International Energy Agency

Keynote Gas Market Developments and Outlook

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ERSE SEMINÁRIO Preparação do Período de Regulação do Setor do Gás 2028-2031

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What is the IEA and what does it do?

80% of global energy consumption

62% of global energy production

80% of global CO2 emissions

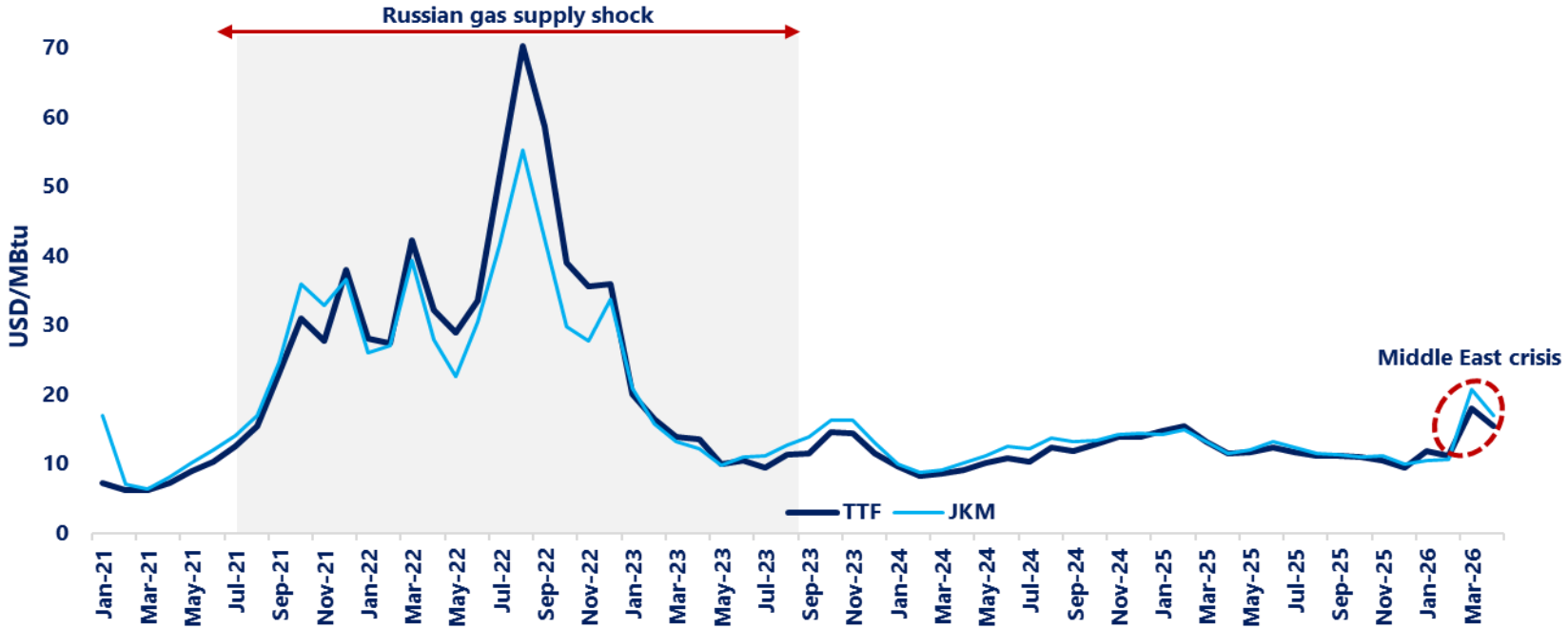
87% of global clean energy investment

- **Intergovernmental** organisation under OECD.
- 32 member countries, 13 association countries, 4 accession countries.
- **Policy** recommendations, **analysis** and **data** on global energy sector.

Global gas market volatility

Middle East crisis: gas prices surged, but so far much less than 2022

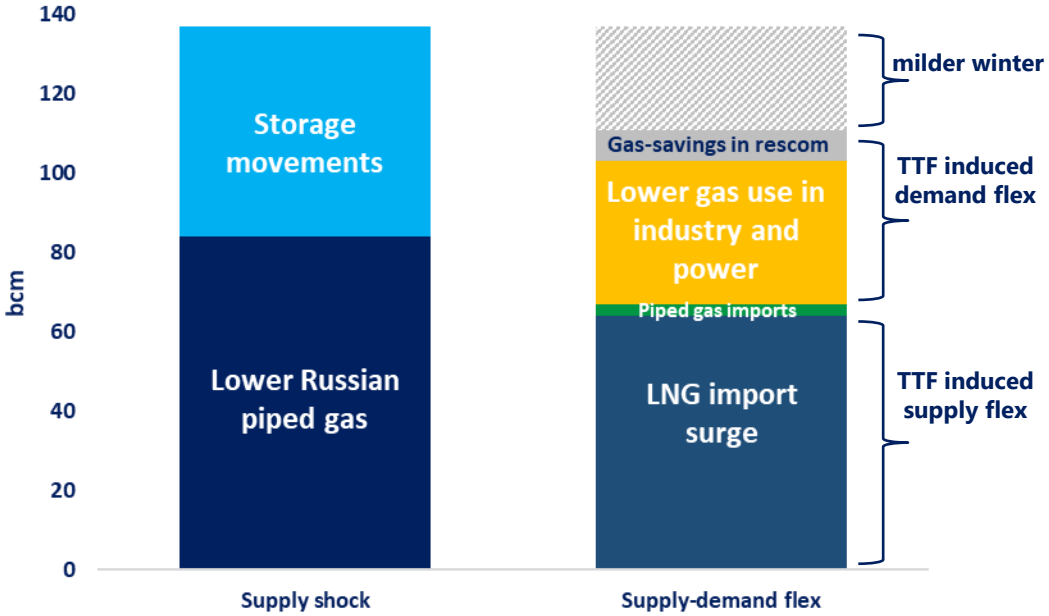
TTF month-ahead and JKM prices, January 2021 – April 2026



Price rises since the closure of the Strait of Hormuz are limited compared to the 2022 gas crisis. Still, the 2022 crisis lasted more than a year, while the duration of the current crisis is unknown.

Lessons learned from 2022 crisis: market forces and policy innovations

Market-driven supply-demand flex in 2022

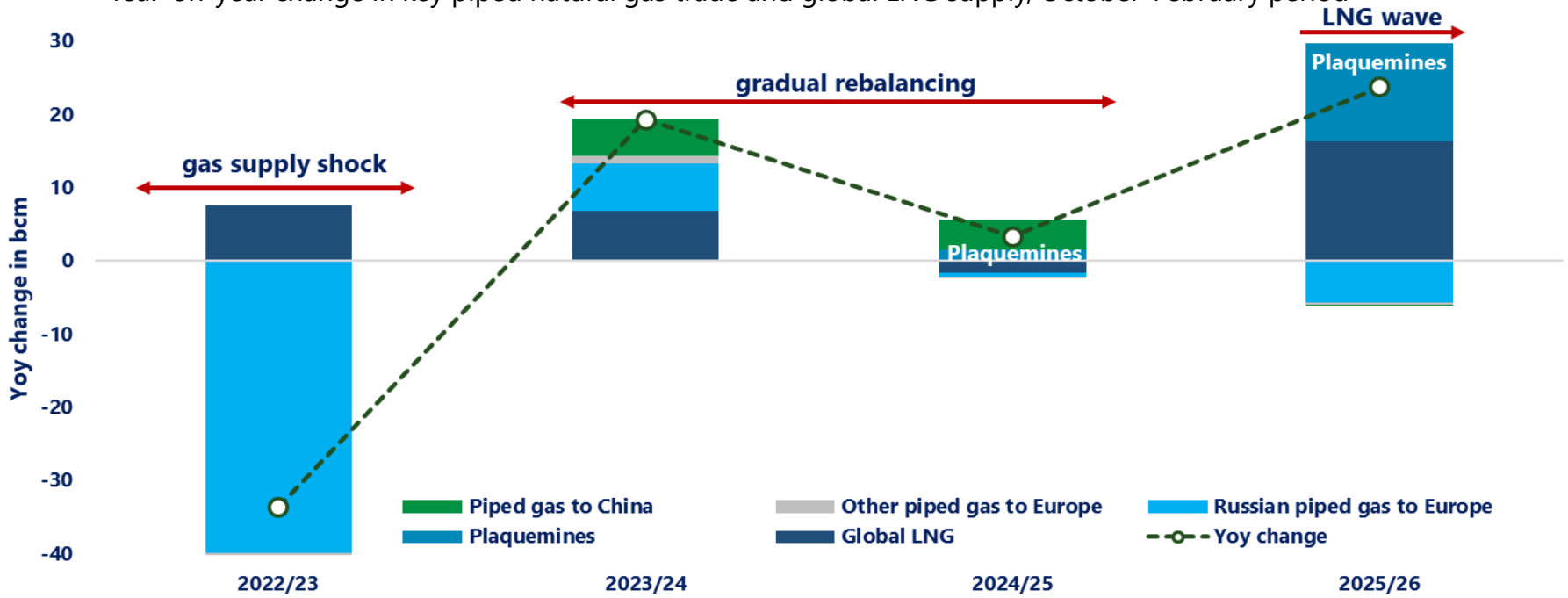


New policies and regulations

TTF played a key role in providing the right price signal to attract additional LNG supply and moderate European gas demand during the 2022/23 crisis. New policies and regulations fostered gas supply security.

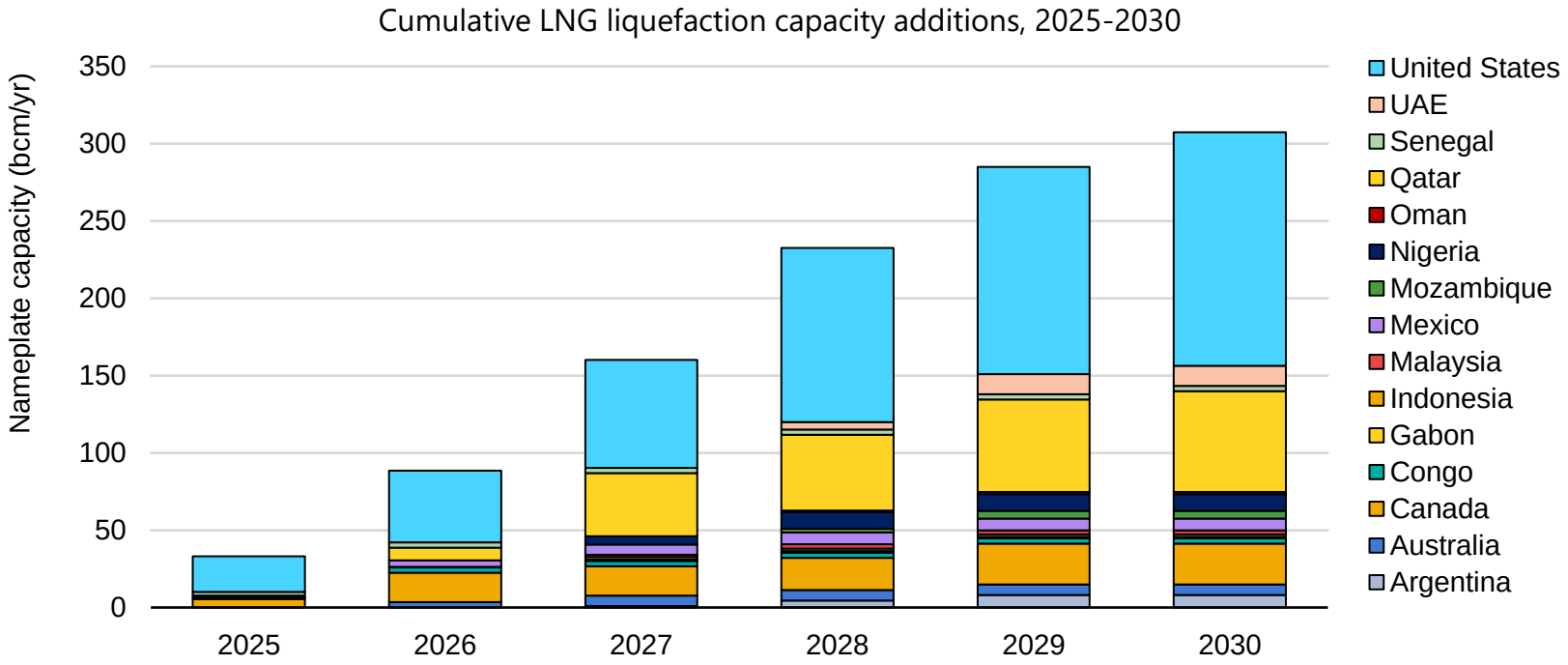
Global LNG supply surged by more than 10% over the 25-26 winter

Year-on-year change in key piped natural gas trade and global LNG supply, October-February period



Global LNG supply grew by around 12% in the Oct-Feb period, largely supported by the ramp-up of new LNG projects in North America. This strong growth gradually eased up market conditions.

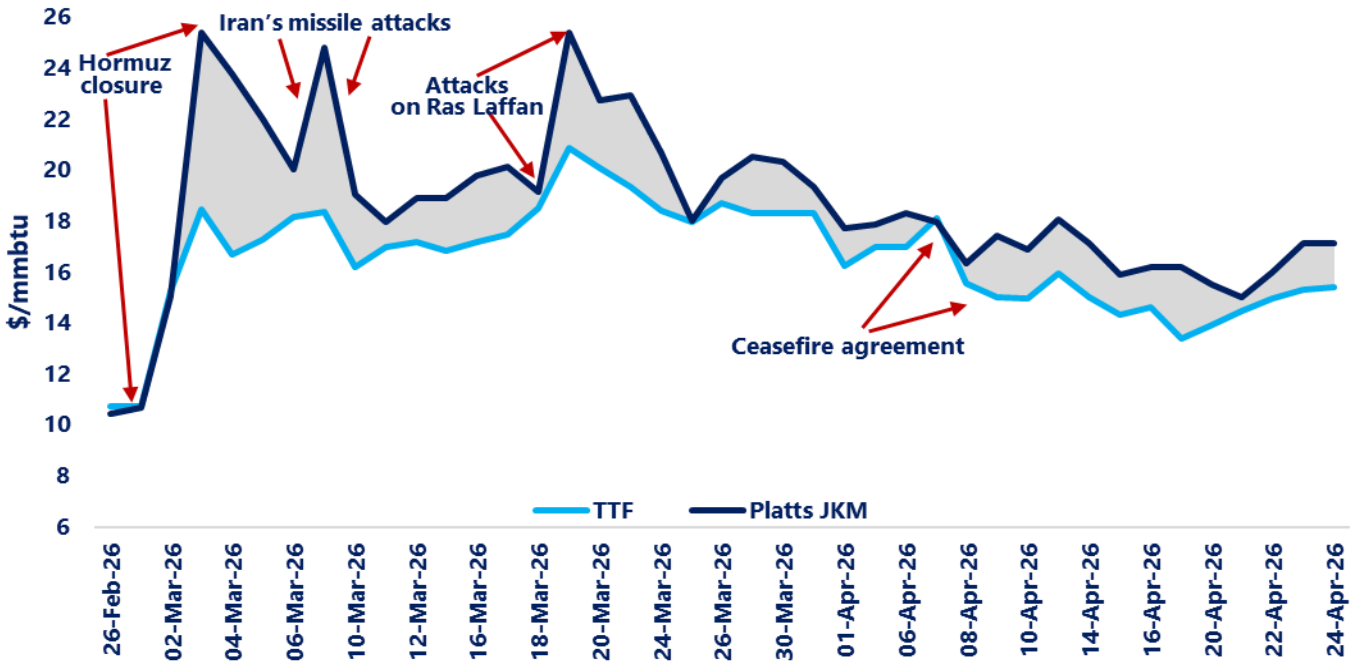
The next wave of LNG supply is delayed but gathering momentum



Global LNG capacity was expected to expand by more than 300 bcm/y by 2030, driven by the United States and (now delayed) Qatar. This growth partially compensates losses from the Strait of Hormuz.

Since end of February, gas prices surged in both Asia and Europe

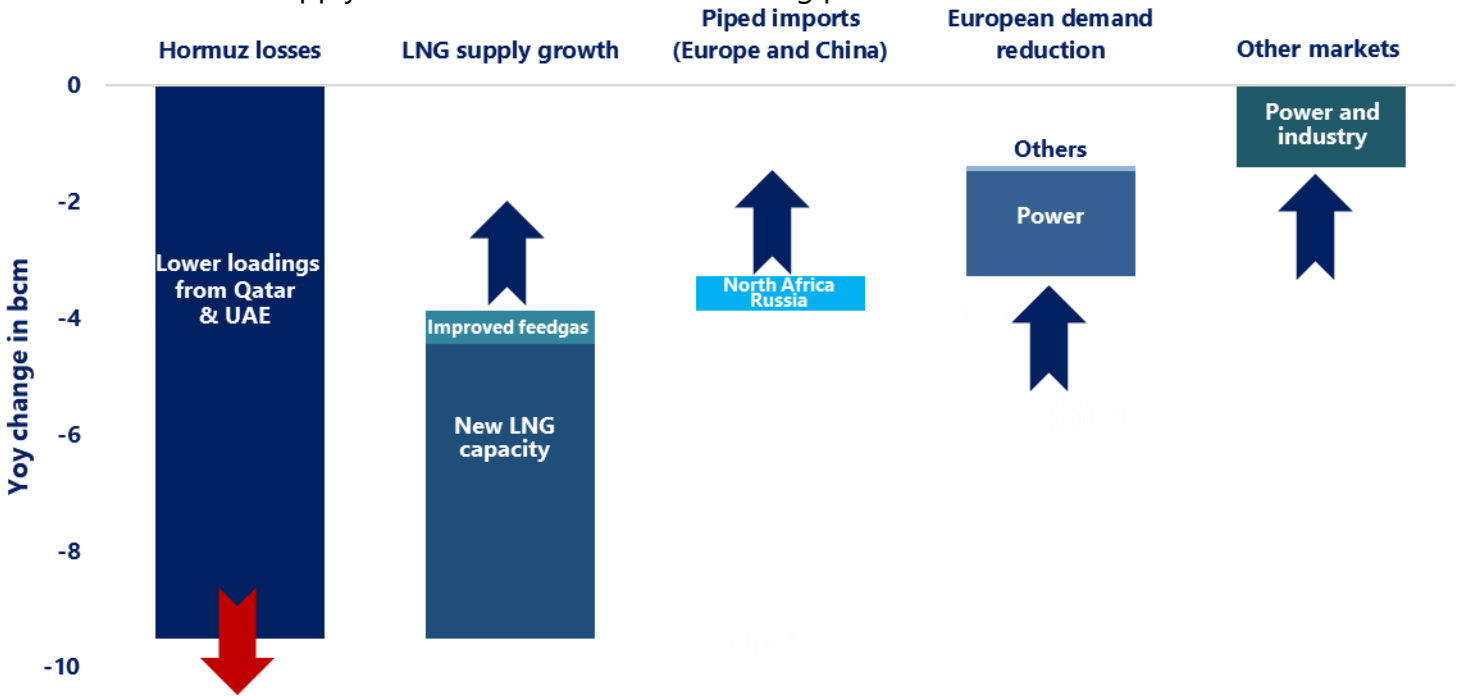
TTF month-ahead and JKM prices, February 2025 – April 2026



TTF surged by 70%, while JKM doubled in the first two trading days after the closure of Hormuz. Prices remained volatile since then and both TTF and JKM surged to their highest since the 2022/23 gas crisis.

How did the market balance out in March 2026?

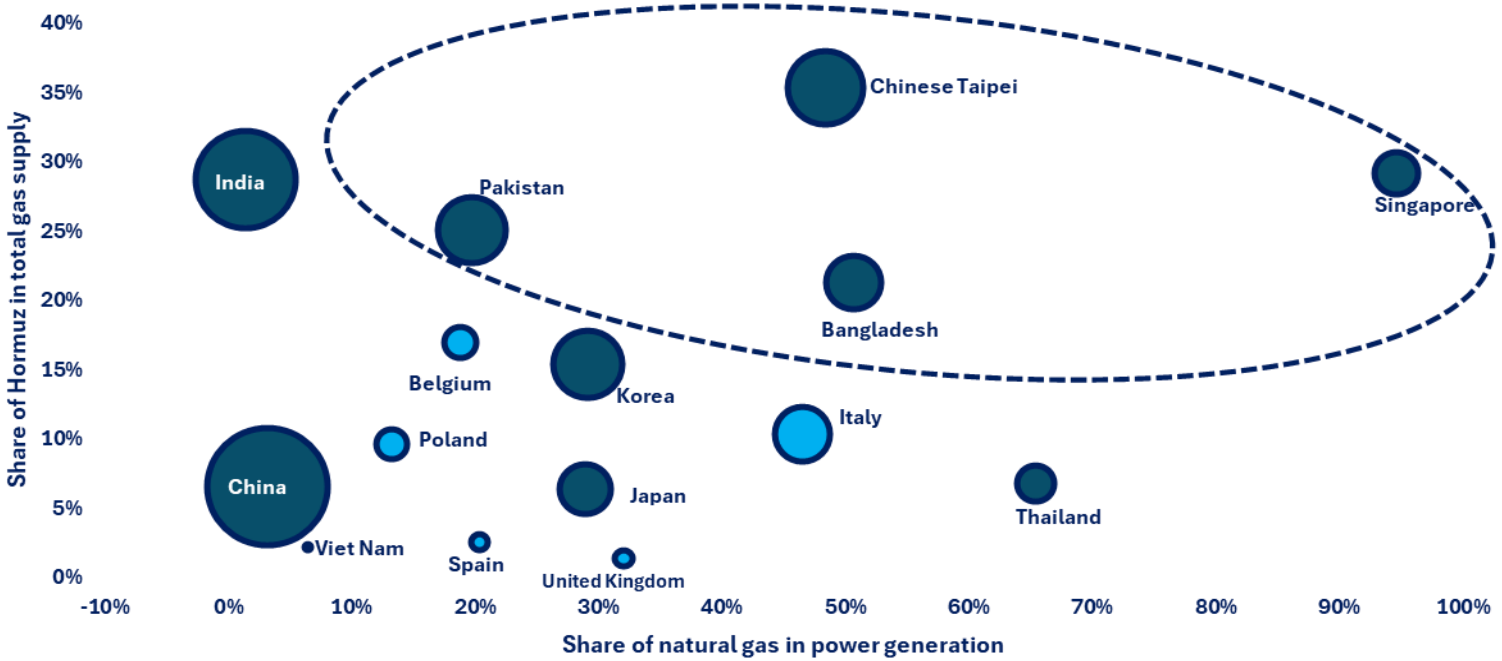
Selected supply and demand factors influencing price formation in March 2026



The decline in Hormuz LNG was partly offset by new LNG supply from North America and Africa. Strong renewables power output in Europe and higher piped deliveries also mitigated the impact of the shortfall.

Asian markets are more exposed to the Strait of Hormuz

The exposure of key Asian and European markets to the Strait of Hormuz in 2025



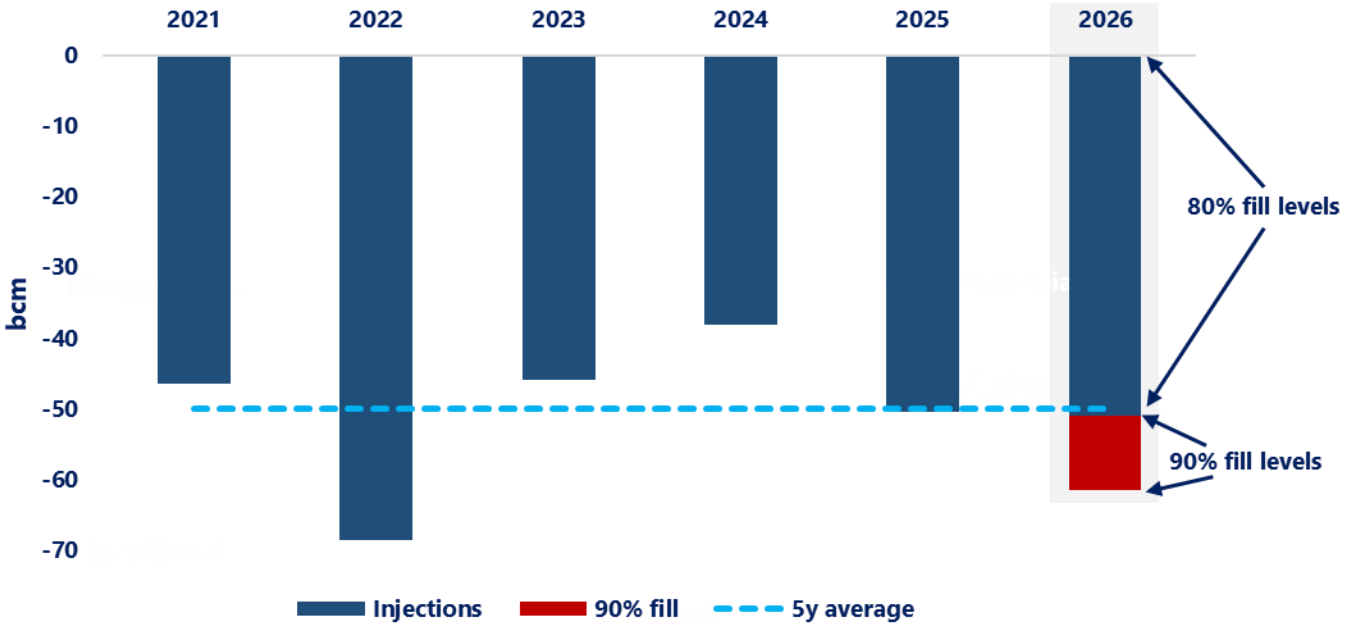
Almost 20% of global LNG trade transited via the Strait of Hormuz in 2025, with no diversion options. While Asian markets are more exposed, a prolonged disruption would have global consequences.

Demand-side measures including fuel switching take center stage

Potential outlooks for gas

Short term: EU storage injections key factor for summer market

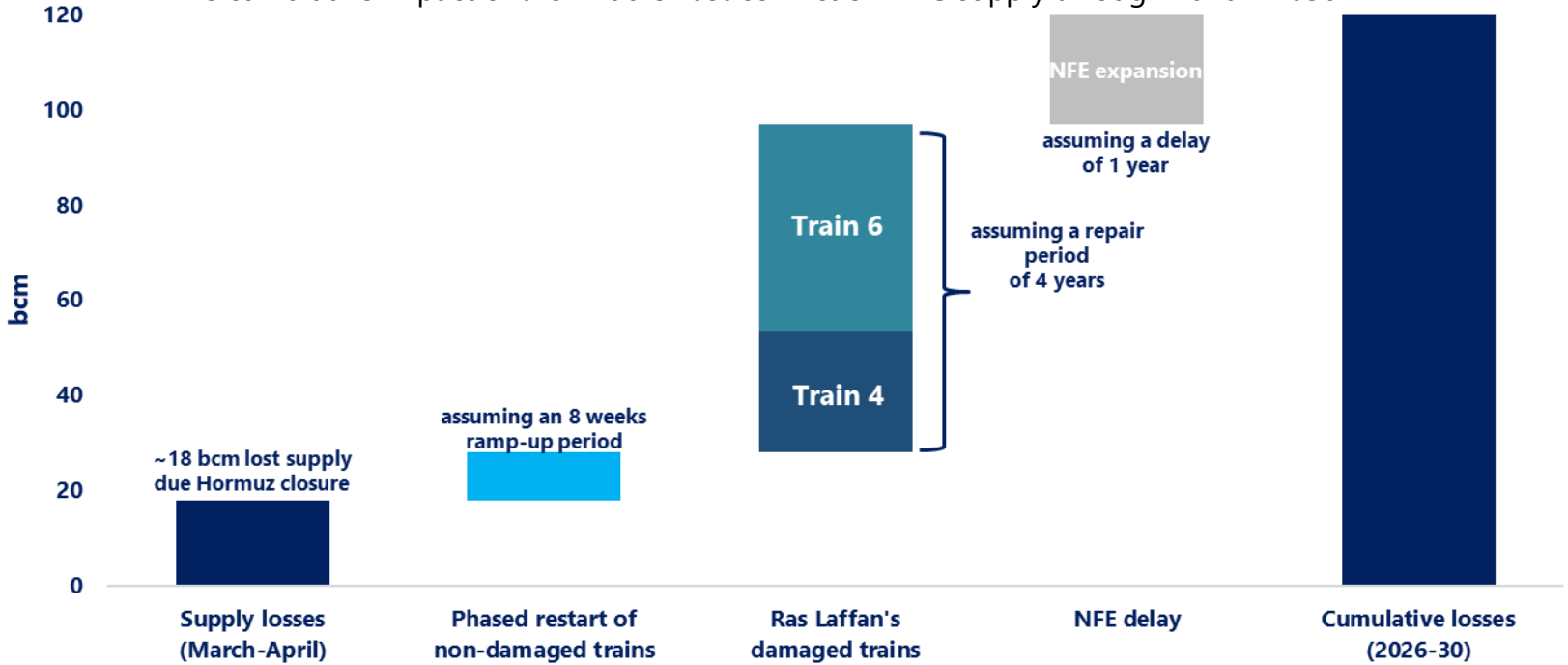
EU storage injections through 2021 – 2025 and projections for 2026 (1 April – 31 October)



EU storage levels are standing 30% below their 5y average. Reaching 90% fill levels would require 10 bcm of additional gas injections, while reaching 80% fill levels would require similar injections as last year.

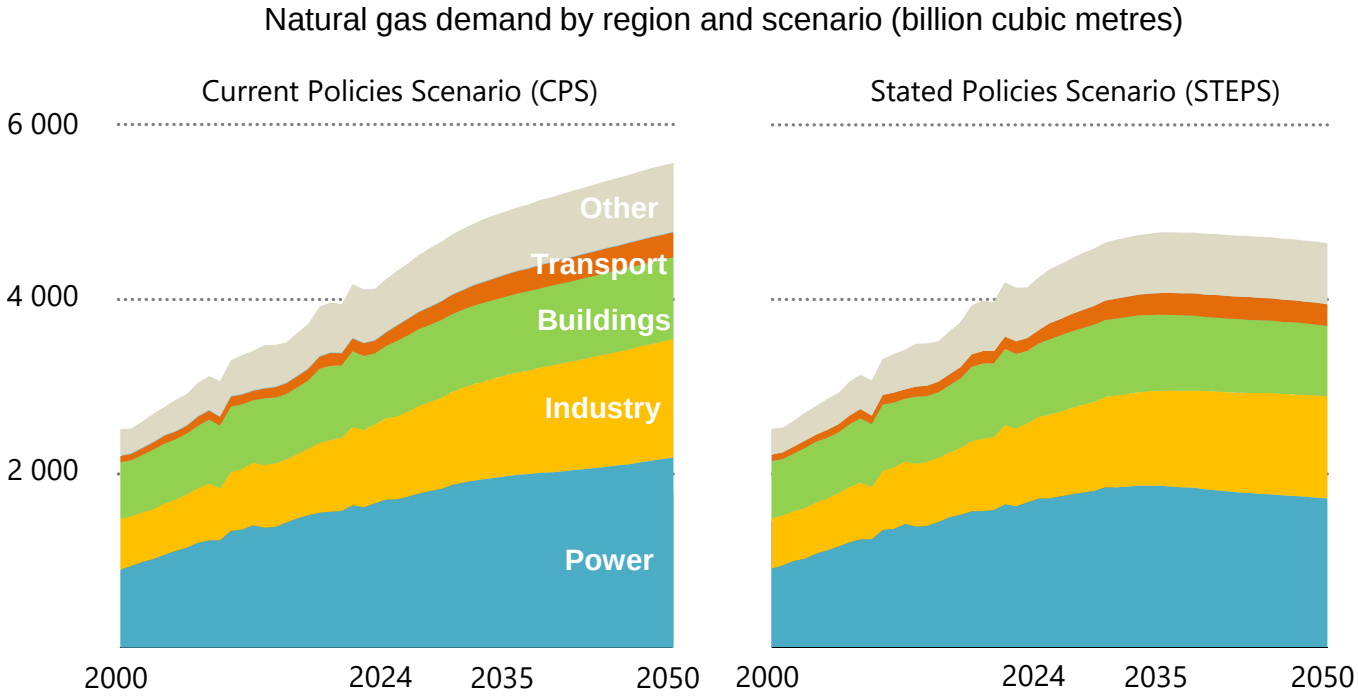
Medium term: the Middle East conflict is altering the outlook

The cumulative impact of the Middle East conflict on LNG supply through 2026 – 2030



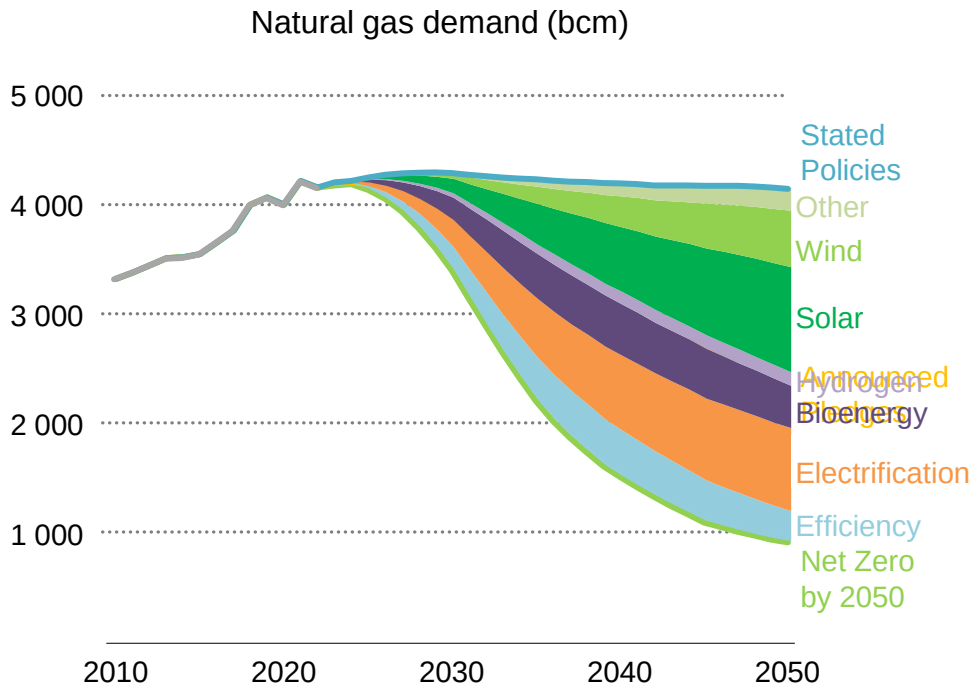
The Middle East conflict already led to a loss of ~120 bcm of global LNG supply over the 2026-30 period, mainly driven by the damages caused to Qatar's LNG facilities. This alters the medium-term outlook.

Long term scenarios: two pathways for global natural gas demand



Emerging and developing economies drive ongoing demand growth for natural gas in the CPS through 2050, while it levels of in the STEPS after 2035

In decarbonising the energy system, what could replace natural gas?

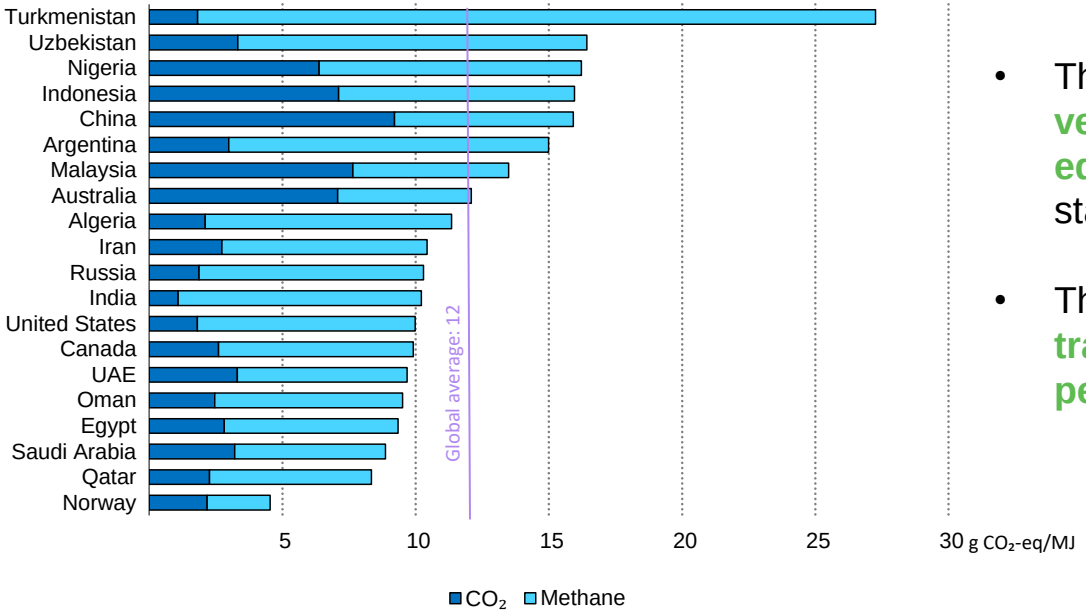


Natural gas demand can be replaced by solar and wind in power generation, and by electrification in heating and (some) industry

Policy discussions: reducing emissions while ensuring security of supply

Large differences in methane emissions intensity across gas suppliers

Average GHG emissions intensity of the world's largest natural gas producers by country, 2022



- Methane emissions from gas operations differ by **a factor of 10 or more** between countries and operators
- These variations are driven by **leak rates, venting practices, flaring efficiency, equipment age**, and operational standards
- This creates growing interest in **methane transparency, monitoring, and performance-based gas markets**

These variations shape the climate impact of natural gas in the near term.

Europe has been the focal point of biogases development to date

Biogas and biomethane resources in Europe and surrounding areas, 2024

15 bcme
biogas demand in 2023

4 bcme
biomethane demand in 2023

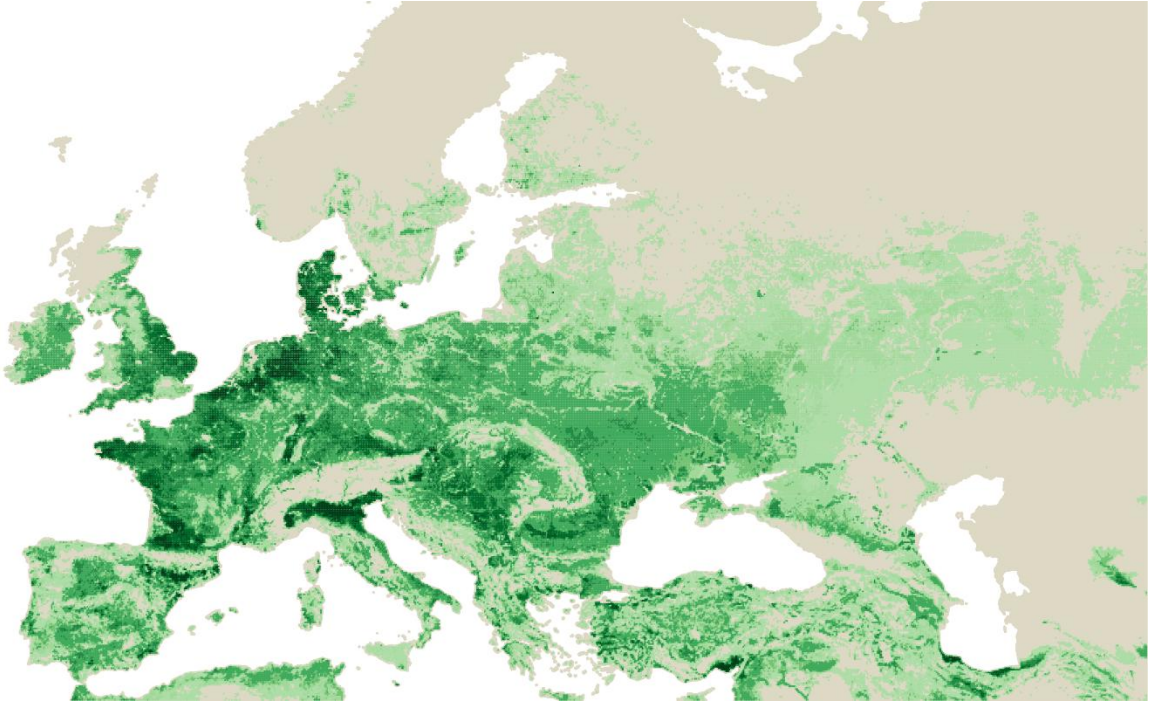
51 bcme
potential for biogases today

15%
as a share of natural gas demand

USD 22/GJ
average cost of biomethane

USD 15/GJ
average cost of producing the cheapest 10% of potential

60%
potential <20 km from gas transmission pipelines



Around 50 bcm-equivalent of biogases potential lies in the European Union alone, equivalent to around 15% of the region's natural gas demand.

Policy priorities for low-emissions gases

Improve Energy Security
(reducing fossil fuel imports, diversifying fuel supply)

Advance Sustainability
(reducing GHG emissions, improving land/water/waste management)

Drive Economic Development
(Local jobs, new income, investment – especially in rural areas)

An accelerated growth in low-emission gases production is **ambitious but achievable**.

Priorities include:

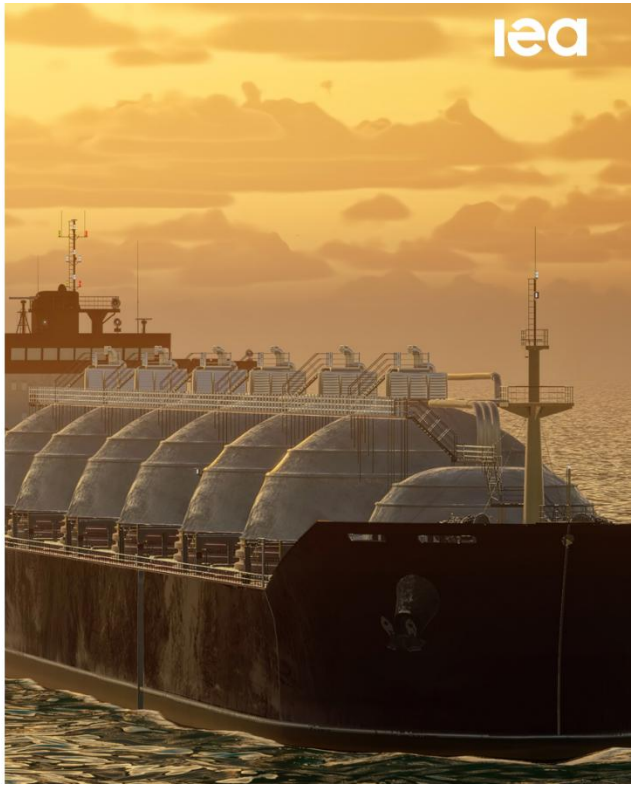
1. **Set clear roadmaps and targets** to create predictability for market development
2. **Adopt robust GHG accounting rules** to reward genuine emissions reductions and enable fair competition
3. **Develop supply chains and infrastructure** with agriculture and waste management sectors
4. **Support innovation and scale-up** to close cost gaps and valorise co-products (biogenic CO_2, digestate)

Policy discussions and concluding remarks

- In view of the increased uncertainty, in energy markets and beyond, policy makers focus more on energy security than previously
- For fossil fuel importing countries, energy security often goes hand in hand with decarbonisation
- Decarbonisation replaces fossil fuel import risk with critical minerals supply chain risk
- In view of the strong growth of renewables, gas in power generation will be less about baseload and more about flexibility and system services, which need to be remunerated
- Gas-fired power generation competes with other technologies, both for baseload and for flexibility, with batteries growing strongly
- Well-functioning markets provide more flexibility and security, but also include price risks
- Natural gas can come with significant greenhouse gas emissions, depending on its origin
- Low-emissions gases are necessary but volumes are low and ramp-up has been slow so far

IEA Quarterly Gas Report –Q2 2026

Gas Market Report,
Q2-2026



https://www.iea.org/reports/gas-market-report-q2-2026