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Volatility experience in the gas sector: new developments and technologies and their impact on price volatility

By

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Primary energy mix

**World**
- Oil: 32%
- Gas: 23%
- Coal: 27%
- Nuclear: 4%
- Hydro: 7%
- Renew: 7%

**EU**
- Oil: 38%
- Gas: 21%
- Coal: 12%
- Nuclear: 9%
- Hydro: 5%
- Renew: 15%

*Source: EI Statistical Review, thierrybros.com*
Oil spare capacity

Source: thierrybros.com, EIA Statistical Review
No spare production capacity in gas

Source: thierrybros.com
Global gas prices & key world events

- OPEC+ production cuts impact Brent prices
- Australian LNG labour strikes increase TTF volatility

Russia invades Ukraine 24 Feb 2022
Russian flows via Nord Stream 1 reduced from July 2022
Fully stopped from 31 August 2022

Source: MarketView
Russian pipe gas flows dropping...

- Ukrainian transit contract ending on 31 December 2024 unlikely to be renewed
- Further minimum drop of 7 bcm/y in 2025e
- RepowerEU is targeting to reach zero Russian pipe imports before end of decade
... More LNG in EU...
... Less for poorer countries

Constrained Supply

- Qatar: 20%
- Australia: 20%
- USA: 19%
- Russia: 8%
- Malaysia: 7%
- Nigeria: 4%
- Rest of World: 12%
- Oman: 3%
- Indonesia: 4%

Demand

- Asia: 64%
- Europe: 28%
- Turkey: 3%
- Americas: 3%
- Middle East & Africa: 2%

Source: GIIGNL
Too little more liquefaction to come

Source: GIIGNL, thierrybros.com
International gas trade

Source: thierrybros.com, EI Statistical Review

- Domestic: 69%
- International pipe: 18%
- LNG: 13%

LNG is growing; Pipe is declining. War in Ukraine should stop all new international pipes projects.
How to reduce price volatility

- With no spare production capacity, volatility to stay
- No new technology breakthrough
- Restricting the financing of upstream gas and liquefaction is both increasing the price and the volatility of gas
- Allow industry to invest more!
Thank you