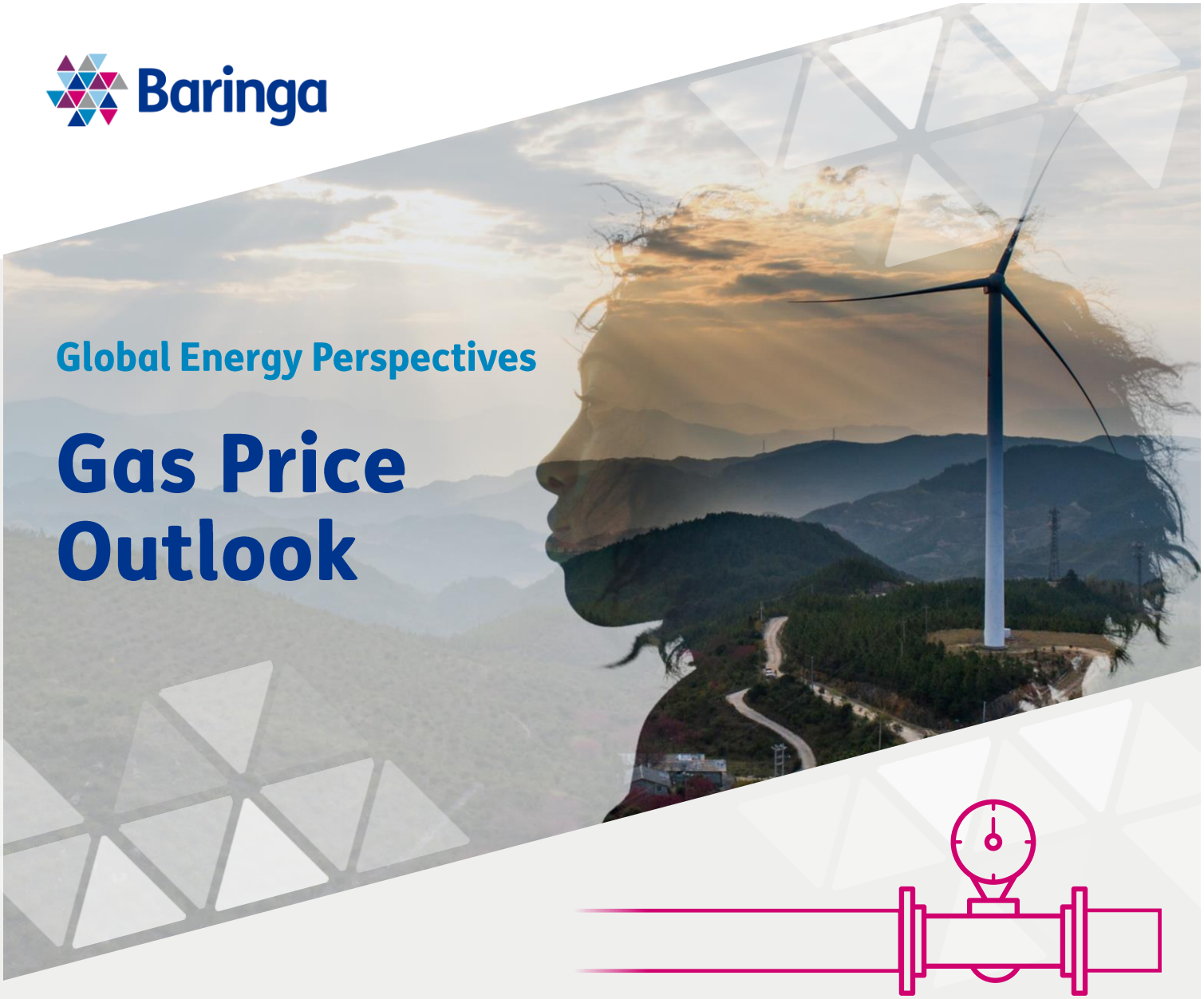
Baringa



Global Energy Perspectives

Gas Price Outlook

Investor Takeaways

Baringa's global gas model has been used to create three plausible supply and demand scenarios over the next 24 months. Each of these drive a possible wholesale gas price outlook.

The supply and demand balance outlook remains highly uncertain creating a range of plausible scenarios on account of variables in pipeline supply and global LNG.

The most plausible central price outlook sees prices remain above pre-crisis levels out until the end of the forecasted period in 2024.

Unmet demand risks are high in our downside scenario including next winter, making supply security a relevant risk for the foreseeable future.

Whilst prices remain high in all but our low case scenario until 2024, prices fall significantly from recent highs. With prices well below 150 Euro MWh in all scenarios by 2024.

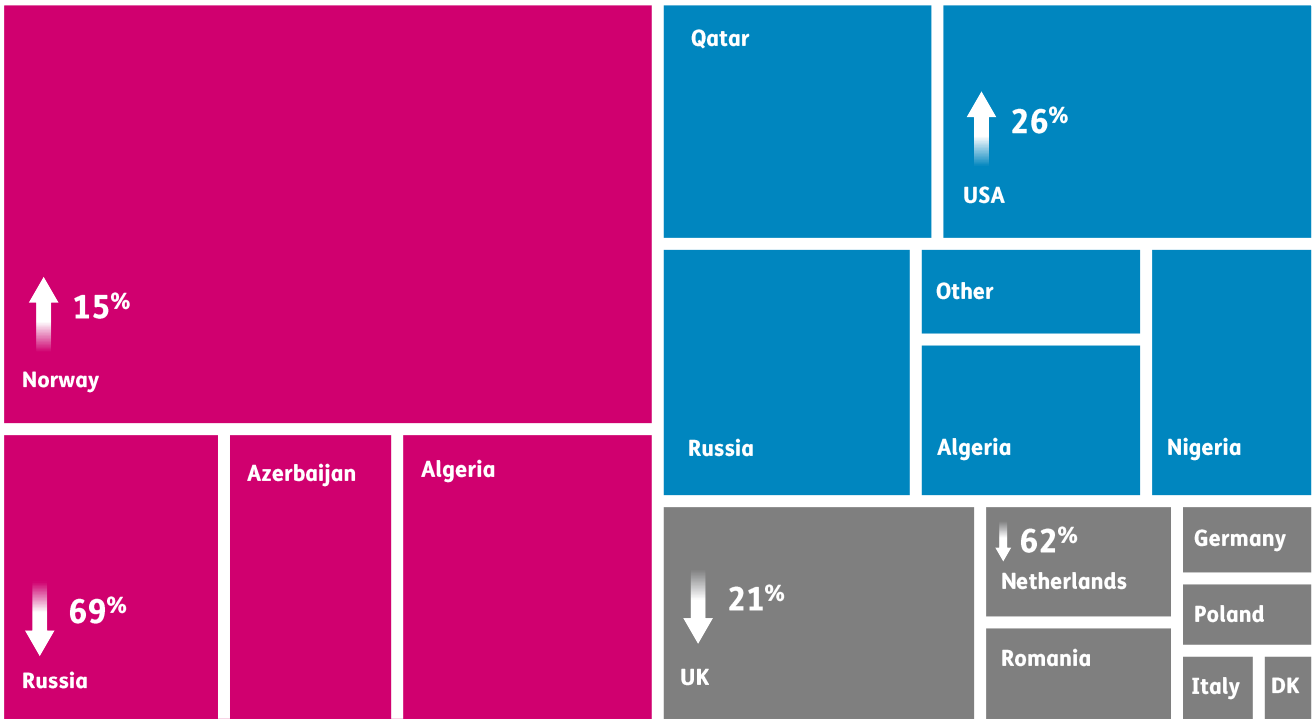
European Natural Gas Supply

The supply of natural gas to Europe has decreased compared to 2019 levels due to a large reduction in pipeline supply from Russia.

The European supply mix has changed markedly compared to pre-Covid-19 levels on account of the Russian invasion of Ukraine. There has been a fundamental shift away from pipeline to LNG as well as continued declines in domestic production.

In particular, Russian pipeline gas has fallen from 43% of EU gas imports in 2021 to just 9% in September 2022.

Natural gas supply – 2022 change on 2019



Pipeline

A large reduction in pipeline gas from Russia is driving most of the supply shortage.

LNG

Increased LNG supplies from the USA & Qatar have partly filled the supply gap.

Domestic production

Domestic production in the Netherlands and UK has dropped from 2019 levels.

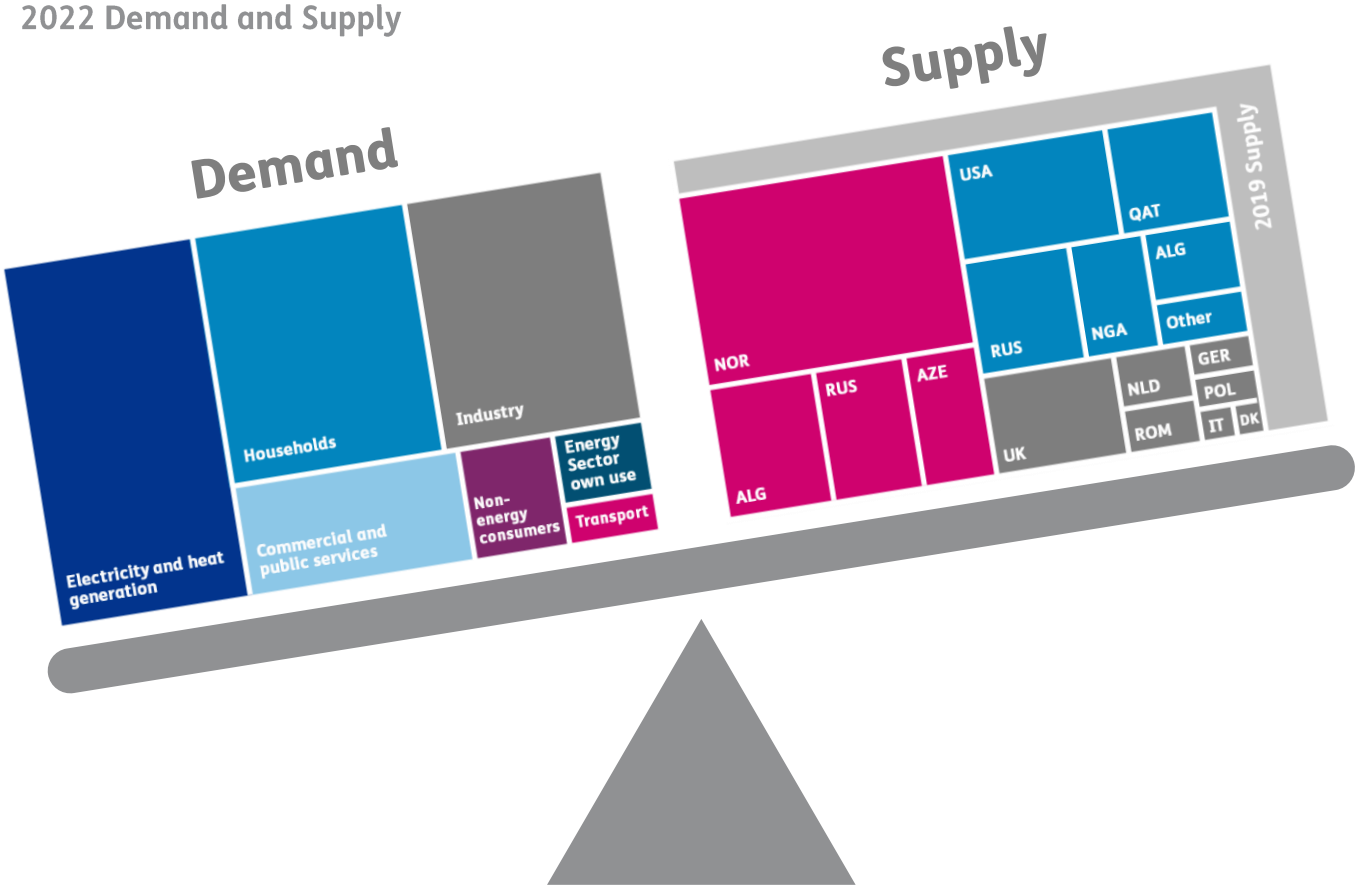
Natural Gas Supply and Demand Balance

The availability and cost of natural gas in Europe is governed by the balance between supply and demand.

The supply and demand balance in Europe has become unstable in light of the supply shock associated with the Russian invasion of Ukraine.

Shrinking gas supplies have left a risk of an imbalance between supply and demand, signaling the potential for unmet demand in European markets.

2022 Demand and Supply



Natural gas demand mostly comes from electricity generation, industrial demand and domestic and commercial heating.

Natural gas supply shortages and continued demand have pushed supply and demand out of balance.

Demand destruction will be required to maintain gas storage levels, which will result in high gas prices.

Natural Gas Supply and Demand Scenarios

The extent of the supply and demand gas imbalance is strongly dependent on pipeline and LNG supply as well as the total European gas demand.

Baringa has modelled three scenarios to provide a realistic supply and demand balance outlook for Europe over the next 24 months. These scenarios considered three variables: pipeline supply, LNG supply, and domestic demand.

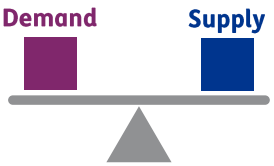
	Pipeline	LNG	Demand
Low case scenario All natural gas demand is met, gas prices steadily decrease	Partial return of Russian gas flows via Nordstream, pipeline supplies from other countries at near capacity.	European LNG imports grow due to new infrastructure buildout and reduced demand from Asia.	European demand declines due to mild winter temperatures, an EU voluntary 15% reduction and slower economic growth.
Mid case scenario Low levels of demand destruction are required, small rise in gas prices	Pipeline gas supply from Russia and other countries continue at current levels.	European LNG imports remain constant as a result of constant demand from Asia.	European demand declines only slightly due to the economic impact of reduced industrial activity and less incentivisation due to residual price caps.
High case scenario High levels of demand destruction required, large spike in gas prices	Pipeline gas supply from Russia is shut off.	LNG imports are lower due to an increase in demand from Asia and cold winter temperatures forcing more spot purchases.	European demand is higher than expected due to a very cold winter.

Required Levels of Demand Destruction

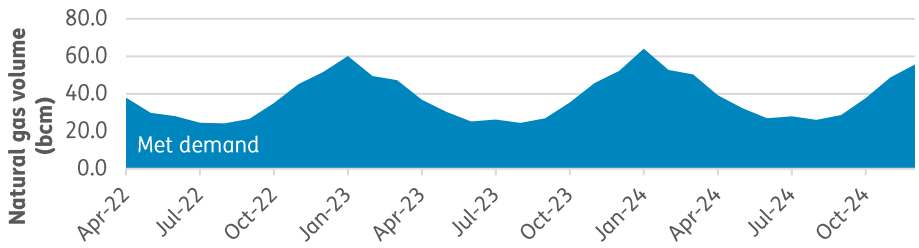
The level of natural gas demand destruction that will be required depends on the extent of the supply and demand imbalance.

Low case scenario

All natural gas demand is met, gas prices steadily decrease

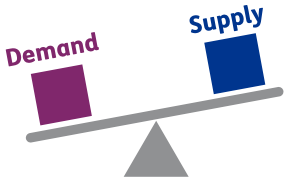


Unmet Demand: 0 bcm

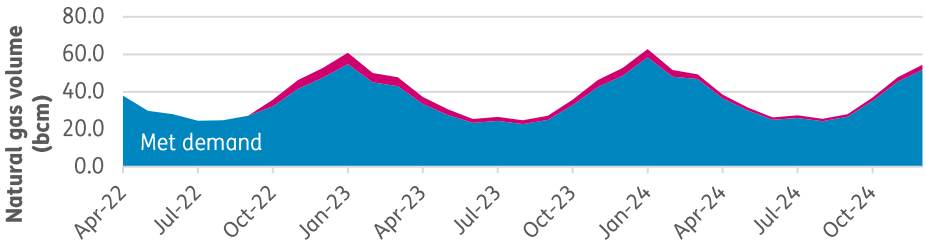


Mid case scenario

Low levels of demand destruction, mostly in the industrial sector, are required to keep storage levels above the minimum level

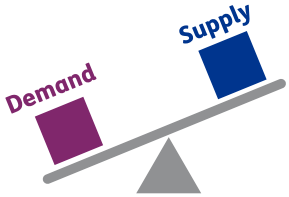


Unmet Demand: 21.1 bcm

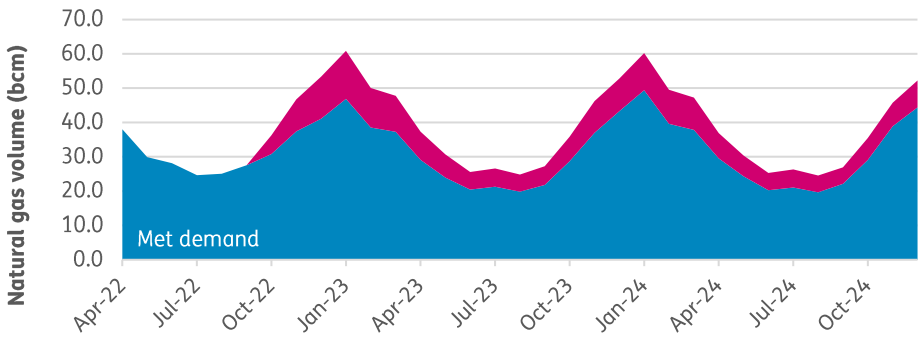


High case scenario

High levels of demand destruction are required, having a large impact on the industrial sector but also affecting sectors such as commercial and residential heating



Unmet Demand: 57.6 bcm



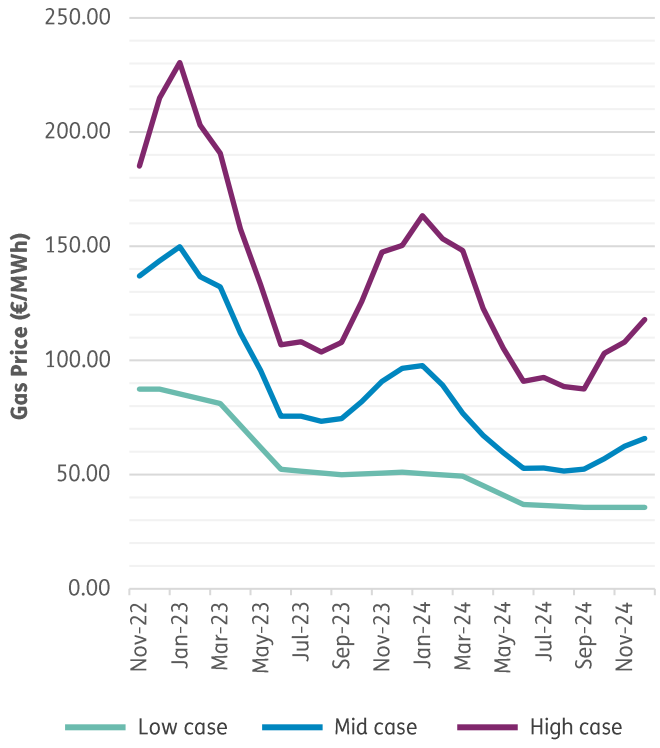
What does this mean for gas prices?

European gas prices will likely remain high for the next two years due to supply constraints.

The three supply and demand scenarios have been used to generate a range of potential price outlooks out to December 2024.

Our most likely scenario sees wholesale prices remain above pre-crisis levels out to the end of the forecast period. However, our low case scenario sees prices fall back to pre-crisis levels by next winter.

European gas price projection



Low case scenario

- **Prices steadily decrease** as a result of constant gas supply to Europe and low domestic and commercial heating demand due to a mild winter.
- **Prices return to pre-Ukraine levels** by summer next year and steadily decrease to pre-pandemic levels by summer 2024.

Mid case scenario

- There may be a **small rise** in gas prices this winter as demand from domestic and commercial heating increases.
- Decreased demand in spring and summer leads to **reduced prices**, although prices may rebound in winter 2023.
- Prices remain elevated relative to pre-war average out to 2024

High case scenario

- There is **large spike** in natural gas prices this winter caused by supply shortages and high demand from domestic and commercial heating.
- Prices recover slightly in spring and summer next year but increase sharpy again next winter due to persisting supply constraints.

If you are interested in hearing more, please get in touch with our experts.

Ilesh Patel
Partner and Lead, Global Energy Perspectives Team

Ilesh.Patel@baringa.com

Caspian Conran
Political Economist, Global Energy Perspectives Team

Caspian.Conran@baringa.com

Find out more:

www.baringa.com