ACER

European Union Agency for the Cooperation of Energy Regulators

Analysis of the European LNG market developments

2026 Monitoring Report

13 May 2026

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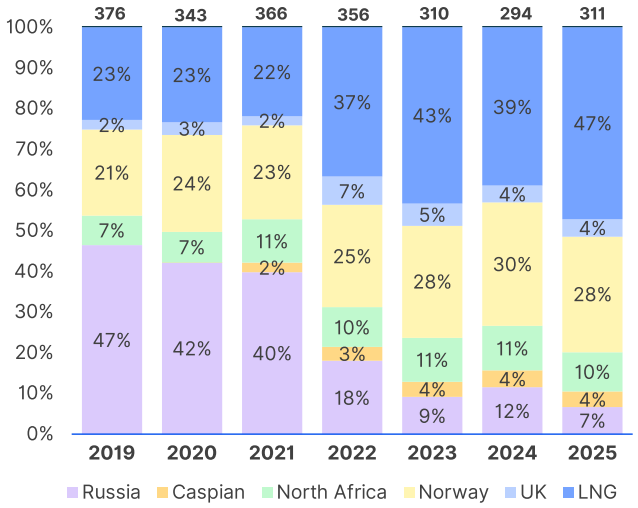
Executive summary

Natural gas consumption in the European Union has been showing a declining trend since 2019. This reflects a strategic shift toward electrification and decarbonisation, affected as well by geopolitical events triggering price spikes. The EU gas demand depends for more than 90% on imports. Since Russia's invasion of Ukraine, the EU reduced its reliance on Russian gas and shifted supply increasingly towards LNG, which now accounts for nearly half (47%) of total gas supply. As a result, the EU became the largest LNG importer, surpassing China and Japan.

Gas imports to the EU by route, 2019-2025 (%, Bcm)

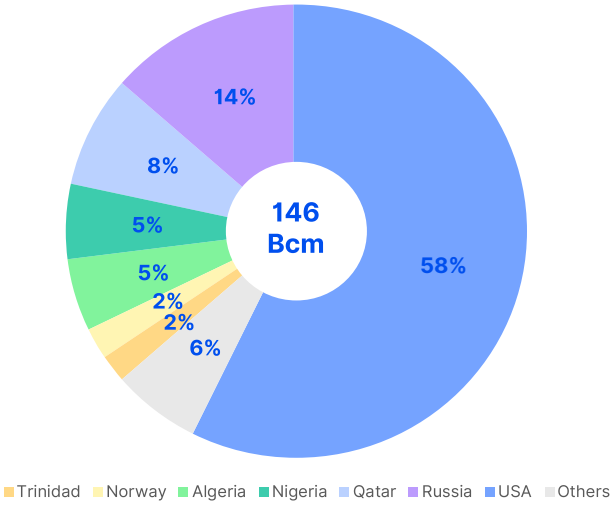


During 2025, EU LNG imports reached a record 146 bcm (equivalent to c.1700 TWh). This was driven by higher gas demand need and a lower starting level of underground gas storage at the end of winter 2024-2025, with storage sites only 34% full on 1 April 2025, compared with 59% the year before.

Global LNG production registered the largest year-on-year increase since 2022 adding 35 bcm (6%). At the same time 2025 was a record year in final investment decisions for the construction of new LNG production capacity by adding an extra 90 bcm of capacity. The US accounted for most of the incremental production and the new capacity additions reaching final investment decisions.

A diversified gas and LNG portfolio is essential to the EU's resilience and security of supply

EU LNG importing sources in 2025 (%, Bcm)



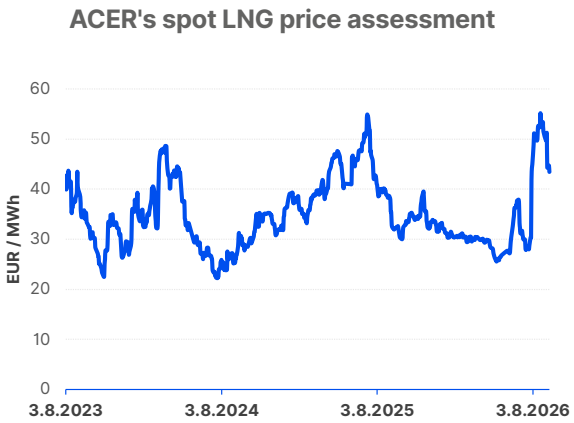
The EU's LNG supply portfolio has become increasingly concentrated, with US LNG playing the central role. With 84 bcm, the US accounts for 58% of EU LNG imports and 25% of overall gas consumption. This reliance is likely to intensify as new U.S. export capacity comes online and as the EU ends Russian LNG imports by the end of 2026 under its Russian gas phase-out regulation.

In assessing EU energy security, firstly, the EU's reliance on U.S. LNG may raise questions of dependency on a single supplying country. Secondly, possibly operational disruptions of either LNG or piped gas in what is still a relatively tight global gas market exposes the EU to possible price spikes.

Further LNG expansion has revealed limited flexibility in securing additional supply

Securing additional LNG through new contracts is a lengthy process given the time it takes to build new LNG capacity. Additional supply often depends on new export capacity, which takes normally from 4 to 6 years from final investment decision to come online. Consequently, a large share of the EU's additional LNG imports has been sourced through the spot market. Although this provides short-term flexibility, it also increases the EU's exposure to volatile global LNG spot prices especially when global supply tightens or geopolitical tensions intensify.

Strengthening transparency and price discovery in the EU spot LNG market



Since 2023, ACER has monitored EU LNG spot prices through its daily EU LNG spot price assessment. The 2025 assessment draws on a record 980 reported spot transactions, accounting for 81 bcm of spot LNG trades, while LNG spot volumes imported into the EU reached 54 bcm.

The reported transactions confirm the Dutch TTF as the main benchmark for EU LNG spot pricing, used as the reference index for 74% of spot-traded transactions.

While price swings have eased considerably since the 2022 crisis, volatility has remained present, albeit on a downward trend over the last three years amid tight market fundamentals. After relatively high prices at the end of winter 2024-2025, market conditions stabilised and prices remained broadly moderate for most of 2025, supported by more balanced fundamentals and significant addition of new LNG production capacity. Recent events in the Middle East, however, have fuelled volatility and temporarily pushed TTF intraday prices above 70 EUR/MWh.

Implications of 2026 Middle East conflict and closure of the Strait of Hormuz

Since March 2026, the closure of the Strait of Hormuz has created a major global energy supply shock. As a key chokepoint for LNG exports from Qatar and the UAE, the Strait is central to global gas trade. Together, the two countries have an export capacity equivalent to roughly 20% of global LNG supply. A continued closure of the Strait for the whole of 2026, would entirely remove 112 bcm export capacity from the global LNG market.

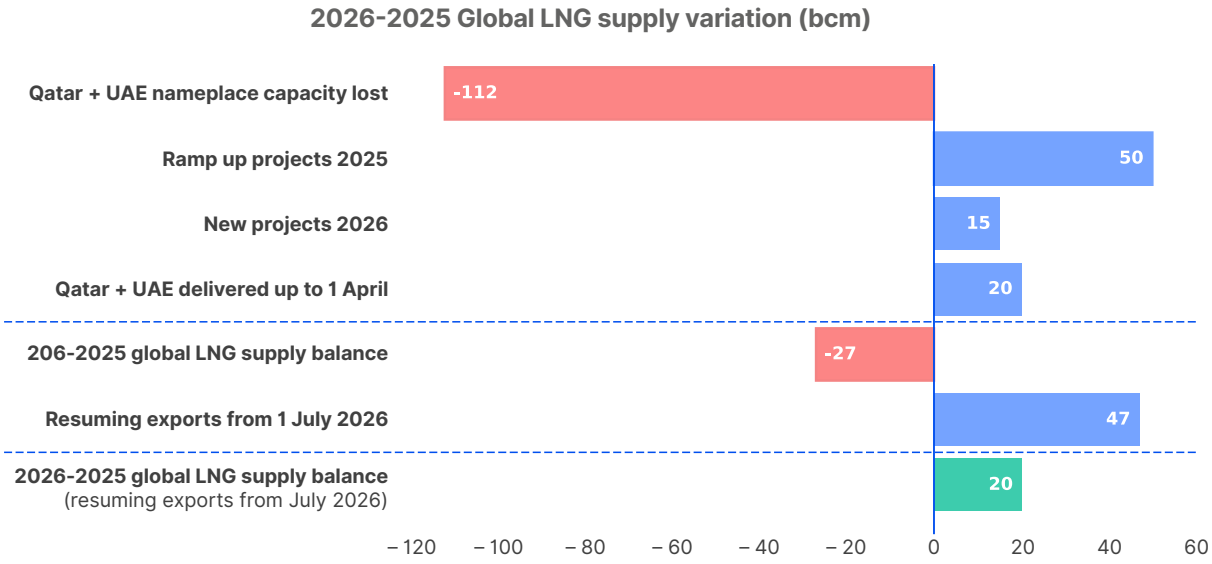
Some of the lost supply could be offset by new LNG capacity elsewhere. Projects that began deliveries in 2025 are expected to add around 50 bcm in 2026 as they ramp up, while projects scheduled to start deliveries during 2026 could provide an additional 15 bcm.

Looking ahead, two main scenarios can be considered. Under a full closure of the Strait of Hormuz throughout the whole 2026, the global LNG supply would face a net shortfall of 27 bcm relative to 2025, even after accounting for the 20 bcm already delivered by Qatar and the UAE before the disruption. This would likely intensify global competition for spot LNG cargoes.

Any further adjustment needed to close the remaining 27 bcm gap will have to come from the demand side, whether through fuel switching or gas demand reductions driven by administrative restrictions or reduced affordability due to high prices:

- In Asia, governments are reintroducing emergency demand-reduction measures previously used during the COVID-19 pandemic, while some countries are also increasing coal use to limit LNG consumption.

- Although the EU is not facing immediate shortages, signs of market tightening are also emerging, with potential spillover effects on electricity prices. At the same time, several Member States, including Italy, the Netherlands and Germany, have increased their use of coal as an alternative to gas for power generation. In response, the European Commission has called for demand-reduction measures, a faster rollout of renewable energy and earlier gas storage injections, making full use of the filling flexibility provided under the Gas Storage Regulation, in order to help contain pressure on gas prices.



Source: ACER based on data from ICIS LNG Edge and S&P Global.

Under a Strait of Hormuz reopening scenario which allow Qatar and the UAE resume production to pre-disruption levels by 1 July, LNG incremental output would increase by 56 bcm once deducting the 17% of Qatari LNG capacity damaged by drone attacks. After accounting for ramp-up production and new capacity additions, incremental production in 2026 would still record a net increase of close to 20 bcm.

LNG's future role in the EU energy system will depend on the pace of decarbonisation[1]

A high reliance on spot LNG volumes exposes the EU to increased price volatility, particularly during periods of global supply tightness or geopolitical tension. The faster the EU decarbonises, electrifies and deploys renewable and low-carbon technologies, the lower its structural dependence on gas will be, and therefore its exposure to LNG spot price volatility.

Throughout this transition, LNG terminals and underground storages will remain critical assets for security of supply, owing to the strategic flexibility they provide during seasonal demand and storage refilling cycles. Both are the main sources of flexibility in the EU gas system. Their complementarity is crucial as they work over different time horizons and address different supply risks.

1 CEER has recently published a report (LNG Terminals: a new Role in the Framework of the Decarbonisation) studying how LNG terminals could play a role in the decarbonisation process through different technological alternatives.

Recommendations:

Renewed tensions in the Middle East show that geopolitical crises can disrupt energy flows and drive up prices, underscoring the continued strategic relevance of REPowerEU and deepening its three core pillars for Europe's energy security and reducing exposure to external shocks:

- Energy savings and efficiency to reduce vulnerability by lowering demand.
- Expanding clean energy to strengthen resilience by reducing dependence on imported fossil fuels.
- Diversifying supply sources and routes to ensure that no single supplier country, transit corridor, or conflict has an immediate impact to destabilise Europe's energy system and, consequentially, its wider economy.

1. Global LNG market dynamics

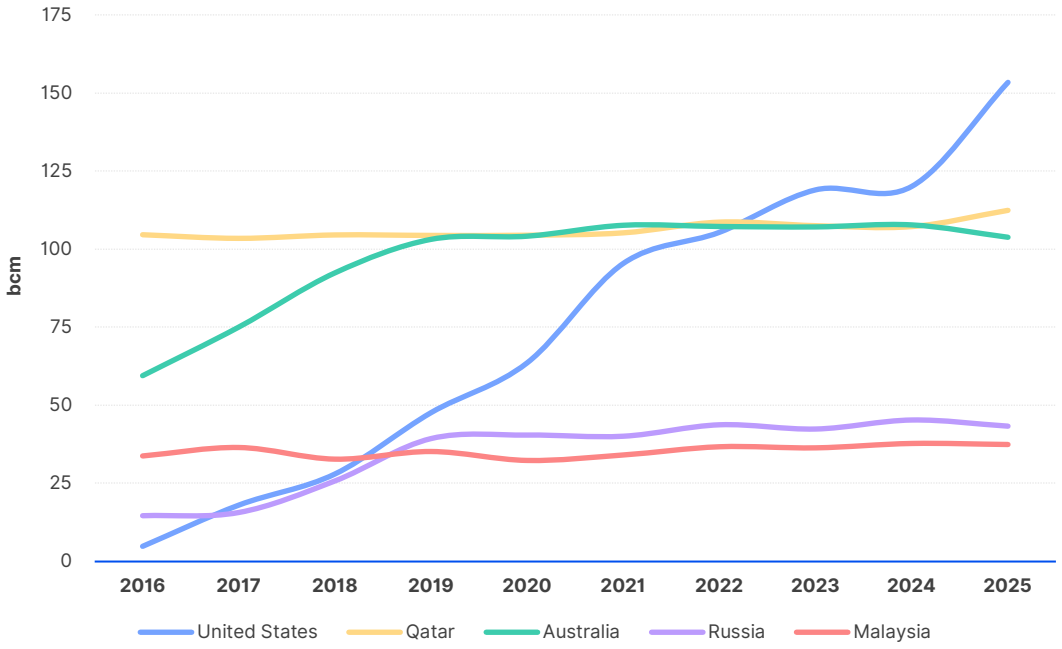
1 This chapter provides an overview of key developments in the global LNG market in 2025, with particular attention to trends shaping both production and demand. It reviews changes in global supply and demand across main regions and countries and examines the main factors behind market growth. The chapter also assesses developments in LNG infrastructure, including progress on projects under construction. While the report focuses primarily on 2025, it also considers developments in the Middle East up to April 2026.

1.1. LNG production

2 In 2025, global LNG production experienced its largest increase since 2022, rising by 26 million tonnes in 2025, equivalent to 36 billion cubic meters (bcm), which represents a year on year growth of about 6%. By the end of 2025, annual global LNG output had reached 438 million tonnes (around 597 bcm).

3 As illustrated in Figure 1, the United States has strengthened its position as the world's largest LNG producer over the past decade, accounting for more than 25% of global production. Over the last five years, US LNG output has increased sharply, exceeding 150 bcm in 2025 further widening the gap with other major producers. Qatar ranks second with production reaching 112 bcm, followed by Australia at around 104 bcm, where output has remained broadly stable in recent years with a slight decline in 2025. Together, these three countries account for 62% of global LNG production. Russia remains the fourth largest producer, with 43 bcm in 2025, Finally, Malaysia ranks fifth among LNG producers, with production remaining relatively stable at 37 bcm.

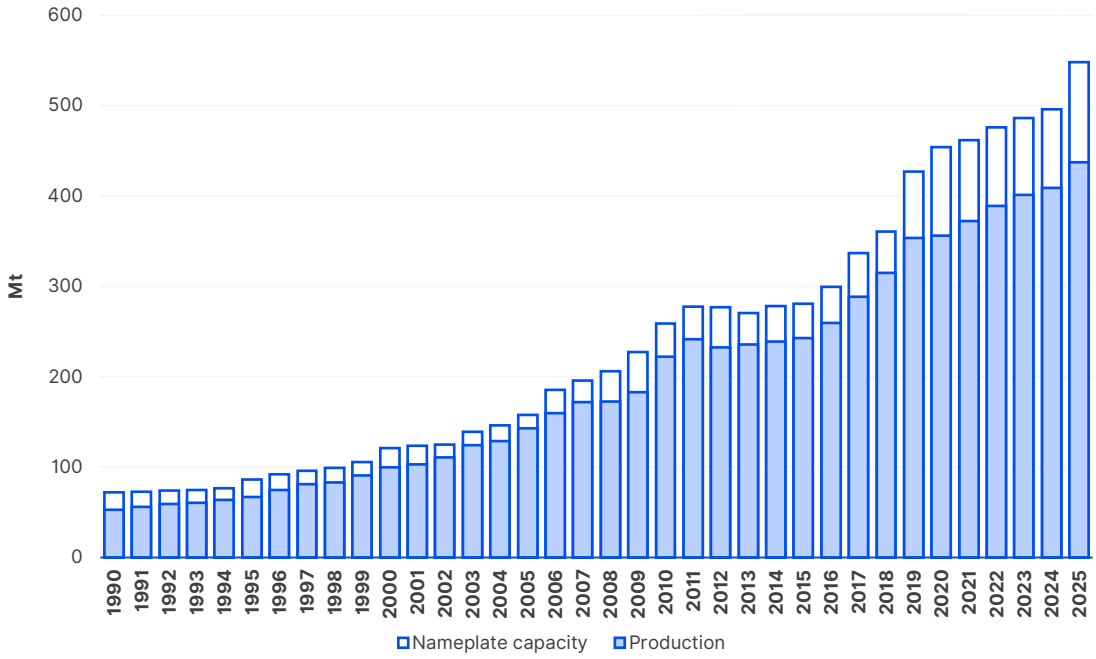
Figure 1: Top 5 largest LNG producers (bcm) - 2016 – 2025



Source: ACER based on data from ICIS LNG Edge.

4 Over the past decade, global production has expanded by approximately 200 bcm with a compound annual growth rate of 5%. However, growth slowed down in recent years. This expansion is driven by several factors such as rising global energy demand and the shift toward natural gas as a cleaner alternative to coal. Also, technological progress in production and transport have supported LNG production growth. More flexible and interconnected global supply chains, along with an improved market liberalisation and enhanced trade dynamics, have strengthened the ability of producers to meet rising and shifting demand.

Figure 2: Historical evolution of LNG production and nameplate capacity (Mt) - 1990 – 2025

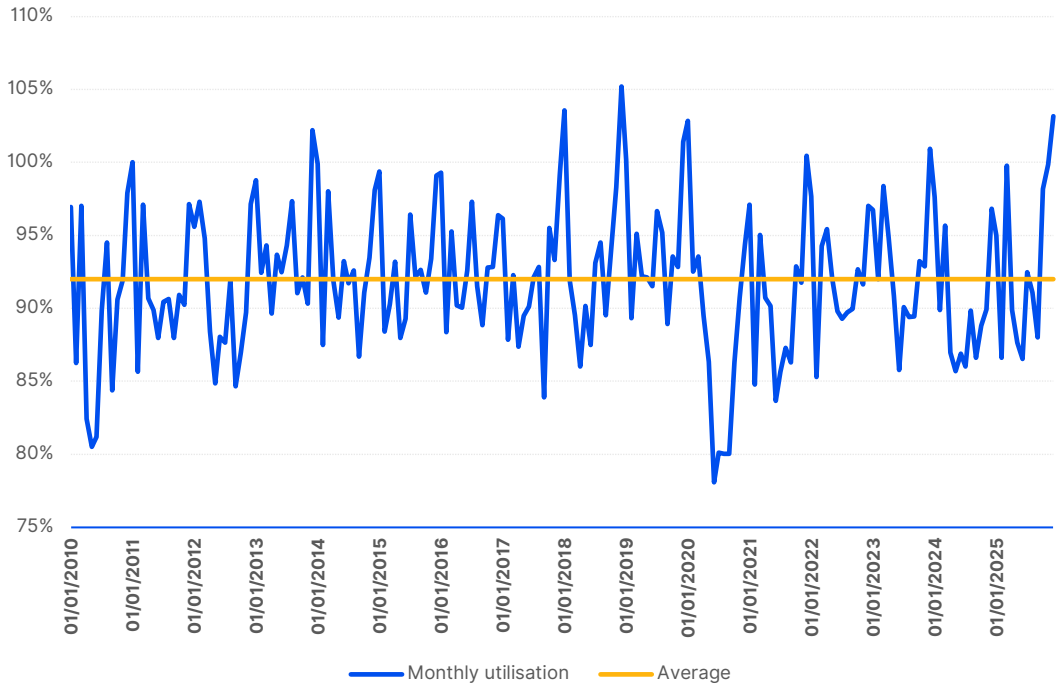


Source: ACER based on data from ICIS LNG Edge and S&P Global.

Production outages and other factors of unavailability

5 LNG output at liquefaction plants is often reduced by routine maintenance operations. Production can also be affected by additional constraints, including feedgas shortages, security issues, severe weather events, and technical problems that limit the availability of liquefaction infrastructure. For this reason, nameplate capacity should not be interpreted as equivalent to the LNG volumes effectively available to the market. In recent years, the global liquefaction capacity utilisation rate has averaged around 92% (see Figure 3).

Figure 3: Global LNG export infrastructure utilisation (%) - 2010 – 2025

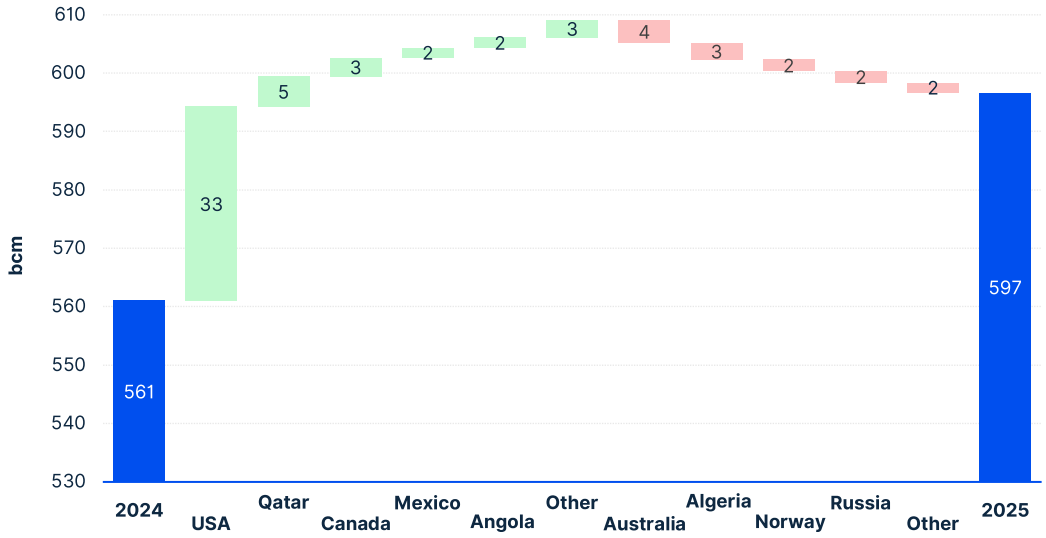


Source: ACER based on data from S&P Global.

Note: Utilization rates can exceed 100% under low ambient temperatures, allowing production to exceed nameplate capacity.

6 Figure 4 illustrates the changes in global LNG output between 2024 and 2025. Global production rose from 561 bcm in 2024 to 597 bcm in 2025, representing a net increase of 36 bcm. The United States accounted for the largest share of this growth, contributing an additional 33 bcm, driven by higher utilisation rates and the ramp-up of new liquefaction capacity. Qatar also increased output, supported by improved operational performance, while Canada's production rose due to incremental capacity expansions. Smaller increases were recorded in Mexico and Angola.

Figure 4: Global LNG production variations in 2025 compared to 2024 (bcm)



Source: ACER based on data from ICIS LNG Edge.

7 Australia recorded the largest reduction, with output decreasing by 4 bcm, followed by Algeria (-3 bcm), Norway (-2 bcm) and Russia (-2 bcm). These declines were mainly associated with operational constraints, maintenance activities, and feedgas availability issues. Overall, the strong expansion in North American production more than compensated for these limited reductions, leading to the largest increase in LNG supply since 2022.

- Australia's lower LNG production in 2025 was driven by multiple aspects such as declining output at the North West Shelf, major maintenance at Ichthys and Gorgon, weather-related disruption at Prelude, reduced output at Wheatstone, and the prolonged offline status of Darwin LNG tightened supply and weighed on LNG exports.

- In Algeria, both rising domestic demand and weak upstream investment continued to constrain feedgas supply to the Arzew and Skikda LNG projects, most of which entered into operation in the 1960s and 1970s or in the early 2000s.

- In Norway, utilization fell year on year at Hammerfest LNG due to a compressor failure at the beginning of the year followed by a planned maintenance shutdown of the entire Hammerfest LNG plant from April to August 2025.

- In Russia, utilization dropped significantly at Vysotsk LNG and Portovaya LNG, following the imposition of US sanctions in January 2025. Utilization also remained low at Arctic LNG 2 due to low availability of icebreaking vessels and unwillingness from buyers to take on sanctioned cargoes. At Yamal LNG, although no maintenance was officially announced, the low level of activity suggests that some of the liquefaction trains may have undergone maintenance.

Expansion of the LNG production infrastructure

8 Global LNG liquefaction capacity expanded markedly in 2025, with new projects entering the commissioning phase representing a combined nameplate capacity of around 70 bcm. Because these projects were commissioned progressively throughout the year, actual production remained below nameplate levels, in line with the usual ramp-up period after start-up.

9 Key additions included Greater Tortue in Mauritania-Senegal (3.7 bcm). In U.S. Corpus Christi Stage 3 (8.1 bcm), and Plaquemines LNG Phases 1 and 2 (36 bcm combined). While Plaquemines exported its first cargo in December 2024, most of its operational ramp-up took place in 2025 and is therefore reflected in the 2025 figures. Further incremental gains in US came from debottlenecking works at Sabine Pass and Calcasieu Pass, which together added around 1 bcm. LNG Canada, with 19 bcm of capacity, began deliveries in July 2025, shipping more than 30 cargoes during the year, and had ramped up to around 85% of nameplate capacity by March 2026.

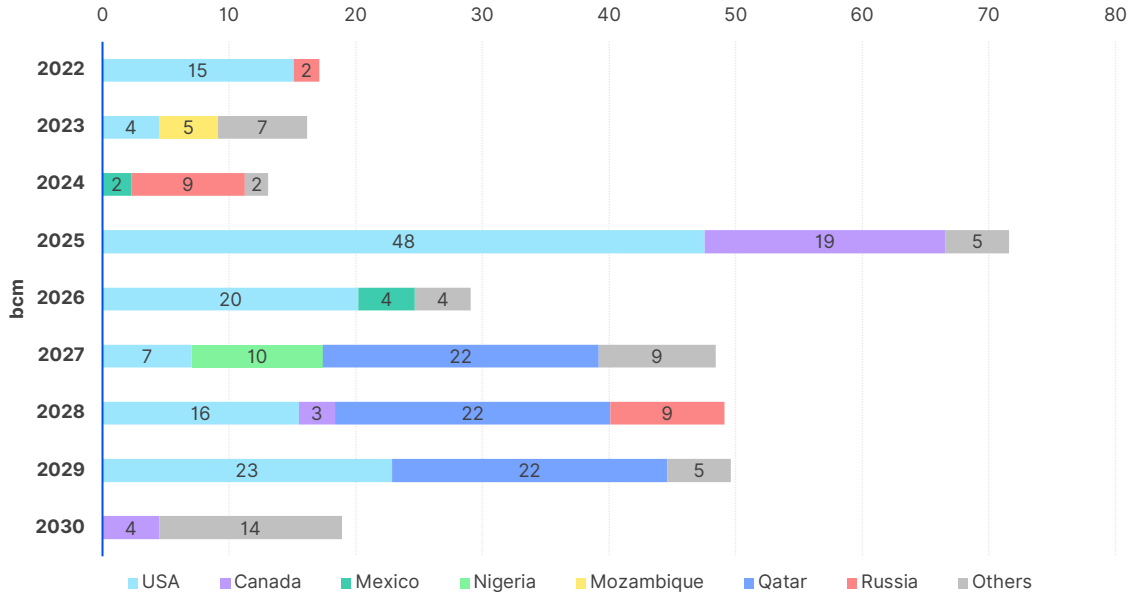
10 Global LNG liquefaction capacity currently stands at 745 bcm and is projected to increase by a further 200 bcm by 2030. However, the deteriorating security environment in the Middle East could delay the contribution from Qatar's expansion projects, initially expected for 2027-2028.

11 The extent to which new liquefaction capacity will be available to the spot market is likely to remain limited, as most LNG output is typically committed under long-term contracts. In general, between 85% and 95% of a project's production is pre-sold, leaving only 5% to 15% available for spot trading. The main exception is Qatar's North Field expansion projects due between 2027 and 2029, where only around half of the planned capacity has so far been tied up under long-term contracts.

12 The balance between long-term contracted and uncontracted volumes is shaped by several factors, with the debt-to-equity ratio being the most influential. Other relevant considerations include the level of government involvement, particularly where liquefaction assets are controlled by National Oil Companies, as well as the role of Export Credit Agencies in providing financial backing.

13 Long-term contracting remains the foundation of project bankability in the LNG sector, as it offers lenders revenue certainty and mitigates exposure to price and demand volatility. Chapter 3 will analyse how these upcoming additions to global LNG production capacity translate into contractual arrangements and assess the share of contracted volumes allocated to the European Union.

Figure 5: New capacity developments in global LNG liquefaction (bcm) - 2022 – 2030



Source: ACER based on data from S&P Global.

14 Future growth in global LNG production will primarily stem from new liquefaction plants being developed in the United States and Qatar, which together account for two-thirds of the upcoming liquefaction capacity as shown in Figure 5.

15 Outside Qatar and US, the outlook for new LNG capacity remains highly uneven. Russia faces continued uncertainty as EU and US sanctions constrain project development; exports fell by 6% in 2025 and utilisation dropped sharply, while Europe is expected to further reduce its intake of Russian LNG. In Africa, East African growth has been delayed by security and governance challenges, although Mozambique's outlook has improved following Coral North FLNG's final investment decision and the lifting of force majeure at Mozambique LNG. West Africa, by contrast, is expected to expand more steadily, with regional capacity reaching above 60 bcm by 2028.

16 Elsewhere, growth prospects are more limited and concentrated. Australia is expected to add only modest new capacity, with Pluto LNG Train 2 contributing around 7 bcm in 2027. In the Middle East, the main near-term additions outside Qatar are Ruwais LNG in UAE and Marsa LNG in Oman. Although both projects were initially expected to start in 2029, deteriorating regional security conditions could delay their start-up until 2030 or later.

Investment decisions in new LNG production capacity

17 Despite expectations of an LNG supply glut towards the end of the decade, 2025 was a remarkable year for final investment decisions in new LNG production capacity, with around 90 bcm of additional capacity sanctioned with the United States accounting for the majority of new projects. While this level of investment strengthens the medium-term supply outlook, it does not eliminate near-term market risks, as most projects are expected to start contributing additional volumes only towards the end of this decade but more significantly towards the beginning of the next one.

Table 1: Final investment decision on new liquefaction plants by country in 2025

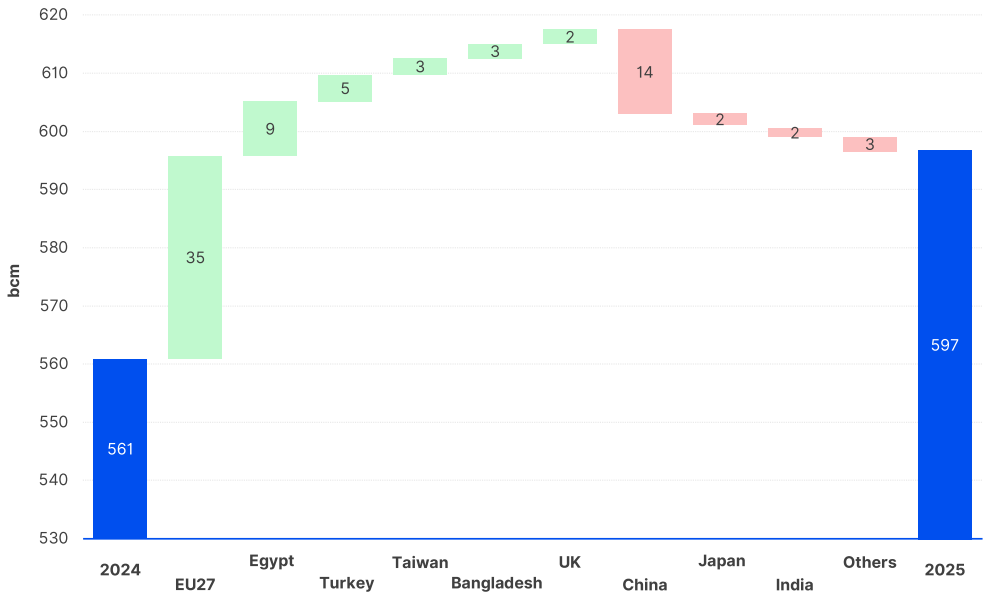
FID Date	Country	Project	Nameplate Capacity (bcm)	Developer	Expected start
April 2025	**United States**	**Louisiana LNG**	22.4	Woodside	2031
May 2025	**Argentina**	**Argentina FLNG 1**	3.4	Argentina FLNG	2029
June 2025	**United States**	**Corpus Christy T8-9**	4.0	Cheniere	2029
July 2025	**United States**	**CP 2 LNG (Phase 1)**	19.6	Venture Global	2028
August 2025	**Argentina**	**Argentina FLNG 2**	4.8	Argentina FLNG	2030
September 2025	**United States**	**Rio Grande Train 4**	7.4	Next Decade	2031
September 2025	**United States**	**Port Arthur (Phase 2)**	16.3	Sempra	2031
October 2025	**United States**	**Rio Grande Train 5**	7.4	Next Decade	2031
October 2025	**Mozambique**	**Coral North FLNG**	4.9	Coral North FLNG	2029

Source: ACER based on public announcements.

1.2. LNG demand

18 Global LNG consumption grew by 36 bcm in 2025 to reach 597 bcm. The European Union accounted for almost all net demand growth, with LNG consumption rising by 35 bcm year on year. Egypt also recorded a significant increase of 9 bcm, driven by lower domestic gas production and lower availability of gas supplies from Israel. China recorded the largest decline in LNG demand driven by weak industrial activity and slower economic growth, combined with higher domestic production and rising pipeline imports from Russia, reduced LNG imports by 14 bcm. Smaller declines were also recorded in other Asian markets, notably Japan and India.

Figure 6: LNG demand variations in 2025 compared to 2024 – bcm



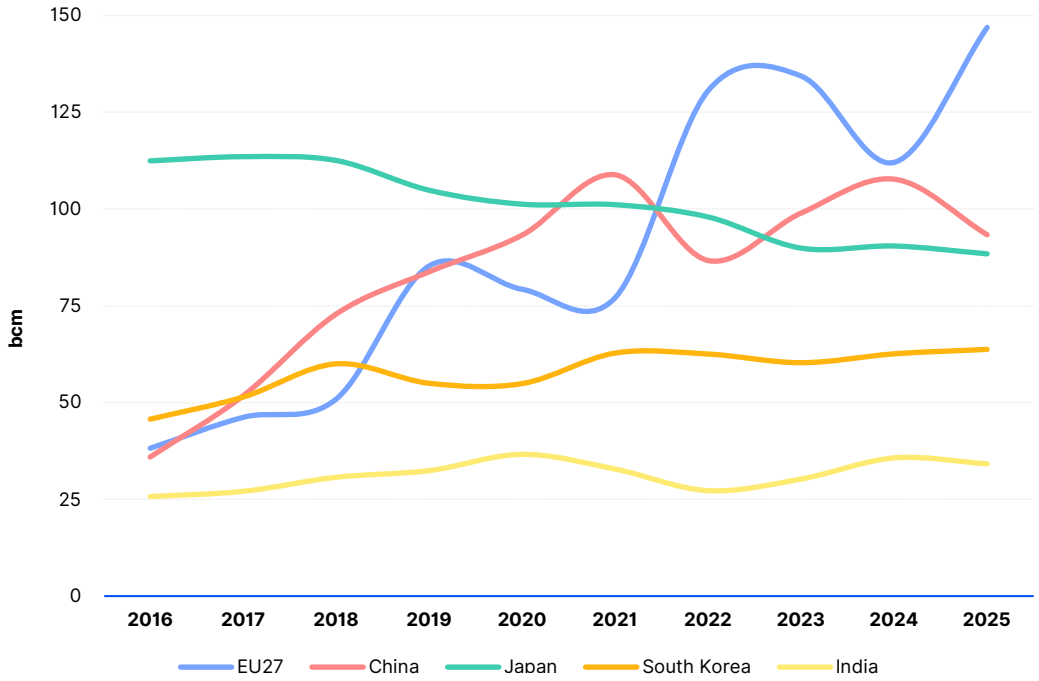
Source: ACER based on data from ICIS LNG Edge.

Shift in global LNG demand prospects for 2026

19 Before the escalation of the Middle East conflict, global LNG demand was expected to continue growing, but more moderately compared with previous years. LNG was set to remain a critical component of energy supply across several regions, supported by rising electricity demand, declining domestic gas production, limited pipeline import options, and the need for flexible generation capacity.

20 Overall, these trends pointed to a relatively supportive outlook for global LNG demand before the escalation of the Middle East conflict. However, the conflict has materially changed the short-term outlook. Greater uncertainty over supply availability has increased the risk of volatility and tighter market conditions. As a result, the immediate outlook is no longer driven primarily by demand growth, but by the possibility of lower gas consumption, due to gas-to-coal switching and demand reductions triggered by higher prices and weaker end user affordability.

Figure 7: Top 5 largest LNG importers (bcm) - 2016 – 2025



Source: ACER based on data from ICIS LNG Edge.

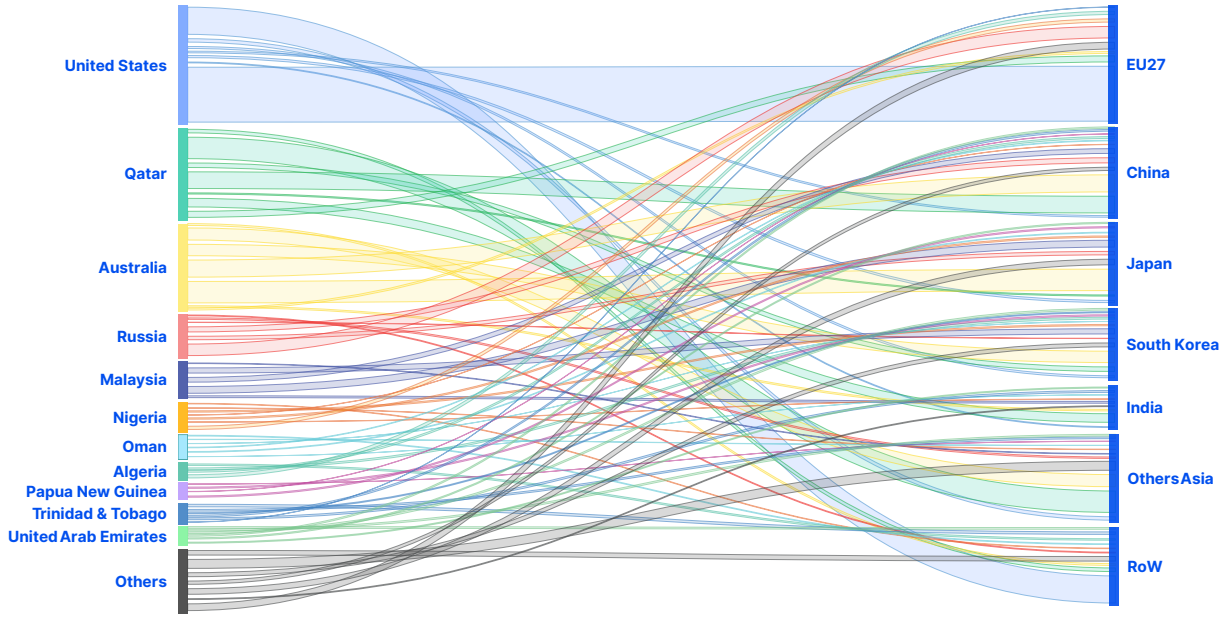
1.3. LNG trade

21 Trade flows between the Atlantic and Pacific basins declined significantly during the year, reflecting both shipping disruptions and stronger regional demand dynamics. LNG exports from the Atlantic Basin, particularly from the United States and West Africa, were mainly absorbed by European buyers. In 2025, the United States exported around 154 bcm of LNG, with approximately three quarters delivered within the Atlantic Basin. while LNG flows from the Middle East to Asian markets continued to increase and reached record levels in 2025. At the same time, LNG trade flows from the Middle East towards Atlantic Basin markets remained comparatively limited.

22 LNG shipping conditions in 2025 continued to be affected by disruptions across key maritime routes. Security concerns in the Red Sea resulted in a second consecutive year of severely reduced traffic through the Suez Canal, requiring many LNG carriers to reroute via the Cape of Good Hope. This increased average voyage durations, including for cargoes delivered from the United States to Asia and from Qatar to Europe. Although operational conditions in the Panama Canal improved compared with previous years, LNG transit volumes through the canal remained below historical levels. These developments contributed to changes in global LNG trade patterns, with a greater concentration of trade flows occurring within regional basins.

23 LNG freight rates remained below the 2024 average during most of the year, supported by continued fleet expansion and relatively comfortable vessel availability. However, freight rates increased again during the final quarter of 2025 as inter-basin trade activity strengthened and vessel availability tightened.

Figure 8: Sankey diagram of bilateral LNG trade in 2025



Source: ACER based on data from ICIS LNG Edge.

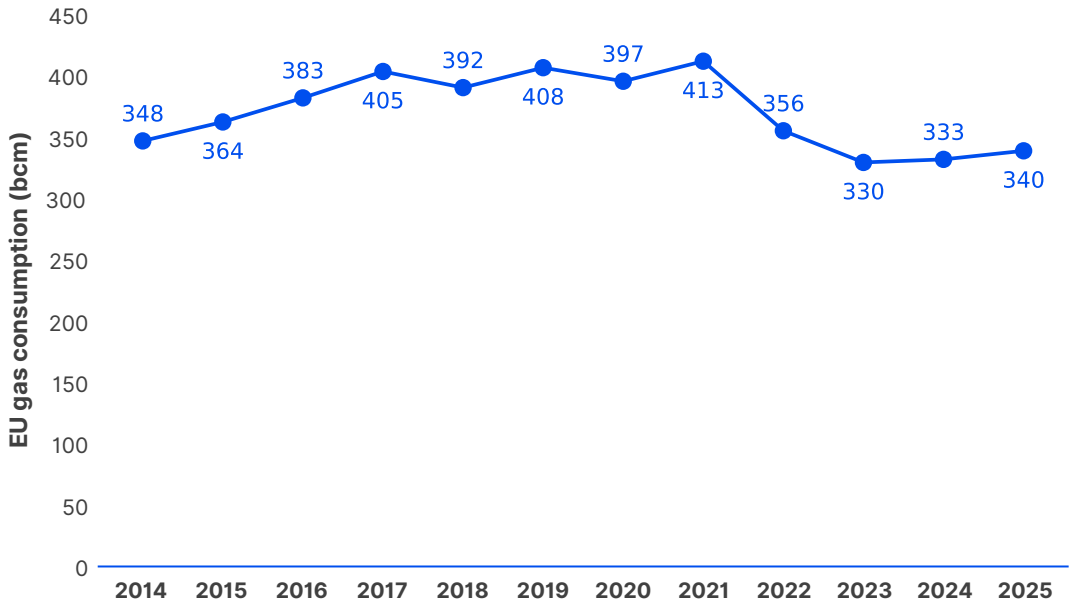
2. Overview of the EU LNG market

24 Chapter two provides an overview of the EU LNG market, examining the evolution of natural gas demand and the key factors shaping consumption across the European Union. It analyses evolution of LNG imports and regasification send-out flows by Member State. The chapter also reviews the main sources of LNG supply to the EU and the changing composition of the EU import portfolio. In addition, it assesses LNG price developments in Europe, including the role of ACER's LNG Price Assessment, and analyses the impact of the Middle East conflict in the EU.

2.1. Gas demand in the European Union

25 Gas consumption in the European Union has declined since 2019, reflecting the ongoing shift towards the electrification and decarbonisation of the EU energy system. Despite a modest increase in 2024 and 2025, consumption remained broadly stable following the 2022 energy crisis (see Figure 9).

Figure 9: EU gas demand evolution (bcm) 2019-2025

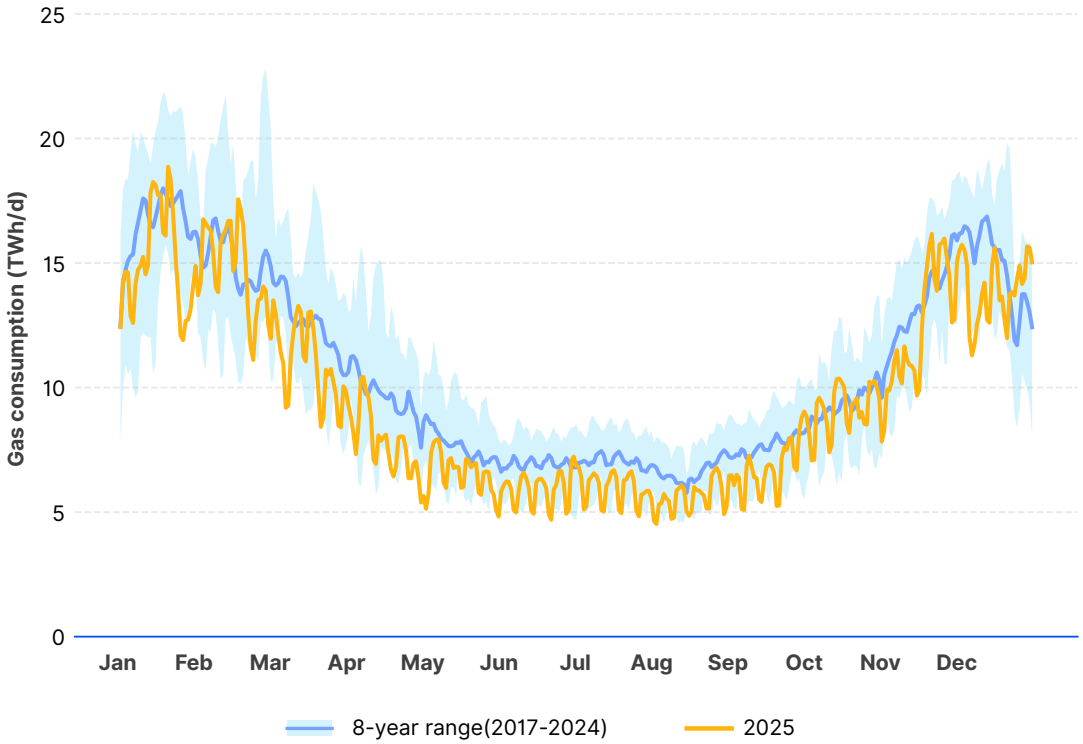


Source: Eurostat.

26 In 2025, EU gas demand increased slightly, mainly driven by higher gas use in power and heat generation, which accounted for around 24% of total EU gas demand. This reflected lower renewable output, higher electricity demand and the continued need for system flexibility. Industrial gas demand, representing around 40% of total demand, continued to decline amid higher prices, weak industrial activity and ongoing efficiency gains. Demand in the residential sector, accounting for around 36%, remained broadly stable, with slightly higher heating needs than in the previous year.

27 As shown in Figure 10, daily gas demand remained in the lower bound of the eight-year historical range for most of 2025, increasing to average levels during colder periods at the beginning and towards the end of the year.

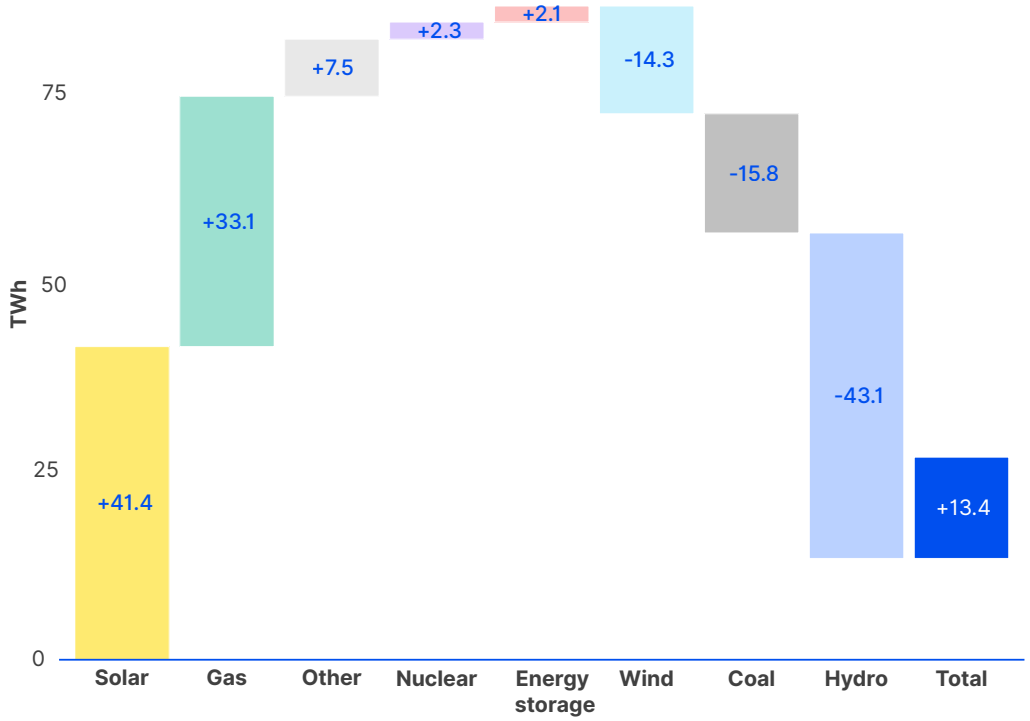
Figure 10: Daily gas consumption in the EU, 2025 compared to 2017-2024 – (TWh/d)



Source: ACER based on JRC's ENaGaD.
Note: Slovakia is missing in the EU aggregate.

28 Gas to power demand increased by 33 TWh in 2025, primarily due to the combination of higher electricity demand 13 TWh with hydropower output declining by 43 TWh and wind generation by 14 TWh which were only partially compensated by higher solar generation 41 TWh.

Figure 11: Year-on-year change for main electricity generation technologies in 2025

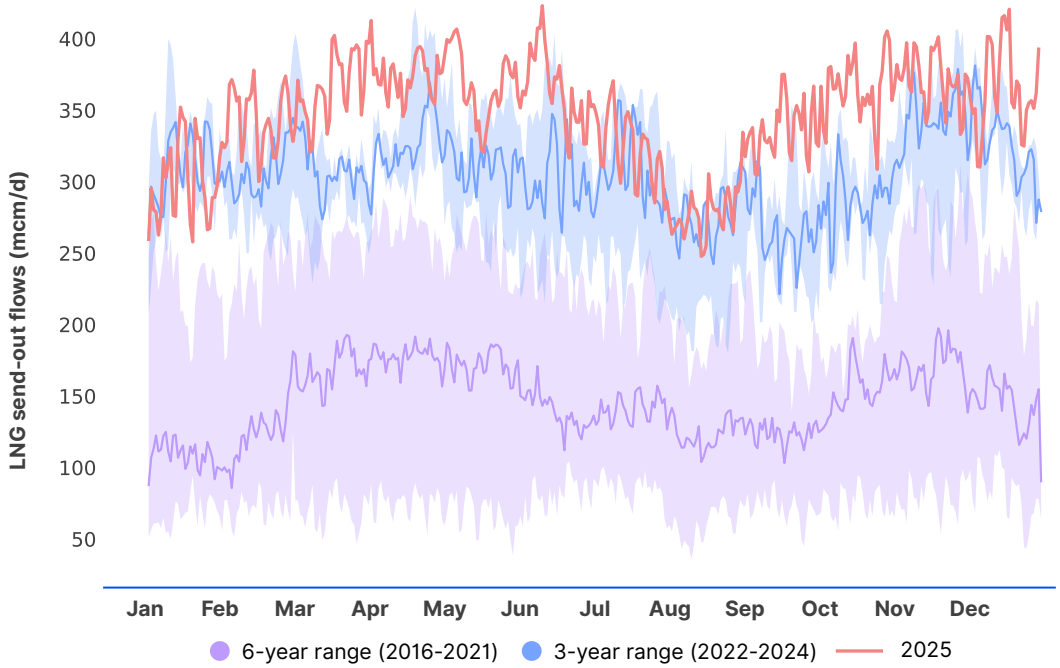


Source: ACER Key developments in European electricity and gas markets – 2026 Monitoring Report.
Note: ACER calculations based on ENTSO-E data. Note: Hydro does not include hydro-pumped storage. Hydro-pumped storage, biomass and other generation sources were accounted for separately, with other generation sources for which the aggregated variation in generation for 2024 was zero.

29 The increase in EU LNG imports in 2025 was driven less by the modest rise in gas demand than by the need to rebuild gas storage from a much lower starting point. On 1 April 2025, EU underground gas storage sites were only 33.8% full, compared with 58.5% on the same date in 2024. This required a sustained level of LNG imports throughout the year to support the refilling season. By 1 November 2025, storage levels had recovered to around 82% but remained well below the 95% reached one year earlier.

30 During 2025 the EU received 1,650 LNG cargoes, an increase of 267 shipments compared with the previous year. March 2025 recorded the highest number of unloadings within the year with a total of 150. This increase in LNG deliveries is reflected in the monthly regasification profile. In addition to the March peak, regasification levels in the final months of the year were significantly higher than the 2022–2024 average, in line with the greater number of cargo arrivals.

Figure 12: Daily evolution of LNG send-out flows in the EU (mcm/d)

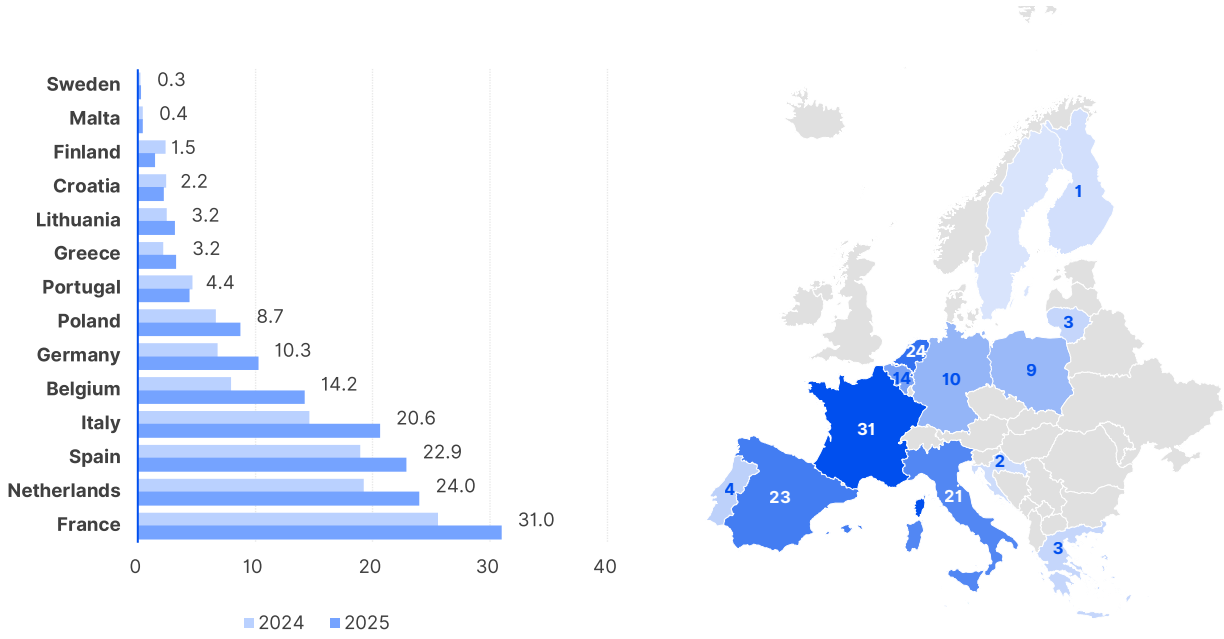


Source: ACER based on data from ALSI (GIE).

31 The growth of LNG imports in Europe must be understood in the broader context of Europe's natural gas supply and demand trends. Although LNG imports have increased in the last years to offset Russian gas piped supply, gas consumption decreased in response to the 2022 energy crisis and it is expected to decline further driven by the ongoing shift toward electrification and decarbonisation of the EU's energy system.

32 Figure 13 illustrates the distribution of LNG imports across EU Member States and their year-on-year variation. France remained the largest importer, with 31 bcm, maintaining its leading position since 2022. It was followed by the Netherlands (24 bcm) and Spain (23 bcm). The largest increases in LNG imports were observed in Belgium and Italy, with rises of 6.3 bcm and 6 bcm respectively. By contrast, slight declines were recorded in Finland, Portugal, and Croatia. LNG imports increased significantly in both Poland and Germany, with especially remarkable growth in Germany, rising from zero in 2022 to approximately 10 bcm in 2025.

Figure 13: LNG demand variation and imports by EU Member State (bcm) - 2024 – 2025



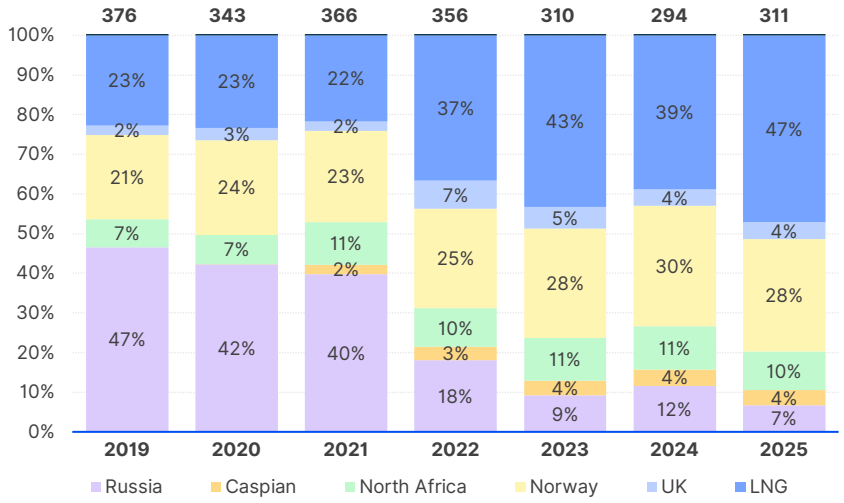
Source: ACER based on data from ICIS LNG Edge.

2.2. Sources of LNG supply to the European Union

33 The EU gas supply mix has experienced a marked transformation between 2019 and 2025. The share of Russian pipeline gas declined dramatically, from 47% in 2019 to just 7% in 2025. Over the same period, LNG increased its share from 23% to 47%, becoming a central component of EU gas supply, while Norway's pipeline supply share rose from 21% to nearly 30%. By contrast, pipeline imports from North Africa remained broadly stable, and pipeline supplies from the Caspian region and the United Kingdom changed only marginally.

34 The most significant adjustment took place between 2021 and 2022, when the sharp contraction in Russian pipeline gas imports was compensated primarily by increased LNG inflows and higher pipeline imports from Norway. As a result, by 2025 LNG and Norway pipeline supply together represented around three quarters of total EU gas supply.

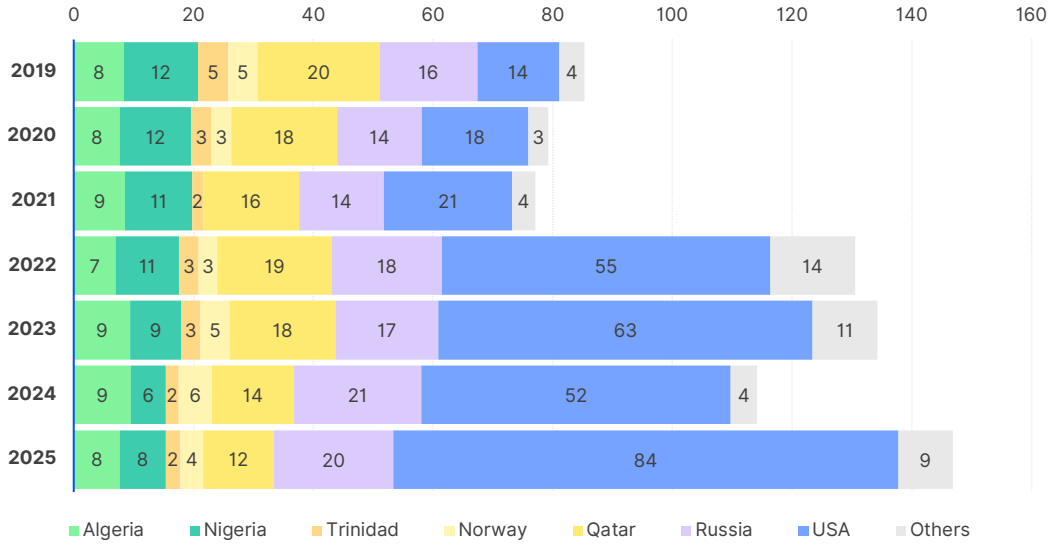
Figure 14: Evolution of gas deliveries into the EU by supply route - 2019 – 2025 (bcm)



Source: ACER based on data from ICIS LNG Edge and ENTSOG.

35 The EU gas balance in 2025 remains characterised by a high level of import dependency. With gas demand standing at 340 bcm and domestic production, including fossil gas and biomethane, limited to only 38 bcm, the Union remains reliant on 311 bcm of gas imports, split between pipeline imports (53%) and LNG imports (47%). Within this supply balance, U.S. LNG has a prominent position. At 84.4 bcm, it represents 58% of total EU LNG imports or 25% of the EU's gas consumption in 2025.

Figure 15: Evolution of LNG supply sources into the EU 2019 – 2025 (bcm)



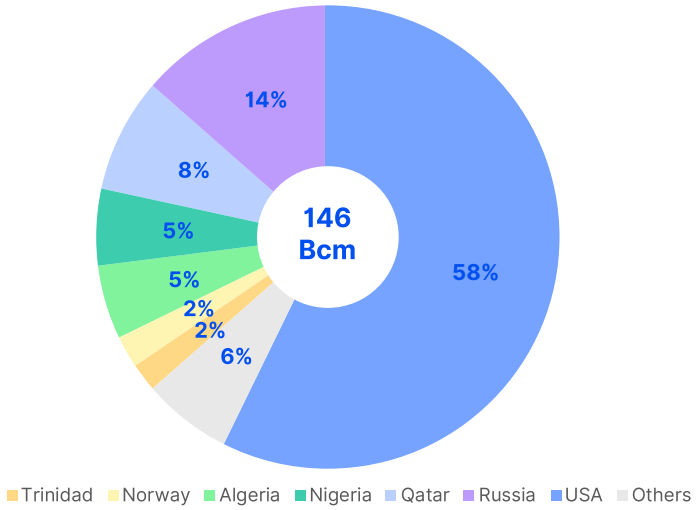
Source: ACER based on data from ICIS LNG Edge.

36 Imports from Qatar, the EU's third-largest LNG supplier, accounted for 8% of EU LNG imports and around 4% of EU gas consumption. These volumes are expected to decline in 2026 due to the closure of the Strait of Hormuz and the time required to repair damaged liquefaction facilities. In this context and considering that Russian LNG will no longer be imported into Europe from 2027 under the Russian gas phase-out regulation[2], the share of U.S. LNG in the European supply mix is likely to increase.

2 Regulation on phasing out Russian imports of both pipeline and liquified natural gas (Regulation EU/261/2026).

37 LNG production capacity in the U.S. Gulf Coast is expected to exceed 300 bcm by 2030 with around 160 bcm already operational and a further 140 bcm under construction. Given the strategic importance of U.S. LNG in supporting the EU gas balance and security of supply, this extraordinary high concentration of capacity in a region historically exposed to hurricanes, underlines the need to assess supply security not only in terms of geopolitical context and commercial relationship, but also in light of potential operational disruptions. In this context, maintaining a diversified import gas and LNG portfolio remains essential to strengthening EU's resilience and security of supply.

Figure 16: Diversification of EU LNG importing sources in 2025



Source: ACER based on data from ICIS LNG Edge.

2.3. EU LNG price developments

2.3.1. Spot transactions under ACER LNG price assessment

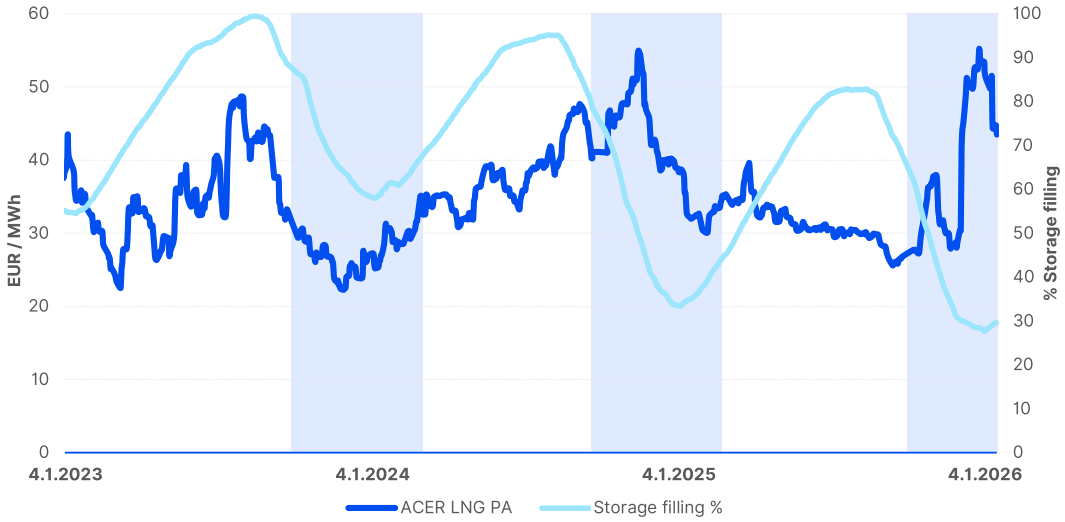
38 In December 2022, Council Regulation (EU) 2022/2576 tasked ACER with the responsibility of producing and publishing a daily LNG price assessment, which would subsequently evolve into a daily LNG price benchmark, commencing in January 2023. The primary goal was to identify the prevailing level at which LNG transactions occurred, to enhance EU LNG price transparency and to better understand the reasons behind the ample price differentials between LNG transactions and the gas prices within EU Virtual Trading Points

39 The Regulation granted ACER with the necessary powers to gather data for establishing the LNG benchmark. In pursuit of this, ACER developed reporting guidance and a data reporting tool to collect real-time information on LNG transactions. Concurrently, ACER, assisted by various LNG market experts, developed a methodology clarifying how the reported data is utilised to produce the daily referential price.

40 ACER collects information on spot-type concluded transactions, bids, and offers, as well as data about individual transactions executed under portfolio-type contracts. The latter relates to long-term gas delivery contracts for larger volumes and comprises several transactions within the same overarching contract.

41 The reported transactions must have the EU as destination. The methodology establishes the data hierarchy, and the calculation steps employed in the assessment process for the publication of daily spot LNG prices (see Figure 17). Essentially, ACER's LNG price assessment consists of a time[3] and volume weighted average price of spot Delivery Ex-Ship (DES) transaction prices reported for the purchase or sale of LNG with delivery in the European Union. For the sake of transparency, ACER presents in this section key insights related to the data reported to ACER for the calculation of the LNG price benchmark.

Figure 17: ACER EU daily spot LNG price assessment (EUR/MWh, %)

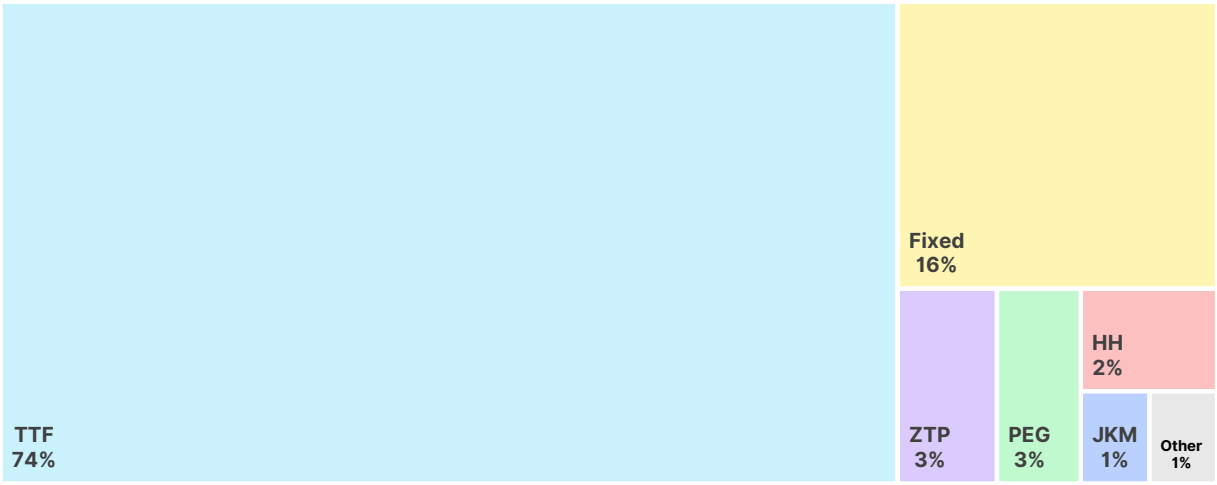


Source: ACER LNG Price Assessment & Benchmark and AGSI (GIE).

42 Spot LNG trades for cargoes delivered to Europe in 2025 amounted to approximately 81 bcm, comprising more than 980 reported transactions involving 87 companies across buyers and sellers. This represents a marked increase compared to the 550 spot transactions reported in 2024. Over the same period, uncontracted LNG volumes, increased from 31 bcm in 2024 to 54 bcm in 2025, in line with higher EU LNG imports. When compared with the size of the EU's uncontracted LNG market, the resulting churn rate (ratio of traded volumes to physically available supply) reached 1.5, suggesting that each uncontracted LNG molecule was traded on average 1.5 times before reaching its final destination.

3 A rolling window of up to ten working days is used to identify, aggregate and analyse the LNG market data used in each daily LNG price assessment.

Figure 18: Breakdown of price indexation for spot trade in Europe 2025 - %



Source: ACER based on information from ACER's LNG Price Assessment & Benchmark.

Disclaimer: The analysis uses the data reported by reporting parties to TERMINAL[4]. The TERMINAL data may not be complete, fully accurate and/or reported in a timely manner. ACER thus reserves the right to update the figures and outcomes of the analysis in the event of newly identified data quality issues.

43 The TTF, Europe's most liquid natural gas benchmark, remained the dominant price index for EU LNG spot pricing in 2025, serving as the reference for 74% of spot traded volumes. In contrast, other regional hubs such as the ZTP (Belgium), PEG (France) played only a marginal role in LNG spot price indexation accounting for just 3% each one of total indexed volumes, reflecting their more limited liquidity and regional scope compared to the TTF's broader market influence.

44 Fixed-price indexation slightly increased up to 16% of EU spot LNG trades. These deals were priced at a set value agreed upon at the time of the transaction, independent of any market index. Fixed-price arrangements are often used for opportunistic buying or short-term optimisation when market conditions are stable or predictable.

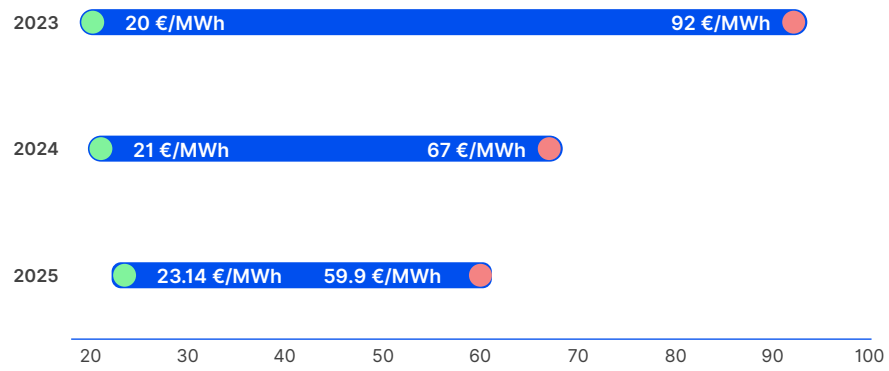
45 Influence of Henry Hub, the U.S. natural gas benchmark as LNG spot price indexation dropped from 4% to 2% of spot traded volumes. Same as Japan Korea Marker (JKM) which also halved, from 2% to 1% despite of being the leading LNG benchmark in Asia.

46 TTF continues to serve as the primary indexation term for European LNG spot trade, reflecting its deep liquidity and wide acceptance as a benchmark for gas in Europe. For long-term contracts, Henry Hub is the predominant index, accounting for over half of the volumes destined for the EU, followed by Brent indexation, which represents more than one-third of the contracted European LNG volumes.

47 Figure 19 illustrates the annual price range of EU LNG spot trades since ACER started receiving transactions from market participants in 2023 as part of the ACER's LNG price assessment. 2023 still recorded high volatility during the aftermath of the energy crisis indicating significant market uncertainty and price spikes during the year. In the following years, the price range has narrowed considerably, suggesting a gradual stabilization of the market with prices ranging from 21 EUR/MWh to 67 EUR/MWh in 2024. During 2025 the range further contracted to 23 EUR/MWh and 60 EUR/MWh. Overall, the figure highlights a clear trend toward reduced volatility and lower peak prices in the European gas market over the three-year period.

4 TERMINAL is a dedicated data collection system developed by ACER for the publication of the LNG price assessment and benchmark.

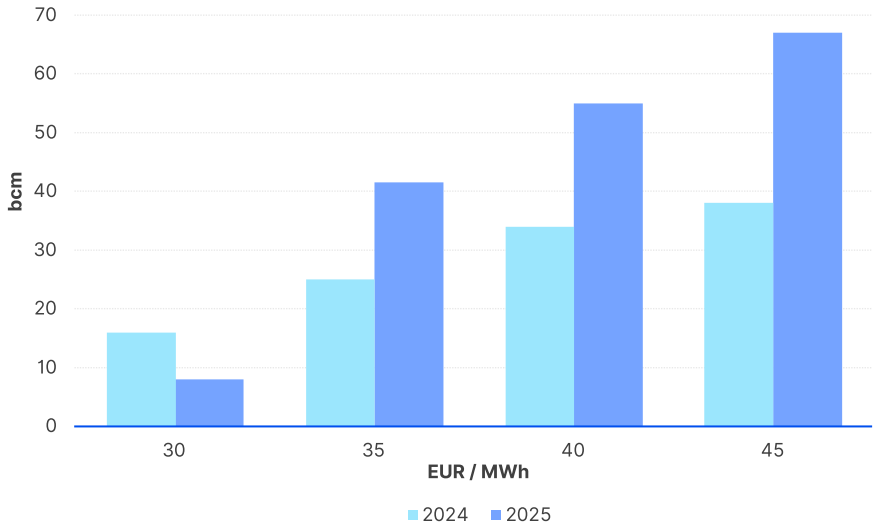
Figure 19: Price range of the EU spot LNG transactions between 2023 and 2025



Source: ACER based on information from ACER's LNG Price Assessment & Benchmark.

48 According to the LNG spot transactions reported for delivery in the EU within 2025 only 8 bcm, equivalent to 10% of EU spot LNG trades were transacted at prices below 30 EUR/MWh. When increasing the price threshold up to 35 EUR/MWh the cumulative traded volume reaches 41.5 bcm, equivalent to more than half of all spot LNG volumes were transacted at below this level or 51% of total EU spot LNG trades. If extended to 40 EUR/MWh, the spot LNG traded volumes increase up to 55 bcm, or two-thirds of all spot LNG volumes, fall within this range. At the upper threshold of 45 EUR/MWh, the volume of LNG traded reached 67 bcm, covering 82% of total spot market transactions. Leaving the amount of 14 bcm of LNG were traded at prices above 45 EUR/MWh.

Figure 20: Cumulative spot LNG volume traded under selected price thresholds - 2025

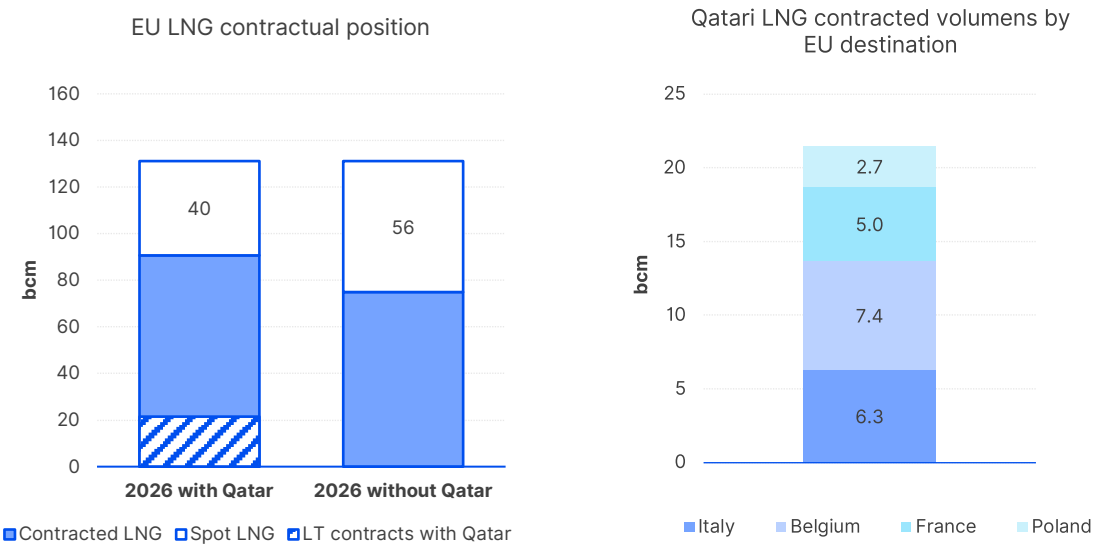


Source: ACER based on information from ACER's LNG Price Assessment & Benchmark.

2.3.2. Middle East conflict and price developments[5]

49 The crisis in the Middle East is triggering price volatility and uncertainty over supply availability due to the blocking of the Strait of Hormuz and damage affecting part of LNG production capacity. The Strait of Hormuz is a critical maritime chokepoint, with two very narrow navigation lanes of around 4 kilometres each, located close to Iran's coastline. Its closure blocks LNG exports from Ras Laffan Industrial City in Qatar and Das Island in the United Arab Emirates, which together have around 112 bcm per year of liquefaction capacity, representing approximately 20% of global LNG supply.

Figure 21: EU LNG contractual relationship with Qatar (bcm)



Source: ACER based on data from ICIS LNG Edge and S&P Global.

50 As a result of the escalation of the conflict in the Middle East, liquefaction Trains 4 and 6 at Qatar's former RasGas complex have been damaged, placing part of Qatar's LNG production capacity offline. The affected liquefaction trains, co-owned by Qatar Energy and ExxonMobil, have a combined production capacity of 17.4 bcm per year, 3% of global LNG production capacity. Even if the Strait of Hormuz reopens, Qatar Energy expects the restoration of the affected liquefaction capacity to take between three and five years. As a result, the producer has declared force majeure on LNG contracts for deliveries to China, South Korea, Italy and Belgium.

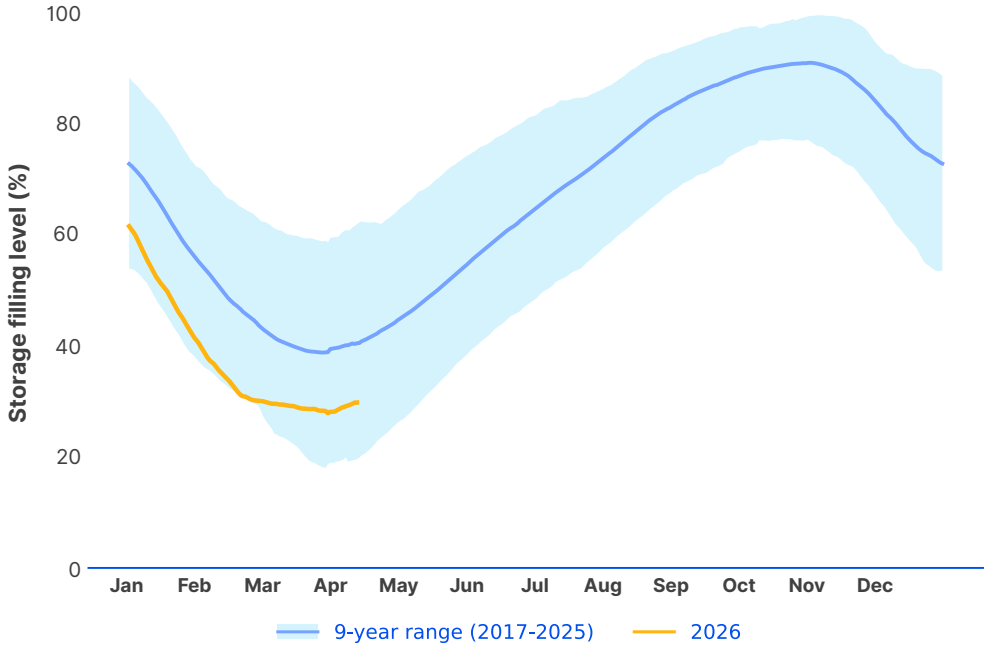
51 Onsite staffing at Qatar Energy's North Field expansion project has been reduced due to security concerns, delaying capacity expansion works until at least 2027 and pushing back plans to gradually add 65 bcm of production capacity over the coming years.

52 EU contracted LNG volumes from Qatar in 2026 amount to approximately 21.5 bcm, representing about 6.4 % percent of EU annual gas demand, with Belgium, Italy, France and Poland holding the main contracts. EU spot LNG demand is estimated at around 40 bcm in 2026 but could rise to approximately 56 bcm if Qatari supply remains offline from April to December 2026, increasing EU exposure to the LNG spot market (see Figure 21).

5 Based on developments up to 30 April 2026.

53 The EU is entering the 2026 storage refill season with a comparatively low storage buffer, with inventories at around 28% and well below the nine-year average. At the same time, intensified competition from Asian buyers for spot LNG cargoes is adding pressure to an already tight market.

Figure 22: EU gas storage levels at the start of 2026 compared to the nine-year average



Source: ACER based on information from AGSI GIE.

54 The Gas Storage Regulation adopted during the 2022 energy crisis introduced a mandatory target requiring storage facilities to be filled to 90 percent by 1 November, supported by intermediate targets for each Member State (February, May, July and September). These measures proved essential in strengthening resilience, reducing market uncertainty and limiting price volatility. While initially set to expire on 31 December 2025, an amending regulation[6] adopted in July 2025 extended the gas storage filling provisions for two years until the end of 2027.

55 The revised Gas Storage Regulation maintains the core objectives of predictability and transparency in the use of storage across the Union, while introducing additional flexibility to allow Member States to better respond to changing market conditions and secure more favourable gas purchasing conditions, without compromising security of supply.

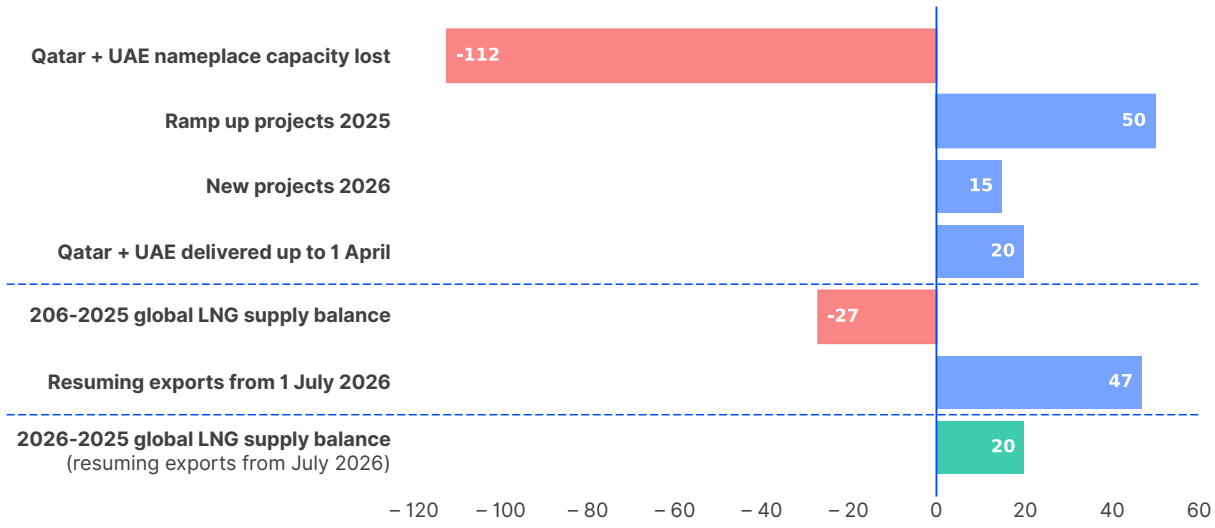
- the existing binding target of 90% for gas storage is maintained, but with flexibility in meeting it anytime **between 1 October and 1 December**, replacing the current hard deadline of 1 November
- a **10% flexibility** is introduced in case of difficult conditions in filling the storages. Additionally, through a delegated act, the European Commission may increase the flexibility towards the filling target by up to an **additional 5**% in case of persistent unfavourable market conditions which can potentially reduce storage requirements to as low as 75%
- **intermediate storage targets will become indicative**, offering predictability in storage levels while allowing market participants to purchase gas throughout the year when conditions are most advantageous.

6 Amending Regulation (EU)2017/1938 as regards the role of gas storage for securing gas supplies ahead of the winter season.

56 New supply is expected to come online in 2026, including the Golden Pass LNG project (around 7 bcm per year) and additional capacity from the Corpus Christi expansion (around 8 bcm per year), as well as further ramp-up from projects that started commercial operations in 2025, such as LNG Canada, Plaquemines, Greater Tortue and Corpus Christi Stage 3. Although Plaquemines made its first delivery in December 2024, it ramped up significantly during 2025. However, this additional supply would not be sufficient to offset the 27 bcm of LNG production that would be lost if the Strait of Hormuz remained closed throughout 2026.

57 Under a Strait of Hormuz reopening scenario which allow Qatar and the UAE resume production to pre-disruption levels by 1 July, LNG incremental output would increase by 47 bcm once deducting the 17% of Qatari LNG capacity damaged. After accounting for ramp-up production and new capacity additions, incremental production in 2026 would still record a net increase of close to 20 bcm.

Figure 23: 2026-2025 Global LNG supply variation (bcm)



Source: ACER based on data from ICIS LNG Edge and S&P Global.

58 In the absence of additional supply, market adjustment must occur on the demand side, with high prices acting as the main balancing mechanism. On the one hand, high prices incentivise LNG producers to maximise output in order to capture higher returns. On the other, they discourage gas consumption by prompting demand reduction, efficiency gains and fuel switching where possible. Once supply has reached its operational limits, the burden of adjustment falls increasingly on the demand side.

59 Governments in Asia, including Vietnam, Thailand, Indonesia, Pakistan, Bangladesh, Philippines, Taiwan, are revisiting measures introduced during COVID times to reduce energy consumption and manage supply shortages. Some of the measures to curb energy demand include switching to alternative and more pollutant fuels, introducing remote working, cutting working days suspending education and limiting domestic flights.

60 Several countries, including China, Japan, South Korea, Thailand, Vietnam, and the Philippines, are temporarily switching to coal and reducing LNG usage:

- Thailand's government is restarting two coal plants that it decommissioned last year.
- China has intensified efforts to maximize domestic coal and renewable energy production, aiming to reduce dependence on energy imports.
- South Korea removed its 80% operating cap on coal-fired generation.
- Japan is lifting caps on coal power generation, allowing older and less-efficient plants to operate at full capacity for up to a year.

61 In the EU, similar dynamics are emerging, including increased reliance on coal as a temporary alternative to gas for power generation in several Member States, including Italy, the Netherlands and Germany. The European Commission has called for demand-reduction measures, a faster rollout of renewable energy and earlier gas storage injections, making full use of the filling flexibility provided under the Gas Storage Regulation, in order to help contain pressure on gas prices.

62 The current crisis reinforces the importance of reducing reliance on imported fossil fuels by accelerating the deployment of renewable energy, improving energy efficiency, and diversifying supply sources.

High-Level Assessment of the ability of EU LNG import capacity to complement a 60% storage filling level

The following calculation provides a simplified overview at EU level. Its feasibility should be contrasted with a thorough country-level assessment and detailed modelling at daily resolution, incorporating pipeline imports, intra-EU cross-border flows, storage deliverability, and LNG send-out capacity.

The difference between 80% and 60% filling levels in underground storage corresponds to approximately: 230 TWh (~20 bcm), assuming a period of 120 days, for the key winter months from December to March.

Would the LNG import infrastructure able to compensate for this gap?

EU LNG storage capacity: 62.5 TWh
EU LNG send-out capacity: 4 TWh/day

At full capacity, EU LNG storage (62.5 TWh) can be fully regasified in approximately:
15.6 days (62.5 ÷ 4 TWh/day).

Total LNG required to cover an additional 20% storage gap: 230 TWh

LNG storage would need to be cycled approximately 4 times:
230 TWh (20% storage gap) / 62.5 TWh (LNG storage capacity) = 3.68

Regasifying 230 TWh would take: ~57.5 days (230 ÷ 4 TWh/day)

LNG Cargo Requirements

230 TWh would require approximately 230 LNG cargoes.

Given that the EU has 30+ LNG import terminals:

Receiving 1 cargo per terminal every 10 days over 120 days results in:
~360 LNG cargoes.

The above analysis should be regarded as a general cross-check, indicating that existing aggregated LNG import capacity would, in principle, be sufficient to compensate for the gap between 60% and 80% underground gas storage (UGS) filling levels. However, confirming this would require detailed, country-level modelling at daily resolution. Such analysis would need to account for the singularities and heterogeneity across Member States, such as some being landlocked countries, limited or absent geological formations for underground gas storages in some regions, disparities in cross-border capacity and connectivity, and variations in access to import pipelines or domestic gas production.

Should such modelling confirm that LNG import capacity is sufficient to bridge the 60%–80% gap, it would suggest that there are no major infrastructure constraints. The main challenge would then be the timely availability of supply rather than the LNG import capacity itself.

The complementarity between LNG regasification terminals and underground gas storage (UGS) is essential for the EU gas system. Both represent the primary sources of flexibility and security of supply. While both contribute to system resilience, they operate on different time horizons and address distinct types of supply risks.

3. Future role of LNG in the EU energy system

63 The third chapter of this report introduces the regulatory framework that will influence LNG in the EU in the coming years and examines the EU's LNG contracting landscape, focusing on the balance between long-term contractual commitments and exposure to the short-term and spot market. The analysis quantifies the share of expected LNG demand already secured through existing agreements under each demand scenario, and identifies the remaining volumes that will need to be sourced from the spot market.

3.1. Regulatory framework influencing LNG's future in the EU

3.1.1. Fit For 55 Package

64 The Fit for 55 package is a set of interconnected and complementary laws aiming to make operational the goal in the European Green Deal of reducing EU greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels, putting the EU to the path to achieve climate neutrality by 2050. The package proposes reforms to the main pillars of the EU's legal climate and energy architecture:

- The revised EU Emissions Trading System (ETS1) tightens the emissions cap for industrial and energy installations, aircraft operators and, as of 2024, maritime transport by 62% by 2030 compared to 2005 levels, while progressively reducing free allowances allocated to companies. Additionally, a separate carbon market (ETS2) for buildings, road transport and small industries will become fully operational in 2028.

- The Carbon Border Adjustment Mechanism (CBAM), introduced in parallel to the phasing out of free allowances under the ETS, imposes a carbon cost on imports of energy intensive goods, namely iron and steel, cement, fertilisers, aluminium, hydrogen and electricity, to counter carbon leakage. The carbon cost is equivalent to the price applicable had the goods been produced under EU's carbon pricing rules.

- The 2024 hydrogen and decarbonised gas markets package updated the regulatory framework governing the EU natural gas market, with the objective of reducing its carbon footprint by facilitating the transition from natural gas to renewable and low-carbon gases. It includes new rules on hydrogen network development, biomethane injection, the gradual repurposing of gas infrastructure, and compatibility requirements for long-term gas contracts with the EU's 2050 climate neutrality objective.

- To increase overall ambition, key energy legislation has been amended. The Renewable Energy Directive (RED) sets a tighter target of 40% for the share of renewable energy in final energy consumption by 2030, while the Energy Efficiency Directive (EED) introduces a binding reduction target for final energy consumption of 9% in 2030 relative to 2020 projections. The Energy Taxation Directive is revised to better align taxation with climate objectives and extend its scope to additional fuels in aviation and maritime transport.

- Within the transport sector, the ReFuelEU Aviation and FuelEU Maritime regulations require, respectively, aircraft operators and ships calling at EU ports to progressively increase the share of sustainable fuels in their fuel mix. Furthermore, the Alternative Fuels Infrastructure Regulation (AFIR) is revised to support the uptake of alternative fuel vehicles across all transport modes.

65 Fit for 55 is deployed gradually to allow sectors to adapt. Most texts were adopted between 2023 and 2024. Key milestones are listed in Table 2.

Table 2: Key milestones under FitFor 55

Milestone	Year
CBAM transitional phase	October 2023
CBAM phase in	2026
ETS maritime transport obligations fully phased in	2026
Gradual removal of free ETS allowances for CBAM sectors	2026-2034
ETS2 launch	2028
55% GHG reduction target	2030
Climate neutrality target	2050

EU ETS extension to maritime transport

66 Since January 2024, the EU ETS applies to CO_2 emissions from large ships over 5,000 gross tonnage, including LNG carriers. Under the system, ship operators must purchase and surrender EU ETS allowances, with each allowance corresponding to one tonne of CO_2 emitted. Coverage will expand in 2026 to include methane and nitrous oxide. Operators must surrender allowances for 40% of verified CO_2 emissions in 2024, rising progressively to full coverage from 2026. However, only 50% of emissions from voyages between EU and non-EU ports are covered, partially limiting the overall cost impact.

67 ETS allowance prices have fluctuated between €60 and €100 per tonne of CO_2 in recent years. As a result, compliance costs for LNG shipping depend on fuel consumption, voyage distance, the applicable coverage factor and EUA prices. These costs are expected to increase over time as emissions caps tighten and carbon prices rise.

FuelEU Maritime and LNG Fuel Standards

68 Effective January 2025, FuelEU Maritime sets greenhouse gas intensity limits for ship fuels. Targets become progressively stricter, from 2% in 2025 to 80% in 2050. The regulation applies to ships over 5,000 gross tonnage, covering 100% of energy use on intra-EU voyages and 50% on international routes. LNG-fuelled ships initially benefit from favourable default values and compliance flexibility under FuelEU Maritime. Most LNG carriers are expected to generate surplus credits in the early years, which can be banked or pooled. However, this advantage is expected to erode after 2030 as targets tighten and methane slip factors are tightened.

69 FuelEU Maritime, EU ETS for maritime transport, and the new International Maritime Organization agreement[7] are expected to encourage the use of Bio-LNG and other renewable gases to meet compliance targets from 2030 onwards.

7 In 2023, IMO adopted a revised greenhouse gas strategy, aiming for net-zero emissions from international shipping by 2050. Interim targets include at least 20% reductions by 2030 and 70% by 2040, relative to 2008.

3.1.2. REPower EU

70 Launched in May 2022 in response to the energy market disruptions caused by Russia's invasion of Ukraine, the REPower EU Plan is the Union's strategy to end dependence on Russian fossil fuels, strengthen energy security, and accelerate the clean energy transition following the disruptions caused by the Russian invasion of Ukraine. It builds on the framework of the European Green Deal and updates existing legislation under the Fit for 55 package. The plan rests on three pillars.

- The first pillar targets **energy saving and efficiency**. After the 2022 energy crisis, a voluntary gas reduction target of 15% compared to the average demand between 2017 and 2021 was set in the Gas Demand Reduction Regulation, which is no longer in force, but proved durable as gas consumption continued to decline beyond its mandate. On the energy efficiency side, the binding energy consumption reduction target under the EED is raised from 9%, as proposed in the FF55, to 11.7% by 2030.

- The second pillar focuses on the **diversification of energy imports**, to offset Russian supply through alternative pipeline gas (+10 bcm) and LNG (+50 bcm). Its centrepiece is a coordinated EU-level purchasing architecture for non-Russian gas, LNG and hydrogen, established in 2022 as the EU Energy Platform and subsequently evolved, in 2025, into the broader EU Energy and Raw Materials Platform. In parallel, the EU strengthened its external energy engagement, deepening partnerships with key supplier countries, such as the U.S., Norway, North Africa and Qatar, and reinforcing its energy diplomacy in line with the EU External Energy Engagement Strategy.

- The third pillar accelerates the **clean energy transition**. The revised Renewable Energy Directive (RED III) raises the binding renewable energy target from 40% under the FF55 to 42.5% by 2030, with an ambition of 45%. RED III is complemented by other sector-specific targets for solar and wind power, heat pumps and renewable gases. On hydrogen, REPowerEU sets a combined target of 20 Mt of renewable hydrogen consumption per year by 2030, underpinned by a dedicated legislative framework including delegated acts on Renewable Fuels of Non-Biological Origin production conditions and greenhouse gas savings. On biomethane, the plan establishes a production target of 35 bcm by 2030.

71 In May 2025, the European Commission published the REPowerEU Roadmap to set out a phased and coordinated removal of remaining Russian oil, gas and nuclear energy from EU markets, to be implemented in a way that preserves security of supply, minimises price impacts and is consistent with the broader clean energy transition.

Phase out of Russian gas imports Regulation

72 On 26 January 2026, EU countries formally adopted the Regulation on phasing out Russian imports of both pipeline and liquified natural gas (EU/261/2026), which was published in the Official Journal of the EU on 2 February, turning the REPowerEU roadmap into EU law.

73 According to the EU Regulation 2026/261, a legally binding prohibition on importing Russian gas, both pipeline and LNG are in force since 18 March 2026 for new gas supply contracts. A transition period is foreseen for existing gas supply contracts (i.e. supply contract concluded before 17 June 2025, and not amended thereafter, unless the amendment is one of the exceptions[8] described in Regulation). During this transition period, the following exceptions for Russian gas imports will apply subject to a prior authorisation regime where authorisation requests must be submitted at least one month before entry into the EU:

Table 3: Transition period defined for existing Russian gas supply contracts

Supply form	Short-term contracts	Long-term contracts
LNG	25 April 2026	1 January 2027
Pipeline	17 June 2026	30 September 2027[9]

74 Prior authorisation of imports: from 18 March 2026 onwards all gas imports to the EU shall be subject to prior authorisation with the only exception of natural gas imported from a country which produces natural gas and has exported more than 5 bcm of natural gas to the Union in 2024, and

a) has prohibited the import of natural gas that originates or is exported, directly or indirectly, from the Russian Federation or is applying other restrictive measures concerning such gas; or

(b) has no gas infrastructure in place which allows to import LNG or pipeline gas.

75 Suspension clause: in case of sudden and significant developments, which seriously threaten the security of supply of one or more Member States, and after an emergency[10] has been declared. The Commission should be able to suspend the requirement of prior authorisation for the entry of gas imports into the customs territory of the Union, in order to facilitate additional imports on short notice. The suspension by the Commission should be limited in time and not be granted for more than 4 weeks at a time and should only be renewed if the conditions for the emergency pursuant to Article 11 of Regulation (EU) 2017/1938 continue to apply. The suspension is strictly limited to addressing the threat and should only allow short-term contracts.

76 National diversification plans: Member States should prepare national diversification plans for natural gas and submit them to the Commission by 1 March 2026 outlining measures for diversifying their gas supplies.

8 For example, lowering contracted quantities, lowering prices and fees; amending confidentiality clauses; amending operational procedures, such as communication procedures; changes of addresses of contract parties; transfers of contractual obligations between affiliated undertakings; changes required by judicial or arbitration procedures; or for landlocked countries, changes of national delivery points.

9 Provided that Member States are on track to fulfil the storage filling targets foreseen in the gas storage regulation, and at the latest on 1 November 2027.

10 In accordance with Articles 11 or 12 of Regulation (EU) 2017/1938.

77 Under this Regulation ACER is mandated to publish two reports by 1 July 2026 and 1 July 2027 seeking to provide an overview of the gas supply originated or exported, directly or indirectly, from Russia and assess the impact of the phase out on supply diversification on EU energy markets.

3.1.3. Methane emissions regulation

78 The EU Methane emissions regulation[11] introduces a wide range of requirements for operators in the oil, gas, and coal sectors, including LNG imports. Importantly, it also applies to methane emissions from fossil fuels produced outside the EU but imported into its market. The Regulation sets out a phased series of obligations for LNG importers aimed at reducing methane emissions associated with imported natural gas. These obligations become progressively more stringent, with the following key dates as of 2025 till the coming years:

- **5 May 2025:** Importers must begin submitting annual reports to the designated EU competent authority. Reports must include information on the exporter and producer, and the measures taken to monitor, report, and reduce methane emissions along the supply chain.
- **By 2026:** The European Commission will establish a public methane transparency database based on submitted data. The database will enable comparisons of emissions performance between different producers and importers.
- **5 August 2028:** Importers must report the methane intensity of imported LNG for contracts signed or renewed after 4 August 2024. The European Commission will define the required calculation methodology in a Delegated Act due by 5 August 2027. For older contracts, the "reasonable efforts" obligation continues to apply.
- **5 August 2030:** All new or renewed LNG contracts must comply with maximum methane intensity values (MMIV), to be defined in the same Delegated Act.

79 Penalties for non-compliance, to be set by Member States by 5 August 2025, must be "effective, proportionate and dissuasive." These may include fines of up to 20% of annual turnover or commercial restrictions. In parallel, the EU aims to conclude cooperation agreements with key exporting countries to facilitate implementation. LNG imports from countries with methane frameworks deemed equivalent may be exempt from some requirements.

3.1.4. European Climate Law and European climate targets by 2040

80 The European Climate Law, first adopted in 2021, gives binding legal effect to the European Green Deal objectives of reducing GHG emissions by 55% by 2030 and achieving climate neutrality by 2050. The Law was revised in March of this year to include the intermediate target of a 90% net GHG emissions reduction by 2040 compared to 1990 levels. The law provides the framework for achieving these targets and requires EU institutions and Member States to ensure that all legislative and regulatory initiatives are consistent with them. To support Member States and industry during the transition, the revised Climate Law introduces a set of flexibilities facilitating implementation, in particular:

11 Regulation (EU) 2024/1787 on the reduction of methane emissions in the energy sector.

- The conditional use of high-quality international credits under the carbon crediting mechanism set up in the Paris Agreement[12]. These credits might be used from 2036 onwards up to a limit of 5% compared to 1990 Union net emissions, to ensure that the emission reduction target within the EU is of at least 85% compared to 1990 levels. A pilot phase between 2031 and 2035 will support the development of such an international credit market.

- The integration of domestic permanent carbon removal to compensate for residual hard-to-abate emissions under the EU emissions trading system.

- A one-year delay in the full operationalization of the ETS2, which is now scheduled, as mentioned above, for 2028.

81 The 90% climate target is closely aligned with the Clean Industrial Deal and the Affordable Energy Action Plan, adopted on 26 February 2025, as they enhance the EU competitiveness and boost the decarbonisation of the energy system. Affordable energy is essential for the transition to a low-carbon economy. In line with the REPowerEU plan, the initiatives emphasise accelerating the roll-out of clean energy and electrification, completing the internal energy market, and reducing the dependence on imported fossil fuels.

3.1.5. Corporate Sustainability Due Diligence

82 Adopted in July 2024, the Corporate Sustainability Due Diligence Directive (CS3D) establishes a mandatory framework requiring large companies operating in or accessing the EU market to conduct risk-based due diligence on human rights and environmental impacts from July 2027. More specifically, EU and non-EU companies with more than 1000 employees and more than €450 million net worldwide turnover must identify, prevent and mitigate negative impacts on human rights and environmental impacts across their operations, subsidiaries, and value chains. The 2024 CS3D also introduced obligations to adopt climate transition plans aligned with the Paris Agreement and the European Climate Law, alongside a civil liability regime for damages and penalties of up to 5% of global turnover in case of non-compliance. Given the global and multi-layered structure of gas supply chains, LNG operators fall squarely within scope, with due diligence extending to upstream production and supply partners.

83 The extraterritorial reach of the Directive has drawn significant international attention. The US and Qatar requested the EU, in a formal letter, to reconsider the Directive's application to non-EU companies, the penalties for non-compliance, the transition plans for climate change mitigation and civil liability on companies. The letter explicitly identifies the supply of LNG to the EU as an area at risk, warning that CS3D compliance burdens could deter international producers and traders from engaging with the EU market.

84 In February 2026, the Omnibus I package amended the Directive, aiming to simplify due diligence duties but scaling back several of its original requirements. The scope of the revised CS3D is narrowed to companies with more than 5,000 employees and over €1.5 billion turnover and the penalty cap is reduced to 3% of net worldwide turnover, while provisions on transition plans for climate change mitigation and EU-level liability are removed. The compliance deadline is now extended to July 2029.

12 Article 6(4) of the Paris Agreement to the United Nations Framework Convention on Climate Change (12 December 2015).

3.2. EU LNG demand outlook by 2030

85 The role of LNG is becoming increasingly important as flexible buffer of supply as Europe undergoes the decarbonisation of its energy mix, seeking both energy security and supply diversification. The European Commission has established 2030 and 2040 as intermediate climate targets to achieve climate neutrality by 2050, as set out in the European Climate Law[13]. The EU's 2030 climate target aims to reduce greenhouse gas emissions by at least 55% compared to 1990 levels, under the 'Fit-for-55' (FF55) package. Achieving the 2030 EU climate targets will require a significant reduction in natural gas demand. The scale of this decline will depend on several factors, including progress in electrification, improvements in energy efficiency, energy prices, the implementation of gas-saving measures, and most importantly, the deployment of renewable and low-carbon technologies.

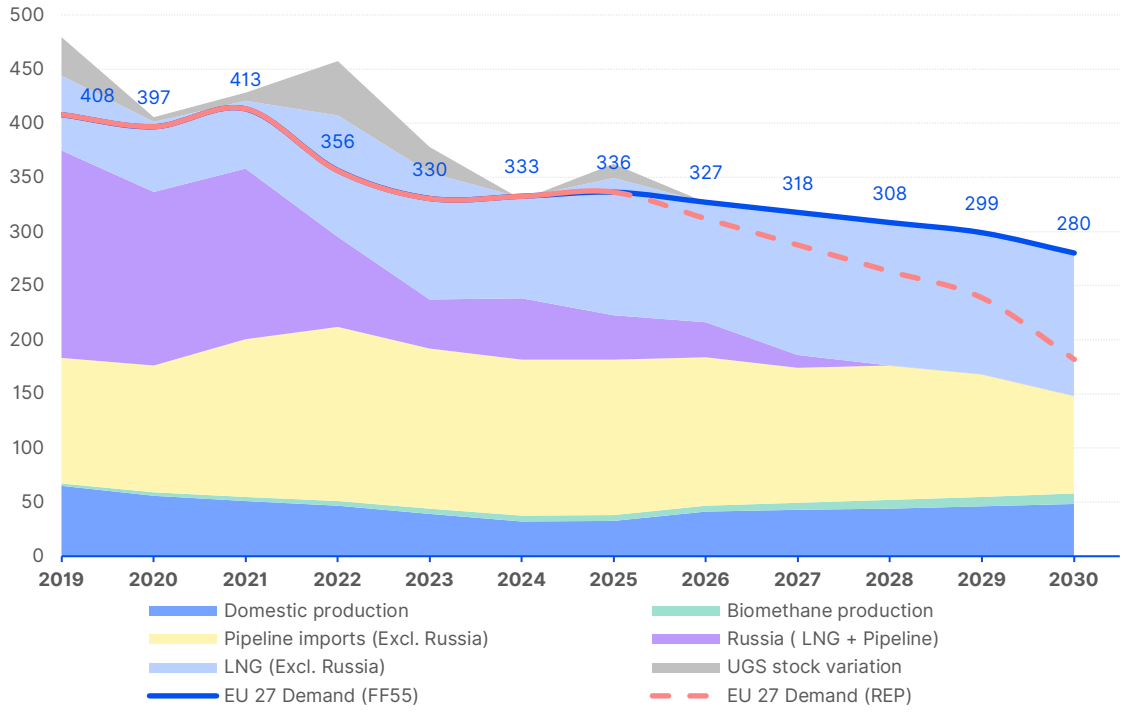
86 EU gas demand up to 2030 is projected according to the European Commission's FF55[14], in which there is a drop by 32% in natural gas consumption in 2030 relative to 2019, and the REPowerEU scenario, for which gas savings associated with renewable hydrogen targets are excluded in this analysis. LNG import requirements are then assessed based on these scenarios.

87 Figure 24 provides a simplified overview of the potential balance among the different gas supply sources available to meet EU demand through 2030. This simplified representation does not account for price fluctuations, global competition for LNG supplies, or the potential extension of existing long-term supply contracts within the EU. In contrast, a more comprehensive modelling exercise would need to incorporate these factors, as well as the gradual deployment of hydrogen infrastructure and its interaction with overall gas system adequacy.

13 See European Climate Law, which writes into Law the objectives set out in the European Green Deal to become climate-neutral by 2050.

14 We rely on the published scenario MIX-CP, which is one of the three policy scenarios for analysing the impact of the legislation proposed under the European Green Deal. The suitability of this scenario may have changed as the energy landscape and the national policies have been evolving in the last years.

Figure 24: EU gas supply under Fit-for-55 and REPowerEU demand scenarios by 2030 (bcm)



Source: ACER based on data from ICIS, S&P Global, ENTSOG, AGSI GIE, Eurostat, and REPowerEU.

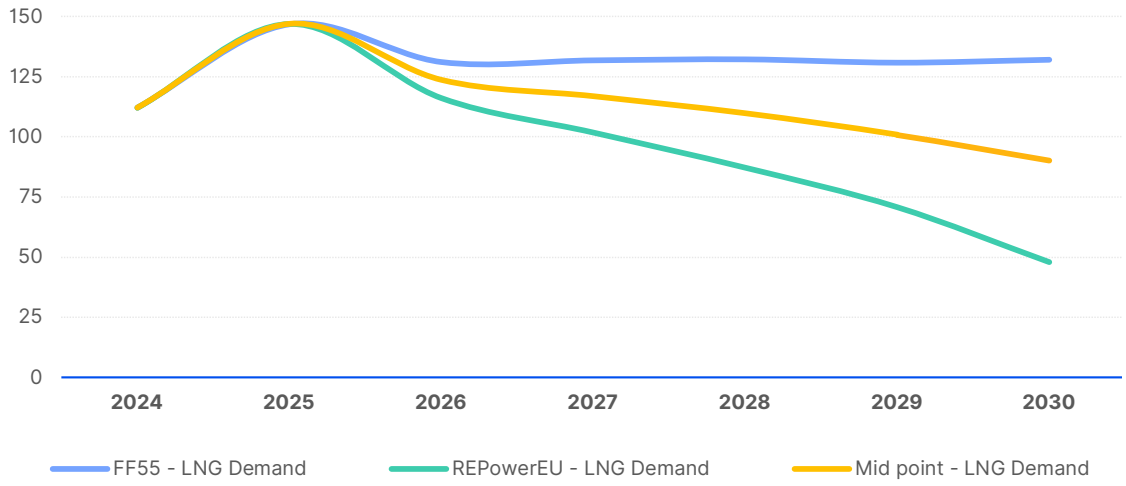
Note: The demand evolution from 2026 to 2030 reflects a linear decrease in alignment with the target set for 2030. The potential gas demand reduction described in REPowerEU linked to the 20 Mt goal for renewable hydrogen by 2030 is not factored in the assessed scenarios.

88 Figure 25 illustrates projected LNG import needs in Europe from 2026 to 2030 under two decarbonisation scenarios:

- Fit for 55 (FF55) – represented by the dark blue line, shows the highest projected LNG demand remaining stable around 130 bcm from 2026 to 2030.
- REPowerEU – shown in green, presents the lowest LNG demand trajectory as it envisages a much more ambitious gas demand reduction subject to the proposed decarbonisation targets are met. starting around 120 bcm in 2026 but declining sharply to around 50 bcm by 2030.

89 A linear decline in natural gas consumption has been assumed for both scenarios from 2026 to 2030. However, the pace of the energy transition through the next five years may vary, potentially at a slower pace in the earlier years, and possibly accelerating later on. This trajectory will depend on the implementation of national energy policies, decarbonisation goals, the financing and permitting of renewable energy projects, and security of supply considerations.

Figure 25: LNG import requirements under decarbonisation scenarios (bcm)



Source: ACER based on Fit for 55 and REPower EU policies.

90 By 2030, LNG imports required to bridge the EU supply gap are projected to range from 48 bcm under the REPowerEU scenario to 132 bcm under the Fit for 55 scenario, representing a difference higher than 80 bcm depending on which pathway materialises. Nevertheless, REPowerEU reflects a higher level of ambition, aiming to accelerate the energy transition through additional funding and enhanced coordination of EU programs.

91 Several EU funding instruments support the achievement of REPowerEU objectives, with the Recovery and Resilience Facility at the core, mobilising around EUR 300 billion. These programmes are expected to accelerate the deployment of clean energy technologies and drive gas demand reductions beyond the original Fit for 55 targets. Given the significant uncertainty surrounding future demand in FF55 and REPowerEU scenarios, a midpoint trajectory[15] has been considered to illustrate a hypothetical pathway where EU partially achieves its 2030 REPowerEU targets delivering around half of the expected gas demand reductions ambitioned in REPowerEU (see Figure 25). The significant difference in LNG demand across scenarios underscores the need for flexible LNG supply strategies, as future volume requirements may differ substantially depending on the decarbonisation ambition and pace of implementation.

15 Midpoint LNG demand corresponds to the arithmetic average between FF55 and REPowerEU expected LNG demand.

3.3. European Union Contractual LNG position by 2030

92 To carry out this analysis, ACER undertakes a comprehensive review of the contractual positions held by buyers importing LNG into the EU. This includes contracts held by portfolio players as well as contracts linked to liquefaction plants that are operational, under construction, or have at least reached final investment decision. Only sales and purchase agreements are considered in the analysis, while heads of agreement[16] are excluded. The assessment includes contracted volumes that are intended for delivery to the EU and that are expected to be active within the timeframe up to 2030 are factored in the analysis. The analysis assumes that LNG contracts will expire as originally scheduled, without renewals or extensions beyond their original end date. Developments in projects under construction are closely monitored to identify progress or delays that may affect the initial delivery of contracted volumes. Particular attention is also given to cases where the timing of commercial operations and the delivery of contracted volumes may be delayed beyond initial expectations, such as contracts with Venture Global linked to the Plaquemines and Calcasieu Pass projects.

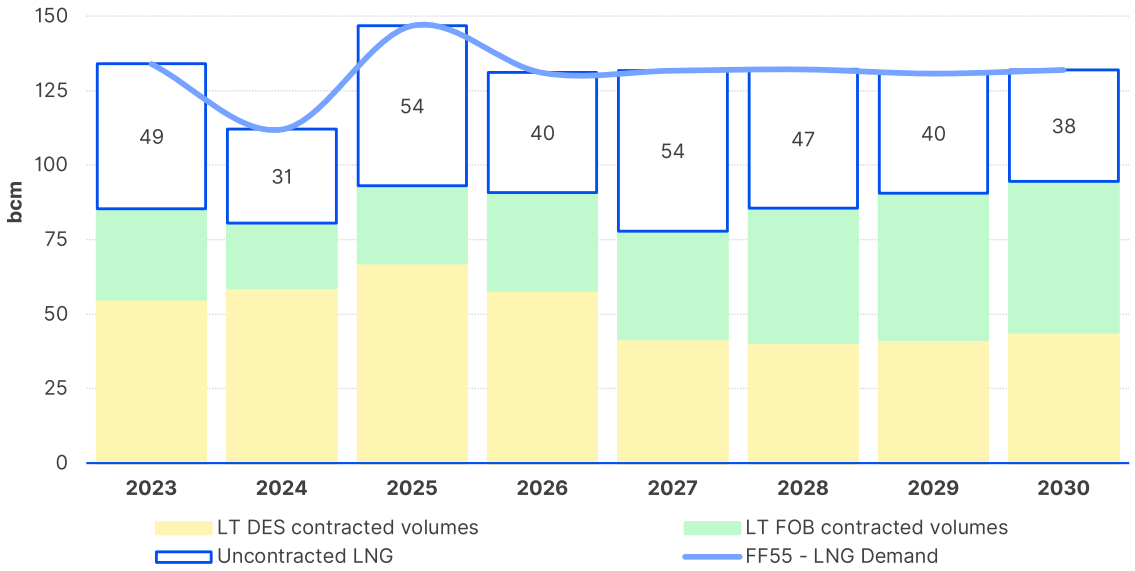
93 While it is important to recognise that the available data on some individual contracts may be limited or subject to uncertainty, the results and conclusions derived from this assessment are considered robust. Moreover, the findings are broadly consistent with observable trends in the LNG industry, reinforcing the validity of the analytical approach.

94 The gap between projected LNG demand and LNG contracted volumes[17] represents the share of supply that would need to be sourced from the spot market in the absence of additional contracts. As illustrated in Figure 26, new contracted volumes from additional liquefaction capacity are insufficient to significantly reduce current exposure to the spot market. Under the Fit-for-55 gas demand scenario, uncontracted LNG volumes remain substantial, accounting for around one third of total LNG demand throughout the analysed period. Uncontracted volumes are projected to peak in 2027, driven by the phase-out of Russian gas regulation, which requires all Russian LNG imports to cease by the end of 2026. From 2028 to 2030, uncontracted volumes are expected to remain around to 40 bcm similar to the gap expected for year 2026. Under the Fit for 55 scenario, the trend in uncontracted volumes highlights a sustained exposure to the LNG spot market and, consequently, to price volatility in the absence of additional long term contracts.

16 A preliminary, typically non-binding document outlining the key commercial terms of a gas contract (e.g. volumes, duration, pricing structure) agreed in principle by the parties, serving as a basis for negotiating the final binding agreement.

17 LNG contracted volumes are the result of long-term, mid-term and short-term supply agreements.

Figure 26: Uncontracted LNG volumes under Fit-for-55 demand scenario by 2030 (bcm)



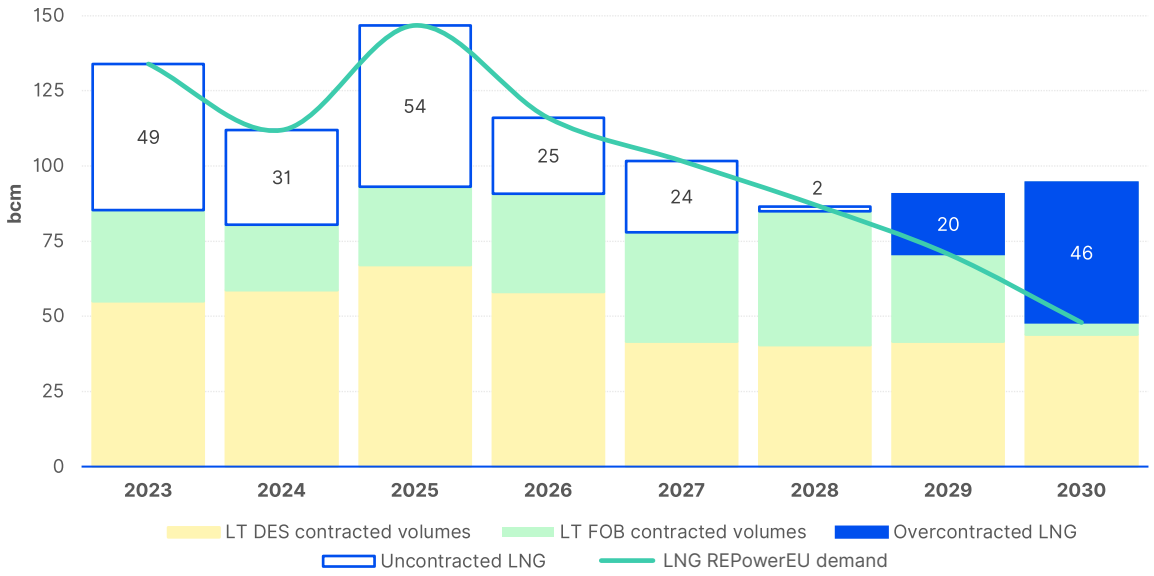
Source: ACER based on data from Fit-for-55 scenario and contract data from ICSI LNG Edge and S&P Global.

Note: Under Free on Board (FOB) terms, LNG buyers arrange shipping and freely decide on destination of the LNG cargo while under Delivery Ex-Ship (DES) terms, sellers handle shipping and the destination is fixed.

95 The REPowerEU gas demand scenario indicates a steady decline in LNG requirements through 2030, driven by reduced reliance on fossil fuels as a result of accelerated decarbonisation policies. The uncontracted gap, which stood at 54 bcm in 2025, is projected to narrow rapidly, halving over the following two years, reaching balance by 2028, and shifting into an overcontracted position of around 20 bcm in 2029 and 46 bcm in 2030. This shift is mainly driven by the substantial gas demand reductions assumed under this scenario.

96 An overcontracted surplus may raise contractual flexibility strategic concerns. This is particularly relevant for long term contracts with take or pay provisions, which may expose buyers to significant financial liabilities in the absence of destination flexibility. This underscores the need for contractual arrangements that are sufficiently flexible and aligned with the evolving trajectory of EU gas demand, in order to mitigate the risks associated with overcontracted volumes.

Figure 27: EU LNG contractual position under REPowerEU demand scenario by 2030 (bcm)

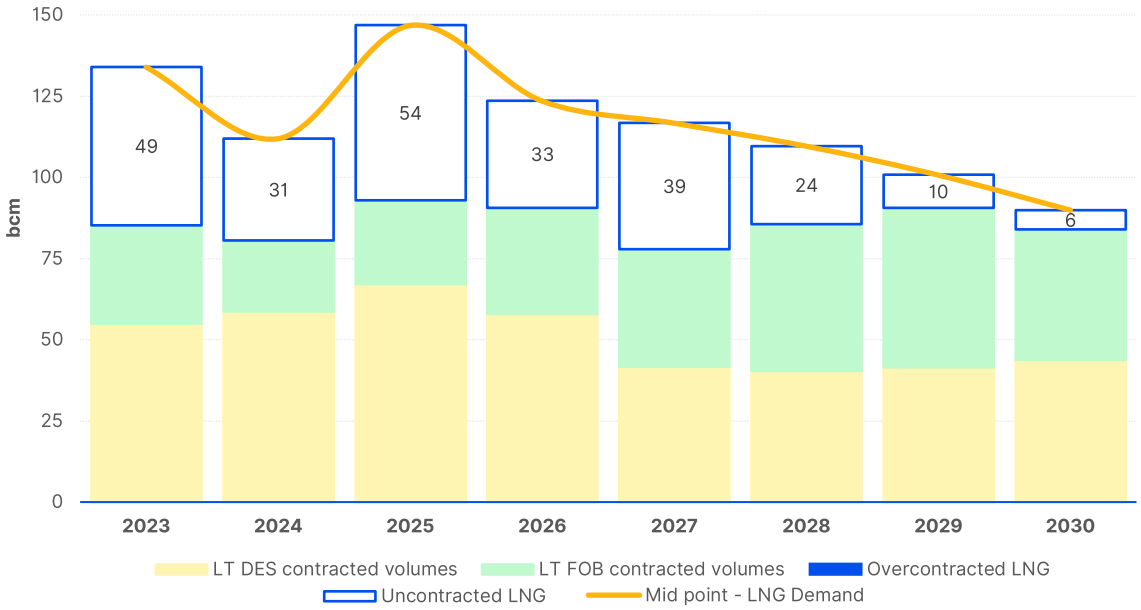


Source: ACER based on data from REPowerEU and contracts data from ICIS LNG Edge and S&P Global.

Note: Under Free on Board (FOB) terms, LNG buyers arrange shipping and freely decide on destination of the LNG cargo while under Delivery Ex-Ship (DES) terms, sellers handle shipping and the destination is fixed.

97 Figure 28 illustrates the evolution of Europe's LNG contractual landscape under the midpoint gas demand trajectory, which reflects a more moderate reduction in gas demand and lies between the two decarbonisation scenarios. Under this pathway, the EU's contractual LNG position improves significantly, leading to a more balanced exposure to the spot market and, consequently, reduced price volatility risks. Uncontracted volumes are projected to fall to around half of their 2025 level and remain relatively limited and manageable from 2029 onwards.

Figure 28: EU LNG contractual position under Mid-point trajectory by 2030 (bcm)



Source: ACER based on data from REPowerEU and Fit for 55.

Note: Under Free on Board (FOB) terms, LNG buyers arrange shipping and freely decide on destination of the LNG cargo while under Delivery Ex-Ship (DES) terms, sellers handle shipping and the destination is fixed.

98 A high reliance on spot volumes poses significant price volatility risk, particularly during periods of global supply tightness or geopolitical tension. These findings highlight the importance of delivering gas demand reduction through accelerated decarbonisation, while simultaneously securing additional contracted LNG volumes to limiting exposure to uncontracted supply.

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