

*Data from May 2019.
Planned article update: October 2020.*

This article looks at monthly cumulated data on natural gas in the [European Union \(EU\)](#) for 2017 and 2018, as well as trends between these two years. It covers all aspects of the supply side - [primary production](#) , imports (entries) and exports (exits), stock changes, [gross inland consumption](#) - as well as natural gas [energy dependency](#) data by Member State and for the European [aggregates EU](#) and [euro area](#) .

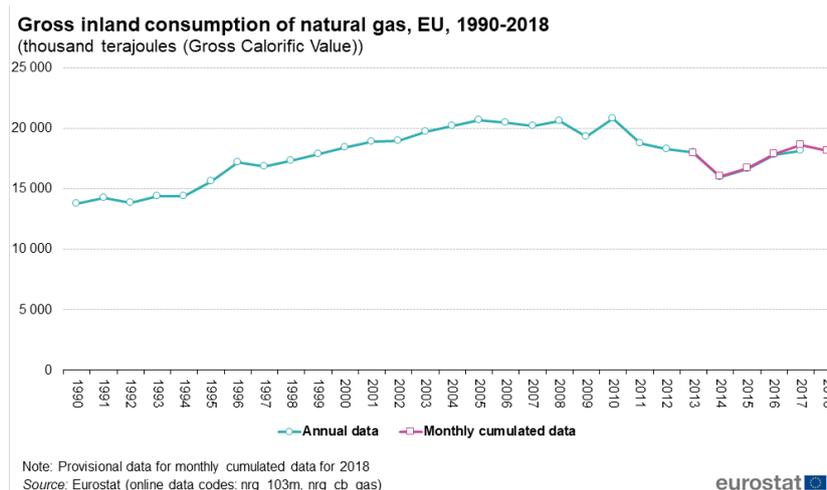


Figure 1: Gross inland consumption in EU in thousand terajoules (gross calorific value) Source: Eurostat (nrg_103m), (nrg_cb_gas)

Consumption trends

In 2018, gross inland consumption of natural gas in the EU decreased by 2.4 % compared with 2017, to reach 18 168 thousand terajoules. [EA-19](#) consumption decreased even more significantly, by 3.5 %, to 12 655 thousand terajoules. The most significant falls in consumption were recorded in Croatia (-8.5 %), Portugal (-8.0 %), Germany (-7.7 %), Bulgaria (-5.3 %) and Czechia (-5.3 %), while the largest increases were noticed in Malta (+17.4 %), Latvia (+16.1 %), Finland (+11.4 %) and Ireland +3.6 %) (see Table 1 and 2 and Figure 2).

In Table 1 and Table 2 as well as in Figure 6, a negative dependency rate indicates a net exporter country. Positive values over 100 % indicate stocks build-up during the [reference period](#) .

Provisional natural gas balance sheet, by country, 2017-2018
(thousand terajoules (Gross Calorific Value))

		EU (*)	EA (*)	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY
1. Primary production	2017	4 774.3	2 191.4	0.0	2.8	8.8	202.0	245.3	0.0	132.5	0.0	1.4	2.1	60.9	211.1	0.0
	2018	4 387.7	1 915.4	0.0	0.5	8.4	171.7	209.7	0.0	127.1	0.6	3.6	2.9	51.0	207.7	0.0
	Growth rate 2017-2018 (%)	-8.1	-12.5	-	-82.7	-4.8	-15.0	-14.5	-	-4.1	-	-156.0	+38.8	-16.3	-1.6	-
2. Imports (entries)	2017	27 275.1	20 794.2	1 743.5	746.2	1 344.1	21.6	5 906.9	18.9	65.6	196.5	1 401.4	1 996.8	71.7	2 652.6	0.0
	2018	27 499.5	20 912.7	1 645.0	650.7	1 526.8	16.1	6 331.3	19.2	80.9	192.8	1 409.2	2 038.5	62.1	2 596.1	0.0
	Growth rate 2017-2018 (%)	+0.8	+0.6	-5.7	-11.5	+13.6	-25.3	+5.8	+1.7	+23.4	-1.9	+0.6	+2.1	-13.5	-2.5	-
3. Resources (*)	2017	32 049.4	22 985.6	1 743.5	749.0	1 352.9	223.6	6 232.2	18.9	198.1	196.5	1 402.8	1 998.9	132.6	2 863.7	0.0
	2018	31 887.2	22 829.1	1 645.0	661.2	1 536.1	187.8	6 541.0	19.2	208.0	193.4	1 412.8	2 041.4	113.0	2 793.8	0.0
	Growth rate 2017-2018 (%)	-0.5	-0.7	-5.7	-11.7	+13.5	-16.0	+5.0	+1.7	+5.0	-1.8	-0.7	+2.1	-14.8	-2.4	-
4. Stock change (*)	2017	12.5	4.9	-10.6	-0.1	15.0	2.8	-23.2	0.0	-2.7	1.4	17.5	-45.6	3.6	-9.9	0.0
	2018	364.8	383.9	3.9	-0.2	-1.7	0.1	180.2	0.0	0.0	1.9	21.4	83.1	-2.5	10.1	0.0
5. Exports (exits)	2017	13 417.3	9 862.2	1 088.6	625.9	1 002.9	93.4	2 676.5	0.0	0.0	0.0	116.6	252.2	7.1	10.3	0.0
	2018	13 354.7	9 790.0	966.8	544.7	1 219.6	64.1	3 056.7	0.0	0.0	0.0	131.4	247.5	3.9	15.1	0.0
	Growth rate 2017-2018 (%)	-0.5	-0.7	-12.0	-13.0	+21.6	-31.4	+14.2	-	-	-	+12.7	-1.9	-44.6	+46.1	-
6. Gross inland consumption	2017	18 619.6	13 116.5	655.7	123.2	335.0	127.5	3 579.0	18.9	200.8	195.0	1 268.7	1 782.2	121.9	2 863.2	0.0
	2018	18 167.7	12 655.1	674.4	116.7	317.2	123.6	3 304.1	19.2	208.0	191.5	1 260.0	1 710.8	111.6	2 768.6	0.0
	Growth rate 2017-2018 (%)	-2.4	-3.5	+2.8	-5.3	-5.3	-3.0	-7.7	+1.7	+3.6	-1.8	-0.7	-4.5	-8.5	-3.3	-
7. Energy dependency (*)	2017	74.4	83.3	98.4	97.7	101.9	-56.3	92.5	100.0	32.7	100.7	101.3	97.3	53.0	92.3	0.0
	2018	77.9	87.9	100.6	99.4	96.8	-38.8	98.1	100.0	38.9	100.7	101.4	104.7	52.1	92.9	0.0

(*) Provisional data for 2017 and 2018
(*) 1+2
(*) - Decrease in stocks
+ Increase in stocks
(*) (2 - 5) / 6 * 100

Source: Eurostat (online data code: nrg_103m)

eurostat

Table 1: Provisional natural gas balance sheet in thousand terajoules (GCV) Source: Eurostat (nrg_103m), (nrg_124m), (nrg_134m)

Provisional natural gas balance sheet, by country, 2017-2018
(thousand terajoules (Gross Calorific Value))

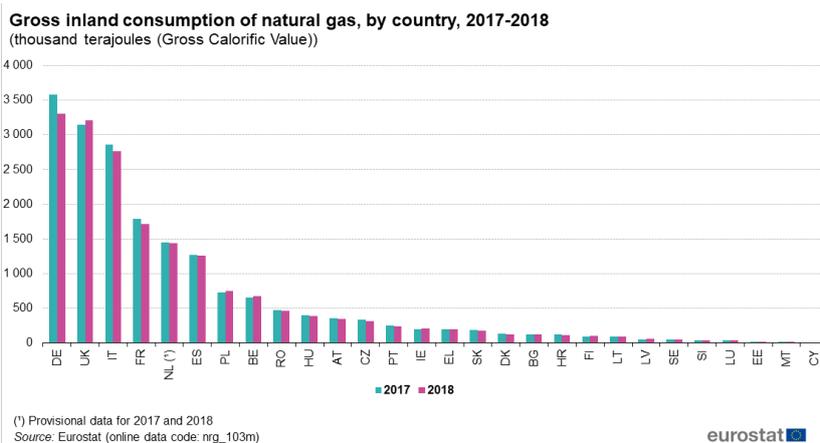
		LV	LT	LU	HU	MT	NL (*)	AT	PL	PT	RO	SI	SK	FI	SE	UK
1. Primary production	2017	0.0	0.0	0.0	65.5	0.0	1 544.4	48.6	161.6	0.0	412.5	0.2	5.8	0.0	0.0	1 668.8
	2018	0.0	0.0	0.0	67.7	0.0	1 320.9	39.9	158.7	0.0	397.3	0.6	3.3	0.0	0.0	1 616.2
	Growth rate 2017-2018 (%)	-	-	-	+3.2	-	-14.5	-17.8	-1.8	-	-3.7	+287.7	-43.4	-	-	-3.2
2. Imports (entries)	2017	59.2	191.2	32.2	607.0	11.8	1 792.4	1 907.0	1 720.0	256.9	46.1	82.1	2 250.0	89.3	46.1	1 877.9
	2018	63.1	197.2	31.8	578.2	14.9	1 976.0	1 873.5	1 735.5	237.0	58.6	47.9	2 070.1	89.2	46.4	1 902.4
	Growth rate 2017-2018 (%)	+6.6	+3.1	-1.4	-4.7	+26.0	+10.2	-4.8	+0.9	-7.7	+27.2	-41.6	-8.0	+11.1	+0.7	+1.3
3. Resources (*)	2017	59.2	191.2	32.2	672.5	11.8	3 336.8	2 015.5	1 881.7	256.9	458.6	82.2	2 255.9	89.3	46.1	3 546.8
	2018	63.1	197.2	31.8	645.9	14.9	3 295.9	1 913.4	1 894.2	237.0	455.9	48.6	2 073.4	89.2	46.4	3 518.6
	Growth rate 2017-2018 (%)	+6.6	+3.1	-1.4	-4.0	+26.0	-1.2	-5.1	+0.7	-7.7	-0.6	-40.9	-8.1	+11.1	+0.7	-0.8
4. Stock change (*)	2017	-4.7	-0.4	0.0	59.7	0.6	40.0	16.2	3.7	0.9	-18.1	0.0	16.3	0.0	0.0	15.9
	2018	-7.4	-0.9	0.0	-16.6	1.7	102.8	0.1	-6.6	2.5	-7.5	0.0	-15.4	0.0	0.0	-5.0
5. Exports (exits)	2017	0.6	102.6	0.0	224.5	0.0	1 853.2	1 639.9	1 150.6	1.6	1.0	47.2	2 056.7	0.2	1.2	448.5
	2018	14.9	108.5	0.0	278.2	0.0	1 751.7	1 571.0	1 154.6	0.4	1.2	14.1	1 912.0	0.0	1.8	296.7
	Growth rate 2017-2018 (%)	+125.8	+5.7	-	+23.9	-	-5.5	-4.2	+0.3	-76.2	+14.7	-70.1	-7.0	-100.0	+28.4	-33.8
6. Gross inland consumption	2017	47.9	89.2	32.2	397.3	11.3	1 443.7	359.4	727.4	254.3	475.7	35.0	182.8	89.0	44.9	3 148.3
	2018	55.6	89.5	31.8	384.2	13.2	1 441.4	342.3	746.2	234.1	462.2	34.4	176.8	89.2	44.9	3 206.0
	Growth rate 2017-2018 (%)	+16.1	+0.4	-1.4	-3.3	+17.4	-0.2	-4.8	+2.6	-8.0	-2.8	-1.7	-3.3	+11.4	-0.1	+1.8
7. Energy dependency (*)	2017	109.7	99.3	100.0	96.3	0.0	-4.2	91.0	78.3	100.4	9.5	99.5	105.8	100.0	100.0	45.4
	2018	86.6	99.0	100.0	78.1	0.0	15.5	88.4	77.8	101.1	12.4	98.2	89.4	100.0	100.0	50.1

(*) Provisional data for 2017 and 2018
(*) 1+2
(*) - Decrease in stocks
+ Increase in stocks
(*) (2 - 5) / 6 * 100

Source: Eurostat (online data code: nrg_103m)

eurostat

Table 2: Provisional natural gas balance sheet in thousand terajoules (GCV) Source: Eurostat (nrg_103m), (nrg_124m), (nrg_134m)



(*) Provisional data for 2017 and 2018
Source: Eurostat (online data code: nrg_103m)

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Figure 2: Gross inland consumption in thousand terajoules(GCV)Source: Eurostat (nrg_103m), (nrg_124m), (nrg_134m)

Supply structure

Natural gas production

EU natural gas production continued its decreasing trend, falling by 8.1 % in 2018 compared with 2017, to total 4 388 thousand terajoules. For the Euro area, a decrease of 12.5 % was recorded and production amounted to 1 916 thousand terajoules. The two main EU natural gas producers, the Netherlands and the United Kingdom, registered drops in production of -14.5 % and - 3.2 % respectively. Notable decreases were also observed for Bulgaria (-82.7 %), Slovakia (-43.4 %), Austria (-17.8 %), Croatia (-16.3 %), Denmark (-15.0 %), Germany (-14.5 %), Czechia (-4.8 %), Ireland (-4.1 %) and Romania (-3.7 %). In contrast, there was an increase of 287.7 % in natural gas production in Slovenia, of 156.0 % in Spain, 38.8 % in France and 3.2 % in Hungary. With a natural gas production of 1 616 thousand terajoules in 2018, the United Kingdom remained the first producer of natural gas in the EU, followed by the Netherlands, whose primary production was of 1 321 thousand terajoules (see Figure 3).

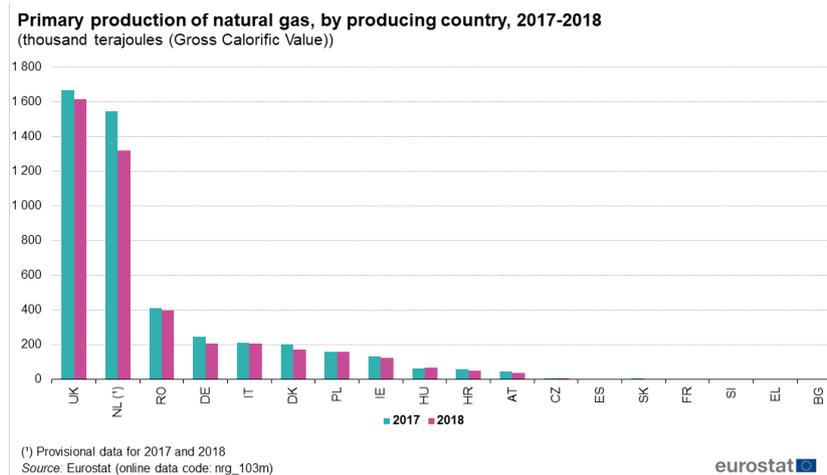
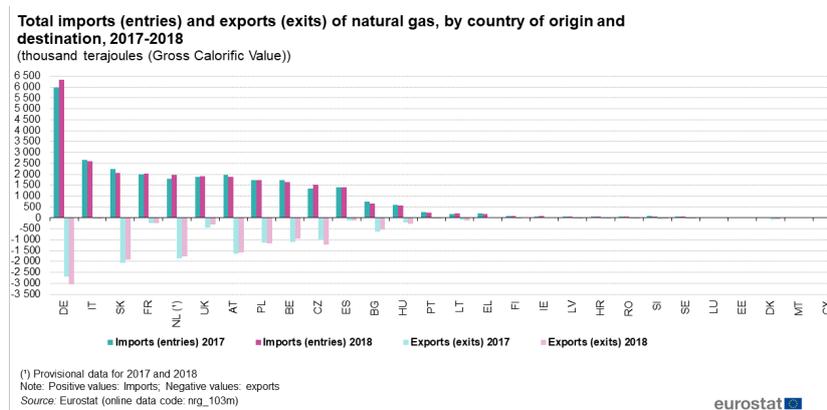


Figure 3: Primary production in thousand terajoules(GCV)Source: Eurostat (nrg_103m)

Natural gas imports

Total EU imports (entries) of natural gas increased by 0.8 % to reach 27 500 thousand terajoules. The most significant increase in 2018 compared with 2017 was observed in Romania (+27.2 %), followed by Malta (+26.0 %), Ireland (+23.4 %), Czechia (+13.6 %), Finland (+11.1 %), the Netherlands (+10.2 %), Latvia (+6.6 %) and Germany (+5.8 %). In the EA, imports of natural gas increased by 0.6 % to reach 20 913 thousand terajoules in 2018 (see Figure 4).



are no longer completely comparable with previous years' figures or with the more detailed annually collected data. The new monthly reporting provides import figures as entries from last transit country (mostly neighbouring countries) instead of by country of primary / indigenous production and export figures as exits from the reporting country (thus including all gas transiting its national territory).

As regards the origin of imports, Norway was the source of 30.2 % of the natural gas entering the EU (intra-EU trade and entries from Switzerland both excluded), followed by Russia (20.5 %), Ukraine (16.3 %) and Belarus (10.3 %) (see Figure 5). However, considering that most gas entering the EU from Ukraine and Belarus initially comes from Russia, the dependency on gas imports from this country is in practice higher than on gas from Norway.

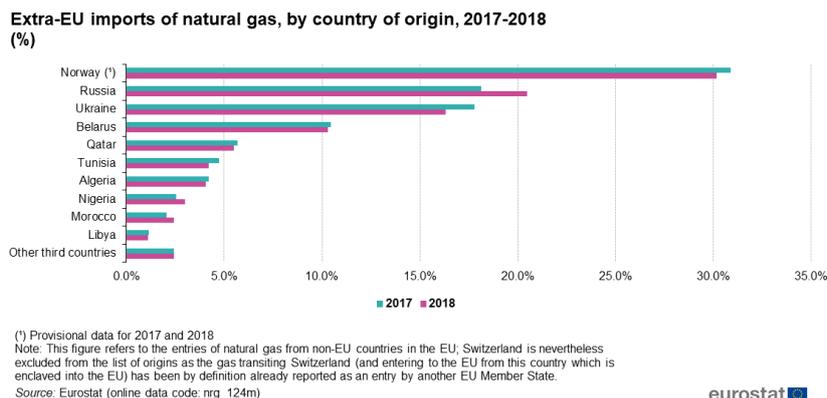


Figure 5: Percentage of extra-EU imports (entries) of natural gas by country of origin Source: Eurostat (nrg_124m)

Natural gas dependency in EU increased again, reaching 77.9 % in 2018, up from 74.4 % in 2017. Denmark is the last remaining net exporter in the EU, as Netherlands became a net importer in 2018. In 15 Member States natural gas dependency was higher than 90 %.

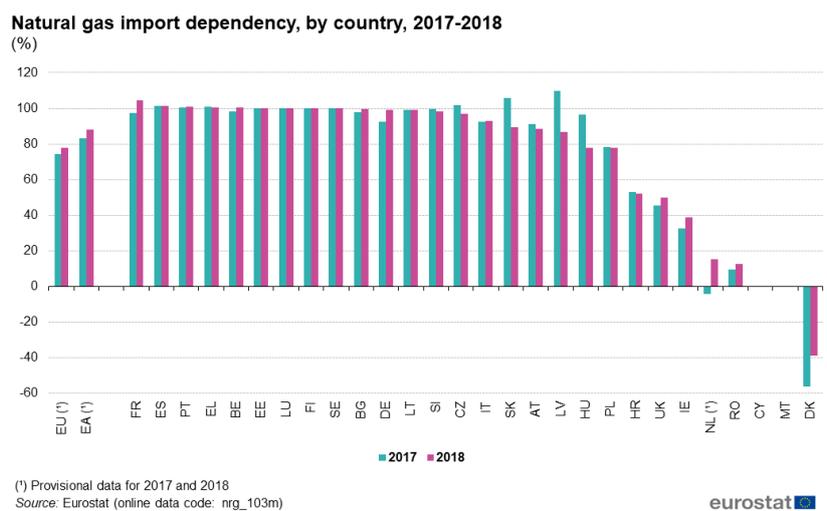


Figure 6: Natural gas import dependency, by country, 2017-2018 (%) Source: Eurostat (nrg_103m)

Source data for tables and graphs

- [Natural gas consumption statistics](#)

Data sources

All data used in this article correspond to cumulative monthly figures and may differ from the annual data (except for Figure 1, where both are used, mainly to illustrate the level of accuracy of the monthly data compared to the annual data).

The reporting is based on [Energy statistics Regulation \(EC\) No 1099/2008](#) .

Context

Timely data are essential to all stakeholders for an efficient monitoring of the market evolutions, especially in the energy domain. Therefore, Eurostat not only collects detailed annual statistics but also complements them with a reduced number of data points which are collected on a monthly basis and published within two to three months after the reference month. In this framework, the natural gas monthly data covers the supply – and to a limited extent consumption – of this fuel, providing thus very early information about the developments in the natural gas market both in the EU as in each Member State.

Other articles

- [Energy statistics - an overview](#)
- [Electricity generation statistics – first results](#)
- [Energy production and imports](#)
- [Natural gas market indicators](#)

Publications

- [Energy, transport and environment indicators - 2018 edition](#)

Tables

- [Energy \(t_nrg\)](#) , see:

Energy Statistics - quantities (t_nrg_quant)

Gross available energy by product (ten00121)

Final energy consumption by product (ten00123)

Energy dependence (t2020_rd320)

Database

- [Energy \(nrg\)](#) , see:

Energy Statistics - quantities, monthly data (nrg_quant)

Energy Statistics - supply, transformation, consumption (nrg_10m)

Supply - gas - monthly data (nrg_103m)

Energy statistics - imports (by country of origin) (nrg_12m)

Imports (by country of origin) - gas - monthly data (nrg_124m)

Energy statistics - exports (by country of destination) (nrg_13m)

Exports (by country of destination) - gas - monthly data (nrg_134m)

Dedicated section

- [Energy](#)

Methodology

- [Energy statistics - supply, transformation, consumption \(monthly\)](#) (ESMS metadata file — nrg_10m_esms)

Legislation

- [Regulation \(EC\) No 1099/2008](#) on energy statistics