“In 2022, inland demand of natural gas in the EU decreased by 13.2% compared with 2021.”

“In 2022, the EU’s natural gas import dependency rate was 97%.”

“EU natural gas production continued its decreasing trend, falling by 7.2% in 2022 compared with 2021.”

**Inland demand of natural gas, EU, 1990-2022**
(teraJoules (Gross Calorific Value))

![Graph showing inland demand of natural gas in EU from 1990 to 2022.](image)

*Source: Eurostat (online data codes: nrg_cb_gasm, nrg_cb_gas)*

**Figure 1:** Inland demand of natural gas in EU in terajoules (gross calorific value) Source: Eurostat (nrg_cb_gasm), (nrg_cb_gas)

This article looks at monthly cumulated data on natural gas in the **European Union (EU)** for 2021 and 2022, as well as changes between these two years. It covers all aspects of the supply side - **primary production**, imports (entries) and exports (exits), stock changes, inland demand - as well as natural gas **energy dependency** data by EU Member State and for the European aggregates, i.e. the **EU** and **euro area**.
Consumption trends

In 2022, inland demand of natural gas in the EU decreased by 13.2 % compared with 2021, to drop to 13 722 451 terajoules. The only increases in consumption were recorded in Ireland (2.1 %) and Malta (1.4 %), while the largest drops occurred in Finland (-47.2 %), Sweden (-42.9 %) and Latvia (-29.3 %). In 2022, Germany, Italy and France had the highest inland demand with 3 073 896 terajoules, 2 611 602 terajoules and 1 543 620 terajoules respectively (see Table 1, Table 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.

Table 1: Provisional natural gas balance sheet in thousand terajoules (GCV) Source: Eurostat (nrg_cb_gasm)

Table 2: Provisional natural gas balance sheet in thousand terajoules (GCV) Source: Eurostat (nrg_cb_gasm)
Supply structure

Natural gas production

EU natural gas production continued its decreasing trend, falling by 7.2 % in 2022 compared with 2021, to 1 636 614 terajoules. The main EU natural gas producer, the Netherlands, registered a drop in production of 15.6 %. With a natural gas production of 611 131 terajoules in 2022, the Netherlands remained the highest producer of natural gas in the EU, followed by Romania, whose primary production equaled 351 683 terajoules (an increase of 2.3 %), and Germany, whose primary production was 160 692 terajoules (a decrease of 4.9 %) (see Figure 3).
Natural gas imports

Total EU imports of natural gas decreased by 6.6 % to reach 23 045 819 terajoules. The most significant increases in 2022 compared with 2021 among the main importers, i.e., countries importing at least 1 000 000 terajoules, was observed in Belgium (51.2 %), France (22.2 %) and the Netherlands (7.8 %) whereas the main decreases were recorded in Czechia (-40.3 %), Austria (-23.5 %) and Germany (-13.5 %) (see Figure 4).

Total imports and exports of natural gas, by country of origin and destination, 2021-2022
(terajoules (Gross Calorific Value))
It is important to remember a methodological change in reporting monthly natural gas trade since reference month January 2013. The monthly reporting provides import figures as entries from the last transit country (mostly neighbouring countries) instead of the country of origin (i.e., the country of primary/indigenous production) and export figures as exits from the reporting country (thus including all natural gas transiting its national territory). This is different from the methodology for annual data, where the ultimate origin of imports is reported, thus excluding all natural gas transit, also from export figures.

As regards the origin of imports (entries), Norway was the source of 24.4 % of the natural gas entering the EU (intra-EU trade and entries from Switzerland both excluded), followed by Russia (15.3 %), the United States (9.8 %) and Algeria (8.3 %) (see Figure 5).

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

Source: Eurostat (online data code: nrg_ti_gasm)

Natural gas dependency in the EU increased to 97.0 % in 2022, up from 83.1 % in 2021. In 20 EU Member States natural gas dependency was higher than 90 % in 2022, up from 15 Member States in 2021 (Figure 6).
Natural gas import dependency, by country, 2020-2021 (%)
calculated in terajoules (%)

Source: Eurostat (online data code: nrg_cb_gasm)
Note: Energy dependency for this figure is calculated as: (imports-exports)/gross inland consumption

Figure 6: Natural gas import dependency, by country, 2020-2021 (%) Source: Eurostat (nrg_cb_gasm)

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 Regulation (EC) No 1099/2008 on energy statistics.

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 collected on a monthly basis. The reporting deadline for countries to transmit monthly natural gas statistics to Eurostat is within 55 days after the end of the reference month. Eurostat validates received data and publishes them as soon as validated. In this framework, the natural gas monthly data covers its supply – and to a limited extent its consumption, thus providing early information about the developments in the natural gas market both in the EU and in each Member State.

Other articles
• Energy statistics - an overview
• Electricity production, consumption and market overview
• Energy production and imports
• Natural gas market indicators

Publications
• Energy, transport and environment indicators - 2018 edition

Tables
• Energy - selected datasets (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 - detailed datasets (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

Visualisations
• Explore monthly energy data - This interactive tool helps you to obtain an overview of seasonal energy trends in Europe or your country.
• Discover the world of energy trade - With this interactive tool you can easily discover the main trading partners of your country and visualise the trade flows in different ways.