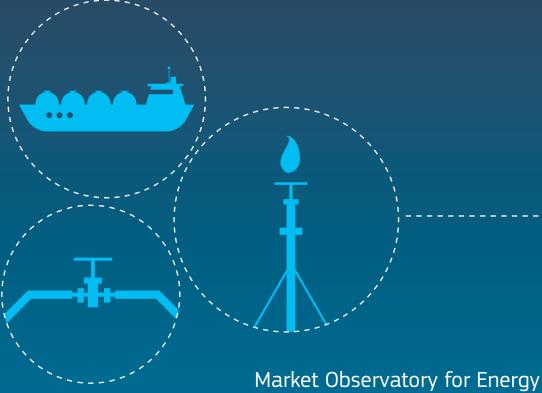


Quarterly report On European gas markets



DG Energy

Volume 17

(issue 3, covering third quarter of 2024)

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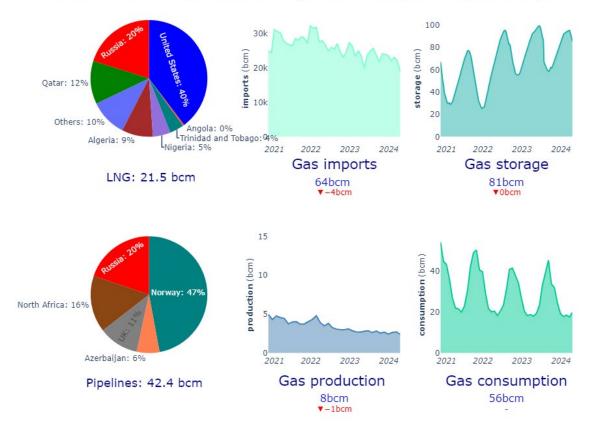
Directorate-General for Energy, Unit A.4, Chief Economist - Market Observatory for Energy, 2024

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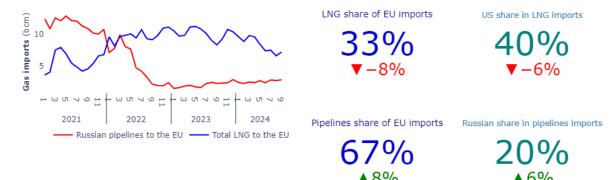
Gas market fundamentals in Q3 2024 and year-on-year comparison



Headline prices in Q3 2024 and year-on-year comparison



Focus of the Quarter: Imports of Russian Pipelines and US LNG



Source: ENTSO-G, LSEG, VaasaETT, EUROSTAT, AGSI, Platts.

HIGHLIGHTS OF THE REPORT

EU gas consumption, production, and storage in Q3 2024

- EU gas consumption was 56¹ bcm, almost the same as in the previous year (-0.3 %, -0.125 bcm) indicating a possible halt in the continued contraction since 2021. Quarter-on-quarter, consumption declined by 9% (-5.6 bcm) reflecting the absence of heating demand during the summer season.
- In the third quarter of 2024, the **EU's domestic gas production was 7.8 bcm**, a **13% decrease compared to** the same quarter **in the previous year** (8.9 bcm), and a modest **2% increase compared to the previous quarter** of 2024. **The Netherlands** became again the **largest domestic gas producer** in the EU (2.34 bcm), closely followed by Romania (2.27 bcm). Germany kept its third place (0.9 bcm), Italy (0.7 bcm) and Denmark (0.5 bcm) were on the fourth and fifth place.
- **EU gas storage filling rate remained at record high level**, practically unchanged compared to Q3 of 2023 and stood at 88%. Compared to the second quarter, the filling rate increased by 32% reflecting summer injections in preparation for the winter heating season and in line with the EU storage target.

EU gas imports in Q3 2024

- EU gas imports amounted to almost 64 bcm, a decline of 8% compared to the previous quarter and a decline of 6% compared to the previous year. Pipeline gas constituted 67% of imports (42.5 bcm), while the share of LNG share continued to decline and reached 33% (21.5 bcm). Norway remained the EU's biggest gas supplier (33%, 21.3 bcm), followed by Russia (20%, 12.7 bcm), the US (13%, 8.5 bcm), North Africa (13%, 8.5 bcm), Azerbaijan (4%, 2.7 bcm) and Qatar (4%, 2.5 bcm).
- EU pipelines imports were 43 bcm, a decrease of 4% compared to the previous quarter and an increase of 5% year-on-year. Norway supplied close to half of the EU's pipeline imports (47%), followed by Russia (20%), North-Africa (16%), UK (11%) and Azerbaijan (6%).
- EU LNG imports were 21 bcm and the volume continued to decrease by another significant 23 % (-6.3 bcm) year-on-year and by 15 % (-3.9 bcm) quarter-on-quarter. The three largest EU LNG importers continued to be France (18 %) Spain (17.5 %) and the Netherlands (16.7 %). The United States remained the biggest EU LNG supplier accounting for 40 % of the EU LNG imports, followed by Russia (20 %) and Qatar (12%).
- Russian gas represented 20 % of EU's total gas imports, an increase of two percentage points compared to the previous quarter and five percentage points increase year-on- year. Total Russian gas imports, combining pipeline and LNG, was 12.7 bcm, an increase of 2 % (-0.2 bcm) quarter-on-quarter and an increase of 22 % (+2.3 bcm) year-on-year. Compared to 2021 (the last year before Russia's invasion of Ukraine), the quarterly Russian gas imports declined by 64%.

EU wholesale gas prices and markets in Q3 2024

- European wholesale prices averaged 36² €/MWh in the third quarter, an increase of 12 % compared to the previous quarter and 7 % increase year-on-year. The upward price movement observed already in the previous quarter continued in July and August (the highest price: 39.3€/MWh on 8 August), while September was dominated by a downward price trend (lowest price: 32.8€/MWh on 19 September). The monthly average price was 32 €/MWh in July, 38 €/MWh in August, and 36 €/MWh in September.
- Asian prices were 14 % or 5 €/MWh higher than European prices as a quarterly average. The Asian premium increased the most in July to 6 €/MWh and was still 4.7 €/MWh in August and 4.5 €/MWh in September. The Henry Hub in the United States recorded an average price of 6.9 €/MWh with a difference of 28.4 €/MWh compared to Europe's TTF benchmark and signalling a growing gap compared to the previous quarter (24.4 €/MWh) and compared to the same quarter (24.7 €/MWh) in 2023.

EU retail gas prices in Q3 2024

• Retail gas prices increased by 2 % compared to the previous quarter and decreased by 3 % year-on-year. The EU quarterly average retail price was 103 €/MWh. Retail prices started to rise for the first time in May 2024, when they recorded the lowest point (100 €/MWh) and continued rising in the third quarter of 2024 ending the declining trend established since December 2022.

¹ Numbers in the highlights are rounded to the nearest integer when practicable for ease of reading.

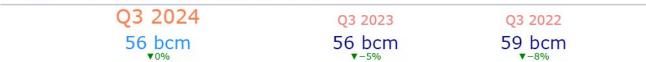
 $^{^{2}}$ Month-ahead price, rounded to the nearest integer.



1. Gas market fundamentals

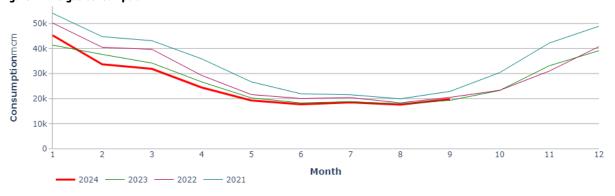
1.1 Consumption

Gas consumption in the EU and year-on-year comparison



EU gas consumption³ in the third quarter of 2024 amounted to **56 bcm**, maintaining **nearly the same level as in the same quarter in the previous year**. Compared to the previous quarter, there was a decrease of 9% (- 5.6 bcm), a usual seasonal decline reflecting the absence of heating demand during the summer season.

Figure 1 - EU gas consumption



Source: Eurostat.

• **Figures 2** shows the yearly and quarterly changes of the EU's gas consumption in each quarter. EU consumption was almost the same as in the same quarter in 2023 indicating a **stabilisation of gas demand** and a **possible halt in the continued year-on-year decline** in EU gas consumption observed in each third quarter since 2021. In any case, the pace of decline moderated, showing smaller and more gradual reduction compared to the significant drops recorded in 2022 and 2023. The **drop compared to the previous quarter** was **aligned with seasonal patterns** and reflected the lack of gas demand for heating during the summer season.

Figure 2 - Gas consumption volumes and change (year-on-year, quarter-on-quarter) of EU gas consumption



Source: Eurostat.

³ EU aggregates, unless otherwise indicated, refer to EU-27, and in order to ensure comparability over time, values of earlier periods and year-on-year comparison indices also refer to EU aggregates without the United Kingdom. Therefore, in comparison to earlier editions, total EU aggregate numbers might differ in the current report.

- As **Figure 3** highlights, the **year-on-year change** and the **ranking** for the 26 EU Member States that consume gas⁴. In a year-on-year comparison, Q3 of 2024 recorded **gas consumption decreases in 16 Member States**, while **in 10 Member States gas consumption increased**. The biggest year-on-year percentage increase was observed in Slovakia (+23%, followed by Greece (+18%), Slovenia (+18%), Latvia (+16%), Poland (+13%), Luxembourg (+8%), Sweden (+7%), Germany (+7%), Ireland (+7%) and Romania (+6%). The biggest year-on-year decline was reported from Portugal (-29%) followed by Lithuania (-16%), Spain (-11%), Denmark (-10%), Belgium (-10%), the Netherlands (-8%), France (-7%), Malta (-7%) and Croatia (-7%). In volume terms, the increase was the biggest in Germany (+688 mcm), followed by Italy (+356 mcm) and Poland (454 mcm), Greece (+237 mcm) and Slovakia (+117 mcm). In the third quarter of 2024, the ten most important gas consumers were: Italy (12.2 bcm), Germany (11 bcm), Spain (6 bcm), the Netherlands (5.5 bcm) and Poland (4 bcm), France (3.8 bcm), Belgium (2.2 bcm), Greece (1.5 bcm), Romania (1.3 bcm) and Hungary (1.2 bcm).
- In a quarter-on-quarter comparison, gas consumption decreased in 19 Member States and increased in 7 Member States. The largest quarter-on-quarter decrease was observed in Estonia (-33%) and Luxemburg (-33%), followed by France (-27%), Lithuania (-25%), Denmark (-23%), Germany (-22%), Belgium (-20%). Between 10% and 20% consumption reduction was experienced in Czechia (-19%), Slovenia (-18%), Austria (-16%), Hungary (-16%), Slovakia (-14%), the Netherlands (-13%), and Bulgaria (-10%). Single digit quarter-on-quarter consumption decline was recorded in Sweden (-8%), Ireland (-6%), Romania (-6%), Finland (-5%) and Poland (-3%).

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100

(8)

0

-20

-50

DE IT FR NL ES PL BE RO HU AT CZ SK EL IE PT BG DK HR FI LT LV SE SI LU EE MT

-100

Figure 3 - Year-on-year change in Member States' gas consumption in the third quarter of 2024

Source: Eurostat.

• In the third quarter of 2024, the EU registered a modest increase in real GDP which amounted to 0.34% quarter-on-quarter and 1% year-on-year. The overall EU GDP amounted to 3.337 trillion EUR (in 2010 inflation adjusted EUR) in Q3 2024 compared to 3.326 trillion EUR in Q2 of 2024 and 3.304 trillion EUR in Q3 2023⁵.



Figure 4 - Change in EU27 real GDP in year-on-year comparison

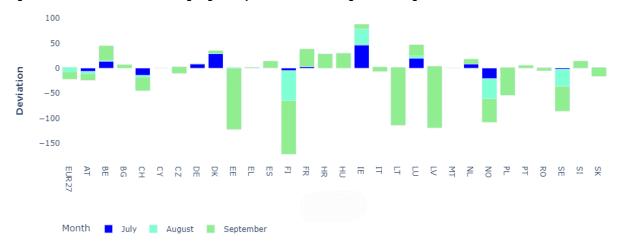
Source: Eurostat.

⁴ Cyprus does not consume gas as they do not have yet access to gas.

⁵ Chain linked volumes (2010) in million euro, seasonally and calendar adjusted gross domestic product at market prices.

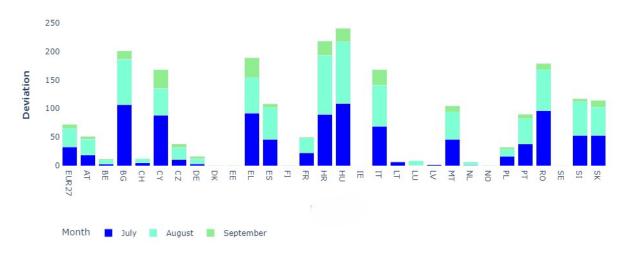
- **Figure 5** & **6** illustrates the monthly deviation of actual Heating Degree Days (HDDs) and Cooling Degree Says (CDD) from the long-term average (a period between 1979 and the last calendar year completed) in the third quarter of 2024. In most of Europe, milder than usual temperatures resulted in less HDDs during Q3 2024 continuing the prevailing trend of recent years.
- **July, August and September of 2024 were some of the hottest months on record in the EU** due to global warming. Accordingly, the figure clearly shows a significant increase in Cooling Degree Days (CDDs) for the third quarter of 2024.

Figure 5 - Deviation of actual Heating Degree Days (HDD) from the long-term average in Q3 of 2024



Source: Joint Research Center (JRC).

Figure 6 - Deviation of actual Cooling Degree Day (CDD) from the long-term average in Q3 of 2024



Source: Joint Research Center (JRC).

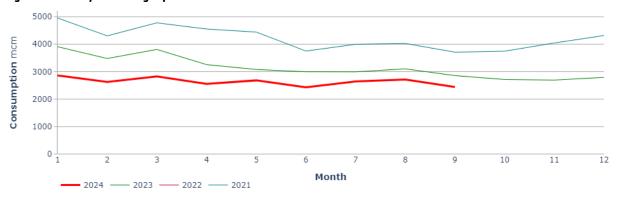
1.2 Production

Gas production in the EU and year-on-year comparison

Q3 2024	Q3 2023	Q3 2022
8 bcm ▼-13%	9 bcm ▼-22%	11 bcm
Gas demand reduction in the EU and year-on-ye	ear comparison (in pp)	
	THE COLOR SALES AND THE CO	
Gas demand reduction in the EU and year-on-year Q3 2024	ear comparison (in pp) Q3 2023	Q3 2022
Gas demand reduction in the EU and year-on-year Q3 2024	THE COLOR SALES AND THE CO	Q3 2022 19%

- In the third quarter of 2024, the EU's domestic gas production was 7.8 bcm, a 13% decrease compared to the same quarter in the previous year (8.9 bcm), and a modest 2% increase compared to the previous quarter of 2024.
- In the third quarter of 2024, the **EU's domestic gas production accounted for 14% of the EU's consumption**, an increase of two percentage points compared to the second quarter of 2024 (when it was 12%), and a decline of two percentage points compared to the third quarter in the previous year (when it was 16%).

Figure 7 - Monthly domestic gas production in the EU



Source: Eurostat⁶.

• In the EU, 18 Member States produce gas, while nine Member States (Finland, Estonia, Latvia, Lithuania, Luxembourg, Malta, Portugal, Sweden, Cyprus) do not have gas production in their territories⁷.

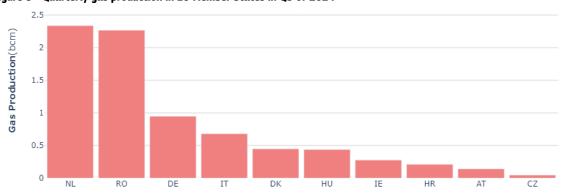
• In the third quarter of 2024, the **Netherlands became again the number one domestic gas producer** with production of 2.34 bcm, **closely followed by Romania**, which produced 2.27 bcm. Germany kept its third position (947 mcm), followed by Italy (679 mcm) and Denmark (447 mcm).

In a year-on-year comparison, **production increased in 8 Member States** (Denmark:+36%, Croatia:+31%, , Czechia:+24%, Ireland:+24%, Hungary: +15%), while **decreased in 10 Member States**, and in some of them considerably, i.e. by above 80% in France (-88%) and Spain (-87%, above 50% in Greece (-58%) and by above 30% in Slovakia (-32%) and by 20% in Slovakia. Production in Austria and Romania remained unchanged. Compared to the previous quarter, production grew in 8 Member States (HR: +19%, BG:+16%, NL:+6%, DK:+ 5%, IE: +4%, AT:+3%, BE: +3%, DE:+1%) , while in 9 Member States there was a decline of between -82% (FR, ES) and -1% (CZ, HU, RO).

⁶ Eurostat nrg_cb_gasm data series do not currently populate 2022 with domestic production data, which the charting code access automatically.

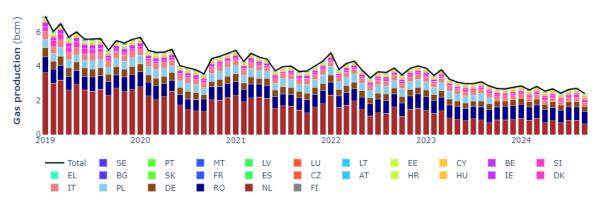
⁷ Statistical data on domestic gas production is available for 17 Member States as Poland no longer makes such data available via Eurostat since the fourth quarter of 2023.

Figure 8 - Quarterly gas production in EU Member States in Q3 of 2024



Source: Eurostat.

Figure 9 - Monthly gas production in the EU



Source: Eurostat.

- **Electricity generation from natural gas** amounted to **80 TWh** in the third quarter of 2024, an **increase of 35 % compared to the previous quarter** (59 TWh) and **14% less than a year ago** in the same quarter. Electricity generation from natural gas constituted 14% of total electricity generation in the quarter, compared to 10% in the Q2 of 2024 and 16% in Q3 of 2023. Gas-fired power generation constituted the fourth largest source of electricity. Nuclear energy (25%), solar power (15%) and hydropower (14%) provided the three largest power generation sources in Q3 of 2024.
- **Gas input for electricity generation** amounted to **15.2 bcm** in Q3-2024, an **increase of 20% compared to the previous quarter** (12.6 bcm) mostly driven by cooling demand. Year-on-year, gas input for electricity production declined by **16% compared with Q3 of 2023** (18 bcm). Quarter-on-quarter, gas input to power generation increased in 13 Member States and decreased in 13 Member States. The biggest increase was registered in Latvia (+267%), followed by France (+117%) and Portugal (+96%). Year-on-year, gas input to power production declined in 17 Member States between 1% (Luxembourg, Italy) and 80% (Denmark), the biggest annual declines being registered in Denmark (-80%), France (-76%), Portugal (-56%), Spain (-53%) Austria (-48%), Belgium (-39%), Finland (-36%) and Czechia (-32%). In six Member States gas consumption for electricity generation increased by between 4% (Ireland) and 85% (Sweden), the biggest increases taking place in Sweden (+85%), Poland (+57%) and Slovenia (+49%), Latvia (+40%) and Bulgaria (+38%).
- **Gas input for electricity generation constituted 27% of the EU gas consumption** in the third quarter. This was an increase of 6 percentage points compared to Q2-2024 (21%) and a decrease of 5 percentage points compared to the same quarter in 2023 (32%).
- In Q3-2024, the seven **highest shares of gas-fired power generation in total national consumption** were recorded in Malta (100%), Greece (79%), Ireland (61%), Latvia (60%), Croatia (49%), Italy (48%) and Estonia (36%). The seven **lowest gas input shares for power generation** were reported in Denmark (2%), Finland (4%), France (4%), Austria (4%), Lithuania (7%), Luxembourg (9%) and Romania (9%).

Figure 10 - Monthly electricity generation in the EU

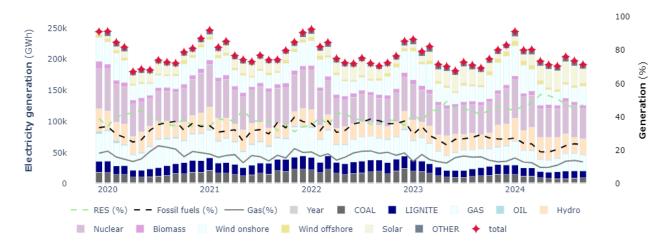
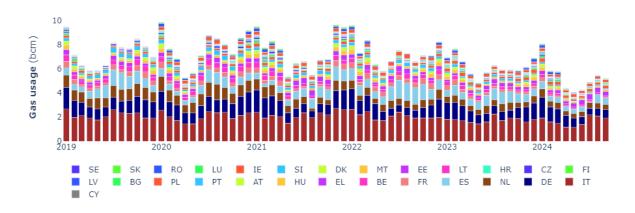


Figure 11 - Monthly gas usage in power generation

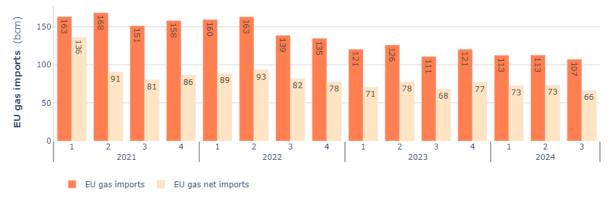


Source: Eurostat.

1.3 Imports

According to Eurostat, total gas imports into the EU was 107 bcm in the third quarter of 2024, a decline of 5 % from 113 bcm in the second quarter and 3% decline year-on-year from 111 bcm in the third quarter of 2024. Net imports (after deducting exports) were 66 bcm, a decline of 10% from 73 bcm in the second quarter of 2024 and of 3% from 68 bcm in the third quarter of 2023.

Figure 12 - EU imports of natural gas (gross and net)



Source: Eurostat.

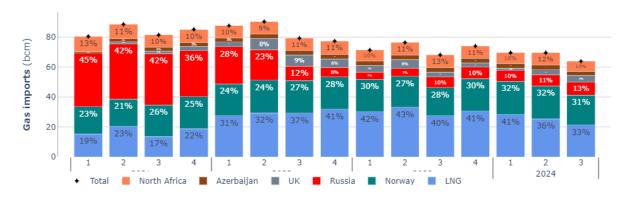
1.3.1. Total EU imports

Total EU imports and year-on-year comparison



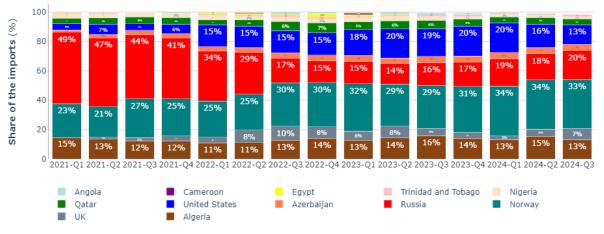
- According to **ENTSO-G**, which tracks all gas flows into and out of the EU, total **gas imports** by EU Member States amounted to **64 bcm** in the third quarter of 2024, which was **8% less** than in the **previous quarter** (70 bcm), and a **6% decrease** compared to the third quarter of 2023 (68 bcm).
- In the third quarter of 2024, the **share of LNG in the total gas imports was 33%**, a decrease of 3 percentage points compared to the previous quarter (36%), and a decrease of 7 percentage points compared to the third quarter of the previous year (40%).
- Looking at the **EU's total gas imports** (pipeline and LNG), **Norway remained the EU's biggest gas supplier** by providing one third of the EU's total imports (33 %, 21.3 bcm), followed by **Russia**, which provided one fifth of EU gas imports (20%, 12.7 bcm)) on the **second place**, the **US** (13%, 8.5 bcm) on the **third** position, and **Algeria** (13%, 8.49 bcm) on the **fourth** place. Azerbaijan (4%, 2.7 bcm), Qatar (4%, 2.5 bcm) and Nigeria (2%, 1 bcm) occupied the fifth, sixth and seventh positions, respectively, in the rankking of EU gas suppliers and together with the UK (7%, 4.7 bcm) completed the list of the EU's major natural gas exporters to the EU (see Figure 14).

Figure 13 - EU imports of natural gas (share of pipeline imports by country and share of LNG)



Source: ENTSO-G.

Figure 14 - Quarterly share of gas imports within the total, combining both pipeline and LNG imports



Source: Commission calculation based on ENTSO-G and LSEG

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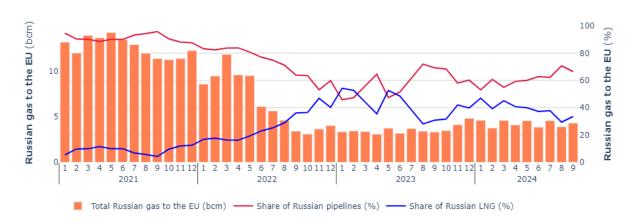
⁸ Net imports.

- As regards the EU's pipeline supplies in Q3 2024, the EU imported **43 bcm** natural gas through pipelines, a **decrease of 4% compared to the** previous quarter (44 bcm) and **an increase of 5% compared to the same quarter in 2023** (41 bcm)⁹.
- The **EU's biggest pipeline supplier** remained **Norway** providing **close to half of the EU's pipeline imports** (47%, 20 bcm), followed by **Russia** on the **second** place (20%, 8.4 bcm) providing one fifth of EU gas pipeline imports. **Algeria** (16%, 6.7 bcm) was the EU's **third** most important pipeline gas supplier with around one sixth of EU imporst and **Azerbaijan** (6%, 2.7 bcm) following with around one fifteenth of the EU pipeline gas imports.
- Norway's pipeline gas imports decreased by 9% (from 22 bcm) compared to the second quarter of 2024 and increased by 6% (from 19 bcm) year-on-year. Pipeline imports from North-Africa decreased both quarter-on-quarter (-20%, from 8.4 bcm) and year-on-year (-23% from 8.6 bcm), and so did the pipeline gas imports from Azerbaijan, which decreased by 8% compared to the second quarter of 2024 (from 2.9 bcm) and by 4% compared to the third quarter of 2023 (from 2.8 bcm).

Russian gas exports to the EU:

- As regards Russian gas exports to the EU, **Russia supplied 20% of the EU's total gas imports** (12.7 bcm). Russia also supplied **20% of the EU's pipeline gas imports** (8.4 bcm) and **20% of the EU's LNG imports** (4.3 bcm) in the third quarter of 2024.
- Pipeline gas imports from Russia increased by 12% quarter-on-quarter (in the previous quarter it was 7.6 bcm) and by 20% year-on-year (in the third quarter of 2023, it was 7 bcm).
- LNG supplies from Russia decreased by 12% in volumes compared to the second quarter of 2024, and increased by 27% compared to the third quarter in 2023. Russia's share in EU's LNG imports increased by one percentage point from 19% in the second quarter of 2024, despite the 12% drop in the export volumes, as the quantity of the overall EU LNG imports fell by 16% compared to the previous quarter. Year-on-year, the Russian share in EU LNG imports increased by eight percentage points from 12% in the third quarter of 2023 to 20% in the third quarter of 2024.
- Within the overall Russian gas exports to the EU, the share of pipeline gas was 66%, an increase of four percentage points compared to the 61% in the second quarter of 2024 and a decrease of two percentage points compared to the 68% in third quarter of 2023. The share of LNG accounted for 34% of the total Russian exports to the EU. Russian gas volumes were the lowest in 2023, with slight increases in 2024 in terms of absolute volumes (but translating into higher import shares due to the overall shrinking EU gas imports), but still well below (-64%) 2021 levels.

Figure 15 - Monthly pipeline and LNG imports from Russia

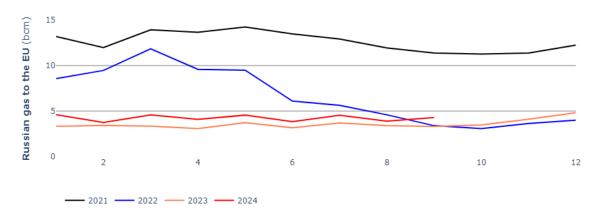


Source: Commission calculation based on ENTSO-G and LSEG (Refinitiv).

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⁹ Rounded to the first integer for the ease of reading.

Figure 16 - Monthly pipeline and LNG imports from Russia, year and year comparisons



Source: Commission calculation based on ENTSO-G and LSEG (Refinitiv).

1.3.2 Pipeline imports

Total EU pipeline imports and year-on-year comparison

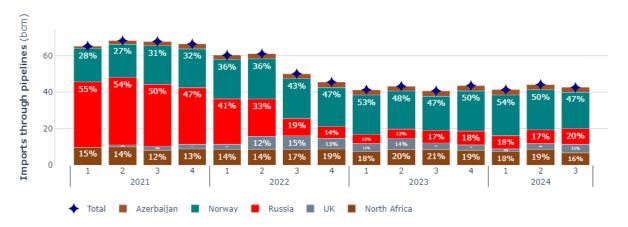


- In the third quarter of 2024, EU pipelines imports were 43 bcm¹⁰, a decrease of 4% compared to the previous quarter and an increase of 5% compared to the same quarter in the previous year.
- The quarter-on-quarter decrease in EU pipeline gas imports was primarily driven by a reduction in pipeline supplies from Norway, the EU's largest pipeline supplier, which saw a 9% decline (-2 bcm). Additionally, exports from North Africa dropped by 20% (-1.7 bcm), and supplies from Azerbaijan also decreased by 8% (-0.2 bcm). In contrast, both Russia and the UK recorded increases in their pipeline gas exports to the EU, with Russia seeing a rise of +12% (+0.8 bcm) and the UK recording an increase of 40% (1.4 bcm). Year-on-year, the 5% (1.9 bcm) growth in EU pipeline gas imports was driven by a 6% (1.1 bcm) increase in Norwegian pipeline imports and a 20% (1.4 bcm) increase in Russian pipeline gas imports, while

 $^{^{\}rm 10}$ Rounded up to the closest integer for ease of reading.

imports from Algeria decreased by 23% (1.9 bcm) and imports from Azerbaijan decreased by 4% (0.1 bcm). The UK also increased its pipeline exports to the EU by 45% (1.5 bcm) year-on-year.

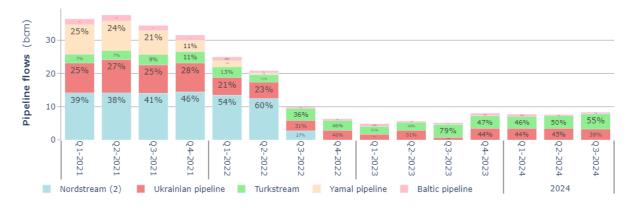
Figure 17 - Quarterly EU imports of natural gas from pipelines



Source: Based on data from the ENTSO-G Transparency Platform.

• In the third quarter of 2024, the **two main remaining transit routes for Russian pipeline gas** exports **through Ukraine** and **Turkey** transported **39% and 55%** of the Russian gas volumes, **respectively**, followed by the Baltic pipeline (6%)¹¹. Flows through TurkStream was higher in the third quarter, just like they were higher since the start of 2024. Flows on the other main Russian pipeline routes coming to Europe (*Nordstream*, and *Yamal*) remained zero.

Figure 18 - Quarterly EU imports of natural gas from Russia by supply route



Source: Based on data from the ENTSO-G Transparency Platform

 $^{^{11}}$ Flows are net of re-export from the EU.

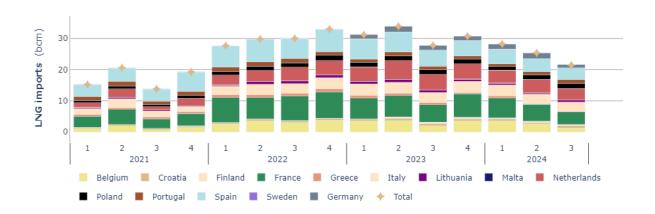
1.3.3 LNG imports

EU LNG imports and year-on-year comparison



- In the third quarter of 2024, total EU LNG import was 22 bcm¹², a decrease of 15% (-4 bcm) compared to the previous quarter and a
 decrease of 23 % (-6.3 bcm) year-on-year¹³.
- France kept its number one position in EU LNG imports by importing 18 % (3.9 bcm) of the EU's LNG, which was three percentage point less than in the previous quarter and two percentage point less than in the previous year. The second largest EU LNG importer was Spain (18%, 3.8 bcm), followed by the Netherlands (17%, 3.6 bcm), Italy (13 %, 2.9 bcm) and Belgium (6 %, 1.3 bcm).
- In the third quarter of 2024, the **United States** remained the **largest supplier of LNG to the EU**, accounting for 40% of EU LNG imports (11 bcm). This represents a 4 percentage points (pp) decrease compared to the previous quarter (44%), and 7 percentage points less than in the previous year (47%). The US exported less to the EU than in the previous quarter (-24%, -2.6 bcm) and less than a year ago (-27%, -4.2 bcm). The decrease had been driven by a maintenance in Freeport LNG (one of the main US LNG terminals) and US LNG flows being diverted to Asia due higher demand and higher prices resulting from heat waves.
- Russia was the second largest LNG supplier with a share of 20% (4.3 bcm), which was an increase of one percentage point compared to the previous quarter (19%) and eight percentage points increase compared to the third quarter of the previous year (12%). Compared to the previous quarter, the volume of Russia's LNG exports to the EU decreased by 12% (-0.6 bcm). Compared to the previous year, Russian LNG imports increased by 27% (+0.9 bcm).
- Qatar provided 12% (2.5 bcm) of the EU's LNG imports and remained the third largest LNG supplier to the EU. Qatar's imports decreased by 17% quarter-on-quarter (from 3 bcm) and decreased by 33% year-on-year (from 3.8 bcm). Qatar's share in EU imports remained the same (12%) quarter-on-quarter and declined by 2 percentage points year-on-year (from 14% in Q3 of 2023). Algeria, the EU's fourth largest LNG supplier provided 9% (1.8 bcm) of the EU LNG supply, which was a decrease of 25% (from 2.4 bcm) quarter-on-quarter and a decrease of 15% (from 2.2 bcm) year-on-year. On the fifth and sixth position, Norway (1.2 bcm) and Nigeria (1 bcm) provided 5.4% and 4.9% of EU LNG supplies to the EU, respectively.

Figure 19 – LNG imports to the EU by Member States

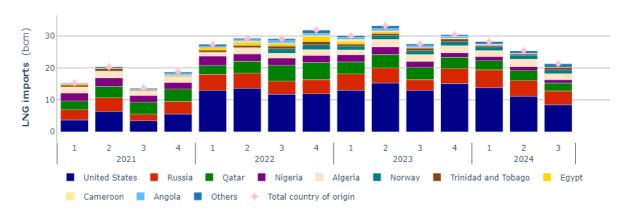


Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

¹² The 22 bcm is rounded up from 21.5 bcm of LNG imported by EU Member States. The volume of LNG recorded on the supplier side was slightly lower, 21.3 bcm, which is rounded as 21 bcm for the sake of easy reading. The discrepancy arises from recording volumes either at the loading/departure date or at the discharfing/arrival dates of LNG cargoes.

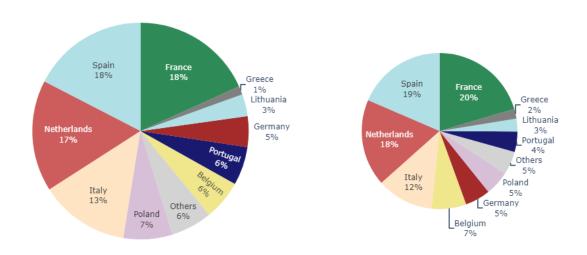
 $^{^{13}}$ By arrival date. By departure date, the quarter-on-quarter decrease was 16% and the year-on-year decrease was 22%.

Figure 20 - LNG imports to the EU by supplier countries



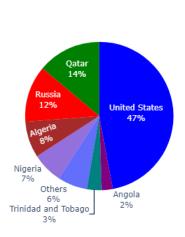
Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

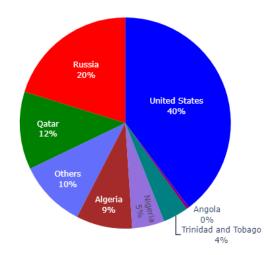
Figure 21 - Share of Member States in EU LNG imports in Q3 2024 (left) and Q3 2023 (right)



Source: Commission calculation based on LSEG (Refinitiv) and ENTSO-G. 'Others' includes Croatia, Finland, Malta and Sweden.

Figure 22 - Share of exporters in EU LNG imports in Q3 2024 (right) and Q3 2023 (left)



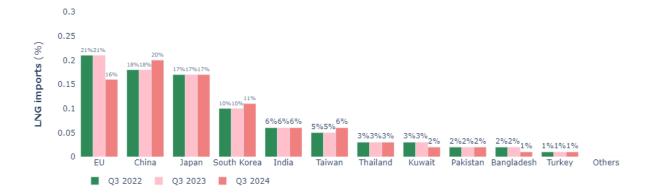


Source: Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

2. Global LNG Trade

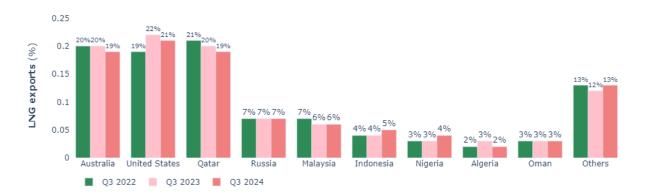
- In the third quarter of 2024, China remained **the world's largest importer of LNG** with a **20% share in global imports**, followed by **Japan** (17%) on the **second**, and the **EU** (16%) on the **third** place. South Korea (11 %), India (6%) and Taiwan (6%) occupied the fourth, fifth and sixth positions, respectively. Global LNG imports in the third quarter of 2024 amounted to 136 bcm.
- On the supplier side, the **biggest LNG exporter** remained the **United States** with a **21% share in global exports**, followed by **Australia** (19%) and **Qatar** (19%). These three countries together supplied close to three-quarters (60%) of the world's LNG demand. Russia (7%), Malaysia (6%) and Indonesia (5%) occupied the fourth, fifth and sixth position, respectively.

Figure 23 - Main global LNG importers in Q3 2024



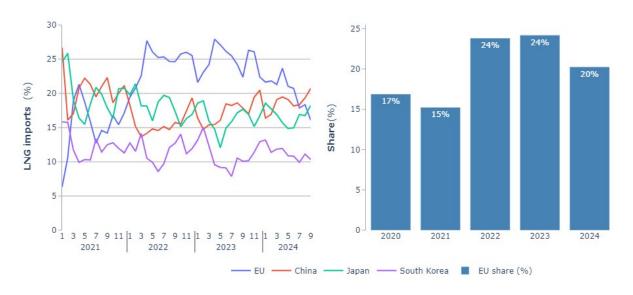
Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

Figure 24 - Main global LNG exporters in Q3 2024



Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

Figure 25 - The most important global LNG importers and evolution of the EU's annual LNG imports share 14



Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

3. Storage and LNG terminals

3.1 Storage

- The EU's maximum technical gas storage capacity currently is 1148 TWh (102 bcm) corresponding to around one third of the European Union's total gas consumption in 2023.
- Gas storage level in the third quarter of 2024 was close to the same record level as in the same quarter of 2023 and stood at 88%¹⁵.
 Compared to the previous quarter, the storage level was 32% higher, as gas storage operators injected gas in preparation of fulfilling the EU

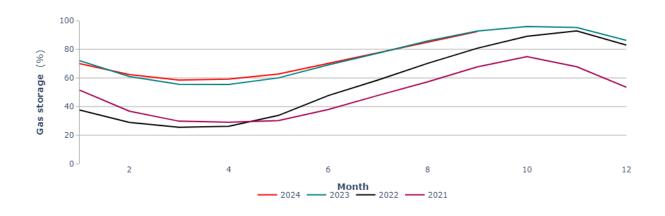
 $^{^{14}}$ Please note that the 20% EU share refers to year-to-date share, while the third quarter share of the EU was 16% in 2024.

¹⁵ The quarterly average filling rate was 88% if rounded to the first integer in both Q3 of 2024 and Q3 of 2023. Expressed with one decimal accuracy, the quarterly average filling rate was 87.9% in Q3 of 2024 and 88.3% in Q3 of 2023.

storage obligation, which requires 90% filling rate by 1st November 2024. The 90% EU storage target was reached already on 19 August, in the third quarter 2024, significantly ahead of the due date¹⁶.

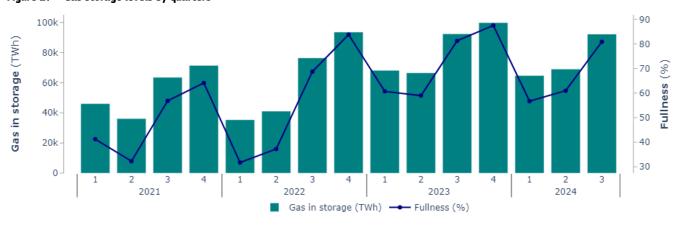
• The monthly average storage levels were 82%, 89% and 93% for June, July and August 2024, respectively, little below the monthly averages reached in the same respective months in the previous year (82%, 90% and 94%).

Figure 26 - Gas storage levels by month



Source: Gas Storage Europe AGSI.

Figure 27 - Gas storage levels by quarters



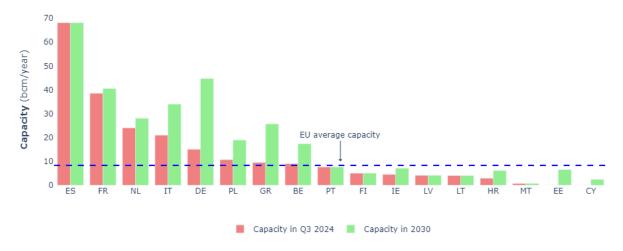
Source: Gas Storage Europe AGSI+ Aggregated Gas Storage Inventory. See explanations on data coverage at https://agsi.gie.eu/#/faq.

 $^{^{\}rm 16}\,{\rm See}$ EU reaches 90% gas storage target 10 weeks ahead of deadline (europa.eu).

3.2 LNG Terminals

- In Q3 2024, the **EU had a total terminal regasification capacity of nearly 250 bcm**, with Spain, France, the Netherlands, and Italy having the largest LNG regasification capacities, with 68 bcm, 38.5 bcm, 24 bcm, and 21 bcm per year, respectively.
- LNG terminals' utilisations rates for regasification continued to vary widely across Europe during the quarter. The highest utilisation rate (162%), was recorded in Belgium, followed by France (110%), Italy (94), Croatia (93%), Poland (88%) and the Netherlands (84%). At the opposite end, Spain had a very low regasification utilisation rate (34%).

Figure 28 - LNG terminal capacities in Q3 2024 and in 2023 in the EU



Source: IEEFA

Figure 29 - Regasification capacity utilisation rates in Q3 2024, 2023 and 2022



Source: LSEG (Refinitiv).

3.3 Hydrogen market developments

- The chart shows estimated production costs for hydrogen using four main technologies: water-based (alkaline water electrolysis (AWE) and polymer
 electrolyte membrane electrolysis (PEM) and gas-based (steam methane reforming (SMR) and autothermal reforming (ATR). For renewable
 hydrogen, AWE and PEM must use renewable electricity, time- and geo-correlated with production. ATR and SMR must use renewable gas or carbon
 capture and storage (CCS) to qualify as green hydrogen.
- Whereas AWE and PEM electrolysis technology costs predominantly depend on the electricity price, the costs of SMR and ATR technologies are driven by natural gas costs...
- In the third quarter of 2024, the price of electrolysis based hydrogen increased considerably. The price of AWE has risen by 26% and that of PEM rose by 22%. Hydrogen produced with gas feedstock rose more moderately. The price of ATR increased by 15% and that of SMR rose by 7% compared to the previous quarter. Year-on-year, the costs declined for PEM by 9% and for SMR by 8%, while the costs of ATR increased by 6% and that of AWE increased by 3%.

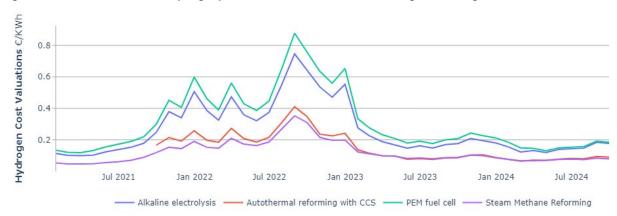


Figure 30 - Production cost-based hydrogen price assessment for different technologies (including CCS)

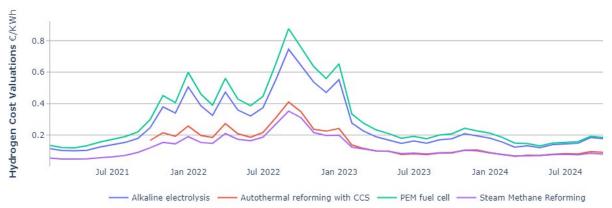
Source: S&P Global (Platts).

• The next chart shows the price assessments for carbon-neutral hydrogen¹⁷ in different regions of the world: Australia, Far East Asia, Northwestern Europe, California, and the US Gulf Coast. Compared to the second quarter of 2024, **prices in all regions increased** by 1% in US Gulf Coast, by 8% in Australia, by 12% in Northwest Europe, by 13% in California and by 15% in Far East Asia. **Year-on-year, prices in all regions decreased** by between 4% in Australia, 26% in California and the US Gulf Coast, 7% in North-western Europe, and 10% in Far East Asia.

• Far East Asia and Northwestern Europe continued to have the highest hydrogen prices. The quarterly average price in Far East Asia was \$3.3/kg, while in Europe, it was \$3.2/kg, both regions characterised by high production costs and import reliance. Australia followed with a relatively high quarterly average price of \$2.7/kg stemming from substantial investments in renewable hydrogen but offset by high local production and domestic transportation costs. The prices in the US were significantly lower. In California, the hydrogen price has risen by 13% in Q3 2024 to \$1.4/kg from \$1.3/kg in Q2-2024. The price in the US Gulf Coast remained the cheapest source of carbon-neutral hydrogen with a price of \$1.2/kg, which remained almost the same as in the previous quarter.

¹⁷ The definition of carbon neutral hydrogen by Platts is significantly broader than the definition of renewable hydrogen under the EU Renewable Energy Directive (RED). Platts' definition covers but is not limited to renewable hydrogen as defined under the RED, which – for hydrogen produced via electrolysis – requires the use of renewable electricity off-grid (dedicated renewable power production for the electrolysis) or, if on-grid, to meet certain criteria regarding origin of electricity combined with temporal and geographical corelations of the electricity production with the electrolysis. Platts definition reflects "the value of hydrogen as it leaves the production facility" and includes the following factors: "the market value of hydrogen in which emissions have been, in order of priority: avoided where possible through the use of low emissions generation, removed through the use of carbon capture and storage, and offset through the use of carbon credits or equivalent instruments. In addition to spot market activity, power-purchase agreements and hydrogen offtake agreements may be considered for assessment purposes, but normalised for terms, periods, and other factors. Platts also considers cost of production factors, which provide baseline inputs in the absence of market activity. These costs incorporate renewable power prices and carbon capture and storage costs with any remaining accounted emissions offset using relevant carbon instruments."

Figure 31 - Carbon-neutral hydrogen prices in different regions of the world



Source: S&P Global (Platts).

4. Wholesale Gas Prices

4.1. Wholesale gas prices at the EU level

Gas spot prices in Q3 2024 and year-on-year comparison

EU (TTF)

US (Henry Hub)

Asia (JKM)

35.4 EUR/MWh

6.7 EUR/MWh

40.1 EUR/MWh

47%

- In the third quarter of 2024, European spot prices (Dutch TTF¹⁸ 'day-ahead', onwards: TTF DA) rose by 11% to 35.4 EUR/MWh as a quarterly average compared to the previous quarter (from 31.7 EUR/MWh). Compared to the previous year, spot prices increased by 7% but were 82% lower than the historic peaks in Q3 of 2022. In the third quarter, prices continued to rise throughout July and August continuing the rising trend observed already in the second quarter. The average monthly price was 32.2 EUR/MWh in July and 37.8 EUR/MWh in August, when they peaked at 39.3 EUR/MWh on 8 August following Ukraine incursion into Russian territory in the Kursk region on 6 August and threatening to cut gas flows through the only remaining entry point of Russian gas into Ukraine at the Sudzha interconnection. As gas flows continued at the usual rate despite the continuation of the conflict, European gas markets calmed down and prices declined to a monthly average of 36.2 EUR/MWh in September.
- **Futures contracts rose by between 7% and 19%** compared to the previous quarter. The biggest increase of 19% was registered for the 'quarter ahead' contract, followed by an 11% increase for the 'two quarters ahead' contract and 8% increase for the 'year ahead' (onward: YA) and 'two years ahead' contracts. The increases indicated that the market expected a continued price rise in the next two years. Year-on-year, all longer-term future contracts decreased by between 15% and 27%, while the short-termed 'month-ahead' (onward: MA) contract was priced by 6% higher year-on-year, closely mirroring the 7% increase in the 'day ahead' (spot) gas price. The biggest year-on-year decline affected the 'two years ahead' contract (-27%) and the 'year ahead' contract (-25%) followed by the 'two quarters ahead' (-24%), and the 'first gas year' contract (-22%). The 'quarter ahead' (onward: QA) contract declined only 15% year-on-year.
- The **expectation reflected in the prices** in the third quarter proved to be similar to the actual prices in the fourth quarter of 2024. **Futures contracts** indicated that the **market expected significant price increases during the next year** with a **peak** anticipated **in the first**

¹⁸ The Dutch Title Transfer Facility (Dutch TTF) is the biggest, most liquid gas hub in Europe and its prices serve as benchmarks for the market price.

quarter of 2025 as the 'two quarters ahead' contract sold at 12% (+4.5 EUR/MWh) higher price than the spot price. The 'year ahead', '1st gas year' and the 'quarter ahead' contracts were 8% more expensive than the spot price offering a premium of 3.2 EUR/MWh, 3.1 EUR/MWh and 3 EUR/MWh, respectively. The 'month ahead' price premium was a modest 1% (+0.3 EUR/MWh).Only the **contracts with a longer time frame, mainly for 2026 and 2027, sold cheaper:** the 'two years ahead' contract was 5% or 1.6 EUR/MWh cheaper and the 'three years ahead' contract 13% or 4 EUR/MWh) cheaper than the spot price.

- LNG prices in Northwestern Europe and Southern Europe increased by between 12% and 13%. The bigger increase of 13% was registered for the Platts Northwestern Europe (LNG NWE) benchmark and the Platts Southern Europe (LNG MED) benchmark, while the ACER European LNG benchmarks for North-West Europe (ACER NWE) and for South-Europe (ACER SE) both rose by 12%. The ACER EU price benchmark rose by 13%. The Dutch TTF spot price and Dutch TTF 'month ahead' price displayed close values of 35.3 EUR/MWh (NWE) and 35.6 EUR/MWh (MED) (as quarterly average), but while the TTF spot price was cheaper than Platts LNG NWE (by -0.5%) and the MED (by -0.7%) benchmarks, the TTF 'month ahead' price was just slightly higher than both Platts LNG NWE (by +0.3%) and the MED (by +0.1%) benchmarks. The TTF 'day-ahead' price was slightly higher than the ACER NWE (by +0.4%) and more significantly higher that the ACER SE (by +1.2%). The TTF 'day ahead' was also slightly above (+0.2%, 0.1 EUR/MWh) the level of ACER European price benchmarks.
- The difference between LNG prices in Northwestern Europe and Southern Europe grew slightly in a quarter-on-quarter comparison, from 0.03 EUR/MWh to 0.07 EUR/MWh regarding Platts NWE LNG and Platts MED LNG, and from 0.15 EUR/MWh to 0.30 EUR/MWh as regards the ACER LNG NWE and ACER LNG SE benchmarks. Despite these small differences, price convergence between the prices in North-Western Europe and Southern Europe remained strong.
- The **ACER EU price benchmark**, which reflects all EU gas trading regions' prices areas **was 35.2 EUR/MWh** or **1.1%** (-0.4 EUR/MWh) **cheaper** on average **than the Dutch TTF 'month-ahead'** contract price in the third quarter of 2024. This price difference narrowed to 0.6 percentage points from a 1.7% in the previous quarter.

300 Invasion of Ukraine by Russia Peak (231 EUR/MWh) 250 200 EUR/MWh 150 100 50 Jan 2021 Jul 2021 Jan 2022 Jul 2022 Jan 2023 Jul 2023 Jan 2024 Jul 2024

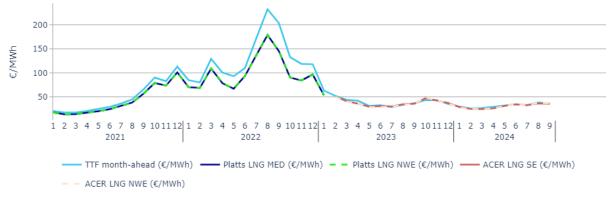
Figure 32 - TTF day-ahead prices compared with TTF month-ahead and year-ahead prices (monthly averages)

TTF YA — TTF QA — TTF 2QA

Source: S&P Global (Platts).

TTF MA - TTF DA -



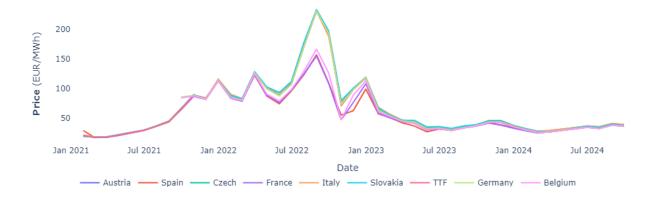


Sources: Global S&P (Platts), ACER.

4.2 European hubs

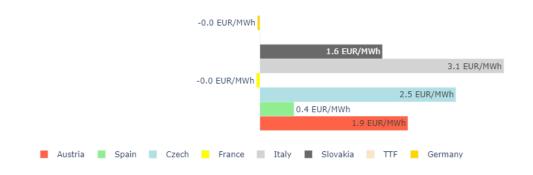
- In the third quarter of 2024 and compared to the second quarter of 2024, prices in European gas hubs increased by 13% on average (across hubs, quarterly average). The increase in all hubs was between 12% and 13%¹⁹. The increase was fairly homogeneous across the hubs, the lowest increase had been observed in France (+12.17%) and the highest increase was recorded in Austria (+13.48%).
- In a **year-on-year** comparison, prices increased by 6 % on average. The smallest increase occurred on the Slovak hub (+2%), while the highest increase was seen in Italy (+9%). In between the highest and the lowest, four hubs recorded 6% price increase (BE, FR, NL, ES), two hubs 5% increase (AT, DE) and one hub 8% increase (CZ).
- The Czech hub displayed the highest prices at around 38 EUR/MWh. Austria, Slovakia and Italy displayed prices at around 37 EUR/MWh., while the Belgian ZTP, the Dutch TTF, the German THE and Spanish PVB displayed prices at around 36 EUR/MWh. France's hub was the cheapest with around 35 EUR/MWh.
- The price differentials between the highest and lowest priced EU hubs were **2.45 EUR/MWh** as a quarterly average, compared to 2.1 EUR/MWh in the previous quarter and 2.8 EUR/MWh in Q3 of 2023).
- **Europe's biggest hub** by volume of transactions, the **Dutch TTF** recorded a **quarterly average price of 35.6 EUR/MWh** in Q3 2024. The Czech, Italian, Austrian and Slovak hubs displayed the largest deviations from this value and offered, respectively, 6% (CZ, +2.2 EUR/MWh), 5% (IT, 1.7 EUR/MWh), 4% (AT, +1.4 EUR/MWh) and 3% (SK, +1.3 EUR/MWh) higher prices.
- Out of the EU's large liquid hubs, only France (-0.2 EUR/MWh) and Belgium (-0.1 EUR/MWh) had slightly lower prices than the Dutch TTF, while the other large EU hubs displayed higher prices.

Figure 34 - Price developments in some of the major European gas hubs



Source: Global S&P (Platts).

Figure 35 - Price differentials of EU gas hubs compared to the benchmark Dutch TTF in the third quarter of 2024



Source: S&P Global (Platts).

¹⁹ S&P (Platts) started to publish price assessment for Hungary's MGP hub since 18 July 2024. The time series of the Hungarian price quotation is not long enough for the Hungarian MGP to be integrated in the comparative analysis.

4.3. Wholesale gas prices at international level

- Among the international hubs of importer countries, the UK National Balancing Point (NBP) remained the cheapest with
 a quarterly average price of 33.1 EUR/MWh²⁰, while the most expensive was again the Japan Korea Marker (JKM) with 40.4
 EUR/MWh. The quarterly average price on the Dutch Title Transfer Facility (TTF), which serves as European benchmark was
 35.4 EUR/MWh and positioned in the middle between the UK NBP and the Asian JKM.
- Compared to the previous quarter, the **international importer hubs**, i.e. the Asian JKM, Dutch TTF and UK NBP, **displayed price increases of between 8%** (NBP) **and 13%** (JKM). Prices on the Dutch TTF have risen by 12%. **Year-on-year, prices increased by between 2%** (UK NBP) **and 7%** (Dutch TTF), while the Asian JKM rose by 3%.
- Based on very different market fundamentals stemming from being a hub of a supplier/producer country, the US Henry Hub
 (HH) displayed a different trend in comparison with the importer/consumer hubs. On the US Henry Hub, prices decreased
 by 6% quarter-on-quarter and by 17 year-on-year. The US Henry Hub continued to be the lowest priced hub with a
 quarterly average price of 6.9 EUR/MWh. This low price level results from the US being a major gas producer country, where gas
 prices are defined by domestic rather than international demand.

300 Invasion of Ukraine by Russia Attack of Israel per the Hamas 250 Price (EUR/MWh) 200 150 100 50 0 Jan 2021 Jul 2021 Jan 2022 Jul 2022 Jan 2023 Jul 2023 lan 2024 Jul 2024 TTF - NRP -- Henry Hub

Figure 36- Comparison of monthly average prices on the Dutch TTF, UK NBP, the US Henry Hub and the Asian JKM

Source: S&P Global (Platts).

- In the third quarter of 2024, **Asia continued to display higher prices** and was on average by **14% more expensive than Europe**. The quarterly average **price differential increased** from 3.9€/MWh in Q2 2024 **to 5€/MWh** in Q3 2024. The higher Asian prices are depicted as positive price differentials between the European TTF benchmark and the Asian JKM benchmark in the chart below.
- The price differentials **remained positive throughout the quarter**, meaning that prices on the Dutch TTF in Europe were lower than those on the Asian JKM during the entire quarter. On a monthly basis, the Asian mark-up was 6€/MWh in July, 4.7€/MWh in August and 6€/MWh in September 2024.

Figure 37 - Prices differences between the Asian JKM and the Dutch TTF (EUR/MWh) benchmarks - last 18 months



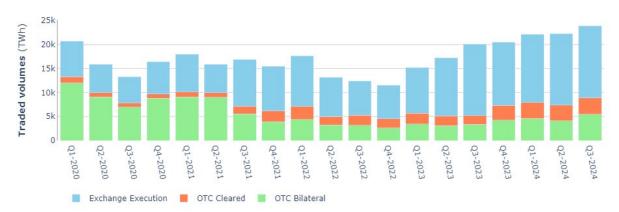
Source: S&P Global (Platts).

²⁰ Prices are quarterly averages.

4.4 Gas trade on the EU hubs

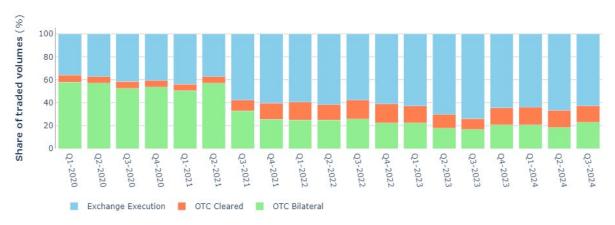
- In the third quarter of 2024, total traded volumes increased by 7% quarter-on-quarter and by 26% year-on-year
 continuing an overall growth trend prevailing since the first quarter of 2023.
- The **share of exchange executed trade** decreased to **63%** from 67% in the previous quarter and 80% in the third quarter of 2023. However, when looking at the transactions in the eight most liquid European hubs, the share of exchange traded volume was 71% confirming the shift towards exchange trade since the third quarter of 2021. The **share of the over-the-counter** (OTC) **bilateral transactions** increased to **23%** from 18% in the previous quarter and equally 18% in the third quarter of 2023. The **share of OTC cleared trade** remained **14%**, **a decrease of 1 percentage point** quarter-on-quarter and an increase of 4 percentage points from 10% in the same quarter of 2023.
- Compared to the previous quarter, the volume of exchange executed trade increased by 1%, while the volume of OTC bilateral trade increased by 34% and OTC cleared transactions increased by 1%. Year-on-year, all three types of organised trades registered increased volumes. OTC cleared transactions grew by 78%, OTC bilateral trade rose by 65% and exchange executed trade increased by 1% year-on-year.

Figure 39 - Over-the-counter (OTC, bilateral and cleared) and exchange executed trade on European gas hubs



Sources: Trayport Commodities Report, LEBA Monthly Energy Volume Report and Analysis.

Figure 40 - Share of OTC and exchange executed trade on European gas hubs



 $Sources: Trayport\ Commodities\ Report,\ LEBA\ Monthly\ Energy\ Volume\ Report\ and\ Analysis.$

The chart covers the following trading hubs: Netherlands: TTF (Title Transfer Facility); Germany: THE (Trading Hub Europe); France: PEG (Point d'Exchange de Gas); Italy: PSV (Punto di Scambio Virtuale); Spain: PVB (Virtual Balancing Point); Austria: Virtual Trading Point (VTP); Belgium: ZTE (Zeebrugge Trading Point) (which merged with the Belgian Zeebrugge Beach Trading Point in June 2023). UK: NBP (National Balancing Point)

5. Retail gas prices

EU retail prices and year-on-year comparison

Q3 2024 Q3 2023 Q3 2022 103 EUR/MWh 106 EUR/MWh 146 EUR/MWh ▼-27% 146 EUR/MWh

- In the third quarter of 2024, average **retail gas prices for household consumers increased by 2 %** to reach an average of **103**²¹ €/MWh from 101 €/MWh in the previous quarter. **Year-on-year, the quarterly average EU retail prices was 3% lower** than in Q3 of 2023, but 39% higher than in the Q3 of 2021 (pre-crisis period).
- The energy component amounted to 54.7 €/MWh, constituting 53% of the retail price roughly unchanged from the previous quarter. Network costs remained 22% (22.5 €/MWh) of the total end user price, energy taxes 10% (10 €/MWh), and value added tax (VAT) 16% (16 €/MWh) (no change from the previous quarter).

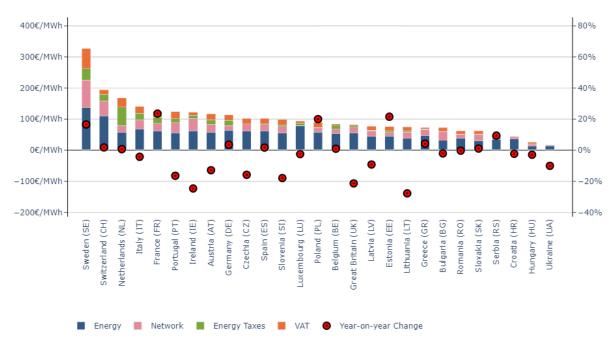
Figure 41 - Monthly average gas price in the EU paid by typical household customers (in EUR/MWh)

Source: VaasaETT. EU average represents an aggregate average of prices in the EU Member States' capital cities.

- Year-on-year, **retail prices decreased in 12 EU Member States**, while price **rose in 10 Member States**. The biggest year-on-year price declines were registered in Lithuania (-28%), Ireland (-25%) and Slovenia (-18%). In some Member States retail prices displayed double-digit increases compared to the third quarter of 2023, the biggest such increase being registered in France, followed by Estonia (+22%) and Poland (+20%).
- **Retail prices continued to diverge across the EU** and **ranged between 26 €/MWh** (Hungary) and **168 €/MWh** (the Netherlands) (disregarding Sweden, 328 €/MWh, which has little gas use in households). Compared to the previous year, prices increased in most of the Member States.
- Compared to the third quarter of 2021 (pre-crisis period), prices were between 9% and 114% higher in Q3 of 2024 in all but two Member States. In Hungary and Croatia, the quarterly average retail price in the third quarter of 2024 was 11% and 4% lower, respectively, than in the third quarter of 2021. The EU's average retail gas price was still 39% higher in Q3 2024 than in Q3 of 2021.

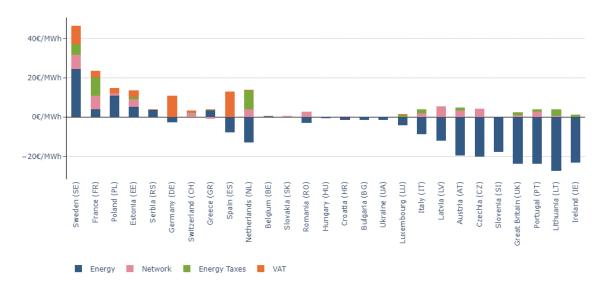
²¹ Translated from 10.34 eurocents/kWh (quarterly average in Q3-2024) to make it comparable with the wholesale price. Retail prices quoted in this section are translated from eurocents/kWh and rounded for the sake of easier comparison with wholesale prices.

Figure 42 - Breakdown of gas price paid by households in European capitals and annual change in prices, Q3 2024



Source: VaasaETT.

Figure 43 - Year-on-year change in gas price components in the European capitals comparing Q3 2024 with Q3 2023



Source: VaasaETT.

6. Appendix - charts providing further details on market developments

Figure 1 - Quarterly gas consumption per Member States

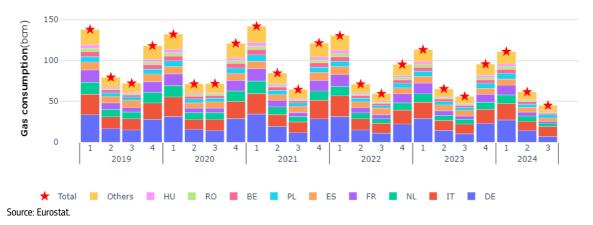
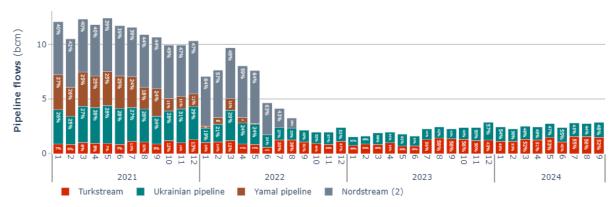


Figure 2 - Monthly EU imports of natural gas from pipelines



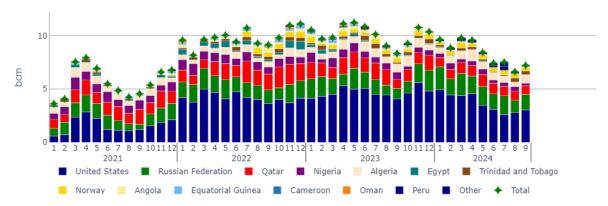
Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

Figure 3 - Monthly EU imports of natural gas from Russia by supply route



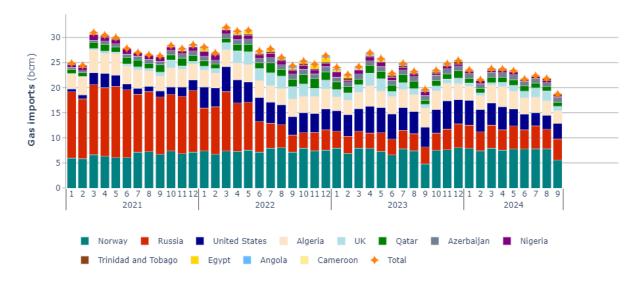
Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

Figure 4 – Monthly gross LNG imports to the EU per suppliers



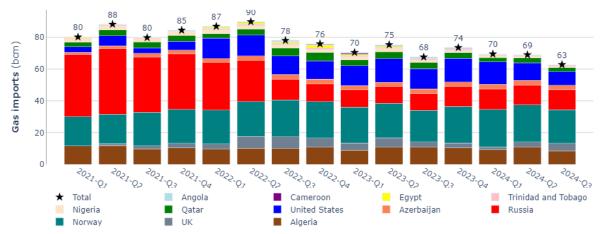
Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

Figure 5 - Monthly gas (pipe and/or LNG) imports to the EU per suppliers



Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

Figure 6 - Quarterly EU gas imports (pipeline and LNG) per suppliers



Source: European Commission calculation based on LSEG (Refinitiv) and ENTSO-G.

Figure 7 – Pipetine and LNG snares in the EU gas imports by quarters

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Q1-2021 Q2-2021 Q3-2021 Q4-2021 Q1-2022 Q2-2022 Q3-2022 Q4-2022 Q1-2023 Q2-2023 Q3-2023 Q4-2023 Q1-2024 Q2-2024 Q3-2024

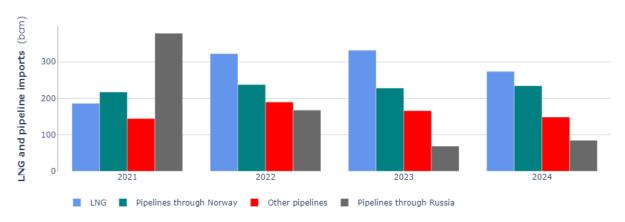
■ Pipelines through Norway ■ Other pipelines ■ Pipelines through Russia

Figure 7 - Pipeline and LNG shares in the EU gas imports by quarters

Source: Based on data from the ENTSO-G Transparency Platform.

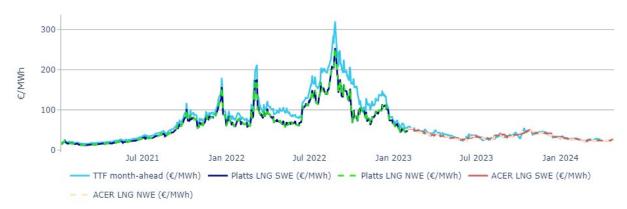
LNG

Figure 8 - Yearly pipeline and LNG imports from the EU main gas import sources



Source: Based on data from the ENTSO-G Transparency Platform.

Figure 9 - LNG NWE and SWE benchmarks compared with the Dutch TTF and ACER NWE and SWE (SE) benchmarks (daily values)



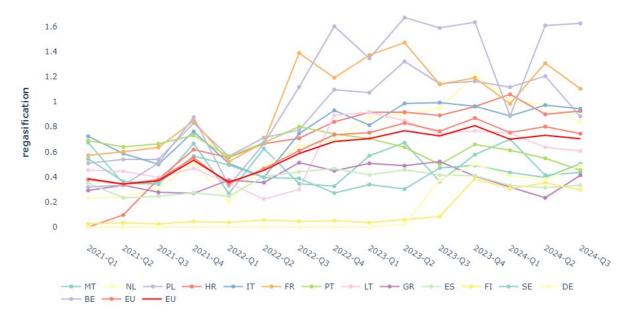
Sources: Global S&P (Platts), ACER.

Figure 10 - Comparison of TTF month-ahead, day-ahead and year-ahead prices (daily values)



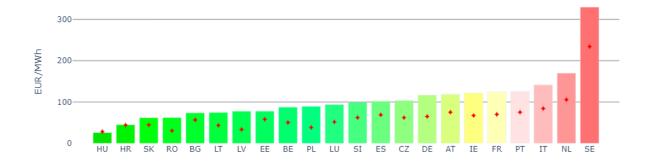
Source: S&P Global (Platts).

Figure 11 - Monthly regasification terminal utilisation rates in the EU



Source: S&P Global (Platts).

Figure 12 - Gas price paid by households in European capitals and comparison with price levels in the first half of 2021



Source: VaasaETT.