | 308 | 273 | 233 | 204 | 205 |
| DK | 81 | 77 | 78 | 62 | 56 | 52 |
| DE | 124 | 123 | 113 | 98 | 88 | 85 |
| EE | 363 | 296 | 333 | 231 | 192 | 182 |
| IE | 96 | 81 | 78 | 53 | 44 | 38 |
| EL | 150 | 138 | 126 | 133 | 121 | 115 |
| ES | 131 | 132 | 114 | 110 | 101 | 99 |
| FR | 130 | 130 | 122 | 111 | 100 | 96 |
| HR | 220 | 206 | 195 | 176 | 159 | 164 |
| IT | 100 | 104 | 98 | 90 | 84 | 84 |
| CY | 167 | 145 | 137 | 127 | 113 | 103 |
| LV | 264 | 211 | 220 | 174 | 165 | 160 |
| LT | 323 | 275 | 199 | 155 | 145 | 144 |
| LU | 99 | 112 | 95 | 77 | 74 | 66 |
| HU | 286 | 257 | 241 | 206 | 186 | 189 |
| MT | 134 | 139 | 121 | 75 | 68 | 63 |
| NL | 115 | 113 | 108 | 93 | 84 | 80 |
| AT | 98 | 107 | 101 | 92 | 86 | 85 |
| PL | 335 | 299 | 259 | 209 | 195 | 193 |
| PT | 132 | 137 | 121 | 120 | 110 | 106 |
| RO | 379 | 298 | 237 | 192 | 164 | 164 |
| SI | 217 | 209 | 185 | 163 | 144 | 141 |
| SK | 378 | 315 | 236 | 190 | 179 | 178 |
| FI | 179 | 167 | 168 | 148 | 140 | 133 |
| SE | 140 | 131 | 118 | 96 | 92 | 86 |

**PRIMARY ENERGY INTENSITY – ALL FUELS – 1990-2020 (toe/M€'2015)**




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

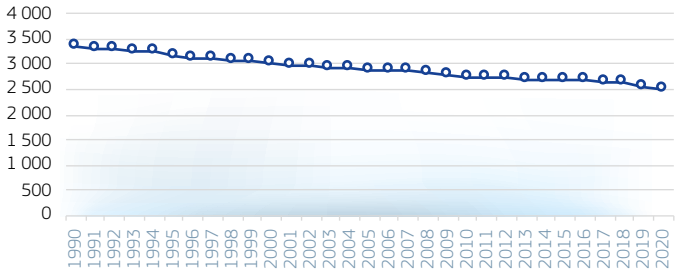
Source: Eurostat, DG Economic and Financial Affairs, April 2022
Methodology and Notes: **see appendices**

## 2.11.7 Greenhouse Gas (GHG) Intensity of Energy

### ALL FUELS

| kg $CO_2$/toe | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 3023 | 2889 | 2743 | 2710 | 2562 | 2503 |
| Index2000 | 100% | 96% | 91% | 90% | 85% | 83% |
| | | | | | | |
| BE | 2584 | 2516 | 2272 | 2298 | 2169 | 2140 |
| BG | 3070 | 3119 | 3339 | 3362 | 3195 | 2781 |
| CZ | 3666 | 3299 | 3112 | 3088 | 2907 | 2827 |
| DK | 3786 | 3512 | 3252 | 2990 | 2757 | 2690 |
| DE | 3085 | 2914 | 2839 | 2901 | 2692 | 2608 |
| EE | 3725 | 3511 | 3593 | 3749 | 3095 | 2590 |
| IE | 4891 | 4707 | 4267 | 4424 | 4220 | 4294 |
| EL | 4627 | 4477 | 4273 | 4082 | 3805 | 3725 |
| ES | 3207 | 3142 | 2850 | 2864 | 2625 | 2516 |
| FR | 2200 | 2046 | 1941 | 1829 | 1805 | 1793 |
| HR | 3043 | 3047 | 2980 | 2905 | 2871 | 2880 |
| IT | 3239 | 3164 | 2978 | 2899 | 2772 | 2719 |
| CY | 3770 | 3951 | 3736 | 3960 | 3786 | 4028 |
| LV | 2631 | 2425 | 2631 | 2523 | 2496 | 2440 |
| LT | 2655 | 2544 | 2951 | 2861 | 2657 | 2666 |
| LU | 2908 | 2981 | 2901 | 2800 | 2761 | 2703 |
| HU | 2999 | 2720 | 2510 | 2462 | 2450 | 2414 |
| MT | 3854 | 3473 | 3452 | 3277 | 2941 | 3049 |
| NL | 2913 | 2675 | 2581 | 2679 | 2528 | 2377 |
| AT | 2799 | 2734 | 2475 | 2391 | 2378 | 2317 |
| PL | 4455 | 4387 | 4078 | 4079 | 3712 | 3665 |
| PT | 3295 | 3210 | 2936 | 3004 | 2848 | 2767 |
| RO | 3793 | 3807 | 3524 | 3625 | 3445 | 3417 |
| SI | 2843 | 2714 | 2718 | 2595 | 2551 | 2512 |
| SK | 2753 | 2712 | 2586 | 2512 | 2350 | 2256 |
| FI | 2177 | 2045 | 2102 | 1745 | 1618 | 1515 |
| SE | 1473 | 1338 | 1325 | 1197 | 1076 | 1045 |

**GHG INTENSITY OF ENERGY – 1990-2020 (kg $CO_2$/toe)** EU27_2020




Source: EEA, June 2022, Eurostat 2022
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 | 2010 | 2019 | 2020 | 2005 | 2010 | 2019 | 2020 |
| EU27_2020 | 10.2% | 14.4% | 19.9% | 22.1% | 12.4% | 17.0% | 22.4% | 23.1% |
| | | | | | | | | |
| BE | 2.3% | 6.0% | 9.9% | 13.0% | 3.4% | 6.7% | 8.3% | 8.4% |
| BG | 9.2% | 13.9% | 21.5% | 23.3% | 14.3% | 24.3% | 35.4% | 37.2% |
| CZ | 7.1% | 10.5% | 16.2% | 17.3% | 10.8% | 14.1% | 22.6% | 23.5% |
| DK | 16.0% | 21.9% | 37.0% | 31.7% | 22.8% | 30.4% | 47.3% | 51.1% |
| DE | 7.2% | 11.7% | 17.3% | 19.3% | 7.7% | 12.1% | 14.5% | 14.8% |
| EE | 17.4% | 24.6% | 31.7% | 30.1% | 32.2% | 43.2% | 52.2% | 58.8% |
| IE | 2.8% | 5.8% | 12.0% | 16.2% | 3.4% | 4.3% | 6.3% | 6.3% |
| EL | 7.3% | 10.1% | 19.6% | 21.7% | 13.4% | 18.7% | 30.0% | 31.9% |
| ES | 8.4% | 13.8% | 17.9% | 21.2% | 9.4% | 12.6% | 17.2% | 18.0% |
| FR | 9.6% | 12.7% | 17.2% | 19.1% | 12.4% | 16.2% | 22.4% | 23.4% |
| HR | 23.7% | 25.1% | 28.5% | 31.0% | 30.0% | 32.9% | 36.8% | 36.9% |
| IT | 7.5% | 13.0% | 18.2% | 20.4% | 8.2% | 15.6% | 19.7% | 19.9% |
| CY | 3.1% | 6.2% | 13.8% | 16.9% | 10.0% | 18.8% | 35.1% | 37.1% |
| LV | 32.3% | 30.4% | 40.9% | 42.1% | 42.7% | 40.7% | 57.7% | 57.1% |
| LT | 16.8% | 19.6% | 25.5% | 26.8% | 29.3% | 32.5% | 47.4% | 50.4% |
| LU | 1.4% | 2.9% | 8.7% | 12.6% | 3.6% | 4.7% | 8.7% | 12.6% |
| HU | 6.9% | 12.7% | 12.6% | 13.9% | 9.9% | 18.1% | 18.2% | 17.7% |
| MT | 0.1% | 1.0% | 8.2% | 10.7% | 1.0% | 7.3% | 23.6% | 23.0% |
| NL | 2.5% | 3.9% | 8.9% | 14.0% | 2.4% | 3.1% | 7.2% | 8.1% |
| AT | 24.4% | 31.2% | 33.8% | 36.5% | 22.8% | 31.0% | 33.9% | 35.0% |
| PL | 6.9% | 9.3% | 15.4% | 16.1% | 10.2% | 11.8% | 22.0% | 22.1% |
| PT | 19.5% | 24.2% | 30.6% | 34.0% | 32.1% | 33.8% | 41.7% | 41.5% |
| RO | 17.6% | 22.8% | 24.3% | 24.5% | 17.9% | 27.2% | 25.7% | 25.3% |
| SI | 19.8% | 21.1% | 22.0% | 25.0% | 26.4% | 29.5% | 32.1% | 32.1% |
| SK | 6.4% | 9.1% | 16.9% | 17.3% | 5.0% | 7.9% | 19.7% | 19.4% |
| FI | 28.8% | 32.3% | 42.7% | 43.8% | 39.1% | 44.0% | 56.9% | 57.6% |
| SE | 40.3% | 46.6% | 55.8% | 60.1% | 49.8% | 58.5% | 64.4% | 66.4% |

* 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 2022
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 | 2010 | 2019 | 2020 | 2005 | 2010 | 2019 | 2020 |
| EU27_2020 | 16.4% | 21.3% | 34.1% | 37.5% | 2.0% | 5.5% | 8.8% | 10.2% |
| | | | | | | | | |
| BE | 2.4% | 7.2% | 20.8% | 25.1% | 0.7% | 4.8% | 6.8% | 11.0% |
| BG | 8.7% | 12.4% | 23.5% | 23.6% | 0.9% | 1.5% | 7.9% | 9.1% |
| CZ | 3.8% | 7.5% | 14.0% | 14.8% | 1.1% | 5.2% | 7.8% | 9.4% |
| DK | 24.6% | 32.7% | 65.3% | 65.3% | 0.4% | 1.2% | 7.1% | 9.7% |
| DE | 10.6% | 18.2% | 40.6% | 44.7% | 4.0% | 6.4% | 7.6% | 9.9% |
| EE | 1.1% | 10.3% | 22.0% | 28.3% | 0.2% | 0.4% | 6.2% | 12.2% |
| IE | 7.2% | 15.6% | 36.5% | 39.1% | 0.1% | 2.5% | 8.9% | 10.2% |
| EL | 8.2% | 12.3% | 31.3% | 35.9% | 0.1% | 1.9% | 4.0% | 5.3% |
| ES | 19.1% | 29.8% | 37.1% | 42.9% | 1.3% | 5.0% | 7.6% | 9.5% |
| FR | 13.7% | 14.8% | 22.4% | 24.8% | 2.1% | 6.6% | 9.2% | 9.2% |
| HR | 35.2% | 37.5% | 49.8% | 53.8% | 1.0% | 1.1% | 5.9% | 6.6% |
| IT | 16.3% | 20.1% | 35.0% | 38.1% | 1.0% | 4.9% | 9.0% | 10.7% |
| CY | 0.0% | 1.4% | 9.8% | 12.0% | 0.0% | 2.0% | 3.3% | 7.4% |
| LV | 43.0% | 42.1% | 53.4% | 53.4% | 2.4% | 4.0% | 4.6% | 6.7% |
| LT | 3.8% | 7.4% | 18.8% | 20.2% | 0.7% | 3.8% | 4.0% | 5.5% |
| LU | 3.2% | 3.8% | 10.9% | 13.9% | 0.2% | 2.1% | 7.7% | 12.6% |
| HU | 4.4% | 7.1% | 10.0% | 11.9% | 1.0% | 6.2% | 8.1% | 11.6% |
| MT | 0.0% | 0.0% | 7.5% | 9.5% | 0.0% | 0.0% | 8.9% | 10.6% |
| NL | 6.3% | 9.6% | 18.2% | 26.4% | 0.5% | 3.4% | 12.3% | 12.6% |
| AT | 62.9% | 66.4% | 75.1% | 78.2% | 5.1% | 10.7% | 10.1% | 10.3% |
| PL | 2.7% | 6.6% | 14.4% | 16.2% | 1.7% | 6.6% | 6.2% | 6.6% |
| PT | 27.7% | 40.6% | 53.8% | 58.0% | 0.5% | 5.5% | 9.1% | 9.7% |
| RO | 28.8% | 30.4% | 42.6% | 43.4% | 1.9% | 1.4% | 7.8% | 8.5% |
| SI | 28.7% | 32.2% | 32.6% | 35.1% | 0.8% | 3.1% | 8.0% | 10.9% |
| SK | 15.7% | 17.8% | 22.1% | 23.1% | 1.7% | 5.3% | 8.3% | 9.3% |
| FI | 26.9% | 27.7% | 38.0% | 39.6% | 0.9% | 4.4% | 14.3% | 13.4% |
| SE | 50.9% | 55.8% | 71.2% | 74.5% | 6.6% | 9.6% | 30.3% | 31.9% |

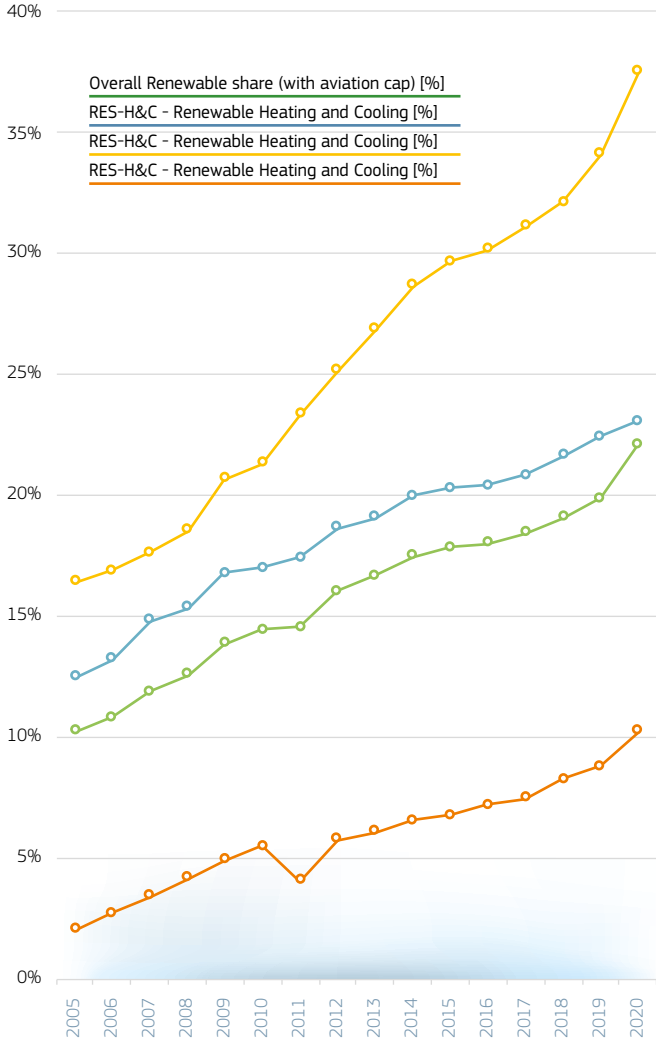
* of the Gross Final Energy

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

source: Eurostat-RES SHARES March 2022
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 2022
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 |

*first semester 2022 (03/01/22 -27/06/22)

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*

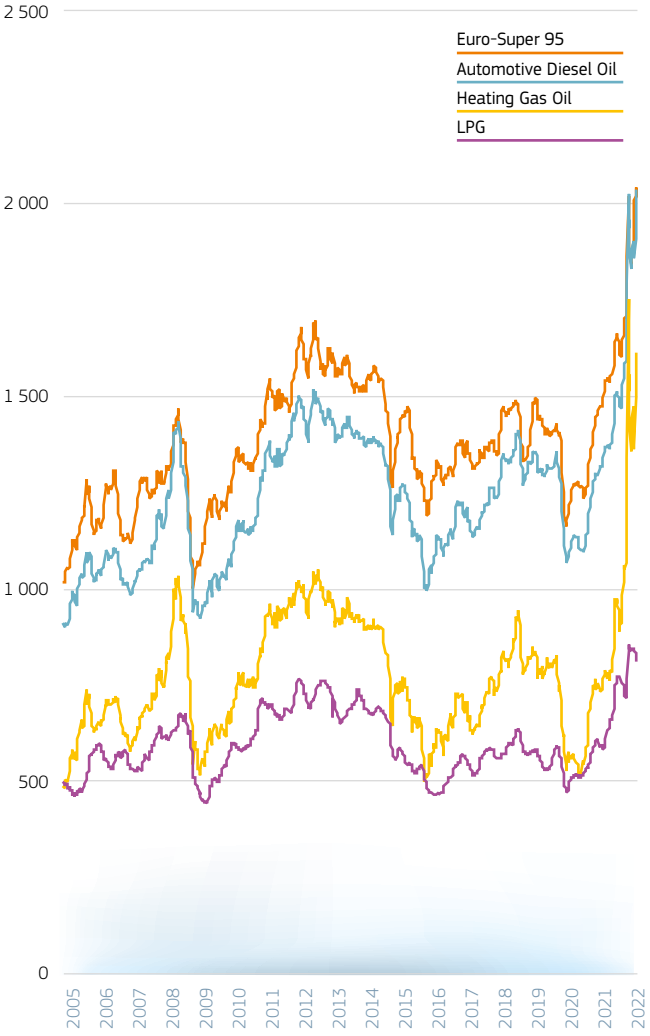
| Current Prices (€/litre) | 2005 | 2010 | 2015 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|
| EU27_2020 | 1.13 | 1.31 | 1.35 | 1.28 | 1.43 | 1.85 |
| | | | | | | |
| BE | 1.22 | 1.40 | 1.37 | 1.28 | 1.40 | 1.82 |
| BG | | 1.02 | 1.10 | 0.93 | 1.00 | 1.43 |
| CZ | 0.95 | 1.25 | 1.15 | 1.07 | 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 |

*first semester 2022 (03/01/22 -27/06/22)

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)




*first semester 2022 (03/01/22 -27/06/22)

*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 | 19.99 | 19.38 | 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 | 29.80 | 51.52 |

* All Taxes and levies Included

**Prices from second semester each year

source: Eurostat June 2022
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 | 21.70 | 21.34 | 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 | 13.17 |
| 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 | 20.76 | 17.18 | 26.04 |

* All Taxes and levies Included

**Prices from second semester each year

source: Eurostat June 2022
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 | 7.77 | 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 | 10.40 | 22.02 |

* Excluding VAT and other recoverable taxes and levies

**Prices from second semester each year

source: Eurostat June 2022

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 | 12.52 | 14.45 |
| | | | | | | |
| BE | 10.79 | 10.54 | 10.81 | 11.52 | 11.85 | 14.39 |
| BG | 6.39 | 6.64 | 7.82 | 8.68 | 8.43 | 18.07 |
| 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 | 13.47 | 13.44 |
| 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 | 5.88 | 9.82 |

* Excluding VAT and other recoverable taxes and levies

**Prices from second semester each year

source: Eurostat June 2022
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 | 2019 | 2020 |
|---|---|---|---|
| B05 - Mining of coal and lignite | *245* | 163 | *140* |
| B06 - Extraction of crude petroleum and natural gas | 220 | 207 | *246* |
| B0721 - Mining of uranium and thorium ores | *4* | | *1* |
| B0892 - Extraction of peat | *981* | 900 | *892* |
| B091 - Support activities for petroleum and natural gas extraction | *851* | 1000 | *1022* |
| C19 - Manufacture of coke and refined petroleum products | 866 | 860 | *780* |
| D35 - Electricity, gas, steam and air conditioning supply | 96893 | 173000 | *174296* |
| D351 - Electric power generation, transmission and distribution | 89157 | 160000 | *162138* |
| D3511 - Production of electricity | 72187 | 153086 | *153086* |
| D3512 - Transmission of electricity | 229 | | *649* |
| D3513 - Distribution of electricity | 1515 | 2598 | *2598* |
| D3514 - Trade of electricity | 3192 | 5165 | *5165* |
| D352 - Manufacture of gas; distribution of gaseous fuels through mains | 1870 | | *5472* |
| D3521 - Manufacture of gas | | 4020 | *4020* |
| D3522 - Distribution of gaseous fuels through mains | | | *535* |
| D3523 - Trade of gas through mains | 599 | 738 | *645* |
| D353 - Steam and air conditioning supply | 5359 | 6060 | *6014* |
| D3530 - Steam and air conditioning supply | 5359 | 6060 | *6014* |
| | | | |
| Broad sector - no. of enterprises reported | 100060 | 176130 | *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 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | | | 163 | *140* | 245 | 220 | 207 | *246* |
| | | | | | | | | |
| BE | | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| BG | 23 | 22 | 17 | *16* | 7 | 4 | 4 | *4* |
| CZ | 12 | 12 | 9 | *8* | 5 | 5 | 5 | *5* |
| DK | 0 | 0 | 0 | *0* | 9 | 12 | 14 | *14* |
| DE | 6 | 7 | 7 | *7* | 4 | 4 | 5 | *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 | *0* | 32 | | | *18* |
| HR | 1 | 0 | 0 | *0* | 4 | 4 | 2 | *0* |
| IT | | 0 | 0 | *0* | 3 | 12 | 11 | *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 | 11 | *4* | 13 | 8 | 11 | *10* |
| MT | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| NL | 0 | 0 | 0 | *0* | 48 | 41 | 47 | *39* |
| AT | 0 | 0 | 0 | *0* | 2 | 2 | 2 | *2* |
| PL | 48 | 62 | 41 | *33* | 54 | 62 | 20 | *23* |
| PT | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| RO | 35 | 27 | 15 | *13* | 21 | 38 | 25 | *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 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | *985* | *981* | 900 | *940* | *540* | *851* | 1 000 | *1 022* |
| | | | | | | | | |
| BE | 0 | 0 | 0 | *0* | | | | *0* |
| BG | 10 | 4 | | | 6 | 14 | 12 | *9* |
| CZ | | 17 | 10 | *10* | 7 | 6 | 10 | *7* |
| DK | 4 | 2 | 2 | *2* | 35 | 55 | 6 | *6* |
| DE | 74 | 91 | 70 | *70* | | | 76 | *70* |
| EE | 39 | 41 | 40 | *40* | 0 | 0 | 59 | *59* |
| IE | | | | | 34 | 35 | 0 | *0* |
| EL | 0 | | | | | 9 | 36 | *43* |
| ES | 6 | 7 | 6 | *6* | | 46 | 5 | *4* |
| FR | 23 | 39 | 8 | *8* | 36 | 54 | 46 | *38* |
| HR | 0 | 0 | 0 | *0* | 7 | 4 | 25 | *20* |
| IT | 12 | 4 | | | | 52 | 4 | *4* |
| CY | 0 | 0 | 0 | *0* | | | 36 | *30* |
| LV | 49 | 91 | 97 | *97* | 0 | 2 | | |
| LT | 24 | 26 | 24 | *24* | 0 | 0 | 2 | *0* |
| LU | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| HU | 15 | 13 | 12 | *12* | 40 | 37 | 0 | *0* |
| MT | 0 | 0 | 0 | *0* | | | 38 | *31* |
| NL | 7 | 6 | 6 | *6* | 116 | 251 | | *11* |
| AT | 7 | 5 | 3 | *3* | 8 | 7 | 347 | *394* |
| PL | 45 | 32 | 43 | *43* | 90 | 104 | 7 | *7* |
| PT | 1 | 1 | 1 | *1* | 1 | 4 | 151 | *146* |
| RO | 8 | 5 | 4 | *4* | 91 | 106 | 9 | *5* |
| SI | 0 | 0 | 0 | *0* | 3 | 2 | 100 | *100* |
| SK | | 42 | 67 | | | | 4 | *2* |
| FI | 463 | 450 | 445 | *445* | 0 | 0 | | |
| SE | 82 | 70 | 54 | *54* | 45 | 63 | 0 | *0* |

Italics, blue: DG ENER estimates
source: Eurostat, Structural Business Statistics Survey (SBS), May 2022
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## 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 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | | 866 | 860 | *780* | | 96893 | 173000 | *174296* |
| | | | | | | | | |
| BE | 22 | | 17 | *15* | 301 | 851 | 726 | *734* |
| BG | 17 | 11 | 10 | *12* | 1091 | 1745 | 1625 | *2027* |
| CZ | 28 | 25 | 22 | *24* | 3267 | 10996 | 11894 | *11907* |
| DK | 5 | 3 | 6 | *8* | 1681 | 1745 | 1561 | *1516* |
| DE | 95 | 54 | 89 | *86* | 1722 | 2059 | 72797 | *72797* |
| EE | 5 | 5 | 6 | *6* | 223 | 230 | 248 | *346* |
| IE | | | | | 403 | 515 | 663 | *677* |
| EL | 7 | 40 | 35 | *34* | 10 | 7036 | 7760 | *7544* |
| ES | 18 | 14 | | *15* | 13098 | 14044 | 15003 | *14052* |
| FR | 52 | 43 | 21 | *18* | 14337 | 27062 | 29113 | *29717* |
| HR | 17 | 14 | 9 | *8* | 234 | 573 | 599 | *569* |
| IT | 328 | 281 | 259 | *250* | 4028 | 10775 | 9423 | *9423* |
| CY | | | 3 | *3* | 4 | 58 | 95 | *93* |
| LV | 13 | 16 | 14 | *10* | 381 | 533 | 522 | *503* |
| LT | 6 | 9 | 7 | *6* | 253 | 1488 | 1338 | *1252* |
| LU | 0 | 0 | 0 | *1* | 67 | 80 | 94 | *97* |
| HU | 9 | 8 | 8 | *6* | 611 | 610 | 1145 | *1258* |
| MT | | | | | | 3 | | *14* |
| NL | 42 | 45 | 38 | *46* | 678 | 1130 | 1731 | *2112* |
| AT | 4 | 5 | 5 | *5* | 1878 | 2390 | 2352 | *2200* |
| PL | 165 | 176 | 133 | *123* | 2047 | 3192 | 3581 | *3938* |
| PT | 10 | 18 | 20 | *17* | 745 | 1209 | 4501 | *5342* |
| RO | 54 | 44 | 49 | *46* | 885 | 1460 | 1039 | *1073* |
| SI | 3 | 4 | 3 | *3* | 648 | 1530 | 1375 | *1362* |
| SK | | | | | 294 | 451 | 597 | *592* |
| FI | 15 | 17 | 14 | *16* | 736 | 907 | 952 | *987* |
| SE | 45 | 34 | 25 | *22* | 1828 | 4221 | 2190 | *2164* |

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
### EU27_2020

| Mio € | 2015 | 2019 | 2020 |
|---|---|---|---|
| B05 - Mining of coal and lignite | *10602* | 7121 | *5774* |
| B06 - Extraction of crude petroleum and natural gas | 84723 | 29951 | *24307* |
| B0721 - Mining of uranium and thorium ores | | | |
| B0892 - Extraction of peat | 1288 | *1738* | *1335* |
| B091 - Support activities for petroleum and natural gas extraction | 4455 | 3176 | *4716* |
| C19 - Manufacture of coke and refined petroleum products | 330409 | 461595 | *295482* |
| D35 - Electricity, gas, steam and air conditioning supply | 1310101 | 1470000 | *1372050* |
| D351 - Electric power generation, transmission and distribution | 1076224 | 1221016 | *1144866* |
| D3511 - Production of electricity | 179021 | 535685 | *430173* |
| D3512 - Transmission of electricity | 15340 | 77963 | *64650* |
| D3513 - Distribution of electricity | 48033 | 140798 | *124431* |
| D3514 - Trade of electricity | 263846 | 466570 | *429939* |
| D352 - Manufacture of gas; distribution of gaseous fuels through mains | 185470 | 210000 | *200000* |
| D3521 - Manufacture of gas | 408 | 2418 | *2418* |
| D3522 - Distribution of gaseous fuels through mains | 11726 | 30962 | *23895* |
| D3523 - Trade of gas through mains | 76229 | 178746 | *159490* |
| D353 - Steam and air conditioning supply | 34939 | 36074 | *29694* |
| D3530 - Steam and air conditioning supply | 34939 | 36074 | *35336* |
| | | | |
| Broad sector - turnover reported | 1741579 | 1973580 | *1703664* |

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 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | *14838* | *10602* | 7121 | *5774* | | 84723 | 29951 | *24307* |
| | | | | | | | | |
| BE | | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| BG | 331 | 349 | | | 26 | 30 | | |
| CZ | 2812 | 1578 | 1336 | *1045* | | | | |
| DK | 0 | 0 | 0 | *0* | 7050 | 3896 | 1815 | *1100* |
| DE | 3921 | 2162 | | | 2762 | 2978 | 13720 | *5500* |
| EE | 0 | 0 | 0 | *0* | | 245 | 203 | *134* |
| IE | | | | | | | | |
| EL | | 93 | | *40* | | | | *65* |
| ES | 596 | 236 | | *17* | 80 | 126 | | *232* |
| FR | | 0 | 0 | *0* | 728 | | | |
| HR | | 0 | 0 | *0* | | | | *0* |
| IT | | 0 | 0 | *0* | 46241 | 46395 | 4840 | *4840* |
| CY | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| LV | 0 | 0 | 0 | *0* | | | | |
| LT | 0 | 0 | 0 | *0* | 69 | 39 | 32 | *18* |
| LU | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| HU | 7 | 9 | | *3* | 81 | 33 | 207 | *136* |
| MT | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| NL | 0 | 0 | 0 | *0* | 34862 | 26735 | 14369 | *8266* |
| AT | 0 | 0 | 0 | *0* | | | | |
| PL | 5974 | 5755 | 4686 | *3761* | | | 133 | |
| PT | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| RO | 358 | 21 | 10 | *12* | 4191 | 4246 | 1478 | *3971* |
| 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 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | *1 700* | 1 288 | *1 738* | *1 335* | | 4 455 | 3 176 | *4 716* |
| | | | | | | | | |
| BE | 0 | 0 | 0 | *0* | | | 0 | |
| BG | 1 | | | | | 0 | | |
| CZ | | 7 | 3 | *3* | 46 | | | |
| DK | | | | | | 633 | 1 288 | *598* |
| DE | 418 | 400 | 413 | *413* | | | 366 | *205* |
| EE | 77 | 84 | | *90* | 0 | 0 | 0 | *0* |
| IE | | | | | 74 | 10 | 22 | *22* |
| EL | 0 | | | | | 29 | 24 | *22* |
| ES | 11 | 10 | 11 | *11* | | 99 | 64 | *137* |
| FR | 74 | 52 | 44 | *44* | 302 | 266 | 314 | *322* |
| HR | 0 | 0 | 0 | *0* | | | 0 | |
| IT | 12 | 5 | | *5* | | 2 238 | 423 | *338* |
| CY | 0 | 0 | 0 | *0* | | | | |
| LV | 101 | 151 | 204 | *204* | | | | *0* |
| LT | 40 | 61 | | | 0 | 0 | 0 | *0* |
| LU | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| HU | 3 | 5 | 6 | *6* | 95 | 133 | 34 | *24* |
| MT | 0 | 0 | 0 | *0* | | | | |
| NL | | | | | | | | |
| AT | | | | | 14 | | | |
| PL | | | 68 | | 378 | 326 | | *293* |
| PT | | | | | | | | *1* |
| RO | 0 | 1 | 3 | *3* | 874 | 638 | 633 | *476* |
| SI | 0 | 0 | 0 | *0* | | | 2 | |
| SK | | 12 | 17 | | | | | |
| FI | 554 | 472 | 455 | *455* | 0 | 0 | 0 | *0* |
| SE | 31 | 29 | 17 | *17* | | 84 | 5 | *5* |

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 € | Manufacture of Coke and Refined Petroleum Products (C19) | | | | Electricity, Gas, Steam and Air Conditioning Supply (D35) | | | |
|---|---|---|---|---|---|---|---|---|
| | 2010 | 2015 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | *477437* | 330409 | 461595 | *295482* | *1116322* | 1310101 | 1470000 | *1372050* |
| | | | | | | | | |
| BE | 48074 | | 41444 | *25092* | 43772 | 36969 | 26439 | *24978* |
| BG | | | 4045 | | 7279 | 8357 | 8500 | *7955* |
| CZ | 4558 | | | | 37371 | 40927 | 52990 | *46173* |
| DK | | | | | 20378 | 21487 | 42620 | *36832* |
| DE | 120832 | 107408 | 102265 | *53389* | 426882 | 537677 | 625119 | *608980* |
| EE | 178 | 254 | 305 | *245* | 1834 | 1765 | 1966 | *1828* |
| IE | | | | | 7186 | 8013 | 10639 | *10433* |
| EL | 15340 | 14818 | 16689 | *10901* | 5943 | 19684 | 14829 | *14110* |
| ES | 34773 | 36051 | | *33460* | 59706 | 93787 | 93728 | *79635* |
| FR | 61248 | 39383 | 41865 | *27386* | 109649 | 110123 | 120099 | *114202* |
| HR | | | | | 3684 | 4359 | 3584 | *3912* |
| IT | 46038 | 35596 | 50198 | *41910* | 160950 | 195056 | 217027 | *191966* |
| CY | | | 4 | | 782 | 630 | 857 | *701* |
| LV | 1 | 8 | | | 2311 | 2082 | 2071 | *1756* |
| LT | | | | | 3279 | 2376 | 2607 | *2426* |
| LU | 0 | 0 | 0 | | 1951 | 4647 | 3879 | *3458* |
| HU | 8298 | 6529 | 9056 | *6691* | 22059 | 16727 | 15797 | *12050* |
| MT | | | | | | | | *653* |
| NL | 37272 | 34362 | 35684 | *23276* | 41197 | 31409 | 30793 | *28576* |
| AT | | 7226 | 9647 | *6354* | 29297 | 35906 | 47682 | *40483* |
| PL | 27575 | 27045 | 34748 | *25555* | 42567 | 47826 | 52537 | *52652* |
| PT | 6767 | 7131 | 8105 | *4671* | 17842 | 21119 | 21379 | *19335* |
| RO | 3272 | 3374 | 12247 | *2645* | 12078 | 13175 | 13872 | *13294* |
| SI | | | | | 4034 | 6076 | 7263 | *7012* |
| SK | | | | | 11351 | 11284 | 12725 | *12147* |
| FI | | | | | 14455 | 12422 | 14524 | *13240* |
| SE | | 11225 | 11948 | *8364* | 28486 | 26220 | 25472 | *23264* |

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 | 2019 | 2020 |
|---|---|---|---|
| B05 - Mining of coal and lignite | 148224 | 113936 | *97841* |
| B06 - Extraction of crude petroleum and natural gas | 56621 | 16340 | *26056* |
| B0721 - Mining of uranium and thorium ores | | | |
| B0892 - Extraction of peat | *10714* | 7088 | *150* |
| B091 - Support activities for petroleum and natural gas extraction | *36816* | *0* | *14778* |
| C19 - Manufacture of coke and refined petroleum products | *113733* | *0* | *120181* |
| D35 - Electricity, gas, steam and air conditioning supply | 1090709 | 1324869 | *1125535* |
| D351 - Electric power generation, transmission and distribution | 809201 | 870838 | *884073* |
| D3511 - Production of electricity | 222839 | 453077 | *453077* |
| D3512 - Transmission of electricity | 39376 | 39330 | *39330* |
| D3513 - Distribution of electricity | 111958 | 109222 | *198552* |
| D3514 - Trade of electricity | 46126 | 135247 | *135247* |
| D352 - Manufacture of gas; distribution of gaseous fuels through mains | 99864 | 91980 | *71323* |
| D3521 - Manufacture of gas | 918 | 10766 | *10766* |
| D3522 - Distribution of gaseous fuels through mains | 41664 | 33070 | *33070* |
| D3523 - Trade of gas through mains | 26052 | 21512 | *21512* |
| D353 - Steam and air conditioning supply | 143299 | 137029 | *80979* |
| D3530 - Steam and air conditioning supply | 143299 | 135799 | *135799* |
| | | | |
| Broad Sector - Employment Reported | 1456817 | 1462233 | *1384541* |

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 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | | 148224 | 113936 | *97841* | | 56621 | 16340 | *26056* |
| | | | | | | | | |
| BE | | 0 | 0 | *0* | | 56621 | 16340 | *26056* |
| BG | 13269 | 11995 | | | 0 | 0 | 0 | *0* |
| CZ | 24265 | 18716 | 13676 | *12450* | | | | |
| DK | 0 | 0 | 0 | *0* | | | | |
| DE | 33672 | 17468 | | | 566 | 1051 | 1565 | *1313* |
| EE | 0 | 0 | 0 | *0* | 3754 | 3927 | | |
| IE | | | | | | 3043 | 2197 | *1523* |
| EL | | 316 | | *273* | | | | |
| ES | 6105 | 1684 | | *276* | | | | *355* |
| FR | 28 | 2 | 0 | | 242 | 368 | | *196* |
| HR | | 0 | 0 | *0* | 814 | | | |
| IT | | 0 | 0 | *0* | | 7852 | 50 | *0* |
| CY | 0 | 0 | 0 | *0* | 12116 | 12681 | 2189 | *2189* |
| LV | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| LT | 0 | 0 | 0 | *0* | 1 | 20 | 12 | *13* |
| LU | 0 | 0 | 0 | *0* | 252 | 212 | 137 | *109* |
| HU | 111 | 124 | | *54* | 0 | 0 | 0 | *0* |
| MT | 0 | 0 | 0 | *0* | 75 | 68 | 129 | *114* |
| NL | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| AT | 0 | 0 | 0 | *0* | 3173 | 3913 | 2933 | *2868* |
| PL | 124925 | 96076 | 84324 | *84527* | | | | |
| PT | 0 | 0 | 0 | *0* | | | 562 | |
| RO | 18011 | 1843 | 548 | *261* | 0 | 0 | 0 | *0* |
| SI | | | | | 30546 | 23486 | 6566 | *17376* |
| SK | | | | | | | | |
| FI | 0 | 0 | 0 | *0* | 0 | | | *0* |
| SE | | | | | 0 | 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

## 3.2.3 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 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | | *10714* | 7088 | *150* | | *36816* | *0* | *14778* |
| | | | | | | | | |
| BE | 0 | 0 | 0 | *0* | | | 12 | |
| BG | 52 | 55 | | | 14 | 25 | 16 | *12* |
| CZ | | 71 | 40 | *40* | 421 | | | |
| DK | | | | | | 1587 | 2045 | *1835* |
| DE | 2003 | 1762 | 1654 | *1654* | | | 1553 | *1525* |
| EE | 1153 | 963 | | | 0 | 0 | 0 | *0* |
| IE | | | | | 35 | 29 | 112 | *115* |
| EL | 0 | | | | | 276 | 100 | *80* |
| ES | 48 | 36 | 40 | *40* | | 191 | 124 | *152* |
| FR | 248 | 130 | | | 110 | 386 | 457 | |
| HR | 0 | 0 | 0 | *0* | | 2273 | 5 | *5* |
| IT | 12 | 21 | | | | 2188 | 1580 | *1527* |
| CY | 0 | 0 | 0 | *0* | 0 | | | |
| LV | 1977 | 2158 | 2200 | *2200* | 0 | 2 | 1 | *0* |
| LT | 1126 | 1149 | | | 0 | 0 | 0 | *0* |
| LU | 0 | 0 | 0 | *0* | 0 | 0 | 0 | *0* |
| HU | 116 | 97 | 63 | *63* | 1089 | 1062 | 271 | *217* |
| MT | 0 | 0 | 0 | *0* | | | | |
| NL | 22 | 104 | 239 | *239* | | | | |
| AT | | | | | 27 | | | |
| PL | | | 671 | | 4082 | 4638 | | *3913* |
| PT | | | | | | | | *11* |
| RO | 26 | 25 | 48 | *48* | 6267 | 6771 | 5306 | *5127* |
| SI | 0 | 0 | 0 | *0* | | | | |
| SK | | 114 | 112 | | | | | |
| FI | 1845 | 1977 | 1923 | *1923* | 0 | 0 | 0 | *0* |
| SE | 306 | 165 | 98 | *98* | | 75 | 49 | *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 | 2019 | 2020 | 2010 | 2015 | 2019 | 2020 |
| EU27_2020 | | *113733* | *0* | *120181* | | 1090709 | 1324869 | *1125535* |
| | | | | | | | | |
| BE | 4091 | | 5999 | *4548* | 19193 | 20293 | 22460 | *18086* |
| BG | | 2078 | 2460 | *2474* | 34191 | 31751 | 31525 | *31368* |
| CZ | 2747 | | | | 31480 | 34536 | 40468 | *40197* |
| DK | | | | | 11235 | 13815 | 11330 | *12378* |
| DE | 19452 | 22302 | 22401 | *21946* | 221264 | 224669 | 387355 | *401068* |
| EE | 1406 | 1679 | 1270 | *1193* | 5681 | 4949 | 4834 | *4813* |
| IE | | | | | 9117 | 8846 | 9562 | *9577* |
| EL | 4333 | 3588 | 5404 | *4807* | 22834 | 25764 | 31556 | *29977* |
| ES | 8954 | 8453 | | *13061* | 48687 | 39764 | 47311 | *43721* |
| FR | 15095 | | | | 170194 | 190364 | 211814 | |
| HR | | 262 | 9594 | *9006* | 16619 | 14893 | 14685 | *14671* |
| IT | 16493 | 11065 | 11881 | *11666* | 86414 | 89109 | 90618 | *91444* |
| CY | | | 38 | | 2470 | 2130 | 2219 | *2214* |
| LV | 12 | 65 | 55 | *26* | 10907 | 11344 | 9882 | *9650* |
| LT | | | | | 15876 | 13522 | 12220 | *11906* |
| LU | 0 | 0 | 0 | | 1196 | 1529 | 1772 | *1835* |
| HU | 6329 | 5691 | 11712 | *10548* | 25715 | 24601 | 27807 | *32566* |
| MT | | | | | | 10 | | *226* |
| NL | 5908 | 5299 | 5647 | *5579* | 22882 | 27969 | 28737 | *29353* |
| AT | | 1180 | 2217 | *2512* | 28685 | 29168 | 32186 | *32638* |
| PL | 13623 | 13495 | 20864 | *21027* | 162409 | 128183 | 152010 | *151824* |
| PT | 1971 | 1830 | 1871 | *1846* | 9496 | 9589 | 13357 | *14299* |
| RO | 3960 | 2560 | 20489 | *2161* | 81111 | 72333 | 65342 | *64385* |
| SI | | 26 | | | 8207 | 8958 | 8637 | *8624* |
| SK | | | | | 20034 | 17873 | 17597 | *17245* |
| FI | | | | | 13463 | 13368 | 13665 | *14136* |
| SE | | 2879 | 3385 | | 31115 | 31379 | 35920 | *37334* |

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 | 2017 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 9563.5 | 10979.5 | 12211.5 | 13076.9 | 14016.5 | 13411.8 |
| | | | | | | |
| BE | 310.0 | 363.1 | 416.7 | 445.1 | 478.2 | 456.7 |
| BG | 24.0 | 38.1 | 45.7 | 52.5 | 61.6 | 61.3 |
| CZ | 110.3 | 157.9 | 169.6 | 194.1 | 225.6 | 215.8 |
| DK | 212.8 | 243.2 | 273.0 | 294.8 | 309.5 | 311.8 |
| DE | 2288.3 | 2564.4 | 3026.2 | 3267.2 | 3473.3 | 3405.4 |
| EE | 11.3 | 14.9 | 20.8 | 23.8 | 27.7 | 26.8 |
| IE | 170.2 | 167.7 | 262.9 | 297.8 | 356.7 | 372.8 |
| EL | 199.2 | 224.1 | 176.1 | 176.9 | 183.3 | 165.3 |
| ES | 927.4 | 1072.7 | 1077.6 | 1161.9 | 1244.4 | 1121.9 |
| FR | 1765.9 | 1995.3 | 2198.4 | 2297.2 | 2437.6 | 2310.5 |
| HR | 36.5 | 45.2 | 44.6 | 49.9 | 55.6 | 50.2 |
| IT | 1493.6 | 1611.3 | 1655.4 | 1736.6 | 1796.6 | 1657.0 |
| CY | 15.0 | 19.4 | 17.9 | 20.2 | 23.0 | 21.6 |
| LV | 13.8 | 17.9 | 24.6 | 27.0 | 30.6 | 29.5 |
| LT | 21.0 | 28.0 | 37.3 | 42.3 | 48.9 | 49.5 |
| LU | 30.0 | 40.2 | 52.1 | 58.2 | 62.7 | 64.2 |
| HU | 90.9 | 99.6 | 112.7 | 127.0 | 146.1 | 137.4 |
| MT | 5.2 | 6.8 | 10.0 | 11.9 | 14.0 | 13.1 |
| NL | 550.9 | 639.2 | 690.0 | 738.1 | 813.1 | 796.5 |
| AT | 254.1 | 295.9 | 344.3 | 369.4 | 397.5 | 379.3 |
| PL | 246.2 | 362.2 | 430.5 | 467.4 | 533.6 | 526.4 |
| PT | 158.6 | 179.6 | 179.7 | 195.9 | 214.4 | 200.1 |
| RO | 79.2 | 125.5 | 160.1 | 187.8 | 223.2 | 218.9 |
| SI | 29.1 | 36.4 | 38.9 | 43.0 | 48.4 | 46.9 |
| SK | 39.4 | 68.2 | 79.8 | 84.4 | 94.0 | 92.1 |
| FI | 164.7 | 188.1 | 211.4 | 226.3 | 239.9 | 238.0 |
| SE | 315.8 | 374.7 | 455.5 | 480.0 | 476.9 | 480.6 |

* 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 | 2017 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 22.0 | 24.9 | 27.5 | 29.4 | 31.4 | 30.0 |
| | | | | | | |
| BE | 29.7 | 33.5 | 37.1 | 39.2 | 41.7 | 39.6 |
| BG | 3.1 | 5.1 | 6.3 | 7.4 | 8.8 | 8.8 |
| CZ | 10.8 | 15.1 | 16.1 | 18.4 | 21.2 | 20.2 |
| DK | 39.3 | 43.9 | 48.2 | 51.3 | 53.3 | 53.5 |
| DE | 27.7 | 31.3 | 37.3 | 39.6 | 41.8 | 40.9 |
| EE | 8.3 | 11.1 | 15.8 | 18.1 | 20.9 | 20.2 |
| IE | 41.4 | 36.9 | 56.2 | 62.2 | 72.7 | 75.1 |
| EL | 18.2 | 20.2 | 16.2 | 16.4 | 17.1 | 15.4 |
| ES | 21.4 | 23.1 | 23.2 | 25.0 | 26.5 | 23.7 |
| FR | 28.1 | 30.9 | 33.1 | 34.4 | 36.3 | 34.3 |
| HR | 8.5 | 10.5 | 10.6 | 12.0 | 13.6 | 12.4 |
| IT | 25.8 | 27.2 | 27.2 | 28.7 | 30.0 | 27.8 |
| CY | 20.5 | 23.7 | 21.1 | 23.7 | 26.3 | 24.3 |
| LV | 6.1 | 8.4 | 12.4 | 13.8 | 16.0 | 15.4 |
| LT | 6.3 | 8.9 | 12.8 | 14.8 | 17.5 | 17.7 |
| LU | 65.1 | 80.0 | 92.5 | 98.5 | 102.1 | 102.6 |
| HU | 9.0 | 9.9 | 11.4 | 13.0 | 15.0 | 14.1 |
| MT | 12.8 | 16.5 | 22.7 | 25.9 | 28.5 | 25.4 |
| NL | 33.8 | 38.6 | 40.8 | 43.2 | 47.0 | 45.8 |
| AT | 31.0 | 35.4 | 40.1 | 42.1 | 44.9 | 42.6 |
| PL | 6.4 | 9.5 | 11.3 | 12.3 | 14.1 | 13.9 |
| PT | 15.1 | 17.0 | 17.3 | 19.0 | 20.9 | 19.4 |
| RO | 3.7 | 6.2 | 8.1 | 9.6 | 11.5 | 11.3 |
| SI | 14.6 | 17.8 | 18.8 | 20.8 | 23.3 | 22.4 |
| SK | 7.3 | 12.6 | 14.7 | 15.5 | 17.3 | 16.9 |
| FI | 31.4 | 35.2 | 38.6 | 41.1 | 43.5 | 43.1 |
| SE | 35.0 | 40.1 | 46.7 | 48.0 | 46.6 | 46.5 |

* 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 | 2017 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 11059.8 | 11620.5 | 12211.5 | 12810.6 | 13313.0 | 12531.4 |
| | | | | | | |
| BE | 362.9 | 390.6 | 416.7 | 428.8 | 445.9 | 420.6 |
| BG | 35.7 | 41.8 | 45.7 | 48.5 | 51.8 | 49.5 |
| CZ | 137.9 | 155.9 | 169.6 | 182.8 | 194.5 | 183.8 |
| DK | 253.4 | 256.1 | 273.0 | 289.8 | 300.0 | 294.0 |
| DE | 2624.6 | 2783.2 | 3026.2 | 3176.6 | 3241.6 | 3121.8 |
| EE | 17.9 | 17.7 | 20.8 | 22.5 | 24.4 | 23.7 |
| IE | 185.7 | 189.6 | 262.9 | 292.4 | 334.6 | 355.3 |
| EL | 219.9 | 216.3 | 176.1 | 177.4 | 183.6 | 167.1 |
| ES | 1028.7 | 1079.0 | 1077.6 | 1143.3 | 1193.8 | 1064.6 |
| FR | 2005.2 | 2088.8 | 2198.4 | 2273.4 | 2358.5 | 2174.9 |
| HR | 43.8 | 45.1 | 44.6 | 48.4 | 51.5 | 47.3 |
| IT | 1737.6 | 1712.8 | 1655.4 | 1704.7 | 1729.1 | 1573.1 |
| CY | 17.1 | 19.5 | 17.9 | 20.2 | 22.4 | 21.3 |
| LV | 21.1 | 20.6 | 24.6 | 26.0 | 27.7 | 26.7 |
| LT | 29.2 | 31.0 | 37.3 | 39.9 | 43.4 | 43.4 |
| LU | 40.0 | 45.2 | 52.1 | 57.6 | 60.7 | 59.6 |
| HU | 102.3 | 101.7 | 112.7 | 120.2 | 132.4 | 126.5 |
| MT | 6.6 | 7.7 | 10.0 | 11.5 | 12.9 | 11.8 |
| NL | 620.7 | 664.8 | 690.0 | 725.7 | 757.3 | 727.9 |
| AT | 306.1 | 326.7 | 344.3 | 359.0 | 373.5 | 348.4 |
| PL | 294.6 | 372.2 | 430.5 | 465.4 | 513.6 | 502.6 |
| PT | 182.0 | 187.4 | 179.7 | 189.8 | 200.4 | 183.5 |
| RO | 121.0 | 139.1 | 160.1 | 180.0 | 195.9 | 188.5 |
| SI | 34.7 | 38.1 | 38.9 | 42.0 | 45.3 | 43.4 |
| SK | 55.3 | 70.3 | 79.8 | 83.9 | 89.3 | 85.4 |
| FI | 201.1 | 210.6 | 211.4 | 224.3 | 229.6 | 224.5 |
| SE | 374.5 | 409.1 | 455.5 | 476.9 | 495.8 | 485.1 |

*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 | 2017 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 25.5 | 26.4 | 27.5 | 28.8 | 29.8 | 28.0 |
| | | | | | | |
| BE | 34.7 | 36.0 | 37.1 | 37.8 | 38.9 | 36.5 |
| BG | 4.6 | 5.6 | 6.3 | 6.8 | 7.4 | 7.1 |
| CZ | 13.5 | 14.9 | 16.1 | 17.3 | 18.3 | 17.2 |
| DK | 46.8 | 46.3 | 48.2 | 50.4 | 51.7 | 50.5 |
| DE | 31.8 | 34.0 | 37.3 | 38.5 | 39.0 | 37.5 |
| EE | 13.2 | 13.2 | 15.8 | 17.1 | 18.4 | 17.8 |
| IE | 45.2 | 41.7 | 56.2 | 61.1 | 68.2 | 71.6 |
| EL | 20.0 | 19.5 | 16.2 | 16.5 | 17.1 | 15.6 |
| ES | 23.8 | 23.2 | 23.2 | 24.6 | 25.4 | 22.5 |
| FR | 31.9 | 32.3 | 33.1 | 34.0 | 35.1 | 32.3 |
| HR | 10.2 | 10.5 | 10.6 | 11.6 | 12.6 | 11.7 |
| IT | 30.0 | 28.9 | 27.2 | 28.1 | 28.9 | 26.4 |
| CY | 23.3 | 23.8 | 21.1 | 23.6 | 25.6 | 24.0 |
| LV | 9.4 | 9.7 | 12.4 | 13.3 | 14.4 | 14.0 |
| LT | 8.7 | 9.9 | 12.8 | 14.0 | 15.5 | 15.5 |
| LU | 86.8 | 90.0 | 92.5 | 97.5 | 98.8 | 95.2 |
| HU | 10.1 | 10.2 | 11.4 | 12.3 | 13.6 | 13.0 |
| MT | 16.4 | 18.6 | 22.7 | 24.9 | 26.1 | 23.0 |
| NL | 38.1 | 40.1 | 40.8 | 42.5 | 43.8 | 41.8 |
| AT | 37.3 | 39.1 | 40.1 | 40.9 | 42.2 | 39.1 |
| PL | 7.7 | 9.8 | 11.3 | 12.3 | 13.5 | 13.2 |
| PT | 17.3 | 17.7 | 17.3 | 18.4 | 19.5 | 17.8 |
| RO | 5.7 | 6.9 | 8.1 | 9.2 | 10.1 | 9.8 |
| SI | 17.4 | 18.6 | 18.8 | 20.3 | 21.8 | 20.7 |
| SK | 10.3 | 13.0 | 14.7 | 15.4 | 16.4 | 15.6 |
| FI | 38.4 | 39.4 | 38.6 | 40.8 | 41.6 | 40.6 |
| SE | 41.6 | 43.8 | 46.7 | 47.7 | 48.5 | 47.0 |

* 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 | 2017 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 434 416.3 | 440 660.4 | 443 666.8 | 445 534.4 | 446 446.4 | 447 319.9 |
| | | | | | | |
| BE | 10 445.9 | 10 839.9 | 11 237.3 | 11 351.7 | 11 455.5 | 11 522.4 |
| BG | 7 688.6 | 7 421.8 | 7 202.2 | 7 101.9 | 7 000.0 | 6 951.5 |
| CZ | 10 198.9 | 10 462.1 | 10 538.3 | 10 578.8 | 10 649.8 | 10 693.9 |
| DK | 5 411.4 | 5 534.7 | 5 659.7 | 5 748.8 | 5 806.1 | 5 822.8 |
| DE | 82 500.8 | 81 802.3 | 81 197.5 | 82 521.7 | 83 019.2 | 83 166.7 |
| EE | 1 358.9 | 1 333.3 | 1 314.9 | 1 315.6 | 1 324.8 | 1 329.0 |
| IE | 4 111.7 | 4 549.4 | 4 677.6 | 4 784.4 | 4 904.2 | 4 964.4 |
| EL | 10 969.9 | 11 119.3 | 10 858.0 | 10 768.2 | 10 724.6 | 10 718.6 |
| ES | 43 296.3 | 46 486.6 | 46 449.6 | 46 528.0 | 46 937.1 | 47 332.6 |
| FR | 62 772.9 | 64 658.9 | 66 458.2 | 66 809.8 | 67 177.6 | 67 320.2 |
| HR | 4 310.9 | 4 302.8 | 4 225.3 | 4 154.2 | 4 076.2 | 4 058.2 |
| IT | 57 874.8 | 59 190.1 | 60 795.6 | 60 589.4 | 59 816.7 | 59 641.5 |
| CY | 733.1 | 819.1 | 847.0 | 854.8 | 875.9 | 888.0 |
| LV | 2 249.7 | 2 120.5 | 1 986.1 | 1 950.1 | 1 920.0 | 1 907.7 |
| LT | 3 355.2 | 3 142.0 | 2 921.3 | 2 847.9 | 2 794.2 | 2 794.1 |
| LU | 461.2 | 502.1 | 563.0 | 590.7 | 613.9 | 626.1 |
| HU | 10 097.5 | 10 014.3 | 9 855.6 | 9 797.6 | 9 772.8 | 9 769.5 |
| MT | 402.7 | 414.0 | 439.7 | 460.3 | 493.6 | 514.6 |
| NL | 16 305.5 | 16 575.0 | 16 900.7 | 17 081.5 | 17 282.2 | 17 407.6 |
| AT | 8 201.4 | 8 351.6 | 8 584.9 | 8 772.9 | 8 858.8 | 8 901.1 |
| PL | 38 173.8 | 38 022.9 | 38 005.6 | 37 973.0 | 37 972.8 | 37 958.1 |
| PT | 10 494.7 | 10 573.5 | 10 374.8 | 10 309.6 | 10 276.6 | 10 295.9 |
| RO | 21 382.4 | 20 294.7 | 19 870.6 | 19 643.9 | 19 414.5 | 19 328.8 |
| SI | 1 997.6 | 2 047.0 | 2 062.9 | 2 065.9 | 2 080.9 | 2 095.9 |
| SK | 5 372.7 | 5 390.4 | 5 421.3 | 5 435.3 | 5 450.4 | 5 457.9 |
| FI | 5 236.6 | 5 351.4 | 5 471.8 | 5 503.3 | 5 517.9 | 5 525.3 |
| SE | 9 011.4 | 9 340.7 | 9 747.4 | 9 995.2 | 10 230.2 | 10 327.6 |

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 | 2017 | 2019 | 2020 |
|---|---|---|---|---|
| B05 - Mining of coal and lignite | 288.6 | 256.5 | 249.3 | 245.3 |
| B06 - Extraction of crude petroleum and natural gas | 64.3 | 57.0 | 54.7 | 57.2 |
| B0892 - Extraction of peat* | *10.7* | 7.1 | *0.2* | *0.2* |
| B091 - Support activities for petroleum and natural gas extraction* | *36.8* | *0.0* | 14.8 | *14.8* |
| C19 - Manufacture of coke and refined petroleum products | *160.7* | *164.3* | 165.7 | 160.1 |
| D35 - Electricity, gas, steam and air conditioning supply | 1 370.6 | 1 361.9 | 1 409.9 | 1 464.3 |
| | | | | |
| Broad Sector - Total Employment** | 1 931.7 | 1 846.8 | 1 894.5 | *1 941.8* |

*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 | 2017 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 68.8 | 69.7 | 71.5 | 72.4 | 73.2 | 72.3 |
| | | | | | | |
| BE | 66.7 | 67.7 | 67.7 | 68.0 | 69.1 | 68.4 |
| BG | 62.1 | 66.5 | 69.2 | 71.2 | 73.1 | 72.1 |
| CZ | 70.4 | 70.2 | 74.0 | 75.9 | 76.7 | 76.4 |
| DK | 79.8 | 78.0 | 76.9 | 77.9 | 79.1 | 79 |
| DE | 73.8 | 75.4 | 76.4 | 77.0 | 78.0 | 77.3 |
| EE | 70.7 | 74.6 | 77.0 | 79.2 | 79.2 | 79.6 |
| IE | 73.9 | 71.6 | 72.0 | 72.6 | 73.2 | 70.8 |
| EL | 66.4 | 67.7 | 67.7 | 68.2 | 68.5 | 65.3 |
| ES | 70.0 | 73.5 | 74.3 | 73.9 | 73.8 | 72.2 |
| FR | 69.7 | 71.0 | 72.2 | 72.4 | 72.6 | 72 |
| HR | 63.3 | 65.1 | 66.9 | 66.4 | 66.5 | 67.1 |
| IT | 62.5 | 61.6 | 63.8 | 65.3 | 65.7 | 63.5 |
| CY | 72.4 | 73.6 | 73.9 | 73.9 | 76.0 | 75.8 |
| LV | 69.1 | 72.7 | 75.7 | 76.9 | 77.3 | 78 |
| LT | 68.7 | 70.2 | 74.1 | 75.9 | 78.0 | 78.5 |
| LU | 66.6 | 68.2 | 70.9 | 70.2 | 72.0 | 72.2 |
| HU | 61.3 | 64.0 | 70.5 | 73.1 | 74.7 | 75.1 |
| MT | 57.6 | 60.4 | 68.8 | 72.2 | 75.9 | 77.1 |
| NL | 75.1 | 80.4 | 82.1 | 82.2 | 83.4 | 83.4 |
| AT | 71.4 | 74.7 | 75.8 | 76.8 | 77.3 | 76.4 |
| PL | 64.4 | 63.4 | 66.8 | 68.7 | 69.9 | 70.1 |
| PT | 73.2 | 71.5 | 72.3 | 73.8 | 74.9 | 73.8 |
| RO | 62.3 | 57.4 | 59.9 | 61.8 | 63.3 | 64.1 |
| SI | 70.7 | 70.8 | 71.2 | 73.6 | 74.6 | 73.8 |
| SK | 68.9 | 70.5 | 72.9 | 74.1 | 74.7 | 74.5 |
| FI | 74.7 | 73.5 | 74.8 | 75.8 | 77.3 | 77.3 |
| SE | 78.2 | 78.6 | 81.4 | 82.1 | 82.5 | 82.1 |

*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 | 2017 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 9.6 | 9.8 | 10.0 | 8.1 | 6.7 | 7.1 |
| | | | | | | |
| BE | 8.5 | 8.3 | 8.5 | 7.1 | 5.4 | 5.6 |
| BG | 10.1 | 10.3 | 9.2 | 6.2 | 4.2 | 5.1 |
| CZ | 7.9 | 7.3 | 5.1 | 2.9 | 2.0 | 2.6 |
| DK | 4.8 | 7.7 | 6.3 | 5.8 | 5.0 | 5.6 |
| DE | 11.2 | 7.0 | 4.6 | 3.8 | 3.1 | 3.8 |
| EE | 8.0 | 16.7 | 6.2 | 5.8 | 4.4 | 6.8 |
| IE | 4.6 | 14.6 | 10.0 | 6.7 | 5.0 | 5.7 |
| EL | 10.0 | 12.7 | 24.9 | 21.5 | 17.3 | 16.3 |
| ES | 9.2 | 19.9 | 22.1 | 17.2 | 14.1 | 15.5 |
| FR | 8.5 | 8.9 | 10.1 | 9.1 | 8.1 | 7.8 |
| HR | 12.8 | 11.7 | 16.2 | 11.2 | 6.6 | 7.5 |
| IT | 7.7 | 8.4 | 11.9 | 11.2 | 10.0 | 9.2 |
| CY | 5.3 | 6.3 | 15.0 | 11.1 | 7.1 | 7.6 |
| LV | 10.0 | 19.5 | 9.9 | 8.7 | 6.3 | 8.1 |
| LT | 8.3 | 17.8 | 9.1 | 7.1 | 6.3 | 8.5 |
| LU | 4.5 | 4.4 | 6.7 | 5.5 | 5.6 | 6.8 |
| HU | 7.2 | 11.2 | 6.8 | 4.2 | 3.4 | 4.3 |
| MT | 6.9 | 6.9 | 5.4 | 4.0 | 3.6 | 4.3 |
| NL | 5.9 | 5.0 | 6.9 | 4.9 | 3.4 | 3.8 |
| AT | 5.6 | 4.8 | 5.7 | 5.5 | 4.5 | 5.4 |
| PL | 17.8 | 9.7 | 7.5 | 4.9 | 3.3 | 3.2 |
| PT | 7.7 | 11.0 | 12.6 | 9.0 | 6.5 | 6.9 |
| RO | 7.2 | 7.0 | 6.8 | 4.9 | 3.9 | 5 |
| SI | 6.5 | 7.3 | 9.0 | 6.6 | 4.5 | 5 |
| SK | 16.3 | 14.4 | 11.5 | 8.1 | 5.8 | 6.7 |
| FI | 8.4 | 8.4 | 9.4 | 8.6 | 6.7 | 7.8 |
| SE | 7.5 | 8.6 | 7.4 | 6.7 | 6.8 | 8.3 |

*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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 4900.6 | 4632.9 | 4276.2 | 3924.4 | 3734.5 | 3354.1 |
| Index1990 | 100.0% | 94.5% | 87.3% | 80.1% | 76.2% | 68.4% |
| | | | | | | |
| BE | 148.8 | 149.1 | 137.9 | 123.4 | 121.7 | 110.1 |
| BG | 99.1 | 62.6 | 59.8 | 62.8 | 60.2 | 49.6 |
| CZ | 199.5 | 150.2 | 141.5 | 129.9 | 124.8 | 113.7 |
| DK | 72.9 | 69.6 | 66.2 | 51.6 | 47.6 | 42.7 |
| DE | 1254.0 | 1009.7 | 960.2 | 922.7 | 829.6 | 742.5 |
| EE | 40.3 | 19.3 | 21.3 | 18.2 | 14.8 | 11.6 |
| IE | 55.5 | 72.8 | 64.3 | 63.0 | 63.2 | 58.9 |
| EL | 105.9 | 139.0 | 121.1 | 98.3 | 89.6 | 76.2 |
| ES | 294.9 | 454.0 | 370.9 | 352.1 | 333.0 | 281.2 |
| FR | 553.0 | 567.3 | 523.7 | 475.6 | 453.7 | 401.1 |
| HR | 31.9 | 29.9 | 28.2 | 24.7 | 25.2 | 23.9 |
| IT | 524.2 | 599.5 | 526.7 | 451.4 | 430.9 | 385.1 |
| CY | 6.3 | 10.1 | 10.3 | 9.1 | 9.9 | 9.2 |
| LV | 26.1 | 11.1 | 12.2 | 11.1 | 11.6 | 10.6 |
| LT | 48.3 | 22.9 | 20.9 | 20.6 | 20.7 | 20.3 |
| LU | 13.1 | 14.3 | 13.5 | 11.7 | 12.5 | 10.7 |
| HU | 95.3 | 77.5 | 66.7 | 62.1 | 65.4 | 63.1 |
| MT | 2.8 | 3.2 | 3.2 | 2.5 | 2.7 | 2.3 |
| NL | 225.2 | 223.9 | 222.3 | 204.6 | 192.3 | 171.0 |
| AT | 79.3 | 94.0 | 86.2 | 80.6 | 82.7 | 74.6 |
| PL | 476.5 | 406.1 | 414.4 | 391.0 | 393.8 | 377.4 |
| PT | 60.0 | 88.1 | 71.6 | 70.9 | 68.0 | 59.2 |
| RO | 250.5 | 147.3 | 123.4 | 115.5 | 114.4 | 110.1 |
| SI | 18.6 | 20.5 | 19.7 | 16.9 | 17.2 | 15.9 |
| SK | 73.5 | 50.7 | 45.8 | 40.9 | 40.0 | 37.1 |
| FI | 72.2 | 71.2 | 77.3 | 57.0 | 55.4 | 48.7 |
| SE | 72.8 | 68.8 | 66.9 | 56.3 | 53.5 | 47.2 |

*GHG emissions without LULUCF, with indirect $CO_2$ and including international aviation
Source: EEA, June 2022, Eurostat 2022
Methodology and Notes: see appendices

## 4.1.1 Greenhouse gas (GHG) Emissions

### GHG EMISSIONS - ENERGY

| [Million ton $CO_2$ equiv.] | 2020 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *of which:* | | | | | | | |
| | Energy | Energy Industries | Manufacturing Industries and Construction | Transport | Commercial/Institutional | Residential | Agriculture/Forestry/Fisheries | Other Sectors | Other Combustion and Fugitive Emissions |
| EU27_2020 | 2 488.1 | 781.0 | 405.7 | 721.3 | 117.2 | 317.7 | 76.9 | 6.4 | 61.9 |
| Share [%] | 100.0 % | 31.4 % | 16.3 % | 29.0 % | 4.7 % | 12.8 % | 3.1 % | 0.3 % | 2.5 % |
| | | | | | | | | | |
| BE | 77.0 | 19.0 | 13.1 | 21.7 | 5.2 | 14.7 | 2.6 | 0.1 | 0.6 |
| BG | 35.1 | 18.2 | 4.0 | 9.4 | 0.3 | 1.0 | 0.5 | 0.0 | 1.6 |
| CZ | 84.6 | 41.6 | 10.2 | 17.8 | 2.7 | 8.4 | 1.3 | 0.3 | 2.3 |
| DK | 27.1 | 7.4 | 3.6 | 12.0 | 0.7 | 1.7 | 1.3 | 0.2 | 0.2 |
| DE | 608.4 | 212.5 | 116.4 | 147.2 | 27.8 | 90.8 | 6.3 | 0.7 | 6.7 |
| EE | 9.5 | 5.8 | 0.5 | 2.2 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 |
| IE | 33.2 | 8.6 | 4.5 | 10.3 | 1.8 | 7.1 | 0.7 | 0.0 | 0.1 |
| EL | 51.6 | 24.5 | 4.5 | 15.4 | 0.6 | 5.2 | 0.8 | 0.3 | 0.4 |
| ES | 199.3 | 43.6 | 40.2 | 74.3 | 9.2 | 16.1 | 11.8 | 0.4 | 3.7 |
| FR | 264.7 | 37.1 | 42.2 | 109.5 | 19.9 | 40.0 | 11.4 | 1.5 | 3.2 |
| HR | 15.5 | 3.7 | 2.4 | 5.8 | 0.6 | 1.9 | 0.8 | 0.0 | 0.4 |
| IT | 298.9 | 81.8 | 45.9 | 85.4 | 23.9 | 47.4 | 7.9 | 0.6 | 6.0 |
| CY | 6.4 | 3.0 | 0.9 | 1.9 | 0.1 | 0.3 | 0.1 | 0.0 | : |
| LV | 6.8 | 1.4 | 0.7 | 3.1 | 0.4 | 0.6 | 0.5 | 0.0 | 0.1 |
| LT | 11.8 | 2.6 | 1.2 | 6.1 | 0.3 | 0.9 | 0.2 | 0.0 | 0.4 |
| LU | 7.6 | 0.2 | 1.1 | 4.7 | 0.6 | 1.0 | 0.0 | 0.0 | 0.0 |
| HU | 44.4 | 12.3 | 5.0 | 12.6 | 2.8 | 8.1 | 1.7 | 0.1 | 1.8 |
| MT | 1.6 | 0.8 | 0.1 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 134.8 | 47.8 | 27.3 | 26.3 | 6.4 | 15.4 | 10.0 | 0.2 | 1.4 |
| AT | 49.9 | 8.8 | 10.5 | 21.2 | 1.3 | 6.7 | 1.0 | 0.0 | 0.3 |
| PL | 305.3 | 139.8 | 29.2 | 63.2 | 6.0 | 33.8 | 11.9 | 0.0 | 21.4 |
| PT | 38.5 | 10.4 | 7.6 | 14.8 | 1.0 | 2.2 | 1.4 | 0.1 | 1.1 |
| RO | 72.8 | 18.3 | 14.8 | 18.4 | 2.1 | 8.4 | 1.6 | 0.7 | 8.6 |
| SI | 12.5 | 4.5 | 1.7 | 4.6 | 0.3 | 0.8 | 0.2 | 0.0 | 0.4 |
| SK | 24.6 | 6.4 | 5.9 | 7.1 | 1.2 | 3.1 | 0.4 | 0.1 | 0.4 |
| FI | 34.3 | 13.1 | 6.2 | 10.4 | 1.1 | 1.1 | 1.2 | 0.9 | 0.1 |
| SE | 31.8 | 7.5 | 6.1 | 15.4 | 0.6 | 0.5 | 1.2 | 0.0 | 0.5 |

Source: EEA, June 2022, Eurostat 2022
Methodology and Notes: see appendices

## 4.1.1 Greenhouse gas (GHG) Emissions

### GHG EMISSIONS - NOT ENERGY RELATED

| | 2020 | | | | | |
|---|---|---|---|---|---|---|
| | GHG emissions other than from energy | of which: | | | | International aviation |
| [Million ton $CO_2$ equiv.] | | Industrial Processes and Product Use | Agriculture | Waste and Others | Indirect $CO_2$ | |
| EU27_2020 | 810.1 | 313.9 | 382.4 | 112.3 | 1.5 | 55.9 |
| Share [%] | 100.0 % | 38.7 % | 47.2 % | 13.9 % | 0.2 % | |
| | | | | | | |
| BE | 29.4 | 18.9 | 9.3 | 1.2 | 0.0 | 3.6 |
| BG | 14.1 | 5.3 | 6.2 | 2.6 | 0.0 | 0.4 |
| CZ | 28.8 | 15.2 | 7.8 | 5.1 | 0.5 | 0.4 |
| DK | 14.6 | 1.9 | 11.3 | 1.2 | 0.2 | 1.0 |
| DE | 120.3 | 55.5 | 56.1 | 8.8 | 0.0 | 13.8 |
| EE | 2.1 | 0.3 | 1.5 | 0.3 | 0.0 | 0.1 |
| IE | 24.6 | 2.9 | 20.8 | 0.9 | 0.0 | 1.2 |
| EL | 23.2 | 10.5 | 7.8 | 4.9 | 0.0 | 1.3 |
| ES | 75.4 | 23.7 | 38.5 | 13.2 | 0.0 | 6.5 |
| FR | 128.2 | 40.2 | 70.4 | 17.7 | 0.0 | 8.1 |
| HR | 8.2 | 3.8 | 2.7 | 1.8 | 0.0 | 0.2 |
| IT | 82.3 | 31.0 | 32.7 | 18.6 | 0.0 | 3.8 |
| CY | 2.5 | 1.3 | 0.6 | 0.6 | 0.0 | 0.3 |
| LV | 3.7 | 0.9 | 2.3 | 0.5 | 0.0 | 0.2 |
| LT | 8.4 | 3.1 | 4.5 | 0.8 | 0.0 | 0.2 |
| LU | 1.4 | 0.6 | 0.7 | 0.1 | 0.0 | 1.7 |
| HU | 18.4 | 7.7 | 7.3 | 3.4 | 0.0 | 0.3 |
| MT | 0.5 | 0.3 | 0.1 | 0.2 | 0.0 | 0.2 |
| NL | 29.6 | 8.8 | 17.7 | 2.7 | 0.4 | 6.7 |
| AT | 23.7 | 15.5 | 7.0 | 1.2 | 0.0 | 1.1 |
| PL | 70.7 | 25.1 | 34.3 | 11.3 | 0.0 | 1.4 |
| PT | 19.1 | 7.6 | 7.0 | 4.4 | 0.1 | 1.6 |
| RO | 37.1 | 12.9 | 18.3 | 5.9 | 0.0 | 0.1 |
| SI | 3.3 | 1.2 | 1.7 | 0.4 | 0.0 | 0.0 |
| SK | 12.4 | 8.1 | 2.6 | 1.7 | 0.0 | 0.1 |
| FI | 13.5 | 5.1 | 6.6 | 1.7 | 0.1 | 0.9 |
| SE | 14.5 | 6.6 | 6.9 | 1.0 | 0.0 | 0.9 |

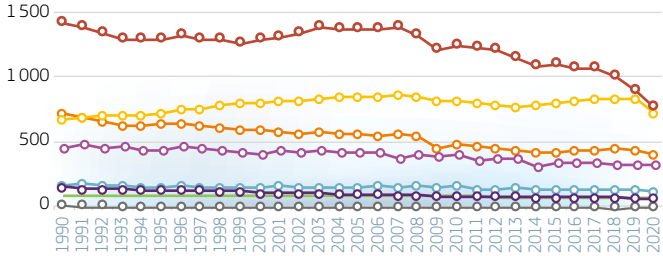
Source: EEA, June 2022, Eurostat 2022
Methodology and Notes: see appendices

## 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 | 4901 | 3724.4 | 1438.4 | 727.2 | 672.9 | 172.1 | 448.5 | 91.1 | 22.0 | 152.1 |
| 1995 | 4613 | 3505.3 | 1317.3 | 646.8 | 725.1 | 149.2 | 436.9 | 89.7 | 10.0 | 130.2 |
| 2000 | 4529 | 3442.1 | 1303.9 | 587.6 | 798.6 | 144.1 | 406.4 | 85.2 | 8.5 | 107.7 |
| 2001 | 4577 | 3508.8 | 1329.8 | 575.8 | 812.8 | 157.4 | 435.1 | 85.1 | 8.1 | 104.7 |
| 2002 | 4561 | 3506.7 | 1352.3 | 566.2 | 822.7 | 151.2 | 418.9 | 83.0 | 8.4 | 104.0 |
| 2003 | 4645 | 3583.1 | 1399.8 | 571.9 | 831.2 | 152.0 | 430.9 | 83.7 | 9.2 | 104.4 |
| 2004 | 4655 | 3577.0 | 1392.7 | 565.5 | 849.7 | 154.4 | 423.3 | 84.2 | 10.3 | 96.9 |
| 2005 | 4633 | 3558.4 | 1384.0 | 556.7 | 847.9 | 154.5 | 424.1 | 84.3 | 10.8 | 96.1 |
| 2006 | 4634 | 3558.7 | 1390.7 | 546.6 | 856.2 | 162.2 | 417.8 | 81.3 | 9.7 | 94.1 |
| 2007 | 4606 | 3517.0 | 1406.3 | 559.3 | 865.0 | 142.9 | 365.9 | 78.4 | 9.6 | 89.5 |
| 2008 | 4513 | 3453.7 | 1337.1 | 540.1 | 846.6 | 157.2 | 396.2 | 79.3 | 9.3 | 87.9 |
| 2009 | 4187 | 3216.9 | 1237.2 | 447.9 | 823.6 | 154.5 | 386.7 | 77.8 | 8.0 | 81.3 |
| 2010 | 4276 | 3296.7 | 1255.8 | 480.7 | 818.0 | 163.4 | 409.9 | 80.0 | 7.8 | 81.2 |
| 2011 | 4170 | 3193.5 | 1247.4 | 468.9 | 808.3 | 140.8 | 359.6 | 79.1 | 8.1 | 81.3 |
| 2012 | 4094 | 3134.9 | 1230.0 | 450.7 | 778.9 | 141.0 | 369.9 | 76.3 | 7.0 | 81.0 |
| 2013 | 4009 | 3051.0 | 1165.6 | 433.2 | 773.4 | 142.7 | 372.6 | 76.3 | 7.0 | 80.3 |
| 2014 | 3872 | 2904.0 | 1104.9 | 419.7 | 779.3 | 125.4 | 314.7 | 75.7 | 6.8 | 77.6 |
| 2015 | 3924 | 2959.7 | 1112.7 | 427.2 | 794.5 | 134.0 | 332.2 | 74.6 | 6.9 | 77.6 |
| 2016 | 3935 | 2962.5 | 1088.4 | 431.7 | 812.1 | 134.8 | 339.3 | 75.0 | 6.2 | 74.9 |
| 2017 | 3970 | 2977.8 | 1083.7 | 441.8 | 826.6 | 134.3 | 335.2 | 75.2 | 6.2 | 74.7 |
| 2018 | 3890 | 2903.1 | 1024.0 | 443.4 | 828.3 | 130.6 | 322.8 | 76.5 | 5.8 | 71.7 |
| 2019 | 3735 | 2761.4 | 906.2 | 428.9 | 834.7 | 126.5 | 317.0 | 75.7 | 6.3 | 66.1 |
| 2020 | 3354 | 2488.1 | 781.0 | 405.7 | 721.3 | 117.2 | 317.7 | 76.9 | 6.4 | 61.9 |

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




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

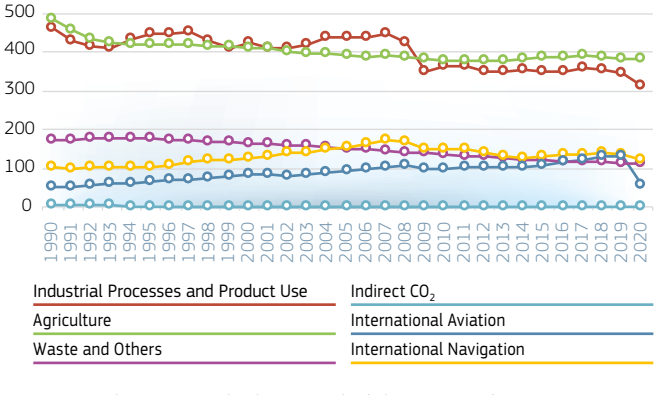
*GHG emissions without LULUCF, with indirect $CO_2$ and including international aviation
Source: EEA, June 2022, Eurostat 2022
Methodology and Notes: see appendices

## 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 | 4901 | 1122.2 | 462.4 | 482.9 | 172.5 | 4.3 | 54.0 | 102.7 |
| 1995 | 4613 | 1041.9 | 445.1 | 417.4 | 175.8 | 3.6 | 65.9 | 103.0 |
| 2000 | 4529 | 1001.8 | 424.0 | 409.5 | 165.4 | 3.0 | 85.0 | 128.6 |
| 2001 | 4577 | 983.5 | 409.8 | 407.5 | 163.4 | 2.8 | 84.3 | 133.2 |
| 2002 | 4561 | 972.1 | 408.5 | 400.1 | 160.7 | 2.7 | 81.8 | 139.2 |
| 2003 | 4645 | 976.2 | 419.1 | 395.5 | 158.9 | 2.7 | 85.4 | 141.7 |
| 2004 | 4655 | 987.6 | 435.5 | 394.5 | 155.0 | 2.6 | 90.4 | 149.9 |
| 2005 | 4633 | 978.5 | 435.9 | 389.0 | 150.9 | 2.6 | 96.0 | 153.8 |
| 2006 | 4634 | 974.3 | 437.8 | 385.7 | 148.1 | 2.6 | 101.0 | 164.6 |
| 2007 | 4606 | 983.7 | 446.8 | 389.4 | 145.0 | 2.5 | 105.7 | 171.7 |
| 2008 | 4513 | 951.6 | 421.6 | 386.0 | 141.6 | 2.4 | 107.3 | 169.7 |
| 2009 | 4187 | 871.3 | 348.6 | 380.9 | 139.6 | 2.2 | 98.6 | 150.8 |
| 2010 | 4276 | 879.2 | 363.4 | 376.7 | 136.7 | 2.3 | 100.4 | 150.3 |
| 2011 | 4170 | 873.5 | 362.6 | 375.5 | 133.2 | 2.2 | 103.1 | 150.9 |
| 2012 | 4094 | 857.1 | 349.6 | 375.1 | 130.3 | 2.1 | 101.8 | 139.7 |
| 2013 | 4009 | 855.1 | 347.9 | 378.2 | 127.1 | 1.9 | 102.7 | 131.5 |
| 2014 | 3872 | 863.7 | 354.7 | 384.0 | 123.1 | 1.9 | 104.8 | 127.8 |
| 2015 | 3924 | 855.9 | 347.7 | 385.5 | 120.8 | 1.9 | 108.7 | 129.8 |
| 2016 | 3935 | 857.6 | 350.7 | 386.9 | 118.3 | 1.8 | 115.2 | 133.7 |
| 2017 | 3970 | 867.7 | 359.7 | 389.5 | 116.6 | 1.8 | 124.1 | 136.0 |
| 2018 | 3890 | 856.8 | 353.6 | 386.3 | 115.2 | 1.7 | 130.3 | 138.6 |
| 2019 | 3735 | 840.1 | 343.3 | 381.6 | 113.5 | 1.6 | 133.0 | 137.5 |
| 2020 | 3354 | 810.1 | 313.9 | 382.4 | 112.3 | 1.5 | 55.9 | 122.5 |

### 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 2022, Eurostat 2022
Methodology and Notes: see appendices

## 4.1.2 $CO_2$ Emissions

### $CO_2$ EMISSIONS – NATIONAL TOTAL*

| [Million ton $CO_2$] | 1990 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 3928.3 | 3842.9 | 3544.6 | 3212.4 | 3050.2 | 2688.0 |
| Index1990 | 100.0% | 97.8% | 90.2% | 81.8% | 77.6% | 68.4% |
| | | | | | | |
| BE | 123.4 | 129.2 | 118.7 | 105.5 | 104.6 | 94.0 |
| BG | 77.4 | 51.2 | 48.4 | 48.8 | 43.0 | 37.4 |
| CZ | 166.8 | 127.8 | 119.4 | 106.7 | 103.0 | 92.8 |
| DK | 56.5 | 54.8 | 52.1 | 38.2 | 34.3 | 29.5 |
| DE | 1063.9 | 889.1 | 856.8 | 820.1 | 736.8 | 653.0 |
| EE | 37.0 | 17.2 | 19.1 | 16.0 | 12.6 | 9.4 |
| IE | 34.0 | 50.6 | 44.1 | 41.2 | 40.6 | 36.3 |
| EL | 85.9 | 116.5 | 99.9 | 77.8 | 69.7 | 56.9 |
| ES | 236.1 | 381.6 | 296.9 | 286.7 | 270.8 | 219.8 |
| FR | 407.2 | 441.2 | 403.0 | 359.2 | 345.8 | 297.4 |
| HR | 23.5 | 23.6 | 21.3 | 18.2 | 18.5 | 17.0 |
| IT | 443.8 | 510.7 | 444.9 | 370.7 | 351.6 | 306.1 |
| CY | 5.4 | 8.8 | 8.9 | 7.7 | 8.4 | 7.6 |
| LV | 19.9 | 8.0 | 8.9 | 7.6 | 8.1 | 7.2 |
| LT | 36.2 | 14.3 | 14.1 | 13.6 | 14.3 | 13.8 |
| LU | 12.2 | 13.4 | 12.5 | 10.7 | 11.5 | 9.7 |
| HU | 73.7 | 61.1 | 52.8 | 47.2 | 50.1 | 47.6 |
| MT | 2.6 | 2.9 | 2.9 | 2.0 | 2.2 | 1.8 |
| NL | 167.3 | 188.3 | 192.2 | 176.0 | 165.4 | 144.9 |
| AT | 63.0 | 81.0 | 74.1 | 68.5 | 70.8 | 63.1 |
| PL | 377.5 | 324.3 | 336.4 | 315.3 | 321.7 | 304.9 |
| PT | 46.9 | 72.2 | 55.8 | 55.6 | 52.1 | 43.5 |
| RO | 174.3 | 100.6 | 85.1 | 78.7 | 77.5 | 74.3 |
| SI | 15.1 | 17.0 | 16.5 | 13.7 | 14.1 | 12.9 |
| SK | 61.6 | 43.0 | 38.6 | 34.7 | 34.0 | 31.2 |
| FI | 58.1 | 58.4 | 65.8 | 46.1 | 45.0 | 38.5 |
| SE | 58.9 | 56.0 | 55.4 | 45.9 | 43.6 | 37.4 |

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

Source: EEA, June 2022, Eurostat 2022

Methodology and Notes: see appendices

## 4.1.2 $CO_2$ Emissions

### $CO_2$ EMISSIONS - ENERGY

| | 2020 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *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 | 2399.9 | 772.3 | 400.3 | 712.4 | 115.9 | 302.3 | 71.3 | 6.3 | 19.0 |
| Share [%] | 100.0% | 32.2% | 16.7% | 29.7% | 4.8% | 12.6% | 3.0% | 0.3% | 0.8% |
| | | | | | | | | | |
| BE | 75.4 | 18.8 | 12.9 | 21.4 | 5.2 | 14.4 | 2.4 | 0.1 | 0.1 |
| BG | 33.4 | 18.1 | 4.0 | 9.2 | 0.3 | 0.7 | 0.4 | 0.0 | 0.7 |
| CZ | 80.7 | 41.4 | 10.1 | 17.6 | 2.7 | 7.4 | 1.2 | 0.3 | 0.1 |
| DK | 26.5 | 7.2 | 3.5 | 11.9 | 0.7 | 1.5 | 1.3 | 0.2 | 0.1 |
| DE | 594.9 | 208.3 | 115.3 | 145.3 | 27.6 | 89.8 | 6.0 | 0.7 | 1.8 |
| EE | 9.2 | 5.8 | 0.5 | 2.2 | 0.3 | 0.2 | 0.3 | 0.0 | 0.0 |
| IE | 32.5 | 8.5 | 4.5 | 10.2 | 1.8 | 6.9 | 0.6 | 0.0 | 0.0 |
| EL | 50.5 | 24.4 | 4.4 | 15.1 | 0.6 | 5.0 | 0.7 | 0.3 | 0.0 |
| ES | 195.6 | 43.0 | 39.2 | 73.4 | 9.0 | 15.4 | 11.7 | 0.4 | 3.6 |
| FR | 259.2 | 36.8 | 41.6 | 108.2 | 19.8 | 38.7 | 10.4 | 1.5 | 2.2 |
| HR | 14.8 | 3.7 | 2.4 | 5.7 | 0.6 | 1.5 | 0.7 | 0.0 | 0.3 |
| IT | 288.0 | 81.4 | 44.9 | 84.5 | 23.4 | 44.1 | 7.1 | 0.6 | 2.1 |
| CY | 6.4 | 3.0 | 0.9 | 1.9 | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 |
| LV | 6.3 | 1.3 | 0.6 | 3.1 | 0.4 | 0.4 | 0.5 | 0.0 | 0.0 |
| LT | 11.2 | 2.6 | 1.2 | 6.1 | 0.3 | 0.7 | 0.2 | 0.0 | 0.2 |
| LU | 7.5 | 0.2 | 1.1 | 4.6 | 0.6 | 1.0 | 0.0 | 0.0 | 0.0 |
| HU | 41.9 | 12.3 | 4.9 | 12.4 | 2.8 | 7.6 | 1.6 | 0.1 | 0.2 |
| MT | 1.6 | 0.8 | 0.1 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| NL | 132.0 | 47.4 | 27.2 | 26.0 | 6.4 | 15.0 | 8.9 | 0.2 | 0.9 |
| AT | 48.8 | 8.7 | 10.4 | 20.9 | 1.3 | 6.4 | 0.9 | 0.0 | 0.1 |
| PL | 282.3 | 139.0 | 28.9 | 62.5 | 5.9 | 31.2 | 10.7 | 0.0 | 4.2 |
| PT | 37.6 | 10.3 | 7.5 | 14.7 | 1.0 | 1.9 | 1.3 | 0.1 | 1.0 |
| RO | 63.3 | 18.3 | 14.7 | 18.1 | 2.1 | 7.2 | 1.5 | 0.6 | 0.8 |
| SI | 12.0 | 4.5 | 1.7 | 4.5 | 0.3 | 0.6 | 0.2 | 0.0 | 0.1 |
| SK | 23.7 | 6.4 | 5.9 | 7.0 | 1.1 | 2.9 | 0.3 | 0.1 | 0.0 |
| FI | 33.5 | 12.9 | 6.1 | 10.3 | 1.1 | 0.9 | 1.2 | 0.9 | 0.1 |
| SE | 30.9 | 7.3 | 5.9 | 15.2 | 0.6 | 0.4 | 1.1 | 0.0 | 0.4 |

Source: EEA, June 2022, Eurostat 2022
Methodology and Notes: see appendices

## 4.1.2 $CO_2$ Emissions

### $CO_2$ EMISSIONS - NOT ENERGY RELATED

| [Million ton $CO_2$] | 2020 | | | | | |
|---|---|---|---|---|---|---|
| | $CO_2$ emissions other than from energy | *of which:* | | | | International aviation |
| | | Industrial Processes and Product Use | Agriculture | Waste and Others | Indirect $CO_2$ | |
| EU27_2020 | 232.7 | 218.6 | 9.7 | 2.9 | 1.5 | 55.4 |
| Share [%] | 100.0% | 93.9% | 4.2% | 1.3% | 0.6% | |
| | | | | | | |
| BE | 15.0 | 14.5 | 0.2 | 0.3 | 0.0 | 3.6 |
| BG | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.4 |
| CZ | 11.7 | 10.7 | 0.3 | 0.1 | 0.5 | 0.3 |
| DK | 2.0 | 1.5 | 0.3 | 0.0 | 0.2 | 1.0 |
| DE | 44.5 | 41.9 | 2.6 | 0.0 | 0.0 | 13.6 |
| EE | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| IE | 2.6 | 2.1 | 0.5 | 0.0 | 0.0 | 1.2 |
| EL | 5.1 | 5.1 | 0.0 | 0.0 | 0.0 | 1.3 |
| ES | 17.7 | 17.1 | 0.6 | 0.0 | 0.0 | 6.4 |
| FR | 30.2 | 26.8 | 1.9 | 1.6 | 0.0 | 8.0 |
| HR | 2.1 | 2.0 | 0.1 | 0.0 | 0.0 | 0.2 |
| IT | 14.3 | 13.7 | 0.5 | 0.1 | 0.0 | 3.8 |
| CY | 0.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.3 |
| LV | 0.7 | 0.6 | 0.1 | 0.0 | 0.0 | 0.2 |
| LT | 2.4 | 2.4 | 0.0 | 0.0 | 0.0 | 0.2 |
| LU | 0.6 | 0.6 | 0.0 | 0.0 | 0.0 | 1.6 |
| HU | 5.4 | 5.1 | 0.2 | 0.0 | 0.0 | 0.3 |
| MT | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| NL | 6.2 | 5.7 | 0.1 | 0.0 | 0.4 | 6.6 |
| AT | 13.3 | 13.1 | 0.1 | 0.0 | 0.0 | 1.0 |
| PL | 21.2 | 19.1 | 1.5 | 0.6 | 0.0 | 1.3 |
| PT | 4.3 | 4.1 | 0.0 | 0.0 | 0.1 | 1.6 |
| RO | 10.8 | 10.7 | 0.1 | 0.0 | 0.0 | 0.1 |
| SI | 0.8 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| SK | 7.4 | 7.3 | 0.1 | 0.0 | 0.0 | 0.1 |
| FI | 4.2 | 3.9 | 0.2 | 0.0 | 0.1 | 0.9 |
| SE | 5.6 | 5.3 | 0.1 | 0.1 | 0.0 | 0.9 |

Source: EEA, June 2022, Eurostat 2022
Methodology and Notes: see appendices

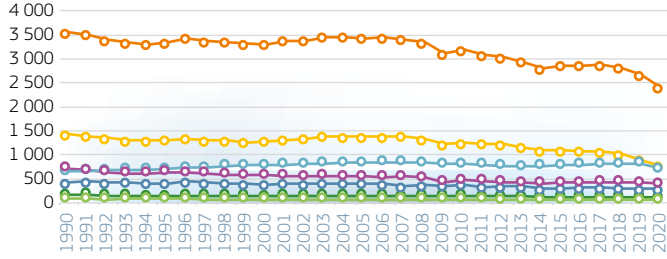
## 4.1.2 $CO_2$ Emissions

### $CO_2$ 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 | 3928 | 3539.8 | 1430.3 | 721.2 | 660.7 | 169.6 | 426.6 | 86.7 | 21.5 | 23.2 |
| 1995 | 3712 | 3342.4 | 1309.4 | 641.3 | 710.5 | 147.9 | 417.5 | 84.8 | 9.8 | 21.2 |
| 2000 | 3698 | 3305.6 | 1295.9 | 581.7 | 785.8 | 142.9 | 389.8 | 80.3 | 8.4 | 20.8 |
| 2001 | 3755 | 3374.2 | 1321.6 | 569.9 | 800.3 | 156.2 | 418.3 | 80.3 | 7.9 | 19.7 |
| 2002 | 3754 | 3375.3 | 1343.8 | 560.1 | 811.0 | 150.0 | 403.6 | 78.2 | 8.3 | 20.3 |
| 2003 | 3840 | 3450.5 | 1390.7 | 565.6 | 819.9 | 150.8 | 414.3 | 78.8 | 9.0 | 21.3 |
| 2004 | 3857 | 3450.8 | 1383.3 | 558.9 | 838.5 | 153.1 | 407.4 | 79.4 | 10.1 | 20.1 |
| 2005 | 3843 | 3433.8 | 1374.6 | 550.1 | 837.7 | 153.2 | 407.4 | 79.4 | 10.6 | 20.9 |
| 2006 | 3858 | 3438.0 | 1381.0 | 540.4 | 846.2 | 160.8 | 400.8 | 76.4 | 9.5 | 22.9 |
| 2007 | 3827 | 3399.4 | 1396.3 | 552.9 | 855.0 | 141.6 | 348.5 | 73.4 | 9.4 | 22.3 |
| 2008 | 3746 | 3335.8 | 1327.1 | 533.8 | 836.9 | 155.7 | 377.6 | 73.9 | 9.1 | 21.7 |
| 2009 | 3442 | 3105.6 | 1227.4 | 442.5 | 814.5 | 153.0 | 368.1 | 72.3 | 7.8 | 19.9 |
| 2010 | 3545 | 3184.2 | 1245.6 | 475.0 | 808.9 | 161.8 | 390.2 | 74.5 | 7.7 | 20.6 |
| 2011 | 3447 | 3084.5 | 1237.2 | 463.1 | 799.3 | 139.3 | 342.4 | 73.6 | 8.0 | 21.5 |
| 2012 | 3373 | 3025.1 | 1219.5 | 445.1 | 770.0 | 139.5 | 351.2 | 71.2 | 6.9 | 21.6 |
| 2013 | 3291 | 2944.0 | 1155.4 | 427.6 | 764.5 | 141.3 | 353.9 | 71.0 | 6.9 | 23.3 |
| 2014 | 3156 | 2801.6 | 1095.0 | 414.3 | 770.3 | 124.1 | 298.2 | 70.6 | 6.7 | 22.4 |
| 2015 | 3212 | 2856.0 | 1102.7 | 421.7 | 785.4 | 132.7 | 315.1 | 69.5 | 6.8 | 22.3 |
| 2016 | 3226 | 2861.0 | 1078.4 | 426.3 | 802.6 | 133.5 | 322.4 | 69.9 | 6.1 | 21.8 |
| 2017 | 3258 | 2876.0 | 1073.6 | 436.2 | 816.8 | 133.0 | 318.1 | 69.9 | 6.1 | 22.3 |
| 2018 | 3190 | 2804.5 | 1014.0 | 437.5 | 818.4 | 129.2 | 306.6 | 71.1 | 5.8 | 22.0 |
| 2019 | 3050 | 2668.8 | 896.7 | 423.2 | 824.7 | 125.1 | 301.4 | 70.3 | 6.2 | 21.2 |
| 2020 | 2688 | 2399.9 | 772.3 | 400.3 | 712.4 | 115.9 | 302.3 | 71.3 | 6.3 | 19.0 |

### EU27_2020 – $CO_2$ EMISSIONS

Million ton $CO_2$




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

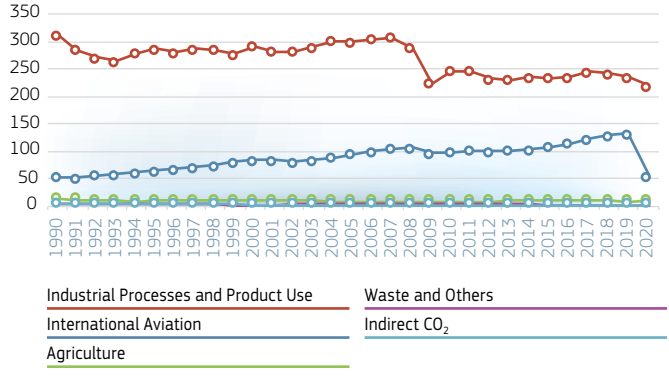
*$CO_2$ emissions without LULUCF, with indirect $CO_2$ and including international aviation
Source: EEA, June 2022, Eurostat 2022
Methodology and Notes: see appendices

## 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 | 3928.3 | 335.0 | 312.8 | 14.1 | 3.8 | 4.3 | 53.5 | 101.4 |
| 1995 | 3712.3 | 304.6 | 287.5 | 9.9 | 3.6 | 3.6 | 65.3 | 101.7 |
| 2000 | 3697.6 | 307.8 | 291.8 | 10.2 | 2.8 | 3.0 | 84.2 | 127.1 |
| 2001 | 3754.6 | 296.9 | 281.2 | 10.0 | 2.9 | 2.8 | 83.5 | 131.6 |
| 2002 | 3753.5 | 297.2 | 281.6 | 9.7 | 3.1 | 2.7 | 81.0 | 137.6 |
| 2003 | 3840.4 | 305.3 | 289.4 | 9.6 | 3.5 | 2.7 | 84.7 | 140.1 |
| 2004 | 3856.8 | 316.4 | 301.2 | 9.3 | 3.2 | 2.6 | 89.6 | 148.2 |
| 2005 | 3842.9 | 314.0 | 298.9 | 9.1 | 3.4 | 2.6 | 95.1 | 152.1 |
| 2006 | 3857.7 | 319.7 | 304.8 | 8.7 | 3.4 | 2.6 | 100.1 | 162.8 |
| 2007 | 3827.4 | 323.3 | 308.5 | 8.9 | 3.4 | 2.5 | 104.8 | 169.8 |
| 2008 | 3745.6 | 303.4 | 288.8 | 8.8 | 3.4 | 2.4 | 106.4 | 167.9 |
| 2009 | 3442.2 | 238.8 | 224.6 | 8.7 | 3.3 | 2.2 | 97.7 | 149.2 |
| 2010 | 3544.6 | 260.9 | 246.5 | 8.8 | 3.3 | 2.3 | 99.5 | 148.7 |
| 2011 | 3447.5 | 260.8 | 246.6 | 8.9 | 3.2 | 2.2 | 102.2 | 149.2 |
| 2012 | 3373.2 | 247.3 | 232.7 | 9.2 | 3.2 | 2.1 | 100.9 | 138.2 |
| 2013 | 3290.7 | 245.0 | 230.2 | 9.8 | 3.1 | 1.9 | 101.7 | 130.1 |
| 2014 | 3155.8 | 250.3 | 235.5 | 9.8 | 3.1 | 1.9 | 103.8 | 126.4 |
| 2015 | 3212.4 | 248.6 | 234.1 | 9.8 | 2.8 | 1.9 | 107.7 | 128.3 |
| 2016 | 3226.0 | 250.8 | 235.6 | 10.4 | 2.9 | 1.8 | 114.2 | 132.2 |
| 2017 | 3258.2 | 259.1 | 244.5 | 10.0 | 2.9 | 1.8 | 123.0 | 134.5 |
| 2018 | 3190.1 | 256.4 | 241.8 | 10.1 | 2.9 | 1.7 | 129.1 | 137.1 |
| 2019 | 3050.2 | 249.6 | 235.6 | 9.3 | 3.0 | 1.6 | 131.8 | 135.9 |
| 2020 | 2688.0 | 232.7 | 218.6 | 9.7 | 2.9 | 1.5 | 55.4 | 121.0 |

### $CO_2$ 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 2022, Eurostat 2022
Methodology and Notes: see appendices

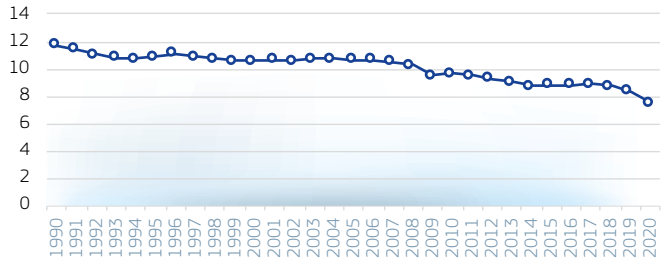
# 4.2 Main Emissions Indicators

## 4.2.1 Grenhouse Gas Emissions per Capita

### MAIN EMISSIONS INDICATORS
### GHG PER CAPITA

| [t $CO_2$ eq./cap] | 1990 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 11.7 | 10.7 | 9.7 | 8.8 | 8.4 | 7.5 |
| Index1990 | 100.0% | 91.0% | 82.8% | 75.5% | 71.4% | 64.0% |
| | | | | | | |
| BE | 15.0 | 14.3 | 12.7 | 11.0 | 10.6 | 9.6 |
| BG | 11.3 | 8.1 | 8.1 | 8.7 | 8.6 | 7.1 |
| CZ | 19.3 | 14.7 | 13.5 | 12.3 | 11.7 | 10.6 |
| DK | 14.2 | 12.9 | 12.0 | 9.1 | 8.2 | 7.3 |
| DE | 15.9 | 12.2 | 11.7 | 11.4 | 10.0 | 8.9 |
| EE | 25.6 | 14.2 | 16.0 | 13.8 | 11.2 | 8.7 |
| IE | 15.8 | 17.7 | 14.1 | 13.5 | 12.9 | 11.9 |
| EL | 10.5 | 12.7 | 10.9 | 9.1 | 8.4 | 7.1 |
| ES | 7.6 | 10.5 | 8.0 | 7.6 | 7.1 | 5.9 |
| FR | 9.5 | 9.0 | 8.1 | 7.2 | 6.8 | 6.0 |
| HR | 6.7 | 6.9 | 6.6 | 5.8 | 6.2 | 5.9 |
| IT | 9.2 | 10.4 | 8.9 | 7.4 | 7.2 | 6.5 |
| CY | 11.0 | 13.7 | 12.6 | 10.8 | 11.4 | 10.4 |
| LV | 9.8 | 4.9 | 5.7 | 5.6 | 6.0 | 5.6 |
| LT | 13.1 | 6.8 | 6.7 | 7.0 | 7.4 | 7.3 |
| LU | 34.6 | 31.0 | 26.8 | 20.8 | 20.4 | 17.1 |
| HU | 9.2 | 7.7 | 6.7 | 6.3 | 6.7 | 6.5 |
| MT | 7.9 | 8.1 | 7.8 | 5.6 | 5.4 | 4.5 |
| NL | 15.1 | 13.7 | 13.4 | 12.1 | 11.1 | 9.8 |
| AT | 10.4 | 11.5 | 10.3 | 9.4 | 9.3 | 8.4 |
| PL | 12.5 | 10.6 | 10.9 | 10.3 | 10.4 | 9.9 |
| PT | 6.0 | 8.4 | 6.8 | 6.8 | 6.6 | 5.7 |
| RO | 10.8 | 6.9 | 6.1 | 5.8 | 5.9 | 5.7 |
| SI | 9.3 | 10.3 | 9.6 | 8.2 | 8.2 | 7.6 |
| SK | 13.9 | 9.4 | 8.5 | 7.5 | 7.3 | 6.8 |
| FI | 14.5 | 13.6 | 14.5 | 10.4 | 10.0 | 8.8 |
| SE | 8.5 | 7.6 | 7.2 | 5.8 | 5.2 | 4.6 |

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




Source: EEA, June 2022, Eurostat 2022

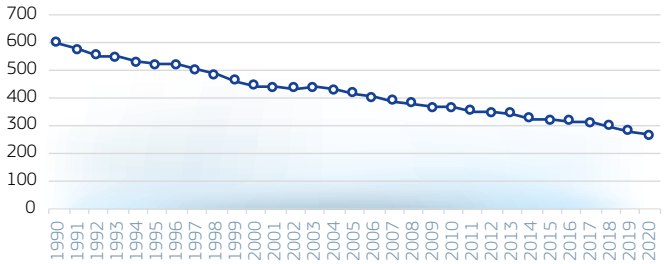
Methodology and Notes: see appendices

## 4.2.2 Greenhouse Gas to GDP Intensity

### MAIN EMISSIONS INDICATORS
### GHG TO GDP INTENSITY

| [t $CO_2$/M€'15] | 1990 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| EU27_2020 | 596.5 | 418.2 | 367.5 | 321.3 | 280.5 | 267.8 |
| Index1990 | 100.0% | 70.1% | 61.6% | 53.9% | 47.0% | 44.9% |
| | | | | | | |
| BE | 562.7 | 411.0 | 352.9 | 296.1 | 272.8 | 261.7 |
| BG | 2902.5 | 1733.0 | 1395.0 | 1370.9 | 1161.8 | 1001.2 |
| CZ | 1854.4 | 1089.1 | 907.7 | 765.9 | 642.2 | 620.8 |
| DK | 400.0 | 274.7 | 258.6 | 188.9 | 157.8 | 144.5 |
| DE | 594.8 | 384.7 | 345.0 | 304.9 | 255.7 | 239.8 |
| EE | 3040.1 | 1080.0 | 1215.9 | 881.6 | 608.4 | 490.9 |
| IE | 762.7 | 393.2 | 340.5 | 239.8 | 189.1 | 166.5 |
| EL | 741.9 | 632.8 | 560.4 | 557.5 | 488.1 | 455.9 |
| ES | 443.7 | 441.3 | 343.7 | 326.7 | 278.9 | 264.2 |
| FR | 369.3 | 282.9 | 250.7 | 216.3 | 192.4 | 184.5 |
| HR | 776.9 | 676.1 | 621.0 | 546.8 | 489.8 | 505.3 |
| IT | 371.3 | 345.0 | 307.5 | 272.7 | 249.2 | 244.8 |
| CY | 714.8 | 590.2 | 530.2 | 509.2 | 443.4 | 432.1 |
| LV | 1262.6 | 523.9 | 587.6 | 449.7 | 418.9 | 399.2 |
| LT | 1733.5 | 781.4 | 674.0 | 550.3 | 477.5 | 469.2 |
| LU | 614.3 | 337.3 | 276.7 | 216.1 | 206.8 | 179.8 |
| HU | 1181.7 | 756.1 | 654.8 | 550.0 | 494.1 | 499.0 |
| MT | 763.7 | 492.3 | 421.8 | 248.4 | 205.5 | 196.4 |
| NL | 537.1 | 360.7 | 334.5 | 296.5 | 253.9 | 234.7 |
| AT | 365.7 | 307.1 | 264.0 | 234.2 | 221.3 | 214.3 |
| PL | 2706.8 | 1378.3 | 1113.4 | 908.4 | 766.6 | 750.9 |
| PT | 462.3 | 484.0 | 381.9 | 394.4 | 339.4 | 322.5 |
| RO | 2414.8 | 1217.1 | 886.7 | 721.5 | 584.0 | 583.8 |
| SI | 760.7 | 591.7 | 518.1 | 434.2 | 378.6 | 365.9 |
| SK | 1939.7 | 916.4 | 648.9 | 511.5 | 448.0 | 434.4 |
| FI | 513.6 | 354.2 | 367.3 | 269.7 | 241.2 | 216.9 |
| SE | 272.8 | 183.7 | 163.4 | 123.6 | 107.9 | 97.4 |

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




Source: EEA, June 2022, Eurostat 2022
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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **676,0** | **703,3** | **695,5** | **657,1** | **617,8** | **573,7** |
| Solid fossil fuels | 189,8 | 176,9 | 146,6 | 133,8 | 100,1 | 83,6 |
| of which hard coal | 99,7 | 86,3 | 62,8 | 52,1 | 37,1 | 32,6 |
| of which brown coal | 90,0 | 90,5 | 83,8 | 81,7 | 63,0 | 51,0 |
| Oil and petroleum products | 44,6 | 45,9 | 33,1 | 28,3 | 22,7 | 21,3 |
| of which crude oil | 42,4 | 42,7 | 30,8 | 26,3 | 20,4 | 19,3 |
| Natural gas | 112,2 | 111,1 | 109,5 | 72,4 | 52,3 | 41,2 |
| Nuclear | 222,1 | 236,8 | 219,6 | 203,8 | 196,2 | 175,2 |
| Renewables and biofuels | 96,1 | 118,4 | 168,2 | 200,4 | 227,3 | 234,2 |
| Wastes, Non-Renewable | 5,9 | 7,2 | 10,6 | 12,3 | 13,6 | 13,8 |
| **Net Imports** | **866,0** | **954,6** | **895,5** | **834,5** | **907,6** | **793,0** |
| Solid fossil fuels | 83,3 | 97,9 | 93,7 | 96,0 | 74,4 | 50,3 |
| of which hard coal | 79,0 | 94,8 | 92,0 | 95,9 | 74,6 | 51,7 |
| Oil and petroleum products | 578,5 | 606,1 | 550,3 | 514,5 | 527,3 | 461,5 |
| of which crude oil and NGL | 542,3 | 569,8 | 517,3 | 519,9 | 514,9 | 450,2 |
| Natural gas | 202,8 | 248,1 | 245,9 | 220,6 | 300,4 | 273,5 |
| Renewables and biofuels | 0,3 | 1,7 | 5,1 | 3,6 | 4,7 | 6,1 |
| Electricity | 0,8 | 0,6 | 0,4 | -0,6 | 0,3 | 1,2 |
| **Gross inland consumption** | **1 498,3** | **1 603,9** | **1 559,1** | **1 448,0** | **1 457,9** | **1 340,1** |
| Solid fossil fuels | 279,0 | 274,3 | 245,1 | 234,1 | 171,9 | 140,3 |
| of which hard coal | 182,7 | 180,5 | 159,4 | 152,4 | 109,9 | 90,1 |
| of which brown coal | 91,9 | 92,5 | 84,9 | 82,6 | 63,5 | 51,9 |
| Oil and petroleum products | 579,8 | 598,6 | 538,9 | 491,5 | 502,2 | 437,2 |
| of which crude and NGL | 586,0 | 612,7 | 548,2 | 541,9 | 532,8 | 467,8 |
| Natural gas | 308,6 | 359,7 | 362,8 | 296,1 | 335,1 | 326,9 |
| Nuclear | 222,1 | 236,8 | 219,6 | 203,8 | 196,2 | 175,2 |
| Renewables and biofuels | 96,5 | 120,0 | 173,4 | 203,9 | 232,0 | 239,7 |
| Electricity | 0,8 | 0,6 | 0,4 | -0,6 | 0,3 | 1,2 |
| Waste, non-renewable | 5,9 | 7,2 | 10,7 | 12,7 | 14,1 | 14,3 |
| **Available for final consumption** | **1 022,9** | **1 091,9** | **1 073,5** | **993,8** | **1 032,8** | **976,4** |
| **Final non-energy consumption** | **101,4** | **104,9** | **98,3** | **88,2** | **90,7** | **89,6** |
| **Final energy consumption** | **926,0** | **986,6** | **973,1** | **909,4** | **937,9** | **885,8** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 33,4 | 28,5 | 27,2 | 23,5 | 19,8 | 19,0 |
| Oil and petroleum products | 396,7 | 405,2 | 366,2 | 338,8 | 346,0 | 310,3 |
| Natural gas | 205,1 | 222,8 | 217,7 | 192,3 | 199,1 | 193,9 |
| Renewables and biofuels | 48,8 | 60,7 | 85,7 | 89,7 | 104,1 | 104,2 |
| Solid biofuels and renewable waste | 46,7 | 55,1 | 67,6 | 65,8 | 69,8 | 68,9 |
| Solar thermal | 0,5 | 0,7 | 1,5 | 2,1 | 2,4 | 2,4 |
| Geothermal | 0,4 | 0,4 | 0,4 | 0,4 | 0,6 | 0,6 |
| Liquid biofuels | 0,7 | 3,3 | 12,4 | 13,3 | 16,6 | 16,9 |
| Biogases | 0,3 | 0,5 | 1,4 | 2,3 | 2,6 | 2,7 |
| Waste, non-renewable | 1,0 | 1,3 | 2,8 | 3,7 | 4,7 | 5,0 |
| Electricity | 189,0 | 209,4 | 215,9 | 210,7 | 213,3 | 205,1 |
| Heat | 42,9 | 51,3 | 51,6 | 45,4 | 46,0 | 44,0 |
| by Sector | | | | | | |
| Industry | 271,0 | 275,2 | 243,9 | 233,7 | 239,4 | 231,2 |
| Transport | 262,9 | 281,6 | 280,0 | 272,8 | 289,0 | 252,0 |
| Residential | 248,5 | 266,2 | 278,9 | 245,0 | 248,2 | 248,2 |
| Services | 104,7 | 127,9 | 140,0 | 128,5 | 128,6 | 121,4 |
| Agriculture and Fishing | 28,4 | 28,5 | 26,7 | 25,7 | 29,2 | 29,3 |
| Others | 10,5 | 7,2 | 3,7 | 3,6 | 3,4 | 3,6 |

Methodology and Notes: **see appendices**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | 613.2 | 675.7 | 790.2 | 889.7 | 946.6 | 962.6 |
| Combustible Fuels | 340.1 | 370.3 | 414.8 | 412.2 | 395.8 | 388.2 |
| Nuclear | 124.9 | 123.1 | 120.9 | 112.5 | 110.0 | 106.0 |
| Hydro | 134.7 | 139.3 | 143.0 | 148.2 | 150.8 | 150.8 |
| Wind | 12.3 | 38.8 | 79.0 | 127.2 | 167.2 | 177.0 |
| Solar | 0.2 | 2.3 | 30.6 | 87.7 | 120.2 | 138.4 |
| Geothermal | 0.6 | 0.7 | 0.8 | 0.8 | 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 | 2916.3 | 2979.7 | 2900.5 | 2902.3 | 2781.3 |
| Solid fossil fuels, peat and products, oil shale | 813.9 | 825.7 | 721.6 | 718.8 | 460.4 | 356.8 |
| Oil and petroleum products | 172.9 | 137.4 | 82.1 | 63.3 | 52.0 | 48.1 |
| Natural gas | 362.7 | 548.3 | 622.1 | 428.6 | 599.7 | 586.2 |
| Nuclear | 859.9 | 916.1 | 854.5 | 786.7 | 765.3 | 683.5 |
| Renewables and biofuels | 435.9 | 477.0 | 682.0 | 883.8 | 1003.5 | 1086.1 |
| Wastes non-RES | 11.6 | 11.8 | 17.4 | 19.4 | 21.4 | 20.7 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 101.5 | 113.8 | 133.3 | 133.4 |
| CHP Electricity Generation [TWh] | | | 370.9 | 343.5 | 348.4 | 337.6 |
| CHP in Total Electricity Generation [%] | | | 12.5 | 11.9 | 11.7 | 11.6 |
| CHP Heat Production [PJ] | | | 2882.9 | 2667.5 | 2629.2 | 2568.2 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 354896 | 367556 | 336673 | 315054 | 323230 | 291235 |
| of which LPG | 19465 | 19408 | 18039 | 16217 | 16584 | 15195 |
| of which motor gasoline | 110381 | 95746 | 76807 | 65300 | 67652 | 58221 |
| of which Gas/Diesel oil | 225049 | 252402 | 241827 | 233537 | 238993 | 217820 |
| Final consumption biofuels | 713 | 3270 | 12442 | 13329 | 16629 | 16875 |
| pure and blended biogasoline | 59 | 550 | 2496 | 2344 | 2725 | 2677 |
| pure and blended biodiesel | 640 | 2532 | 9701 | 10927 | 13779 | 14024 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 1396.5 | 1497.9 | 1457.7 | 1352.7 | 1353.8 | 1236.3 |
| Final energy consumption 2020-2030 [Mtoe] | 979.5 | 1040.9 | 1024.1 | 958.4 | 986.4 | 907.0 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 137 | 135 | 125 | 111 | 102 | 99 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 147 | 145 | 134 | 119 | 110 | 107 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3497 | 3692 | 3538 | 3264 | 3266 | 2996 |
| Final Electricity per Capita [KWh/capita] | 6201 | 6713 | 6762 | 6538 | 6501 | 6218 |
| **Import Dependency [%]** | 57.8% | 59.5% | 57.4% | 57.6% | 62.3% | 59.2% |
| of Solid fossil fuels | 29.8% | 35.7% | 38.2% | 41.0% | 43.3% | 35.8% |
| of Hard Coal | 43.2% | 52.5% | 57.7% | 63.0% | 67.9% | 57.4% |
| of Oil and petroleum products | 99.8% | 101.2% | 102.1% | 104.7% | 105.0% | 105.6% |
| of Crude and NGL | 92.5% | 93.0% | 94.4% | 95.9% | 96.6% | 96.2% |
| of Natural Gas | 65.7% | 69.0% | 67.8% | 74.5% | 89.7% | 83.6% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 10.24% | 14.42% | 17.82% | 19.88% | 22.09% |
| RE-T - Renewable energy in Transport [%] | | 2.04% | 5.50% | 6.75% | 8.80% | 10.22% |
| RES-E - Renewable Electricity Generation [%] | | 16.40% | 21.30% | 29.65% | 34.09% | 37.48% |
| RES-H&C - Renewable Heating and Cooling [%] | | 12.45% | 17.02% | 20.31% | 22.43% | 23.09% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 3697.6 | 3842.9 | 3544.6 | 3212.4 | 3050.2 | 2688.0 |
| GHG emissions - National total* | 4528.8 | 4632.9 | 4276.2 | 3924.4 | 3734.5 | 3354.1 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 92,4% | 94,5% | 87,3% | 80,1% | 76,2% | 68,4% |
| Total GHG per capita [t $CO_2$ eq./capita] | 10,6 | 10,7 | 9,7 | 8,8 | 8,4 | 7,5 |

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

# 5.2 Belgium

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **13,4** | **13,8** | **15,0** | **10,3** | **15,2** | **13,3** |
| 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 | 12,4 | 12,3 | 11,6 | 6,3 | 10,6 | 8,4 |
| Renewables and biofuels | 0,5 | 0,9 | 2,5 | 3,1 | 3,6 | 4,0 |
| Wastes, Non-Renewable | 0,4 | 0,5 | 0,7 | 0,7 | 0,7 | 0,6 |
| **Net Imports** | **50,6** | **53,5** | **53,6** | **50,1** | **49,9** | **45,1** |
| Solid fossil fuels | 7,3 | 5,2 | 3,7 | 3,3 | 3,1 | 2,4 |
| of which hard coal | 6,6 | 5,0 | 3,7 | 2,8 | 2,5 | 2,1 |
| Oil and petroleum products | 29,6 | 32,5 | 32,5 | 30,4 | 30,6 | 26,8 |
| of which crude oil and NGL | 34,2 | 32,0 | 33,5 | 32,4 | 34,6 | 27,7 |
| Natural gas | 13,3 | 14,9 | 16,8 | 13,9 | 15,5 | 15,0 |
| Renewables and biofuels | 0,1 | 0,3 | 0,5 | 0,7 | 0,8 | 0,9 |
| Electricity | 0,4 | 0,5 | 0,0 | 1,8 | -0,2 | 0,0 |
| **Gross inland consumption** | **59,4** | **59,3** | **60,7** | **53,7** | **56,1** | **51,4** |
| Solid fossil fuels | 8,0 | 5,2 | 3,8 | 3,4 | 3,0 | 2,4 |
| of which hard coal | 7,0 | 4,9 | 3,7 | 2,9 | 2,5 | 2,0 |
| of which brown coal | 0,2 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 24,2 | 24,7 | 24,5 | 23,5 | 22,0 | 19,7 |
| of which crude and NGL | 34,1 | 32,1 | 33,5 | 32,4 | 34,6 | 27,6 |
| Natural gas | 13,4 | 14,8 | 16,8 | 14,0 | 15,2 | 15,2 |
| Nuclear | 12,4 | 12,3 | 11,6 | 6,3 | 10,6 | 8,4 |
| Renewables and biofuels | 0,6 | 1,2 | 3,0 | 3,7 | 4,4 | 4,9 |
| Electricity | 0,4 | 0,5 | 0,0 | 1,8 | -0,2 | 0,0 |
| Waste, non-renewable | 0,4 | 0,5 | 0,7 | 0,7 | 0,7 | 0,6 |
| **Available for final consumption** | **40,8** | **41,6** | **43,0** | **41,0** | **40,1** | **38,2** |
| **Final non-energy consumption** | **7,0** | **7,5** | **7,0** | **7,7** | **7,3** | **7,1** |
| **Final energy consumption** | **33,6** | **34,2** | **35,4** | **33,1** | **32,6** | **31,0** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,9 | 0,6 | 0,5 | 0,5 | 0,5 | 0,4 |
| Oil and petroleum products | 15,1 | 15,3 | 14,8 | 14,1 | 12,9 | 11,9 |
| Natural gas | 9,3 | 9,4 | 10,0 | 8,9 | 9,5 | 9,1 |
| Renewables and biofuels | 0,4 | 0,6 | 1,7 | 1,7 | 2,0 | 2,1 |
| Solid biofuels and renewable waste | 0,4 | 0,6 | 1,2 | 1,3 | 1,2 | 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 | 0,4 | 0,3 | 0,5 | 0,7 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| Waste, non-renewable | 0,1 | 0,1 | 0,2 | 0,2 | 0,2 | 0,2 |
| Electricity | 6,7 | 7,0 | 7,3 | 7,0 | 7,0 | 6,8 |
| Heat | 0,5 | 0,5 | 0,6 | 0,5 | 0,5 | 0,5 |
| by Sector | | | | | | |
| Industry | 11,6 | 10,6 | 11,0 | 10,6 | 10,3 | 10,0 |
| Transport | 8,2 | 8,7 | 8,9 | 8,9 | 8,8 | 7,8 |
| Residential | 9,5 | 9,1 | 9,6 | 8,2 | 7,9 | 7,9 |
| Services | 3,5 | 4,7 | 5,0 | 4,6 | 4,6 | 4,5 |
| Agriculture and Fishing | 0,8 | 1,0 | 0,8 | 0,7 | 0,9 | 0,8 |
| Others | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: **see appendices**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **15,7** | **16,1** | **18,8** | **21,2** | **23,9** | **25,7** |
| Combustible Fuels | 8,5 | 8,7 | 9,5 | 8,5 | 8,1 | 8,1 |
| Nuclear | 5,7 | 5,8 | 5,9 | 5,9 | 5,9 | 5,9 |
| Hydro | 1,4 | 1,4 | 1,4 | 1,4 | 1,4 | 1,4 |
| Wind | 0,0 | 0,2 | 0,9 | 2,2 | 3,9 | 4,7 |
| Solar | 0,0 | 0,0 | 1,0 | 3,1 | 4,6 | 5,6 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **84,0** | **85,4** | **94,3** | **69,2** | **93,2** | **88,9** |
| Solid fossil fuels, peat and products, oil shale | 12,9 | 8,2 | 4,2 | 2,1 | 0,1 | 0,1 |
| Oil and petroleum products | 0,8 | 1,7 | 0,4 | 0,2 | 0,1 | 0,1 |
| Natural gas | 19,1 | 23,8 | 32,6 | 24,1 | 28,0 | 28,6 |
| Nuclear | 48,2 | 47,6 | 47,9 | 26,1 | 43,5 | 34,4 |
| Renewables and biofuels | 2,3 | 3,4 | 8,0 | 15,6 | 20,4 | 24,5 |
| Wastes non-RES | 0,8 | 0,7 | 1,2 | 1,2 | 1,2 | 1,2 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 2,6 | 2,4 | 2,4 | 2,4 |
| CHP Electricity Generation [TWh] | | | 15,2 | 12,5 | 12,8 | 13,0 |
| CHP in Total Electricity Generation [%] | | | 16,0 | 17,7 | 13,7 | 13,0 |
| CHP Heat Production [PJ] | | | | 104,4 | 94,8 | 93,4 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 13515 | 14103 | 13213 | 12704 | 11922 | 10846 |
| **of which LPG** | 414 | 226 | 337 | 400 | 447 | 475 |
| **of which motor gasoline** | 2359 | 1883 | 1274 | 1360 | 1838 | 1527 |
| of which Gas/Diesel oil | 10741 | 11993 | 11602 | 10943 | 9637 | 8844 |
| **Final consumption biofuels** | 0 | 1 | 384 | 266 | 490 | 705 |
| **pure and blended biogasoline** | 0 | 0 | 57 | 41 | 129 | 130 |
| **pure and blended biodiesel** | 0 | 0 | 316 | 223 | 359 | 575 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 52,4 | 51,6 | 53,4 | 45,7 | 48,4 | 43,9 |
| Final energy consumption 2020-2030 [Mtoe] | 37,7 | 36,8 | 38,1 | 35,9 | 35,8 | 33,3 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 159 | 142 | 137 | 110 | 109 | 104 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 180 | 163 | 155 | 129 | 126 | 122 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 5805 | 5675 | 5599 | 4777 | 4896 | 4464 |
| Final Electricity per Capita [KWh/capita] | 8205 | 8176 | 8701 | 6162 | 8136 | 7715 |
| **Import Dependency [%]** | **85,2%** | **90,2%** | **88,4%** | **93,3%** | **88,9%** | **87,7%** |
| of Solid fossil fuels | 91,2% | 101,3% | 97,5% | 95,7% | 102,1% | 102,7% |
| **of Hard Coal** | 93,5% | 102,0% | 100,0% | 96,3% | 102,7% | 104,2% |
| of Oil and petroleum products | 122,3% | 131,9% | 132,7% | 129,5% | 139,2% | 136,0% |
| **of Crude and NGL** | 100,2% | 99,5% | 99,9% | 100,0% | 100,0% | 100,5% |
| of Natural Gas | 99,3% | 100,5% | 100,3% | 99,3% | 101,9% | 99,2% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 2.33% | 6.00% | 8.06% | 9.93% | 13.00% |
| RE-T - Renewable energy in Transport [%] | | 0.67% | 4.80% | 3.92% | 6.82% | 11.03% |
| RES-E - Renewable Electricity Generation [%] | | 2.35% | 7.23% | 15.57% | 20.82% | 25.12% |
| RES-H&C - Renewable Heating and Cooling [%] | | 3.41% | 6.70% | 7.94% | 8.32% | 8.45% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 131,4 | 129,2 | 118,7 | 105,5 | 104,6 | 94,0 |
| GHG emissions - National total* | 153,6 | 149,1 | 137,9 | 123,4 | 121,7 | 110,1 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 103,2% | 100,2% | 92,6% | 82,9% | 81,7% | 74,0% |
| Total GHG per capita [t $CO_2$ eq./capita] | 15,0 | 14,3 | 12,7 | 11,0 | 10,6 | 9,6 |

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

# 5.3 Bulgaria

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **9,9** | **10,6** | **10,5** | **12,0** | **11,7** | **10,8** |
| Solid fossil fuels | 4,3 | 4,2 | 4,9 | 5,8 | 4,7 | 3,7 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 4,2 | 4,2 | 4,9 | 5,8 | 4,7 | 3,7 |
| Oil and petroleum products | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,4 | 0,1 | 0,1 | 0,0 | 0,0 |
| Nuclear | 4,7 | 4,9 | 3,8 | 3,9 | 4,3 | 4,3 |
| Renewables and biofuels | 0,8 | 1,1 | 1,5 | 2,1 | 2,6 | 2,6 |
| Wastes, Non-Renewable | 0,0 | 0,1 | 0,0 | 0,0 | 0,1 | 0,1 |
| **Net Imports** | **8,7** | **9,6** | **7,2** | **6,8** | **7,2** | **6,8** |
| Solid fossil fuels | 2,3 | 2,6 | 1,7 | 0,7 | 0,4 | 0,4 |
| of which hard coal | 2,2 | 2,5 | 1,7 | 0,7 | 0,4 | 0,4 |
| Oil and petroleum products | 4,1 | 5,2 | 4,2 | 4,5 | 5,0 | 4,3 |
| of which crude oil and NGL | 5,3 | 6,1 | 5,5 | 6,2 | 7,1 | 4,9 |
| Natural gas | 2,7 | 2,5 | 2,1 | 2,5 | 2,5 | 2,4 |
| Renewables and biofuels | 0,0 | 0,0 | -0,1 | 0,0 | -0,1 | 0,0 |
| Electricity | -0,4 | -0,7 | -0,7 | -0,9 | -0,5 | -0,3 |
| **Gross inland consumption** | **18,6** | **20,1** | **17,9** | **18,7** | **18,8** | **17,8** |
| Solid fossil fuels | 6,4 | 6,9 | 6,9 | 6,6 | 5,2 | 4,3 |
| of which hard coal | 2,2 | 2,6 | 1,9 | 0,7 | 0,6 | 0,5 |
| of which brown coal | 4,2 | 4,2 | 4,9 | 5,8 | 4,6 | 3,7 |
| Oil and petroleum products | 4,2 | 5,0 | 4,0 | 4,3 | 4,8 | 4,3 |
| of which crude and NGL | 5,4 | 6,3 | 5,6 | 6,1 | 6,9 | 5,0 |
| Natural gas | 2,9 | 2,8 | 2,3 | 2,6 | 2,4 | 2,5 |
| Nuclear | 4,7 | 4,9 | 3,8 | 3,9 | 4,3 | 4,3 |
| Renewables and biofuels | 0,8 | 1,1 | 1,5 | 2,1 | 2,5 | 2,6 |
| Electricity | -0,4 | -0,7 | -0,7 | -0,9 | -0,5 | -0,3 |
| Waste, non-renewable | 0,0 | 0,1 | 0,0 | 0,0 | 0,1 | 0,1 |
| **Available for final consumption** | **9,6** | **10,5** | **9,2** | **10,1** | **10,3** | **10,3** |
| **Final non-energy consumption** | **1,0** | **0,8** | **0,4** | **0,6** | **0,5** | **0,5** |
| **Final energy consumption** | **8,6** | **9,6** | **8,7** | **9,4** | **9,7** | **9,5** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,6 | 0,7 | 0,4 | 0,3 | 0,3 | 0,3 |
| Oil and petroleum products | 3,0 | 3,5 | 3,0 | 3,2 | 3,6 | 3,4 |
| Natural gas | 1,4 | 1,4 | 1,1 | 1,3 | 1,1 | 1,2 |
| Renewables and biofuels | 0,5 | 0,7 | 1,0 | 1,3 | 1,4 | 1,6 |
| Solid biofuels and renewable waste | 0,5 | 0,7 | 0,9 | 1,0 | 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 | 0,2 | 0,2 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,1 | 0,0 | 0,0 | 0,1 | 0,1 |
| Electricity | 2,1 | 2,2 | 2,3 | 2,4 | 2,6 | 2,5 |
| Heat | 0,9 | 0,9 | 1,0 | 0,8 | 0,5 | 0,6 |
| by Sector | | | | | | |
| Industry | 3,6 | 3,6 | 2,5 | 2,7 | 2,7 | 2,6 |
| Transport | 1,9 | 2,7 | 2,7 | 3,2 | 3,4 | 3,2 |
| Residential | 2,1 | 2,1 | 2,2 | 2,2 | 2,2 | 2,4 |
| Services | 0,7 | 0,8 | 1,0 | 1,1 | 1,3 | 1,1 |
| Agriculture and Fishing | 0,3 | 0,3 | 0,2 | 0,2 | 0,2 | 0,2 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **11,1** | **12,3** | **10,0** | **10,9** | **11,2** | **11,0** |
| Combustible Fuels | 5,7 | 6,7 | 4,6 | 4,0 | 4,1 | 3,8 |
| Nuclear | 3,5 | 2,7 | 1,9 | 2,0 | 2,0 | 2,0 |
| Hydro | 1,9 | 2,8 | 3,0 | 3,2 | 3,4 | 3,4 |
| Wind | 0,0 | 0,0 | 0,5 | 0,7 | 0,7 | 0,7 |
| Solar | 0,0 | 0,0 | 0,0 | 1,0 | 1,0 | 1,1 |
| 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]** | **40,9** | **44,4** | **46,6** | **49,2** | **44,3** | **40,7** |
| Solid fossil fuels, peat and products, oil shale | 16,9 | 18,5 | 22,6 | 22,5 | 17,2 | 13,5 |
| Oil and petroleum products | 0,7 | 0,6 | 0,4 | 0,2 | 0,4 | 0,3 |
| Natural gas | 2,2 | 1,9 | 2,0 | 1,9 | 2,2 | 2,3 |
| Nuclear | 18,2 | 18,7 | 15,2 | 15,4 | 16,6 | 16,6 |
| Renewables and biofuels | 3,0 | 4,7 | 6,4 | 9,3 | 8,0 | 8,0 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 1,0 | 1,1 | 1,2 | 1,3 |
| CHP Electricity Generation [TWh] | | | 3,7 | 2,9 | 3,9 | 3,8 |
| CHP in Total Electricity Generation [%] | | | 8,0 | 6,0 | 8,8 | 8,1 |
| CHP Heat Production [PJ] | | | 40,4 | 31,9 | 39,6 | 36,2 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 2162 | 2803 | 2658 | 3037 | 3278 | 3110 |
| of which LPG | 245 | 479 | 418 | 514 | 485 | 460 |
| of which motor gasoline | 697 | 571 | 611 | 520 | 473 | 459 |
| of which Gas/Diesel oil | 1219 | 1752 | 1630 | 2002 | 2320 | 2191 |
| Final consumption biofuels | 0 | 0 | 13 | 146 | 179 | 172 |
| pure and blended biogasoline | 0 | 0 | 0 | 32 | 32 | 27 |
| pure and blended biodiesel | 0 | 0 | 10 | 114 | 148 | 146 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 17,7 | 19,2 | 17,4 | 18,0 | 18,2 | 17,2 |
| Final energy consumption 2020-2030 [Mtoe] | 9,1 | 10,1 | 8,8 | 9,5 | 9,8 | 9,5 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 644 | 532 | 406 | 392 | 352 | 347 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 680 | 556 | 418 | 408 | 364 | 360 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 2275 | 2612 | 2414 | 2594 | 2692 | 2566 |
| Final Electricity per Capita [KWh/capita] | 4996 | 5770 | 6284 | 6832 | 6324 | 5859 |
| **Import Dependency [%]** | **46,6%** | **47,6%** | **40,4%** | **36,6%** | **38,3%** | **38,1%** |
| of Solid fossil fuels | 35,2% | 36,9% | 24,5% | 11,2% | 7,2% | 9,2% |
| of Hard Coal | 101,0% | 94,0% | 86,0% | 96,1% | 57,6% | 69,0% |
| of Oil and petroleum products | 97,5% | 104,9% | 104,3% | 103,9% | 104,2% | 99,4% |
| of Crude and NGL | 98,7% | 97,7% | 99,1% | 100,5% | 102,6% | 99,4% |
| of Natural Gas | 93,5% | 87,7% | 92,6% | 97,0% | 100,4% | 96,4% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 9.17% | 13.93% | 18.26% | 21.55% | 23.32% |
| RE-T - Renewable energy in Transport [%] | | 0.88% | 1.50% | 6.49% | 7.89% | 9.10% |
| RES-E - Renewable Electricity Generation [%] | | 8.67% | 12.36% | 18.98% | 23.51% | 23.59% |
| RES-H&C - Renewable Heating and Cooling [%] | | 14.26% | 24.33% | 28.90% | 35.42% | 37.18% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 45,7 | 51,2 | 48,4 | 48,8 | 43,0 | 37,4 |
| GHG emissions - National total* | 57,2 | 62,6 | 59,8 | 62,8 | 60,2 | 49,6 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 57,7% | 63,2% | 60,4% | 63,4% | 60,8% | 50,1% |
| Total GHG per capita [t $CO_2$ eq./capita] | 7,0 | 8,1 | 8,1 | 8,7 | 8,6 | 7,1 |

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

# 5.4 Czechia

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **30,8** | **33,2** | **31,9** | **28,6** | **26,6** | **23,5** |
| Solid fossil fuels | 25,0 | 23,6 | 20,7 | 16,8 | 13,4 | 10,2 |
| of which hard coal | 9,4 | 8,4 | 7,4 | 5,3 | 2,2 | 1,4 |
| of which brown coal | 15,6 | 15,2 | 13,3 | 11,5 | 11,1 | 8,8 |
| Oil and petroleum products | 0,4 | 0,6 | 0,3 | 0,2 | 0,2 | 0,1 |
| of which crude oil | 0,2 | 0,3 | 0,2 | 0,1 | 0,1 | 0,1 |
| Natural gas | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| Nuclear | 3,5 | 6,5 | 7,2 | 6,7 | 7,5 | 7,5 |
| Renewables and biofuels | 1,6 | 2,3 | 3,3 | 4,4 | 5,0 | 5,2 |
| Wastes, Non-Renewable | 0,1 | 0,2 | 0,2 | 0,3 | 0,4 | 0,4 |
| **Net Imports** | **9,4** | **12,7** | **11,5** | **13,5** | **17,5** | **15,6** |
| Solid fossil fuels | -4,7 | -3,3 | -2,9 | -0,3 | 1,2 | 1,6 |
| of which hard coal | -3,5 | -2,8 | -2,7 | -0,4 | 1,5 | 1,8 |
| Oil and petroleum products | 7,5 | 9,7 | 9,0 | 8,7 | 9,6 | 8,7 |
| of which crude oil and NGL | 5,6 | 7,7 | 7,8 | 7,2 | 7,9 | 6,3 |
| Natural gas | 7,5 | 7,5 | 6,8 | 6,2 | 7,9 | 6,3 |
| Renewables and biofuels | 0,0 | -0,2 | -0,1 | 0,0 | -0,1 | 0,0 |
| Electricity | -0,9 | -1,1 | -1,3 | -1,1 | -1,1 | -0,9 |
| **Gross inland consumption** | **41,3** | **45,5** | **45,5** | **42,1** | **42,9** | **40,2** |
| Solid fossil fuels | 21,6 | 20,2 | 18,8 | 16,4 | 14,2 | 12,2 |
| of which hard coal | 6,2 | 5,6 | 5,1 | 4,9 | 3,5 | 3,4 |
| of which brown coal | 15,6 | 14,8 | 13,5 | 11,2 | 10,7 | 8,8 |
| Oil and petroleum products | 7,9 | 10,0 | 9,3 | 8,9 | 9,9 | 8,6 |
| of which crude and NGL | 5,8 | 7,8 | 8,0 | 7,3 | 8,0 | 6,2 |
| Natural gas | 7,5 | 7,7 | 8,1 | 6,5 | 7,2 | 7,3 |
| Nuclear | 3,5 | 6,5 | 7,2 | 6,7 | 7,5 | 7,5 |
| Renewables and biofuels | 1,6 | 2,1 | 3,2 | 4,4 | 4,9 | 5,1 |
| Electricity | -0,9 | -1,1 | -1,3 | -1,1 | -1,1 | -0,9 |
| Waste, non-renewable | 0,1 | 0,2 | 0,2 | 0,3 | 0,4 | 0,4 |
| **Available for final consumption** | **26,4** | **28,2** | **27,7** | **25,9** | **27,2** | **26,0** |
| **Final non-energy consumption** | **2,1** | **3,0** | **2,9** | **2,5** | **3,0** | **2,5** |
| **Final energy consumption** | **24,0** | **24,9** | **24,1** | **23,1** | **24,2** | **23,8** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 4,2 | 2,9 | 1,9 | 1,6 | 1,4 | 1,4 |
| Oil and petroleum products | 5,2 | 6,5 | 6,3 | 6,4 | 6,7 | 6,4 |
| Natural gas | 5,9 | 6,2 | 6,1 | 5,0 | 5,2 | 5,2 |
| Renewables and biofuels | 1,2 | 1,7 | 2,3 | 2,8 | 3,2 | 3,4 |
| Solid biofuels and renewable waste | 1,1 | 1,6 | 2,0 | 2,3 | 2,5 | 2,6 |
| 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 | 0,1 | 0,0 | 0,2 | 0,3 | 0,3 | 0,4 |
| Biogases | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 | 0,2 |
| Waste, non-renewable | 0,1 | 0,1 | 0,2 | 0,2 | 0,3 | 0,3 |
| Electricity | 4,2 | 4,6 | 4,7 | 4,7 | 5,0 | 4,9 |
| Heat | 2,6 | 2,5 | 2,4 | 2,0 | 2,0 | 2,0 |
| by Sector | | | | | | |
| Industry | 9,2 | 8,7 | 6,9 | 6,5 | 6,6 | 6,6 |
| Transport | 4,2 | 5,7 | 5,9 | 6,2 | 6,8 | 6,4 |
| Residential | 6,4 | 6,7 | 7,4 | 6,8 | 7,0 | 7,1 |
| Services | 3,0 | 3,1 | 3,2 | 3,0 | 3,2 | 3,0 |
| Agriculture and Fishing | 0,7 | 0,5 | 0,5 | 0,6 | 0,6 | 0,6 |
| Others | 0,5 | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **15,3** | **17,4** | **20,1** | **21,9** | **22,0** | **21,4** |
| Combustible Fuels | 11,5 | 11,5 | 12,0 | 13,0 | 13,0 | 12,4 |
| Nuclear | 1,8 | 3,8 | 3,9 | 4,3 | 4,3 | 4,3 |
| Hydro | 2,1 | 2,2 | 2,2 | 2,3 | 2,3 | 2,3 |
| Wind | 0,0 | 0,0 | 0,2 | 0,3 | 0,3 | 0,3 |
| Solar | 0,0 | 0,0 | 1,7 | 2,1 | 2,1 | 2,1 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **73,5** | **82,6** | **85,8** | **83,8** | **86,9** | **81,4** |
| Solid fossil fuels, peat and products, oil shale | 52,8 | 49,5 | 46,9 | 41,1 | 37,3 | 31,0 |
| Oil and petroleum products | 0,4 | 0,3 | 0,2 | 0,1 | 0,1 | 0,1 |
| Natural gas | 3,9 | 4,2 | 4,2 | 5,0 | 7,9 | 8,5 |
| Nuclear | 13,6 | 24,7 | 28,0 | 26,8 | 30,2 | 30,0 |
| Renewables and biofuels | 2,8 | 3,8 | 6,5 | 10,7 | 11,2 | 11,6 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 4,8 | 4,6 | 8,5 | 8,3 |
| CHP Electricity Generation [TWh] | | | 12,2 | 11,8 | 9,9 | 10,2 |
| CHP in Total Electricity Generation [%] | | | 14,2 | 14,0 | 11,4 | 12,0 |
| CHP Heat Production [PJ] | | | 135,7 | 106,0 | 99,1 | 100,2 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 4646 | 6063 | 5924 | 6142 | 6625 | 6193 |
| **of which LPG** | 199 | 165 | 117 | 182 | 177 | 174 |
| **of which motor gasoline** | 1922 | 2125 | 1868 | 1570 | 1602 | 1456 |
| of which Gas/Diesel oil | 2526 | 3772 | 3939 | 4390 | 4847 | 4563 |
| **Final consumption biofuels** | 62 | 3 | 231 | 297 | 340 | 372 |
| **pure and blended biogasoline** | 0 | 0 | 58 | 63 | 74 | 66 |
| **pure and blended biodiesel** | 62 | 3 | 173 | 233 | 267 | 307 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 39,1 | 42,5 | 42,5 | 39,4 | 39,8 | 37,5 |
| Final energy consumption 2020-2030 [Mtoe] | 25,1 | 26,1 | 25,3 | 24,2 | 25,3 | 24,5 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 344 | 308 | 273 | 233 | 204 | 205 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 363 | 330 | 292 | 248 | 221 | 220 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 4017 | 4465 | 4346 | 3990 | 4032 | 3760 |
| Final Electricity per Capita [KWh/capita] | 7148 | 8097 | 8203 | 7953 | 8160 | 7612 |
| **Import Dependency [%]** | **22,7%** | **27,8%** | **25,4%** | **32,1%** | **40,8%** | **38,9%** |
| of Solid fossil fuels | -22,0% | -16,2% | -15,3% | -1,8% | 8,7% | 13,0% |
| **of Hard Coal** | -56,4% | -49,4% | -53,9% | -8,6% | 41,7% | 52,0% |
| of Oil and petroleum products | 95,3% | 97,5% | 96,5% | 97,8% | 97,5% | 101,2% |
| **of Crude and NGL** | 95,2% | 99,3% | 97,5% | 98,4% | 98,6% | 101,7% |
| of Natural Gas | 99,8% | 97,8% | 84,8% | 95,1% | 109,8% | 86,0% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 7.12% | 10.51% | 15.07% | 16.24% | 17.30% |
| RE-T - Renewable energy in Transport [%] | | 1.10% | 5.22% | 6.54% | 7.84% | 9.38% |
| RES-E - Renewable Electricity Generation [%] | | 3.78% | 7.52% | 14.07% | 14.05% | 14.81% |
| RES-H&C - Renewable Heating and Cooling [%] | | 10.84% | 14.10% | 19.79% | 22.63% | 23.53% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 128,9 | 127,8 | 119,4 | 106,7 | 103,0 | 92,8 |
| GHG emissions - National total* | 151,4 | 150,2 | 141,5 | 129,9 | 124,8 | 113,7 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 75,9% | 75,3% | 70,9% | 65,1% | 62,6% | 57,0% |
| Total GHG per capita [t $CO_2$ eq./capita] | 14,7 | 14,7 | 13,5 | 12,3 | 11,7 | 10,6 |

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

# 5.5 Denmark

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **27,8** | **31,3** | **23,4** | **16,2** | **12,5** | **9,5** |
| 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 | 18,3 | 19,0 | 12,5 | 7,9 | 5,2 | 3,6 |
| of which crude oil | 18,3 | 19,0 | 12,5 | 7,9 | 5,2 | 3,6 |
| Natural gas | 7,4 | 9,4 | 7,3 | 4,1 | 2,8 | 1,2 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 1,8 | 2,5 | 3,1 | 3,7 | 4,2 | 4,3 |
| Wastes, Non-Renewable | 0,3 | 0,4 | 0,4 | 0,4 | 0,4 | 0,4 |
| **Net Imports** | **-7,5** | **-10,4** | **-3,4** | **2,4** | **7,0** | **7,4** |
| Solid fossil fuels | 3,8 | 3,5 | 2,6 | 1,5 | 1,3 | 0,5 |
| of which hard coal | 3,8 | 3,5 | 2,6 | 1,5 | 1,3 | 0,5 |
| Oil and petroleum products | -8,5 | -9,4 | -3,8 | 0,4 | 3,4 | 3,5 |
| of which crude oil and NGL | -10,0 | -11,2 | -5,1 | -0,4 | 2,8 | 3,7 |
| Natural gas | -2,9 | -5,0 | -3,0 | -1,4 | -0,2 | 0,8 |
| Renewables and biofuels | 0,1 | 0,4 | 0,9 | 1,2 | 1,8 | 1,9 |
| Electricity | 0,1 | 0,1 | -0,1 | 0,5 | 0,5 | 0,6 |
| **Gross inland consumption** | **19,5** | **19,8** | **20,4** | **17,3** | **17,3** | **15,9** |
| Solid fossil fuels | 4,0 | 3,7 | 3,8 | 1,8 | 0,9 | 0,7 |
| of which hard coal | 4,0 | 3,7 | 3,8 | 1,8 | 0,9 | 0,7 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 8,8 | 8,3 | 7,8 | 6,7 | 6,9 | 5,8 |
| of which crude and NGL | 8,3 | 7,9 | 7,4 | 7,5 | 7,8 | 7,3 |
| Natural gas | 4,4 | 4,4 | 4,4 | 2,9 | 2,5 | 2,1 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 1,9 | 2,9 | 4,0 | 5,0 | 6,0 | 6,2 |
| Electricity | 0,1 | 0,1 | -0,1 | 0,5 | 0,5 | 0,6 |
| Waste, non-renewable | 0,3 | 0,4 | 0,4 | 0,4 | 0,4 | 0,4 |
| **Available for final consumption** | **14,3** | **14,7** | **15,0** | **13,5** | **13,9** | **13,5** |
| **Final non-energy consumption** | **0,3** | **0,3** | **0,3** | **0,3** | **0,2** | **0,2** |
| **Final energy consumption** | **14,0** | **14,7** | **14,9** | **13,5** | **13,5** | **13,1** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,3 | 0,3 | 0,1 | 0,1 | 0,1 | 0,1 |
| Oil and petroleum products | 6,3 | 6,4 | 5,9 | 5,1 | 5,1 | 4,7 |
| Natural gas | 1,7 | 1,7 | 1,7 | 1,5 | 1,5 | 1,5 |
| Renewables and biofuels | 0,7 | 1,0 | 1,4 | 1,6 | 1,6 | 1,6 |
| Solid biofuels and renewable waste | 0,6 | 0,9 | 1,2 | 1,2 | 1,1 | 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 | 0,2 | 0,2 | 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 | 2,9 | 2,8 | 2,6 | 2,7 | 2,7 |
| Heat | 2,3 | 2,4 | 2,8 | 2,5 | 2,5 | 2,4 |
| by Sector | | | | | | |
| Industry | 2,9 | 2,9 | 2,4 | 2,1 | 2,3 | 2,3 |
| Transport | 4,0 | 4,4 | 4,4 | 4,2 | 4,2 | 3,9 |
| Residential | 4,2 | 4,5 | 5,0 | 4,4 | 4,4 | 4,3 |
| Services | 1,8 | 2,0 | 2,1 | 1,9 | 1,9 | 1,8 |
| Agriculture and Fishing | 1,0 | 0,9 | 0,9 | 0,8 | 0,7 | 0,7 |
| Others | 0,0 | 0,1 | 0,0 | 0,0 | 0,1 | 0,1 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **12.3** | **13.0** | **13.4** | **14.0** | **15.1** | **15.5** |
| Combustible Fuels | 9.9 | 9.9 | 9.6 | 8.1 | 7.9 | 7.9 |
| Nuclear | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hydro | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wind | 2.4 | 3.1 | 3.8 | 5.1 | 6.1 | 6.3 |
| Solar | 0.0 | 0.0 | 0.0 | 0.8 | 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]** | **36.0** | **36.2** | **38.9** | **28.9** | **29.5** | **28.7** |
| Solid fossil fuels, peat and products, oil shale | 16.7 | 15.5 | 17.0 | 7.1 | 3.3 | 3.1 |
| Oil and petroleum products | 4.4 | 1.4 | 0.8 | 0.3 | 0.2 | 0.3 |
| Natural gas | 8.8 | 8.8 | 7.9 | 1.8 | 2.1 | 1.2 |
| Nuclear | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Renewables and biofuels | 5.6 | 9.8 | 12.4 | 18.9 | 23.1 | 23.5 |
| Wastes non-RES | 0.6 | 0.8 | 0.7 | 0.8 | 0.8 | 0.8 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 5.8 | 6.1 | 5.1 | 5.0 |
| CHP Electricity Generation [TWh] | | | 19.1 | 11.6 | 10.6 | 8.3 |
| CHP in Total Electricity Generation [%] | | | 49.2 | 40.0 | 35.9 | 25.0 |
| CHP Heat Production [PJ] | | | 124.7 | 93.3 | 91.9 | 80.8 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 5754 | 5938 | 5586 | 4846 | 4768 | 4430 |
| **of which LPG** | 81 | 78 | 59 | 55 | 64 | 63 |
| **of which motor gasoline** | 2055 | 1954 | 1602 | 1412 | 1339 | 1194 |
| of which Gas/Diesel oil | 3619 | 3906 | 3925 | 3378 | 3365 | 3172 |
| **Final consumption biofuels** | 0 | 0 | 28 | 215 | 226 | 251 |
| **pure and blended biogasoline** | 0 | 0 | 27 | 44 | 44 | 80 |
| **pure and blended biodiesel** | 0 | 0 | 1 | 171 | 183 | 172 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 19.1 | 19.4 | 20.0 | 16.8 | 16.8 | 15.3 |
| Final energy consumption 2020-2030 [Mtoe] | 14.7 | 15.5 | 15.5 | 14.2 | 14.3 | 13.1 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 81 | 77 | 78 | 62 | 56 | 52 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 82 | 78 | 80 | 63 | 57 | 54 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3658 | 3663 | 3680 | 3049 | 2975 | 2728 |
| Final Electricity per Capita [KWh/capita] | 6757 | 6698 | 7021 | 5113 | 5085 | 4935 |
| **Import Dependency [%]** | **-38.3%** | **-52.6%** | **-16.6%** | **13.6%** | **40.4%** | **46.4%** |
| of Solid fossil fuels | 94.9% | 94.4% | 69.4% | 85.0% | 154.0% | 74.9% |
| **of Hard Coal** | 94.8% | 94.3% | 69.3% | 85.0% | 154.5% | 74.0% |
| of Oil and petroleum products | -96.5% | -114.2% | -48.3% | 5.9% | 49.6% | 60.3% |
| **of Crude and NGL** | -120.5% | -141.3% | -68.8% | -4.9% | 36.0% | 50.7% |
| of Natural Gas | -64.8% | -113.9% | -68.3% | -48.2% | -7.2% | 37.4% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 15.96% | 21.89% | 30.47% | 37.02% | 31.68% |
| **RE-T - Renewable energy in Transport [%]** | | 0.44% | 1.15% | 6.43% | 7.11% | 9.70% |
| **RES-E - Renewable Electricity Generation [%]** | | 24.65% | 32.74% | 51.29% | 65.35% | 65.32% |
| **RES-H&C - Renewable Heating and Cooling [%]** | | 22.78% | 30.45% | 39.54% | 47.30% | 51.07% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 57.5 | 54.8 | 52.1 | 38.2 | 34.3 | 29.5 |
| GHG emissions - National total* | 73.8 | 69.6 | 66.2 | 51.6 | 47.6 | 42.7 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 101,3% | 95,5% | 90,9% | 70,8% | 65,3% | 58,6% |
| Total GHG per capita [t $CO_2$ eq./capita] | 13,8 | 12,9 | 12,0 | 9,1 | 8,2 | 7,3 |

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

# 5.6 Germany

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **135,2** | **137,8** | **131,7** | **120,5** | **105,3** | **97,8** |
| Solid fossil fuels | 60,6 | 56,5 | 45,9 | 43,0 | 28,4 | 23,4 |
| of which hard coal | 24,2 | 18,0 | 9,2 | 4,6 | 0,0 | 0,0 |
| of which brown coal | 36,4 | 38,4 | 36,7 | 38,4 | 28,4 | 23,4 |
| Oil and petroleum products | 4,4 | 5,1 | 3,7 | 3,5 | 3,2 | 3,1 |
| of which crude oil | 3,2 | 3,6 | 2,5 | 2,5 | 2,0 | 1,9 |
| Natural gas | 15,8 | 14,3 | 11,1 | 6,3 | 4,4 | 4,0 |
| Nuclear | 43,8 | 42,1 | 36,2 | 23,6 | 19,3 | 16,6 |
| Renewables and biofuels | 9,0 | 18,0 | 30,9 | 39,8 | 45,7 | 46,5 |
| Wastes, Non-Renewable | 1,7 | 1,8 | 3,9 | 4,3 | 4,2 | 4,2 |
| **Net Imports** | **204,9** | **212,0** | **204,6** | **199,1** | **207,5** | **182,2** |
| Solid fossil fuels | 21,7 | 26,0 | 31,6 | 36,1 | 26,7 | 19,7 |
| of which hard coal | 17,2 | 23,8 | 29,1 | 35,2 | 26,5 | 19,6 |
| Oil and petroleum products | 126,1 | 123,7 | 112,2 | 108,4 | 108,4 | 97,3 |
| of which crude oil and NGL | 101,5 | 114,5 | 94,0 | 92,3 | 87,2 | 84,0 |
| Natural gas | 56,9 | 61,9 | 61,6 | 58,7 | 75,7 | 66,5 |
| Renewables and biofuels | 0,0 | 0,8 | 0,4 | 0,2 | -0,4 | 0,4 |
| Electricity | 0,3 | -0,4 | -1,3 | -4,2 | -2,8 | -1,6 |
| **Gross inland consumption** | **342,4** | **346,5** | **338,2** | **318,1** | **308,1** | **284,7** |
| Solid fossil fuels | 84,8 | 81,8 | 79,1 | 79,4 | 56,5 | 44,6 |
| of which hard coal | 43,8 | 41,2 | 39,8 | 40,2 | 27,8 | 21,1 |
| of which brown coal | 37,2 | 38,4 | 36,7 | 38,1 | 28,5 | 23,4 |
| Oil and petroleum products | 131,1 | 124,6 | 113,2 | 109,9 | 110,0 | 99,5 |
| of which crude and NGL | 108,2 | 117,7 | 96,6 | 95,1 | 88,7 | 85,4 |
| Natural gas | 71,9 | 77,8 | 75,9 | 65,2 | 75,6 | 74,6 |
| Nuclear | 43,8 | 42,1 | 36,2 | 23,6 | 19,3 | 16,6 |
| Renewables and biofuels | 9,0 | 18,8 | 31,3 | 39,9 | 45,3 | 46,9 |
| Electricity | 0,3 | -0,4 | -1,3 | -4,2 | -2,8 | -1,6 |
| Waste, non-renewable | 1,7 | 1,8 | 3,9 | 4,3 | 4,2 | 4,2 |
| **Available for final consumption** | **234,8** | **235,9** | **233,1** | **220,8** | **225,5** | **214,6** |
| **Final non-energy consumption** | **25,3** | **24,7** | **22,6** | **21,3** | **21,6** | **21,0** |
| **Final energy consumption** | **207,2** | **207,3** | **209,9** | **200,0** | **200,8** | **193,6** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 5,6 | 4,0 | 4,4 | 4,7 | 3,4 | 3,4 |
| Oil and petroleum products | 92,3 | 82,2 | 74,9 | 73,0 | 72,5 | 67,6 |
| Natural gas | 53,0 | 52,6 | 54,0 | 49,3 | 52,4 | 51,8 |
| Renewables and biofuels | 4,8 | 10,1 | 16,2 | 15,6 | 16,6 | 17,3 |
| Solid biofuels and renewable waste | 4,4 | 7,4 | 11,2 | 9,9 | 10,4 | 10,1 |
| Solar thermal | 0,1 | 0,3 | 0,5 | 0,7 | 0,7 | 0,7 |
| Geothermal | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 | 0,1 |
| Liquid biofuels | 0,2 | 1,9 | 3,2 | 2,7 | 2,8 | 3,6 |
| Biogases | 0,1 | 0,3 | 0,8 | 1,3 | 1,4 | 1,4 |
| Waste, non-renewable | 0,0 | 0,3 | 1,0 | 1,0 | 1,3 | 1,3 |
| Electricity | 41,6 | 44,9 | 45,7 | 44,3 | 42,7 | 41,3 |
| Heat | 6,8 | 10,6 | 11,3 | 9,6 | 9,6 | 9,0 |
| by Sector | | | | | | |
| Industry | 51,4 | 54,5 | 56,7 | 56,1 | 55,6 | 54,2 |
| Transport | 60,0 | 54,8 | 53,1 | 55,1 | 56,2 | 51,0 |
| Residential | 65,3 | 63,7 | 63,8 | 55,0 | 57,7 | 58,0 |
| Services | 25,8 | 33,7 | 34,8 | 32,3 | 27,5 | 26,8 |
| Agriculture and Fishing | 0,3 | 0,2 | 1,3 | 1,5 | 3,6 | 3,6 |
| Others | 4,3 | 0,3 | 0,2 | 0,1 | 0,1 | 0,1 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **118,9** | **128,5** | **162,9** | **203,3** | **231,5** | **233,7** |
| Combustible Fuels | 80,8 | 76,4 | 85,8 | 97,0 | 100,5 | 98,3 |
| Nuclear | 22,4 | 20,4 | 20,5 | 10,8 | 9,5 | 8,1 |
| Hydro | 9,5 | 10,9 | 11,2 | 11,3 | 10,7 | 10,8 |
| Wind | 6,1 | 18,3 | 27,0 | 44,6 | 60,7 | 62,2 |
| Solar | 0,1 | 2,1 | 18,0 | 39,2 | 48,9 | 53,7 |
| 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]** | **576,5** | **620,2** | **631,0** | **646,5** | **605,4** | **571,1** |
| Solid fossil fuels, peat and products, oil shale | 296,7 | 288,1 | 262,9 | 272,2 | 171,5 | 133,6 |
| Oil and petroleum products | 4,8 | 12,0 | 8,7 | 6,2 | 4,8 | 4,9 |
| Natural gas | 60,0 | 83,6 | 100,9 | 74,5 | 101,1 | 104,9 |
| Nuclear | 169,6 | 163,1 | 140,6 | 91,8 | 75,1 | 64,4 |
| Renewables and biofuels | 39,7 | 70,2 | 111,6 | 194,7 | 246,3 | 256,7 |
| Wastes non-RES | 5,8 | 3,3 | 6,4 | 7,1 | 6,8 | 6,6 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 24,6 | 37,1 | 54,8 | 53,4 |
| CHP Electricity Generation [TWh] | | | 83,2 | 78,8 | 86,9 | 85,5 |
| CHP in Total Electricity Generation [%] | | | 13,2 | 12,2 | 14,3 | 14,3 |
| CHP Heat Production [PJ] | | | 675,8 | 669,9 | 663,2 | 638,8 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 89321 | 78716 | 72135 | 70165 | 70460 | 65956 |
| **of which LPG** | 1909 | 1644 | 2075 | 1607 | 1729 | 1665 |
| **of which motor gasoline** | 30479 | 24121 | 19204 | 17226 | 16989 | 15311 |
| of which Gas/Diesel oil | 56933 | 52951 | 50857 | 51332 | 51741 | 48981 |
| **Final consumption biofuels** | 236 | 1927 | 3166 | 2716 | 2827 | 3552 |
| **pure and blended biogasoline** | 0 | 153 | 749 | 744 | 725 | 696 |
| **pure and blended biodiesel** | 222 | 1597 | 2244 | 1926 | 2044 | 2800 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 317,1 | 321,6 | 315,2 | 295,9 | 285,2 | 262,3 |
| Final energy consumption 2020-2030 [Mtoe] | 220,2 | 219,7 | 223,0 | 212,7 | 214,7 | 201,7 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 124 | 123 | 113 | 98 | 88 | 85 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 134 | 132 | 122 | 105 | 95 | 92 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 4168 | 4200 | 4135 | 3918 | 3712 | 3424 |
| Final Electricity per Capita [KWh/capita] | 7017 | 7517 | 7714 | 7962 | 7293 | 6867 |
| **Import Dependency [%]** | **59,8%** | **61,2%** | **60,5%** | **62,6%** | **67,4%** | **64,0%** |
| of Solid fossil fuels | 25,6% | 31,7% | 40,0% | 45,4% | 47,2% | 44,1% |
| **of Hard Coal** | 39,2% | 57,7% | 73,2% | 87,6% | 95,2% | 92,8% |
| of Oil and petroleum products | 96,2% | 99,3% | 99,1% | 98,7% | 98,5% | 97,8% |
| **of Crude and NGL** | 93,8% | 97,3% | 97,3% | 97,1% | 98,3% | 98,3% |
| of Natural Gas | 79,1% | 79,6% | 81,2% | 90,1% | 100,1% | 89,1% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 7.17% | 11.67% | 14.91% | 17.27% | 19.31% |
| RE-T - Renewable energy in Transport [%] | | 3.95% | 6.41% | 6.57% | 7.63% | 9.92% |
| RES-E - Renewable Electricity Generation [%] | | 10.58% | 18.24% | 30.88% | 40.60% | 44.70% |
| RES-H&C - Renewable Heating and Cooling [%] | | 7.71% | 12.06% | 13.44% | 14.50% | 14.81% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 918,6 | 889,1 | 856,8 | 820,1 | 736,8 | 653,0 |
| GHG emissions - National total* | 1056,3 | 1009,7 | 960,2 | 922,7 | 829,6 | 742,5 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 84,2% | 80,5% | 76,6% | 73,6% | 66,2% | 59,2% |
| Total GHG per capita [t $CO_2$ eq./capita] | 12,9 | 12,2 | 11,7 | 11,4 | 10,0 | 8,9 |

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

# 5.7 Estonia

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **3,4** | **4,0** | **5,1** | **4,9** | **5,0** | **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 | 0,7 | 1,0 | 1,3 | 1,9 | 1,8 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Net Imports** | **1,6** | **1,5** | **0,9** | **0,6** | **0,2** | **0,5** |
| Solid fossil fuels | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,8 | 0,9 | 0,8 | 0,6 | 0,3 | 0,3 |
| of which crude oil and NGL | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,7 | 0,8 | 0,6 | 0,4 | 0,4 | 0,4 |
| Renewables and biofuels | 0,0 | -0,1 | -0,1 | -0,4 | -0,6 | -0,5 |
| Electricity | -0,1 | -0,1 | -0,3 | -0,1 | 0,2 | 0,3 |
| **Gross inland consumption** | **4,7** | **5,5** | **5,9** | **4,9** | **4,8** | **4,5** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,7 | 0,8 | 0,6 | 0,3 | 0,1 | 0,0 |
| of which crude and NGL | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,7 | 0,8 | 0,6 | 0,4 | 0,4 | 0,3 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,5 | 0,6 | 0,9 | 0,9 | 1,2 | 1,3 |
| Electricity | -0,1 | -0,1 | -0,3 | -0,1 | 0,2 | 0,3 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Available for final consumption** | **2,5** | **3,2** | **3,1** | **2,5** | **2,8** | **2,9** |
| **Final non-energy consumption** | **0,2** | **0,2** | **0,1** | **0,1** | **0,1** | **0,2** |
| **Final energy consumption** | **2,4** | **2,8** | **2,9** | **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 | 0,9 | 1,0 | 1,0 | 0,9 |
| Natural gas | 0,2 | 0,3 | 0,2 | 0,2 | 0,2 | 0,2 |
| Renewables and biofuels | 0,4 | 0,4 | 0,6 | 0,5 | 0,4 | 0,5 |
| Solid biofuels and renewable waste | 0,4 | 0,4 | 0,5 | 0,5 | 0,4 | 0,4 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Electricity | 0,4 | 0,5 | 0,6 | 0,6 | 0,6 | 0,6 |
| Heat | 0,5 | 0,5 | 0,5 | 0,4 | 0,5 | 0,5 |
| by Sector | | | | | | |
| Industry | 0,6 | 0,7 | 0,6 | 0,5 | 0,5 | 0,4 |
| Transport | 0,6 | 0,7 | 0,8 | 0,8 | 0,8 | 0,8 |
| Residential | 0,9 | 0,9 | 1,0 | 0,9 | 1,0 | 0,9 |
| Services | 0,3 | 0,4 | 0,4 | 0,5 | 0,5 | 0,5 |
| Agriculture and Fishing | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: **see appendices**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **2.8** | **2.6** | **2.8** | **2.9** | **2.7** | **2.7** |
| Combustible Fuels | 2.8 | 2.5 | 2.6 | 2.6 | 2.3 | 2.2 |
| Nuclear | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hydro | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Wind | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.3 |
| Solar | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| Geothermal | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Tide, Wave and Ocean | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **8.5** | **10.2** | **13.0** | **10.1** | **7.6** | **6.0** |
| Solid fossil fuels, peat and products, oil shale | 7.7 | 9.3 | 11.2 | 7.9 | 4.3 | 2.2 |
| Oil and petroleum products | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Natural gas | 0.8 | 0.8 | 0.7 | 0.5 | 1.1 | 0.8 |
| Nuclear | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Renewables and biofuels | 0.0 | 0.1 | 1.0 | 1.6 | 2.1 | 2.8 |
| Wastes non-RES | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0.4 | 0.4 | 0.2 | 0.5 |
| CHP Electricity Generation [TWh] | | | 1.3 | 1.2 | 1.0 | 1.4 |
| CHP in Total Electricity Generation [%] | | | 10.3 | 11.9 | 13.6 | 19.3 |
| CHP Heat Production [PJ] | | | 12.3 | 12.5 | 3.6 | 12.8 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 655 | 877 | 883 | 945 | 956 | 885 |
| **of which LPG** | 8 | 8 | 11 | 20 | 30 | 27 |
| **of which motor gasoline** | 296 | 305 | 289 | 243 | 276 | 216 |
| of which Gas/Diesel oil | 351 | 564 | 583 | 683 | 650 | 642 |
| **Final consumption biofuels** | 0 | 0 | 8 | 3 | 27 | 39 |
| **pure and blended biogasoline** | 0 | 0 | 4 | 3 | 7 | 6 |
| **pure and blended biodiesel** | 0 | 0 | 3 | 0 | 20 | 33 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 4.6 | 5.3 | 5.8 | 4.8 | 4.7 | 4.3 |
| Final energy consumption 2020-2030 [Mtoe] | 2.4 | 2.9 | 2.9 | 2.8 | 2.9 | 2.8 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 363 | 296 | 333 | 231 | 192 | 182 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 376 | 308 | 338 | 235 | 197 | 190 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3361 | 4044 | 4443 | 3690 | 3621 | 3378 |
| Final Electricity per Capita [KWh/capita] | 6075 | 7510 | 9723 | 7718 | 5748 | 4482 |
| **Import Dependency [%]** | **34,7 %** | **27,5 %** | **15,2 %** | **11,8 %** | **5,0 %** | **11,2 %** |
| of Solid fossil fuels | 125.2 % | 88.4 % | 132.6 % | -6.8 % | 107.2 % | 391.7 % |
| **of Hard Coal** | 116.1 % | 96.4 % | 118.3 % | 24.1 % | 96.7 % | 28.5 % |
| of Oil and petroleum products | 117.3 % | 113.2 % | 130.2 % | 188.9 % | 547.2 % | -1580.2 % |
| **of Crude and NGL** | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % | 0.0 % |
| of Natural Gas | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 105.4 % | 106.3 % |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 17.43 % | 24.60 % | 28.99 % | 31.73 % | 30.07 % |
| **RE-T - Renewable energy in Transport [%]** | | 0.24 % | 0.43 % | 0.41 % | 6.24 % | 12.16 % |
| **RES-E - Renewable Electricity Generation [%]** | | 1.13 % | 10.29 % | 16.15 % | 22.00 % | 28.29 % |
| **RES-H&C - Renewable Heating and Cooling [%]** | | 32.22 % | 43.25 % | 50.03 % | 52.19 % | 58.83 % |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 15,6 | 17,2 | 19,1 | 16,0 | 12,6 | 9,4 |
| GHG emissions - National total* | 17,5 | 19,3 | 21,3 | 18,2 | 14,8 | 11,6 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 43,6 % | 47,9 % | 52,8 % | 45,2 % | 36,9 % | 28,9 % |
| Total GHG per capita [t $CO_2$ eq./capita] | 12,5 | 14,2 | 16,0 | 13,8 | 11,2 | 8,7 |

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

# 5.8 Ireland

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **2,2** | **1,7** | **1,8** | **2,0** | **4,1** | **3,5** |
| 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 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 1,0 | 0,5 | 0,2 | 0,1 | 2,1 | 1,7 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,2 | 0,4 | 0,6 | 1,0 | 1,5 | 1,6 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| **Net Imports** | **12,4** | **14,0** | **13,3** | **12,8** | **10,4** | **9,9** |
| Solid fossil fuels | 1,7 | 1,9 | 1,0 | 1,5 | 0,3 | 0,3 |
| of which hard coal | 1,7 | 1,9 | 0,9 | 1,5 | 0,3 | 0,3 |
| Oil and petroleum products | 8,2 | 8,9 | 7,7 | 7,5 | 7,5 | 6,6 |
| of which crude oil and NGL | 3,0 | 3,3 | 3,0 | 3,7 | 2,6 | 3,0 |
| Natural gas | 2,5 | 3,0 | 4,5 | 3,6 | 2,4 | 2,9 |
| Renewables and biofuels | 0,0 | 0,0 | 0,1 | 0,1 | 0,2 | 0,2 |
| Electricity | 0,0 | 0,2 | 0,0 | 0,1 | 0,1 | 0,0 |
| **Gross inland consumption** | **14,4** | **15,5** | **15,1** | **14,2** | **15,0** | **13,7** |
| Solid fossil fuels | 1,8 | 1,9 | 1,2 | 1,5 | 0,4 | 0,4 |
| of which hard coal | 1,8 | 1,9 | 1,2 | 1,4 | 0,4 | 0,4 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 8,2 | 8,8 | 7,8 | 7,0 | 7,4 | 6,2 |
| of which crude and NGL | 3,4 | 3,4 | 3,0 | 3,4 | 2,6 | 2,9 |
| Natural gas | 3,4 | 3,5 | 4,7 | 3,8 | 4,6 | 4,6 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,2 | 0,4 | 0,7 | 1,1 | 1,6 | 1,8 |
| Electricity | 0,0 | 0,2 | 0,0 | 0,1 | 0,1 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| **Available for final consumption** | **10,4** | **11,1** | **11,3** | **10,8** | **11,6** | **11,1** |
| **Final non-energy consumption** | **0,7** | **0,5** | **0,3** | **0,2** | **0,2** | **0,2** |
| **Final energy consumption** | **10,2** | **11,8** | **11,2** | **10,5** | **11,3** | **10,8** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,4 | 0,5 | 0,4 | 0,3 | 0,2 | 0,2 |
| Oil and petroleum products | 6,5 | 7,4 | 6,5 | 5,6 | 5,9 | 5,5 |
| Natural gas | 1,2 | 1,4 | 1,6 | 1,7 | 2,0 | 2,0 |
| Renewables and biofuels | 0,1 | 0,2 | 0,3 | 0,4 | 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 | 0,0 | 0,1 | 0,1 | 0,2 | 0,2 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| Electricity | 1,7 | 2,1 | 2,2 | 2,2 | 2,4 | 2,5 |
| Heat | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| by Sector | | | | | | |
| Industry | 2,5 | 2,5 | 1,9 | 2,0 | 2,2 | 2,2 |
| Transport | 3,5 | 4,3 | 3,9 | 3,9 | 4,1 | 3,5 |
| Residential | 2,7 | 3,2 | 3,6 | 2,8 | 2,9 | 3,1 |
| Services | 1,2 | 1,4 | 1,6 | 1,6 | 1,8 | 1,8 |
| Agriculture and Fishing | 0,4 | 0,4 | 0,3 | 0,2 | 0,2 | 0,2 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **4,7** | **6,1** | **8,1** | **9,7** | **11,1** | **11,2** |
| Combustible Fuels | 4,1 | 5,1 | 6,5 | 6,7 | 6,4 | 6,3 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 0,5 | 0,5 | 0,2 | 0,5 | 0,5 | 0,5 |
| Wind | 0,1 | 0,5 | 1,4 | 2,5 | 4,1 | 4,3 |
| Solar | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **24,0** | **26,0** | **28,4** | **28,4** | **31,0** | **32,3** |
| Solid fossil fuels, peat and products, oil shale | 8,6 | 8,8 | 5,7 | 7,4 | 2,4 | 1,6 |
| Oil and petroleum products | 4,6 | 3,3 | 0,6 | 0,4 | 0,3 | 0,4 |
| Natural gas | 9,3 | 11,6 | 18,1 | 12,4 | 15,9 | 16,2 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 1,5 | 2,2 | 3,9 | 8,1 | 12,0 | 13,8 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,1 | 0,3 | 0,3 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0,3 | 0,3 | 0,3 | 0,3 |
| CHP Electricity Generation [TWh] | | | 1,9 | 2,1 | 2,1 | 2,1 |
| CHP in Total Electricity Generation [%] | | | 6,7 | 7,5 | 6,7 | 6,5 |
| CHP Heat Production [PJ] | | | 12,0 | 12,6 | 11,2 | 11,1 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 4839 | 5642 | 4893 | 4544 | 4826 | 4195 |
| of which LPG | 153 | 166 | 148 | 153 | 180 | 174 |
| of which motor gasoline | 1590 | 1823 | 1527 | 1020 | 781 | 578 |
| of which Gas/Diesel oil | 3096 | 3653 | 3218 | 3371 | 3865 | 3443 |
| Final consumption biofuels | 0 | 1 | 93 | 122 | 188 | 175 |
| pure and blended biogasoline | 0 | 0 | 30 | 24 | 26 | 19 |
| pure and blended biodiesel | 0 | 1 | 62 | 98 | 162 | 155 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 13,7 | 14,9 | 14,7 | 14,0 | 14,7 | 13,4 |
| Final energy consumption 2020-2030 [Mtoe] | 10,8 | 12,6 | 11,9 | 11,3 | 12,4 | 11,2 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 96 | 81 | 78 | 53 | 44 | 38 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 101 | 84 | 80 | 54 | 45 | 39 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3804 | 3762 | 3311 | 3045 | 3054 | 2763 |
| Final Electricity per Capita [KWh/capita] | 6347 | 6316 | 6232 | 6069 | 6313 | 6504 |
| **Import Dependency [%]** | **86,4%** | **90,3%** | **88,3%** | **89,8%** | **69,4%** | **72,1%** |
| of Solid fossil fuels | 93,3% | 100,8% | 77,7% | 103,0% | 68,2% | 60,3% |
| of Hard Coal | 93,1% | 100,8% | 77,5% | 103,0% | 67,4% | 59,2% |
| of Oil and petroleum products | 100,6% | 101,2% | 99,2% | 107,0% | 100,7% | 105,8% |
| of Crude and NGL | 89,8% | 98,9% | 101,6% | 108,2% | 100,9% | 102,3% |
| of Natural Gas | 72,1% | 86,1% | 95,3% | 96,3% | 53,0% | 63,7% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 2.82% | 5.78% | 9.08% | 11.98% | 16.16% |
| RE-T - Renewable energy in Transport [%] | | 0.08% | 2.49% | 5.94% | 8.92% | 10.19% |
| RES-E - Renewable Electricity Generation [%] | | 7.20% | 15.64% | 25.73% | 36.46% | 39.05% |
| RES-H&C - Renewable Heating and Cooling [%] | | 3.44% | 4.32% | 6.18% | 6.34% | 6.26% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 47,1 | 50,6 | 44,1 | 41,2 | 40,6 | 36,3 |
| GHG emissions - National total* | 70,3 | 72,8 | 64,3 | 63,0 | 63,2 | 58,9 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 126,7% | 131,2% | 115,9% | 113,6% | 113,9% | 106,2% |
| Total GHG per capita [t $CO_2$ eq./capita] | 18,6 | 17,7 | 14,1 | 13,5 | 12,9 | 11,9 |

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

# 5.9 Greece

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **10,0** | **10,4** | **9,5** | **8,5** | **6,4** | **5,0** |
| Solid fossil fuels | 8,2 | 8,5 | 7,3 | 5,7 | 3,1 | 1,6 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 8,2 | 8,5 | 7,3 | 5,7 | 3,1 | 1,6 |
| Oil and petroleum products | 0,3 | 0,1 | 0,1 | 0,1 | 0,2 | 0,1 |
| of which crude oil | 0,3 | 0,1 | 0,1 | 0,1 | 0,2 | 0,1 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 1,5 | 1,7 | 2,0 | 2,7 | 3,1 | 3,2 |
| Wastes, Non-Renewable | 0,1 | 0,0 | 0,0 | 0,1 | 0,0 | 0,0 |
| **Net Imports** | **21,8** | **23,1** | **21,3** | **18,4** | **19,3** | **18,0** |
| Solid fossil fuels | 0,8 | 0,4 | 0,4 | 0,2 | 0,2 | 0,2 |
| of which hard coal | 0,8 | 0,4 | 0,4 | 0,2 | 0,2 | 0,2 |
| Oil and petroleum products | 19,3 | 20,1 | 17,0 | 14,6 | 13,7 | 11,9 |
| of which crude oil and NGL | 19,2 | 17,6 | 19,1 | 21,8 | 22,4 | 22,5 |
| Natural gas | 1,7 | 2,3 | 3,2 | 2,7 | 4,4 | 5,0 |
| Renewables and biofuels | 0,0 | 0,0 | 0,2 | 0,1 | 0,1 | 0,1 |
| Electricity | 0,0 | 0,3 | 0,5 | 0,8 | 0,9 | 0,8 |
| **Gross inland consumption** | **27,9** | **31,1** | **28,3** | **24,1** | **23,6** | **20,4** |
| Solid fossil fuels | 9,0 | 9,0 | 7,9 | 5,6 | 3,2 | 1,8 |
| of which hard coal | 0,7 | 0,3 | 0,4 | 0,2 | 0,2 | 0,2 |
| of which brown coal | 8,3 | 8,6 | 7,5 | 5,4 | 3,0 | 1,7 |
| Oil and petroleum products | 15,6 | 17,7 | 14,5 | 12,0 | 11,8 | 9,6 |
| of which crude and NGL | 19,3 | 18,5 | 19,2 | 21,5 | 22,8 | 22,1 |
| Natural gas | 1,7 | 2,4 | 3,2 | 2,7 | 4,5 | 4,9 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 1,5 | 1,7 | 2,2 | 2,8 | 3,2 | 3,3 |
| Electricity | 0,0 | 0,3 | 0,5 | 0,8 | 0,9 | 0,8 |
| Waste, non-renewable | 0,1 | 0,0 | 0,0 | 0,1 | 0,0 | 0,0 |
| **Available for final consumption** | **18,5** | **20,8** | **19,2** | **16,5** | **16,4** | **14,6** |
| **Final non-energy consumption** | **0,7** | **0,8** | **1,1** | **0,7** | **0,9** | **0,8** |
| **Final energy consumption** | **17,9** | **20,2** | **18,4** | **15,7** | **15,4** | **14,5** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,9 | 0,4 | 0,3 | 0,2 | 0,2 | 0,2 |
| Oil and petroleum products | 11,9 | 13,6 | 11,4 | 8,6 | 8,2 | 7,4 |
| Natural gas | 0,3 | 0,6 | 0,8 | 1,0 | 0,9 | 1,1 |
| Renewables and biofuels | 1,1 | 1,1 | 1,2 | 1,5 | 1,7 | 1,7 |
| Solid biofuels and renewable waste | 0,9 | 1,0 | 0,9 | 1,1 | 0,8 | 0,8 |
| Solar thermal | 0,2 | 0,2 | 0,2 | 0,3 | 0,3 | 0,3 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,1 | 0,2 | 0,2 | 0,2 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,1 | 0,0 | 0,0 |
| Electricity | 3,7 | 4,4 | 4,6 | 4,4 | 4,3 | 4,1 |
| Heat | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| by Sector | | | | | | |
| Industry | 4,5 | 4,2 | 3,5 | 3,1 | 2,6 | 2,5 |
| Transport | 6,5 | 7,4 | 7,5 | 5,8 | 6,0 | 5,1 |
| Residential | 4,6 | 5,6 | 4,7 | 4,5 | 4,1 | 4,3 |
| Services | 1,3 | 2,0 | 2,0 | 1,9 | 2,1 | 1,9 |
| Agriculture and Fishing | 1,1 | 1,2 | 0,8 | 0,3 | 0,3 | 0,3 |
| Others | 0,0 | 0,0 | 0,0 | 0,3 | 0,2 | 0,3 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **10,9** | **13,3** | **15,3** | **18,9** | **20,5** | **20,8** |
| Combustible Fuels | 7,6 | 9,7 | 10,6 | 10,9 | 10,6 | 10,0 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 3,1 | 3,1 | 3,2 | 3,4 | 3,4 | 3,4 |
| Wind | 0,2 | 0,5 | 1,3 | 2,1 | 3,6 | 4,1 |
| Solar | 0,0 | 0,0 | 0,2 | 2,6 | 2,8 | 3,3 |
| 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** | **60,0** | **57,4** | **51,9** | **48,6** | **48,3** |
| Solid fossil fuels, peat and products, oil shale | 34,3 | 35,5 | 30,8 | 22,1 | 12,1 | 6,6 |
| Oil and petroleum products | 8,9 | 9,2 | 6,1 | 5,7 | 5,6 | 4,7 |
| Natural gas | 5,9 | 8,2 | 9,8 | 9,1 | 14,5 | 19,2 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 4,6 | 7,0 | 10,6 | 14,9 | 16,1 | 17,7 |
| Wastes non-RES | 0,2 | 0,1 | 0,1 | 0,1 | 0,3 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0,6 | 0,6 | 0,4 | 0,4 |
| CHP Electricity Generation [TWh] | | | 2,5 | 2,0 | 2,2 | 2,3 |
| CHP in Total Electricity Generation [%] | | | 4,3 | 3,9 | 4,5 | 4,2 |
| CHP Heat Production [PJ] | | | 12,7 | 10,9 | 15,3 | 16,8 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 10038 | 11762 | 9882 | 7138 | 6929 | 6350 |
| **of which LPG** | 456 | 403 | 320 | 531 | 596 | 514 |
| **of which motor gasoline** | 3471 | 4146 | 3894 | 2586 | 2357 | 1895 |
| of which Gas/Diesel oil | 6111 | 7213 | 5668 | 4021 | 3976 | 3941 |
| **Final consumption biofuels** | 0 | 0 | 125 | 158 | 193 | 205 |
| **pure and blended biogasoline** | 0 | 0 | 0 | 0 | 25 | 63 |
| **pure and blended biodiesel** | 0 | 0 | 125 | 158 | 168 | 142 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 27,2 | 30,3 | 27,2 | 23,4 | 22,3 | 19,2 |
| Final energy consumption 2020-2030 [Mtoe] | 18,7 | 21,0 | 19,1 | 16,6 | 16,2 | 14,5 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 150 | 138 | 126 | 133 | 121 | 115 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 154 | 141 | 131 | 137 | 128 | 122 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 2589 | 2831 | 2549 | 2218 | 2196 | 1908 |
| Final Electricity per Capita [KWh/capita] | 4997 | 5471 | 5163 | 4778 | 4534 | 4502 |
| **Import Dependency [%]** | **78,0%** | **74,5%** | **75,1%** | **76,3%** | **82,0%** | **87,9%** |
| of Solid fossil fuels | 8,5% | 4,1% | 5,1% | 2,8% | 6,4% | 10,2% |
| **of Hard Coal** | 105,8% | 112,4% | 100,5% | 91,5% | 105,0% | 114,6% |
| of Oil and petroleum products | 123,4% | 113,6% | 117,1% | 121,1% | 116,1% | 124,5% |
| **of Crude and NGL** | 99,6% | 95,2% | 99,6% | 101,5% | 98,1% | 102,0% |
| of Natural Gas | 99,1% | 99,1% | 99,9% | 99,9% | 99,0% | 100,7% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 7.28% | 10.08% | 15.69% | 19.63% | 21.75% |
| **RE-T - Renewable energy in Transport [%]** | | 0.06% | 1.92% | 1.10% | 4.05% | 5.34% |
| **RES-E - Renewable Electricity Generation [%]** | | 8.21% | 12.31% | 22.09% | 31.30% | 35.86% |
| **RES-H&C - Renewable Heating and Cooling [%]** | | 13.38% | 18.66% | 26.56% | 30.05% | 31.94% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 105,5 | 116,5 | 99,9 | 77,8 | 69,7 | 56,9 |
| GHG emissions - National total* | 129,1 | 139,0 | 121,1 | 98,3 | 89,6 | 76,2 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 121,8% | 131,2% | 114,3% | 92,8% | 84,6% | 71,9% |
| Total GHG per capita [t $CO_2$ eq./capita] | 12,0 | 12,7 | 10,9 | 9,1 | 8,4 | 7,1 |

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

# 5.10 Spain

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **31,3** | **30,0** | **34,5** | **34,1** | **34,7** | **35,4** |
| Solid fossil fuels | 8,0 | 6,3 | 3,3 | 1,2 | 0,0 | 0,0 |
| of which hard coal | 5,4 | 4,1 | 2,5 | 0,8 | 0,0 | 0,0 |
| of which brown coal | 2,6 | 2,1 | 0,8 | 0,4 | 0,0 | 0,0 |
| Oil and petroleum products | 0,2 | 0,2 | 0,1 | 0,2 | 0,0 | 0,0 |
| of which crude oil | 0,2 | 0,2 | 0,1 | 0,2 | 0,0 | 0,0 |
| Natural gas | 0,1 | 0,1 | 0,0 | 0,1 | 0,1 | 0,0 |
| Nuclear | 16,0 | 14,8 | 16,1 | 14,9 | 15,2 | 15,2 |
| Renewables and biofuels | 6,7 | 8,4 | 14,6 | 17,3 | 18,8 | 19,6 |
| Wastes, Non-Renewable | 0,2 | 0,2 | 0,3 | 0,4 | 0,5 | 0,5 |
| **Net Imports** | **99,9** | **124,2** | **106,7** | **94,9** | **100,6** | **80,2** |
| Solid fossil fuels | 12,8 | 14,4 | 6,8 | 10,2 | 4,5 | 1,7 |
| of which hard coal | 13,3 | 14,7 | 6,9 | 10,1 | 4,1 | 1,2 |
| Oil and petroleum products | 71,2 | 79,7 | 69,3 | 61,3 | 64,5 | 51,7 |
| of which crude oil and NGL | 58,1 | 60,2 | 53,0 | 65,4 | 67,0 | 55,4 |
| Natural gas | 15,5 | 30,2 | 31,0 | 23,8 | 31,4 | 27,2 |
| Renewables and biofuels | 0,0 | 0,0 | 0,4 | -0,4 | -0,4 | -0,7 |
| Electricity | 0,4 | -0,1 | -0,7 | 0,0 | 0,6 | 0,3 |
| **Gross inland consumption** | **124,0** | **144,5** | **130,1** | **122,9** | **126,8** | **111,8** |
| Solid fossil fuels | 20,9 | 20,5 | 7,3 | 13,6 | 5,1 | 3,1 |
| of which hard coal | 18,5 | 18,6 | 7,2 | 12,7 | 4,5 | 2,6 |
| of which brown coal | 2,8 | 2,3 | 0,2 | 0,7 | 0,2 | 0,0 |
| Oil and petroleum products | 64,4 | 70,8 | 60,9 | 52,5 | 56,2 | 45,7 |
| of which crude and NGL | 57,7 | 60,1 | 53,4 | 65,7 | 66,3 | 55,7 |
| Natural gas | 15,2 | 29,8 | 31,1 | 24,5 | 30,9 | 27,9 |
| Nuclear | 16,0 | 14,8 | 16,1 | 14,9 | 15,2 | 15,2 |
| Renewables and biofuels | 6,8 | 8,4 | 15,0 | 17,0 | 18,4 | 19,1 |
| Electricity | 0,4 | -0,1 | -0,7 | 0,0 | 0,6 | 0,3 |
| Waste, non-renewable | 0,2 | 0,2 | 0,3 | 0,4 | 0,5 | 0,5 |
| **Available for final consumption** | **85,4** | **101,8** | **91,4** | **79,0** | **86,3** | **77,7** |
| **Final non-energy consumption** | **9,5** | **8,4** | **7,1** | **4,3** | **5,4** | **5,8** |
| **Final energy consumption** | **76,3** | **93,7** | **85,5** | **75,9** | **81,5** | **72,3** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,8 | 0,8 | 0,5 | 0,4 | 0,4 | 0,3 |
| Oil and petroleum products | 43,7 | 50,5 | 43,9 | 36,7 | 39,5 | 32,6 |
| Natural gas | 11,8 | 17,7 | 14,3 | 12,9 | 14,5 | 13,8 |
| Renewables and biofuels | 3,5 | 3,8 | 5,4 | 5,7 | 6,7 | 6,5 |
| Solid biofuels and renewable waste | 3,3 | 3,4 | 3,7 | 4,0 | 3,8 | 3,7 |
| Solar thermal | 0,0 | 0,1 | 0,2 | 0,3 | 0,3 | 0,3 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,1 | 0,3 | 1,5 | 1,0 | 1,7 | 1,4 |
| Biogases | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 | 0,1 |
| Waste, non-renewable | 0,0 | 0,0 | 0,1 | 0,2 | 0,2 | 0,2 |
| Electricity | 16,2 | 20,8 | 21,0 | 20,0 | 20,2 | 18,9 |
| Heat | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| by Sector | | | | | | |
| Industry | 24,5 | 29,9 | 20,8 | 18,7 | 20,6 | 18,8 |
| Transport | 30,5 | 37,0 | 34,2 | 29,4 | 33,0 | 26,2 |
| Residential | 12,1 | 15,2 | 17,0 | 15,3 | 14,4 | 14,6 |
| Services | 6,7 | 8,3 | 9,8 | 9,5 | 10,3 | 9,5 |
| Agriculture and Fishing | 2,6 | 3,1 | 2,2 | 2,7 | 2,9 | 3,0 |
| Others | 0,0 | 0,2 | 1,5 | 0,4 | 0,3 | 0,3 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **53,9** | **76,6** | **101,7** | **106,8** | **109,7** | **108,4** |
| Combustible Fuels | 26,2 | 40,8 | 50,4 | 49,3 | 45,6 | 41,7 |
| Nuclear | 7,5 | 7,6 | 7,5 | 7,4 | 7,1 | 7,1 |
| Hydro | 18,0 | 18,2 | 18,5 | 20,1 | 20,1 | 20,1 |
| Wind | 2,2 | 9,9 | 20,7 | 22,9 | 25,6 | 26,8 |
| Solar | 0,0 | 0,1 | 4,6 | 7,0 | 11,1 | 12,6 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **224,5** | **289,1** | **301,4** | **280,7** | **273,1** | **263,2** |
| Solid fossil fuels, peat and products, oil shale | 79,1 | 79,1 | 25,3 | 51,4 | 12,9 | 5,5 |
| Oil and petroleum products | 22,6 | 24,4 | 16,6 | 17,2 | 12,9 | 10,7 |
| Natural gas | 21,9 | 80,7 | 95,8 | 53,8 | 84,8 | 70,4 |
| Nuclear | 62,2 | 57,5 | 62,0 | 57,2 | 58,3 | 58,3 |
| Renewables and biofuels | 38,0 | 46,9 | 101,0 | 100,3 | 103,2 | 117,3 |
| Wastes non-RES | 0,6 | 0,5 | 0,7 | 0,8 | 1,0 | 1,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 3,4 | 3,5 | 5,0 | 5,0 |
| CHP Electricity Generation [TWh] | | | 22,4 | 22,7 | 29,7 | 26,9 |
| CHP in Total Electricity Generation [%] | | | 7,4 | 8,1 | 10,9 | 9,8 |
| CHP Heat Production [PJ] | | | 153,3 | 120,3 | 143,2 | 132,4 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 37047 | 44463 | 37676 | 33209 | 34941 | 29967 |
| of which LPG | 2775 | 2529 | 2063 | 1500 | 1386 | 1216 |
| of which motor gasoline | 9019 | 7682 | 5620 | 4602 | 5473 | 4348 |
| of which Gas/Diesel oil | 25253 | 34252 | 29994 | 27107 | 28081 | 24403 |
| Final consumption biofuels | 71 | 261 | 1453 | 1004 | 1672 | 1403 |
| pure and blended biogasoline | 0 | 114 | 232 | 192 | 131 | 87 |
| pure and blended biodiesel | 71 | 147 | 1221 | 812 | 1541 | 1316 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 114,5 | 136,0 | 123,0 | 118,2 | 120,6 | 105,0 |
| Final energy consumption 2020-2030 [Mtoe] | 80,0 | 98,1 | 89,6 | 80,5 | 86,5 | 73,8 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 131 | 132 | 114 | 110 | 101 | 99 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 142 | 140 | 121 | 114 | 106 | 105 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3065 | 3337 | 2799 | 2646 | 2702 | 2362 |
| Final Electricity per Capita [KWh/capita] | 5547 | 6677 | 6483 | 6043 | 5819 | 5561 |
| **Import Dependency [%]** | **80,%** | **86,%** | **82,%** | **77,%** | **79,%** | **71,%** |
| of Solid fossil fuels | 61,% | 70,% | 92,% | 75,% | 89,% | 54,% |
| of Hard Coal | 71,% | 79,% | 95,% | 79,% | 91,% | 46,% |
| of Oil and petroleum products | 110,% | 112,% | 113,% | 116,% | 114,% | 113,% |
| of Crude and NGL | 100,% | 100,% | 99,% | 99,% | 101,% | 99,% |
| of Natural Gas | 101,% | 101,% | 99,% | 96,% | 101,% | 97,% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 8.4% | 13.8% | 16.2% | 17.8% | 21.2% |
| RE-T - Renewable energy in Transport [%] | | 1.2% | 5.0% | 1.0% | 7.6% | 9.5% |
| RES-E - Renewable Electricity Generation [%] | | 19.1% | 29.7% | 36.9% | 37.1% | 42.9% |
| RES-H&C - Renewable Heating and Cooling [%] | | 9.4% | 12.6% | 16.8% | 17.2% | 17.9% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 321,2 | 381,6 | 296,9 | 286,7 | 270,8 | 219,8 |
| GHG emissions - National total* | 397,7 | 454,0 | 370,9 | 352,1 | 333,0 | 281,2 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 134,% | 154,% | 125,% | 119,% | 112,% | 95,% |
| Total GHG per capita [t $CO_2$ eq./capita] | 9,8 | 10,5 | 8,0 | 7,6 | 7,1 | 5,9 |

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

# 5.11 France

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **129,3** | **135,9** | **136,9** | **140,8** | **134,1** | **122,6** |
| 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 | 1,5 | 1,2 | 1,0 | 0,9 | 0,8 |
| of which crude oil | 1,7 | 1,3 | 0,9 | 0,9 | 0,7 | 0,7 |
| Natural gas | 1,5 | 0,9 | 0,6 | 0,0 | 0,0 | 0,0 |
| Nuclear | 107,1 | 116,5 | 111,6 | 114,0 | 104,0 | 92,2 |
| Renewables and biofuels | 15,7 | 16,0 | 22,2 | 24,1 | 27,4 | 28,0 |
| Wastes, Non-Renewable | 0,9 | 1,1 | 1,3 | 1,7 | 1,7 | 1,6 |
| **Net Imports** | **132,7** | **144,6** | **132,4** | **120,2** | **120,3** | **99,9** |
| Solid fossil fuels | 12,8 | 13,4 | 12,1 | 9,2 | 7,3 | 5,1 |
| of which hard coal | 12,3 | 12,7 | 11,2 | 8,8 | 6,8 | 4,8 |
| Oil and petroleum products | 90,0 | 95,8 | 83,2 | 81,8 | 77,8 | 65,0 |
| of which crude oil and NGL | 85,4 | 86,0 | 65,5 | 59,2 | 49,5 | 33,8 |
| Natural gas | 35,8 | 40,7 | 39,6 | 34,5 | 39,2 | 33,1 |
| Renewables and biofuels | 0,0 | -0,1 | 0,2 | 0,3 | 1,0 | 0,7 |
| Electricity | -6,0 | -5,2 | -2,6 | -5,5 | -5,0 | -3,9 |
| **Gross inland consumption** | **256,1** | **277,3** | **269,8** | **260,0** | **251,4** | **223,7** |
| Solid fossil fuels | 14,9 | 14,2 | 12,0 | 9,3 | 7,3 | 5,3 |
| of which hard coal | 14,1 | 13,6 | 11,1 | 9,1 | 6,9 | 5,0 |
| of which brown coal | 0,1 | 0,0 | 0,0 | 0,1 | 0,0 | 0,0 |
| Oil and petroleum products | 87,6 | 93,8 | 82,7 | 81,2 | 77,3 | 65,0 |
| of which crude and NGL | 86,8 | 87,6 | 66,7 | 59,9 | 50,3 | 34,5 |
| Natural gas | 35,8 | 41,0 | 42,6 | 35,0 | 37,5 | 34,9 |
| Nuclear | 107,1 | 116,5 | 111,6 | 114,0 | 104,0 | 92,2 |
| Renewables and biofuels | 15,7 | 15,9 | 22,3 | 24,3 | 28,4 | 28,6 |
| Electricity | -6,0 | -5,2 | -2,6 | -5,5 | -5,0 | -3,9 |
| Waste, non-renewable | 0,9 | 1,1 | 1,3 | 1,7 | 1,7 | 1,6 |
| **Available for final consumption** | **156,7** | **167,1** | **161,7** | **157,3** | **155,5** | **141,6** |
| **Final non-energy consumption** | **17,0** | **16,1** | **13,9** | **13,9** | **13,5** | **12,6** |
| **Final energy consumption** | **145,1** | **150,7** | **146,3** | **140,9** | **139,1** | **128,2** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 2,3 | 2,0 | 1,8 | 1,1 | 1,0 | 0,8 |
| Oil and petroleum products | 67,5 | 65,4 | 58,4 | 56,8 | 53,8 | 47,6 |
| Natural gas | 29,8 | 33,3 | 32,0 | 28,7 | 28,3 | 26,5 |
| Renewables and biofuels | 9,0 | 9,4 | 12,9 | 13,2 | 14,8 | 14,0 |
| Solid biofuels and renewable waste | 8,4 | 8,5 | 9,1 | 8,1 | 8,2 | 7,8 |
| Solar thermal | 0,0 | 0,0 | 0,1 | 0,2 | 0,2 | 0,2 |
| Geothermal | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,3 | 0,6 | 2,4 | 3,0 | 3,5 | 2,9 |
| Biogases | 0,1 | 0,1 | 0,1 | 0,1 | 0,2 | 0,2 |
| Waste, non-renewable | 0,2 | 0,1 | 0,1 | 0,4 | 0,5 | 0,4 |
| Electricity | 33,1 | 36,4 | 38,2 | 37,4 | 37,1 | 35,4 |
| Heat | 3,2 | 4,2 | 2,8 | 3,3 | 3,7 | 3,6 |
| by Sector | | | | | | |
| Industry | 32,2 | 32,5 | 27,7 | 27,9 | 27,5 | 25,8 |
| Transport | 45,2 | 44,4 | 43,6 | 45,5 | 45,1 | 38,2 |
| Residential | 40,6 | 43,0 | 45,4 | 39,9 | 39,6 | 38,7 |
| Services | 18,7 | 21,0 | 24,1 | 22,3 | 21,9 | 20,3 |
| Agriculture and Fishing | 4,3 | 4,6 | 4,4 | 4,5 | 4,4 | 4,5 |
| Others | 4,1 | 5,3 | 1,0 | 0,7 | 0,6 | 0,6 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **114,5** | **115,7** | **124,1** | **132,2** | **136,3** | **136,6** |
| Combustible Fuels | 25,9 | 26,4 | 28,4 | 25,9 | 19,8 | 19,8 |
| Nuclear | 63,2 | 63,3 | 63,1 | 63,1 | 63,1 | 61,4 |
| Hydro | 25,2 | 25,1 | 25,4 | 25,6 | 25,9 | 25,7 |
| Wind | 0,0 | 0,7 | 5,9 | 10,3 | 16,5 | 17,5 |
| Solar | 0,0 | 0,0 | 1,0 | 7,1 | 10,8 | 12,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| **Gross Electricity Generation, by Fuel [TWh]** | **540,0** | **576,1** | **569,2** | **578,9** | **570,4** | **531,2** |
| Solid fossil fuels, peat and products, oil shale | 27,0 | 27,5 | 23,4 | 11,9 | 3,6 | 3,1 |
| Oil and petroleum products | 7,2 | 7,9 | 5,5 | 6,7 | 5,9 | 5,6 |
| Natural gas | 15,4 | 26,3 | 26,7 | 23,8 | 41,5 | 37,2 |
| Nuclear | 415,2 | 451,5 | 428,5 | 437,4 | 399,0 | 353,8 |
| Renewables and biofuels | 74,2 | 61,2 | 83,0 | 96,8 | 117,8 | 129,2 |
| Wastes non-RES | 1,1 | 1,7 | 2,0 | 2,3 | 2,4 | 2,3 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 4,6 | 5,6 | 6,6 | 6,5 |
| CHP Electricity Generation [TWh] | | | 15,7 | 13,9 | 18,1 | 17,5 |
| CHP in Total Electricity Generation [%] | | | 2,8 | 2,5 | 3,2 | 3,2 |
| CHP Heat Production [PJ] | | | 173,9 | 154,9 | 159,9 | 177,1 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 61952 | 61099 | 55093 | 53451 | 50708 | 45050 |
| **of which LPG** | 3815 | 2992 | 2645 | 2035 | 1906 | 1782 |
| **of which motor gasoline** | 14494 | 11230 | 7744 | 7079 | 8209 | 7049 |
| of which Gas/Diesel oil | 43643 | 46877 | 44705 | 44338 | 40593 | 36219 |
| **Final consumption biofuels** | 326 | 585 | 2420 | 3004 | 3481 | 2935 |
| **pure and blended biogasoline** | 59 | 101 | 399 | 432 | 653 | 555 |
| **pure and blended biodiesel** | 268 | 484 | 2021 | 2565 | 2805 | 2356 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 239,1 | 261,0 | 254,6 | 244,4 | 235,2 | 208,4 |
| Final energy consumption 2020-2030 [Mtoe] | 154,8 | 160,1 | 154,0 | 148,4 | 145,4 | 130,1 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 130 | 130 | 122 | 111 | 100 | 96 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 139 | 138 | 129 | 118 | 107 | 103 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 4229 | 4417 | 4173 | 3913 | 3742 | 3323 |
| Final Electricity per Capita [KWh/capita] | 8918 | 9177 | 8802 | 8710 | 8490 | 7891 |
| **Import Dependency [%]** | **51,8%** | **52,2%** | **49,1%** | **46,2%** | **47,9%** | **44,7%** |
| of Solid fossil fuels | 86,3% | 94,4% | 101,0% | 98,4% | 99,6% | 96,3% |
| **of Hard Coal** | 87,2% | 92,8% | 100,6% | 97,0% | 99,2% | 95,8% |
| of Oil and petroleum products | 102,7% | 102,1% | 100,6% | 100,7% | 100,6% | 100,0% |
| **of Crude and NGL** | 98,5% | 98,2% | 98,2% | 98,8% | 98,4% | 97,9% |
| of Natural Gas | 100,0% | 99,3% | 92,8% | 98,5% | 104,5% | 94,7% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 9.60% | 12.67% | 14.80% | 17.17% | 19.11% |
| RE-T - Renewable energy in Transport [%] | | 2.13% | 6.58% | 8.37% | 9.25% | 9.21% |
| RES-E - Renewable Electricity Generation [%] | | 13.74% | 14.82% | 18.82% | 22.39% | 24.82% |
| RES-H&C - Renewable Heating and Cooling [%] | | 12.37% | 16.16% | 18.88% | 22.36% | 23.37% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 428,9 | 441,2 | 403,0 | 359,2 | 345,8 | 297,4 |
| GHG emissions - National total* | 563,2 | 567,3 | 523,7 | 475,6 | 453,7 | 401,1 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 101,9% | 102,6% | 94,7% | 86,0% | 82,1% | 72,5% |
| Total GHG per capita [t $CO_2$ eq./capita] | 9,3 | 9,0 | 8,1 | 7,2 | 6,8 | 6,0 |

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

# 5.12 Croatia

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **4,3** | **4,8** | **5,2** | **4,4** | **3,9** | **3,7** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 1,3 | 1,0 | 0,8 | 0,7 | 0,7 | 0,7 |
| of which crude oil | 1,3 | 1,0 | 0,8 | 0,7 | 0,7 | 0,7 |
| Natural gas | 1,4 | 1,9 | 2,2 | 1,5 | 0,9 | 0,7 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 1,6 | 1,9 | 2,2 | 2,2 | 2,3 | 2,3 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Net Imports** | **4,1** | **5,2** | **4,4** | **4,2** | **5,0** | **4,5** |
| Solid fossil fuels | 0,5 | 0,6 | 0,7 | 0,6 | 0,4 | 0,4 |
| of which hard coal | 0,4 | 0,6 | 0,6 | 0,6 | 0,4 | 0,4 |
| Oil and petroleum products | 2,4 | 3,6 | 3,0 | 2,6 | 2,5 | 2,1 |
| of which crude oil and NGL | 3,9 | 4,0 | 3,6 | 2,4 | 1,9 | 1,4 |
| Natural gas | 0,9 | 0,6 | 0,5 | 0,6 | 1,6 | 1,7 |
| Renewables and biofuels | 0,0 | 0,0 | -0,1 | -0,3 | -0,1 | -0,1 |
| Electricity | 0,3 | 0,4 | 0,3 | 0,6 | 0,5 | 0,4 |
| **Gross inland consumption** | **8,4** | **9,8** | **9,5** | **8,5** | **8,8** | **8,3** |
| Solid fossil fuels | 0,4 | 0,7 | 0,7 | 0,6 | 0,4 | 0,4 |
| of which hard coal | 0,4 | 0,6 | 0,6 | 0,6 | 0,4 | 0,3 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 4,0 | 4,5 | 3,7 | 3,2 | 3,3 | 2,8 |
| of which crude and NGL | 5,5 | 5,1 | 4,4 | 3,0 | 2,7 | 2,1 |
| Natural gas | 2,2 | 2,4 | 2,6 | 2,1 | 2,4 | 2,5 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 1,6 | 1,9 | 2,1 | 2,0 | 2,1 | 2,2 |
| Electricity | 0,3 | 0,4 | 0,3 | 0,6 | 0,5 | 0,4 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Available for final consumption** | **6,6** | **7,8** | **7,7** | **7,0** | **7,3** | **7,0** |
| **Final non-energy consumption** | **0,7** | **0,7** | **0,6** | **0,5** | **0,6** | **0,5** |
| **Final energy consumption** | **5,9** | **7,2** | **7,1** | **6,5** | **6,7** | **6,4** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,1 | 0,1 | 0,2 | 0,1 | 0,1 | 0,1 |
| Oil and petroleum products | 2,6 | 3,0 | 2,8 | 2,6 | 2,7 | 2,5 |
| Natural gas | 1,0 | 1,2 | 1,3 | 1,0 | 1,1 | 1,1 |
| Renewables and biofuels | 1,0 | 1,3 | 1,3 | 1,3 | 1,2 | 1,2 |
| Solid biofuels and renewable waste | 1,0 | 1,2 | 1,2 | 1,2 | 1,1 | 1,1 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 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 | 1,2 | 1,4 | 1,3 | 1,4 | 1,3 |
| Heat | 0,2 | 0,3 | 0,2 | 0,2 | 0,2 | 0,3 |
| by Sector | | | | | | |
| Industry | 1,3 | 1,5 | 1,3 | 1,1 | 1,2 | 1,2 |
| Transport | 1,5 | 1,8 | 2,0 | 2,0 | 2,2 | 2,0 |
| Residential | 2,3 | 2,8 | 2,8 | 2,4 | 2,2 | 2,3 |
| Services | 0,5 | 0,7 | 0,8 | 0,8 | 0,8 | 0,8 |
| Agriculture and Fishing | 0,3 | 0,2 | 0,3 | 0,2 | 0,2 | 0,3 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **2,1** | **3,9** | **4,1** | **4,8** | **4,7** | **4,7** |
| Combustible Fuels | 0,0 | 1,8 | 1,9 | 2,1 | 1,8 | 1,5 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 2,1 | 2,1 | 2,1 | 2,2 | 2,2 | 2,2 |
| Wind | 0,0 | 0,0 | 0,1 | 0,4 | 0,6 | 0,8 |
| Solar | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **11,3** | **13,2** | **14,9** | **11,4** | **12,8** | **13,4** |
| Solid fossil fuels, peat and products, oil shale | 1,6 | 2,3 | 2,4 | 2,3 | 1,6 | 1,2 |
| Oil and petroleum products | 1,7 | 1,9 | 0,6 | 0,2 | 0,0 | 0,0 |
| Natural gas | 1,6 | 1,8 | 2,6 | 1,2 | 2,6 | 3,4 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 6,5 | 7,2 | 9,4 | 7,7 | 8,5 | 8,7 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0,7 | 0,6 | 0,9 | 0,9 |
| CHP Electricity Generation [TWh] | | | 2,0 | 0,8 | 2,3 | 2,7 |
| CHP in Total Electricity Generation [%] | | | 15,8 | 7,1 | 18,3 | 17,6 |
| CHP Heat Production [PJ] | | | 14,9 | 10,0 | 17,6 | 20,0 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 2293 | 2681 | 2629 | 2461 | 2609 | 2359 |
| of which LPG | 100 | 130 | 183 | 157 | 150 | 129 |
| of which motor gasoline | 835 | 755 | 692 | 567 | 508 | 423 |
| of which Gas/Diesel oil | 1359 | 1796 | 1755 | 1737 | 1951 | 1807 |
| Final consumption biofuels | 0 | 0 | 3 | 24 | 63 | 66 |
| pure and blended biogasoline | 0 | 0 | 0 | 0 | 1 | 1 |
| pure and blended biodiesel | 0 | 0 | 3 | 24 | 62 | 65 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 7,8 | 9,1 | 8,9 | 8,0 | 8,2 | 7,8 |
| Final energy consumption 2020-2030 [Mtoe] | 6,0 | 7,2 | 7,2 | 6,6 | 6,9 | 6,5 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 220 | 206 | 195 | 176 | 159 | 164 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 238 | 222 | 208 | 188 | 171 | 175 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 1877 | 2278 | 2201 | 2013 | 2156 | 2047 |
| Final Electricity per Capita [KWh/capita] | 2508 | 3053 | 3463 | 2699 | 3130 | 3298 |
| **Import Dependency [%]** | **48,6%** | **52,7%** | **46,7%** | **48,8%** | **56,4%** | **53,7%** |
| of Solid fossil fuels | 110,9% | 91,3% | 102,5% | 103,0% | 107,3% | 106,0% |
| of Hard Coal | 112,8% | 90,6% | 102,7% | 102,4% | 108,6% | 106,7% |
| of Oil and petroleum products | 61,3% | 79,8% | 80,8% | 81,5% | 76,9% | 74,2% |
| of Crude and NGL | 72,1% | 78,9% | 82,3% | 79,6% | 71,1% | 68,0% |
| of Natural Gas | 41,0% | 23,7% | 18,1% | 27,1% | 66,4% | 68,8% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 23.69% | 25.10% | 28.97% | 28.47% | 31.02% |
| RE-T - Renewable energy in Transport [%] | | 1.03% | 1.12% | 2.36% | 5.85% | 6.59% |
| RES-E - Renewable Electricity Generation [%] | | 35.18% | 37.52% | 45.41% | 49.78% | 53.82% |
| RES-H&C - Renewable Heating and Cooling [%] | | 30.00% | 32.88% | 38.62% | 36.79% | 36.93% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 19,9 | 23,6 | 21,3 | 18,2 | 18,5 | 17,0 |
| GHG emissions - National total* | 25,7 | 29,9 | 28,2 | 24,7 | 25,2 | 23,9 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 80,5% | 93,8% | 88,4% | 77,4% | 79,1% | 74,9% |
| Total GHG per capita [t $CO_2$ eq./capita] | 5,7 | 6,9 | 6,6 | 5,8 | 6,2 | 5,9 |

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

# 5.13 Italy

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **28,2** | **30,2** | **32,9** | **36,1** | **36,9** | **37,7** |
| Solid fossil fuels | 0,0 | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 4,7 | 6,3 | 5,6 | 5,8 | 4,7 | 5,9 |
| of which crude oil | 4,6 | 6,1 | 5,1 | 5,5 | 4,3 | 5,4 |
| Natural gas | 13,6 | 9,9 | 6,9 | 5,5 | 3,9 | 3,3 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 9,6 | 13,3 | 19,4 | 23,6 | 27,1 | 27,3 |
| Wastes, Non-Renewable | 0,3 | 0,7 | 1,0 | 1,1 | 1,2 | 1,2 |
| **Net Imports** | **152,4** | **159,8** | **148,5** | **121,4** | **122,5** | **105,8** |
| Solid fossil fuels | 13,1 | 16,4 | 13,8 | 12,3 | 6,4 | 4,7 |
| of which hard coal | 12,9 | 15,9 | 13,8 | 11,9 | 6,2 | 4,7 |
| Oil and petroleum products | 88,0 | 78,5 | 66,8 | 52,4 | 52,4 | 42,0 |
| of which crude oil and NGL | 83,6 | 88,5 | 78,2 | 61,7 | 63,1 | 50,2 |
| Natural gas | 47,0 | 59,8 | 61,6 | 50,0 | 57,9 | 54,1 |
| Renewables and biofuels | 0,5 | 0,8 | 2,5 | 2,7 | 2,5 | 2,2 |
| Electricity | 3,8 | 4,2 | 3,8 | 4,0 | 3,3 | 2,8 |
| **Gross inland consumption** | **174,5** | **189,4** | **176,8** | **155,7** | **155,4** | **141,6** |
| Solid fossil fuels | 12,6 | 16,5 | 13,7 | 12,3 | 6,5 | 5,1 |
| of which hard coal | 12,2 | 16,0 | 13,6 | 11,8 | 6,3 | 5,0 |
| of which brown coal | 0,0 | 0,0 | 0,2 | 0,2 | 0,0 | 0,0 |
| Oil and petroleum products | 89,9 | 83,3 | 68,4 | 56,7 | 54,0 | 44,9 |
| of which crude and NGL | 87,9 | 94,1 | 82,8 | 67,0 | 67,3 | 55,7 |
| Natural gas | 57,9 | 70,7 | 68,1 | 55,3 | 60,9 | 58,3 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 10,1 | 14,1 | 21,9 | 26,3 | 29,5 | 29,3 |
| Electricity | 3,8 | 4,2 | 3,8 | 4,0 | 3,3 | 2,8 |
| Waste, non-renewable | 0,3 | 0,7 | 1,0 | 1,1 | 1,2 | 1,2 |
| **Available for final consumption** | **128,8** | **139,6** | **131,7** | **117,6** | **118,7** | **109,3** |
| **Final non-energy consumption** | **8,4** | **8,6** | **9,6** | **6,6** | **7,0** | **6,8** |
| **Final energy consumption** | **119,7** | **131,5** | **123,1** | **112,1** | **113,1** | **103,1** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 1,5 | 1,3 | 0,6 | 0,5 | 0,6 | 0,4 |
| Oil and petroleum products | 55,0 | 56,0 | 45,6 | 41,2 | 38,9 | 32,2 |
| Natural gas | 37,6 | 40,6 | 38,5 | 33,0 | 33,0 | 31,8 |
| Renewables and biofuels | 1,7 | 4,5 | 9,1 | 8,4 | 10,9 | 10,7 |
| Solid biofuels and renewable waste | 1,5 | 4,1 | 7,4 | 6,8 | 6,7 | 6,5 |
| Solar thermal | 0,0 | 0,0 | 0,1 | 0,2 | 0,2 | 0,2 |
| Geothermal | 0,2 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 |
| Liquid biofuels | 0,0 | 0,2 | 1,4 | 1,2 | 1,3 | 1,3 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,1 | 0,1 | 0,2 | 0,3 | 0,3 | 0,3 |
| Electricity | 23,5 | 25,9 | 25,7 | 24,7 | 25,1 | 23,7 |
| Heat | 0,0 | 3,1 | 3,3 | 3,9 | 4,2 | 3,9 |
| by Sector | | | | | | |
| Industry | 37,6 | 37,2 | 29,0 | 24,9 | 24,9 | 23,9 |
| Transport | 39,7 | 41,8 | 38,6 | 36,4 | 35,9 | 29,0 |
| Residential | 27,6 | 33,9 | 35,4 | 32,5 | 31,1 | 30,7 |
| Services | 11,5 | 15,1 | 17,0 | 15,4 | 18,2 | 16,6 |
| Agriculture and Fishing | 3,2 | 3,3 | 2,9 | 2,9 | 2,9 | 3,0 |
| Others | 0,2 | 0,2 | 0,2 | 0,1 | 0,1 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **75,5** | **85,5** | **106,6** | **117,0** | **116,4** | **116,4** |
| Combustible Fuels | 54,0 | 61,9 | 74,7 | 65,6 | 61,3 | 60,1 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 20,3 | 21,0 | 21,5 | 22,2 | 22,5 | 22,7 |
| Wind | 0,4 | 1,6 | 5,8 | 9,1 | 10,7 | 10,9 |
| Solar | 0,0 | 0,0 | 3,6 | 18,9 | 20,9 | 21,7 |
| Geothermal | 0,6 | 0,7 | 0,7 | 0,8 | 0,8 | 0,8 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **275,9** | **302,6** | **301,3** | **282,4** | **293,2** | **280,0** |
| Solid fossil fuels, peat and products, oil shale | 26,3 | 43,6 | 39,7 | 43,2 | 18,8 | 13,4 |
| Oil and petroleum products | 85,9 | 47,1 | 21,7 | 13,4 | 10,2 | 10,0 |
| Natural gas | 105,6 | 155,1 | 157,4 | 113,0 | 144,1 | 135,3 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 57,6 | 55,3 | 80,3 | 110,3 | 117,7 | 118,9 |
| Wastes non-RES | 0,5 | 1,5 | 2,1 | 2,4 | 2,4 | 2,4 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 7,4 | 9,0 | 8,6 | 9,2 |
| CHP Electricity Generation [TWh] | | | 34,7 | 39,5 | 40,5 | 39,9 |
| CHP in Total Electricity Generation [%] | | | 11,5 | 14,0 | 13,8 | 13,9 |
| CHP Heat Production [PJ] | | | 202,5 | 213,2 | 216,9 | 213,4 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 47568 | 49091 | 41649 | 37803 | 36534 | 30351 |
| **of which LPG** | 4286 | 3852 | 3675 | 3572 | 3572 | 3190 |
| **of which motor gasoline** | 17652 | 14495 | 10462 | 8217 | 7850 | 6144 |
| of which Gas/Diesel oil | 25629 | 30743 | 27512 | 26014 | 25111 | 21017 |
| **Final consumption biofuels** | 0 | 177 | 1419 | 1167 | 1276 | 1265 |
| **pure and blended biogasoline** | 0 | 0 | 122 | 25 | 30 | 20 |
| **pure and blended biodiesel** | 0 | 177 | 1297 | 1142 | 1246 | 1245 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 166,1 | 180,8 | 167,3 | 149,1 | 145,9 | 132,3 |
| Final energy consumption 2020-2030 [Mtoe] | 124,8 | 137,2 | 128,5 | 116,2 | 115,4 | 102,7 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 100 | 104 | 98 | 90 | 84 | 84 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 105 | 109 | 103 | 94 | 90 | 90 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3066 | 3273 | 2988 | 2562 | 2598 | 2374 |
| Final Electricity per Capita [KWh/capita] | 4846 | 5228 | 5090 | 4645 | 4902 | 4695 |
| **Import Dependency [%]** | **87,3%** | **84,3%** | **84,0%** | **78,0%** | **78,8%** | **74,7%** |
| of Solid fossil fuels | 104,6% | 99,4% | 100,8% | 100,2% | 98,6% | 93,0% |
| **of Hard Coal** | 105,7% | 99,7% | 101,4% | 100,5% | 98,4% | 93,1% |
| of Oil and petroleum products | 97,9% | 94,3% | 97,6% | 92,4% | 97,1% | 93,5% |
| **of Crude and NGL** | 95,1% | 94,0% | 94,5% | 92,2% | 93,9% | 90,2% |
| of Natural Gas | 81,1% | 84,7% | 90,5% | 90,4% | 95,1% | 92,8% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 7.55% | 13.02% | 17.53% | 18.18% | 20.36% |
| RE-T - Renewable energy in Transport [%] | | 1.05% | 4.92% | 6.50% | 9.05% | 10.74% |
| RES-E - Renewable Electricity Generation [%] | | 16.29% | 20.09% | 33.46% | 34.97% | 38.08% |
| RES-H&C - Renewable Heating and Cooling [%] | | 8.22% | 15.64% | 19.25% | 19.70% | 19.95% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 478,4 | 510,7 | 444,9 | 370,7 | 351,6 | 306,1 |
| GHG emissions - National total* | 565,3 | 599,5 | 526,7 | 451,4 | 430,9 | 385,1 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 107,8% | 114,4% | 100,5% | 86,1% | 82,2% | 73,5% |
| Total GHG per capita [t $CO_2$ eq./capita] | 9,9 | 10,4 | 8,9 | 7,4 | 7,2 | 6,5 |

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

# 5.14 Cyprus

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **0,0** | **0,1** | **0,1** | **0,1** | **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 | 0,0 | 0,1 | 0,1 | 0,2 | 0,2 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Net Imports** | **2,6** | **2,9** | **3,0** | **2,5** | **2,7** | **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 | 2,8 | 2,9 | 2,4 | 2,6 | 2,3 |
| of which crude oil and NGL | 1,2 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 |
| Electricity | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross inland consumption** | **2,4** | **2,5** | **2,8** | **2,3** | **2,6** | **2,3** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 2,3 | 2,5 | 2,6 | 2,1 | 2,3 | 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 | 0,1 | 0,2 | 0,2 | 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** | **1,5** | **1,7** | **1,4** | **1,7** | **1,6** |
| **Final non-energy consumption** | **0,1** | **0,1** | **0,1** | **0,0** | **0,0** | **0,0** |
| **Final energy consumption** | **1,4** | **1,5** | **1,6** | **1,4** | **1,6** | **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 | 1,1 | 0,9 | 1,0 | 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 | 0,1 | 0,2 | 0,2 |
| Solid biofuels and renewable waste | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| Solar thermal | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 | 0,1 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Electricity | 0,3 | 0,3 | 0,4 | 0,4 | 0,4 | 0,4 |
| Heat | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| by Sector | | | | | | |
| Industry | 0,4 | 0,3 | 0,2 | 0,2 | 0,2 | 0,2 |
| Transport | 0,6 | 0,7 | 0,8 | 0,6 | 0,7 | 0,6 |
| Residential | 0,2 | 0,3 | 0,3 | 0,3 | 0,4 | 0,4 |
| Services | 0,1 | 0,2 | 0,2 | 0,2 | 0,3 | 0,2 |
| Agriculture and Fishing | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Others | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **1,0** | **1,1** | **1,6** | **1,8** | **1,8** | **1,9** |
| Combustible Fuels | 1,0 | 1,1 | 1,5 | 1,5 | 1,5 | 1,5 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Wind | 0,0 | 0,0 | 0,1 | 0,2 | 0,2 | 0,2 |
| Solar | 0,0 | 0,0 | 0,0 | 0,1 | 0,2 | 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]** | **3,4** | **4,4** | **5,3** | **4,5** | **5,1** | **4,8** |
| Solid fossil fuels, peat and products, oil shale | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 3,4 | 4,4 | 5,2 | 4,1 | 4,6 | 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 | 0,0 | 0,1 | 0,4 | 0,5 | 0,6 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0,0 | 0,0 | 0,0 | 0,0 |
| CHP Electricity Generation [TWh] | | | 0,1 | 0,0 | 0,0 | 0,0 |
| CHP in Total Electricity Generation [%] | | | 1,0 | 0,1 | 0,6 | 0,8 |
| CHP Heat Production [PJ] | | | 0,1 | 0,2 | 0,1 | 0,2 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 833 | 897 | 949 | 800 | 881 | 779 |
| **of which LPG** | 60 | 60 | 60 | 61 | 69 | 62 |
| **of which motor gasoline** | 218 | 321 | 413 | 365 | 356 | 301 |
| of which Gas/Diesel oil | 556 | 517 | 476 | 374 | 457 | 416 |
| **Final consumption biofuels** | 0 | 0 | 15 | 10 | 11 | 25 |
| **pure and blended biogasoline** | 0 | 0 | 0 | 0 | 0 | 1 |
| **pure and blended biodiesel** | 0 | 0 | 15 | 10 | 11 | 25 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 2,3 | 2,5 | 2,7 | 2,3 | 2,5 | 2,2 |
| Final energy consumption 2020-2030 [Mtoe] | 1,6 | 1,8 | 1,9 | 1,7 | 1,9 | 1,6 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 167 | 145 | 137 | 127 | 113 | 103 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 173 | 149 | 142 | 129 | 117 | 107 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3511 | 3476 | 3370 | 2715 | 2998 | 2574 |
| Final Electricity per Capita [KWh/capita] | 4881 | 5971 | 6497 | 5354 | 5870 | 5461 |
| **Import Dependency [%]** | **106,4%** | **112,0%** | **107,4%** | **107,6%** | **102,6%** | **104,3%** |
| of Solid fossil fuels | 102,0% | 121,1% | 65,6% | 100,0% | 117,2% | 105,4% |
| **of Hard Coal** | 102,0% | 121,2% | 65,4% | 100,0% | 117,2% | 105,4% |
| of Oil and petroleum products | 108,4% | 114,3% | 111,5% | 114,5% | 111,6% | 116,0% |
| **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) | | 3.13% | 6.17% | 9.90% | 13.78% | 16.88% |
| **RE-T - Renewable energy in Transport [%]** | | 0.00% | 1.99% | 2.52% | 3.32% | 7.40% |
| **RES-E - Renewable Electricity Generation [%]** | | 0.02% | 1.39% | 8.45% | 9.76% | 12.04% |
| **RES-H&C - Renewable Heating and Cooling [%]** | | 9.97% | 18.84% | 24.07% | 35.05% | 37.12% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 8,0 | 8,8 | 8,9 | 7,7 | 8,4 | 7,6 |
| GHG emissions - National total* | 9,1 | 10,1 | 10,3 | 9,1 | 9,9 | 9,2 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 144,9% | 159,6% | 163,5% | 144,4% | 157,6% | 146,0% |
| Total GHG per capita [t $CO_2$ eq./capita] | 13,2 | 13,7 | 12,6 | 10,8 | 11,4 | 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **1,4** | **1,9** | **2,0** | **2,3** | **2,8** | **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 | 1,9 | 2,0 | 2,3 | 2,8 | 2,7 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Net Imports** | **2,4** | **3,1** | **2,2** | **2,4** | **2,2** | **2,1** |
| Solid fossil fuels | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 1,2 | 1,8 | 1,7 | 1,8 | 1,8 | 1,7 |
| of which crude oil and NGL | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 1,1 | 1,4 | 0,9 | 1,1 | 1,1 | 0,9 |
| Renewables and biofuels | -0,2 | -0,4 | -0,6 | -0,7 | -0,9 | -0,8 |
| Electricity | 0,2 | 0,2 | 0,1 | 0,2 | 0,1 | 0,1 |
| **Gross inland consumption** | **3,9** | **4,6** | **4,6** | **4,4** | **4,6** | **4,4** |
| Solid fossil fuels | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 1,3 | 1,5 | 1,5 | 1,5 | 1,5 | 1,4 |
| of which crude and NGL | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 1,1 | 1,4 | 1,5 | 1,1 | 1,1 | 0,9 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 1,2 | 1,5 | 1,4 | 1,5 | 1,8 | 1,8 |
| Electricity | 0,2 | 0,2 | 0,1 | 0,2 | 0,1 | 0,1 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,1 | 0,0 | 0,1 |
| **Available for final consumption** | **3,3** | **4,0** | **4,1** | **3,8** | **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** | **4,0** | **3,7** | **3,9** | **3,8** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 1,0 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 |
| Natural gas | 0,3 | 0,5 | 0,5 | 0,3 | 0,3 | 0,3 |
| Renewables and biofuels | 0,8 | 1,0 | 0,9 | 0,9 | 1,0 | 1,0 |
| Solid biofuels and renewable waste | 0,8 | 1,0 | 0,9 | 0,9 | 1,0 | 0,9 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,1 | 0,0 | 0,1 |
| Electricity | 0,4 | 0,5 | 0,5 | 0,6 | 0,6 | 0,6 |
| Heat | 0,6 | 0,6 | 0,6 | 0,5 | 0,6 | 0,6 |
| by Sector | | | | | | |
| Industry | 0,6 | 0,7 | 0,8 | 0,8 | 0,9 | 0,9 |
| Transport | 0,7 | 1,0 | 1,1 | 1,0 | 1,1 | 1,0 |
| Residential | 1,3 | 1,5 | 1,4 | 1,1 | 1,2 | 1,1 |
| Services | 0,5 | 0,6 | 0,6 | 0,6 | 0,6 | 0,6 |
| Agriculture and Fishing | 0,1 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **2,1** | **2,2** | **2,6** | **2,9** | **2,9** | **2,9** |
| Combustible Fuels | 0,6 | 0,6 | 1,0 | 1,3 | 1,3 | 1,3 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 1,5 | 1,5 | 1,6 | 1,6 | 1,6 | 1,6 |
| Wind | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| Solar | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **4,1** | **4,9** | **6,6** | **5,5** | **6,4** | **5,7** |
| 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 | 1,5 | 3,0 | 2,8 | 3,2 | 2,1 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 2,8 | 3,4 | 3,6 | 2,8 | 3,2 | 3,6 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0,9 | 1,1 | 1,3 | 1,3 |
| CHP Electricity Generation [TWh] | | | 3,0 | 2,5 | 2,6 | 2,1 |
| CHP in Total Electricity Generation [%] | | | 45,0 | 44,7 | 41,1 | 36,2 |
| CHP Heat Production [PJ] | | | 10,4 | 12,4 | 13,7 | 12,1 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 889 | 1 202 | 1 278 | 1 265 | 1 331 | 1 280 |
| of which LPG | 50 | 61 | 50 | 98 | 82 | 77 |
| of which motor gasoline | 354 | 361 | 302 | 213 | 182 | 175 |
| of which Gas/Diesel oil | 485 | 779 | 926 | 954 | 1 067 | 1 028 |
| Final consumption biofuels | 0 | 3 | 27 | 25 | 37 | 49 |
| pure and blended biogasoline | 0 | 0 | 8 | 8 | 7 | 13 |
| pure and blended biodiesel | 0 | 3 | 19 | 17 | 30 | 36 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 3,8 | 4,5 | 4,6 | 4,3 | 4,6 | 4,3 |
| Final energy consumption 2020-2030 [Mtoe] | 3,3 | 4,0 | 4,1 | 3,8 | 4,1 | 3,9 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 264 | 211 | 220 | 174 | 165 | 160 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 269 | 216 | 223 | 178 | 168 | 164 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 1 623 | 2 040 | 2 183 | 2 205 | 2 421 | 2 286 |
| Final Electricity per Capita [KWh/capita] | 1 737 | 2 181 | 3 125 | 2 786 | 3 353 | 3 001 |
| **Import Dependency [%]** | **61,1 %** | **67,5 %** | **48,0 %** | **54,2 %** | **46,7 %** | **47,6 %** |
| of Solid fossil fuels | 84,1 % | 97,7 % | 106,5 % | 85,2 % | 110,8 % | 89,6 % |
| of Hard Coal | 82,5 % | 96,7 % | 106,6 % | 85,2 % | 110,8 % | 89,6 % |
| of Oil and petroleum products | 95,5 % | 120,1 % | 110,0 % | 120,6 % | 119,2 % | 120,9 % |
| of Crude and NGL | 0,0 % | 0,0 % | 0,0 % | 0,0 % | 0,0 % | 0,0 % |
| of Natural Gas | 101,9 % | 105,6 % | 61,8 % | 98,6 % | 100,0 % | 100,1 % |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 32.26 % | 30.38 % | 37.54 % | 40.93 % | 42.13 % |
| RE-T - Renewable energy in Transport [%] | | 2.39 % | 3.98 % | 3.64 % | 4.55 % | 6.73 % |
| RES-E - Renewable Electricity Generation [%] | | 43.02 % | 42.05 % | 52.21 % | 53.42 % | 53.36 % |
| RES-H&C - Renewable Heating and Cooling [%] | | 42.68 % | 40.75 % | 51.74 % | 57.75 % | 57.09 % |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 7,2 | 8,0 | 8,9 | 7,6 | 8,1 | 7,2 |
| GHG emissions - National total* | 10,2 | 11,1 | 12,2 | 11,1 | 11,6 | 10,6 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 38,9 % | 42,6 % | 46,6 % | 42,3 % | 44,4 % | 40,7 % |
| Total GHG per capita [t $CO_2$ eq./capita] | 4,3 | 4,9 | 5,7 | 5,6 | 6,0 | 5,6 |

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

# 5.16 Lithuania

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **3,5** | **4,1** | **1,6** | **1,9** | **2,0** | **2,0** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,3 | 0,2 | 0,1 | 0,1 | 0,0 | 0,0 |
| of which crude oil | 0,3 | 0,2 | 0,1 | 0,1 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Nuclear | 2,3 | 2,8 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,7 | 0,9 | 1,2 | 1,5 | 1,7 | 1,7 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 |
| **Net Imports** | **4,3** | **5,0** | **5,7** | **5,5** | **6,0** | **5,9** |
| Solid fossil fuels | 0,1 | 0,2 | 0,2 | 0,1 | 0,2 | 0,1 |
| of which hard coal | 0,0 | 0,0 | 0,1 | 0,1 | 0,2 | 0,1 |
| Oil and petroleum products | 2,3 | 2,6 | 2,7 | 2,7 | 3,2 | 3,1 |
| of which crude oil and NGL | 4,6 | 8,9 | 9,1 | 8,7 | 9,6 | 7,9 |
| Natural gas | 2,1 | 2,5 | 2,5 | 2,1 | 1,9 | 2,0 |
| Renewables and biofuels | 0,0 | 0,0 | -0,1 | -0,1 | -0,1 | -0,1 |
| Electricity | -0,1 | -0,3 | 0,5 | 0,6 | 0,8 | 0,7 |
| **Gross inland consumption** | **7,3** | **9,0** | **7,1** | **7,2** | **7,8** | **7,6** |
| Solid fossil fuels | 0,1 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 |
| of which hard coal | 0,0 | 0,0 | 0,1 | 0,2 | 0,2 | 0,1 |
| of which brown coal | 0,1 | 0,2 | 0,1 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 2,2 | 2,7 | 2,6 | 2,6 | 3,0 | 2,9 |
| of which crude and NGL | 4,9 | 9,4 | 9,2 | 8,7 | 9,6 | 7,9 |
| Natural gas | 2,1 | 2,5 | 2,5 | 2,1 | 1,9 | 2,0 |
| Nuclear | 2,3 | 2,8 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,7 | 0,9 | 1,1 | 1,4 | 1,6 | 1,7 |
| Electricity | -0,1 | -0,3 | 0,5 | 0,6 | 0,8 | 0,7 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 |
| **Available for final consumption** | **4,3** | **5,3** | **5,4** | **5,9** | **6,6** | **6,4** |
| **Final non-energy consumption** | **0,7** | **0,7** | **0,7** | **1,1** | **1,2** | **1,1** |
| **Final energy consumption** | **3,7** | **4,6** | **4,8** | **4,8** | **5,5** | **5,3** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,1 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 |
| Oil and petroleum products | 1,3 | 1,6 | 1,6 | 1,8 | 2,2 | 2,1 |
| Natural gas | 0,4 | 0,6 | 0,6 | 0,5 | 0,6 | 0,6 |
| Renewables and biofuels | 0,6 | 0,7 | 0,7 | 0,7 | 0,7 | 0,8 |
| Solid biofuels and renewable waste | 0,6 | 0,7 | 0,7 | 0,6 | 0,6 | 0,6 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Electricity | 0,5 | 0,7 | 0,7 | 0,8 | 0,9 | 0,9 |
| Heat | 0,8 | 0,9 | 0,9 | 0,8 | 0,8 | 0,7 |
| by Sector | | | | | | |
| Industry | 0,8 | 1,1 | 0,9 | 1,0 | 1,1 | 1,0 |
| Transport | 1,0 | 1,4 | 1,5 | 1,8 | 2,2 | 2,1 |
| Residential | 1,4 | 1,5 | 1,6 | 1,4 | 1,4 | 1,4 |
| 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **5,7** | **4,6** | **3,6** | **3,6** | **3,4** | **3,5** |
| Combustible Fuels | 2,5 | 2,5 | 2,5 | 2,2 | 1,8 | 1,9 |
| Nuclear | 2,4 | 1,2 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 0,9 | 0,9 | 0,9 | 0,9 | 0,9 | 0,9 |
| Wind | 0,0 | 0,0 | 0,1 | 0,4 | 0,5 | 0,5 |
| Solar | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,2 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **11,3** | **14,6** | **5,5** | **4,7** | **3,7** | **5,3** |
| Solid fossil fuels, peat and products, oil shale | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,7 | 0,4 | 0,6 | 0,3 | 0,1 | 0,1 |
| Natural gas | 1,6 | 3,0 | 3,2 | 2,0 | 0,5 | 1,7 |
| Nuclear | 8,4 | 10,3 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,6 | 0,8 | 1,7 | 2,4 | 3,1 | 3,4 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 1,1 | 1,0 | 0,6 | 0,6 |
| CHP Electricity Generation [TWh] | | | 2,0 | 1,5 | 1,1 | 1,2 |
| CHP in Total Electricity Generation [%] | | | 34,6 | 31,3 | 27,4 | 23,6 |
| CHP Heat Production [PJ] | | | 19,3 | 12,4 | 11,0 | 11,7 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 1 185 | 1 516 | 1 545 | 1 764 | 2 190 | 2 132 |
| **of which LPG** | 205 | 301 | 224 | 175 | 158 | 142 |
| **of which motor gasoline** | 400 | 355 | 298 | 201 | 244 | 238 |
| of which Gas/Diesel oil | 579 | 860 | 1 023 | 1 388 | 1 788 | 1 752 |
| **Final consumption biofuels** | 0 | 3 | 45 | 68 | 75 | 103 |
| **pure and blended biogasoline** | 0 | 1 | 10 | 10 | 10 | 16 |
| **pure and blended biodiesel** | 0 | 3 | 34 | 58 | 65 | 87 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 6,5 | 8,0 | 6,2 | 5,8 | 6,3 | 6,2 |
| Final energy consumption 2020-2030 [Mtoe] | 3,8 | 4,7 | 4,8 | 4,9 | 5,6 | 5,3 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 323 | 275 | 199 | 155 | 145 | 144 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 363 | 307 | 228 | 192 | 180 | 176 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 2 093 | 2 677 | 2 254 | 2 459 | 2 792 | 2 732 |
| Final Electricity per Capita [KWh/capita] | 3 227 | 4 347 | 1 750 | 1 598 | 1 342 | 1 901 |
| **Import Dependency [%]** | **58,5 %** | **56,2 %** | **80,6 %** | **76,2 %** | **77,1 %** | **76,7 %** |
| of Solid fossil fuels | 101,7 % | 101,0 % | 95,7 % | 90,6 % | 108,1 % | 87,9 % |
| **of Hard Coal** | 100,0 % | 100,0 % | 109,7 % | 90,1 % | 109,1 % | 86,7 % |
| of Oil and petroleum products | 105,2 % | 98,4 % | 104,0 % | 103,6 % | 107,3 % | 109,2 % |
| **of Crude and NGL** | 94,5 % | 95,3 % | 99,0 % | 99,5 % | 100,8 % | 99,4 % |
| of Natural Gas | 100,0 % | 100,7 % | 99,7 % | 99,7 % | 100,0 % | 98,9 % |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 16.77 % | 19.64 % | 25.75 % | 25.47 % | 26.77 % |
| **RE-T - Renewable energy in Transport [%]** | | 0.66 % | 3.79 % | 4.58 % | 4.05 % | 5.51 % |
| **RES-E - Renewable Electricity Generation [%]** | | 3.83 % | 7.40 % | 15.54 % | 18.79 % | 20.17 % |
| **RES-H&C - Renewable Heating and Cooling [%]** | | 29.32 % | 32.54 % | 46.08 % | 47.37 % | 50.35 % |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 11,9 | 14,3 | 14,1 | 13,6 | 14,3 | 13,8 |
| GHG emissions - National total* | 19,5 | 22,9 | 20,9 | 20,6 | 20,7 | 20,3 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 40,4 % | 47,4 % | 43,3 % | 42,6 % | 43,0 % | 42,2 % |
| Total GHG per capita [t $CO_2$ eq./capita] | 5,6 | 6,8 | 6,7 | 7,0 | 7,4 | 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **0,1** | **0,1** | **0,1** | **0,2** | **0,2** | **0,3** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,0 | 0,1 | 0,1 | 0,1 | 0,2 | 0,3 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Net Imports** | **3,6** | **4,7** | **4,5** | **4,0** | **4,3** | **3,7** |
| Solid fossil fuels | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 2,4 | 3,1 | 2,9 | 2,6 | 3,0 | 2,4 |
| of which crude oil and NGL | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,7 | 1,2 | 1,2 | 0,8 | 0,7 | 0,6 |
| Renewables and biofuels | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| Electricity | 0,5 | 0,3 | 0,3 | 0,5 | 0,5 | 0,5 |
| **Gross inland consumption** | **3,7** | **4,8** | **4,6** | **4,2** | **4,5** | **4,0** |
| Solid fossil fuels | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 2,3 | 3,2 | 2,9 | 2,6 | 2,9 | 2,4 |
| of which crude and NGL | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,7 | 1,2 | 1,2 | 0,8 | 0,7 | 0,6 |
| 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 | 0,4 |
| Electricity | 0,5 | 0,3 | 0,3 | 0,5 | 0,5 | 0,5 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Available for final consumption** | **3,2** | **4,1** | **3,9** | **3,6** | **3,8** | **3,3** |
| **Final non-energy consumption** | **0,1** | **0,0** | **0,0** | **0,0** | **0,0** | **0,0** |
| **Final energy consumption** | **3,2** | **4,0** | **3,9** | **3,5** | **3,8** | **3,3** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,1 | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 1,9 | 2,7 | 2,4 | 2,1 | 2,3 | 1,8 |
| Natural gas | 0,6 | 0,6 | 0,7 | 0,6 | 0,6 | 0,6 |
| Renewables and biofuels | 0,0 | 0,0 | 0,1 | 0,1 | 0,2 | 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 | 0,0 | 0,1 | 0,1 | 0,1 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Electricity | 0,5 | 0,5 | 0,6 | 0,5 | 0,6 | 0,5 |
| Heat | 0,0 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| by Sector | | | | | | |
| Industry | 0,7 | 0,8 | 0,8 | 0,6 | 0,6 | 0,6 |
| Transport | 1,6 | 2,3 | 2,2 | 2,0 | 2,2 | 1,7 |
| Residential | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 |
| Services | 0,4 | 0,4 | 0,4 | 0,4 | 0,5 | 0,5 |
| Agriculture and Fishing | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: **see appendices**

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **1,2** | **1,7** | **1,7** | **2,0** | **1,8** | **1,8** |
| Combustible Fuels | 0,1 | 0,5 | 0,5 | 0,5 | 0,1 | 0,1 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 1,1 | 1,1 | 1,1 | 1,3 | 1,3 | 1,3 |
| Wind | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,2 |
| Solar | 0,0 | 0,0 | 0,0 | 0,1 | 0,2 | 0,2 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **1,2** | **4,1** | **4,6** | **2,8** | **1,9** | **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 | 3,1 | 2,9 | 0,8 | 0,2 | 0,2 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,9 | 1,0 | 1,6 | 1,9 | 1,6 | 2,0 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0,1 | 0,1 | 0,1 | 0,1 |
| CHP Electricity Generation [TWh] | | | 0,4 | 0,4 | 0,4 | 0,5 |
| CHP in Total Electricity Generation [%] | | | 9,6 | 12,7 | 22,1 | 22,7 |
| CHP Heat Production [PJ] | | | 3,2 | 2,4 | 3,8 | 4,8 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 1932 | 2672 | 2405 | 2144 | 2306 | 1814 |
| of which LPG | 26 | 13 | 13 | 11 | 10 | 8 |
| of which motor gasoline | 598 | 515 | 362 | 293 | 343 | 262 |
| of which Gas/Diesel oil | 1307 | 2144 | 2031 | 1841 | 1953 | 1544 |
| Final consumption biofuels | 0 | 1 | 42 | 83 | 130 | 142 |
| pure and blended biogasoline | 0 | 0 | 1 | 7 | 17 | 14 |
| pure and blended biodiesel | 0 | 0 | 41 | 76 | 113 | 129 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 3,6 | 4,8 | 4,6 | 4,1 | 4,5 | 3,9 |
| Final energy consumption 2020-2030 [Mtoe] | 3,5 | 4,5 | 4,3 | 4,0 | 4,4 | 3,8 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 99 | 112 | 95 | 77 | 74 | 66 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 100 | 113 | 95 | 77 | 75 | 67 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 8433 | 10411 | 9250 | 7421 | 7402 | 6331 |
| Final Electricity per Capita [KWh/capita] | 2690 | 8952 | 9145 | 4913 | 3109 | 3568 |
| **Import Dependency [%]** | **99,6%** | **97,4%** | **97,1%** | **96,0%** | **95,0%** | **92,5%** |
| of Solid fossil fuels | 100,0% | 100,0% | 102,2% | 99,8% | 93,1% | 112,3% |
| of Hard Coal | 100,0% | 100,0% | 102,5% | 99,8% | 92,3% | 114,0% |
| of Oil and petroleum products | 102,1% | 99,4% | 99,3% | 99,3% | 100,4% | 100,0% |
| 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) | | 1.40% | 2.85% | 6.86% | 8.69% | 12.61% |
| RE-T - Renewable energy in Transport [%] | | 0.16% | 2.09% | 6.70% | 7.71% | 12.58% |
| RES-E - Renewable Electricity Generation [%] | | 3.18% | 3.79% | 6.20% | 10.86% | 13.89% |
| RES-H&C - Renewable Heating and Cooling [%] | | 3.61% | 4.70% | 6.86% | 8.69% | 12.61% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 9,7 | 13,4 | 12,5 | 10,7 | 11,5 | 9,7 |
| GHG emissions - National total* | 10,6 | 14,3 | 13,5 | 11,7 | 12,5 | 10,7 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 81,0% | 109,0% | 102,6% | 89,1% | 95,5% | 81,6% |
| Total GHG per capita [t $CO_2$ eq./capita] | 24,5 | 31,0 | 26,8 | 20,8 | 20,4 | 17,1 |

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

# 5.18 Hungary

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **11,6** | **10,9** | **11,7** | **11,1** | **10,8** | **10,6** |
| Solid fossil fuels | 2,9 | 1,7 | 1,6 | 1,5 | 1,0 | 0,9 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 2,9 | 1,7 | 1,6 | 1,5 | 1,0 | 0,9 |
| Oil and petroleum products | 1,7 | 1,4 | 1,1 | 0,9 | 1,2 | 1,0 |
| of which crude oil | 1,7 | 1,4 | 1,1 | 0,9 | 1,1 | 1,0 |
| Natural gas | 2,5 | 2,3 | 2,2 | 1,4 | 1,3 | 1,3 |
| Nuclear | 3,7 | 3,6 | 4,0 | 4,0 | 4,1 | 4,1 |
| Renewables and biofuels | 0,8 | 1,7 | 2,7 | 3,2 | 3,1 | 3,1 |
| Wastes, Non-Renewable | 0,0 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| **Net Imports** | **13,9** | **17,7** | **15,1** | **13,6** | **18,6** | **14,8** |
| Solid fossil fuels | 1,1 | 1,3 | 1,1 | 0,8 | 0,8 | 0,7 |
| of which hard coal | 0,9 | 1,0 | 1,3 | 1,0 | 1,0 | 0,9 |
| Oil and petroleum products | 5,2 | 6,1 | 5,8 | 6,6 | 7,1 | 6,5 |
| of which crude oil and NGL | 5,8 | 6,2 | 5,8 | 6,2 | 5,9 | 5,9 |
| Natural gas | 7,3 | 9,8 | 7,7 | 5,2 | 9,8 | 6,6 |
| Renewables and biofuels | 0,0 | 0,0 | 0,0 | -0,2 | -0,2 | -0,1 |
| Electricity | 0,3 | 0,5 | 0,4 | 1,2 | 1,1 | 1,0 |
| **Gross inland consumption** | **25,2** | **28,5** | **26,6** | **25,2** | **26,7** | **26,2** |
| Solid fossil fuels | 3,8 | 3,1 | 2,7 | 2,4 | 1,8 | 1,7 |
| of which hard coal | 0,9 | 0,9 | 1,3 | 1,0 | 1,0 | 0,9 |
| of which brown coal | 3,0 | 2,1 | 1,7 | 1,6 | 1,0 | 1,0 |
| Oil and petroleum products | 6,9 | 7,4 | 6,8 | 7,0 | 8,2 | 7,5 |
| of which crude and NGL | 7,4 | 7,6 | 6,8 | 6,8 | 7,0 | 6,9 |
| Natural gas | 9,7 | 12,1 | 9,8 | 7,5 | 8,5 | 8,8 |
| Nuclear | 3,7 | 3,6 | 4,0 | 4,0 | 4,1 | 4,1 |
| Renewables and biofuels | 0,8 | 1,7 | 2,8 | 3,0 | 2,8 | 3,0 |
| Electricity | 0,3 | 0,5 | 0,4 | 1,2 | 1,1 | 1,0 |
| Waste, non-renewable | 0,0 | 0,1 | 0,1 | 0,1 | 0,2 | 0,2 |
| **Available for final consumption** | **17,2** | **20,3** | **18,9** | **18,5** | **20,0** | **19,7** |
| **Final non-energy consumption** | **1,6** | **2,2** | **2,0** | **1,9** | **2,1** | **2,2** |
| **Final energy consumption** | **15,6** | **18,2** | **16,9** | **16,8** | **18,0** | **17,6** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,4 | 0,5 | 0,2 | 0,2 | 0,2 | 0,2 |
| Oil and petroleum products | 4,0 | 4,6 | 4,4 | 5,0 | 5,9 | 5,3 |
| Natural gas | 6,4 | 7,7 | 6,1 | 5,3 | 5,5 | 5,7 |
| Renewables and biofuels | 0,8 | 1,2 | 2,0 | 2,2 | 1,8 | 1,9 |
| Solid biofuels and renewable waste | 0,7 | 1,1 | 1,7 | 1,9 | 1,5 | 1,5 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| Liquid biofuels | 0,0 | 0,0 | 0,2 | 0,2 | 0,2 | 0,3 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| Electricity | 2,5 | 2,8 | 2,9 | 3,1 | 3,5 | 3,4 |
| Heat | 1,4 | 1,3 | 1,1 | 1,0 | 1,0 | 1,0 |
| by Sector | | | | | | |
| Industry | 3,3 | 3,1 | 2,6 | 3,9 | 4,5 | 4,4 |
| Transport | 3,1 | 4,0 | 4,1 | 4,2 | 5,1 | 4,5 |
| Residential | 5,6 | 7,0 | 6,6 | 6,0 | 5,7 | 6,0 |
| Services | 3,0 | 3,5 | 3,0 | 2,2 | 2,1 | 2,0 |
| Agriculture and Fishing | 0,7 | 0,6 | 0,5 | 0,6 | 0,7 | 0,7 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **8,3** | **8,6** | **9,0** | **8,6** | **10,0** | **10,7** |
| Combustible Fuels | 6,4 | 6,7 | 6,6 | 6,1 | 6,2 | 6,1 |
| Nuclear | 1,9 | 1,9 | 2,0 | 2,0 | 2,0 | 2,0 |
| Hydro | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 | 0,1 |
| Wind | 0,0 | 0,0 | 0,3 | 0,3 | 0,3 | 0,3 |
| Solar | 0,0 | 0,0 | 0,0 | 0,2 | 1,4 | 2,1 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **35,2** | **35,8** | **37,4** | **30,3** | **34,2** | **34,8** |
| Solid fossil fuels, peat and products, oil shale | 9,6 | 7,0 | 6,2 | 5,8 | 4,0 | 3,7 |
| Oil and petroleum products | 4,4 | 0,5 | 0,5 | 0,1 | 0,1 | 0,0 |
| Natural gas | 6,7 | 12,5 | 11,7 | 5,2 | 8,8 | 9,2 |
| Nuclear | 14,2 | 13,8 | 15,8 | 15,8 | 16,3 | 16,1 |
| Renewables and biofuels | 0,2 | 1,9 | 3,0 | 3,2 | 4,7 | 5,5 |
| Wastes non-RES | 0,1 | 0,1 | 0,2 | 0,1 | 0,2 | 0,2 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 1,9 | 1,6 | 1,5 | 1,6 |
| CHP Electricity Generation [TWh] | | | 7,3 | 4,1 | 4,6 | 4,7 |
| CHP in Total Electricity Generation [%] | | | 19,6 | 13,5 | 13,4 | 13,0 |
| CHP Heat Production [PJ] | | | 42,2 | 24,4 | 27,5 | 27,6 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 3699 | 4436 | 4263 | 4639 | 5541 | 4920 |
| **of which LPG** | 368 | 282 | 211 | 295 | 256 | 269 |
| **of which motor gasoline** | 1414 | 1568 | 1348 | 1283 | 1507 | 1308 |
| of which Gas/Diesel oil | 1917 | 2586 | 2703 | 3061 | 3778 | 3342 |
| **Final consumption biofuels** | 0 | 3 | 175 | 175 | 202 | 279 |
| **pure and blended biogasoline** | 0 | 3 | 57 | 43 | 46 | 84 |
| **pure and blended biodiesel** | 0 | 0 | 118 | 133 | 157 | 195 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 23,6 | 26,3 | 24,6 | 23,3 | 24,6 | 23,9 |
| Final energy consumption 2020-2030 [Mtoe] | 16,2 | 18,7 | 17,5 | 17,4 | 18,6 | 18,0 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 286 | 257 | 241 | 206 | 186 | 189 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 306 | 278 | 261 | 223 | 202 | 207 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 2468 | 2823 | 2655 | 2557 | 2733 | 2677 |
| Final Electricity per Capita [KWh/capita] | 3443 | 3541 | 3732 | 3074 | 3497 | 3561 |
| **Import Dependency [%]** | **55,0%** | **62,3%** | **56,9%** | **53,9%** | **69,7%** | **56,6%** |
| of Solid fossil fuels | 28,1% | 42,5% | 41,9% | 33,7% | 45,7% | 43,7% |
| **of Hard Coal** | 96,4% | 108,3% | 99,2% | 99,2% | 98,8% | 97,0% |
| of Oil and petroleum products | 75,9% | 82,0% | 85,3% | 93,7% | 86,6% | 87,1% |
| **of Crude and NGL** | 78,5% | 81,8% | 85,3% | 91,4% | 84,6% | 86,0% |
| of Natural Gas | 75,4% | 81,1% | 78,7% | 69,7% | 115,2% | 75,6% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 6.93% | 12.74% | 14.50% | 12.63% | 13.85% |
| RE-T - Renewable energy in Transport [%] | | 1.01% | 6.16% | 7.17% | 8.06% | 11.57% |
| RES-E - Renewable Electricity Generation [%] | | 4.42% | 7.10% | 7.34% | 9.97% | 11.90% |
| RES-H&C - Renewable Heating and Cooling [%] | | 9.94% | 18.08% | 21.33% | 18.16% | 17.72% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 59,1 | 61,1 | 52,8 | 47,2 | 50,1 | 47,6 |
| GHG emissions - National total* | 75,7 | 77,5 | 66,7 | 62,1 | 65,4 | 63,1 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 79,4% | 81,3% | 70,0% | 65,1% | 68,6% | 66,2% |
| Total GHG per capita [t $CO_2$ eq./capita] | 7,4 | 7,7 | 6,7 | 6,3 | 6,7 | 6,5 |

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

# 5.19 Malta

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **0,0** | **0,0** | **0,0** | **0,0** | **0,0** | **0,0** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Net Imports** | **1,5** | **1,6** | **2,4** | **2,2** | **3,1** | **2,9** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 1,5 | 1,6 | 2,4 | 2,1 | 2,7 | 2,5 |
| of which crude oil and NGL | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,3 | 0,3 |
| Renewables and biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Electricity | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,0 |
| **Gross inland consumption** | **0,8** | **0,9** | **0,9** | **0,8** | **0,9** | **0,8** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,8 | 0,9 | 0,9 | 0,6 | 0,5 | 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 | 0,0 | 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 | 0,0 | 0,1 |
| Electricity | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 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** | **0,4** | **0,5** | **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** | **0,4** | **0,5** | **0,5** | **0,5** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,2 | 0,2 | 0,2 | 0,3 | 0,3 | 0,3 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Solid biofuels and renewable waste | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Electricity | 0,1 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| Heat | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| by Sector | | | | | | |
| Industry | 0,0 | 0,1 | 0,0 | 0,1 | 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **0,0** | **0,0** | **0,6** | **0,7** | **0,7** | **0,8** |
| Combustible Fuels | 0,0 | 0,0 | 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 | 0,0 | 0,1 | 0,2 | 0,2 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **1,9** | **2,2** | **2,1** | **1,3** | **2,1** | **2,1** |
| Solid fossil fuels, peat and products, oil shale | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 1,9 | 2,2 | 2,1 | 1,2 | 0,0 | 0,1 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 1,8 | 1,8 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 0,0 | 0,0 | 0,0 | 0,1 | 0,2 | 0,2 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0,0 | 0,0 | 0,1 | 0,1 |
| CHP Electricity Generation [TWh] | | | 0,0 | 0,0 | 0,2 | 0,2 |
| CHP in Total Electricity Generation [%] | | | 0,0 | 0,0 | 8,5 | 7,2 |
| CHP Heat Production [PJ] | | | 0,0 | 0,0 | 0,1 | 0,1 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 171 | 194 | 223 | 256 | 294 | 253 |
| of which LPG | 18 | 20 | 24 | 26 | 29 | 26 |
| of which motor gasoline | 75 | 68 | 75 | 78 | 85 | 72 |
| of which Gas/Diesel oil | 78 | 107 | 124 | 152 | 180 | 156 |
| Final consumption biofuels | 0 | 0 | 1 | 7 | 11 | 15 |
| pure and blended biogasoline | 0 | 0 | 0 | 0 | 0 | 0 |
| pure and blended biodiesel | 0 | 0 | 1 | 7 | 11 | 15 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 0,8 | 0,9 | 0,9 | 0,8 | 0,9 | 0,7 |
| Final energy consumption 2020-2030 [Mtoe] | 0,4 | 0,5 | 0,5 | 0,6 | 0,7 | 0,5 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 134 | 139 | 121 | 75 | 68 | 63 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 134 | 142 | 122 | 76 | 70 | 64 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 2080 | 2324 | 2266 | 1724 | 1826 | 1480 |
| Final Electricity per Capita [KWh/capita] | 4931 | 5563 | 5105 | 2967 | 4173 | 4165 |
| **Import Dependency [%]** | **181,8%** | **170,3%** | **252,0%** | **294,6%** | **341,5%** | **377,7%** |
| of Solid fossil fuels | 0,0% | 0,0% | 0,0% | 0,0% | 0,0% | 0,0% |
| of Hard Coal | 0,0% | 0,0% | 0,0% | 0,0% | 0,0% | 0,0% |
| of Oil and petroleum products | 181,8% | 170,4% | 253,3% | 330,7% | 548,1% | 719,1% |
| of Crude and NGL | 0,0% | 0,0% | 0,0% | 0,0% | 0,0% | 0,0% |
| of Natural Gas | 0,0% | 0,0% | 0,0% | 0,0% | 103,6% | 96,2% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 0.12% | 0.98% | 5.12% | 8.23% | 10.71% |
| RE-T - Renewable energy in Transport [%] | | 0.00% | 0.00% | 4.68% | 8.90% | 10.59% |
| RES-E - Renewable Electricity Generation [%] | | 0.00% | 0.03% | 4.31% | 7.49% | 9.49% |
| RES-H&C - Renewable Heating and Cooling [%] | | 1.03% | 7.28% | 14.64% | 23.60% | 23.03% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 2,8 | 2,9 | 2,9 | 2,0 | 2,2 | 1,8 |
| GHG emissions - National total* | 3,1 | 3,2 | 3,2 | 2,5 | 2,7 | 2,3 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 111,4% | 116,1% | 115,8% | 88,8% | 94,7% | 83,0% |
| Total GHG per capita [t $CO_2$ eq./capita] | 8,0 | 8,1 | 7,8 | 5,6 | 5,4 | 4,5 |

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

# 5.20 The Netherlands

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **58,5** | **62,4** | **71,1** | **48,1** | **33,1** | **27,4** |
| 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 | 2,7 | 2,5 | 1,6 | 2,1 | 1,1 | 1,1 |
| of which crude oil | 2,4 | 2,3 | 1,5 | 1,8 | 0,9 | 0,9 |
| Natural gas | 52,8 | 56,2 | 64,7 | 39,4 | 23,9 | 17,3 |
| Nuclear | 1,0 | 1,0 | 0,9 | 0,9 | 0,9 | 1,0 |
| Renewables and biofuels | 1,4 | 2,0 | 3,1 | 4,8 | 6,2 | 7,1 |
| Wastes, Non-Renewable | 0,6 | 0,7 | 0,7 | 0,6 | 0,7 | 0,7 |
| **Net Imports** | **35,0** | **37,5** | **28,3** | **43,7** | **56,3** | **57,1** |
| Solid fossil fuels | 7,7 | 8,2 | 7,6 | 10,7 | 6,6 | 3,8 |
| of which hard coal | 7,7 | 8,2 | 7,5 | 10,7 | 6,6 | 3,9 |
| Oil and petroleum products | 42,9 | 48,4 | 44,5 | 43,7 | 41,9 | 39,4 |
| of which crude oil and NGL | 60,7 | 61,4 | 60,4 | 60,0 | 63,3 | 56,9 |
| Natural gas | -17,2 | -20,9 | -24,2 | -10,5 | 8,3 | 14,2 |
| Renewables and biofuels | -0,1 | 0,3 | 0,1 | -1,1 | -0,7 | -0,2 |
| Electricity | 1,6 | 1,6 | 0,2 | 0,8 | 0,1 | -0,2 |
| **Gross inland consumption** | **78,3** | **83,7** | **86,2** | **76,4** | **76,1** | **71,9** |
| Solid fossil fuels | 7,8 | 8,1 | 7,5 | 11,1 | 6,4 | 4,1 |
| of which hard coal | 7,8 | 8,2 | 7,4 | 11,1 | 6,4 | 4,2 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 30,9 | 34,7 | 33,4 | 30,3 | 30,1 | 27,8 |
| of which crude and NGL | 62,8 | 63,5 | 61,9 | 61,2 | 63,4 | 58,0 |
| Natural gas | 35,0 | 35,3 | 40,1 | 28,6 | 32,0 | 31,4 |
| Nuclear | 1,0 | 1,0 | 0,9 | 0,9 | 0,9 | 1,0 |
| Renewables and biofuels | 1,3 | 2,3 | 3,3 | 3,7 | 5,4 | 6,8 |
| Electricity | 1,6 | 1,6 | 0,2 | 0,8 | 0,1 | -0,2 |
| Waste, non-renewable | 0,6 | 0,7 | 0,7 | 0,8 | 0,8 | 0,8 |
| **Available for final consumption** | **58,8** | **62,1** | **64,8** | **55,2** | **56,4** | **55,3** |
| **Final non-energy consumption** | **11,3** | **13,6** | **14,4** | **12,2** | **12,1** | **12,9** |
| **Final energy consumption** | **47,5** | **49,0** | **50,8** | **43,5** | **44,3** | **42,3** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,1 | 0,1 | 0,1 | 0,2 | 0,2 | 0,2 |
| Oil and petroleum products | 14,0 | 14,9 | 15,3 | 13,7 | 13,9 | 12,7 |
| Natural gas | 20,7 | 20,0 | 21,6 | 16,9 | 16,5 | 15,9 |
| Renewables and biofuels | 0,5 | 0,6 | 1,0 | 1,3 | 2,0 | 2,0 |
| Solid biofuels and renewable waste | 0,4 | 0,5 | 0,6 | 0,6 | 0,7 | 0,7 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| Liquid biofuels | 0,0 | 0,0 | 0,2 | 0,3 | 0,7 | 0,6 |
| Biogases | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| Waste, non-renewable | 0,0 | 0,0 | 0,1 | 0,0 | 0,0 | 0,0 |
| Electricity | 8,2 | 9,0 | 9,3 | 8,9 | 9,4 | 9,4 |
| Heat | 3,7 | 3,8 | 3,0 | 2,3 | 2,1 | 1,9 |
| by Sector | | | | | | |
| Industry | 15,2 | 15,6 | 14,4 | 12,9 | 13,0 | 13,1 |
| Transport | 10,6 | 11,4 | 11,7 | 10,4 | 10,9 | 9,3 |
| Residential | 10,8 | 10,7 | 12,5 | 9,5 | 9,5 | 9,3 |
| Services | 6,2 | 6,9 | 7,8 | 6,7 | 6,8 | 6,5 |
| Agriculture and Fishing | 4,5 | 4,2 | 4,2 | 3,8 | 4,1 | 4,0 |
| Others | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **21,1** | **21,8** | **26,7** | **33,9** | **37,1** | **42,2** |
| Combustible Fuels | 20,1 | 20,0 | 23,7 | 28,4 | 24,8 | 24,1 |
| Nuclear | 0,4 | 0,4 | 0,5 | 0,5 | 0,5 | 0,5 |
| Hydro | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Wind | 0,4 | 1,2 | 2,2 | 3,4 | 4,5 | 6,6 |
| Solar | 0,0 | 0,1 | 0,1 | 1,5 | 7,2 | 10,9 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **89,4** | **99,7** | **119,1** | **108,8** | **120,8** | **123,0** |
| Solid fossil fuels, peat and products, oil shale | 24,3 | 23,5 | 22,6 | 39,4 | 17,7 | 7,6 |
| Oil and petroleum products | 2,6 | 2,3 | 1,3 | 1,3 | 1,4 | 1,3 |
| Natural gas | 54,4 | 61,0 | 78,5 | 48,7 | 73,1 | 75,1 |
| Nuclear | 3,9 | 4,0 | 4,0 | 4,1 | 3,9 | 4,1 |
| Renewables and biofuels | 3,0 | 7,4 | 11,2 | 13,7 | 22,8 | 33,0 |
| Wastes non-RES | 1,2 | 1,4 | 1,6 | 1,6 | 1,8 | 1,9 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 9,3 | 9,2 | 8,8 | 9,1 |
| CHP Electricity Generation [TWh] | | | 39,2 | 29,8 | 32,2 | 31,7 |
| CHP in Total Electricity Generation [%] | | | 33,2 | 27,1 | 26,6 | 26,1 |
| CHP Heat Production [PJ] | | | 233,6 | 189,6 | 174,2 | 171,6 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 11 992 | 12 522 | 12 449 | 11 161 | 11 327 | 9 870 |
| of which LPG | 723 | 575 | 487 | 301 | 306 | 262 |
| of which motor gasoline | 3 964 | 4 039 | 4 048 | 3 783 | 4 177 | 3 483 |
| of which Gas/Diesel oil | 7 305 | 7 908 | 7 914 | 7 076 | 6 843 | 6 126 |
| **Final consumption biofuels** | 0 | 10 | 243 | 320 | 719 | 609 |
| pure and blended biogasoline | 0 | 0 | 134 | 142 | 199 | 226 |
| pure and blended biodiesel | 0 | 0 | 95 | 179 | 480 | 355 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 66,9 | 70,1 | 71,7 | 63,9 | 63,5 | 58,4 |
| Final energy consumption 2020-2030 [Mtoe] | 52,1 | 54,1 | 55,3 | 48,8 | 49,7 | 45,5 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 115 | 113 | 108 | 93 | 84 | 80 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 135 | 135 | 130 | 111 | 100 | 99 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 4 934 | 5 133 | 5 198 | 4 519 | 4 401 | 4 132 |
| Final Electricity per Capita [KWh/capita] | 5 634 | 6 112 | 7 186 | 6 437 | 6 990 | 7 068 |
| **Import Dependency [%]** | **44,7 %** | **44,8 %** | **32,8 %** | **57,2 %** | **74,0 %** | **79,3 %** |
| of Solid fossil fuels | 99,4 % | 101,3 % | 101,4 % | 96,6 % | 102,1 % | 91,9 % |
| of Hard Coal | 98,9 % | 100,0 % | 101,6 % | 96,5 % | 101,8 % | 93,0 % |
| of Oil and petroleum products | 138,8 % | 139,5 % | 133,4 % | 144,3 % | 139,0 % | 141,7 % |
| of Crude and NGL | 96,7 % | 96,7 % | 97,6 % | 98,0 % | 99,9 % | 98,1 % |
| of Natural Gas | -49,1 % | -59,3 % | -60,4 % | -36,7 % | 26,0 % | 45,2 % |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 2.48 % | 3.92 % | 5.71 % | 8.89 % | 14.00 % |
| RE-T - Renewable energy in Transport [%] | | 0.50 % | 3.40 % | 5.60 % | 12.33 % | 12.63 % |
| RES-E - Renewable Electricity Generation [%] | | 6.30 % | 9.60 % | 11.04 % | 18.23 % | 26.41 % |
| RES-H&C - Renewable Heating and Cooling [%] | | 2.38 % | 3.10 % | 5.28 % | 7.22 % | 8.05 % |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 181,5 | 188,3 | 192,2 | 176,0 | 165,4 | 144,9 |
| GHG emissions - National total* | 228,0 | 223,9 | 222,3 | 204,6 | 192,3 | 171,0 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 101,3 % | 99,4 % | 98,7 % | 90,9 % | 85,4 % | 76,0 % |
| Total GHG per capita [t $CO_2$ eq./capita] | 14,4 | 13,7 | 13,4 | 12,1 | 11,1 | 9,8 |

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

# 5.21 Austria

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **9,8** | **9,9** | **12,1** | **12,2** | **12,4** | **12,4** |
| Solid fossil fuels | 0,3 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,3 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 1,1 | 0,9 | 1,1 | 0,9 | 0,7 | 0,6 |
| of which crude oil | 1,1 | 0,9 | 1,1 | 0,9 | 0,7 | 0,6 |
| Natural gas | 1,5 | 1,3 | 1,4 | 1,0 | 0,8 | 0,6 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 6,6 | 7,2 | 9,0 | 9,6 | 10,3 | 10,5 |
| Wastes, Non-Renewable | 0,3 | 0,4 | 0,6 | 0,7 | 0,6 | 0,7 |
| **Net Imports** | **19,2** | **24,7** | **21,9** | **20,4** | **24,9** | **18,8** |
| Solid fossil fuels | 3,0 | 4,0 | 3,4 | 2,8 | 2,8 | 2,4 |
| of which hard coal | 2,3 | 3,0 | 2,4 | 2,1 | 2,1 | 1,8 |
| Oil and petroleum products | 11,0 | 13,3 | 11,8 | 11,3 | 12,3 | 10,8 |
| of which crude oil and NGL | 7,4 | 8,0 | 6,9 | 8,2 | 8,7 | 7,6 |
| Natural gas | 5,3 | 7,2 | 6,1 | 5,0 | 9,4 | 5,3 |
| Renewables and biofuels | 0,0 | 0,0 | 0,4 | 0,4 | 0,1 | 0,0 |
| Electricity | -0,1 | 0,2 | 0,2 | 0,9 | 0,3 | 0,2 |
| **Gross inland consumption** | **29,2** | **34,4** | **34,8** | **33,7** | **34,8** | **32,2** |
| Solid fossil fuels | 3,6 | 4,1 | 3,4 | 3,2 | 2,9 | 2,5 |
| of which hard coal | 2,5 | 2,8 | 2,5 | 2,5 | 2,2 | 1,9 |
| of which brown coal | 0,3 | 0,3 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 12,3 | 14,4 | 13,0 | 12,0 | 12,9 | 11,1 |
| of which crude and NGL | 8,5 | 9,0 | 8,0 | 9,0 | 9,3 | 8,2 |
| Natural gas | 6,6 | 8,1 | 8,1 | 6,9 | 7,7 | 7,3 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 6,6 | 7,2 | 9,5 | 10,0 | 10,4 | 10,5 |
| Electricity | -0,1 | 0,2 | 0,2 | 0,9 | 0,3 | 0,2 |
| Waste, non-renewable | 0,3 | 0,4 | 0,6 | 0,7 | 0,6 | 0,7 |
| **Available for final consumption** | **23,6** | **27,3** | **27,8** | **27,3** | **28,3** | **26,9** |
| **Final non-energy consumption** | **1,7** | **1,6** | **1,8** | **1,8** | **2,1** | **2,1** |
| **Final energy consumption** | **21,8** | **25,7** | **26,0** | **25,5** | **26,2** | **24,8** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,7 | 0,5 | 0,4 | 0,4 | 0,3 | 0,3 |
| Oil and petroleum products | 9,0 | 11,2 | 9,7 | 9,1 | 9,5 | 8,5 |
| Natural gas | 4,0 | 4,7 | 4,7 | 4,6 | 4,8 | 4,6 |
| Renewables and biofuels | 2,4 | 2,9 | 4,1 | 4,3 | 4,2 | 4,1 |
| Solid biofuels and renewable waste | 2,3 | 2,7 | 3,2 | 3,1 | 3,1 | 3,0 |
| Solar thermal | 0,1 | 0,1 | 0,2 | 0,2 | 0,2 | 0,2 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,1 | 0,5 | 0,7 | 0,5 | 0,4 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,1 | 0,2 | 0,2 | 0,2 | 0,2 | 0,3 |
| Electricity | 4,4 | 4,9 | 5,2 | 5,3 | 5,5 | 5,3 |
| Heat | 1,0 | 1,2 | 1,6 | 1,7 | 1,7 | 1,7 |
| by Sector | | | | | | |
| Industry | 6,0 | 7,2 | 7,6 | 7,4 | 7,5 | 7,3 |
| Transport | 6,4 | 8,4 | 8,2 | 8,5 | 8,8 | 7,7 |
| Residential | 6,3 | 6,6 | 7,1 | 6,6 | 6,7 | 6,7 |
| Services | 2,6 | 3,0 | 2,6 | 2,5 | 2,6 | 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **17,8** | **19,1** | **21,3** | **24,7** | **25,9** | **26,3** |
| Combustible Fuels | 6,1 | 6,5 | 7,3 | 7,7 | 6,4 | 6,4 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 11,6 | 11,8 | 12,9 | 13,6 | 14,6 | 14,6 |
| Wind | 0,1 | 0,8 | 1,0 | 2,5 | 3,2 | 3,2 |
| Solar | 0,0 | 0,0 | 0,1 | 0,9 | 1,7 | 2,0 |
| 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]** | **61,2** | **66,8** | **71,1** | **65,3** | **74,2** | **72,6** |
| Solid fossil fuels, peat and products, oil shale | 5,7 | 7,2 | 4,9 | 3,0 | 1,5 | 0,6 |
| Oil and petroleum products | 1,7 | 1,6 | 1,3 | 0,9 | 0,7 | 0,7 |
| Natural gas | 8,9 | 14,3 | 16,1 | 9,8 | 13,2 | 11,8 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 44,8 | 43,2 | 48,2 | 51,0 | 58,0 | 58,8 |
| Wastes non-RES | 0,1 | 0,4 | 0,6 | 0,7 | 0,8 | 0,7 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 3,2 | 2,8 | 2,9 | 2,9 |
| CHP Electricity Generation [TWh] | | | 11,0 | 9,0 | 9,7 | 9,7 |
| CHP in Total Electricity Generation [%] | | | 15,4 | 13,8 | 13,1 | 13,9 |
| CHP Heat Production [PJ] | | | 110,6 | 105,9 | 110,2 | 111,3 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 8274 | 10600 | 9352 | 8857 | 9351 | 8356 |
| of which LPG | 166 | 188 | 177 | 73 | 73 | 70 |
| of which motor gasoline | 2016 | 2137 | 1767 | 1542 | 1559 | 1293 |
| of which Gas/Diesel oil | 6093 | 8275 | 7408 | 7242 | 7718 | 6993 |
| Final consumption biofuels | 17 | 83 | 532 | 683 | 510 | 427 |
| pure and blended biogasoline | 0 | 0 | 78 | 60 | 57 | 55 |
| pure and blended biodiesel | 17 | 83 | 454 | 623 | 454 | 372 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 27,5 | 32,7 | 32,9 | 31,7 | 32,3 | 29,7 |
| Final energy consumption 2020-2030 [Mtoe] | 23,7 | 27,9 | 28,0 | 27,5 | 28,3 | 26,1 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 98 | 107 | 101 | 92 | 86 | 85 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 104 | 112 | 107 | 98 | 93 | 92 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3652 | 4192 | 4171 | 3928 | 3924 | 3619 |
| Final Electricity per Capita [KWh/capita] | 7652 | 8149 | 8515 | 7605 | 8378 | 8151 |
| **Import Dependency [%]** | **65,6%** | **71,8%** | **62,8%** | **60,4%** | **71,7%** | **58,3%** |
| of Solid fossil fuels | 83,9% | 99,4% | 99,6% | 86,9% | 96,7% | 97,8% |
| of Hard Coal | 91,6% | 106,8% | 97,3% | 83,5% | 98,4% | 95,5% |
| of Oil and petroleum products | 89,2% | 92,2% | 90,6% | 94,0% | 95,8% | 97,6% |
| of Crude and NGL | 86,9% | 88,8% | 86,5% | 91,1% | 94,0% | 92,9% |
| of Natural Gas | 80,6% | 88,5% | 75,3% | 72,6% | 122,8% | 73,2% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 24.36% | 31.21% | 33.50% | 33.75% | 36.55% |
| RE-T - Renewable energy in Transport [%] | | 5.07% | 10.71% | 11.41% | 10.05% | 10.28% |
| RES-E - Renewable Electricity Generation [%] | | 62.90% | 66.36% | 71.49% | 75.07% | 78.20% |
| RES-H&C - Renewable Heating and Cooling [%] | | 22.82% | 30.96% | 33.23% | 33.93% | 34.99% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 67,8 | 81,0 | 74,1 | 68,5 | 70,8 | 63,1 |
| GHG emissions - National total* | 81,8 | 94,0 | 86,2 | 80,6 | 82,7 | 74,6 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 103,1% | 118,5% | 108,7% | 101,7% | 104,2% | 94,1% |
| Total GHG per capita [t $CO_2$ eq./capita] | 10,2 | 11,5 | 10,3 | 9,4 | 9,3 | 8,4 |

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

# 5.22 Poland

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **78,6** | **77,9** | **66,8** | **67,8** | **62,1** | **58,0** |
| Solid fossil fuels | 70,7 | 68,4 | 55,1 | 53,6 | 44,4 | 40,0 |
| of which hard coal | 58,6 | 55,7 | 43,5 | 41,3 | 34,8 | 31,2 |
| of which brown coal | 12,1 | 12,7 | 11,6 | 12,3 | 9,5 | 8,8 |
| Oil and petroleum products | 0,7 | 0,9 | 0,7 | 0,9 | 1,0 | 0,9 |
| of which crude oil | 0,7 | 0,8 | 0,7 | 0,9 | 1,0 | 0,9 |
| Natural gas | 3,3 | 3,9 | 3,7 | 3,7 | 3,4 | 3,4 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 3,8 | 4,5 | 6,9 | 9,0 | 12,3 | 12,5 |
| Wastes, Non-Renewable | 0,1 | 0,2 | 0,4 | 0,5 | 1,1 | 1,1 |
| **Net Imports** | **9,6** | **16,5** | **32,1** | **28,7** | **48,1** | **44,2** |
| Solid fossil fuels | -16,3 | -13,0 | -2,7 | -5,5 | 2,6 | 0,1 |
| of which hard coal | -13,8 | -9,7 | 1,8 | -1,0 | 6,9 | 4,5 |
| Oil and petroleum products | 19,8 | 22,0 | 25,7 | 24,1 | 30,7 | 28,8 |
| of which crude oil and NGL | 18,1 | 18,0 | 22,8 | 26,6 | 26,8 | 25,1 |
| Natural gas | 6,6 | 8,5 | 8,9 | 9,9 | 13,4 | 13,6 |
| Renewables and biofuels | 0,0 | -0,1 | 0,4 | 0,1 | 0,5 | 0,4 |
| Electricity | -0,5 | -1,0 | -0,1 | 0,0 | 0,9 | 1,1 |
| **Gross inland consumption** | **89,2** | **92,6** | **101,6** | **95,9** | **106,1** | **103,0** |
| Solid fossil fuels | 56,3 | 54,7 | 55,2 | 48,4 | 43,8 | 40,9 |
| of which hard coal | 46,3 | 45,5 | 48,5 | 40,7 | 38,8 | 36,2 |
| of which brown coal | 12,1 | 12,7 | 11,6 | 12,3 | 9,5 | 8,8 |
| Oil and petroleum products | 19,6 | 22,0 | 26,0 | 24,1 | 31,3 | 29,4 |
| of which crude and NGL | 18,3 | 18,5 | 23,2 | 26,5 | 27,7 | 26,0 |
| Natural gas | 10,0 | 12,2 | 12,8 | 13,8 | 16,2 | 17,4 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 3,8 | 4,5 | 7,3 | 9,1 | 12,7 | 13,0 |
| Electricity | -0,5 | -1,0 | -0,1 | 0,0 | 0,9 | 1,1 |
| Waste, non-renewable | 0,1 | 0,2 | 0,4 | 0,5 | 1,1 | 1,1 |
| **Available for final consumption** | **57,1** | **61,7** | **70,4** | **65,2** | **77,7** | **77,1** |
| **Final non-energy consumption** | **4,4** | **4,6** | **5,0** | **5,6** | **5,6** | **5,8** |
| **Final energy consumption** | **53,6** | **57,5** | **65,3** | **60,9** | **71,9** | **70,3** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 11,9 | 11,5 | 13,2 | 10,7 | 9,0 | 9,0 |
| Oil and petroleum products | 15,2 | 17,6 | 20,2 | 18,6 | 25,4 | 24,4 |
| Natural gas | 6,3 | 7,9 | 8,9 | 8,5 | 9,3 | 9,2 |
| Renewables and biofuels | 3,5 | 3,9 | 5,3 | 5,6 | 9,2 | 9,0 |
| Solid biofuels and renewable waste | 3,5 | 3,8 | 4,3 | 4,6 | 7,7 | 7,5 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,9 | 0,7 | 1,0 | 1,0 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| Waste, non-renewable | 0,1 | 0,1 | 0,4 | 0,5 | 0,8 | 0,8 |
| Electricity | 8,4 | 9,0 | 10,2 | 11,0 | 12,1 | 11,8 |
| Heat | 6,9 | 6,6 | 6,5 | 5,5 | 5,6 | 5,6 |
| by Sector | | | | | | |
| Industry | 17,1 | 14,6 | 13,5 | 14,1 | 16,5 | 15,9 |
| Transport | 9,6 | 12,2 | 17,2 | 16,6 | 22,8 | 21,8 |
| Residential | 17,2 | 19,5 | 22,0 | 19,0 | 21,0 | 21,1 |
| Services | 5,0 | 6,7 | 8,8 | 7,8 | 7,8 | 7,6 |
| Agriculture and Fishing | 4,6 | 4,4 | 3,7 | 3,3 | 3,8 | 3,9 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2018 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **30,6** | **32,3** | **33,4** | **37,3** | **43,4** | **49,4** |
| Combustible Fuels | 28,4 | 29,8 | 29,9 | 30,0 | 33,6 | 36,7 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 2,2 | 2,3 | 2,3 | 2,4 | 2,4 | 2,4 |
| Wind | 0,0 | 0,1 | 1,1 | 4,9 | 5,8 | 6,3 |
| Solar | 0,0 | 0,0 | 0,0 | 0,1 | 1,5 | 4,0 |
| 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]** | **145,2** | **156,6** | **157,6** | **164,8** | **163,8** | **157,9** |
| Solid fossil fuels, peat and products, oil shale | 135,9 | 141,9 | 136,5 | 130,5 | 118,1 | 107,4 |
| Oil and petroleum products | 1,9 | 2,8 | 2,9 | 2,1 | 1,8 | 1,7 |
| Natural gas | 3,0 | 6,5 | 6,7 | 8,8 | 17,1 | 19,3 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 4,3 | 5,4 | 11,5 | 23,3 | 26,2 | 29,0 |
| Wastes non-RES | 0,1 | 0,0 | 0,0 | 0,1 | 0,6 | 0,5 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 8,7 | 8,6 | 9,7 | 10,0 |
| CHP Electricity Generation [TWh] | | | 27,7 | 26,5 | 29,9 | 30,1 |
| CHP in Total Electricity Generation [%] | | | 17,6 | 16,1 | 18,3 | 16,8 |
| CHP Heat Production [PJ] | | | 277,1 | 238,6 | 248,5 | 245,6 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 13.789 | 16.388 | 19.566 | 18.333 | 24.888 | 23.848 |
| **of which LPG** | 1.153 | 2.598 | 2.618 | 2.504 | 2.946 | 2.659 |
| **of which motor gasoline** | 5.291 | 4.185 | 4.252 | 3.658 | 4.544 | 4.229 |
| of which Gas/Diesel oil | 7.344 | 9.605 | 12.696 | 12.170 | 17.398 | 16.959 |
| **Final consumption biofuels** | 0 | 50 | 867 | 653 | 1.026 | 1.041 |
| **pure and blended biogasoline** | 0 | 34 | 170 | 153 | 187 | 183 |
| **pure and blended biodiesel** | 0 | 15 | 698 | 500 | 838 | 857 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 84,8 | 88,0 | 96,6 | 90,1 | 100,2 | 96,9 |
| Final energy consumption 2020-2030 [Mtoe] | 55,1 | 58,5 | 66,3 | 62,3 | 73,7 | 71,1 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 335 | 299 | 259 | 209 | 195 | 193 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 352 | 314 | 273 | 223 | 207 | 205 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 2.332 | 2.425 | 2.672 | 2.522 | 2.793 | 2.713 |
| Final Electricity per Capita [KWh/capita] | 3.794 | 4.103 | 4.144 | 4.337 | 4.312 | 4.161 |
| **Import Dependency [%]** | **10,8%** | **17,8%** | **31,6%** | **29,9%** | **45,4%** | **42,9%** |
| of Solid fossil fuels | -29,0% | -23,8% | -5,0% | -11,4% | 6,0% | 0,3% |
| **of Hard Coal** | -29,9% | -21,3% | 3,7% | -2,4% | 17,8% | 12,4% |
| of Oil and petroleum products | 101,2% | 99,9% | 99,0% | 100,3% | 98,2% | 97,9% |
| **of Crude and NGL** | 99,2% | 97,4% | 98,4% | 100,5% | 96,7% | 96,6% |
| of Natural Gas | 66,3% | 69,7% | 69,3% | 72,2% | 82,4% | 78,3% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 6,90% | 9,30% | 11,88% | 15,38% | 16,10% |
| RE-T - Renewable energy in Transport [%] | | 1,75% | 6,64% | 5,69% | 6,20% | 6,58% |
| RES-E - Renewable Electricity Generation [%] | | 2,68% | 6,65% | 13,40% | 14,36% | 16,24% |
| RES-H&C - Renewable Heating and Cooling [%] | | 10,16% | 11,81% | 14,79% | 22,00% | 22,14% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 318,5 | 324,3 | 336,4 | 315,3 | 321,7 | 304,9 |
| GHG emissions - National total* | 397,5 | 406,1 | 414,4 | 391,0 | 393,8 | 377,4 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 83,4% | 85,2% | 87,0% | 82,1% | 82,6% | 79,2% |
| Total GHG per capita [t $CO_2$ eq./capita] | 10,4 | 10,6 | 10,9 | 10,3 | 10,4 | 9,9 |

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

# 5.23 Portugal

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **3,8** | **3,6** | **5,8** | **5,9** | **6,6** | **6,8** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 3,8 | 3,5 | 5,6 | 5,8 | 6,4 | 6,7 |
| Wastes, Non-Renewable | 0,1 | 0,1 | 0,2 | 0,1 | 0,2 | 0,1 |
| **Net Imports** | **22,2** | **24,8** | **18,7** | **18,5** | **18,4** | **14,4** |
| Solid fossil fuels | 3,9 | 3,2 | 1,6 | 3,2 | 1,5 | 0,0 |
| of which hard coal | 4,0 | 3,2 | 1,6 | 3,2 | 1,5 | 0,0 |
| Oil and petroleum products | 16,2 | 17,1 | 12,5 | 11,2 | 11,5 | 9,4 |
| of which crude oil and NGL | 11,7 | 13,4 | 11,5 | 14,4 | 11,5 | 11,0 |
| Natural gas | 2,0 | 3,9 | 4,5 | 4,1 | 5,3 | 5,2 |
| Renewables and biofuels | 0,0 | 0,0 | -0,2 | -0,2 | -0,3 | -0,3 |
| Electricity | 0,1 | 0,6 | 0,2 | 0,2 | 0,3 | 0,1 |
| **Gross inland consumption** | **25,4** | **27,4** | **24,4** | **23,6** | **23,9** | **21,4** |
| Solid fossil fuels | 3,8 | 3,3 | 1,7 | 3,3 | 1,2 | 0,6 |
| of which hard coal | 3,8 | 3,3 | 1,7 | 3,3 | 1,2 | 0,6 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 15,6 | 16,1 | 12,4 | 10,4 | 10,8 | 8,9 |
| of which crude and NGL | 11,8 | 13,4 | 11,6 | 14,2 | 11,4 | 11,2 |
| Natural gas | 2,0 | 3,8 | 4,5 | 4,1 | 5,3 | 5,2 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 3,8 | 3,5 | 5,5 | 5,6 | 6,1 | 6,4 |
| Electricity | 0,1 | 0,6 | 0,2 | 0,2 | 0,3 | 0,1 |
| Waste, non-renewable | 0,1 | 0,1 | 0,2 | 0,2 | 0,2 | 0,2 |
| **Available for final consumption** | **19,5** | **20,9** | **19,0** | **16,9** | **17,6** | **16,4** |
| **Final non-energy consumption** | **2,4** | **2,6** | **1,7** | **1,3** | **1,2** | **1,1** |
| **Final energy consumption** | **17,2** | **18,3** | **17,3** | **15,6** | **16,4** | **15,2** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,4 | 0,0 | 0,1 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 10,1 | 10,1 | 8,4 | 6,9 | 7,2 | 6,3 |
| Natural gas | 0,8 | 1,3 | 1,6 | 1,6 | 1,8 | 1,7 |
| Renewables and biofuels | 2,4 | 2,5 | 2,5 | 2,8 | 2,9 | 2,9 |
| Solid biofuels and renewable waste | 2,4 | 2,5 | 2,2 | 1,7 | 1,8 | 1,8 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,3 | 0,3 | 0,3 | 0,3 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 | 0,1 |
| Electricity | 3,3 | 4,0 | 4,3 | 3,9 | 4,1 | 4,0 |
| Heat | 0,1 | 0,3 | 0,3 | 0,2 | 0,2 | 0,2 |
| by Sector | | | | | | |
| Industry | 6,3 | 5,8 | 5,5 | 4,4 | 4,6 | 4,5 |
| Transport | 6,0 | 6,4 | 6,5 | 5,6 | 6,0 | 5,0 |
| Residential | 2,8 | 3,2 | 3,0 | 2,8 | 2,9 | 3,0 |
| Services | 1,4 | 2,2 | 1,9 | 2,4 | 2,4 | 2,2 |
| Agriculture and Fishing | 0,7 | 0,6 | 0,5 | 0,4 | 0,5 | 0,5 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **10,9** | **13,4** | **18,9** | **19,6** | **21,6** | **21,7** |
| Combustible Fuels | 6,3 | 7,3 | 9,9 | 8,0 | 8,2 | 8,2 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Hydro | 4,5 | 5,0 | 5,1 | 6,2 | 7,3 | 7,2 |
| Wind | 0,1 | 1,1 | 3,8 | 4,9 | 5,2 | 5,1 |
| Solar | 0,0 | 0,0 | 0,1 | 0,4 | 0,9 | 1,1 |
| 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]** | **43,8** | **46,6** | **54,1** | **52,4** | **53,2** | **53,1** |
| Solid fossil fuels, peat and products, oil shale | 14,6 | 15,2 | 7,1 | 14,7 | 5,5 | 2,4 |
| Oil and petroleum products | 8,4 | 8,8 | 3,0 | 1,3 | 1,3 | 1,2 |
| Natural gas | 7,2 | 13,6 | 14,9 | 10,6 | 17,3 | 17,6 |
| Nuclear | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Renewables and biofuels | 13,3 | 8,6 | 28,8 | 25,5 | 28,8 | 31,6 |
| 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] | | | 6,4 | 6,5 | 6,4 | 6,5 |
| CHP in Total Electricity Generation [%] | | | 11,8 | 12,3 | 12,1 | 12,8 |
| CHP Heat Production [PJ] | | | 67,2 | 59,3 | 62,1 | 59,8 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 8310 | 8557 | 7439 | 6200 | 6566 | 5734 |
| **of which LPG** | 1139 | 971 | 728 | 571 | 557 | 548 |
| **of which motor gasoline** | 2272 | 1935 | 1459 | 1100 | 1108 | 918 |
| of which Gas/Diesel oil | 4899 | 5652 | 5252 | 4528 | 4901 | 4268 |
| **Final consumption biofuels** | 0 | 0 | 327 | 344 | 283 | 255 |
| **pure and blended biogasoline** | 0 | 0 | 0 | 21 | 8 | 6 |
| **pure and blended biodiesel** | 0 | 0 | 323 | 320 | 275 | 249 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 23,0 | 24,9 | 22,7 | 21,6 | 22,1 | 19,5 |
| Final energy consumption 2020-2030 [Mtoe] | 18,0 | 19,0 | 18,1 | 16,0 | 17,1 | 15,0 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 132 | 137 | 121 | 120 | 110 | 106 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 146 | 151 | 130 | 131 | 119 | 117 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 2476 | 2614 | 2306 | 2274 | 2325 | 2077 |
| Final Electricity per Capita [KWh/capita] | 4270 | 4438 | 5115 | 5052 | 5172 | 5155 |
| **Import Dependency [%]** | **87,5%** | **90,4%** | **76,6%** | **78,4%** | **76,8%** | **67,4%** |
| of Solid fossil fuels | 102,9% | 96,3% | 98,3% | 98,5% | 122,1% | -6,5% |
| **of Hard Coal** | 103,4% | 96,3% | 98,3% | 98,5% | 122,3% | -7,9% |
| of Oil and petroleum products | 103,6% | 106,0% | 101,1% | 108,0% | 106,8% | 105,0% |
| **of Crude and NGL** | 99,0% | 100,2% | 98,8% | 100,9% | 100,4% | 98,3% |
| of Natural Gas | 100,3% | 103,8% | 100,4% | 100,4% | 99,9% | 99,3% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 19.53% | 24.16% | 30.51% | 30.62% | 33.98% |
| RE-T - Renewable energy in Transport [%] | | 0.45% | 5.55% | 7.43% | 9.09% | 9.70% |
| RES-E - Renewable Electricity Generation [%] | | 27.70% | 40.61% | 52.62% | 53.77% | 58.03% |
| RES-H&C - Renewable Heating and Cooling [%] | | 32.09% | 33.83% | 40.10% | 41.66% | 41.55% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 67,9 | 72,2 | 55,8 | 55,6 | 52,1 | 43,5 |
| GHG emissions - National total* | 83,6 | 88,1 | 71,6 | 70,9 | 68,0 | 59,2 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 139,4% | 146,8% | 119,3% | 118,1% | 113,4% | 98,6% |
| Total GHG per capita [t $CO_2$ eq./capita] | 8,2 | 8,4 | 6,8 | 6,8 | 6,6 | 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **28,5** | **27,9** | **27,4** | **26,4** | **24,5** | **22,4** |
| Solid fossil fuels | 5,6 | 5,8 | 5,9 | 4,7 | 3,9 | 2,6 |
| of which hard coal | 0,2 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 5,4 | 5,8 | 5,9 | 4,7 | 3,9 | 2,6 |
| Oil and petroleum products | 6,4 | 5,9 | 4,2 | 3,9 | 3,5 | 3,4 |
| of which crude oil | 6,4 | 5,3 | 4,2 | 3,9 | 3,5 | 3,4 |
| Natural gas | 11,0 | 9,7 | 8,6 | 8,8 | 8,3 | 7,4 |
| Nuclear | 1,4 | 1,4 | 2,9 | 2,9 | 2,8 | 2,9 |
| Renewables and biofuels | 4,0 | 5,0 | 5,7 | 5,9 | 5,8 | 5,8 |
| Wastes, Non-Renewable | 0,1 | 0,1 | 0,0 | 0,1 | 0,1 | 0,3 |
| **Net Imports** | **8,0** | **10,6** | **7,5** | **5,3** | **10,1** | **9,1** |
| Solid fossil fuels | 1,9 | 2,9 | 1,2 | 1,0 | 1,1 | 0,8 |
| of which hard coal | 1,6 | 2,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| Oil and petroleum products | 3,5 | 3,8 | 4,6 | 4,7 | 6,5 | 6,3 |
| of which crude oil and NGL | 4,8 | 8,7 | 5,7 | 6,5 | 8,6 | 7,0 |
| Natural gas | 2,7 | 4,2 | 1,8 | 0,2 | 2,1 | 1,6 |
| Renewables and biofuels | 0,0 | 0,0 | 0,1 | 0,0 | 0,2 | 0,2 |
| Electricity | -0,1 | -0,2 | -0,2 | -0,6 | 0,1 | 0,2 |
| **Gross inland consumption** | **36,8** | **38,7** | **35,0** | **31,9** | **33,2** | **32,2** |
| Solid fossil fuels | 7,5 | 8,8 | 6,9 | 5,9 | 4,9 | 3,5 |
| of which hard coal | 1,7 | 2,0 | 0,1 | 0,1 | 0,1 | 0,1 |
| of which brown coal | 5,5 | 6,4 | 6,2 | 5,3 | 4,3 | 3,0 |
| Oil and petroleum products | 10,1 | 9,8 | 8,6 | 8,6 | 9,9 | 9,6 |
| of which crude and NGL | 11,1 | 14,0 | 10,0 | 10,4 | 12,0 | 10,5 |
| Natural gas | 13,7 | 13,9 | 10,8 | 8,9 | 9,3 | 9,7 |
| Nuclear | 1,4 | 1,4 | 2,9 | 2,9 | 2,8 | 2,9 |
| Renewables and biofuels | 4,0 | 4,9 | 5,9 | 6,0 | 6,0 | 6,0 |
| Electricity | -0,1 | -0,2 | -0,2 | -0,6 | 0,1 | 0,2 |
| Waste, non-renewable | 0,1 | 0,1 | 0,0 | 0,1 | 0,2 | 0,3 |
| **Available for final consumption** | **24,1** | **26,0** | **24,8** | **22,8** | **25,1** | **25,1** |
| **Final non-energy consumption** | **1,9** | **2,6** | **2,1** | **1,1** | **1,1** | **1,3** |
| **Final energy consumption** | **21,9** | **23,6** | **22,0** | **21,6** | **23,7** | **23,5** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,3 | 0,6 | 0,5 | 0,8 | 0,7 | 0,6 |
| Oil and petroleum products | 5,4 | 6,5 | 6,0 | 6,8 | 8,3 | 7,9 |
| Natural gas | 6,5 | 7,2 | 6,0 | 5,3 | 5,6 | 5,8 |
| Renewables and biofuels | 2,7 | 3,2 | 4,0 | 3,5 | 3,8 | 3,8 |
| Solid biofuels and renewable waste | 2,7 | 3,2 | 3,9 | 3,3 | 3,4 | 3,4 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,1 | 0,2 | 0,4 | 0,5 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,1 | 0,1 | 0,0 | 0,1 | 0,2 | 0,3 |
| Electricity | 2,9 | 3,3 | 3,6 | 3,7 | 3,9 | 3,8 |
| Heat | 3,6 | 2,1 | 1,6 | 1,3 | 1,1 | 1,0 |
| by Sector | | | | | | |
| Industry | 8,6 | 9,0 | 6,5 | 6,4 | 6,7 | 6,4 |
| Transport | 3,3 | 4,2 | 5,0 | 5,3 | 6,6 | 6,5 |
| Residential | 8,4 | 8,0 | 8,1 | 7,4 | 7,8 | 8,0 |
| Services | 0,7 | 1,7 | 1,9 | 1,8 | 2,0 | 1,8 |
| Agriculture and Fishing | 0,4 | 0,2 | 0,4 | 0,5 | 0,6 | 0,5 |
| Others | 0,5 | 0,6 | 0,2 | 0,2 | 0,2 | 0,2 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **16,8** | **19,0** | **19,9** | **23,8** | **20,9** | **20,6** |
| Combustible Fuels | 10,0 | 12,0 | 11,6 | 11,2 | 8,4 | 8,1 |
| Nuclear | 0,7 | 0,7 | 1,4 | 1,4 | 1,4 | 1,4 |
| Hydro | 6,1 | 6,3 | 6,5 | 6,7 | 6,7 | 6,7 |
| Wind | 0,0 | 0,0 | 0,4 | 3,1 | 3,0 | 3,0 |
| Solar | 0,0 | 0,0 | 0,0 | 1,3 | 1,4 | 1,4 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **51,6** | **59,4** | **61,0** | **66,3** | **59,6** | **55,9** |
| Solid fossil fuels, peat and products, oil shale | 18,9 | 21,9 | 20,7 | 18,1 | 13,6 | 9,4 |
| Oil and petroleum products | 3,4 | 1,9 | 0,7 | 0,5 | 0,6 | 0,6 |
| Natural gas | 9,0 | 9,8 | 7,3 | 9,5 | 9,1 | 9,6 |
| Nuclear | 5,5 | 5,6 | 11,6 | 11,6 | 11,3 | 11,5 |
| Renewables and biofuels | 14,8 | 20,2 | 20,7 | 26,6 | 25,1 | 24,9 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 4,6 | 1,8 | 1,3 | 1,4 |
| CHP Electricity Generation [TWh] | | | 6,5 | 5,6 | 5,1 | 4,6 |
| CHP in Total Electricity Generation [%] | | | 10,8 | 8,4 | 12,1 | 7,8 |
| CHP Heat Production [PJ] | | | 69,0 | 51,0 | 62,1 | 35,4 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 4355 | 5513 | 5662 | 6172 | 7377 | 7148 |
| of which LPG | 317 | 738 | 489 | 438 | 514 | 454 |
| of which motor gasoline | 1403 | 1762 | 1457 | 1319 | 1395 | 1290 |
| of which Gas/Diesel oil | 2634 | 3013 | 3717 | 4415 | 5468 | 5404 |
| Final consumption biofuels | 0 | 0 | 116 | 202 | 412 | 483 |
| pure and blended biogasoline | 0 | 0 | 47 | 61 | 98 | 92 |
| pure and blended biodiesel | 0 | 0 | 69 | 141 | 315 | 392 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 34,9 | 36,1 | 32,9 | 30,7 | 32,1 | 30,9 |
| Final energy consumption 2020-2030 [Mtoe] | 22,7 | 24,6 | 22,5 | 21,8 | 23,9 | 23,5 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 379 | 298 | 237 | 192 | 164 | 164 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 400 | 320 | 252 | 199 | 170 | 171 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 1637 | 1809 | 1725 | 1604 | 1710 | 1666 |
| Final Electricity per Capita [KWh/capita] | 2296 | 2779 | 3005 | 3336 | 3071 | 2894 |
| **Import Dependency [%]** | **21,9%** | **27,5%** | **21,4%** | **16,7%** | **30,3%** | **28,2%** |
| of Solid fossil fuels | 25,5% | 33,2% | 16,9% | 16,7% | 22,0% | 22,0% |
| of Hard Coal | 96,3% | 103,1% | 88,4% | 96,9% | 97,7% | 106,4% |
| of Oil and petroleum products | 34,4% | 38,6% | 52,7% | 54,5% | 65,6% | 65,0% |
| of Crude and NGL | 43,5% | 62,0% | 57,2% | 63,0% | 72,0% | 66,9% |
| of Natural Gas | 19,8% | 30,1% | 16,8% | 1,8% | 23,2% | 16,6% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 17.57% | 22.83% | 24.79% | 24.29% | 24.48% |
| RE-T - Renewable energy in Transport [%] | | 1.87% | 1.37% | 5.49% | 7.85% | 8.54% |
| RES-E - Renewable Electricity Generation [%] | | 28.78% | 30.38% | 43.16% | 42.62% | 43.37% |
| RES-H&C - Renewable Heating and Cooling [%] | | 17.93% | 27.23% | 25.89% | 25.74% | 25.33% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 93,1 | 100,6 | 85,1 | 78,7 | 77,5 | 74,3 |
| GHG emissions - National total* | 139,4 | 147,3 | 123,4 | 115,5 | 114,4 | 110,1 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 55,7% | 58,8% | 49,2% | 46,1% | 45,7% | 43,9% |
| Total GHG per capita [t $CO_2$ eq./capita] | 6,2 | 6,9 | 6,1 | 5,8 | 5,9 | 5,7 |

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

# 5.25 Slovenia

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **3,2** | **3,7** | **3,7** | **3,3** | **3,4** | **3,5** |
| Solid fossil fuels | 1,1 | 1,2 | 1,2 | 0,9 | 0,9 | 0,9 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 1,1 | 1,2 | 1,2 | 0,9 | 0,9 | 0,9 |
| Oil and petroleum products | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Nuclear | 1,2 | 1,5 | 1,3 | 1,3 | 1,4 | 1,5 |
| Renewables and biofuels | 0,9 | 1,0 | 1,1 | 1,1 | 1,0 | 1,1 |
| Wastes, Non-Renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| **Net Imports** | **3,4** | **3,9** | **3,6** | **3,2** | **3,6** | **2,9** |
| Solid fossil fuels | 0,2 | 0,3 | 0,3 | 0,2 | 0,2 | 0,2 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 2,5 | 2,6 | 2,6 | 2,3 | 2,6 | 2,1 |
| of which crude oil and NGL | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,8 | 0,9 | 0,9 | 0,7 | 0,7 | 0,7 |
| Renewables and biofuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| Electricity | -0,1 | 0,0 | -0,2 | 0,0 | 0,0 | -0,2 |
| **Gross inland consumption** | **6,6** | **7,6** | **7,3** | **6,5** | **6,7** | **6,3** |
| Solid fossil fuels | 1,3 | 1,5 | 1,5 | 1,1 | 1,1 | 1,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 1,2 | 1,5 | 1,4 | 1,0 | 1,0 | 1,0 |
| Oil and petroleum products | 2,4 | 2,6 | 2,6 | 2,3 | 2,4 | 2,0 |
| of which crude and NGL | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,8 | 0,9 | 0,9 | 0,7 | 0,7 | 0,7 |
| Nuclear | 1,2 | 1,5 | 1,3 | 1,3 | 1,4 | 1,5 |
| Renewables and biofuels | 0,9 | 1,0 | 1,2 | 1,1 | 1,1 | 1,2 |
| Electricity | -0,1 | 0,0 | -0,2 | 0,0 | 0,0 | -0,2 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| **Available for final consumption** | **4,8** | **5,4** | **5,3** | **4,8** | **5,0** | **4,6** |
| **Final non-energy consumption** | **0,2** | **0,3** | **0,2** | **0,1** | **0,2** | **0,1** |
| **Final energy consumption** | **4,5** | **5,1** | **5,0** | **4,7** | **4,9** | **4,4** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,1 | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 2,2 | 2,4 | 2,4 | 2,1 | 2,2 | 1,9 |
| Natural gas | 0,6 | 0,7 | 0,6 | 0,6 | 0,6 | 0,6 |
| Renewables and biofuels | 0,5 | 0,7 | 0,7 | 0,7 | 0,6 | 0,6 |
| Solid biofuels and renewable waste | 0,5 | 0,7 | 0,6 | 0,6 | 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 | 0,0 | 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 | 0,1 | 0,0 |
| Electricity | 0,9 | 1,1 | 1,0 | 1,1 | 1,2 | 1,1 |
| Heat | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| by Sector | | | | | | |
| Industry | 1,4 | 1,6 | 1,3 | 1,2 | 1,3 | 1,3 |
| Transport | 1,2 | 1,5 | 1,8 | 1,8 | 1,9 | 1,6 |
| Residential | 1,2 | 1,4 | 1,4 | 1,2 | 1,1 | 1,1 |
| Services | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **2,6** | **3,0** | **3,2** | **3,4** | **3,8** | **3,9** |
| Combustible Fuels | 1,1 | 1,4 | 1,3 | 1,1 | 1,5 | 1,5 |
| Nuclear | 0,7 | 0,7 | 0,7 | 0,7 | 0,7 | 0,7 |
| Hydro | 0,8 | 1,0 | 1,3 | 1,3 | 1,4 | 1,4 |
| Wind | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| 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]** | **13,6** | **15,1** | **16,4** | **15,1** | **16,1** | **17,2** |
| Solid fossil fuels, peat and products, oil shale | 4,6 | 5,3 | 5,3 | 4,4 | 4,5 | 4,4 |
| Oil and petroleum products | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,3 | 0,3 | 0,5 | 0,4 | 0,5 | 0,6 |
| Nuclear | 4,8 | 5,9 | 5,7 | 5,6 | 5,8 | 6,4 |
| Renewables and biofuels | 3,9 | 3,6 | 4,9 | 4,6 | 5,2 | 5,9 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 0,3 | 0,4 | 0,4 | 0,3 |
| CHP Electricity Generation [TWh] | | | 1,1 | 1,2 | 1,2 | 1,2 |
| CHP in Total Electricity Generation [%] | | | 6,9 | 7,7 | 7,3 | 7,3 |
| CHP Heat Production [PJ] | | | 11,6 | 10,4 | 11,0 | 11,2 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 2135 | 2303 | 2407 | 2112 | 2159 | 1827 |
| of which LPG | 104 | 101 | 92 | 88 | 96 | 84 |
| of which motor gasoline | 854 | 693 | 604 | 442 | 413 | 327 |
| of which Gas/Diesel oil | 1177 | 1510 | 1710 | 1582 | 1651 | 1416 |
| Final consumption biofuels | 0 | 0 | 46 | 29 | 95 | 93 |
| pure and blended biogasoline | 0 | 0 | 4 | 7 | 4 | 8 |
| pure and blended biodiesel | 0 | 0 | 41 | 23 | 91 | 85 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 6,3 | 7,2 | 7,0 | 6,3 | 6,5 | 6,1 |
| Final energy consumption 2020-2030 [Mtoe] | 4,6 | 5,1 | 5,1 | 4,7 | 4,9 | 4,4 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 217 | 209 | 185 | 163 | 144 | 141 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 225 | 218 | 191 | 167 | 148 | 146 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3301 | 3786 | 3544 | 3151 | 3231 | 3016 |
| Final Electricity per Capita [KWh/capita] | 6854 | 7567 | 8031 | 7320 | 7737 | 8202 |
| **Import Dependency [%]** | **51,9%** | **51,0%** | **49,4%** | **49,8%** | **53,6%** | **46,6%** |
| of Solid fossil fuels | 18,8% | 21,0% | 19,3% | 19,1% | 20,1% | 17,6% |
| of Hard Coal | 118,2% | 100,0% | 135,3% | 124,2% | 95,9% | 97,7% |
| of Oil and petroleum products | 101,5% | 102,1% | 99,9% | 102,4% | 109,6% | 105,3% |
| of Crude and NGL | 87,2% | 0,0% | 0,0% | 0,0% | 0,0% | 0,0% |
| of Natural Gas | 99,3% | 99,6% | 99,3% | 99,6% | 99,2% | 99,4% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 19.81% | 21.08% | 22.88% | 21.97% | 25.00% |
| RE-T - Renewable energy in Transport [%] | | 0.83% | 3.12% | 2.24% | 7.98% | 10.91% |
| RES-E - Renewable Electricity Generation [%] | | 28.65% | 32.20% | 32.72% | 32.63% | 35.09% |
| RES-H&C - Renewable Heating and Cooling [%] | | 26.40% | 29.54% | 36.15% | 32.13% | 32.14% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 15,1 | 17,0 | 16,5 | 13,7 | 14,1 | 12,9 |
| GHG emissions - National total* | 18,7 | 20,5 | 19,7 | 16,9 | 17,2 | 15,9 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 100,0% | 110,1% | 105,7% | 90,5% | 92,0% | 85,1% |
| Total GHG per capita [t $CO_2$ eq./capita] | 9,4 | 10,3 | 9,6 | 8,2 | 8,2 | 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **6,3** | **6,4** | **6,0** | **6,4** | **6,9** | **6,8** |
| Solid fossil fuels | 1,0 | 0,6 | 0,6 | 0,5 | 0,4 | 0,2 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 1,0 | 0,6 | 0,6 | 0,5 | 0,4 | 0,2 |
| Oil and petroleum products | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,1 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| Nuclear | 4,3 | 4,7 | 3,9 | 4,0 | 4,0 | 4,0 |
| Renewables and biofuels | 0,5 | 0,9 | 1,4 | 1,6 | 2,2 | 2,2 |
| Wastes, Non-Renewable | 0,3 | 0,1 | 0,0 | 0,2 | 0,2 | 0,2 |
| **Net Imports** | **11,5** | **12,3** | **11,4** | **9,8** | **11,9** | **9,3** |
| Solid fossil fuels | 3,4 | 3,7 | 3,0 | 2,8 | 2,5 | 2,0 |
| of which hard coal | 3,1 | 3,5 | 2,6 | 2,5 | 2,2 | 1,7 |
| Oil and petroleum products | 2,6 | 3,2 | 3,5 | 3,1 | 3,6 | 3,7 |
| of which crude oil and NGL | 5,3 | 5,3 | 5,5 | 5,9 | 5,2 | 5,7 |
| Natural gas | 5,7 | 5,7 | 5,0 | 3,7 | 5,6 | 3,6 |
| Renewables and biofuels | 0,0 | 0,0 | -0,1 | 0,0 | 0,0 | 0,0 |
| Electricity | -0,2 | -0,3 | 0,1 | 0,2 | 0,1 | 0,0 |
| **Gross inland consumption** | **17,7** | **18,7** | **17,7** | **16,3** | **17,0** | **16,4** |
| Solid fossil fuels | 4,3 | 4,2 | 3,9 | 3,3 | 2,7 | 2,3 |
| of which hard coal | 3,0 | 3,3 | 2,8 | 2,6 | 2,2 | 1,8 |
| of which brown coal | 1,2 | 0,9 | 0,8 | 0,7 | 0,5 | 0,5 |
| Oil and petroleum products | 2,9 | 3,3 | 3,5 | 3,1 | 3,6 | 3,6 |
| of which crude and NGL | 5,4 | 5,5 | 5,5 | 5,9 | 5,1 | 5,6 |
| Natural gas | 5,8 | 5,9 | 5,0 | 3,9 | 4,1 | 4,1 |
| Nuclear | 4,3 | 4,7 | 3,9 | 4,0 | 4,0 | 4,0 |
| Renewables and biofuels | 0,5 | 0,8 | 1,3 | 1,6 | 2,2 | 2,1 |
| Electricity | -0,2 | -0,3 | 0,1 | 0,2 | 0,1 | 0,0 |
| Waste, non-renewable | 0,3 | 0,1 | 0,0 | 0,2 | 0,2 | 0,2 |
| **Available for final consumption** | **11,7** | **11,7** | **11,5** | **10,0** | **11,3** | **10,8** |
| **Final non-energy consumption** | **1,4** | **1,3** | **1,1** | **1,0** | **1,0** | **1,2** |
| **Final energy consumption** | **9,9** | **10,4** | **10,4** | **8,9** | **10,2** | **9,6** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,9 | 0,6 | 0,7 | 0,4 | 0,4 | 0,4 |
| Oil and petroleum products | 1,7 | 2,1 | 2,3 | 2,1 | 2,8 | 2,6 |
| Natural gas | 4,2 | 3,9 | 3,5 | 2,5 | 2,6 | 2,4 |
| Renewables and biofuels | 0,1 | 0,3 | 0,5 | 0,6 | 1,2 | 1,1 |
| Solid biofuels and renewable waste | 0,1 | 0,3 | 0,4 | 0,4 | 1,0 | 0,9 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,1 | 0,1 | 0,2 | 0,2 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Waste, non-renewable | 0,2 | 0,0 | 0,0 | 0,2 | 0,2 | 0,2 |
| Electricity | 1,9 | 2,0 | 2,1 | 2,1 | 2,2 | 2,0 |
| Heat | 0,6 | 1,0 | 0,9 | 0,6 | 0,5 | 0,5 |
| by Sector | | | | | | |
| Industry | 3,5 | 3,6 | 3,2 | 3,3 | 3,5 | 3,1 |
| Transport | 1,4 | 2,4 | 2,6 | 2,2 | 2,8 | 2,5 |
| Residential | 2,6 | 2,5 | 2,3 | 2,0 | 2,6 | 2,7 |
| Services | 2,2 | 1,8 | 2,1 | 1,3 | 1,2 | 1,1 |
| Agriculture and Fishing | 0,2 | 0,2 | 0,1 | 0,2 | 0,1 | 0,1 |
| Others | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **7,5** | **8,3** | **7,9** | **7,8** | **7,7** | **7,7** |
| Combustible Fuels | 2,4 | 3,1 | 3,5 | 2,8 | 2,6 | 2,7 |
| Nuclear | 2,6 | 2,6 | 1,8 | 1,9 | 1,9 | 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 | 0,0 | 0,5 | 0,6 | 0,5 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Tide, Wave and Ocean | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Gross Electricity Generation, by Fuel [TWh]** | **31,2** | **31,4** | **27,8** | **26,8** | **28,4** | **28,8** |
| Solid fossil fuels, peat and products, oil shale | 5,6 | 5,5 | 3,6 | 2,8 | 2,3 | 1,9 |
| Oil and petroleum products | 0,2 | 0,7 | 0,6 | 0,4 | 0,5 | 0,4 |
| Natural gas | 3,9 | 2,6 | 2,7 | 2,1 | 3,4 | 3,9 |
| Nuclear | 16,5 | 17,7 | 14,6 | 15,1 | 15,3 | 15,4 |
| Renewables and biofuels | 5,0 | 4,8 | 6,3 | 6,3 | 6,9 | 7,1 |
| Wastes non-RES | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 2,8 | 3,7 | 1,5 | 1,6 |
| CHP Electricity Generation [TWh] | | | 4,4 | 21,1 | 3,1 | 3,3 |
| CHP in Total Electricity Generation [%] | | | 15,9 | 78,5 | 10,8 | 11,0 |
| CHP Heat Production [PJ] | | | 20,1 | 27,3 | 34,9 | 35,1 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 1498 | 1850 | 2179 | 1983 | 2496 | 2296 |
| **of which LPG** | 33 | 63 | 42 | 54 | 49 | 49 |
| **of which motor gasoline** | 612 | 672 | 601 | 578 | 551 | 505 |
| of which Gas/Diesel oil | 852 | 1115 | 1536 | 1351 | 1896 | 1742 |
| **Final consumption biofuels** | 0 | 11 | 98 | 144 | 157 | 155 |
| **pure and blended biogasoline** | 0 | 0 | 24 | 23 | 20 | 26 |
| **pure and blended biodiesel** | 0 | 11 | 74 | 121 | 137 | 129 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 16,4 | 17,4 | 16,7 | 15,2 | 16,0 | 15,2 |
| Final energy consumption 2020-2030 [Mtoe] | 11,0 | 11,6 | 11,5 | 10,1 | 11,2 | 10,4 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 378 | 315 | 236 | 190 | 179 | 178 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 410 | 338 | 251 | 204 | 191 | 193 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 3284 | 3480 | 3286 | 3000 | 3123 | 3013 |
| Final Electricity per Capita [KWh/capita] | 5771 | 5851 | 5161 | 4944 | 5211 | 5278 |
| **Import Dependency [%]** | **65,1%** | **66,0%** | **64,4%** | **60,1%** | **69,8%** | **56,3%** |
| of Solid fossil fuels | 80,2% | 88,3% | 75,7% | 84,5% | 92,2% | 86,2% |
| **of Hard Coal** | 103,8% | 105,2% | 91,9% | 97,5% | 102,7% | 97,3% |
| of Oil and petroleum products | 92,5% | 97,4% | 98,4% | 100,6% | 101,3% | 102,0% |
| **of Crude and NGL** | 97,6% | 97,8% | 99,9% | 99,3% | 100,5% | 101,4% |
| of Natural Gas | 98,8% | 97,5% | 99,9% | 95,1% | 136,6% | 88,1% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 6.36% | 9.10% | 12.88% | 16.89% | 17.34% |
| RE-T - Renewable energy in Transport [%] | | 1.66% | 5.29% | 8.63% | 8.31% | 9.26% |
| RES-E - Renewable Electricity Generation [%] | | 15.74% | 17.77% | 22.66% | 22.10% | 23.07% |
| RES-H&C - Renewable Heating and Cooling [%] | | 5.03% | 7.90% | 10.79% | 19.70% | 19.43% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 41,2 | 43,0 | 38,6 | 34,7 | 34,0 | 31,2 |
| GHG emissions - National total* | 48,8 | 50,7 | 45,8 | 40,9 | 40,0 | 37,1 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 66,4% | 69,0% | 62,3% | 55,6% | 54,4% | 50,5% |
| Total GHG per capita [t $CO_2$ eq./capita] | 9,0 | 9,4 | 8,5 | 7,5 | 7,3 | 6,8 |

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

# 5.27 Finland

| Mtoe, unless otherwise stated | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **14,9** | **16,7** | **17,1** | **17,2** | **19,3** | **18,4** |
| 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 | 0,1 | 0,2 | 0,1 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Nuclear | 5,8 | 6,0 | 5,6 | 5,6 | 5,7 | 5,5 |
| Renewables and biofuels | 7,8 | 8,2 | 9,4 | 10,4 | 12,1 | 11,9 |
| Wastes, Non-Renewable | 0,1 | 0,1 | 0,1 | 0,2 | 0,3 | 0,3 |
| **Net Imports** | **18,6** | **19,3** | **18,1** | **15,8** | **14,6** | **13,6** |
| Solid fossil fuels | 3,5 | 3,3 | 4,0 | 2,5 | 2,1 | 1,7 |
| of which hard coal | 3,2 | 3,0 | 3,7 | 2,3 | 2,0 | 1,6 |
| Oil and petroleum products | 10,6 | 10,9 | 9,5 | 9,6 | 8,4 | 8,3 |
| of which crude oil and NGL | 11,9 | 10,8 | 11,4 | 11,1 | 12,7 | 11,6 |
| Natural gas | 3,4 | 3,6 | 3,8 | 2,2 | 2,1 | 2,1 |
| Renewables and biofuels | 0,0 | -0,1 | -0,1 | 0,1 | 0,1 | 0,2 |
| Electricity | 1,0 | 1,5 | 0,9 | 1,4 | 1,7 | 1,3 |
| **Gross inland consumption** | **32,8** | **34,8** | **36,8** | **32,7** | **34,2** | **32,1** |
| Solid fossil fuels | 3,6 | 3,3 | 4,6 | 2,7 | 2,1 | 1,8 |
| of which hard coal | 3,3 | 2,9 | 4,3 | 2,6 | 2,1 | 1,8 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 9,5 | 10,5 | 10,0 | 8,4 | 8,5 | 7,8 |
| of which crude and NGL | 11,7 | 11,1 | 11,3 | 10,7 | 12,8 | 11,6 |
| Natural gas | 3,4 | 3,6 | 3,8 | 2,2 | 2,1 | 2,1 |
| Nuclear | 5,8 | 6,0 | 5,6 | 5,6 | 5,7 | 5,5 |
| Renewables and biofuels | 7,8 | 8,1 | 9,3 | 10,5 | 12,2 | 12,0 |
| Electricity | 1,0 | 1,5 | 0,9 | 1,4 | 1,7 | 1,3 |
| Waste, non-renewable | 0,1 | 0,1 | 0,1 | 0,2 | 0,3 | 0,3 |
| **Available for final consumption** | **23,7** | **25,3** | **26,3** | **24,1** | **25,7** | **24,8** |
| **Final non-energy consumption** | **1,0** | **1,2** | **1,2** | **1,3** | **1,4** | **1,5** |
| **Final energy consumption** | **23,3** | **24,0** | **25,0** | **23,0** | **24,7** | **23,2** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,3 | 0,3 | 0,2 | 0,1 | 0,1 | 0,1 |
| Oil and petroleum products | 7,2 | 7,4 | 6,9 | 6,0 | 5,8 | 5,5 |
| Natural gas | 0,9 | 0,8 | 0,8 | 0,6 | 0,7 | 0,7 |
| Renewables and biofuels | 4,5 | 4,2 | 4,8 | 5,4 | 6,8 | 6,3 |
| Solid biofuels and renewable waste | 4,5 | 4,2 | 4,6 | 4,9 | 5,6 | 5,3 |
| Solar thermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Geothermal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Liquid biofuels | 0,0 | 0,0 | 0,2 | 0,5 | 0,4 | 0,4 |
| Biogases | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 | 0,1 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Electricity | 6,5 | 6,9 | 7,2 | 6,7 | 7,0 | 6,6 |
| Heat | 3,3 | 3,8 | 4,6 | 3,8 | 3,9 | 3,6 |
| by Sector | | | | | | |
| Industry | 11,5 | 11,1 | 10,7 | 10,2 | 11,0 | 10,2 |
| Transport | 3,9 | 4,2 | 4,3 | 4,1 | 4,2 | 3,9 |
| Residential | 4,5 | 5,0 | 5,8 | 5,0 | 5,6 | 5,3 |
| Services | 2,3 | 2,6 | 3,1 | 2,7 | 3,0 | 2,8 |
| Agriculture and Fishing | 0,8 | 0,8 | 0,8 | 0,7 | 0,7 | 0,7 |
| Others | 0,3 | 0,3 | 0,3 | 0,3 | 0,2 | 0,3 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **16,3** | **16,5** | **15,4** | **16,5** | **17,4** | **17,3** |
| Combustible Fuels | 10,7 | 10,7 | 9,5 | 9,6 | 8,9 | 8,4 |
| Nuclear | 2,6 | 2,7 | 2,7 | 2,8 | 2,8 | 2,8 |
| Hydro | 2,9 | 3,0 | 3,0 | 3,1 | 3,2 | 3,2 |
| Wind | 0,0 | 0,1 | 0,2 | 1,0 | 2,3 | 2,6 |
| Solar | 0,0 | 0,0 | 0,0 | 0,0 | 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]** | **69,8** | **70,3** | **80,4** | **68,4** | **68,4** | **68,7** |
| Solid fossil fuels, peat and products, oil shale | 12,5 | 11,0 | 20,8 | 8,2 | 7,4 | 4,6 |
| Oil and petroleum products | 0,6 | 0,5 | 0,5 | 0,2 | 0,3 | 0,2 |
| Natural gas | 10,8 | 11,9 | 11,8 | 5,8 | 4,5 | 4,6 |
| Nuclear | 22,5 | 23,3 | 22,8 | 23,2 | 23,9 | 23,3 |
| Renewables and biofuels | 23,4 | 23,5 | 24,2 | 30,5 | 31,9 | 35,6 |
| Wastes non-RES | 0,1 | 0,2 | 0,2 | 0,4 | 0,5 | 0,4 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 6,2 | 5,8 | 6,4 | 6,4 |
| CHP Electricity Generation [TWh] | | | 29,2 | 21,7 | 22,5 | 18,9 |
| CHP in Total Electricity Generation [%] | | | 36,2 | 31,7 | 32,8 | 26,4 |
| CHP Heat Production [PJ] | | | 272,8 | 242,4 | 242,7 | 214,8 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 6137 | 6398 | 6156 | 5502 | 5402 | 5132 |
| of which LPG | 263 | 309 | 311 | 430 | 351 | 305 |
| of which motor gasoline | 1833 | 1927 | 1613 | 1441 | 1323 | 1230 |
| of which Gas/Diesel oil | 4041 | 4163 | 4232 | 3631 | 3728 | 3596 |
| Final consumption biofuels | 0 | 0 | 184 | 501 | 433 | 401 |
| pure and blended biogasoline | 0 | 0 | 81 | 70 | 94 | 99 |
| pure and blended biodiesel | 0 | 0 | 63 | 430 | 339 | 301 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 31,6 | 33,6 | 35,4 | 31,2 | 32,1 | 29,9 |
| Final energy consumption 2020-2030 [Mtoe] | 24,4 | 25,2 | 26,2 | 24,2 | 25,4 | 23,3 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 179 | 167 | 168 | 148 | 140 | 133 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 185 | 173 | 175 | 155 | 149 | 143 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 6336 | 6654 | 6875 | 5969 | 6201 | 5813 |
| Final Electricity per Capita [KWh/capita] | 13495 | 13432 | 15017 | 12491 | 12394 | 12438 |
| **Import Dependency [%]** | **56,6%** | **55,3%** | **49,1%** | **48,4%** | **42,5%** | **42,4%** |
| of Solid fossil fuels | 97,6% | 102,0% | 86,3% | 91,3% | 98,9% | 92,2% |
| of Hard Coal | 97,7% | 102,6% | 85,5% | 88,6% | 96,1% | 90,0% |
| of Oil and petroleum products | 111,5% | 103,9% | 94,2% | 113,3% | 98,9% | 106,4% |
| of Crude and NGL | 101,5% | 97,5% | 101,1% | 104,2% | 99,0% | 99,7% |
| of Natural Gas | 100,0% | 100,0% | 100,0% | 100,0% | 100,6% | 100,4% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 28.81% | 32.29% | 39.23% | 42.72% | 43.80% |
| RE-T - Renewable energy in Transport [%] | | 0.91% | 4.41% | 24.56% | 14.32% | 13.44% |
| RES-E - Renewable Electricity Generation [%] | | 26.92% | 27.66% | 32.21% | 37.97% | 39.56% |
| RES-H&C - Renewable Heating and Cooling [%] | | 39.12% | 43.97% | 52.62% | 56.88% | 57.62% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 58,2 | 58,4 | 65,8 | 46,1 | 45,0 | 38,5 |
| GHG emissions - National total* | 71,3 | 71,2 | 77,3 | 57,0 | 55,4 | 48,7 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 98,8% | 98,7% | 107,1% | 79,0% | 76,7% | 67,4% |
| Total GHG per capita [t $CO_2$ eq./capita] | 13,8 | 13,6 | 14,5 | 10,4 | 10,0 | 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 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Production** | **30,0** | **33,8** | **31,8** | **35,8** | **37,0** | **34,9** |
| Solid fossil fuels | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which hard coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| of which crude oil | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Natural gas | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Nuclear | 14,8 | 18,7 | 14,5 | 15,5 | 16,2 | 12,0 |
| Renewables and biofuels | 14,7 | 14,5 | 16,5 | 19,6 | 19,9 | 21,9 |
| Wastes, Non-Renewable | 0,3 | 0,5 | 0,5 | 0,6 | 0,7 | 0,9 |
| **Net Imports** | **19,3** | **20,3** | **19,9** | **14,7** | **15,6** | **16,0** |
| Solid fossil fuels | 2,3 | 2,5 | 2,4 | 1,9 | 1,9 | 1,5 |
| of which hard coal | 2,1 | 2,2 | 2,3 | 1,9 | 1,6 | 1,4 |
| Oil and petroleum products | 15,7 | 17,4 | 15,5 | 13,0 | 13,5 | 14,0 |
| of which crude oil and NGL | 20,8 | 20,2 | 20,0 | 20,3 | 16,5 | 18,7 |
| Natural gas | 0,8 | 0,8 | 1,5 | 0,7 | 1,0 | 1,3 |
| Renewables and biofuels | 0,0 | 0,1 | 0,2 | 0,9 | 1,4 | 1,4 |
| Electricity | 0,4 | -0,6 | 0,2 | -1,9 | -2,2 | -2,1 |
| **Gross inland consumption** | **47,7** | **51,4** | **50,5** | **47,0** | **49,7** | **45,2** |
| Solid fossil fuels | 2,2 | 2,3 | 2,1 | 2,0 | 1,9 | 1,5 |
| of which hard coal | 2,0 | 2,1 | 2,0 | 1,9 | 1,7 | 1,4 |
| of which brown coal | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Oil and petroleum products | 14,2 | 14,8 | 14,6 | 9,5 | 10,6 | 8,4 |
| of which crude and NGL | 20,7 | 20,1 | 20,2 | 19,5 | 16,5 | 17,6 |
| Natural gas | 0,8 | 0,8 | 1,5 | 0,7 | 0,9 | 1,3 |
| Nuclear | 14,8 | 18,7 | 14,5 | 15,5 | 16,2 | 12,0 |
| Renewables and biofuels | 14,7 | 14,6 | 16,8 | 20,5 | 21,4 | 23,2 |
| Electricity | 0,4 | -0,6 | 0,2 | -1,9 | -2,2 | -2,1 |
| Waste, non-renewable | 0,3 | 0,5 | 0,5 | 0,6 | 0,8 | 1,0 |
| **Available for final consumption** | **34,9** | **33,4** | **35,1** | **31,9** | **33,6** | **33,1** |
| **Final non-energy consumption** | **1,7** | **2,4** | **2,1** | **1,8** | **2,3** | **1,7** |
| **Final energy consumption** | **33,7** | **31,7** | **32,5** | **31,5** | **31,3** | **31,5** |
| by Fuel/Product | | | | | | |
| Solid fossil fuels | 0,5 | 0,4 | 0,4 | 0,4 | 0,3 | 0,3 |
| Oil and petroleum products | 12,6 | 10,6 | 9,5 | 7,9 | 7,0 | 6,5 |
| Natural gas | 0,4 | 0,5 | 0,6 | 0,6 | 0,5 | 0,5 |
| Renewables and biofuels | 5,3 | 4,5 | 5,4 | 7,5 | 8,2 | 9,2 |
| Solid biofuels and renewable waste | 5,3 | 4,3 | 5,0 | 5,3 | 5,1 | 6,0 |
| 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 | 0,2 | 0,4 | 1,0 | 1,6 | 1,7 |
| Biogases | 0,0 | 0,0 | 0,1 | 0,1 | 0,1 | 0,1 |
| Waste, non-renewable | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,1 |
| Electricity | 11,1 | 11,2 | 11,3 | 10,7 | 10,7 | 10,6 |
| Heat | 3,6 | 4,2 | 5,1 | 4,2 | 4,3 | 4,1 |
| by Sector | | | | | | |
| Industry | 13,7 | 11,7 | 11,6 | 11,0 | 10,9 | 11,6 |
| Transport | 7,5 | 7,5 | 7,5 | 7,3 | 7,0 | 6,6 |
| Residential | 7,3 | 7,6 | 8,3 | 7,4 | 7,4 | 7,2 |
| Services | 4,4 | 4,1 | 4,3 | 4,0 | 4,0 | 4,0 |
| Agriculture and Fishing | 0,8 | 0,8 | 0,7 | 0,7 | 0,6 | 0,6 |
| Others | 0,0 | 0,0 | 0,0 | 1,1 | 1,4 | 1,5 |

Methodology and Notes: see appendices

| | 2000 | 2005 | 2010 | 2015 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| **Installed Electricity Capacity [GW]** | **33,7** | **33,4** | **36,5** | **39,7** | **42,8** | **43,7** |
| Combustible Fuels | 7,5 | 7,1 | 8,7 | 7,8 | 8,3 | 8,4 |
| Nuclear | 9,5 | 9,5 | 9,0 | 9,7 | 8,6 | 7,8 |
| Hydro | 16,5 | 16,3 | 16,7 | 16,3 | 16,5 | 16,4 |
| Wind | 0,2 | 0,5 | 2,0 | 5,8 | 8,7 | 10,0 |
| Solar | 0,0 | 0,0 | 0,0 | 0,1 | 0,7 | 1,1 |
| 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]** | **145,3** | **158,4** | **148,5** | **162,1** | **168,4** | **163,8** |
| Solid fossil fuels, peat and products, oil shale | 1,7 | 1,2 | 1,8 | 0,6 | 0,4 | 0,1 |
| Oil and petroleum products | 1,5 | 1,4 | 1,8 | 0,3 | 0,2 | 0,1 |
| Natural gas | 1,3 | 1,3 | 3,8 | 1,1 | 1,1 | 0,7 |
| Nuclear | 57,3 | 72,4 | 57,8 | 56,3 | 66,1 | 49,2 |
| Renewables and biofuels | 83,2 | 81,3 | 82,2 | 102,6 | 99,0 | 112,2 |
| Wastes non-RES | 0,2 | 0,9 | 1,2 | 1,2 | 1,7 | 1,5 |
| **Cogeneration Heat and Power** | | | | | | |
| CHP Electrical Capacity [GW] | | | 5,1 | 4,9 | 3,3 | 3,3 |
| CHP Electricity Generation [TWh] | | | 18,5 | 13,7 | 9,2 | 9,2 |
| CHP in Total Electricity Generation [%] | | | 12,5 | 8,4 | 5,5 | 5,5 |
| CHP Heat Production [PJ] | | | 187,2 | 151,3 | 94,0 | 94,0 |
| **Transport Fuels [ktoe]** | | | | | | |
| Final consumption petroleum products | 9906 | 9270 | 8578 | 7421 | 6564 | 6157 |
| of which LPG | 397 | 456 | 463 | 367 | 364 | 314 |
| of which motor gasoline | 4208 | 4118 | 3422 | 2601 | 2170 | 1990 |
| of which Gas/Diesel oil | 5302 | 4695 | 4692 | 4454 | 4030 | 3853 |
| Final consumption biofuels | 0 | 153 | 383 | 963 | 1564 | 1657 |
| pure and blended biogasoline | 0 | 145 | 203 | 141 | 101 | 107 |
| pure and blended biodiesel | 0 | 8 | 179 | 823 | 1463 | 1486 |
| **Main Energy Indicators** | | | | | | |
| Primary energy consumption 2020-2030 [Mtoe] | 46,0 | 49,0 | 48,3 | 43,8 | 45,8 | 41,7 |
| Final energy consumption 2020-2030 [Mtoe] | 35,0 | 33,2 | 34,0 | 31,8 | 31,5 | 30,9 |
| Primary Energy Intensity 2020-2030 [toe/M€'15] | 140 | 131 | 118 | 96 | 92 | 86 |
| Energy Intensity (GAE/GDP2015) [toe/M€'15 | 145 | 137 | 123 | 103 | 100 | 93 |
| Energy per Capita (GIC/pop) [kgoe/capita] | 5384 | 5705 | 5402 | 4826 | 4860 | 4377 |
| Final Electricity per Capita [KWh/capita] | 16393 | 17582 | 15903 | 16631 | 16465 | 15864 |
| **Import Dependency [%]** | **40,4%** | **39,5%** | **39,5%** | **31,2%** | **31,3%** | **35,4%** |
| of Solid fossil fuels | 105,4% | 105,9% | 113,7% | 97,4% | 103,2% | 100,3% |
| of Hard Coal | 107,7% | 104,3% | 115,2% | 99,6% | 98,1% | 101,5% |
| of Oil and petroleum products | 110,4% | 117,4% | 106,3% | 136,7% | 127,5% | 166,9% |
| of Crude and NGL | 100,6% | 100,4% | 99,0% | 103,6% | 100,0% | 106,1% |
| of Natural Gas | 100,0% | 100,0% | 100,0% | 100,0% | 101,8% | 101,6% |
| **Renewable in gross final energy [%]** | | | | | | |
| Overall Renewable share (with aviation cap) | | 40.27% | 46.60% | 52.22% | 55.79% | 60.12% |
| RE-T - Renewable energy in Transport [%] | | 6.60% | 9.63% | 21.49% | 30.31% | 31.85% |
| RES-E - Renewable Electricity Generation [%] | | 50.90% | 55.77% | 65.73% | 71.23% | 74.49% |
| RES-H&C - Renewable Heating and Cooling [%] | | 49.84% | 58.48% | 63.24% | 64.39% | 66.38% |
| **Greenhouse gas emissions [Mt $CO_2$]** | | | | | | |
| $CO_2$ emissions - National total* | 56,8 | 56,0 | 55,4 | 45,9 | 43,6 | 37,4 |
| GHG emissions - National total* | 70,3 | 68,8 | 66,9 | 56,3 | 53,5 | 47,2 |
| **Main Emissions Indicators** | | | | | | |
| GHG national total emissions [index 1990=100] | 96,6% | 94,5% | 91,8% | 77,3% | 73,5% | 64,9% |
| Total GHG per capita [t $CO_2$ eq./capita] | 7,9 | 7,6 | 7,2 | 5,8 | 5,2 | 4,6 |

** 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/web/energy/data/energy-balances

# Appendix 3
# Main Energy Products in Eurostat Energy Balances- EN

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

| | |
|---|---|
| O4699 | Other oil products n.e.c. |
| G3000 | Natural gas |
| RA000 | Renewables and biofuels |
| RA100 | Hydro power |
| RA500 | Tide, wave and ocean |
| RA300 | Wind power |
| RA420 | Solar photovoltaic |
| RA410 | Solar thermal |
| RA200 | Geothermal |
| R5110-5150_W6000RI | Primary solid biofuels |
| R5160 | Charcoal |
| R5300 | Biogases |
| W6210 | Renewable municipal waste |
| R5210P | Pure biogasoline |
| R5210B | Blended biogasoline |
| R5220P | Pure biodiesels |
| R5220B | Blended biodiesels |
| R5230P | Pure bio jet kerosene |
| R5230B | Blended bio jet kerosene |
| R5290 | Other liquid biofuels |
| RA600 | Ambient heat (heat pumps) |
| W6100_6220 | Non-renewable waste |
| W6100 | Industrial waste (non-renewable) |
| W6220 | Non-renewable municipal waste |
| N900H | Nuclear heat |
| H8000 | Heat |
| E7000 | Electricity |

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

# Appendix 4
# Symbols and Abbreviations

| | |
|---|---|
| % | per cent |
| € | euro |
| 0 | zero or figure less than half of the unit represented |
| bbl | barrel |
| bcm | billion cubic meters |
| Blank | data not available |
| CHP | combined heat & 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/web/energy/data/energy-balances

### 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. 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.
TransformaTOon output is the sum of the output from electricity & heat generaTOon plants [TO_EHG_E], coke ovens [TO_CO_E], blast furnaces [TO_BF_E], gas works [TO_GW_E], refineries & petrochemical industry [TO_RPI_E], patent fuel plants [TO_PF_E], BKB & PB plants [TO_BKBPB_E], coal liquefaction plants [TO_CL_E], for blended natural gas [TO_BNG_E], liquid biofuels blended [TO_LBB_E], charcoal production plants [TO_CPP_E], gas-TO-liquids plants [TO_GTL_E] and others not elsewhere specified [TO_NSP_E].

### TRANSFORMATION LOSSES

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

### TURNOVER

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

### UNEMPLOYMENT RATE

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

# 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 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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