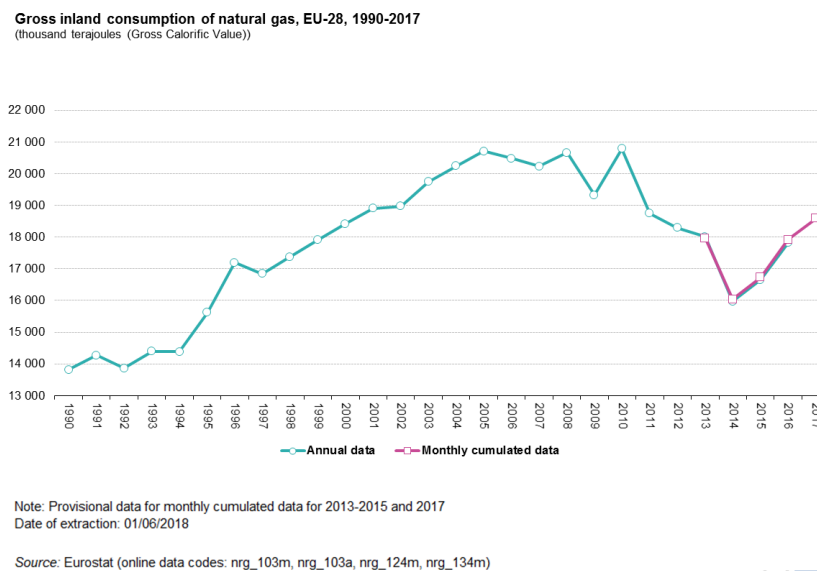


# Natural gas supply statistics

Statistics Explained

Data from July 2018.

This article looks at monthly cumulated data on natural gas in the [European Union \(EU\)](#) for the years 2016 and 2017, 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-28](#) and [euro area](#) .



**Figure 1: Gross inland consumption in EU-28 in thousand terajoules (gross calorific value)** Source: Eurostat (nrg103m), (nrg103a) (nrg124m), (nrg134m)

## Consumption trends

In 2017, gross inland consumption of natural gas in the EU-28 increased by 3.7 % compared with 2016, to reach 18 587 thousand terajoules. [EA-19](#) consumption also increased, by 5.1 %, to 13 099 thousand terajoules. The most significant increases in consumption were recorded in Portugal (+22.2 %), Greece (+20.5 %), Croatia (+13.1 %) and the Netherlands (+9.7 %), and the largest falls in Sweden (-17.7 %), Latvia (-9.6 %), Finland (-6.8 %) and Estonia (-5.0 %) (see Table 1 and 2 and Figure 2).

In Table 1 and Table 2, 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, 2016-2017  
(thousand terajoules (Gross Calorific Value))

		EU-28 (*)	EA (*)	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY
1. Primary production	2016	4 803.1	2 256.5	0.0	3.6	8.4	188.0	267.5	0.0	112.9	0.0	2.2	1.5	67.4	220.3	0.0
	2017	4 774.2	2 191.4	0.0	2.8	8.8	201.9	245.3	0.0	132.5	0.0	1.4	2.1	60.9	211.1	0.0
	Growth rate 2016-2017 (%)	-0.6	-2.9	-	-21.3	+4.7	+7.4	-8.3	-	+17.3	-	-36.9	+36.5	-8.6	-4.2	-
2. Imports (entries)	2016	25 497.0	19 318.0	1 600.0	676.0	1 308.0	28.0	5 670.0	20.0	79.0	161.0	1 312.0	1 919.0	51.0	2 487.0	0.0
	2017	27 242.3	20 776.4	1 743.5	746.2	1 344.1	21.8	5 969.0	18.9	65.6	196.5	1 401.4	1 996.8	71.7	2 652.6	0.0
	Growth rate 2016-2017 (%)	+6.8	+7.5	+8.6	+10.4	+2.9	-22.9	+1.7	-5.4	-17.0	+22.0	+6.8	+4.1	+40.6	+6.7	-
3. Resources (*)	2016	30 300.1	21 574.5	1 600.0	679.6	1 314.4	216.0	6 137.5	20.0	191.9	161.0	1 314.2	1 920.5	118.4	2 707.3	0.0
	2017	32 016.5	22 967.7	1 743.5	749.0	1 352.9	223.5	6 214.3	18.9	198.1	196.5	1 402.8	1 998.9	132.6	2 863.7	0.0
	Growth rate 2016-2017 (%)	+5.7	+6.5	+8.6	+10.2	+2.9	+3.6	+1.3	-5.4	+3.2	+22.0	+6.7	+4.1	+12.0	+5.8	-
4. Stock change (*)	2016	-432.4	-350.9	3.7	-0.9	-5.6	-5.1	-69.1	0.0	2.9	-0.8	-12.4	-16.6	-3.4	-2.2	0.0
	2017	13.9	6.3	-10.8	-0.1	15.0	2.8	-23.1	0.0	-2.7	1.4	17.5	-44.3	3.6	-9.9	0.0
	Growth rate 2016-2017 (%)	+4.2	+1.8	-30.0	-1.1	+27.3	+5.4	-33.4	-	-10.0	+21.9	+41.1	-62.5	+10.6	-36.1	-
5. Exports (exits)	2016	12 812.4	9 466.0	956.8	558.8	993.9	88.2	2 760.6	0.0	0.0	0.0	161.4	155.2	14.3	8.1	0.0
	2017	13 416.1	9 862.2	1 098.6	625.9	1 002.9	93.3	2 676.5	0.0	0.0	0.0	116.6	252.2	7.1	10.3	0.0
	Growth rate 2016-2017 (%)	+4.7	+4.1	+14.5	+11.1	+1.1	+5.7	-3.0	-	-	-	+7.2	+62.5	-5.0	+27.8	-
6. Gross inland consumption	2016	17 921.1	12 459.5	645.7	121.7	326.4	133.3	3 446.1	19.9	194.9	161.9	1 164.9	1 761.8	107.8	2 701.8	0.0
	2017	18 586.6	13 099.2	655.7	123.2	335.0	127.4	3 561.0	18.9	200.8	195.0	1 268.7	1 790.9	121.9	2 863.2	0.0
	Growth rate 2016-2017 (%)	+3.7	+5.1	+1.6	+1.7	+2.6	-4.4	+3.3	-5.0	+3.1	+20.5	+8.9	+0.5	+13.1	+6.0	-
7. Energy dependency (*)	2016	70.8	79.1	100.5	96.3	95.6	-45.2	90.2	100.4	40.5	99.4	98.8	99.0	34.0	91.7	0.0
	2017	74.4	83.3	98.4	97.7	101.9	-56.3	92.5	100.0	32.7	100.7	101.3	97.4	53.0	92.3	0.0

(\*) Provisional data for 2017

(\*) 1+2

(\*) - Decrease in stocks

+ Increase in stocks

(\*) (2 - 5) / 6 \* 100

Date of extraction: 01/06/2018

Source: Eurostat (online data codes: nrg\_103m, nrg\_124m, nrg\_134m)

eurostat

Table 1: Provisional natural gas balance sheet in thousand terajoules (GCV) Source: Eurostat (nrg103m), (nrg124m), (nrg134m)

Provisional natural gas balance sheet, by country, 2016-2017 (table 2)  
(thousand terajoules (Gross Calorific Value))

		LV	LT	LU	HU	MT	NL (*)	AT	PL	PT	RO	SI	SK	FI	SE	UK
1. Primary production	2016	0.0	0.0	0.0	66.5	0.0	1 602.5	45.7	165.3	0.0	383.1	0.0	3.8	0.0	0.0	1 694.3
	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
	Growth rate 2016-2017 (%)	-	-	-	-1.5	-	-3.6	+6.2	-2.2	-	+7.7	-	+53.1	-	-	+0.3
2. Total imports	2016	59.0	173.0	33.0	411.0	0.0	1 379.0	1 789.0	1 695.0	215.0	57.0	83.0	2 037.0	96.0	38.0	1 916.0
	2017	59.2	191.2	32.2	607.0	11.8	1 762.4	1 967.0	1 720.0	256.9	46.1	82.1	2 250.0	89.3	31.3	1 877.9
	Growth rate 2016-2017 (%)	+0.3	+10.5	-2.3	+47.7	-	+26.0	+9.9	+1.5	+19.5	-19.2	-1.1	+10.5	-2.0	-17.7	-2.0
3. Resources (*)	2016	59.0	173.0	33.0	477.5	0.0	2 961.5	1 834.7	1 860.3	215.0	440.1	83.0	2 040.8	96.0	38.0	3 560.3
	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	31.3	3 546.8
	Growth rate 2016-2017 (%)	+0.3	+10.5	-2.3	+40.8	-	+11.9	+9.9	+1.1	+19.5	+4.2	-0.9	+10.5	-7.0	-17.7	-0.3
4. Stock change (*)	2016	-19.0	0.5	0.0	-12.4	0.0	-220.1	1.0	18.1	-2.6	-3.1	0.0	-10.4	0.0	0.0	-70.2
	2017	4.7	-0.6	0.0	50.7	0.6	40.0	16.2	3.7	0.9	-18.1	0.0	19.3	0.0	0.0	-50.0
	Growth rate 2016-2017 (%)	+25.3	-12.0	-	+411.1	+0.6	+18.2	+15.2	+2.1	+3.3	-100.0	-	+19.3	-	-	-71.4
5. Total exports	2016	6.6	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	0.0	448.5
	2017	7.3	118.9	-	224.5	-	1 853.2	1 639.9	1 150.6	1.6	1.0	47.2	2 056.7	0.2	0.0	448.5
	Growth rate 2016-2017 (%)	+10.6	+16.4	-	+0.0	-	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0
6. Gross inland consumption	2016	53.0	85.7	33.0	373.5	0.0	1 316.2	333.8	678.6	208.1	443.4	33.4	1 831.9	95.6	38.0	3 238.8
	2017	47.9	89.2	32.2	397.3	11.3	1 443.7	359.4	727.4	254.3	475.7	35.0	1 822.8	89.0	31.3	3 148.3
	Growth rate 2016-2017 (%)	-11.3	+4.1	-2.3	+6.4	+11.3	+9.7	+7.2	+22.2	+17.3	+4.9	-0.6	-0.6	-8.8	-17.7	-2.8
7. Energy dependency (*)	2016	61.0	101.1	100.0	78.8	0.0	-38.5	88.6	78.4	88.6	12.8	99.4	92.4	100.4	99.9	46.5
	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

(\*) Provisional data for 2017

(\*) 1+2

(\*) - Decrease in stocks

+ Increase in stocks

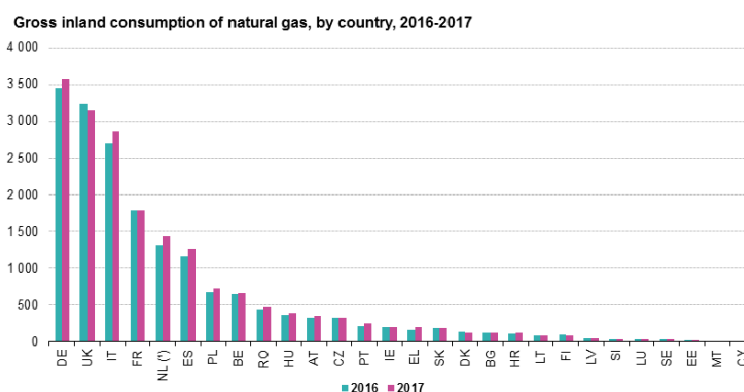
(\*) (2 - 5) / 6 \* 100

Date of extraction: 01/06/2018

Source: Eurostat (online data codes: nrg\_103m, nrg\_124m, nrg\_134m)

eurostat

Table 2: Provisional natural gas balance sheet in thousand terajoules (GCV) Source: Eurostat (nrg103m), (nrg124m), (nrg134m)



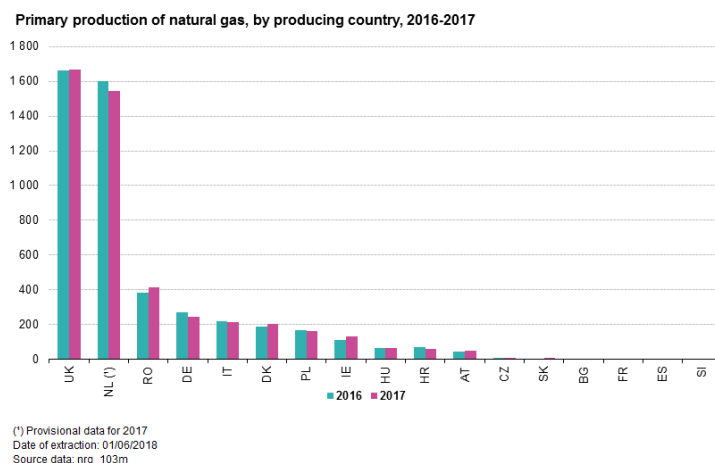
(\*) Provisional data for 2017  
Date of extraction: 01/06/2018  
Source data: nrg\_103m

Figure 2: Gross inland consumption in thousand terajoules(GCV)Source: Eurostat (nrg103m), (nrg124m), (nrg134m)

## Supply structure

### Natural gas production

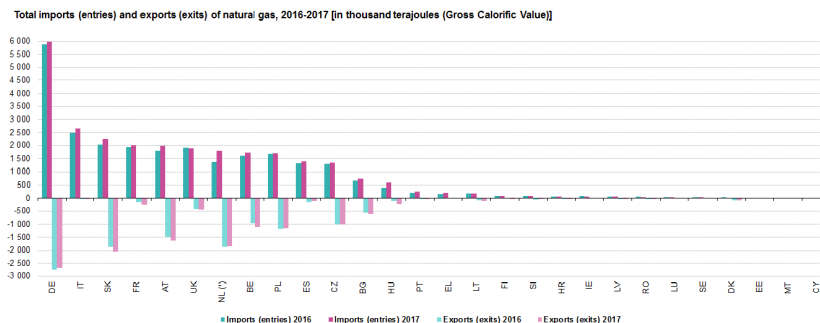
EU-28 natural gas production fell by 0.6 % in 2017 compared with 2016, to total 4 774 thousand terajoules. For EA-19, a decrease of 2.9 % was recorded and production amounted to 2 191 thousand terajoules. One of the main EU natural gas producers, the Netherlands registered a drop in production of 3.6 %. Notable decreases were also observed for Spain (-36.9 %), Bulgaria (-21.3 %), Croatia (-9.6 %), Germany (-8.3 %) and Italy (-4.2 %). In contrast, there was an increase of 53.1 % in natural gas production in Slovakia, of 36.5 % in France, 17.3 % in Ireland, 7.7 % in Romania, 7.4 % in Denmark and 6.2 % in Austria. With a natural gas production of 1 668 thousand terajoules in 2017 (+0.3 % compared with 2016), the United Kingdom confirmed its place as first producer of natural gas in the EU-28 (see Figure 3).



**Figure 3: Primary production in thousand terajoules(GCV)Source: Eurostat (nrg103m)**

### Natural gas imports

Total EU-28 imports (entries) of natural gas increased by 6.8 % to total 27 242 thousand terajoules. The most significant increase in 2017 compared with 2016 was observed in Hungary (47.7 %), followed by Croatia (40.6 %), Netherlands (30.0 %), Greece (22.0 %) , Portugal (19.5 %), Slovakia and Lithuania (both 10.5 %), Bulgaria (10.4 %) and Austria (+5.4 %). In EA-19, imports of natural gas increased by 7.5 % to total 20 776 thousand terajoules in 2017 (see Figure 4).

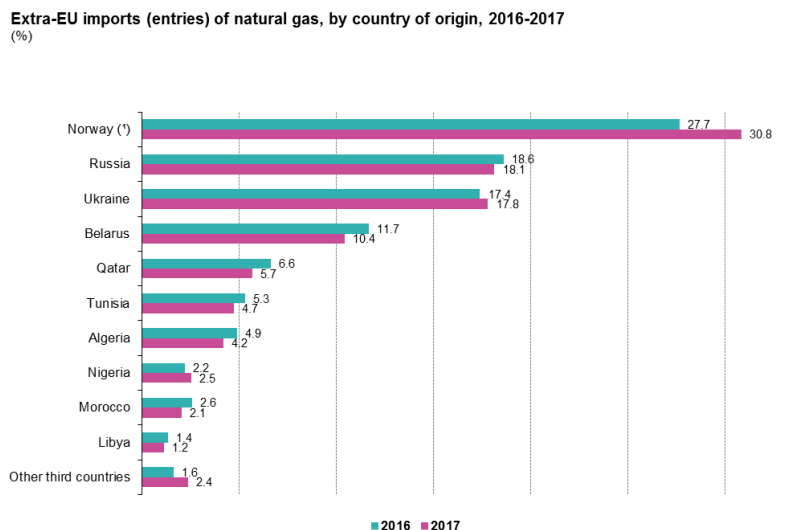


**Figure 4: Total imports (entries) and exports (exits) in thousand terajoules (GCV)Source: Eurostat (nrg124m), (nrg134m)**

It is important to remember that following the change in methodology in reporting monthly natural gas trade, introduced starting with reference month January 2013, monthly data concerning imports by country of origin

are no longer completely comparable with previous years' figures. The new 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 30.8 % of the natural gas entering the EU (intra-EU trade excluded, as well as entries from Switzerland), followed by Russia (18.1 %), Ukraine (17.8 %) and Belarus (10.4 %) (see Figure 5).



(\*) Provisional data for 2017  
Date of extraction: 01/06/2018

Source: Eurostat (online data code: nrg\_124m)

eurostat

**Figure 5: Percentage of extra-EU imports (entries) of natural gas by country of origin** Source: Eurostat (nrg124m)

Natural gas dependency in EU-28 was 74.4 % in 2017, up from 70.8 % in 2016. Denmark and Netherlands are the only net exporters. In 19 Member States natural gas dependency was higher than 90 %.

## 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.

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 also 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 - 2017 edition](#)

## Tables

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

Energy Statistics - quantities (tnrgquant)

Primary production of energy by resource (ten00076)

Gross inland energy consumption by fuel type (tsdcc320)

Final energy consumption by product (ten00095)

Energy dependence (tsdcc310)

## Database

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

Energy Statistics - quantities, monthly data (nrgquant)

Energy Statistics - supply, transformation, consumption (nrg10m)

Supply - gas - monthly data (nrg103m)

Energy statistics - imports (by country of origin) (nrg12m)

Imports (by country of origin) - gas - monthly data (nrg124m)

Energy statistics - exports (by country of destination) (nrg13m)

Exports (by country of destination) - gas - monthly data (nrg134m)

## Dedicated section

- [Energy](#)

## Methodology

- [Energy Statistics - supply, transformation and consumption](#) (ESMS metadata file — nrg10esms)

## Legislation

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