

Theme:

Fading energy crisis

Smaller risks, but still a tight market

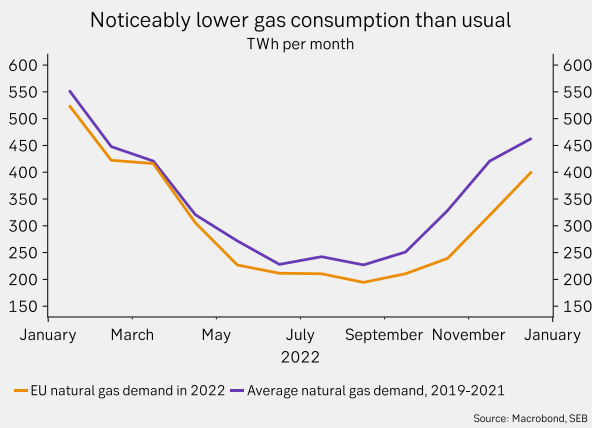
Prices for oil, coal and especially natural gas in the EU fell sharply during the second half of 2022. The risk that natural gas will be rationed in the European Union this winter and next is now close to zero. But the global fossil fuel market will still be tight. We expect EU natural gas prices to be lower than in 2022 but higher than they are now, since elevated prices are needed to keep demand subdued. Meanwhile we expect oil prices to be higher in 2023 than in 2022 as China reconnects to the world while oil supply from Russia is curbed.

A cooling global economy – with lower demand and COVID-19 lockdowns in China – helped to drive oil, coal, and natural gas prices sharply lower late in 2022. The EU also managed to adapt to its energy crisis surprisingly well. Ultra-high natural gas prices in the EU led to a boom in liquefied natural gas (LNG) imports, while demand fell 26 per cent below the 2019-2021 average in October and November due to warm weather for that time of year, high prices, energy curbs and various types of energy saving and efficiency measures (Germany managed to install a new LNG import terminal at record speed during Q4 2022). EU natural gas inventories are now 16 per cent above normal. There is consequently close to zero risk of natural gas shortages and rationing during the rest of this winter, as well as next winter. Market forces now have nine months to ensure that EU natural gas inventories are at satisfactory levels in October 2023. But the question is whether current natural gas prices are too low. We are already seeing stronger natural gas demand and softer LNG imports because of much lower prices.



Major worries after loss of Russian natural gas supply.

Fears ran deep that the EU economy would collapse as Russian natural gas exports to the EU dropped to only 10-20 per cent of normal in mid-2022 and then stayed at that low level. As a result, natural gas prices spiked to 1,500 per cent of normal in late August. But high prices are meanwhile the cure for high prices. Demand fell by around 26 per cent in October and November compared to the average for 2019-2021. LNG imports, while already high in the first half of 2022, rose even higher in the second half since European natural gas prices were much higher than in the rest of the world and thus attracted huge LNG cargo inflows to Europe. Natural gas production and exports from Norway to the rest of Europe also got a boost, since gas prices were much higher than oil prices.



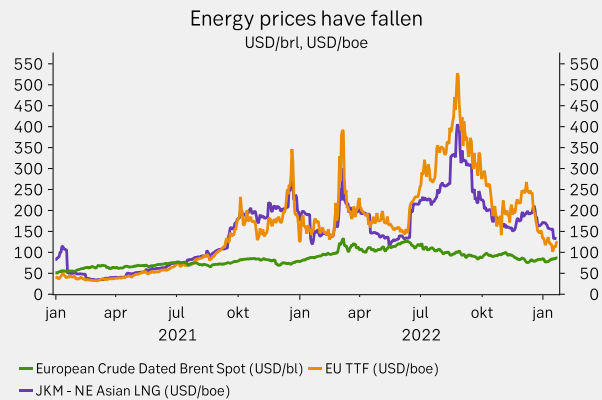
The EU adapted quickly and broadly in response to high natural gas prices.

Demand for alternative energy sources increased, and parts of the EU's energy-intensive industry closed. Industrial companies instead bought semi-finished products from other parts of the world where the energy crunch was less severe. Households did their part, both by directly reducing consumption but also by undertaking energy efficiency measures. German industrial output fell only 1 per cent during 2022. At the end of the year, one third of German companies still saw potential to reduce natural gas consumption even further. So far, the winter has also been unusually warm in Europe, which has helped to lower the demand for natural gas. Because of its COVID-19 lockdowns, China needed less oil and gas. This also eased the energy crisis in the EU.

Lower natural gas prices and fading market forces.

Although weather conditions and market forces did much of the job, the EU should be praised for how it has handled the energy crisis. With natural gas inventories about 16 per cent above normal, the crisis is nearly over

and the risk of natural gas rationing in the winter of 2023/24 is practically non-existent. EU natural gas prices (using the TTF gas price in Amsterdam) are still three times higher than normal, but that is far below the 15 times normal that prevailed in late August 2022. The front-month (February) TTF natural gas price is currently EUR 63 per megawatt hour (MWh) or USD 107 per barrel of oil equivalent (boe). The TTF front-month price averaged EUR 132/MWh in 2022, and during the second half of the year it had a premium of EUR 30/MWh over Japanese LNG prices. The high prices caused a drop in demand both in Europe and in Asia, and the premium allowed more natural gas to flow to Europe instead of Asia. The TTF price is now almost half of what it was in 2022 and is now trading at a discount to the Japanese LNG price.



China has removed its official COVID restrictions

and is gradually reconnecting with the rest of the world, with increased demand for oil and gas as a result (a strong rise in Chinese oil purchases is already taking place). Diesel prices in the EU are now at USD 126/b which is more expensive than TTF natural gas at USD 107/boe. We do not know how much substitution from natural gas to diesel there was in 2022. But we can at least say that there will not be any substitution at current prices. Strong market forces helped to solve Europe's energy crisis in 2022. But these market forces are now significantly reduced. Total EU natural gas demand was only down 16 per cent in December versus the 2019-21 average, 10 percentage points less than in October-November. LNG imports to the EU also looks like they are softening. So far this year they are averaging 3.7 TWh/day versus 5.1 TWh/day in December 2022. We expect a rebound in natural gas prices from current levels, since higher prices are probably needed to sort out EU energy challenges.

We still have a tight fossil energy market where we have lost some 2.5 m boe per day of Russian natural gas which no longer goes to the EU. Western sanctions and

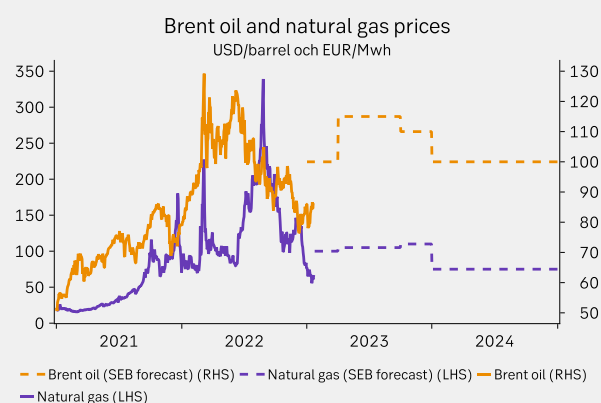
curbs to Russian crude oil exports have had less of an effect since it is possible to reroute Russian oil to other places. Russian crude oil production is today estimated at 9.8 million b/d, which is 0.7 m b/d below Russian's production cap. Its oil production is projected to fall further by up to 1.6 m b/d in Q2 2023, according to the US Energy Information Administration (US EIA), due to a lack of sophisticated Western oil services. Total losses of Russian fossil fuel production could thus amount to some 3-5 boe/d. We thus expect a tight global fossil energy market and continued elevated prices in 2023.

In 2022 the world was plagued by a diesel crisis we had not seen since 2008. Global refining capacity contracted in 2021 for the first time in 30 years. Non-China diesel demand rebounded in 2022 as the world reopened after COVID lockdowns. But then came the invasion of Ukraine, which made the situation much worse. Russia normally exports 3 million b/d of oil products, with a large proportion going to Europe, where it is an integral part of the refined oil product market – not least through important feedstock products like vacuum gas oil (VGO), which Europe uses in upgrading units to make diesel. This year, sanctions and the reopening of China may again make the situation worse.

Starting on February 5, the EU and the UK will no longer import seaborne oil products from Russia as new sanctions kick in. The Group of 7 (G7) countries have also said they will implement a price cap on Russian oil products, just like they did with Russian crude oil on December 5 last year. So far, the latter policy has depressed the price of Russian crude in the global market, since Asian buyers have gained more leverage to negotiate prices when the EU and G7 countries are not buying. Market players are not yet worried about the new sanctions, but maybe they should be, since the rerouting of these Russian products to Asia could prove more difficult than rerouting Russian crude. Diesel margins versus Brent crude have been strengthening since early December, and diesel is today trading at a USD 40/b premium to Brent crude versus a more normal premium of USD 15/b. Having reopened, China will soon be moving back to large-scale international aviation. The new sanctions have the potential to drive diesel premiums back up to peaks of more than USD 60/b, as in 2022.

Higher real and nominal oil prices ahead. Brent crude oil spiked to USD 138.3/b in March 2022 right after Russia's invasion of Ukraine. Brent crude averaged USD 99.9/b in 2022, some 70 per cent above the 2015-2019 average of USD 58/b. But adjusted for inflation, the average during this period was USD 70/b, which

means that the average Brent crude price in 2022 was instead 45 per cent higher than the 2015-2019 average. If we stretch out the comparative period and look at the average price during 2008-2021, the nominal price was USD 77/b, while the inflation-adjusted price was USD 98/b. This implies that the 2022 price of USD 99.9/b was only 4 per cent above the inflation-adjusted 2008-2021 average of USD 98/b. It is important to note that the period from 2015 to 2019 was a special low-price period. US shale oil production expanded uncontrollably while non-OPEC, non-US production also expanded solidly as elevated capital spending over the years to 2014 began to pay off. During the coming five years, we expect muted US shale oil production growth due to recent consolidation of the sector. There are also signs that the lion's share of the richest US shale resources has now been extracted, which could also create some headwinds to further expansion.



Source: Intercontinental Exchange (ICE), Macrobond, SEB

OPEC has had a challenging period since 2014, due to very strong growth in non-OPEC production. We now believe that market power has shifted back and will predominantly be in the hands of OPEC over the coming five years, which means significantly higher oil prices than USD 70/b. Because of this – as well as extensive sanctions towards Russia, which have led to significant losses in oil and gas supply – we expect Brent crude to average USD 110/b in 2023 and USD 100/b in 2024.