This article highlights the development of natural gas prices for household and non-household consumers within the European Union (EU); it also includes price data from Liechtenstein, North Macedonia, Serbia, Turkey, Bosnia and Herzegovina, Moldova, Georgia and Ukraine.

The price of energy in the EU depends on a range of different supply and demand conditions, including the geopolitical situation, the national energy mix, import diversification, network costs, environmental protection costs, severe weather conditions, or levels of excise and taxation. Note that prices presented in this article include taxes, levies and VAT for household consumers but exclude refundable taxes and levies and VAT for non-household consumers.

**Natural gas prices for household consumers**

**Highest gas prices in the Netherlands, Sweden and Italy**

For household consumers in the EU (defined for the purpose of this article as medium-sized consumers with an annual consumption between 20 Gigajoules (GJ) and 200 GJ), natural gas prices in the second half of 2020 were highest in the Netherlands, Sweden and Italy, and lowest in Latvia, Lithuania and Hungary (see Figure 1). The price of natural gas for households in Sweden (EUR 0.1073 per kWh) was more than three times the price charged in Latvia (EUR 0.0280 per kWh).
The average price in the EU — a weighted average using the most recent (second half 2020) data for natural gas consumption by household consumers — was EUR 0.0698 per kWh.

Figure 2 presents the development of natural gas prices for household consumers in the EU since the first half of 2008. Generally, these prices are higher in the second half of each year. This is due to the seasonal effect. Overall, there was an upward trend in natural gas total prices in the EU from a low EUR 0.0558 per kWh in the second half of 2009 to a peak of EUR 0.0746 per kWh in the second half of 2013. It decreased from 2013 to 2017 but started increasing again in 2018, before dropping considerably in 2020. The second semester 2020 it stood at EUR 0.0698 per kWh, lower than a year ago in the same period (EUR 0.0720 per kWh). When adjusted for inflation, the price without taxes in the second half of 2020 is below the price without taxes in the first half of 2008. However, when including taxes, the decrease is less pronounced, since the weight of the taxes increased from 25 % in the first half of 2008 to 32 % in the second half of 2020.
Figure 2: Development of natural gas prices for household consumers, EU-27, 2008-2020 (EUR per kWh) Source: Eurostat (nrg_pc_202)

Weight of taxes and levies differs greatly between Member States

Figure 3 shows the proportion of taxes and levies in the overall natural gas retail price for household consumers. The relative tax contribution in the first half of 2020 was smallest in Greece (8.1 %) where a low VAT rate applies to the basic price. We observe the highest taxes in Denmark where taxes and levies correspond to 61.9 % of the final price. In the Netherlands this percentage is 59.0 %. The VAT in the EU represents 15.9 % of the total price. It ranges from 5.4 % in Greece to 22.0 % in Sweden.
Increases in gas prices for household consumers in Germany, the Netherlands and Portugal

Figure 4 shows the change in natural gas prices for household consumers including all taxes, levies and VAT from the second half of 2019 to the second half of 2020. For comparison purposes and for calculating the aggregates, the average exchange rates of national currencies was used. These prices fell during the period under consideration in 21 of the 24 EU Member States for which data are available — Cyprus, Malta and Finland do not report natural gas prices in the household sector. We observe the largest decreases in Lithuania (-27.3 %), Bulgaria (-21.2 %) and Latvia (-20.2 %). Tax decreases and cost of energy mainly drove the reduction in Bulgaria and Lithuania. Cost of energy was the main factor in Latvia. Network costs in Latvia remained relatively stable. There were only three Member States where natural gas prices for household consumers rose between the second half of 2019 and the second half of 2020, in Germany (5.4 %), the Netherlands (4.7 %) and Portugal (0.9%). Mainly, tax increases caused the increase in the Netherlands. Cost of energy was the main driver in Germany and both components were responsible for the increase in Portugal.
Natural gas prices for non-household consumers

Gas prices for non-household consumers highest in Finland and Sweden

For non-household consumers in the EU (defined for the purpose of this article as medium-sized consumers with an annual consumption between 10 000 GJ and 100 000 GJ), natural gas prices in the first half of 2020 were highest in Finland (EUR 0.0490 per kWh), Sweden (EUR 0.0374 per kWh) and France (EUR 0.0349 per kWh). They were lowest in Bulgaria (EUR 0.0202 per kWh) (see Figure 5).

The EU average price — a weighted average using the most recent (second half 2020) data for natural gas consumption by non-household consumers — was EUR 0.0279 per kWh.
Figure 5: Natural gas prices for non-household consumers, second half 2020 (EUR per kWh)

Source: Eurostat (nrg_pc_203)

Figure 6 shows the development of natural gas prices for non-household consumers in the EU since the first half of 2008. These prices display the same trend as observed for household consumers (see Figure 2) but without the seasonal effect. After falling to EUR 0.031 per kWh in the second half of 2009, the natural gas total price for non-household consumers increased each half year to peak at EUR 0.042 per kWh in the first half of 2013. Then, it decreased every semester, reaching a low of EUR 0.029 in the second half of 2017, before rising again until the first semester 2019. Since then, prices have been decreasing, from EUR 0.0307 per kWh in the second half of 2019 to EUR 0.0280 per kWh in the second half of 2020. Excluding taxes, in the second semester of 2020, we observe the lowest price since 2008 at EUR 0.0237 per kWh. The weight of the taxes have increased from around 7 % in 2008 to around 15 % in 2020.
Figure 6: Development of natural gas prices for non-household consumers, EU-27, 2008-2020 (EUR per kWh) Source: Eurostat (nrg_pc_203)

Figure 7 presents the proportion of taxes and levies in the total natural gas price that non-household consumers cannot recover. For non-household consumers, the share of these non-recoverable taxes in the second half of 2020 was lowest in Luxembourg (1.4%), Romania (2.5%) and Poland (3.1%). Finland (38%), Denmark (32.5%) and the Netherlands (30.9%), registering the highest shares of taxes.

Figure 7: Share of taxes and levies paid by non-household consumers for natural gas, second half 2020 (%) Source: Eurostat (nrg_pc_203)

Development of gas prices for non-household consumers
Figure 8 shows the change in natural gas prices for non-household consumers including all non-recoverable taxes and levies from the second half of 2019 to the second half of 2020. For comparison purposes and for calculating the aggregates, the average exchange rates of national currencies was used. These prices fell in 23 EU Member States out of 25 having reported these data — Cyprus and Malta do not report natural gas prices in the non-household sector. It fell by 36.2% in Greece followed by Bulgaria (-27.6%) and Estonia (-25.5%). The main driver in the reduction of gas non-household prices is the decrease of the cost of energy. By contrast, natural gas prices for the non-household sector rose only in Sweden (4.8%).

Source data for tables and figures (MS Excel)

- Natural gas price statistics tables and graphs

Data sources

Defining household consumers
Throughout this article, references to household consumers relate to the medium standard household consumption band with an annual consumption of natural gas (only piped gas is considered) between 5 555 kWh and 55 555 kWh (20 Gigajoule (GJ) and 200 GJ). All figures are consumer retail prices and include taxes, levies and VAT. Cyprus, Malta and Finland do not report natural gas prices in the household sector.

Defining non-household consumers

Throughout this article, references to non-household consumers relate to the medium standard non-household consumption band with an annual consumption of natural gas between 2 778 and 27 778 GWh (10 000 and 100 000 GJ). Prices correspond to the basic price for natural gas, including all non-recoverable taxes and levies. Cyprus and Malta do not report natural gas prices in the non-household sector. Quantities of natural gas used for chemical processes or electricity and/or combined heat and power production are excluded from these data.

Methodology

Comparison between the 2019 and 2020 prices are made in euro.

Prices in national currencies are converted into euro using the average exchange rate of the period for which the prices were reported.

Prices are always compared with the prices of the same semesters (i.e. year on year) in order to avoid seasonal effects.

In 2016, Regulation (EU) No 2016/1952 entered into force. It defines the obligation for the collection and dissemination of natural gas prices for household and non-household consumers. Until 2016, the domain of non-household consumers was defined as industrial consumers, but reporting authorities were allowed to include other non-household consumers. With Regulation (EU) No 2016/1952, the definition was changed from industrial to non-household consumers to have a unique methodology for all reporting countries. Until January 2017, the reporting authorities provided their price data for the household sector on a voluntary basis.

Natural gas tariffs or price schemes vary from one supplier to another. They may result from negotiated contracts, especially for large non-household consumers. For smaller consumers, they are generally set according to a number of characteristics including the amount of natural gas consumed. Most tariffs also include some form of fixed charge. There is, therefore, no single price for natural gas. In order to compare prices over time and between EU Member States, this article shows information for consumption bands for household consumers and for non-household consumers. Natural gas prices for households consumers are divided into three annual consumption bands and, for non-household consumers, into six different consumption bands.

The prices collected cover average prices over a period of six months (a half-year or semester) from January to June (first semester) and from July to December (second semester) of each year. Prices include the basic price of natural gas, transmission and distribution charges, meter rental, and other services. Natural gas prices for household consumers presented in this article include taxes, levies, non-tax levies, fees and value added tax (VAT) as this generally reflects the total price paid by household consumers. As non-household consumers are usually able to recover VAT and some other taxes, prices for non-households consumers are shown without VAT and other recoverable taxes/levies/fees. The unit for natural gas prices is that of euro per kilowatt-hour (EUR per kWh).

Context

The price and reliability of energy supplies are key elements in a country’s energy supply strategy. Natural gas prices are of particular importance for international competitiveness, as natural gas might represent a significant proportion of total energy costs for industrial and service-providing businesses. Contrary to the price of fossil fuels, which are usually traded on global markets with relatively uniform prices, natural gas prices vary widely among EU Member States.

The EU has acted to liberalise electricity and gas markets since the second half of the 1990s. Directives adopted in 2003 established common rules for internal markets for electricity and natural gas. Deadlines were set for opening markets and allowing customers to choose their supplier: as of 1 July 2004 for business cus-
tomers and as of 1 July 2007 for all consumers (including households). Some EU Member States anticipated the 
liberalisation process, while others were much slower in adopting the necessary measures. Indeed, significant 
barriers to entry remain in many electricity and natural gas markets as seen through the number of markets 
still dominated by (near) monopoly suppliers.

In 2019, the European Commission presented the Clean energy for all Europeans package. The Commission 
completed a comprehensive update of its energy policy framework to facilitate the transition away from fossil 
fuels towards cleaner energy and to deliver on the EU’s Paris Agreement commitments for reducing greenhouse 
gas emissions.

rules for the internal market in natural gas aims to introduce common rules for the transmission, distribution, 
supply and storage of natural gas with the objectives of providing market access and enabling fair and non-
discriminatory competition.

ropean Union Agency for the Cooperation of Energy Regulators. ACER, among others, assists the regulatory 
authorities in carrying out, at EU level, the regulatory tasks performed in the EU countries.

Regulation (EU) No 2016/1952 tackles data weaknesses led to the recommendation to improve the detail, 
transparency and consistency of energy price data collection. An energy prices and costs report would be pre-
pared every 2 years. The European Commission thus published such a report also in 2016 and 2018.

The fourth report on energy prices and costs was published in October 2020, as part of the 2020 State of 
the energy union report . It focuses on progress made on the EU’s policies on the energy transition policies and 
initiatives related to the European Green Deal, but it also assesses the impact of the COVID-19 pandemic on 
the recent and expected evolution of the analysed indicators.

Increased transparency for gas and electricity prices should help promote fair competition, by encouraging 
consumers to choose between different energy sources (oil, coal, natural gas and renewable energy sources ) and 
different suppliers. Energy price transparency is more effective when publishing and broadcasting as widely as 
possible prices and pricing systems.

Other articles

• Electricity price statistics
• Energy price statistics — background
• Energy production and imports

Main tables

• Energy (t_nrg) , see

Energy Statistics - prices (t_nrg_price)  
Gas prices by type of user (ten00118)

Database

• Energy (nrg) , see:

Energy Statistics - prices of natural gas and electricity (nrg_price)  
Energy Statistics - natural gas and electricity prices (from 2007 onwards) (nrg_pc)  
Energy Statistics - natural gas and electricity prices (until 2007) (nrg_pc_h)
Dedicated section

- Energy

Methodology

- Energy statistics - Natural gas prices for domestic and industrial consumers, price components (ESMS metadata file — nrg_pc_202_esms)

Visualisations

- Visualisation energy prices

External links

- Eurogas — Statistics
- Europe’s Energy Portal
- European Commission — Energy
- Weekly oil bulletin (weekly pump prices)
  - Single market progress report for gas and electricity
- International Energy Agency (IEA) — Prices and taxes statistics