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QUARTERLY INSIGHT

Q4/2025



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EXECUTIVE SUMMARY

- Natural gas will remain essential for ensuring energy security throughout the green transition.
- Geopolitics is reshaping energy geography globally – and Central Europe is no exception.
- The global share of LNG is set to grow, driven by rising energy demand in Asia and North America and by Europe's ongoing transformation.
- Central Europe is experiencing a fundamental reconfiguration of its energy landscape, shifting from east-west to north-south paradigm.
- The ability to seize emerging opportunities will be critical to long-term success.
- Changes over the next decade are likely to be incremental, while truly transformative shifts are more plausible over a longer time horizon.

FUTURE OF NATURAL GAS



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WORLD GAS PRODUCTION AND TRADE

Natural gas remains essential to energy security in an evolving energy system by providing a reliable, lower-emission alternative to oil and coal, and helping stabilise energy mixes as electrification rises, renewables expand, and uncertainties - from extreme weather to technological breakthroughs - intensify.

Global natural gas demand grew by 78 bcm (1.9%) in 2024 to 4122 bcm, driven mainly by Asia and North America. Power-sector use increased due to heatwave-driven cooling, supported by higher transport and industrial demand. Europe and Asia accounted for more than half of global imports, and Russia remained the largest net exporter.

To compare, in **2015** global natural-gas consumption exceeded 3400 bcm with international trade accounting for about 29% of that total (just over 1000 bcm). LNG made up slightly more than 30% of traded volumes, equivalent to around (337,1 bcm). In **2024** international trade represented 1016 bcm (25 % of global demand), of which 55 % (555 bcm) was LNG (just under 15% of global natural gas consumption). Global LNG supply has been outpacing gas demand and is expected to *continue*, with nearly 300 bcm of new capacity coming online between 2025 and 2030.

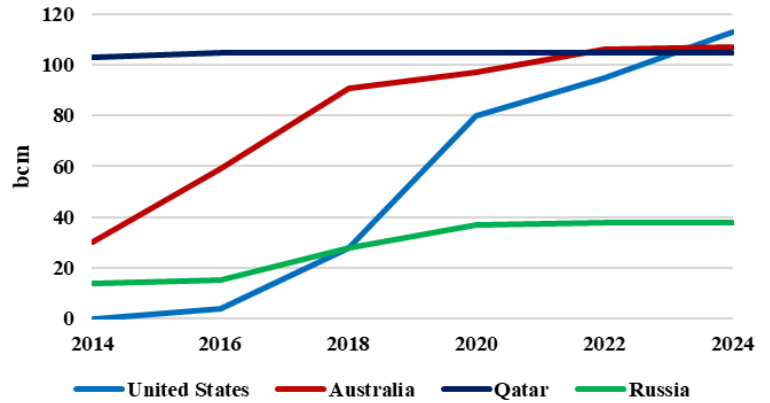
LNG TRADE

Global LNG supply rose by 4% in the first half of 2025. The main driver was the Plaquemines LNG project in Louisiana, which started up in late 2024 and contributed around two-thirds of the world's new LNG volumes. But this growth was partly offset by declines in pipeline gas to Europe. Russian supplies to the EU plunged by 45% after gas transit through Ukraine stopped at the start of 2025. At the same time, Norway's pipeline deliveries fell by 4.5% due to the maintenance of major gas fields and onshore processing plants.

In 2024, North America, the Middle East and Australia remained the **top LNG-exporting regions**. The US led the list of exporting countries, accounting for just over one-fifth of global supply (with a record in November 2025), followed by Australia, Qatar, Russia, and Malaysia. Asia is the biggest **LNG importer**, driven by increased power demand and early-year price advantages.

In 2024, LNG imports in Europe *declined* as storage levels remained high and gas demand stayed weak. LNG imports into China (as the world's *largest* net importer of LNG per state) and India rose significantly, supported by severe heatwaves and stronger power-sector demand. In sum, regional gas demand is becoming more diversified, with growth primarily in North America, Asia, and the Middle East.

TOP World Exporters of LNG



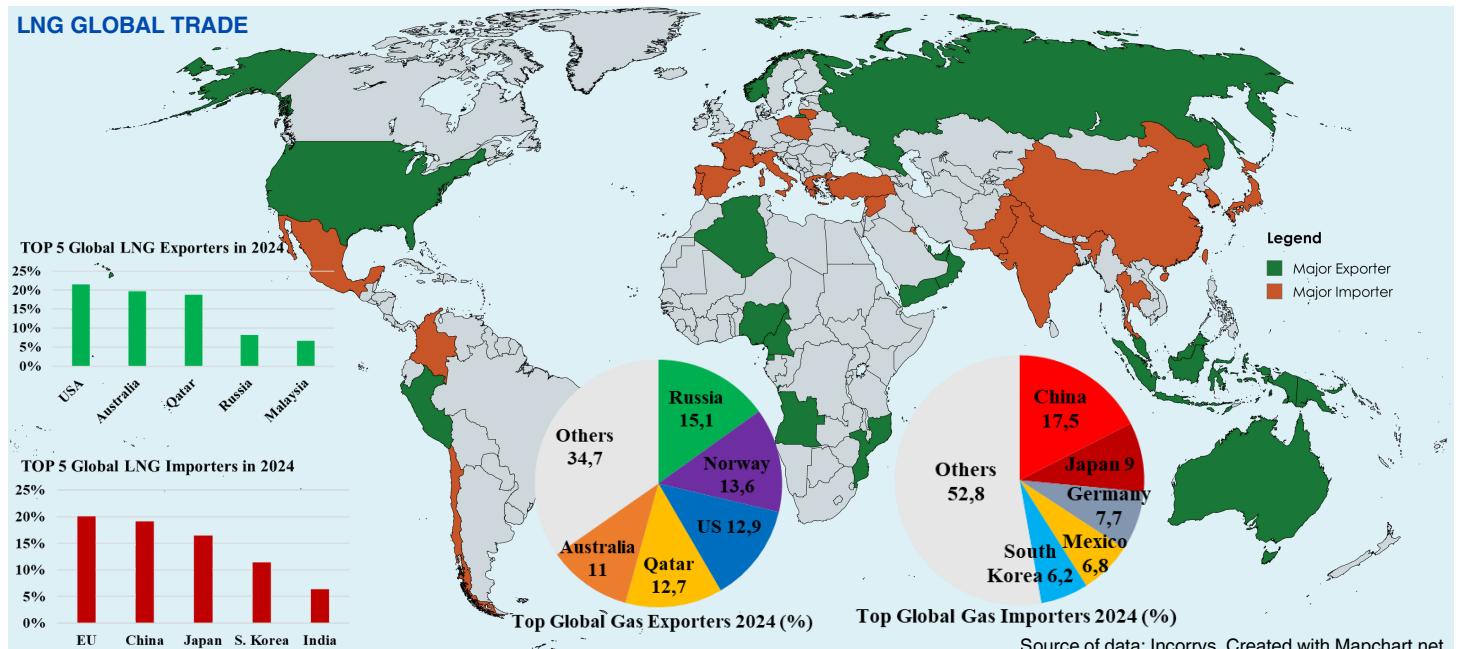
KEY FUTURE TRENDS

Global **energy demand** is expected to follow an upward trajectory. Power consumption is expected to surge in China and India, positioning Asia as the key driver of global energy demand, supported by growth in North America. However, gas demand in Europe is *expected* to fall up to 10% by 2030.

Investment decisions for LNG projects have *accelerated* in 2025. If all projects proceed as planned, about 300 bcm of new LNG export capacity will be operational by 2030 — boosting global supply by around 50%. Global LNG demand is *projected* to rise by roughly 60% by 2040.

Heatwaves and **technological drivers**, such as the AI and Cloud, are straining power systems globally, requiring reliable and flexible sources and more infrastructure.

Geopolitical tensions are clouding the outlook for natural gas demand and supply, alongside the dynamics of **green transition**.





EU CONTEXT



EU REPOWER

The EU's May 2022 REPowerEU Plan, created after Russia's invasion of Ukraine, seeks to end reliance on Russian fossil fuels by **boosting efficiency, diversifying supplies, and expanding clean energy.**

EU imports of Russian gas fell from 150 bcm in 2021 to 52 bcm in 2024, with reliance dropping from 45% to 13% in early 2025. At the same time, overall gas demand has declined by 17% since August 2022. Although LNG imports from Russia increased by 2 bcm between 2023 and 2024, the end of the transit of Russian gas via Ukraine decreased the imports of pipeline gas from Russia by 15 bcm per year.

The Council presidency and the EP's representatives reached a provisional agreement at the beginning of December 2025 to impose a permanent ban on Russian gas imports, ending LNG deliveries by December 31, 2026 and pipeline gas imports by September 30, 2027, with a possible one-month extension to the end of October 2027 if gas storage levels fall below the required minimum.

The EU has also expanded its LNG regasification capacity by 32%, reaching 338,9 bcm. New or expanded terminals have been built in nine EU countries during this period. Additionally, new LNG terminals are currently planned in six EU countries.

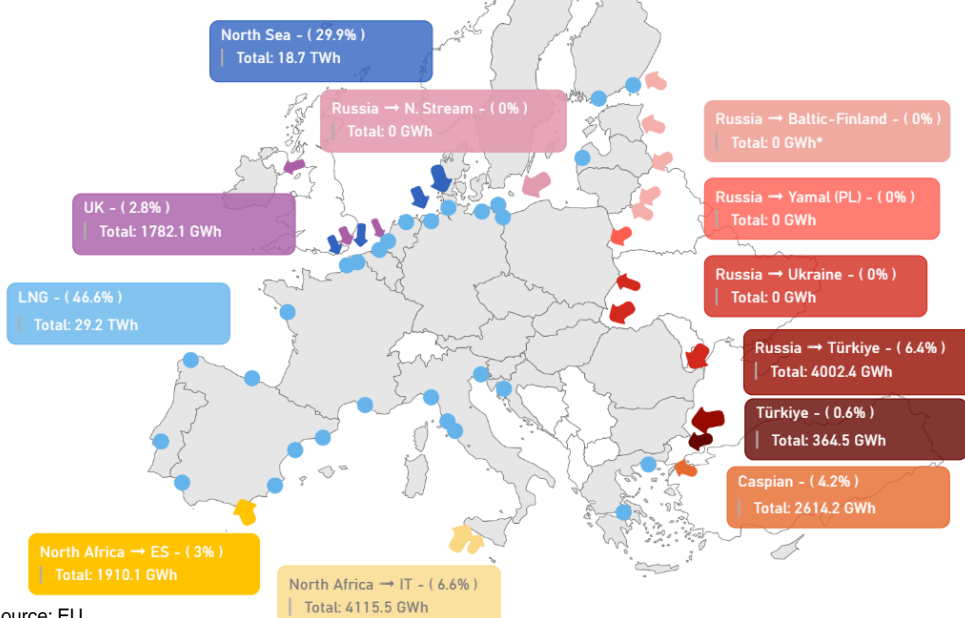
Another effect of the *RePowerEU* was that the EU has rapidly *reduced* its gas dependence by expanding renewables and heat pumps. Gas demand has kept falling, and together with several other factors, European gas prices have dropped as well. After years of shortages and high costs, the gas market is now shifting into a phase of *abundance* — and possibly even oversupply.

NEW PARTNERS

The reduction of Russian pipeline deliveries, has been offset by surging global LNG supply. EU LNG imports exceeded 100 bcm in 2024, with the US providing nearly 45%, more than double its 2021 *share*. LNG share of EU gas imports rose from 20% in 2021 to 37% in 2024, supported by a rapid expansion of regasification capacity: 70 bcm added in 2023–2024, with another 60 bcm expected by 2030.

European gas prices kept falling into mid-December, edging toward €27/MWh — their lowest level since April 2024. This latest decline pushes the year-to-date drop to about 45% and leaves prices more than 90% below their highs during the 2022 energy crisis.

EU Gas Import Routes (pipeline and LNG)



Source: EU

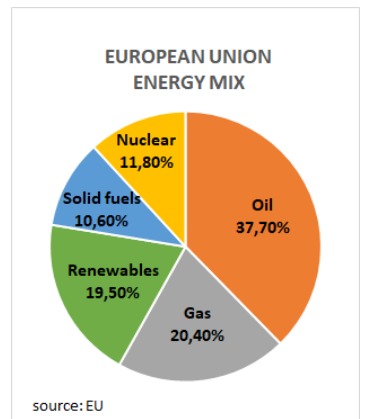
Global LNG supply is projected to grow sharply while the EU's demand continues to fall. With new capacities *adding* around 200 bcm by 2028, the EU is well-positioned to replace all remaining Russian gas, potentially raising the US LNG share above 80% if fully *substituted*. This will also accelerate the EU's pledge from August 2025 to import \$750 billion worth of LNG, oil, and nuclear fuels from the US by 2028, as part of the broader trade deal.

This alternative dependency will also impact the EU's regulatory and green standards, while the US and Qatar have warned that adopting the Corporate Sustainability Due Diligence Directive (CSDDD) in its original form could, in their view, *jeopardize* the stability of LNG supplies to Europe by increasing regulatory burdens and costs, ultimately leading to higher prices for households and businesses.

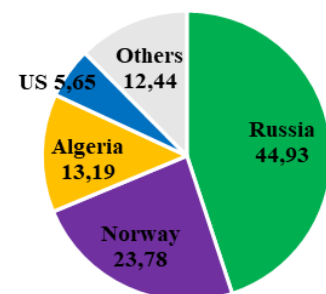
GREEN TRANSITION

EU energy policy anticipates a structural decline in natural gas as part of its broader decarbonization agenda. The European Green Deal (to 2050), supported by Fit for 55 (to 2030), frames natural gas primarily as a transitional fuel. While progress toward climate targets has been achieved, several objectives remain off track. Although the IEA expects global natural gas demand to peak around 2030, EU gas consumption is set to decline earlier as renewables, biomethane, and hydrogen expand. Relatedly, Draghi's report highlights decarbonization as a core pillar of EU competitiveness, making the reduction of fossil gas use both a strategic and environmental imperative.

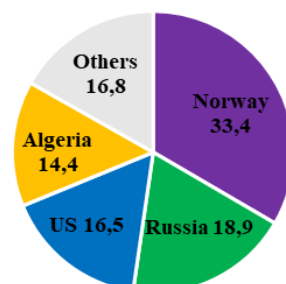
According to Deutsche Bank Research, one year after the Draghi *report*, the EU adopted key energy and industrial plans, including the Clean Industrial Deal, the Affordable Energy Action Plan, a new transition-focused state-aid framework, and the Steel and Metal Action Plan. In 2025, it also launched a joint platform to purchase hydrogen, biomethane, LNG, natural gas, and over 30 critical raw materials.



EU Top Gas Suppliers in 2021 (%)



EU Top Gas Suppliers in 2024 (%)



Source: EU



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VISEGRAD 4

All V4 countries are highly dependent on energy imports (Czechia 39,9, Poland 46,20%, Hungary 49,40%, Slovakia 53,5%). This is even more evident in the case of gas, for which domestic production in the V4 countries is low (Hungary 11,6%, Poland 5,8%, Slovakia and Czechia < 1%), although all V4 countries have significant gas storage capacities (all four are in TOP 10 in the EU).

While energy mixes in V4 differ substantially, natural gas plays a central role in each V4 country, accounting for 15–30% of total supply and 15–27% of final consumption. Yet, political responses differ - while Poland and Czechia have chosen full independence from Russian supplies, Hungary and Slovakia still insist on maintaining Russian connections. Yet, return to status quo ante is unlikely even after the peace in Ukraine is achieved.

New energy geography in Central Europe

The developments set forth by Russian invasion of Ukraine, followed by gradual halting of Russian gas transits, form part of a broader process that is shaping a new energy geography in Central Europe:

North-south routes are replacing traditional east-west trajectory: the V4 countries are now tied into both Western European (Germany, Netherlands and Austria) and North-South infrastructure. This gives them access to multiple sources and trading hubs - US LNG (via Polish and Croatian terminals), Norwegian gas via the Baltic Pipeline, and Azeri gas through the Southern Gas Corridor, or the Romanian Neptun project.

Central European hub: the V4 has significant gas storage capacities, placing them all in TOP 10 in the EU. Cross-border interconnectors have been built creating intra-V4 network and connecting the region with neighbours (Austria, Ukraine, Croatia, Serbia, Lithuania and Romania), placing the region firmly on the EU's north-south corridor and positioning the region as a potentially important gas hub on the north-south route.

While politically sensitive and financially costly, existing frameworks - **REPowerEU**, **Connecting Europe Facility** or the **Three Seas Initiative** - can ease the burden and help translating this major challenge into opportunity by replacing historical dependencies with new forms of cooperation.

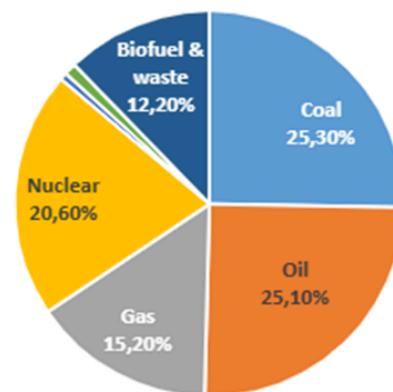
A new role for Ukraine?

Ukraine, once a central transit country for Russian gas, can turn into a source of future opportunities when the war is over and the full potential of Ukraine is explored. Ukraine's gas sector has been growing, but its long-term trajectory remains uncertain. *Production* rose to 19.12 bcm in 2024, which in combination with one-third decline in Ukraine's natural gas demand during the war brought Ukraine close to self-sufficiency in **natural gas**, and the need for imports has decreased significantly. However, Ukraine's geological potential is substantial, placing it among Europe's top resource holders (second only to Norway). Ukraine can also provide opportunities in the longer term - Ukraine's massive agricultural sector provides huge potential for **biogas** production, and several studies see Ukraine as a potential green **hydrogen** hub.

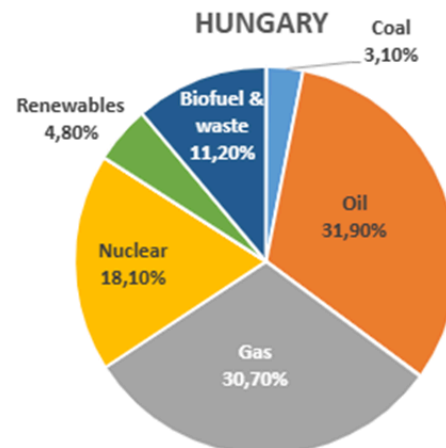
Turning Ukraine into a future EU supplier will require coherent policy reforms, major investment, and a stable security environment. However, in each of these scenarios, the existing gas grids connecting central Europe with Ukraine could become part of Ukraine's "reconnection" with Europe.

V4 ENERGY MIXES

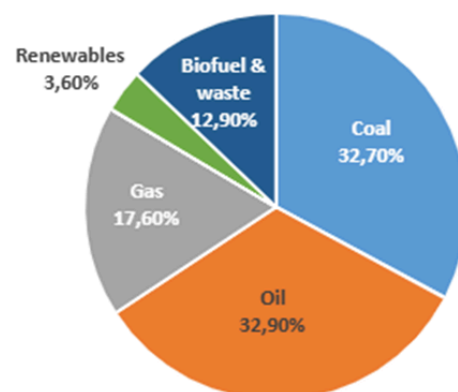
CZECHIA



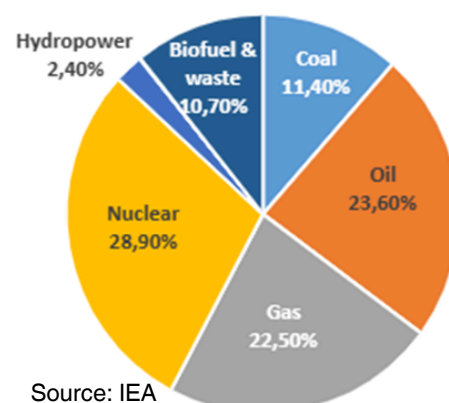
HUNGARY



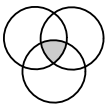
POLAND



SLOVAKIA



Source: IEA



RISKS AND OPPORTUNITIES



<p>Strengths</p> <ul style="list-style-type: none"> · Network of interconnection and growing access to LNG · Significant underground gas storage capacity · Integration into the EU single market · EU funding supporting infrastructure and diversification 	<p>Weaknesses</p> <ul style="list-style-type: none"> · Legacy of historical dependence on Russia · Landlocked vulnerability and transit reliance · Incomplete and uneven diversification within the region · High exposure of industry to gas price volatility · Political fragmentation inside the V4 · Stranded-asset risk - cost of under-used pipes and storage
<p>Opportunities</p> <ul style="list-style-type: none"> · Diversification away from Russia towards new suppliers · North–South corridor leading to a new role as a regional trading and storage hub · Repurposing gas infrastructure for hydrogen / renewable gases 	<p>Threats</p> <ul style="list-style-type: none"> · Supply chain and price vulnerabilities · Exposure to global LNG demand competition · Changing flows leading to new bottlenecks and dependencies · Political fragmentation inside the V4 and with Brussels

Turning a Challenge into an Opportunity in Central Europe

The war in Ukraine has triggered a paradigm shift in Central Europe’s energy landscape. The policy responses reflect a combination of economic, social, security, and political considerations. The fundamental choice, however, lies between efforts to minimise losses or maximise new opportunities, while recognising that unpopular measures may in fact only represent necessary measures that were delayed in the past.

On the risk side, the key issues concern the availability of alternative sources, their reliability, and their price. Since three of the four V4 countries are landlocked, the question of supply routes and the related pricing is particularly sensitive. Yet this also represents an opportunity to eliminate long-standing unilateral dependence. Source diversification enhances negotiating leverage, while EU membership strengthens bargaining power and provides resources for investment into the necessary infrastructure. In this respect, the V4 is weakened by its internal strategic divergencies, which affect the region’s position both within the EU and beyond. At the same time, intensifying global competition – particularly in LNG markets – is inherently double-edged. Increased supply may exert downward price pressures, yet rising global demand introduces price volatility and supply-chain uncertainty.

The V4’s advantage lies in its central geographic position and the improving interconnectedness both within and beyond the region. This creates potential for the V4 to serve as an energy hub beyond its traditional east–west axis, also in the increasingly important north–south axis. Moreover, today’s gas infrastructure offers the potential for future adaptation to support emerging energy carriers aligned with the EU’s green transition, including low-carbon gases and hydrogen. In this respect, Ukraine’s importance could grow in the medium to long term, as a potentially significant producer of biogas and green hydrogen.

The ability to see the new reality not only as a threat but also as a strategic opportunity will be a key differentiator in determining who succeeds in this transformation, where the energy transition is only one – yet a crucial – variable.

SCENARIOS

The development in Central Europe in the next decade will most likely fall between incremental decline and incremental progress.

In the **incremental decline** scenario, EU policies and legislation restricting the role of unabated natural gas will be a strong driver. This trend can be further accelerated by the continuation of geopolitical tensions (even beyond Ukraine), resulting in supply disruptions and price volatility prompting governments to further reduce exposure to gas imports. Continued progress in the green transition would also contribute to lower demand, both through the substitution of gas with renewable energy sources and through improvements in energy efficiency. A potential nuclear renaissance across Central Europe could reinforce this dynamic by reducing the structural need for new gas-fired electricity generation. Additional factors, such as population decline and the effects of climate change – including consistently milder winters – may also play a role in dampening gas consumption.

Conversely, an **incremental progress** scenario could be supported by partial geopolitical de-escalation following the end of the war in Ukraine (though a return to status quo ante is unlikely). Weaker than expected progress in the green transition coupled with softer enforcement of EU decarbonisation targets aimed at boosting economic competitiveness, could also reduce declines in gas use. An abundance of supply that would lower gas prices would also reinforce this trajectory. Rising energy demand driven by new technologies such as electromobility, AI, and data centres, as well as reindustrialisation initiatives could also temporarily increase gas consumption, if alternative sources like renewables and nuclear fail to expand quickly enough.

More **transformative scenarios** – in which natural gas becomes marginalised or residual energy source – are plausible over longer-term horizons (2040s-2050s), if multiple variables converge simultaneously. These include consistent implementation of EU green policies, deep and sustained electrification supported by continued decline in renewable-energy costs, and significant technological progress. Widespread adoption of green hydrogen, advances in enhanced geothermal systems, deployment of next-generation nuclear reactors, or even a wildcard breakthrough in fusion technologies could collectively accelerate the shift away from natural gas over the longer term.

