Balancing Energy Security, Decarbonization, and Competitiveness in Europe's Energy Landscape

As the EU transitions to a low-carbon economy, crude oil and natural gas remain vital for energy stability, serving as essential transitional fuels that support grid reliability and are indispensable for energy-intensive industries. However, Europe's energy security remains fragile, especially after Russia's war in Ukraine, and urgent action is needed to address emerging risks. We share recommendations to help the EU restore its security of supply and competitiveness while staying on track to reach its climate objectives.

With crude oil and natural gas comprising almost 60% of the EU's energy mix and powering key sectors like transport, industry, and heating, ensuring a secure and reliable supply remains a strategic priority – one that is increasingly shaped by regulatory and geopolitical factors. A complex regulatory environment may lead to limited sourcing flexibility and price spikes. Decarbonization efforts, market interventions, and regulatory burdens could further impact long-term energy prices undermining economic competitiveness. Given current geopolitical and market realities, the EU remains exposed to global energy market tightness and volatility, particularly in the crude oil and natural gas sectors, while being in competition with Asia for available supplies. While the EU produces only about 5% of its crude oil and 15% of its natural gas domestically, it remains reliant on imports for the remainder. As global production and export capacity for these energy sources are set to increase, non-market-related policy and regulatory challenges continue to discourage long-term energy contracting. These obstacles include low EU energy demand projections, market interventions, mixed political signals, heavy administrative burden, prescriptive requirements, and regulatory risks for suppliers.

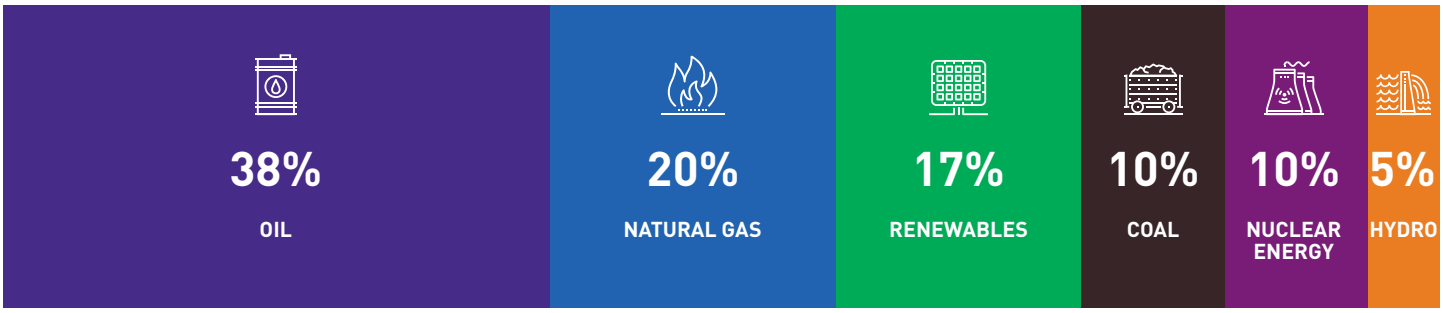

Figure 1: Primary energy consumption by source in the EU, 2023.[1]

If not adequately addressed, these obstacles could limit the EU's ability to attract and successfully contract diverse energy supplies and potentially leaving the EU vulnerable to energy shortages.[2] In contrast, tackling them head-on can help restore competitiveness and reduce energy poverty while balancing an increasingly decarbonized and decentralized energy system on the way to climate neutrality. Dialling back emergency measures, subject to a cost-benefit assessment and requirements that could possibly translate into other barriers to trade, will help the security of supply.

[1] EI, *'Statistical Review of World Energy, 73rd edition'* (2024): https://www.energyinst.org/__data/assets/pdf_file/0006/1542714/684_EI_Stat_Review_V16_DIGITAL.pdf

[2] Rystad Energy, *'Rebalancing Europe's Natural Gas Supply 2nd Edition'* (December 2023): https://iogpeurope.org/wp-content/uploads/2023/12/Summary-Rebalancing-Europes-Gas-Supply-second-edition.pdf

Recommendations to strengthen EU energy security

In addition to sending clear and decisive political signals at the highest level, the EU should consider the following recommendations:

1) Conduct competitiveness and fitness checks of EU legislation
2) Ensure diversification of energy sources, suppliers, and routes
3) Assess and encourage the use of European crude oil and natural gas resources
4) Ensuring robust infrastructure and safeguarding its security and full utilization
5) Use realistic demand outlooks and pragmatic decarbonization pathways
6) Optimize market functioning and avoid the use of distortive measures

1. A Competitiveness and fitness check of EU legislation

President Von der Leyen's focus on energy competitiveness and affordability for 2024-2029 requires optimizing regulations to drive investment and strengthen the sourcing of affordable energy domestically and internationally. Simplifying the existing regulatory framework through the Omnibus proposal and aligning legislation more effectively will be key to achieving these objectives.

The EU Methane Regulation's requirements could lead to disruptions in the security of supply if key suppliers and domestic producers cannot meet compliance requirements on time.

The EU Methane Regulation is the first of its kind - imposing Monitoring Reporting and Verification (MRV) requirements on both domestic and non-EU crude oil and natural gas producers, setting methane emissions intensity thresholds and mandating detailed tracking of producers' emissions across the supply chain. To support the effective implementation of this regulation while maintaining security of supply, clarity regarding the requirements and their feasibility is essential.

More clarity is needed in the legislative text concerning importer requirements (i.e., Article 27, 28, and 29) to help market participants understand how compliance will be demonstrated within both current and future commercial contracting frameworks. The lack of clarity on some requirements is already impacting the finalization of agreements whose terms extend beyond the implementation of the new requirements. Further guidance is needed from the European Commission on how to meet the requirements, specifically regarding MRV equivalence, methane intensity reporting, and the methane intensity limit, in situations where the origin and producer of the natural gas and crude oil imports are unknown or cannot be known (for example, when natural gas or crude is commingled).

Some elements of the EU Methane Regulation require substantial technological and human capital resources. Implementing the Regulation's provisions for domestic production is extremely challenging for operators, while third country suppliers may not be able to achieve the same results within the same timeframe. Collaboration with industry on addressing these challenges could help mitigate the risks of supply disruptions and increased energy costs.

The EU imports oil and gas from multiple countries, as diversification is key for energy security. To enable effective and smooth compliance with the EU Methane Regulation's requirements for imports, the EU should seek to establish equivalence with third countries that have the most advanced methane emissions regulatory frameworks as soon as possible and collaborate with third countries that are earlier on their methane journey to help them prepare for compliance with the EU methane regulation requirements.

Additionally, penalties for non-compliance must balance the need to incentivize methane emissions reductions in natural gas, LNG, and crude oil supplies to the EU, while preventing supply constraints. For example, penalties could be phased in gradually over time.

Proposed actions:

- European Commission should include EU Methane Regulation in the scope of the Omnibus proposal as soon as possible to ensure that technical implementation challenges are addressed thoroughly, and workable timelines are proposed for market participants to comply with the provisions.
- European Commission should establish MRV equivalence with major exporters to the EU as soon as possible (e.g., with the US EPA '40 CFR Part 98, Subpart W'; or by providing documented evidence of the accuracy levels of quantification otherwise performed).
- European Commission should provide clear guidance and prioritise development of EU Methane Regulation's Implementing and Delegated Acts foreseen by the Regulation, to provide the necessary clarity and assurance to market participants.
- European Commission and Members States should assess the impact on security of supply on EU Methane Regulation.
- European Commission should promote the development of an international GHG Supply Chain Measurement, Monitoring, Reporting, and Verification (MMRV) framework that enables comparable and reliable information on GHG emissions across the supply chain, for example, through the US DoE-led MMRV Framework.

Technology neutrality: Simplifying the regulatory framework and adopting technology-neutral policies are essential to ensuring security of supply and achieving the EU's climate objective. However, in the past 10-15 years the EU has deployed technology-exclusive policy objectives and legislative initiatives. Many of these – on renewable hydrogen, heat pumps, or internal combustion engines to name a few – are proving difficult and costly to achieve, often leading to negative reactions from citizens. Pursuing this approach in 2024-2029 may lead to a continuation of costly deployment, public acceptance issues, technical limitations, and missed targets or ambitions.

To achieve climate and economic objectives, we recommend ending technology-exclusive sub-targets, mandates, and electrification at all costs, and focusing instead on decarbonization, backed by incentives and de-risking mechanisms for promising technologies.

Alongside renewable hydrogen, low-carbon hydrogen, specially produced from natural gas with carbon capture and storage (CCS) or methane pyrolysis, can play a significant role in Europe's energy security, diversifying the energy sources, supporting renewable integration, and decarbonizing hard-to-electrify sectors. The required deep decarbonization of hard-to-electrify sectors will critically depend on Europe's capability to produce and/or import low-carbon fuels at substantial scale meeting the continuous demand pattern required by industry which is unlikely to be possible with domestic renewable hydrogen only in the near and medium term. We welcome the recognition of low-carbon hydrogen in the EU Hydrogen and Gas Decarbonisation package, and we strongly encourage that this example of technological neutrality be integrated into other EU legislative frameworks. To achieve this, further improvements to the Delegated Act for Low Carbon Fuels (LCFs) are required, ensuring technology-neutrality, incentivizing GHG emission reductions and establishing a simple and robust methodology. This will enable the creation of a hydrogen market in Europe, boosting investor confidence and enabling FIDs both in the EU and other jurisdictions that can serve the EU market.

Proposed actions:

- European Commission and Member States should shift from technology-exclusive mandates to technology-neutral policies that allow for a variety of solutions to allow market forces to determine the best technologies for decarbonization.
- European Commission and Member States should establish mechanisms to incentivize all industries to adopt low-carbon technologies while ensuring that the most cost-effective solutions are pursued without prescribing specific technologies.
- European Commission and Member States should integrate hydrogen strategies in the EU energy security framework to ensure resilient and technologically neutral approach to the energy sources, supporting the transition to a decarbonized energy system.
- European Commission should recognise in the Union Data Base (UDB) system also imported hydrogen from third countries as this will be necessary to support the growth and security of a fully fungible market. Project developers need certainty that the carbon intensity of feedstocks and low-carbon fuels transported via grids outside the EU will be recognized (based on mass balancing principles).

2. Ensure diversification of energy sources, suppliers and routes

Europe's gas market has undergone a significant transformation in response to Russia's invasion of Ukraine. The EU gas demand dropped from around 400 Bcm to 300 Bcm between 2021 and 2023, while Russia's share a supplier dropped from 45% (150 Bcm) in 2021 to 15% (25-30 Bcm) in 2024. This shift was driven by a combination of diversified natural gas supply sources, fuel switching, energy efficiency, and demand reduction. However, the initial supply shock led to high energy costs, which have exacerbated energy poverty and caused permanent industrial demand destruction. By Q4 2023, EU industrial gas demand was 17% lower than in Q4 2021[3], whereas affordability became the number one energy priority for European citizens, surpassing climate neutrality.[4] In 2024, the EU imported approximately 85% of its natural gas consumption, totaling around 297.9 Bcm of imports, with 50% of this coming from top two suppliers Norway (95 Bcm) and the US (61 Bcm).

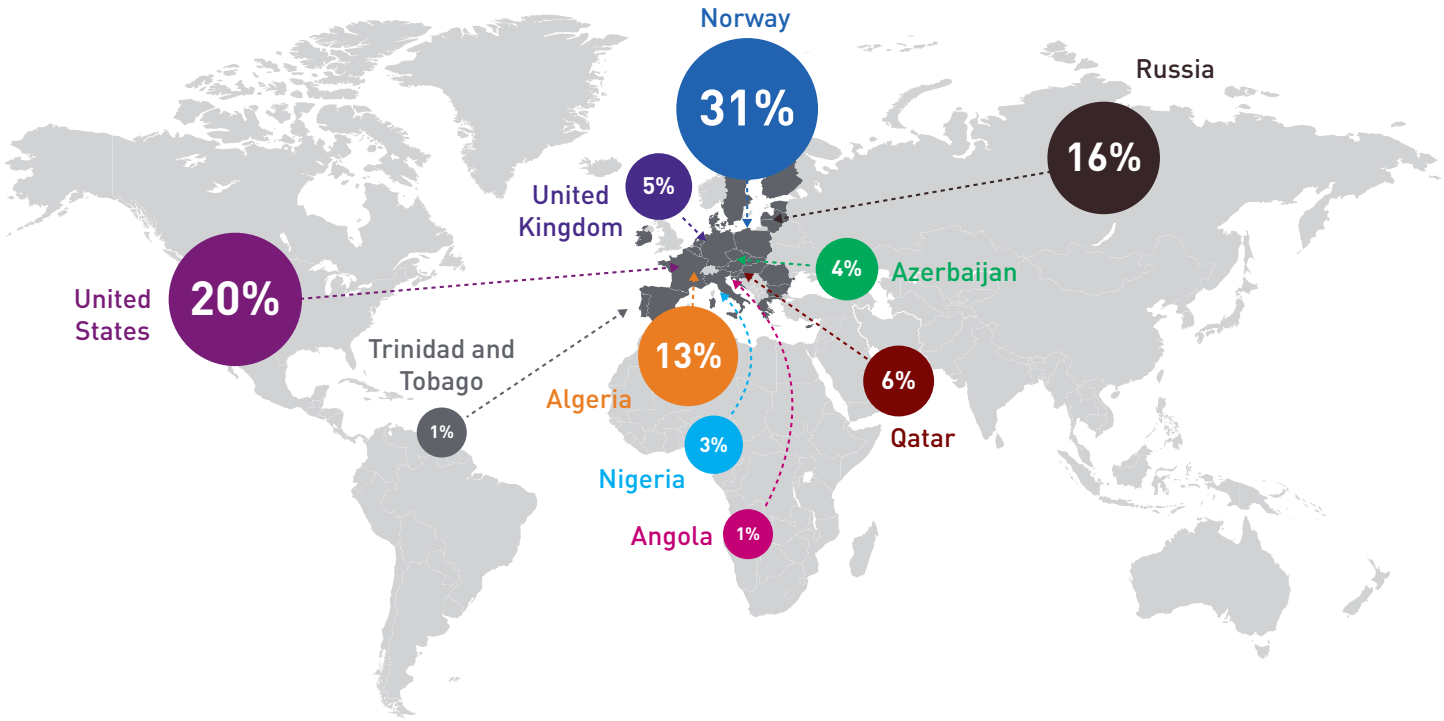

Figure 2: Top 10 countries exporting natural gas to the EU in 2023.[5]

Diversification of energy sources, suppliers and routes is essential for Europe's energy security - encompassing natural gas and crude oil sources, renewable energy, geothermal and hydrogen deployment. Natural gas can be expanded through increased pipeline imports from North Africa and the Caspian region. Similarly, LNG supplies from Africa and the Middle East (e.g., Tanzania, Mozambique, Qatar, and the UAE) offer significant diversification potential. These additional sources play a critical role in complementing North American LNG imports to the EU.

Crude oil supply to the EU is less constrained by pipelines, as it can be transported by vessels – providing a wide range of global suppliers. The efficiency of crude oil markets was evident in the rapid redirection of global flows following the EU's ban on Russian crude oil imports. The EU is almost fully dependent on imports for its crude oil supply – major suppliers include the United States, Norway and countries in the Middle East. By 2022, the EU's import dependency for the entire family of crude oil and petroleum products increased to 97.7%.[6] At the same time, crude oil production in the EU decreased by 43% between 2010 and 2023 – underscoring the importance of short- and medium-term actions which ensure a stable

[3] Columbia SIPA, *'Anatomy of the European Industrial Gas Demand Drop'* (March 2024): https://www.energypolicy.columbia.edu/publications/anatomy-of-the-european-industrial-gas-demand-drop/
[4] EC, *'European's attitudes towards energy policies'* (September 2024): https://europa.eu/eurobarometer/surveys/detail/3229
[5] Rystad Energy, *'UCube'* (2024).
[6] EC, *'Oil import dependency at its highest in 2022'* (April 2024): https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240415-1#:~:text=The%20EU's%20import%20dependency,dependency%20in%202021%20to%2091.6%25.

and diversified supply of crude oil, as well as adequate strategic reserves.[7] In 2024, the EU imported approximately 85% of its crude oil consumption, totaling around 479 million metric tons. The United States emerged as the EU's largest supplier, accounting for 17% of crude oil imports in the first quarter of 2024.

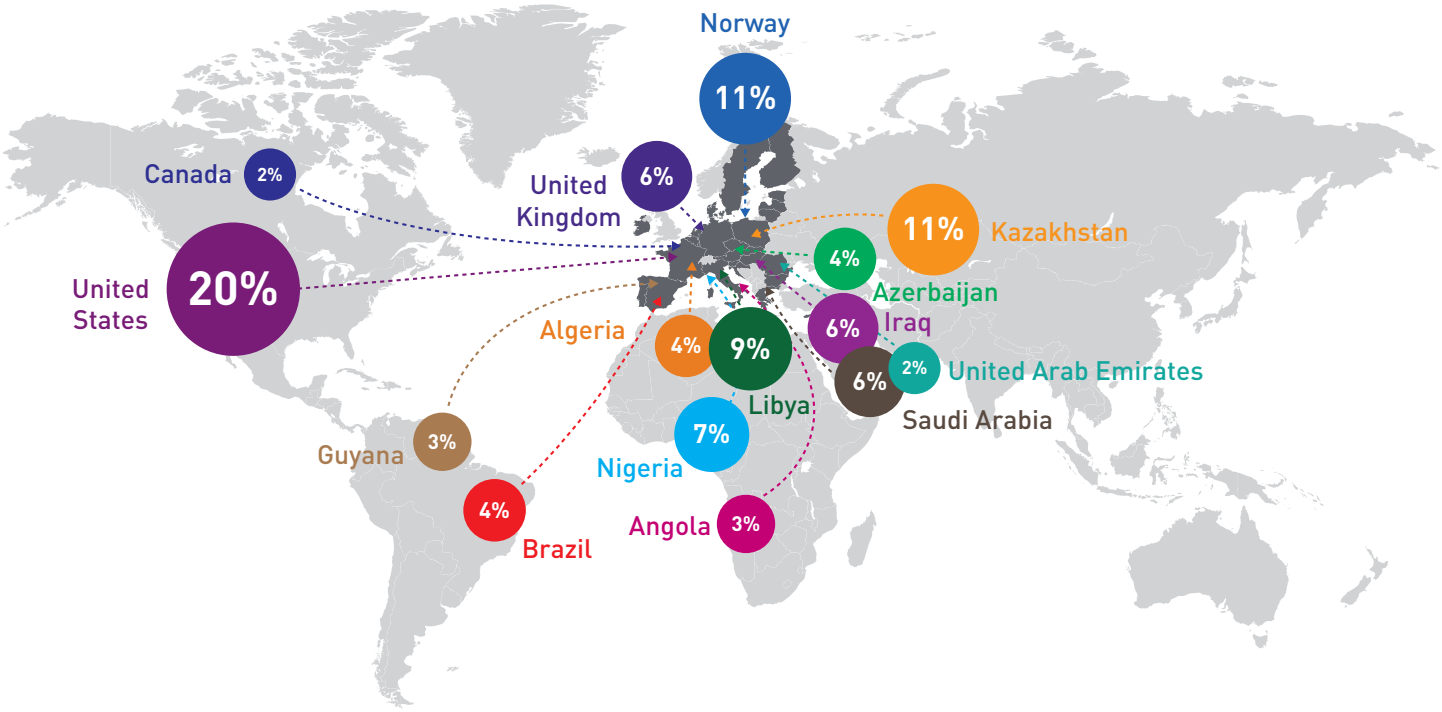

Figure 3: Top 15 countries exporting crude oil to the EU in 2023.[8]

It is equally important to prioritize partnerships with reliable energy suppliers to avoid the 'weaponizing of energy' supplies, while also considering affordability when transitioning from one supplier to another.[9] Any diversification effort must ensure that energy remains equally affordable, particularly for vulnerable consumers and industries. Furthermore, investments in infrastructure must address the needs of all EU regions to guarantee equitable access to energy.

Enhanced market transparency strengthens energy security by enabling better monitoring of gas flows. Expanding the ENTSOG Transparency Platform to include data from countries like Turkey, through which Russian gas may transit, and increasing access to data on entry points would allow for proactive responses to potential supply risks.

The increased deployment of renewable energy sources will enhance the diversification of Europe's energy. Higher levels of electrification increase the importance of natural gas-fired power plants, which play a crucial role in providing critical flexibility and grid stability during periods of high renewable intermittency, ensuring the energy system remains resilient even in the face of infrastructure constraints or geopolitical disruptions.

Therefore, there is a need for accelerated deployment of low-carbon technologies like hydrogen and carbon capture and storage (CCS) for gas-fired plants so that they can help mitigate emissions while ensuring that gas plants remain compatible with a gradually decarbonized market.

By integrating diversified sources, resilient infrastructure, reliable partners, affordability considerations, and robust transparency mechanisms, coupled with accelerating the deployment of renewable energy and hydrogen, Europe can build a secure, inclusive, and sustainable energy system.

[7] Rystad Energy, *'UCube'* (2024).
[8] Rystad Energy, *'UCube'* (2024).
[9] European Council, *'Where does the EU's gas come from?'* (2024): https://www.consilium.europa.eu/en/infographics/eu-gas-supply/

Proposed actions:

- European Commission should ensure that EU partnerships with producing countries that can support new supplies while contracts between market parties are concluded in competition with each other.
- European Commission should create the conditions to the deployment of low-carbon technologies like hydrogen and carbon capture and storage (CCS) value chains.
- European Commission should enhance market transparency and fair competition by expanding the ENTSOG Transparency Platform increasing access to data on natural gas entry.

3. Assess and encourage the use of European crude oil and natural gas resources

To ensure security of supply while replacing Russian gas imports, and achieving energy affordability and climate objectives, it should also include using Europe's own crude oil and natural gas resources. Mario Draghi's report recommends 'Member States to assess the role of domestic supply in ensuring EU energy security and price stabilization'.[10]

Despite a production decline of 73% in natural gas and 43% in crude oil between 2010 and 2024, the EU produced 42 Bcm of natural gas and 0.35 Million bbl/day of crude oil in 2024[11], covering 13% (of a total of 300 Bcm) and 3.5% (of a total of around 10 Million bbl/day) of its demand, respectively. Norway contributed an additional 129 Bcm of natural gas (33%) and 0.94 Million bbl/day of crude oil (11%).[12]

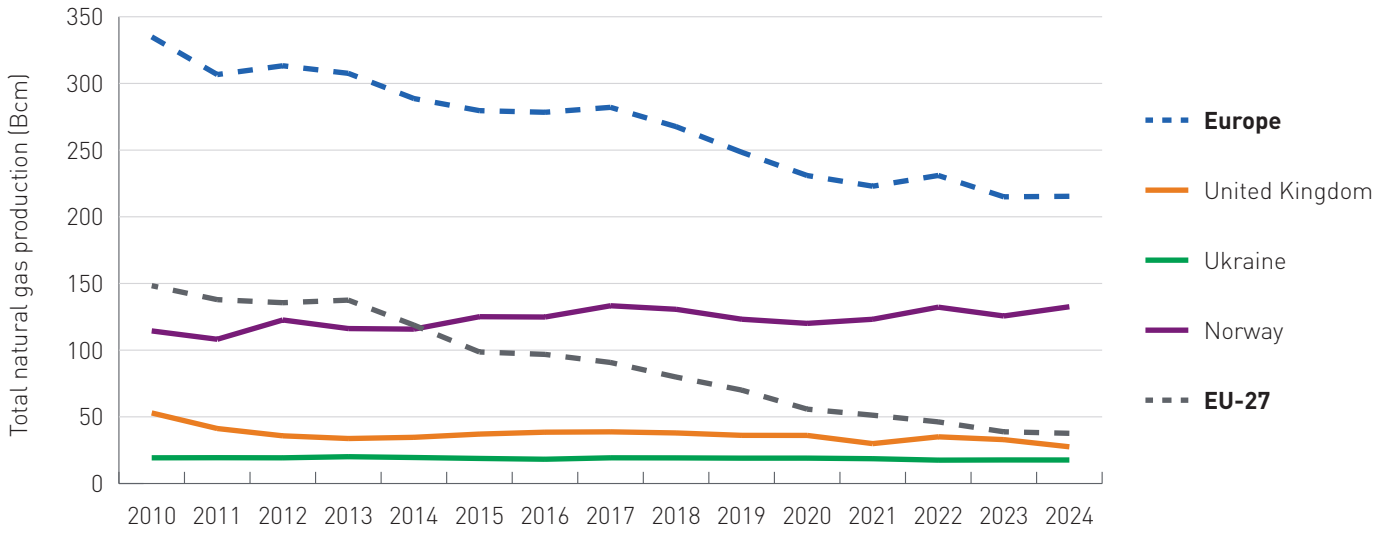

Figure 4: Total natural gas production in Europe (EU-27, UK, Norway), 2024.[13]

[10] Mario Draghi, *'The future of European competitiveness, Part B'* (September 2024): https://commission.europa.eu/document/download/ec1409c1-d4b4-4882-8bdd3519f86bbb92_en?filename=The%20future%20of%20European%20competitiveness_%20Indepth%20analysis%20and%20recommendations_0.pdf

[11] Rystad Energy, *'UCube'* (2024): (2010: 157.52 Bcm; 2023: 42.80 Bcm)

[12] Rystad Energy, *'UCube'* (2024).

[13] Rystad Energy, *'UCube'* (2024).

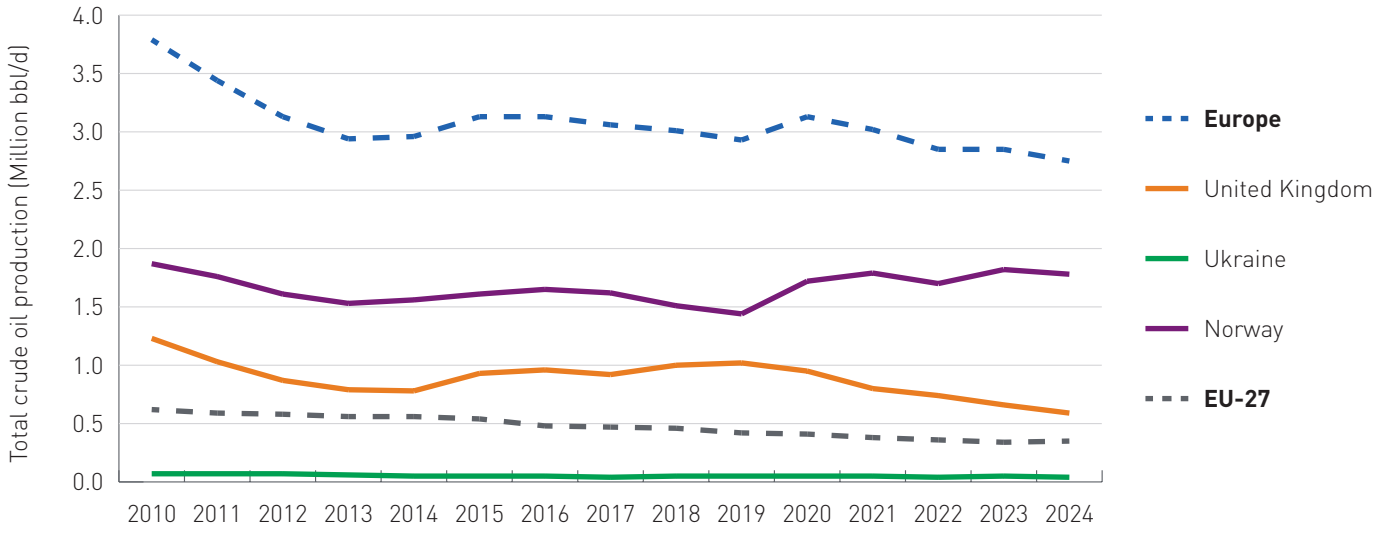

Figure 5: Total crude oil production in Europe (EU-27, UK, Norway), 2024.[14]

Developing European crude oil and natural gas resources is often more sustainable and fully compatible with climate neutrality than imports, given that molecules are transported across shorter distances reducing transportation and logistics costs and operations take place in a mature environmental regulatory framework adhering to the most stringent environmental standards and use the most advanced technologies.

Increasing EU production of oil and gas would enhance security of supply, reduce reliance on volatile foreign suppliers, and stabilize prices by reducing external shocks. Beyond this, remaining European oil and gas reserves should be seen as important from a perspective of strategic autonomy, serving as feedstock for crucial industrial sectors.

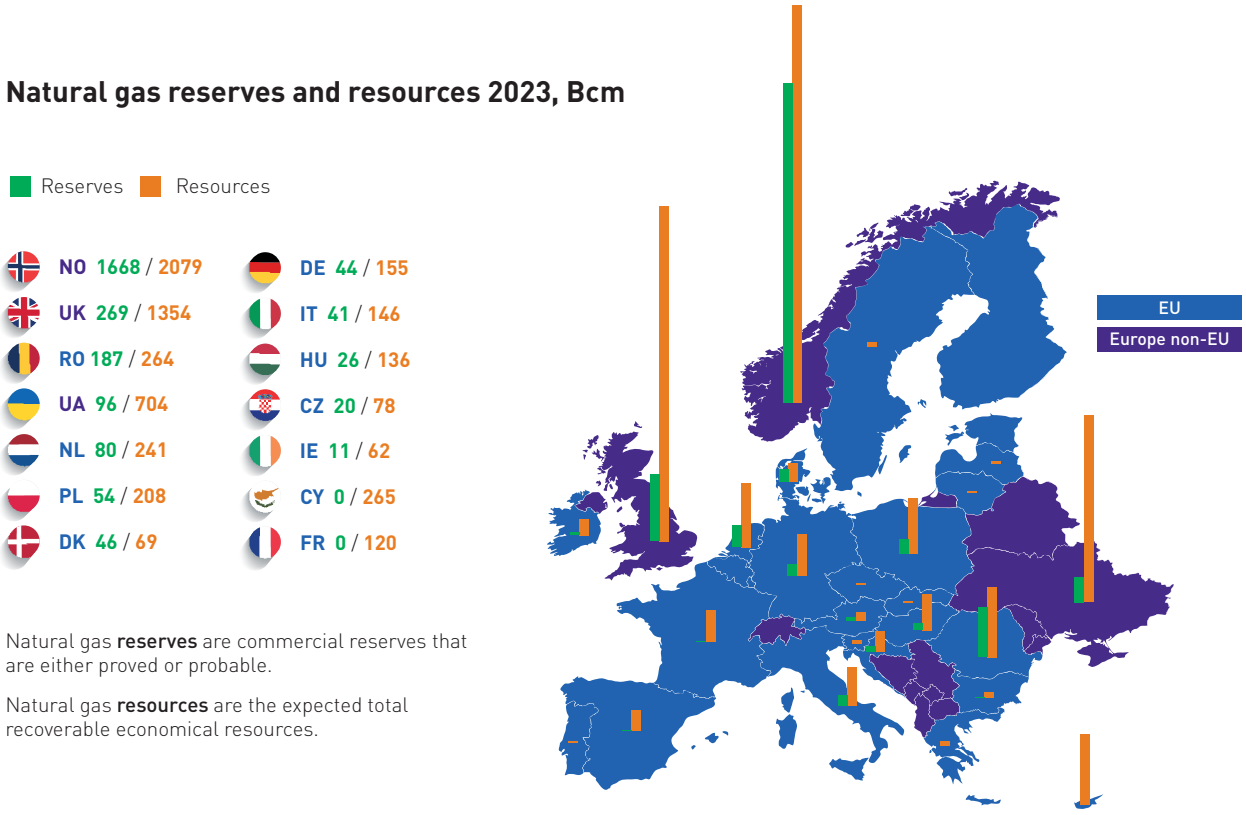

Figure 6: Natural gas reserves and resources in Europe, 2023.[15]

[14] Rystad Energy, *'UCube'* (2024).
[15] Rystad Energy, *'UCube'* (2024).

The EU has significant crude oil and natural gas resources, but much of it remains underdeveloped due to environmental and political constraints. Reserves – economically viable deposits – are concentrated in the North Sea (Norway, Denmark, Netherlands, UK) and smaller fields in Romania, Poland, Germany and Italy. Resources, which include deposits that are not yet commercially viable, are far larger.

While this is a national competence, no EU strategy is in place to maximize the use of domestic resources despite their economic value, lower environmental footprint, and compatibility with climate neutrality.

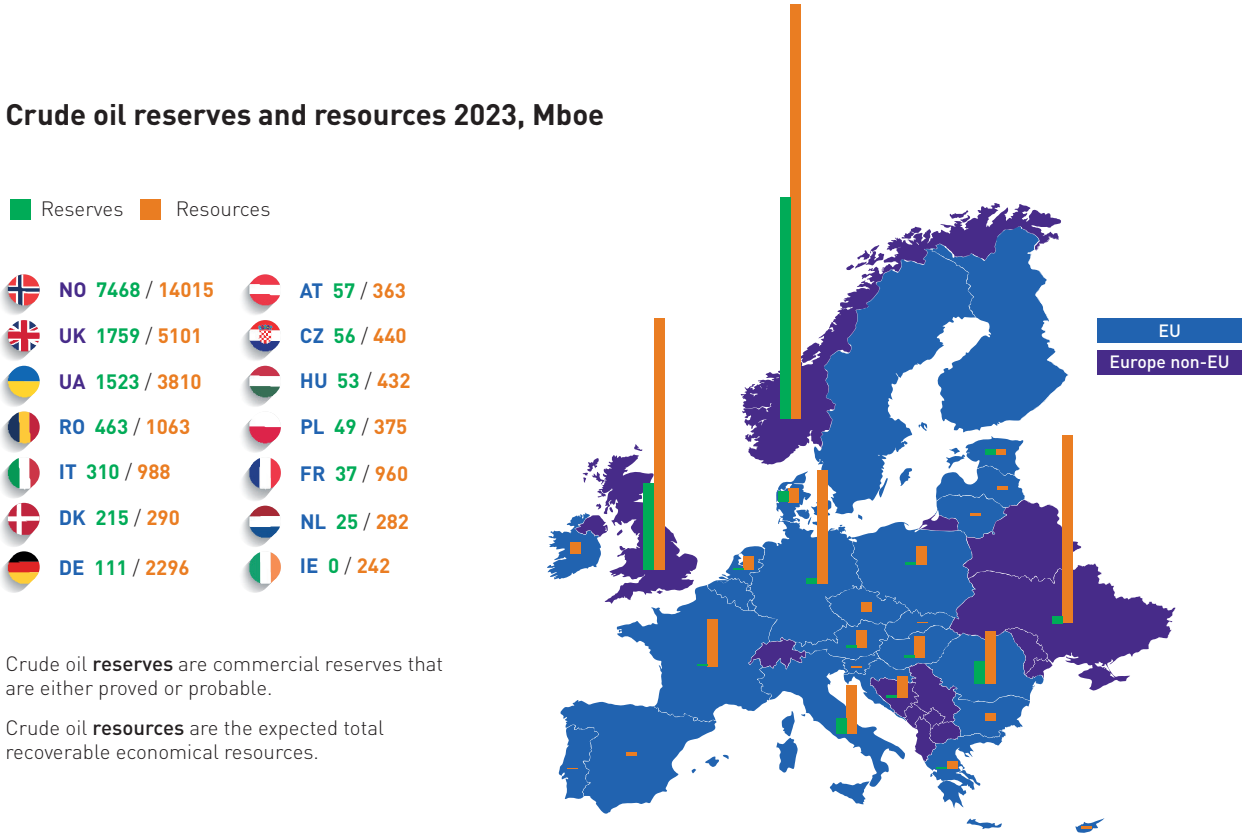

Figure 7: Crude oil reserves and resources in Europe, 2023.[16]

Proposed actions:

- European Commission should encourage Member States to assess the role of domestic supply in ensuring EU energy security and price stabilization, as recommended in Draghi report.
- Member States and European Commission should examine and address exploration / licensing / permitting challenges (e.g., support new licensing rounds / exploration opportunities, acceleration of permitting etc.) for new EU oil and gas production.
- European Commission should encourage Member States to lift existing bans or restriction in the production of oil and natural gas resources in the EU.
- Member States and European Commission should reduce barriers to financing the development of new crude oil and natural gas resources and recognize that due to natural field decline, future investment in crude oil and natural gas production will be essential, even in 2°C compatible scenarios.

[16] Rystad Energy, *'UCube'* (2024).

4. Ensuring robust infrastructure and safeguarding its security and full utilization

Ensuring robust energy infrastructure is crucial for maintaining a reliable and sustainable energy supply. This requires physical security measures to protect against physical threats (e.g., sabotage or natural disasters) and strong cyber resilience to defend against digital vulnerabilities. Maintaining and investing in existing infrastructure is as important as addressing gaps and upgrading systems to meet evolving demands. Safeguarding these assets is essential to ensuring the uninterrupted flow of energy, support the energy transition, and protect critical systems from evolving risks.

To address the substitution of Russian energy imports, the role of LNG in the gas supply mix and the number of LNG import terminals have increased. LNG terminals are inherently more dispersed and small-scale compared to pipelines and interconnecting infrastructure. Despite the extensive coverage of the European territory, significant gaps and bottlenecks persist in the European gas infrastructure grid. Moreover, much of the existing infrastructure can be repurposed for dual use, such as transporting hydrogen to consumption hubs and CO_2 to underground geological storage. Regular maintenance and modernization are essential to mitigate vulnerabilities, especially given the increasing complexity of the energy landscape and growing geopolitical risks.

It is not enough to only consider the EU import and transport capacity (e.g., pipelines, LNG regasification terminals) when assessing whether the system works well, as it misses regional needs, connectivity, and a more decentralized supply system. Additional FSRU-based LNG terminals can complement the onshore LNG terminals already in operation to ensure the availability of natural gas on the market. Modern FSRU-based LNG terminals offer a flexible, cost-effective solution that is smaller, cheaper, and reliant on existing ships. In case of overcapacity or changing market conditions, FSRUs can be redeployed elsewhere to ensure efficient use of resources. This adaptability also addresses concerns about "lock-in" effects, as these terminals avoid long-term reliance on fixed infrastructure, allowing for greater responsiveness to evolving energy needs and a smoother transition to low-carbon energy sources (e.g., hydrogen).

Maintaining the most efficient use of the transmission infrastructure of Europe's strategic infrastructure is of the utmost importance to secure the uninterrupted flow of supplies. Shippers should be exempted across all EU countries from the obligation to pay a fee for reserved capacity that has not been realized due to repairs to the transmission infrastructure. It would prevent prolonging required work beyond what is necessary and promote the most efficient approach. This would minimize supply disruptions and adverse effects on alternative supply routes.

Proposed actions:

- European Commission should present an EU Security Union Strategy 2025-2030, building on the Recommendations of the critical infrastructure stock taking exercises and closely aligning with strategic partners.
- European Commission should swiftly adopt measures included in the Council Recommendation on a Blueprint to coordinate a Union-level response to disruptions of critical infrastructure (2023/0318 (NLE)).
- European Commission should support the development of imports via pipelines from other EU neighbouring regions through targeted policy support.
- European Commission to support further the construction of LNG and LNG FSR terminals and permitting procedures.
- European Commission should ensure the most efficient use of transmission infrastructure by exempting shippers across all EU from the obligation to pay a fee for reserved capacity that has not been realized due to repairs on the transmission infrastructure.
- Propose energy sector-specific guidance in NIS2 Directive, for example:
  - (1) cybersecurity risk-management measures (NIS2, Art. 21) as implemented in each country's regulatory scheme should allow energy companies to reference standards such as IEC62443 applicable to industrial control systems, in addition to the current focus on information technology standards such as ISO27001.
  - (2) Guidance for the threshold of reporting "significant incidents" under NIS2 should be sector-specific so that energy companies follow useful thresholds applicable to energy infrastructure, which may differ from those applicable to network / IT infrastructure. A better and more efficient response to SoS may be achieved.

5. Use realistic demand outlooks and pragmatic decarbonization pathways

Realistic demand outlooks and pragmatic decarbonization pathways are essential for maintaining the stability, sustainability and long-term viability of the oil and gas industry and energy supply contracts. To conclude long-term energy supply contracts, European buyers need visibility on demand. While the EU's emphasis on competitiveness and energy affordability is a positive signal, the demand projections - centered on a significant increase in electrification and the phase-out of all fossil fuels - are pushing buyers toward the global spot gas market. This shift highlights the need to balance the flexibility benefits of the spot market with the energy security and stability offered by long-term supply agreements.

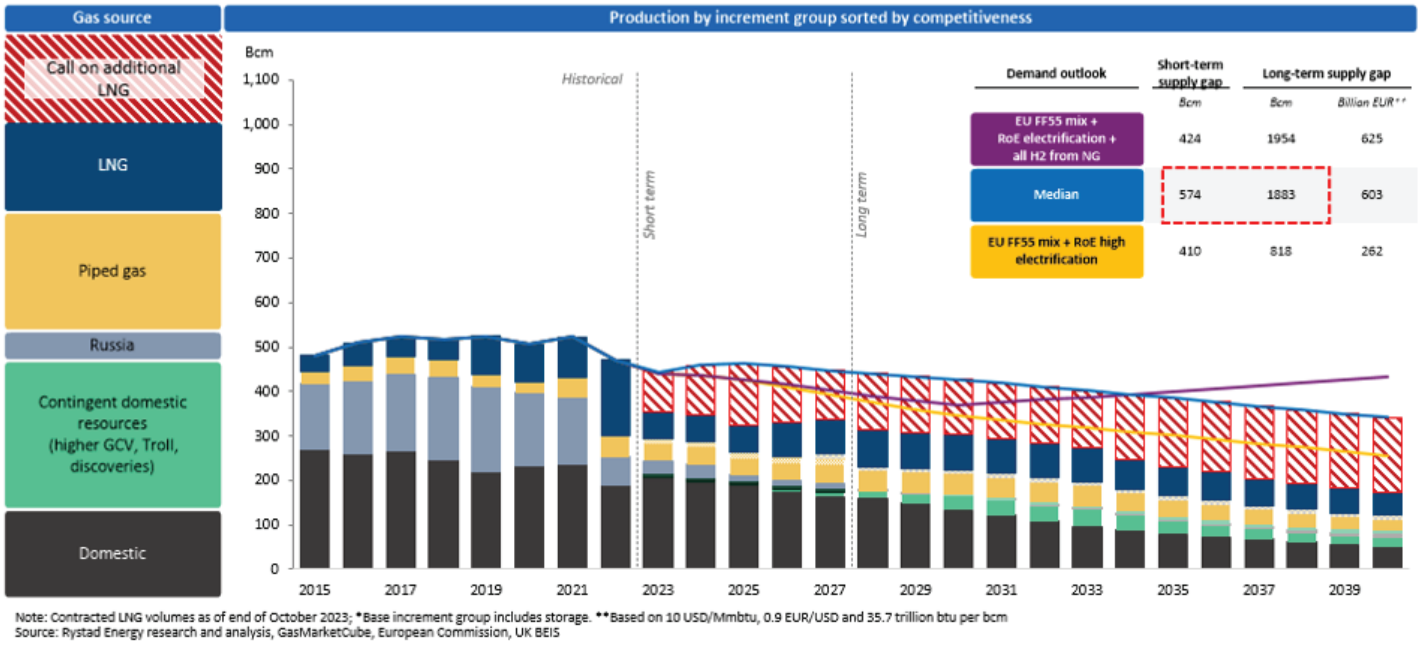

Figure 8: Long-term overview of gas supply by increment group sorted by competitiveness, 2023.[17]

This exposes the EU to price volatility and the diversion of supply to competing regions such as Asia, while failing to prevent the relocation of energy-intensive industries outside Europe, a net loss from an economic and environmental perspective.

Natural gas retains a significant role in the EU energy mix and it is used relatively evenly across sectors of the economy. Despite this fact, the EU has concluded 31 LNG supply agreements amounting to 52% of 1,228 Bcm of the LNG required for 2023-2040 (as of 5 February 2025), indicating ongoing exposure to market fluctuations (assuming 'Fit for 55 mix' scenario).[18] In comparison, Asia has concluded 117 LNG supply agreements amounting to 1,519 Bcm.

As the Commission develops its 90% 2040 GHG emission reduction scenarios and impact assessment, an unnecessarily gloomy outlook for natural gas demand rather than a plan for its decarbonization – alongside that of industry – may further discourage the conclusion of long-term natural gas contracts and accelerate industrial demand destruction irremediably.

Long-term LNG contracts can increase resilience because they can reduce exposure to short-term global price volatility and – depending on detailed contractual terms – can provide buyers with a first call on the right to be supplied and/or flexibility to divert supplies in case of low demand.

[17] Rystad Energy research and analysis; Rystad Energy GasMarketCube; European Commission; UK BEIS

[18] Rystad Energy, 'Rebalancing Europe's Natural Gas Supply 2nd Edition' (December 2023): https://iogpeurope.org/wp-content/uploads/2023/12/Summary-Rebalancing-Europes-Gas-Supply-second-edition.pdf

Proposed actions:

- European Commission to assess and communicate in relevant scenarios how much natural gas the EU needs on the way to climate neutrality. Ensure that this is peer-reviewed objectively - establishing unrealistic 'low natural gas' scenarios prevents investment in needed supply and infrastructure and endangers the EU's security of energy supply.
- European Commission to ensure that the future impact assessment for the revision of the Climate Law including 2040 targets is based on an impact assessment with realistic scenarios in particular regarding the role of natural gas and low-carbon hydrogen.
- European Commission to send a clear political message that the EU will continue to need natural gas also to complement the intermittent role of renewable energy sources, supported by long-term contracts. Uncertainty on this political message creates an aversion to risk when signing new long-term supply agreements, both on the part of the supplier and customer.

6. Optimize market functioning and avoid the use of distortive measures

The existing EU internal market and gas infrastructure has proven to be resilient and effective in facilitating market signals to address and manage substantial supply challenges - allowing for the successful substitution of Russian imports through an increase in LNG imports from 80 Bcm in 2021 to 137 Bcm in 2023, making up 46% of total EU gas demand (295 Bcm).[19] While the EC acted swiftly, through measures included in RePowerEU, to address the energy crises caused by the Russian invasion of Ukraine, several of these measures may not be relevant and/or may require important modifications given today's market realities.

Example 1 – Gas Market Correction Mechanism (MCM): distortive measures such as limiting wholesale gas price levels would disrupt market-based price formation and limit the movement of gas to where it is most needed. This can create the risk of LNG cargoes being diverted away from Europe and impact the carefully calibrated risk and reward balances provided by existing (long-term) contracts. Price caps also disincentivize investments while long-term contracts, with diverse indexations, are best suited to secure the supply of natural gas and mitigate price volatility.

Example 2 – Joint purchasing mechanism, AggregateEU: independent purchase and sale of natural gas (or other energies) by market parties in competition with each other is a core element of a functioning, competitive, liquid market and a cornerstone of the EU single energy market. The risk of mandatory joint purchasing cannot be underestimated - collective purchasing of gas could reduce competition and undermine the benefits of a competitive market that have been established over the past decades. Despite the interest in voluntary participation, the total volumes matched on the platform amounted to 42 Bcm in 2023, which compares to approximately 6,896 Bcm of total volume traded on EU hubs, comprising both OTC and exchange trades, i.e. less than 1% of the total market.

Example 3 – The 90% storage target: the storage filling target has caused a significant degree of risk for suppliers and shippers, and market distortion, not to mention a significant cost for the Member States. It is crucial to monitor the future gas demand and available supply in order to assess the need for a possible and justified (through risk-assessment) use of the measure, which should be applied carefully to limit negative effects to the market. Considering the change in market conditions since 2022, contemplating storage targets for November 2026 should be underpinned by an assessment on the impact of such target on the market. Additionally, clarity should be provided to the market with as much advance notice as possible. In any case, regional flexibility, based on Member States' specificities is necessary to make sure that the imposed burdens are commensurate to the specific market risks. Specifically, while no storage targets apply when Union or regional emergencies are declared, no similar option is available in the case of national emergencies. The flexibility of a target when a national emergency is declared in only one Member State will make it easier to respond appropriately to its specific supply problems (e.g., when transmission infrastructure is damaged or transmission is halted due to long-term infrastructure repairs).

Example 4 – Member States' solidarity provisions: the already existing provisions on solidarity amongst the Member States are both clear and effective enough. There is no need to extend measures stipulated in Regulation 2022/2576.

[19] Rystad Energy, *'Rebalancing Europe's Natural Gas Supply 2nd Edition'*, December 2023: https://iogpeurope.org/wp-content/uploads/2023/12/Summary-Rebalancing-Europes-Gas-Supply-second-edition.pdf
*Only includes SPA signed in 2022 and up to 31st October 2023, MoUs and HoAs are excluded

Proposed actions:

- European Commission to revise SoS Regulation in a way that takes into account new gas market reality, geopolitical situation and ensure consistency with existing security of supply related initiatives / legislation.
- European Commission to consult stakeholders and assess whether the conditions that led to the emergency measure are still valid. It is crucial to monitor future gas demand and supplies in order to assess the need for a possible and justified (through risk-assessment) extension of the measure while minimizing negative effects from market distortion. In any case, a regional flexibility based on member States' specificities is necessary to make sure that the imposed burdens are commiserated to the specific market risks
- European Commission and Member States to avoid turning emergency measures into permanent instruments which are no longer needed and may significantly distort and undermine the functioning of the EU's integrated energy market. European Commission should assess the need for November 2026 storage target and should provide clarity to the market with as much advance notice as possible.
- European Commission to maintain AggregateEU on a voluntary basis, to ensure competition in the EU single energy market.
- European Commission to ensure flexibility of storage targets, including when national emergency is declared in only one Member State.

Concluding remarks

The EU's approach to enhancing the security of crude oil and natural gas supply must balance the need for secure and affordable energy with net-zero objectives and be resilient to geopolitical events. By emphasizing the importance of and long-term need for crude oil and natural gas supplies (incl. demand scenario development; promotion of long-term contracts), maximizing domestic production, facilitating diverse crude oil and natural gas imports, promoting the development of infrastructure, and ensuring a stable, clear and enabling regulatory framework, Europe can achieve greater security of supply while remaining committed to its climate objectives.

While the EU's regulatory frameworks, such as CSDDD, CSRD, and the Taxonomy Regulation, aim to align with sustainability goals, the cumulative effect of all the reporting requirements and prescriptive policies risk discouraging energy supplies to the EU and may stifle much-needed investment in oil and gas infrastructure. Tight markets and the potential underestimation of energy demand (i.e., REPowerEU scenario) - particularly as the 2040 energy landscape comes into view - compound the issue as efforts to electrify the economy struggle with intermittent renewable sources, storage challenges, and supply chain bottlenecks. The pushback against new strategic natural gas infrastructure and market interventions adds additional pressure to an already fragile supply chain, raising concerns about long-term energy security.

IOGP Europe highlights that an efficiently functioning, interconnected, and liquid energy market with free and transparent price formation for competing energies from a diversity of domestic and global supplies, intelligent demand-side solutions, and a stable legislative framework will best ensure cost-efficient, secure supplies to consumers. It is essential that the revision of the Gas Security of Supply Regulation does not undermine the successful establishment of the integrated EU energy market. Direct government interventions into functioning markets (particularly on a wholesale level), including market-based price formation, may have unintended long-term consequences and should be avoided. Where required, policymakers may best address energy poverty with targeted financial support for vulnerable/low-income consumers. The Regulation established Member States' solidarity measures across the industry protecting supplies, especially to vulnerable consumers.

As the "third wave" of LNG liquefaction projects comes onstream and reduces market tightness by 2026-2027 (please see the 'Rebalancing Europe's Gas Supplies 2nd edition' December 2023 study by IOGP, API, and Rystad), the EU has the opportunity to give buyers and suppliers the signal to source the energy needed to safeguard its competitiveness.