

**EMBARGO: Tuesday 4 February 2020 - 11:00 CET**

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## Energy consumption in 2018

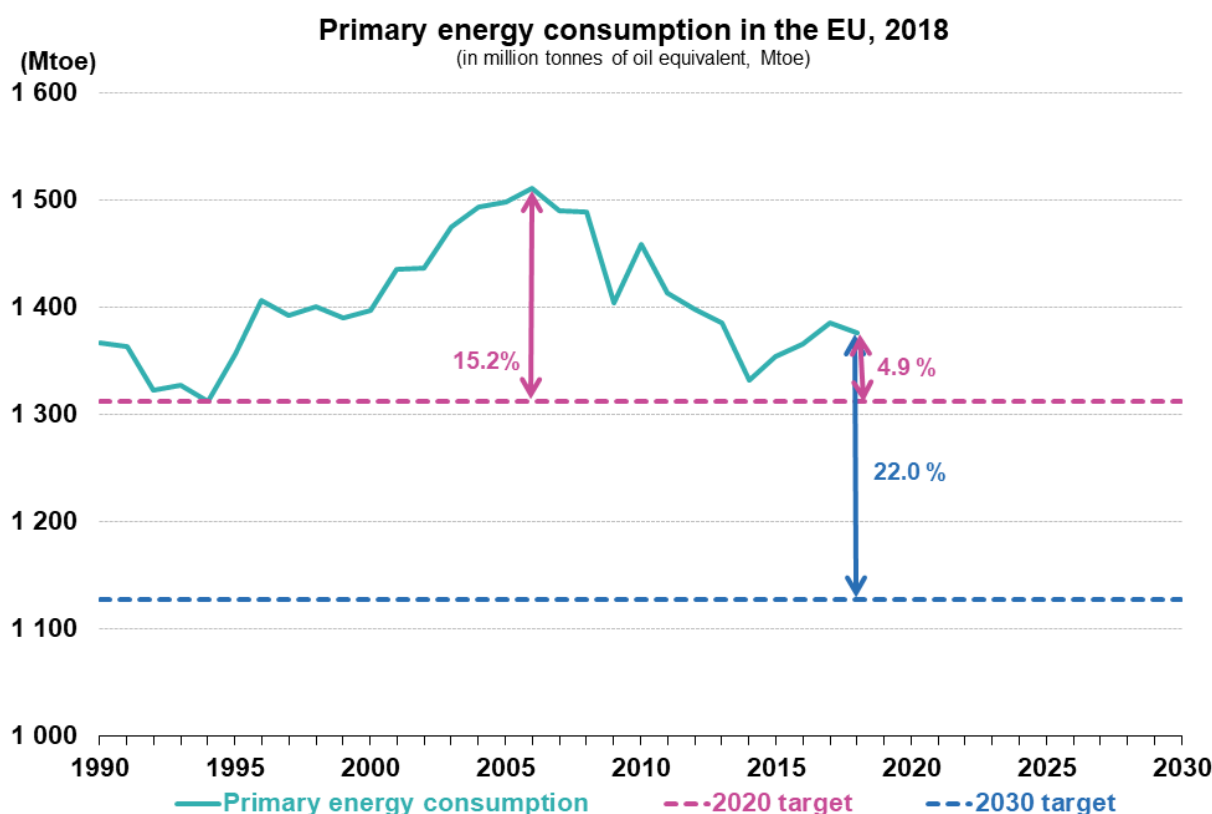
# Primary and final energy consumption still 5% and 3% away from 2020 targets

In 2018, energy consumption in the **European Union of 27 Member States** (EU) remained stable. Primary energy consumption reached 1 376 million tonnes of oil equivalent (Mtoe), 0.71% less than the previous year, while final energy consumption reached 990 Mtoe, 0.02% more than 2017.

The **EU** has an energy efficiency target of reducing energy consumption by 20% by 2020. The primary energy consumption should amount to no more than 1 312 Mtoe and final energy consumption to no more than 959 Mtoe in 2020. The **EU** energy efficiency target for 2030 aims at a primary energy consumption of no more than 1 128 Mtoe and a final energy consumption of no more than 846 Mtoe.

Primary energy consumption measures total domestic energy demand, while final energy consumption refers to what end users actually consume. The difference relates mainly to what the energy sector needs itself and to transformation and distribution losses.

In 2018, primary energy consumption in the **EU** was 4.9% above the efficiency target for 2020 and 22.0% away from the 2030 target. Since 1990, the first year for which data are available, primary energy consumption has fluctuated greatly, with a peak in 2006 (1 511 Mtoe representing a 15.2% gap from the 2020 target) and one of the lowest levels reached in 2014 (1 332 Mtoe representing a 1.5% gap from the 2020 target).



### Primary energy consumption rose most in Estonia, fell most in Belgium

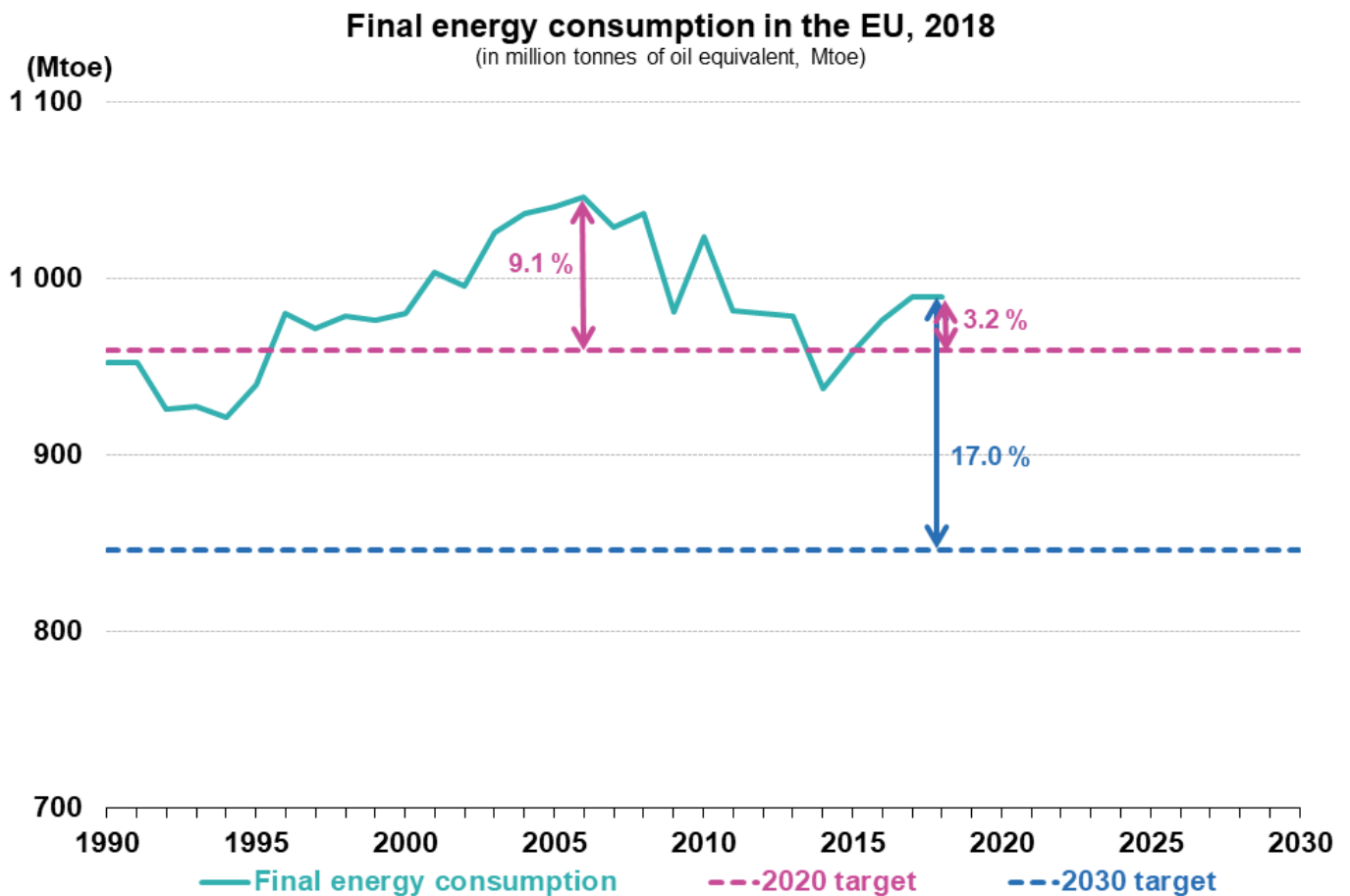
Primary energy consumption in 2018, compared with 2017, increased in 12 of the 27 Member States, remained stable in four and decreased in eleven Member States.

Compared to 2017, the highest increase by far was recorded in **Estonia** (+9%), followed by **Latvia** (+5%) and **Luxembourg** (+4%). Among the eleven Member States where primary energy consumption decreased between 2017 and 2018, the largest fall was registered in **Belgium** (-5%), followed by **Greece** and **Austria** (both -3%), **Germany** and **Slovakia** (both -2%).

### Final energy consumption increased most in Malta, decreased most in Greece

In 2018, final energy consumption in the **EU** was 3.2% above the efficiency target for 2020 and 17.0% away from the 2030 target. Final energy consumption has fluctuated over the years, with a peak in 2006 (1 046 Mtoe representing a 9.1% gap from the 2020 target) and one of the lowest levels recorded in 2014 (937.5 Mtoe, representing 2.2% below the 2020 target of 959 Mtoe).

Compared to 2017, final energy consumption increased in 15 of the 27 Member States, remained stable in six and decreased in six other Member states. The highest increases were recorded in **Malta** (+6%) followed by **Ireland** (+5%), **Latvia** and **Luxembourg** (both +4%). At the opposite end of the scale the largest drop was recorded in **Greece** (-5%), followed by **Austria** (-3%) and **Germany** (-1%).



## Geographical information

The **European Union** (EU) refers to its composition with 27 Member States, as of 1 February 2020, and includes Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland and Sweden.

The United Kingdom left the European Union on 31 January 2020. Information on dissemination of European statistics for the EU of 27 Member States is published on the [Eurostat website](#).

In this news release, data are also available for the United Kingdom, Iceland, Norway, Montenegro, North Macedonia, Albania, Serbia, Turkey, Bosnia and Herzegovina, Kosovo (under United Nations Security Council Resolution 1244/99), Moldova, Ukraine and Georgia.

## Methods and definitions

A **tonne of oil equivalent** (toe) is a standardised unit defined on the basis of one tonne of oil having a net calorific value of 41.868 gigajoules. It is a convenient common measure used to sum up the different fuels, based on their energy content. Thus, for example, one GJ of nuclear power will be equivalent to 0.024 tonnes of oil, and one tonne of high grade coal contains the same amount of energy as 0.7 tonnes of oil. Lower grades will contain less energy. Mtoe refers to million toe.

**Primary energy consumption** measures total energy demand of a country. It is defined as gross inland energy consumption excluding non-energy purposes (such as natural gas used in the chemical industry or bitumen for road surfaces). Fuel deliveries to international maritime bunkers are excluded too. In Eurostat's database, the indicator to track progress towards the targets has the code "PEC2020-2030" and the label "Primary energy consumption (Europe 2020-2030)".

**Final energy consumption** is the total energy consumed by end users, such as households, industry, agriculture, services (commercial and public) and for transport purposes. It is the energy, which reaches the final consumer's door and excludes what the energy sector uses itself. In Eurostat's database, the indicator to track progress towards the targets has the code "FEC2020-2030" and the label "Final energy consumption (Europe 2020-2030)".

## For more information

Eurostat [website section](#) on energy statistics

Eurostat [database](#) on energy

Eurostat [Statistics Explained article](#) on energy savings

[Sankey diagrams](#)

European Commission [website section](#) dedicated to Energy efficiency.

European Statistics [Code of Practice](#)

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## Primary energy consumption

	2013	2014	2015	2016	2017	2018
<b>EU27**</b>	1 385,8	1 331,6	1 354,5	1 365,9	1 385,5	1 375,7
<b>EU28</b>	1 577,4	1 512,4	1 537,6	1 544,9	1 562,4	1 551,9
<b>Euro area</b>	1 109.7	1 063.1	1 083.5	1 088.0	1 098.2	1 086.0
<b>Belgium</b>	49.3	45.7	46.1	49.2	49.1	46.8
<b>Bulgaria</b>	16.5	17.3	18.0	17.7	18.3	18.4
<b>Czechia</b>	40.9	39.2	39.7	40.0	40.3	40.4
<b>Denmark</b>	17.8	16.9	16.9	17.6	17.8	18.0
<b>Germany</b>	308.3	293.6	295.9	297.6	298.1	291.7
<b>Estonia</b>	6.0	5.7	5.3	5.9	5.6	6.2
<b>Ireland</b>	13.1	13.2	13.9	14.6	14.4	14.5
<b>Greece</b>	23.3	23.1	23.2	22.9	23.1	22.4
<b>Spain</b>	116.1	114.2	118.6	119.3	125.8	124.6
<b>France</b>	250.4	239.8	244.4	240.1	239.2	238.9
<b>Croatia</b>	8.0	7.6	8.0	8.0	8.3	8.2
<b>Italy</b>	152.1	142.7	149.1	148.0	148.9	147.2
<b>Cyprus</b>	2.2	2.2	2.3	2.4	2.5	2.5
<b>Latvia</b>	4.4	4.4	4.3	4.3	4.5	4.7
<b>Lithuania</b>	5.8	5.8	5.8	6.0	6.2	6.3
<b>Luxembourg</b>	4.3	4.2	4.1	4.2	4.3	4.5
<b>Hungary</b>	22.4	22.0	23.3	23.7	24.5	24.5
<b>Malta</b>	0.9	0.9	0.8	0.7	0.8	0.8
<b>Netherlands</b>	66.2	62.3	63.7	64.8	65.1	64.7
<b>Austria</b>	32.1	30.8	31.6	31.9	32.8	31.8
<b>Poland</b>	93.5	89.5	90.1	94.8	99.2	101.1
<b>Portugal</b>	21.0	20.7	21.6	21.8	22.8	22.6
<b>Romania</b>	30.4	30.0	30.7	30.6	32.4	32.5
<b>Slovenia</b>	6.6	6.4	6.3	6.5	6.7	6.7
<b>Slovakia</b>	15.7	14.8	15.2	15.4	16.1	15.8
<b>Finland</b>	32.0	32.7	31.2	32.4	32.1	33.0
<b>Sweden</b>	46.4	46.0	44.3	45.4	46.4	46.8
<b>United Kingdom</b>	191.6	180.7	183.1	179.0	176.9	176.3
<b>Iceland</b>	6.1	6.1	5.8	5.6	6.0	6.5
<b>Norway</b>	30.8	26.5	27.0	26.1	27.3	25.9
<b>Montenegro</b>	1.0	0.9	1.0	1.0	1.0	1.0
<b>North Macedonia</b>	2.7	2.7	2.6	2.6	2.7	2.5
<b>Albania</b>	2.2	2.3	2.1	2.2	2.3	2.3
<b>Serbia</b>	14.4	12.8	14.2	14.6	14.9	14.8
<b>Turkey</b>	106.7	116.6	125.3	131.5	145.5	139.5
<b>Bosnia and Herzegovina</b>	:	5.9	6.1	6.7	6.7	:
<b>Kosovo*</b>	2.3	2.2	2.5	2.7	2.5	2.5
<b>Moldova</b>	2.5	2.5	2.6	2.7	2.8	2.9
<b>Ukraine</b>	110.2	101.4	88.9	90.8	86.7	:
<b>Georgia</b>	3.7	4.2	4.4	4.6	4.6	4.6

: Data not available

\* Kosovo, under United Nations Security Council Resolution 1244/99

\*\* EU27 represents the European Union of 27 Member States after 1 February 2020

Source dataset: [nrg\\_ind\\_eff](#)

## Final energy consumption

	2013	2014	2015	2016	2017	2018
<b>EU27**</b>	978.5	937.5	957.4	976.3	989.3	<b>989.5</b>
<b>EU28</b>	1 115.5	1 067.6	1 090.1	1 110.0	1 122.9	<b>1 124.1</b>
<b>Euro area</b>	791.3	754.4	769.7	781.8	787.1	<b>786.4</b>
<b>Belgium</b>	36.6	34.3	35.9	36.4	36.1	<b>36.3</b>
<b>Bulgaria</b>	8.8	9.0	9.5	9.6	9.9	<b>9.9</b>
<b>Czechia</b>	24.2	23.6	24.2	24.8	25.5	<b>25.3</b>
<b>Denmark</b>	14.1	13.7	14.2	14.6	14.8	<b>15.0</b>
<b>Germany</b>	221.0	210.0	212.7	216.9	218.6	<b>215.4</b>
<b>Estonia</b>	2.9	2.8	2.8	2.8	2.9	<b>3.0</b>
<b>Ireland</b>	10.8	10.8	11.2	11.6	11.7	<b>12.3</b>
<b>Greece</b>	15.3	15.6	16.6	16.8	16.8	<b>16.0</b>
<b>Spain</b>	80.7	79.2	80.4	82.2	84.6	<b>86.8</b>
<b>France</b>	154.7	144.2	147.4	149.3	148.5	<b>146.6</b>
<b>Croatia</b>	6.6	6.2	6.6	6.6	6.9	<b>6.9</b>
<b>Italy</b>	118.6	113.3	116.2	115.9	115.2	<b>116.5</b>
<b>Cyprus</b>	1.6	1.6	1.7	1.8	1.9	<b>1.9</b>
<b>Latvia</b>	3.9	3.9	3.8	3.8	4.0	<b>4.2</b>
<b>Lithuania</b>	4.8	4.9	4.9	5.1	5.3	<b>5.5</b>
<b>Luxembourg</b>	4.1	4.0	4.0	4.0	4.2	<b>4.3</b>
<b>Hungary</b>	16.6	16.2	17.4	17.8	18.5	<b>18.5</b>
<b>Malta</b>	0.5	0.5	0.6	0.6	0.6	<b>0.7</b>
<b>Netherlands</b>	51.9	47.6	49.1	49.8	50.3	<b>50.3</b>
<b>Austria</b>	28.0	26.8	27.5	28.1	28.6	<b>27.9</b>
<b>Poland</b>	63.2	61.5	62.3	66.6	71.0	<b>71.9</b>
<b>Portugal</b>	15.9	15.8	16.0	16.2	16.6	<b>16.9</b>
<b>Romania</b>	21.8	21.7	21.8	22.2	23.2	<b>23.5</b>
<b>Slovenia</b>	4.8	4.6	4.7	4.9	4.9	<b>5.0</b>
<b>Slovakia</b>	10.6	10.0	10.1	10.4	11.1	<b>11.1</b>
<b>Finland</b>	24.7	24.5	24.2	25.2	25.3	<b>25.8</b>
<b>Sweden</b>	31.9	31.1	31.7	32.0	32.3	<b>32.0</b>
<b>United Kingdom</b>	136.9	130.1	132.7	133.7	133.6	<b>134.7</b>
<b>Iceland</b>	2.9	2.9	3.1	3.3	3.3	<b>3.6</b>
<b>Norway</b>	19.0	18.5	18.7	18.9	18.8	<b>19.0</b>
<b>Montenegro</b>	0.7	0.6	0.7	0.7	0.7	<b>0.8</b>
<b>North Macedonia</b>	1.8	1.8	1.9	1.9	1.9	<b>1.9</b>
<b>Albania</b>	2.0	2.1	2.0	1.9	2.1	<b>2.1</b>
<b>Serbia</b>	8.3	7.8	8.2	8.6	8.8	<b>9.0</b>
<b>Turkey</b>	82.1	86.1	93.1	96.4	107.1	<b>101.7</b>
<b>Bosnia and Herzegovina</b>	:	3.3	3.5	3.7	3.7	:
<b>Kosovo*</b>	1.2	1.2	1.3	1.4	1.5	<b>1.5</b>
<b>Moldova</b>	2.3	2.3	2.4	2.5	2.6	<b>2.8</b>
<b>Ukraine</b>	69.8	61.6	51.3	52.9	50.7	:
<b>Georgia</b>	3.3	3.7	3.8	4.1	4.1	<b>4.2</b>

: Data not available

\* Kosovo, under United Nations Security Council Resolution 1244/99

\*\* EU27 represents the European Union of 27 Member States after 1 February 2020

Source dataset [nrg\\_ind\\_eff](#)