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What's in store for Gas Year 2022/23?

Tuesday, 13 September 2022 | Contents

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Executive summary

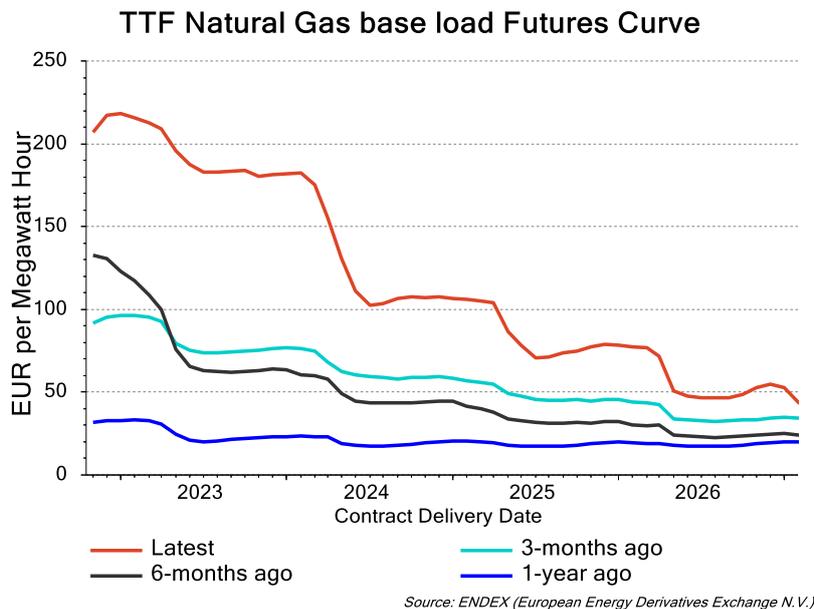
- > Before the Gas Year 2022 starts October 1, we will take a deep dive in the gas market, analyse the most important factors that will affect gas prices in the coming quarters, present three gas price scenarios; our base case and a bullish and a bearish scenario.
- > Several economic, political and weather related factors will affect gas prices. Out of these three, economic factors point to lower gas prices. The political outlook related to Russian sanctions and further cuts in Russian pipe line flows is cloudy while weather factors are unpredictable and could cause wild price swings.
- > In our base case we assume average winter temperatures and less gas demand from households, energy intensive industry, and electricity producers. On the political front, we expect European governments to direct policy responses mainly to supporting the most vulnerable households while disrupting market mechanisms less than some now have to come assume. We also think that Russia won't cut gas supplies to Europe any further. In this scenario, TTF gas prices will likely remain very volatile in the coming months and will decline on balance to the €120 – 170 range.
- > In the bearish scenario, above average winter temperatures coincide with a withdrawal of Russian troops from Ukraine and increasing hope of an end to the sanctions and resumption of gas supplies from Russia. In this optimistic scenario for the economy, gas prices will likely drop to the pre-2021 price range significantly below €50.
- > In the bullish scenario for gas prices, the coming winter will be very cold and Russia doubles down on its strategy to bring Ukraine under Russian control. In order to do this and split European unity, Russia could announce a full stop of all energy supplies to Europe. This will cause increasing fears of gas rationing and shortages until at least 2025. Consequently, gas prices will rise to new highs with price levels (far) above €400.
- > On page 14 you will find a table with a brief analysis of what the three gas price scenarios mean for EUR/USD, oil prices and European interest rates and stock prices.



Introduction

According to the Oxford Institute of Energy Studies, total gas supply in Q2 in Europe amounted to around 117 bcm, a decline of 1,8% from total gas supply in Q2 2021. However, gas prices exploded to the upside, reacting as if there was a sharp drop in supplies. The main reasons for the sharp increase in gas prices were lower pipeline gas supplies from Russia and uncertainty over whether and when these supplies will be restored. The sharp reduction in Russian gas means Europe has become more dependent on LNG, an internationally traded commodity which is historically trading at higher prices than Russian pipe line gas. In order to secure enough gas for the winter and with government support, European gas buyers bid up prices. In addition, droughts and heat waves resulted in high demand for electricity and more gas demand from power plants.

Longer dated gas future prices (for 2023 and beyond) have increased as well as it remains unclear if and when Russia will resume pipeline gas supplies to Western Europe. With a bit of luck there is enough gas for this winter. However, if Russia doesn't restart deliveries, it is very doubtful whether Europe will be able to fill the gas reserves before winter 2023/24.



In this special, we present the most likely outlook for gas prices based on economic, chart-technical, political and weather factors and two alternative scenarios. Additionally, the commodity expert of ICC consultants will explain if and how companies can manage their energy risks (and gas price risks in particular).

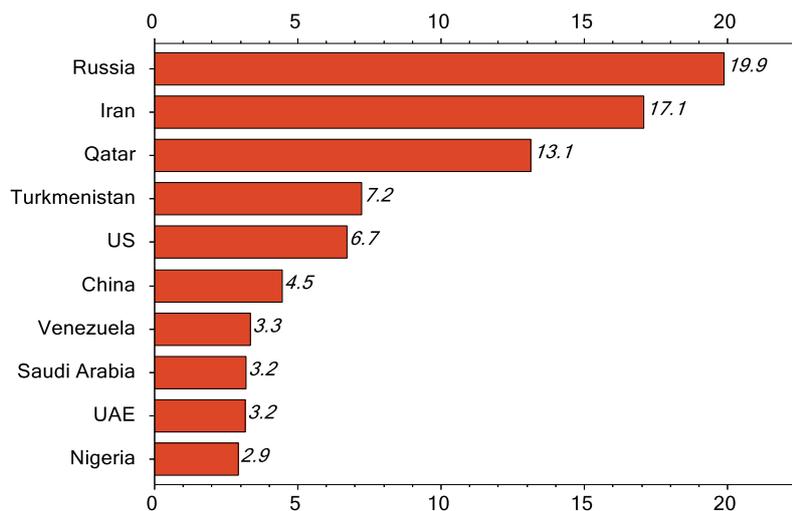


Outlook gas prices

There are three pillars of uncertainty for the gas price outlook:

- > Weather factors (rainfall, temperatures).
- > Political factors (gas supplies from Russia, extra supply in the Netherlands, supportive measures to increase production of gas and non-gas based electricity production on the one hand and to help out consumers on the other hand).
- > Economic factors (how strongly will demand respond to higher gas prices)

Major holders of natural gas* (% of global reserves)



*Top 10 as of 17 March 2022

Source: Refinitiv Datastream / ECR Research

Weather factors

Below average rainfall and temperatures in the autumn and winter mean gas and electricity prices will remain elevated or could even rise further and vice versa. The recent hot and dry summer means very low water levels, which are curtailing production at hydroelectric powerplants and shipments of coal by barge to power plants in Germany. Additionally, high water temperatures limit the usefulness of river water for cooling of (nuclear) power plants.



GAS PRICE OUTLOOK

A summer like the current one [isn't necessarily followed](#) by a cold and/or wet winter. So it's impossible to predict whether the coming winter will be colder or warmer than normal and how much rainfall we could expect.

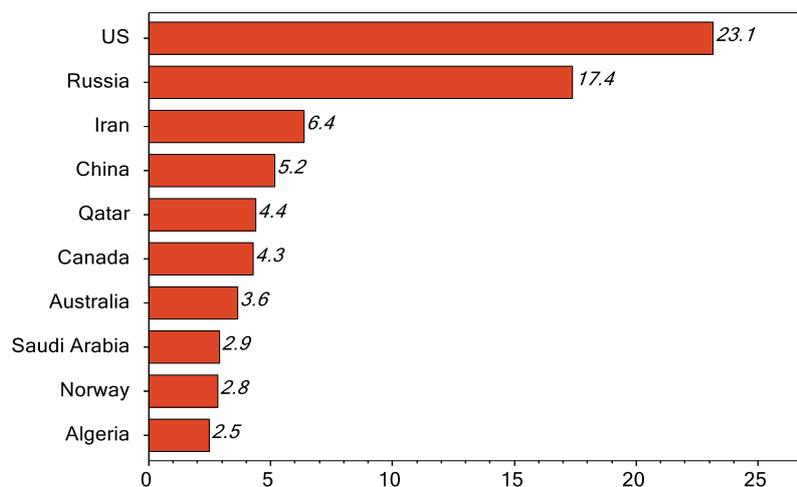
Finally, a windy or stormy autumn and winter will increase the supply of renewable energy and hence decrease demand for gas from gas burning power plants.

We can't forecast what the winter in Europe will be like and whether there will be enough rainfall to restore hydroelectric power production to 'normal' levels and provide easier 'cooling conditions' for and coal transports to power plants. In other words, weather conditions are an important swing factor for gas prices.

Political factors

The most important force behind skyrocketing gas prices is the Ukraine war and the fallout of the conflict including the slowing down of Russian gas deliveries to a trickle. The most direct way in which politicians could contribute to getting energy prices down is by solving the conflict. But as we have explained in recent editions of our Global Political Risks report, both Ukraine and Russia don't have a off-ramp for now and we don't see one appearing in the near future. Kyiv can't live with giving up what it has lost so far territorially speaking and the West keeps supplying Ukraine with much needed weapons and other equipment for the time being. Also, if Moscow would strike a deal with Kyiv now, Putin would look weak since the Russian armed forces have been on the defense lately. Therefore, we expect the war to last at least well into 2023 and with that it's fair to assume that Putin won't fully turn on the gas tap anytime soon.

Major natural gas producers* (% of global production)



*Top 10 as of 17 March 2022

Source: Refinitiv Datastream / ECR Research



GAS PRICE OUTLOOK

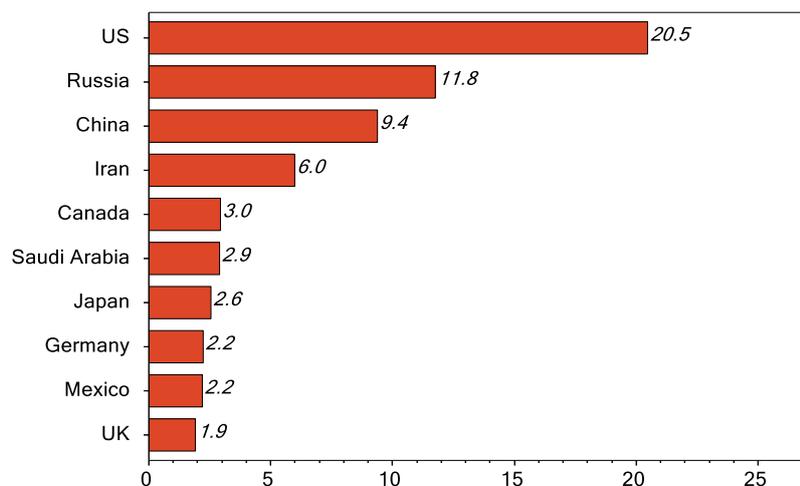
Unless Putin gets burned too much by the heat from both the Russian people in the streets and the elite caused by empty supermarket shelves and crumbling wealth. But for now, with the clampdown on protests and (the few) independent media going on, with state media loudly calling for a hardline course on Ukraine and with public support for the invasion remaining strong, we don't expect domestic Russian factors forcing a substantial change in Putin's war effort.

According to some, shutting down NordStream I is Putin's last throw of the dice. If this move won't work, the Russian president has few options left to break Western support for Ukraine. As [Emeritus Professor of War Studies Lawrence Freedman](#) recently wrote:

"If Moscow was truly confident that it could hold on to its gains and possibly extend them, it would have kept the gas pipelines open, taking the revenues and giving itself a reasonable chance of holding on to lucrative markets over the long-term. It is a sign of a loss of confidence, even desperation, that as Russia is failing as a military superpower it is jeopardising its position as an energy superpower."

So, since we don't expect any meaningful downward forces on gas prices coming from Ukraine and Russia, it falls to Western politicians to try and do something about the eye-watering energy prices to appease their anxious electorates. And those electorates are indeed getting nervous. Already, left-wing and far-right German groups have promised to begin weekly demonstrations against Chancellor Scholz's center-left coalition and some German unions have threatened to take to the streets. In the Czech Republic, an estimated 70,000 people recently protested in Prague against the government, calling on the ruling coalition to do more to control surging energy prices and voicing opposition to the European Union and NATO.

Major natural gas consumers* (% of global consumption)



*Top 10 as of 17 March 2022

Source: Refinitiv Datastream / ECR Research



GAS PRICE OUTLOOK

Politicians can basically take on the problem from three directions:

- > Providing financial support to consumers and businesses suffering from debilitating energy bills.
- > Taking measures to weaken gas demand.
- > Provide incentives to increase gas supplies and other forms of energy.

European countries have been implementing policies from all three angles. [Think tank Bruegel](#) discerns eight more concrete avenues taking by governments to alleviate the energy burden:

- > A reduction in VAT/energy taxes.
- > Retail price regulation
- > Wholesale price regulation
- > Transfers to vulnerable groups
- > Mandates to state-owned firms (for example, France forced EDF to increase the volume of electricity that the country's main electricity supplier is obliged to sell to its competitors).
- > Windfall profits tax and regulations
- > Support for businesses
- > Other measures (for example, France wants to extend the lives of existing nuclear reactors and build six new ones).

Already, Europe's leaders have earmarked €300-400bn (calculations from think tanks, banks and others vary a lot) to take the sting out of soaring energy costs this winter and this figure is bound to rise much further in the coming months to quarters. Yet there's a big risk all this different varieties of spending still won't bring enough relief. In August, the average price offered to consumers in the largest European countries was 67% higher than in August 2021 for electricity and 114% higher for gas.

Let's take a closer look at the two largest Eurozone economies and what they are doing to help out consumers and businesses and to become less dependent on Russian gas.

Last week, the German government announced a €65 billion package to ease the burden on Germans facing soaring inflation and surging energy costs. This is the third and largest package announced by

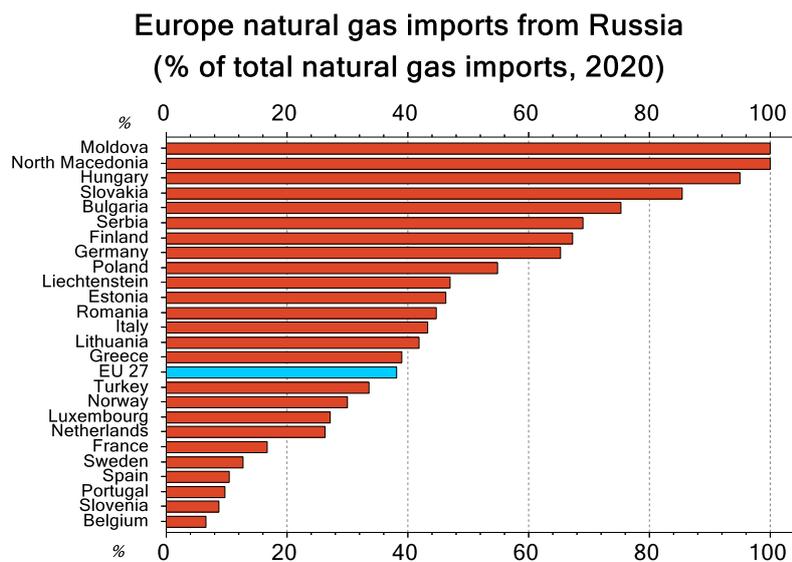


GAS PRICE OUTLOOK

Scholz's coalition as part of its response to the energy crisis. The costs of German measures to address the energy crisis are now nearing the €100bn mark (2.5-3.0% of GDP). Berlin plans to fund the latest package with a windfall/solidarity tax on profits of energy companies that have seen their profits soar (those include producers of coal, nuclear and renewable energy). Among the newly announced measures are one-time payments to households, tax breaks for energy-intensive industries, heavily subsidized public transport tickets and a plan to guarantee German consumers a certain amount of electricity at a lower cost.

Germany also has taken measures to cut gas demand by, among other things, water taps in public buildings dispensing only cold water; public offices allowed to be only heated to 19 °C, while hallways and foyers won't be heated at all; and shutting off the lights at night. Germany has also already substantially slashed its reliance on energy from Russia, but doubts whether it will be enough to make it through the next couple of winters remain.

Over in France, president Macron is calling for a 10% reduction in energy use over the coming months and he has warned that forced energy savings might have to be considered if voluntary efforts aren't sufficient. Rationing plans are already being prepared in case they're needed. Macron and his government have also taken measures to support struggling citizens and businesses, but France's [largest source of energy is nuclear](#), meaning it is less affected by spikes in fossil energy prices. This means that France probably doesn't need to spend as much on alleviating the pain of surging energy prices as some other countries feel the need to do. However, Paris is still devoting billions to ease the energy burden. To illustrate this, France is offering one-off payment to its citizens to help them face hard times. Also, Paris has forced state-owned energy provider EDF to limit electricity wholesale price rises to 4% a year (for now, the price cap is set to last until 31 December). In addition, access to a €3bn fund for businesses unable to meet their energy bills has been made easier.



Source: Refinitiv Datastream / ECR Research



GAS PRICE OUTLOOK

Governments in other European countries have taken similar measures. On top of this, the EU strives to implement far-reaching measures to tackle the energy crisis with a combination of price caps for Russian gas, rationing packages, other ways to reduce demand, windfall taxes, and bailouts for struggling businesses (some even want the ECB to offer lifelines to energy companies in danger of going under). The plans from Brussels are far-reaching, but it will take a lot of diplomatic wrangling to get everybody on board since EU member are coping with widely different energy problems and the extent to which consumers are hit by high price also varies a lot.

For now, it looks like most measures enacted and those in the pipeline are concentrated on supporting vulnerable citizens and businesses in enabling them to service their energy bills. Of course, there are plenty of initiatives to suppress demand and to expand energy production, but on balance we expect politicians to focus most on alleviating the pain of skyrocketing energy bills. Therefore, demand may not fall as much as many would hope.

There's one political issue we haven't yet discussed: the risk of Russia halting all gas flows to Europe. Last week, Russian president Putin threatened to completely stop all supplies if the EU would decide on a price cap on Russian gas. "We will not supply gas, oil, coal, heating oil — we will not supply anything," he said. "We would only have one thing left to do: as in the famous Russian fairy tale, we would let the wolf's tail freeze," Putin added. We suspect he will follow through on his threat if the EU agrees on the price cap. Although the share of Russian pipeline gas in the EU's total imports has already plunged from 40% before the war to 9% today, a complete stop would still materially impact gas prices since the market is so tight.

Economic factors

If recent record high gas and electricity prices prevail, we expect more demand destruction in Europe relative to the demand pre 2021. First of all, energy intensive businesses will reduce production further or close down. As energy prices have risen much faster in Europe than elsewhere, it's more economical to import energy intensive products. For energy intensive products which are less easily traded internationally, higher prices likely mean less demand in a slowing economy. Second, households will reduce energy consumption by turning down the thermostat and by other means. A drop in industrial production and lower consumption indicate Europe will enter a severe recession, which will reduce energy demand even further.

The extent of demand destruction will also be determined by government measures to keep energy prices in check. If European governments take more such measures (i.e. lower VAT rates on energy, price caps), demand will decrease less than would otherwise be the case.

On the supply side, there is a strong incentive to increase energy production (by reviving old gas fields for example) and to export more gas to Europe. Unfortunately, increasing LNG production often takes years rather than months while reviving old gas fields could be technical difficult. Building a new network



GAS PRICE OUTLOOK

of gas pipelines to import more gas from Africa could easily take a decade. On the positive side, LNG import capacity in Europe is on an upward trajectory. For example, Germany is building several LNG import facilities and it expects the first two to be up and running this winter. The Netherlands is also expanding its import capacity, by adding two floating units this month.

International context

Without more pipeline flows from Russia, Europe must compete in the LNG market to secure enough gas for the winter and for restocking next year. There are a number of positive developments (for gas consumers) on this front:

- > Slower growth in China and a deteriorating growth outlook for Asia in general means less industrial demand for LNG imports in China and other Asian economies.
- > Japan is aiming to increase the production of nuclear energy, which will, over time, reduce the demand for LNG imports.
- > US LNG export capacity will steadily expand in the coming years and [is expected to double in 2026](#) relative to 2021 levels. Already, the US has more LNG export capacity than any other country and has exported more LNG than any other nation.

Unfortunately, the negative factors for European gas consumers will likely outweigh the positive forces. Most importantly, global growth of LNG import and export capacity is set to slow down in the coming years, as low gas prices over the last decade resulted in less LNG investments. Moreover, covid contributed to construction delays. Consequently, the LNG market will remain very tight in the coming years (assuming Russian pipe line flows won't resume) and switching to other energy sources is difficult. Also, Russia's ability to divert gas flows to consumers outside Europe is limited, meaning a big chunk of the world's gas supply is 'trapped'. Consequently, demand for other energy sources such as coal is growing while supply is constrained due to a lack of investment in new production capacity in recent years. Second, China will expand its LNG import capacity in the coming months. Although China's gas storages are full, a cold winter could therefore result in more Chinese competition for LNG. Third, a reduction in the production of energy intensive products in Europe will result in more import demand and hence more production of energy intensive products outside Europe. This could limit the amount of gas available for LNG exports.

Outlook based on economic factors

Based on economic considerations, we expect Europe to avoid gas rationing this winter as gas storages are being filled, US LNG exports will increase and gas demand will continue to drop as a result of high prices and slowing economic growth. This will cause (further) downward pressure on gas prices (especially on spot prices and prices for short-term delivery).



However, we expect more upward pressure on gas prices for delivery next summer and winter 2023/24 as empty gas storages will be more difficult to restock next year without Russian pipeline supplies and growth in global LNG export while European import capacity won't be able to accommodate demand.

Three gas price scenarios

As things currently stand, we expect high energy prices will cause more demand destruction in the coming months to quarters as energy intensive business will close or reduce production and households will conserve energy by turning down the thermostat and/or heat less rooms. Until now, European governments' policy response has mainly been to support the most vulnerable households while keeping the price mechanism intact. There are discussions about price caps, but these are mainly intended to capture a large part of the excess profits made by energy producers that don't use gas as an input (for example renewable and nuclear energy producers). Furthermore, we expect that Russia won't cut gas supplies to Europe even further and might even increase them a bit in the winter to compensate for the likely loss of oil revenues as Western sanctions will take effect in November.

At the same time, the gas market is still extremely tight and fear of a cold winter or adverse developments for Russia on the battle field could lead to increasing Russian threats of a further reduction in gas supplies, causing a sharp but temporary increase in prices. We expect a continuation of volatile market conditions with possibly large price movements but on balance we foresee a further decline in gas prices in the coming months. However, concerns about the availability of gas to replenish reserves next summer will remain high and this will likely keep prices for next year delivery elevated and could cause upward pressure on TTF gas prices early next year.

In a bearish scenario for gas prices, the coming winter will have above average temperatures with plenty of rainfall, which will limit the demand for gas for heating and electricity production. If Russian troops withdraw from Ukraine with a prospect of an end to the sanctions, gas supply from Russia to Europe could be restored in full, gas prices will likely plunge to the pre-2021 price range and remain there. We think this scenario is less likely, as we expect the war in Ukraine will continue, as will the economic sanctions. Hence, we think Russia won't restore gas supplies in full anytime soon.

In a bullish scenario, winter temperatures are below average and Russia declares an 'official' war with Ukraine. To weaken the West and try to prevent more weapon deliveries from Europe to Ukraine, Russia will try to inflict as much damage to European economies by halting all gas and oil supplies to European countries. This will substantially increase fear of gas shortages this winter and in the coming years as alternative LNG supplies will likely face capacity constraints until at least 2025. In this scenario, gas prices could rise rapidly until fear of a severe recession (or depression) and a plunge in gas demand will take over and push gas prices lower to levels around €200.

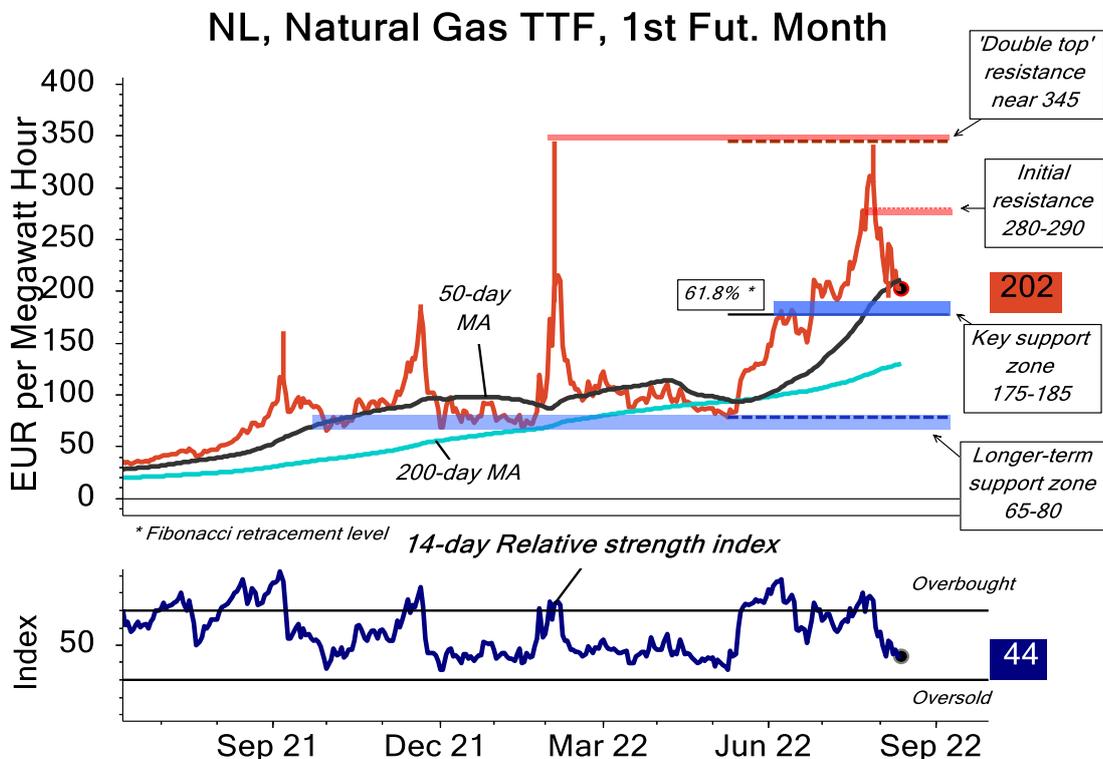


Technical Analysis gas price scenarios

Bearish scenario: A breakdown below the very significant chart support area between 175 and 190 (which is the 61.8% Fibonacci retracement zone of the huge rally phase from the past quarter). Should, TTF drop below 175 to a significant degree (at least 5% on a weekly closing basis), we reckon with a full (100%) reversal of the of the prior bull run. In concrete terms, an additional falling phase can be expected in subsequent weeks and months. At least towards the longer-term support zone 65-80 (the lows from the past year).

Side ways scenario: The key chart support area between 175 and 190 will be tested with success and holds. At the same time, TTF remains stuck in the very wide consolidation range from the past several months. In concrete terms, we foresee ongoing fluctuations between aforementioned chart support zone and the initial chart resistance zone 280-290.

Bullish scenario: The key chart support area between 175 and 190 will be tested with success and holds. The fierce decline of the past month can be interpreted as a corrective pattern within the steep medium-term uptrend. As such, TTF remains bullish biased in the months ahead. On the upside, a rebound rally exceeding initial resistance at 290 would be a strong indication that the corrective phase is complete indeed. A further rally to above (double top) resistance near 345 would confirm it - in which case we foresee an ongoing rising phase, on balance towards (above) 500 in subsequent months.



Source: Refinitiv Datastream / ECR Research



Table 1: Summary of the gas price scenarios

	Gas price scenarios		
	Bearish scenario: No gas rationing Sharply lower short and long-term gas prices TTF gas price declines to €50 and lower	Base Case: No gas rationing Lower short term gas prices Elevated long-term gas prices TTF gas price remain volatile but declines on balance to €120 – 170 range	Bullish scenario: Gas rationing Elevated short term gas prices Much higher long-term gas prices TTF gas price will spike to new highs above €400
Weather factors	Above average temperatures and abundant rainfall in Europe and Asia	Average temperatures in Autumn and Winter and normal rainfall levels.	Below average temperatures and a relative dry Autumn and winter in Europe and Asia
Political factors	More than expected progress on intra-European energy sharing. Softening of Putin’s stance or even an enduring ceasefire. Renewal of the Iran deal.	EU to push down demand but with more focus on providing relief to the lower incomes & non-targeted fiscal support like lower VAT. Ukraine war keeps going but without intensifying.	Further escalation of the war and the confrontation between Russia & The West. EU infighting and no cooperation on addressing the energy crisis. A new corona wave resulting in supply complications for energy sources like coal.
Economic factors	More than 15% reduction in gas demand in EU and rapid increasing fear of global recession	Demand reduction between 10% - 15% and global growth expectation deteriorate a bit further	More government measures to push gas prices lower, a less than 10% reduction in gas and electricity demand and no further deterioration in growth expectations.
Chart-technical important levels	Bearish target: Longer-term chart support zone 65-80.	Stuck between support zone 175-190 and resistance zone 280-290.	Support zone 175-190. Initial resistance zone 345. Bullish target: 500



Table 2: Consequences for other markets

	Gas price scenarios		
	Bearish scenario	Base Case	Bullish scenario
EUR/USD	Lower gas prices mean improving real incomes and less fear of an inflationary recession. Very positive for EUR/USD	Short-term EUR/USD positive. Lower gas prices combined with more fiscal stimulus and tighter ECB policy.	Higher risk of prolonged inflationary recession. EUR/USD negative.
Long-term interest rates	Positive as growth prospects improve	Positive as growth prospects improve at the margin and inflation expectations remain higher compared to the negative scenario	Negative due to fear of excess tightening and deep recession
EMU stock prices	Very positive: less fear of inflationary recession and excessive ECB tightening.	Slightly positive due to reduces fear of a scenario for much higher gas prices.	Very negative due to possible gas rationing and a deep recession
Oil price	Negative: less demand for oil as substitution for gas.	Oil price neutral to slightly positive as economic outlook improves but likely less substitution demand	Negative; more downward pressure on economic growth.

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