



Briefing · January 2025

European competitiveness threatened by continued imports of volatile LNG

Key points:

- Europe is increasingly relying on imports of liquefied natural gas (LNG) as it seeks to shift away from a reliance on Russian fossil fuels.
- Rising imports of LNG have coincided with higher gas price volatility in Europe. In the
 last five years, the volatility in European gas prices has been double the historic
 average.
- Sudden spikes in gas prices have widespread economic and social impacts because they often set electricity prices in Europe. In 2022, a surge in gas prices pushed up electricity costs for households and businesses.
- European demand for LNG is predicted to fall over the long-term but LNG's growing share of imports will remain an ongoing threat to the region's competitiveness.
- Geopolitical tensions surrounding an unpredictable second Trump presidency and intense competition with Asia for LNG might mean more price volatility in future.
- However, increased domestic solar and wind electricity generation could shield European countries from LNG price volatility.

Europe eyes increased imports of LNG

LNG markets are predicted to enter a "golden era" in the next few years as the inauguration of US President Donald Trump for his second term in office is expected to lead to a surge in production and exports of LNG from the US. The International Energy Agency (IEA) expects global LNG supply to grow by almost 6% in 2025, as several large LNG projects come online. Over the next decade, surging LNG supply is expected to exceed demand, a trend that will push down LNG prices.

Some see rising LNG supply as an opportunity for Europe. The EU has said it aims to replace Russian gas flowing through Ukraine, following the end of a transit deal in December 2024, with imports of LNG. This is part of the EU's wider plan to phase out Russian fossil fuels following the country's invasion of Ukraine in February 2022.

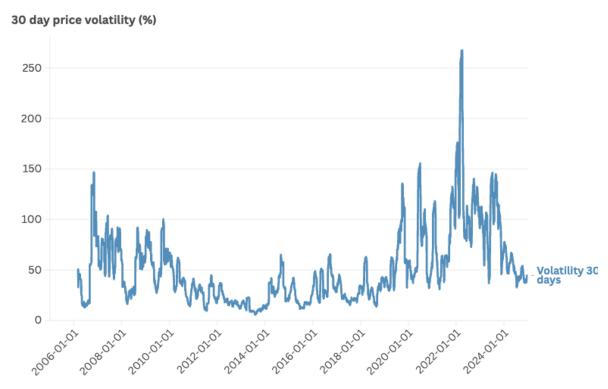
Joining the dots: Rising LNG imports and price volatility in Europe

The European benchmark for natural gas prices, the Title Transfer Facility (TTF), has experienced a rise in volatility. The average price volatility in the last five years has been two times higher than the historical average. Between 2019–2024, the average 30 day price volatility for the TTF was 85%, compared to 39% over the period 2005–2019 (Figure 1).

While energy analysts have <u>speculated that the TTF volatility is partly structural</u>, <u>Europe's increased dependence on LNG</u> has also been cited as a driver. LNG became the new baseload source of European gas supply in 2022 (Figure 2), making the region increasingly <u>sensitive to the liquidity and volatility of the global LNG market</u>. Between 2005 and 2019,

LNG made up 22% of European gas imports. This jumped to 44% between 2020 and 2023, with LNG overtaking pipeline imports for the first time in 2022. A report by ex-European <u>Central Bank President Mario Draghi on EU competitiveness</u> highlighted that: "LNG prices are typically higher than pipeline gas on spot markets owing to liquefaction and transportation costs."

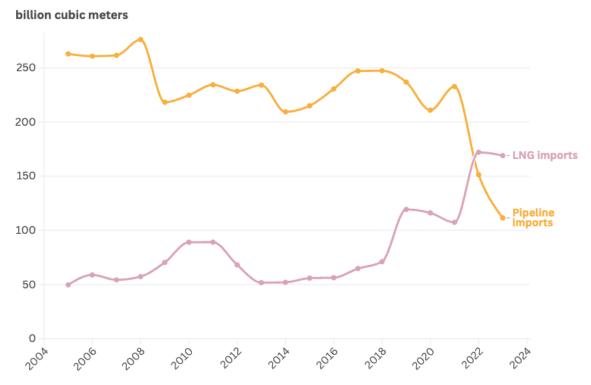
Figure 1: TTF price volatility 2005-2024



Source: Bloomberg terminal (2024), accessed 6/1/2024



Figure 2: European gas imports 2005-2023



Source: Energy Institute: Statistical Review of World Energy Data (2024), accessed 6/1/2024



One of the drivers of TTF price volatility in Europe is intense competition with Asia for LNG. Price rises in Asia have reverberated back into European prices - a trend that is expected to become more prominent in future. In early 2024, rising demand in Asia, partly due to heatwaves, lower prices and lower domestic gas production, played a role in pushing up prices in Europe. "Gas prices in Europe are likely to remain volatile for some time as the EU has to compete with the more price-sensitive China and to a lesser extent India and Thailand for LNG cargoes. This dynamic introduces greater price unpredictability, as the reliability of LNG cargoes is not guaranteed in the very short term at the most optimal price," said Stephen Ellis, an investment strategist at Morningstar.

Europe potentially faces even more intense competition with Asia and other regions for LNG if it follows through with a pledge to end gas imports from Russia by 2027 something the new EU energy commissioner Dan Jørgensen says he intends to do. Russia still remains a key source of LNG for the EU, despite the bloc's efforts to diversify. The end of the Russia-Ukraine transit deal already increased gas prices in Europe at the start of January, and is expected to do the same in Asia. Cas contracts in Europe are "trading at around triple pre-crisis levels so far in 2025," according to Bloomberg. This could be made worse by colder weather in both regions. "If Europe also experiences a colder winter, buyers in Europe would have to compete for spot LNG cargoes, which in turn would raise prices at both European and Asian price hubs, especially if fuel switching is not possible," said the US Energy Information Administration.

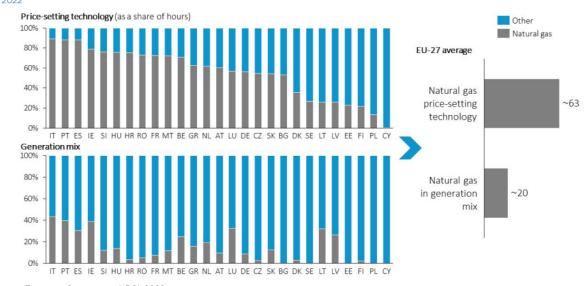
High energy prices weaken European competitiveness

Persistently high energy prices are restricting the competitiveness of European industry, according to the Draghi report, which noted that "even though energy prices have fallen considerably from their peaks, EU companies still face electricity prices that are 2-3 times those in the US". A study by Goldman Sachs Research found that the higher cost of electricity is a key driver of Europe's lower productivity relative to the US economy.

One of the key factors in higher electricity prices has been Europe's reliance on gas. An IMF working paper found that: "the recent spike in wholesale electricity prices in Europe has broadly been driven by the cost of production at natural-gas power plants." In Germany at the time of Russia's invasion of Ukraine in 2022, "electricity prices were extremely volatile and closely connected to gas price trends". The rise in natural gas prices contributed to widespread high wholesale electricity prices in Q2 2022 when "the highest price was €500/ MWh and the average was €186.98/ MWh". The high electricity prices hurt some key German industries such as the automotive sector. A survey of automotive companies at the time by lobby group VDA found that 10% had production restrictions and 85% considered Germany an "internationally uncompetitive location" in terms of energy prices and supply.

The impact of gas on electricity prices was felt throughout Europe - with households and businesses facing high energy costs, and vulnerable, low-income households being disproportionately impacted. The Draghi report found that "at the peak of the energy crisis, natural gas was the pricesetter 63% of the time, despite making up only 20% share of the EU's electricity mix.

Figure 3: Price-setting technology per member state and their generation mix Price-setting technology per Member State and their generation mix %. 2022



Source: European Commission (JRC), 2023

Source: The future of European competitiveness: Report by Mario Draghi, 2024.

¹ Page 46.

Reducing Europe's exposure to volatile LNG will enhance its competitiveness

Researchers and analysts predict that <u>EU demand for imported LNG will potentially reduce</u> from 2023, as climate and energy policies such as increasing energy efficiency and expanding renewable energy sources are expected to reduce gas demand by at least 40% through 2030. The EU may be better insulated against LNG volatility in the future due to this decreased demand. However, electricity prices are frequently set by the price of gas even if used in smaller amounts. This represents an ongoing threat to stable and affordable electricity prices, and therefore the region's competitiveness. This interlinkage is mainly driven by the design of the EU's electricity market. "Market rules in the power sector do not fully de-couple the price of renewable and nuclear energy from higher and more volatile fossil fuel prices, preventing end users from capturing the full benefits of clean energy in their bills," according to the Draghi report.

The EU plans to increase its use of domestic renewable energy in order to achieve energy independence, reduce energy costs and strengthen the bloc's competitiveness. The shift to an electrified, renewables-based and efficient energy system would reduce the "overall exposure to fossil fuel price volatility", according to the IEA. The transition could have a "net positive effect on energy security," provided that investments are aligned to "address" new challenges posed by the increased reliance on renewables," the IMF said. Electrification based on low cost renewable energy could also increase European competitiveness by narrowing the gap between energy costs paid by European businesses and their competitors in different regions, according to Goldman Sachs Research.

The Draghi report finds that: "Decarbonisation could be an opportunity for Europe, both to take the lead in new clean technologies and circularity solutions, and to shift power generation towards secure, low-cost clean energy sources in which the EU has generous natural endowments."