NEW CHALLENGES
NEW SOLUTIONS

RUSSIA AND CIS OIL AND GAS QUARTERLY REVIEW

Moscow Energy Center

October 2022

Contents

Global economy

The global economy has been under unprecedented pressure over the past nine months as geopolitical tensions have plunged the world into a deeper energy crisis and inflation.

Business activity has declined, with the composite PMI falling below 50 in August and September, compared with 50.8 in July.

The euro area continues to struggle, facing the lowest level of business activity in the past 20 months amid high inflation, soaring energy costs, growing economic uncertainty and crumbling demand. New orders have plummeted to a two-year low, with a considerable drop seen in export sales.

While the EU is grappling with growing uncertainty over Russian gas supplies, its impact will vary from country to country. The suspension of supplies from Russia will be felt most keenly in Hungary, Slovakia and Bulgaria, whose economies may shrink by over 4%. Italy is expected to take the hardest hit among Western European countries, with its GDP to lose around 3.5%, while Nordic economies will be affected to a much lesser extent.

China's manufacturing and services sectors grew in September, albeit at a lower pace than a month earlier, with the composite PMI topping 50. Growth was driven by large industrial enterprises, property developers as well as telecommunication and financial services companies.

Inflation is now firmly in the regulatory spotlight. The annualized reading for September in the US was rather high, at 8.2% vs. 8.3% for August, though it dropped to the lowest level for the past seven months, while in the euro area it is expected to come in at 10%, compared with 9.1% a month earlier.

Central banks globally are now tightening their monetary policy in a bid to rein in inflation. In late September, the Fed approved a third-consecutive 75 b.p. rate hike to a new target range between 3% and 3.25%, while in the UK the rate was raised by 50 b.p. to 2.25%. Similar steps were taken by other regulators, with a higher rate set in Switzerland (0.5%), Sweden (1.75%), South Africa (6.25%), Indonesia (4.25%) and Australia (2.6%).

Nevertheless, in October the IMF did not trim its June global economic growth forecast for this year (3.2% YoY), though it lowered its outlook for 2023 from 2.9% to 2.7%.

Composite PMI (manufacturing and services)

	05-22	06-22	07-22	08-22	09-22
Global	**51.3**	**53.5**	**50.8**	**49.3**	**49.7**
US	53.6	52.3	47.7	44.6	49.3
China	48.4	54.1	52.5	51.7	50.9
Euro area	54.8	52.0	49.9	48.9	48.2
Germany	53.7	51.3	48.1	46.9	45.7
France	57.0	52.5	51.7	50.4	51.2
Italy	52.4	51.3	47.7	49.6	47.6
UK	53.1	53.7	52.1	49.6	49.1
UAE	55.6	54.8	55.4	56.7	56.1
Saudi Arabia	55.7	57.0	56.3	57.7	56.6
Russia	48.2	50.4	52.2	50.4	51.5

Sources: National Bureau of Statistics of China , open sources, Moscow Energy Center

Russia's economy

Geopolitical pressures, including the expanded sanctions against Russia, are weighing on its economy, with GDP contracting 4.1% YoY in Q2 2022 and 0.4% YoY in H1 2022.

Estimates by the Ministry of Economic Development (MED) suggest that the pace of economic decline in July and August slowed to 4.3% and 4.1% YoY, respectively, compared with 4.9% in the first summer month. Unlike in extractive industries, the situation in the agricultural sector has improved somewhat, although this was because of the low-base effect of last August, when the economy plunged 10% YoY due to late harvesting.

A flash reading of the composite PMI, which tracks business trends across both the services and manufacturing sectors, came in at 51.5 in September, up from 50.4 in August, largely on the back of stronger domestic demand while new export orders continued to shrink.

The MED forecasts a 2.9% contraction in Russia's GDP for 2022 (with the biggest decline anticipated in the last quarter), while, according to the OECD, Russia may face an even deeper recession, with its GDP to fall 5.5% YoY.

After hiking the key interest rate to as much as 20% in late February, the Central Bank of Russia (CBR) has continued to cut it gradually. At its September meeting, the regulator slashed the rate by 50 b.p. to 7.5%, with both subdued consumer demand and improved business activity contributing to this decision.

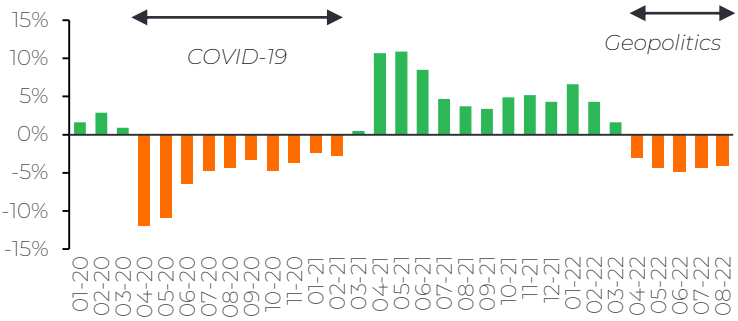
By the end of September, consumer prices in Russia had risen 13.7% YoY, compared with 10.4% a month earlier, while cumulative growth for the first seven and eight months of this year was 14.39% and 14.38%, respectively. According to the CBR's forecasts, annual inflation will go down to 11%–13% in 2022 and 5%–7% in 2023, and will return to the target level of 4% in 2024.

Sources: Bloomberg, IMF, OECD, IHS Markit, Ministry of Economic Development of the Russian Federation, Rosstat, Central Bank of Russia, Moscow Energy Center

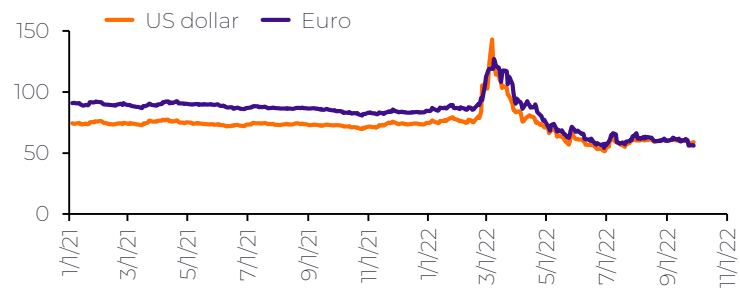
Though the DXY, a measure of the US dollar relative to a basket of six foreign currencies, hit a fresh 20-year high in September, the ruble continued to gain value against the greenback (+5%). The appreciation of the Russian currency was driven by a large current account surplus and the de-dollarization of the economy in the face of geopolitical risks. Another reason behind the gain is that exporters had to convert their foreign-currency revenues into rubles to pay taxes. The downside, however, is that the stronger ruble erodes the profitability of exporters and has an adverse effect on monetary flows to the state's coffers.

As of 1 October 2022, Russia's national wealth fund (NWF) stood at RUB 10.79 trillion, which is equal to 8.1% of GDP. At 2022 year-end, the NWF is expected to be worth RUB 8.8 trillion (6.2% of GDP), while in the following year it will decrease to RUB 6.3 trillion (4.2% of GDP), estimates by the Finance Ministry suggest.

GDP change, YoY

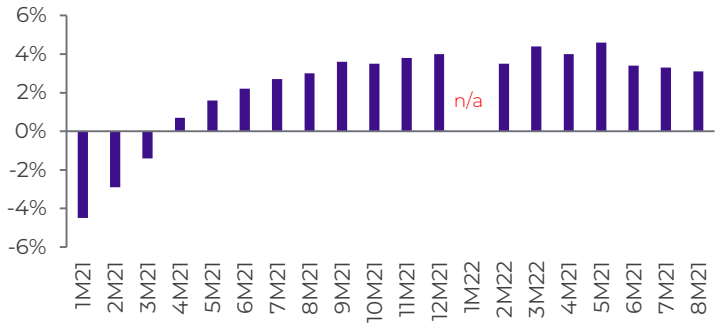


Ruble exchange rate

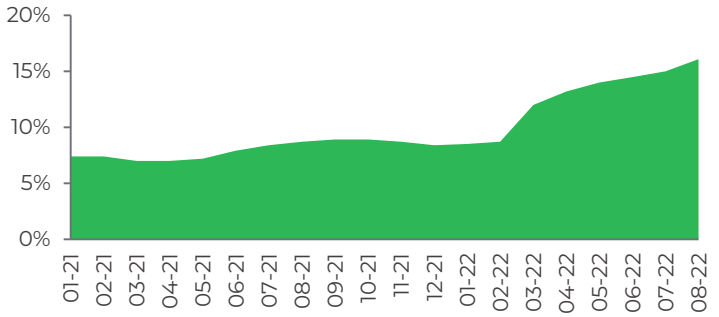


Kazakhstan's economy

GDP change, YoY



Consumer price index, YoY



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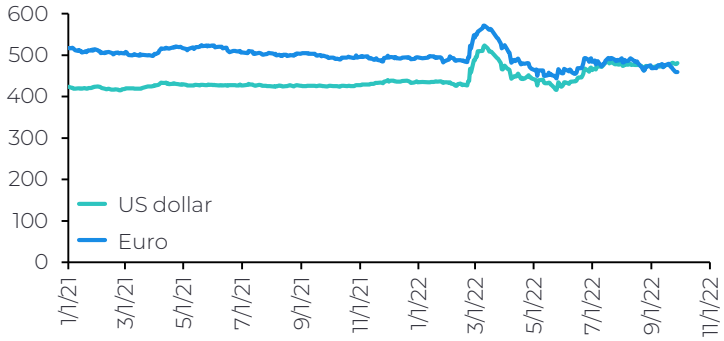


Sources: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, National Bank of Kazakhstan, Moscow Energy Center

According to the Ministry of National Economy, the country's GDP expanded 3.1% in the first eight months of 2022, with the real economy and the services sector growing 3.3% and 2.3%, respectively. Services for the gas production segment edged up 2.7% YoY, while investments in fixed capital rose 5.7%.

The IMF has revised its outlook on Kazakhstan for 2022 upward, from 2.3% in April to 2.5%-2.8% in October, while growth in the following year is now expected at 4.4%.

Kazakhstan's foreign exchange reserves were estimated at $32.7 billion in August, which is 11.1% more than a year earlier and 2% less than at the beginning of 2022.

Annualized inflation in September stood at 17.7%, with the monthly reading showing a 1.8% increase, according to data from the National Statistics Bureau of the Agency for Strategic Planning and Reforms. The biggest price jump was observed in the services sector (+2.7%), as the average housing rent soared 13.1% in September alone.

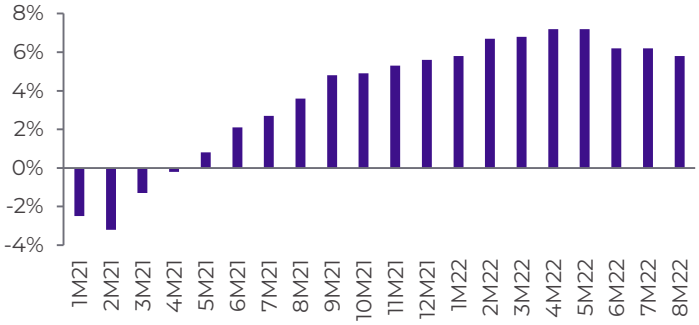
The National Bank raised the base rate to 14.5% in July to rein in inflation, which had surpassed the projection amid growing inflationary expectations. At its next meeting two months later, the regulator decided to keep the rate unchanged.

Between January and September, the tenge lost 9.3% against the US dollar and gained 4.5% against the euro, with the average exchange rate standing at KZT 475.5/USD and KZT 470.6/€.

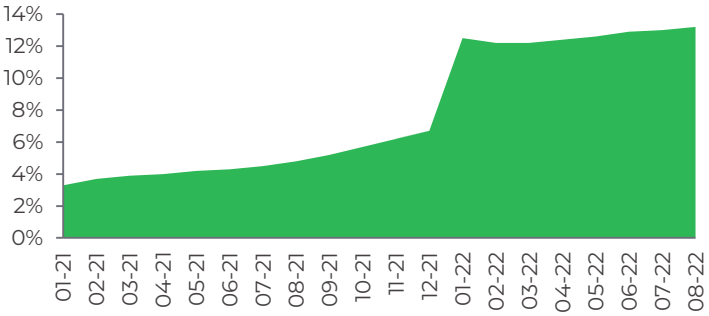
The unemployment rate in August was 4.9%, up only a smidgen (0.1%) from a year earlier. At 1 September 2022, 71.4 thousand people received unemployment benefit from the State Social Insurance Fund.

Azerbaijan’s economy

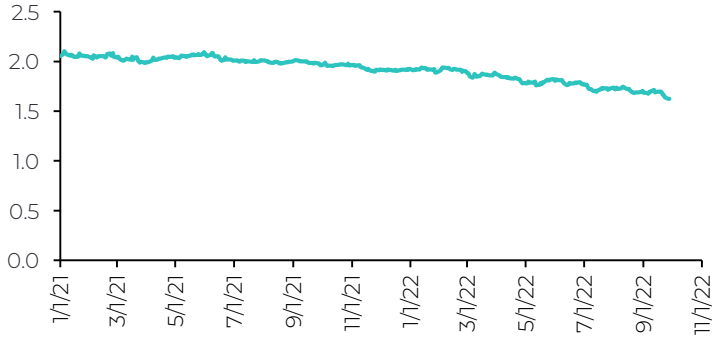
GDP change, YoY



Consumer price index, YoY (cumulative)



Manat exchange rate



In the first eight months of 2022, Azerbaijan's economy expanded 5.8% YoY, while GDP increased to AZN 84.9 billion, or AZN 8,800 per capita. While the oil and gas sector was down 2% YoY, all other sectors showed combined growth of 10.3%.

The top three contributors to GDP were manufacturing (52.5%), trade and vehicle repairs (7.9%), and transport and warehousing (6.1%).

The Government forecasts GDP growth at 3.5% in 2022 and 2.7% in 2023, down from the 5.6% reported last year. The World Bank revised upwards its 2022 growth expectations for Azerbaijan, from 2.7% in April to 4.2% in October.

Annualized inflation remains stubbornly high, at 13.2% in late August versus 13% a month earlier. Monthly inflation in August was 0.9%, up from 0.5% in July. According to the Finance Ministry, prices will grow 12.5% in 2022 and 6.9% in the following year. The World Bank, while having the same expectations for 2022, anticipates a steeper rise in 2023, at around 9.5%.

In September, the Central Bank maintained its interest rate at 7.75% (the previous hike was 0.25 b.p. on 18 March).

As of 1 July 2022, Azerbaijan’s national government debt stood at AZN 16.9 billion (14.7% of GDP), while external debt was AZN 13.4 billion (11.7% of GDP).

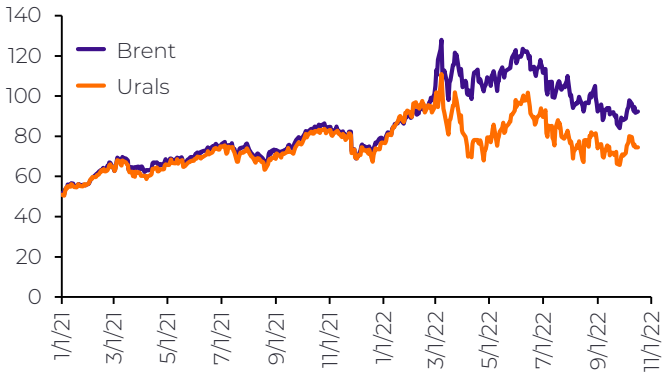
The euro’s average exchange rate was AZN 1.7/€ in Q3 2022, compared with AZN 1.9/€ in Q1 2022 and AZN 1.8/€ in Q2 2022.

Sources: State Statistical Committee of the Republic of Azerbaijan, Oxford Economics

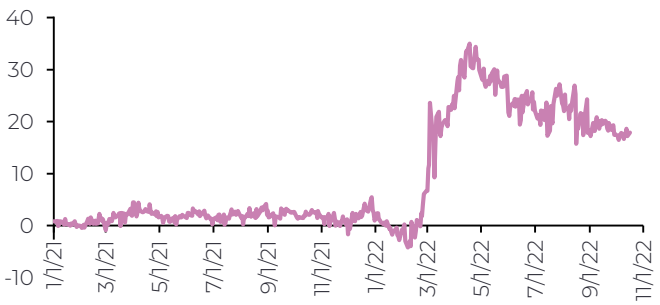
Global oil market

After losing almost 30% in value since the peak of early March, oil now costs about $90 a barrel. The spot market discount for Urals against Brent narrowed from $35 in April to $18 in mid-October, though it is still well above the historical average of $1–$2 per barrel. The real ruble price of Russian crude plunged to the critical level of 2015–16, while the Brent price is expected at $94 in 2023, according to the median forecast.

Brent and Urals price, $/bbl



Urals discount to Brent, $/bbl



Sources: Bloomberg, IEA, Reuters, OPEC, open sources, investing.com, Moscow Energy Center

The market outlook remains uncertain against a weakening economic backdrop and more so due to the upcoming EU ban on seaborne imports from Russia from 5 December 2022 as part of the sixth package of sanctions adopted on 3 June this year.

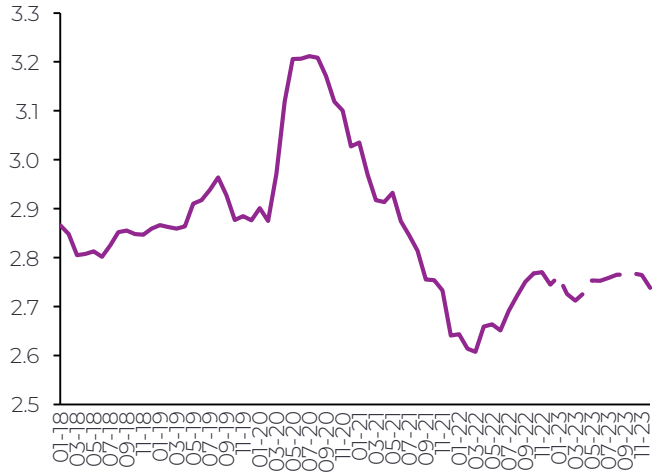
With a proposed ban on marine insurance and reinsurance for tankers carrying Russian oil, its deliveries to the EU could plummet by as much as 90%, which may also affect global supply and send oil prices soaring.

For third countries, the problem is compounded by disruption to supply chains and traditional sea routes via Europe.

Recognizing that a potential global supply shortfall may spur oil prices even higher, the G7 leaders have proposed setting a price cap on Russian oil at $60 per barrel from 5 December (an unspecified price threshold was earlier mentioned in the eighth package of EU sanctions targeting Russia's seaborne oil exports to third countries).

Amid uncertainties surrounding the global oil market and the economy at large, OPEC+ decided at the JMMC meeting in October to make the biggest output cut in 2.5 years and extended its production cooperation agreement until the end of 2023.

OECD oil commercial inventories, billion barrels



DXY change

OPEC+ members' quota for November and December was slashed by as much as 2 million b/d. It was also decided to use August 2022 output as a new reference level, while previously production cuts were established by reference to October 2018.

According to Bloomberg, however, these cuts will not become real until the EU sanctions on Russian crude exports kick in, considering also that Russia is successfully diverting most of the crude left by European buyers to India, Turkey and China. Note also that in September the cartel as a whole fell some 3.6 million b/d below its collective ceiling anyway.

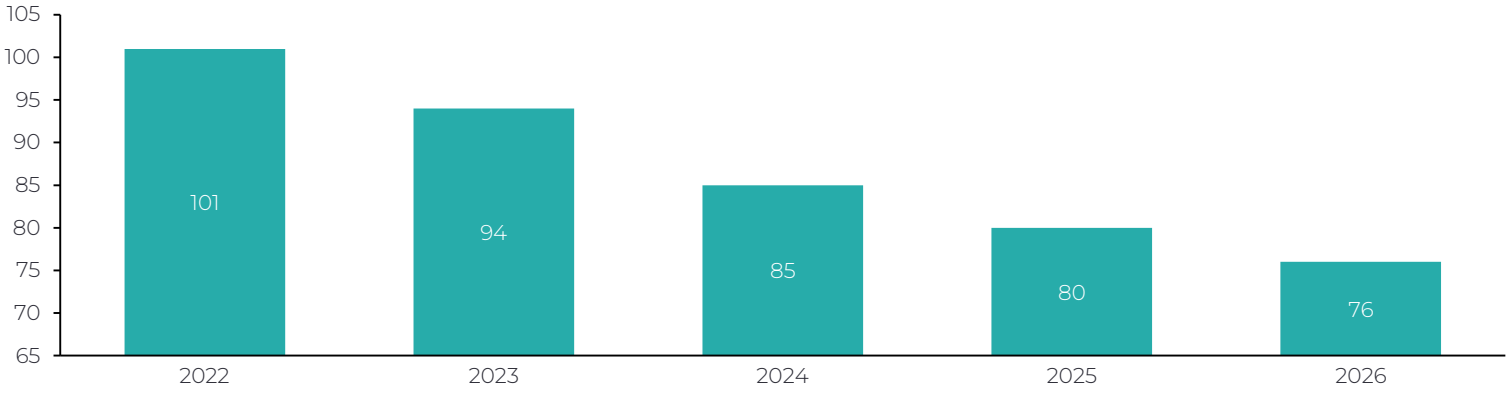
Production curbs by OPEC+, coupled with the EU's ban on Russian oil imports and growing demand in Europe as the bloc switches from gas to oil this winter, will squeeze supply. Ahead of midterm elections, the US is planning to release 15 million tonnes (around 110 million b/d) from the strategic petroleum reserve, which is already at its lowest level since 1984.

Meanwhile, global markets are bracing for a deeper economic slump, driven in part by a stronger dollar. Another factor that has pushed oil prices higher was the hefty rate hike of 75 b.p. to 3%–3.25% by the Fed as it escalates its inflation fight. Add to this the uncertainty about the effects of Hurricane Ian on oil operations in the Gulf of Mexico.

All these developments have prompted investment banks to revisit their forecasts. Goldman Sachs, for example, has raised its Q4 2022 estimate for Brent by $10 to $100 a barrel. Similarly, Morgan Stanley upped its forecast for Q1 2023 by $5, also to $100 a barrel, as it anticipates a tighter oil market ahead, though its forecast for the rest of 2023 remained unchanged.

Russia's Ministry of Economic Development expects a barrel of Urals to cost $80 in 2022, $70 in 2023 and $65 in 2025.

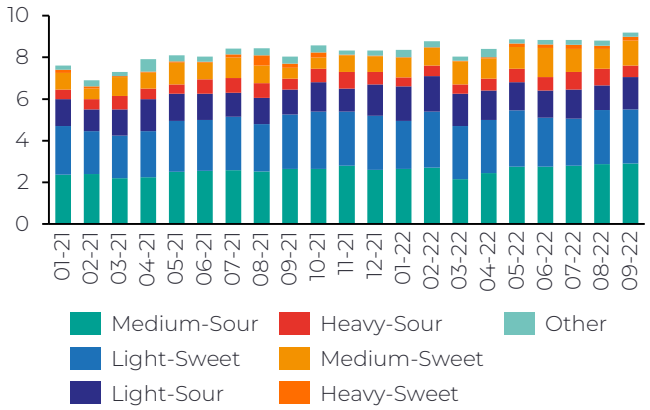
Median Brent forecast in mid-October 2022, $/bbl



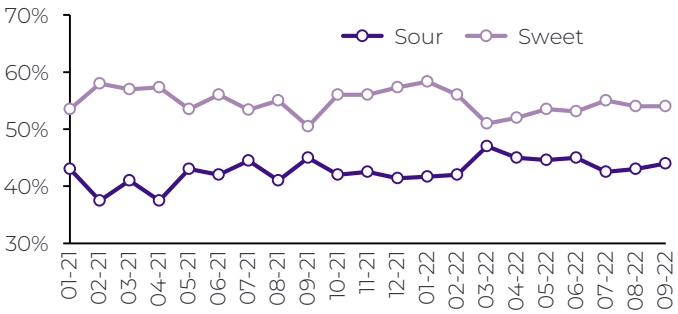
Sources: open sources, investment banks, Moscow Energy Center

Europe continues to ramp up its crude and condensate imports ahead of winter, with September's figures marking a 0.35 million b/d rise over a month earlier. From January to September 2022, the share of sweet crude grades (<0.5% of sulfur content) rose 3 p.p. to 44% of total imports, while the share of sour grades (> 2.0%–2.5% of sulfur content) declined 4 p.p. to 54% over the same period. Europe can hardly count on additional flows from the Middle East, as oil producers with spare capacity to boost oil production (Saudi Arabia, Kuwait and the UAE) are sticking to their obligations under the OPEC+ deal.

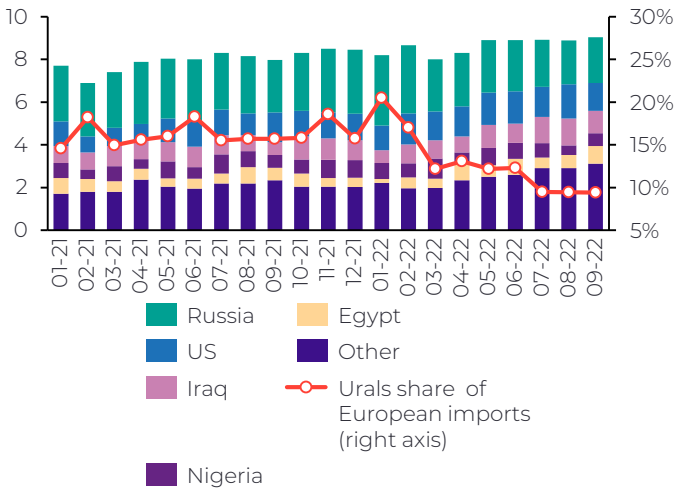
European crude oil imports by category, million barrels per day



Sweet and sour oil imports to Europe, % of total



European crude/condensate imports by origin country, million barrels per day



Sources: Vortexa, Moscow Energy Center

In September, Europe's imports of light to medium-sweet grades rose to 3.8 million b/d (+0.2 million b/d over a month earlier). Europe increased its imports of middle-distillate rich grades in response to growing demand, spurred by higher diesel cracks ($58/bbl on 7 October vs. $41/bbl on 30 September, according to Argus), while demand for sweet grades was also on the rise, as refiners had to stay frugal after high natural gas prices pushed the cost of desulfurization extremely high.

Europe imported 4 million b/d of sweet crude and 4.9 million b/d of sour crude in September, up 0.23 million b/d and 0.19 million b/d from the previous month, respectively. Sweet crude imports hit the highest level since January 2020, with most of them sourced from Africa (half of the 2.7 million b/d of light-sweet imports were bought from suppliers in Libya, Algeria and Nigeria). Medium-sweet crude imports in September rose 0.19 million b/d to 1.1 million b/d, coming largely from Nigeria.

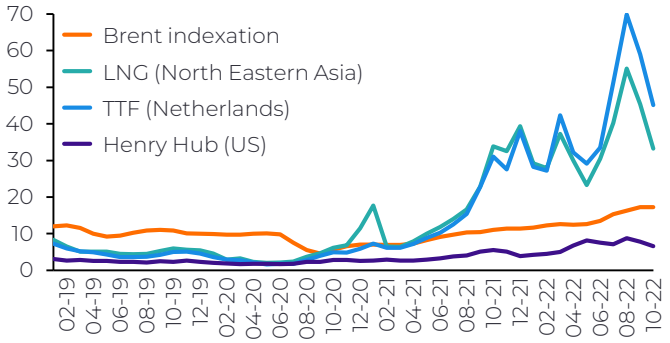
Seaborne exports of Russia's flagship Urals crude to Europe (including Turkey) fell 9% in September. With the imminent ban on Russian supplies, refiners in Europe are looking for alternatives close to Urals in terms of sulfur content. For example, Poland, France, Italy and Greece are boosting their purchases of Arab Light, both directly from Saudi Arabia and via the pipeline connecting Europe and Egypt. Imports of other Middle Eastern grades are also growing, with Europe importing 0.52 million b/d of Kirkuk in September, up 0.19 million b/d over a month earlier.

Going forward, Europe will be importing even more crude and condensate to secure its energy needs during the coming winter, while demand is set to remain strong as local refiners continue to benefit from high diesel crack spreads. The mix of alternatives to Russian crude may vary depending on market conditions, so refiners will have to be flexible.

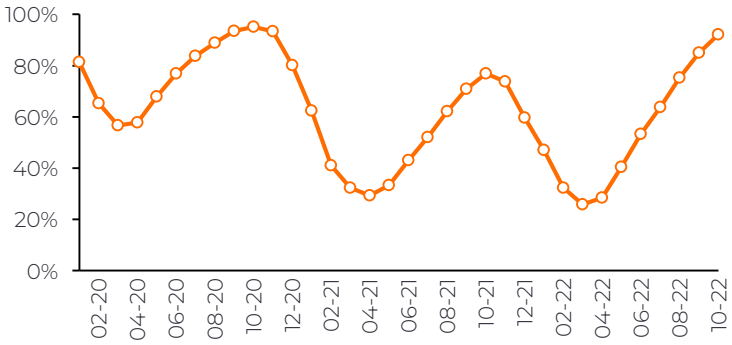
Global gas market

The leaks discovered in September in two natural gas pipelines in the Baltic Sea not only prompted major concern among climate activists (methane is 30 times more damaging to the environment than carbon dioxide), but also brought renewed limelight on the ailing gas market.

Gas prices, $/million BTU



European gas storage level, mid-month



Sources: open sources, Moscow Energy Center

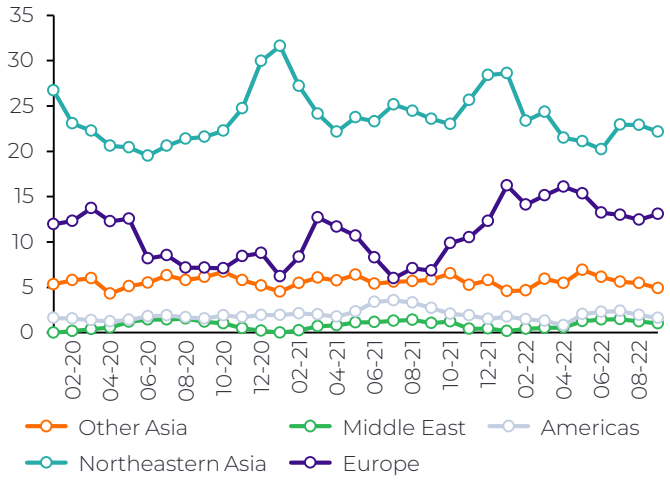
In the first ten days of October, natural gas prices pulled back from the peak levels seen in August, from $55 per million BTU in Asia to $33 and from $70 per million BTU in Europe to $43.

Prices in Europe jumped in early October following the pipeline incidents, only to fall shortly afterwards, as neither pipeline was actively transporting gas at the time of the incidents. However, this backup supply channel, which was kept in the hope of resuming the flow in the mid term, has been damaged, and it's not clear how long it will take to restore it, which is especially alarming in the run-up to winter.

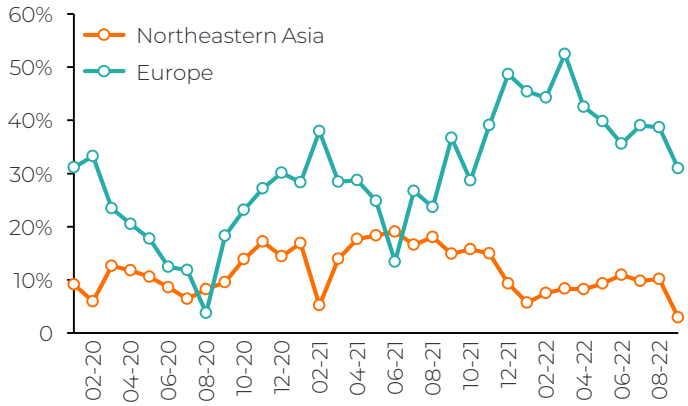
Gas storage facilities across the EU are filling up more quickly than planned (90% of capacity in early October versus the 80% target set for 1 November). This offers a glimmer of hope that the region's gas market will balance itself out, but it's yet to be seen what the withdrawal rate will be during the winter months.

Europe's LNG imports, though rising 92% YoY in September, are trending down, having declined from 15.3 billion cubic meters to 13.1 billion cubic meters between May and September.

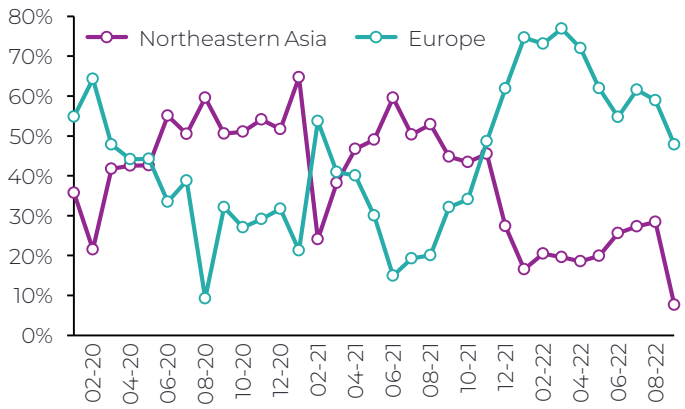
LNG imports by region, billion cubic meters



US share of European and Asian LNG imports



Europe's and Asia's share of US LNG exports



Sources: open sources, Moscow Energy Center

US LNG supplies to Europe, while growing 60% YoY in September (thanks to, among other factors, a healthy price premium over most of Asia), continued to decline month on month, from 6.2 billion cubic meters in May to 4.1 billion cubic meters in September. As a result, the US share of the region's imports decreased from 52% to 31% between May and September, while Europe's share of US LNG exports shrank from 77% to 48% in the same period.

Imports in northeastern Asia fell 6% YoY to 22.1 billion cubic meters in September, down 3.5% and 3.2% from July and August, respectively, while China's imports in 2022 are expected to tumble 14% from a year earlier due to an economic slowdown, high prices and a milder winter.

Natural gas prices in Europe are now worryingly close to those in Asia, with Europe-destined LNG cargoes likely to be diverted to Asia. This may lead to a supply shortage, which could trigger a price spike, resulting in some of the lost supplies being shifted from Asia back to Europe.

On the other hand, China could increase its LNG purchases if its Government decides to shake off the COVID-19 shackles. In this case, Europe could face a long-standing shortfall of gas, with the market equilibrium to be restored owing to weaker demand rather than stronger supply. According to the IEA, Europe's gas consumption declined by more than 10% in the first eight months of this year compared with the same period in 2021.

In mid-October, China announced plans to speed up the construction of LNG storage and receiving facilities, while local shipbuilders have orders on hand until 2026. To top up inventories and meet domestic demand during the winter season, the Government urged its state-owned LNG importers to stop selling cargoes to buyers in Europe and Asia.

Growing global competition for supplies could herald tectonic shifts on the gas market. Suppliers are now snapping up all available vessels. According to Bloomberg, Shell has booked the LNG carrier Yiannis for as much as $400,000 per day, likely the most expensive ever for the Atlantic basin, while the Indian firm GAIL has also secured the LNG Schneeweisschen vessel for about $360,000 per day.

Global drilling activity

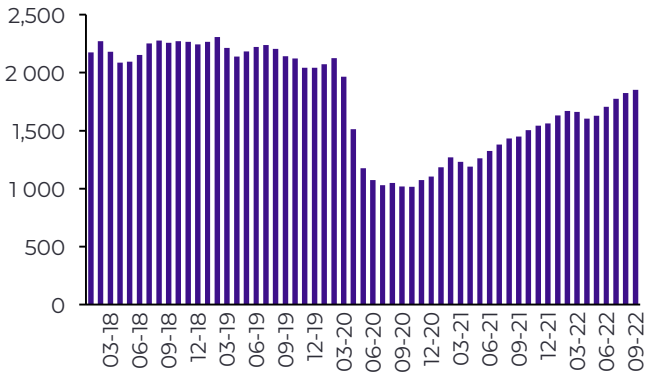
The active rig count, which is a leading indicator of oil and gas output, continues to grow globally, having risen to 1,853 in September from 1,632 in January and 1,706 in June this year.

Growth was the highest in Canada, with the number of active rigs there rising 48%, or by 68 units, between June and September.

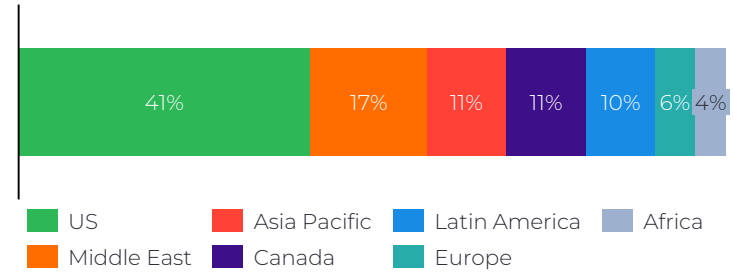
The US rig count rose 24 units in the same period to 763 in September.

Between June and early October, the active rig count grew at 0.3% a week, compared with 1.1% in the first half of 2022.

Global rig count

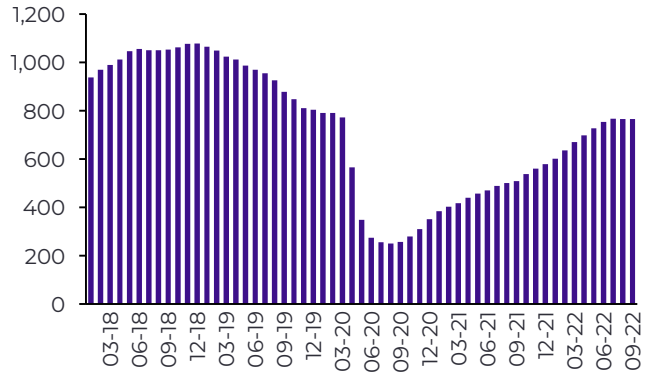


Baker Hughes rig count by region, September 2022



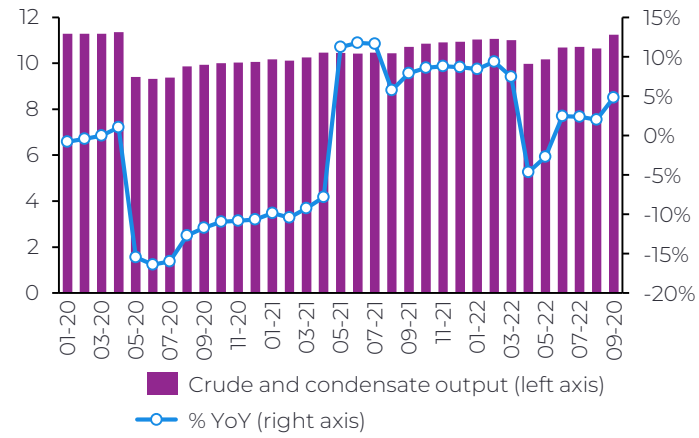
Source: Baker Hughes

US rig count, month-end

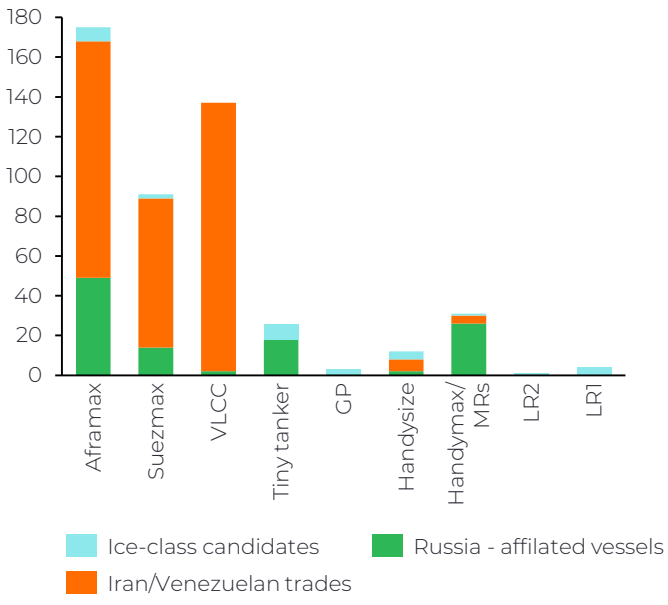


Russia's oil and gas sector
Upstream

Average daily output – Crude and condensate
million barrels per day



Number of vessels viable for carrying Russian oil and products after the EU ban



Sources: InfoTEK, Rosstat, Vortexa, Moscow Energy Center

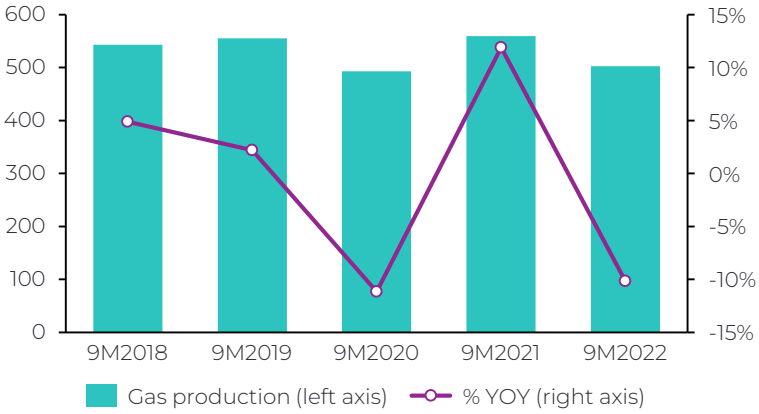
After falling briefly in August, Russia's crude and condensate output in September was back to the level posted in July (the setback was due to repairs at the Prirazlomnoye field and a fall in condensate output prompted by a decline in natural gas production). Liquid hydrocarbon output in the first nine months of 2022 was up 3% YoY, at around 400 million tonnes, or 10.7 million b/d.

Russia's oil exports in September were virtually unchanged from the previous month, at around 4.9 million b/d transported by tankers and pipelines. According to media reports, exports by rail are set to increase, especially to China. Russia has been diverting its exports to China, India and Turkey since late February after European buyers slashed seaborne imports of Russian crude in fear of reputational damage.

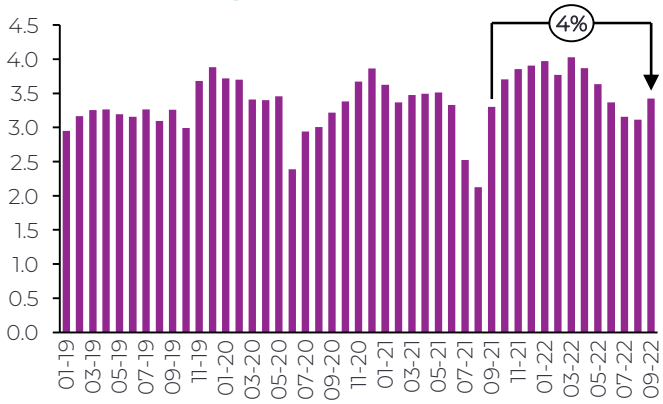
In just the first four months of 2022, between February and May, India's imports from Russia were 20% higher than in the whole of 2021. However, after peaking in June, imports of Russian crude (excluding ESPO) dropped from 0.8 million b/d in August to 0.5 million b/d in September, squeezed by rising oil prices and freight rates. Instead, Indian buyers have turned to the Middle East, as it takes only one week to deliver cargoes from there to India, compared with nearly one month from Russia.

Russia's oil output in the short term will depend on the enforcement of the sixth and eighth packages of EU sanctions, which will take effect in early December. In its outlook for 2022, the MED anticipates a 2% drop in oil production from a year ago. This is broadly in line with the Finance Ministry's policy document called the Main Priorities of the Budget, Tax and Customs Tariff Policy, which says that oil production will decline from 524 million tonnes in 2021 to 515 million tonnes (10.3 million b/d) in 2022 and 490 million tonnes (9.8 million b/d) in 2023.

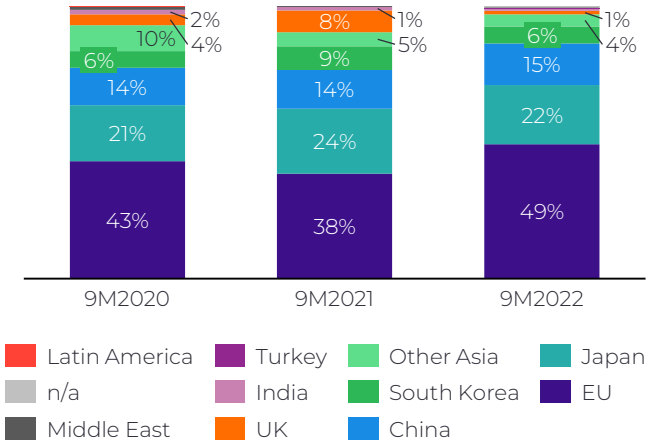
Average daily output – Gas
billion cubic meters per day



Russia's LNG exports, billion cubic meters



Russia's LNG exports by destination



Sources: InfoTEK, open sources, Moscow Energy Center

Meanwhile, after falling more than 5% YoY in April, natural gas output continued on the downward path: in the first nine months of 2022, it shrank 10.3% YoY to 502.8 billion cubic meters, a level observed two years ago.

This year's natural gas output will drop by as much as 10%, while exports to the EU will fall by 50 billion cubic meters, Deputy Prime Minister Alexander Novak said in mid-October.

According to Gazprom's preliminary reports, it produced 313.3 billion cubic meters in the first nine months of 2022, down 17.1%, or 64.8 billion cubic meters, from the same period last year, while its non-FSU sales were down 40.4% YoY to 86.9 billion cubic meters. By contrast, the gas giant's exports to China via the Power of Siberia pipeline were on the rise: daily supplies were normally above the levels set in the long-term contract with China's CNPC, with an all-time record registered twice in September.

Another gas producer, NOVATEK, boosted its output in the first nine months of 2022 to 60.8 billion cubic meters (+2.9% YoY).

In January-September 2022, LNG exports from Russia soared by roughly 10% YoY, with the EU's share rising from 38% to 49%.

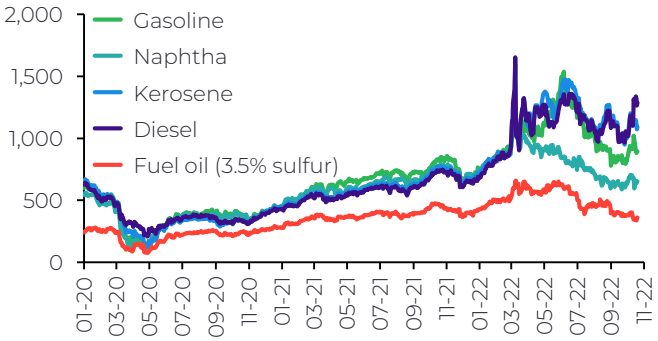
While Europe's pipeline gas imports from Russia are expected to decline, LNG supplies to the region should stay at the same level as last year.

With the Nord Stream pipeline now inoperable, Russia is exploring possibilities of supplying gas to Europe via Turkey. According to preliminary estimates, exports may reach as much as 63 billion cubic meters once the existing infrastructure has been expanded.

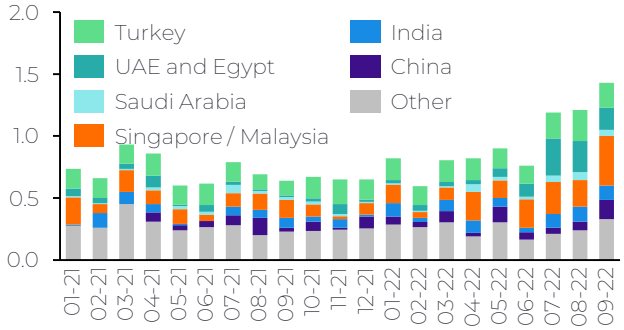
With a view to broadening Russia's export reach, President Vladimir Putin announced in October the upcoming launch of the Power of Siberia-2 project, a mega pipeline that will run to China, including the construction of the pipeline's Mongolian section, known as Soyuz-Vostok. The President also mentioned plans to connect the Asian and European segments of the national gas transmission system, as well as ongoing support for projects to construct LNG terminals.

Russia's oil and gas sector
Downstream

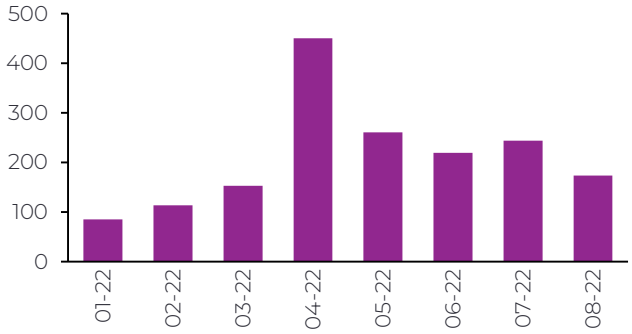
Oil product prices, CIF NWE, $/tonne



Russia's oil product exports to friendly countries, million barrels per day



Compensation payments under the damping mechanism, billion rubles



Sources: InfoTEK, Reuters, Vortexa, open sources, Moscow Energy Center

According to InfoTEK, primary processing in the first eight months of 2022 declined 3.6% YoY to 178.8 million tonnes, with local refineries operating at 80.7% of their capacity, compared with 84% in the same period last year. Refining product output declined in May, primarily as a result of a fall in exports, with refiners now having to focus on the domestic market.

While oil product prices in Europe are generally on the decline, reflecting the downward trend for crude, they are still much higher than last year, with CIF NWE cargo prices for middle distillates and gasoline in September rising 65% and 14% YoY, respectively. At the beginning of September, diesel in Europe traded at a record premium over gasoline of around $300 per tonne. The widening spread was underpinned by the growing price of natural gas, which is used to produce hydrogen needed for converting heavy crude oil streams into diesel fuel. By contrast, naphtha lost 7% YoY, impacted by the ongoing malaise in the petrochemicals sector.

Some of the Russian oil products, which will be restricted in the EU from 5 February 2023, are already traded at a discount. Given that gasoline is sold at a higher discount than other oil products, its damping mechanism was adjusted on 1 September, with the indicative export price now taking into account not only gasoline prices in Europe and the cost to deliver gasoline from Russia, but also the real discount at which it is sold in Europe. These changes will last either until 1 January 2023 or until Urals starts to trade at a premium to Brent, although regulators are now considering keeping them for a longer term to alleviate pressure on the budget. No price adjustments were required for diesel fuel, as it is sold at a substantially lower discount than gasoline.

Between January and August 2022, local refiners received around RUB 1.48 trillion in compensation payments under the damping mechanism. According to the Ministry of Finance, payments in August totaled RUB 173.3 billion and were 29% less than in July (for comparison, RUB 450.3 billion in April).

Hot topics for Russia's oil and gas market

Geopolitical challenges

- Restrictions on inbound capital flows (investments and debt financing) and on foreign participation in local projects
- Resisting technology sanctions by means of import substitution
- Reconfiguring operations and building new production and supply chains

Taxation in the oil and gas sector

- Adjusting the damping mechanism for gasoline beginning in September 2022 to reflect a Urals-to-Brent price difference
- Discussing regulatory changes:
- Introducing variable export duty on gas (duty to be raised from 30% to 50% if the price tops $300 per thousand cubic meters) and raising an MET rate for all gas producers
- Introducing export duty for LNG producers
- Raising export duty on crude oil by around 50% in 2023 by increasing the coefficient in the export duty formula from 0.167 to 0.25 until 2024
- Extending the newly adjusted damping mechanism for gasoline until 2025
- Increasing the tax burden on LNG players by raising the corporate tax rate from 20% to 32% between 2023 and 2025 (the legislative proposal has passed the first reading in the State Duma)
- Expanding the AIT regime to extra viscous oil

Upstream

- EU ban on Russian seaborne oil imports from 5 December 2022
- Export diversification as a top priority
- Revisiting the idea of a strategic petroleum reserve
- Tightening export controls in the EU and the US on oil and gas extraction equipment and goods supplied to Russia
- Setting a price cap on Russian crude and a growing discount to world prices

Downstream

- EU ban on Russian seaborne petroleum product imports from 5 February 2023
- Optimizing sales and supply chains amid geopolitical uncertainty
- EU ban on exports of specific technologies for use in oil refining

Oilfield services

- Restricting the operations of international OFS players who were top providers of technologies, including multistage hydraulic fracturing

Natural gas

- Explosions in the two Nord Stream gas pipelines
- EU restrictions on LNG equipment supplies to Russia
- Debates in some countries around a price cap on Russian gas

Kazakhstan’s oil and gas sector

In the first nine months of 2022, Kazakhstan’s oil output dropped 1.1% YoY to 53 million tonnes, or around 1.42 million barrels per day, while the production of gas condensate declined 0.8% YoY to 8.8 million tonnes. Oil output at Kashagan was 8.7 million tonnes, or 17% below the planned level due to a shutdown of the Bolashak plant in August 2022 after a leak was detected at the gas separation unit.

Kazakhstan exported 46.8 million tonnes of oil between January and September 2022, 4% less than in the same period last year.

According to the Ministry of Energy, Kazakhstan plans to boost annual oil output from 85–87 million tonnes to 100 million tonnes by mid 2024 and will therefore need to expand its transportation reach. The Ministry is now exploring a number of possibilities, including an eastbound route to China, across the Caspian Sea, and a seaborne route to Iran.

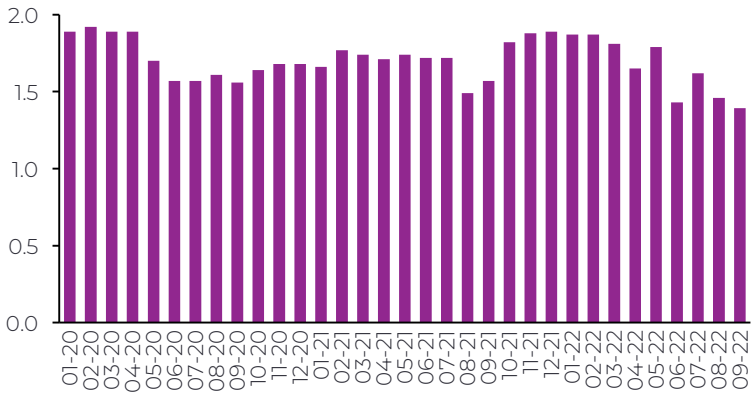
Natural gas production in the first nine months of 2022 increased 0.6% YoY to 39.4 billion cubic meters. In September, however, natural gas output saw the biggest slump since 2013, which was largely prompted by a decrease in associated petroleum gas production in response to declining oil output.

Exports of natural gas in the first nine months of 2022 tumbled 33.3% YoY to 4.6 billion cubic meters. While in 2021 as a whole exports stood at 7.2 billion cubic meters, this year they are expected to drop to 5 billion cubic meters.

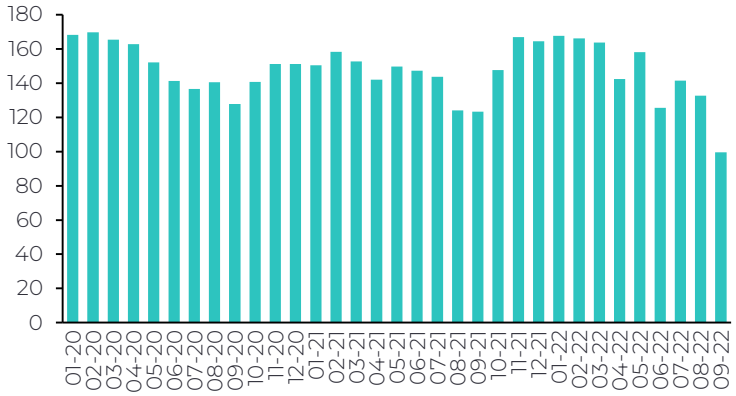
Domestic gas consumption is now on the rise, driven by the ongoing gasification of rural areas, which is set to cover 65% of the population (13.5 million people) by 2030, as well as by transition from solid fuels to gas in the manufacturing sector.

While Kazakhstan is determined to scale up the production of commercial gas by 15 billion cubic meters by 2030 in line with the comprehensive plan for the development of the gas industry to 2026, QazaqGaz anticipates a supply shortage from 2024 onwards, with exports, therefore, likely to drop to zero by 2025.

Average daily output – Crude and condensate
million barrels per day



Average daily output – Gas
million cubic meters per day



Source: InfoTEK

Azerbaijan's oil and gas sector

In the first nine months of 2022, Azerbaijan produced 24.5 million tonnes of oil and gas condensate, down 5.3% YoY.

Daily output of liquid hydrocarbons in September was 654,000 tonnes, with condensate accounting for 17% of this amount.

In that month, Azerbaijan exceeded its required cut under the OPEC+ deal by 32.2%. The quota for October and November this year is set at 717,000 and 684,000 barrels per day, respectively.

Azerbaijan exported around 19.7 million tonnes of crude and condensate that it produced in the first nine months of 2022, or 80% of the total output, while its export revenues in the same period rose 60%. Exports were destined to 27 countries, with top buyers being Italy (38.7%), India and Israel. In September, Azerbaijan started selling oil to Bulgaria.

Azerbaijan's natural gas output in January-September 2022 was 34.4 billion cubic meters (+8.6% YoY), of which 16.3 billion cubic meters were exported (+22.6% YoY).

A total of 12.5 billion cubic meters were supplied via the Trans Adriatic Pipeline (TAP) and the Trans Anatolian Pipeline (TANAP), including 8.3 billion cubic meters to the EU and 4.2 billion cubic meters to Turkey. Another two lots – 1.9 billion cubic meters each – were delivered to Turkey and Georgia via the South Caucasus Pipeline.

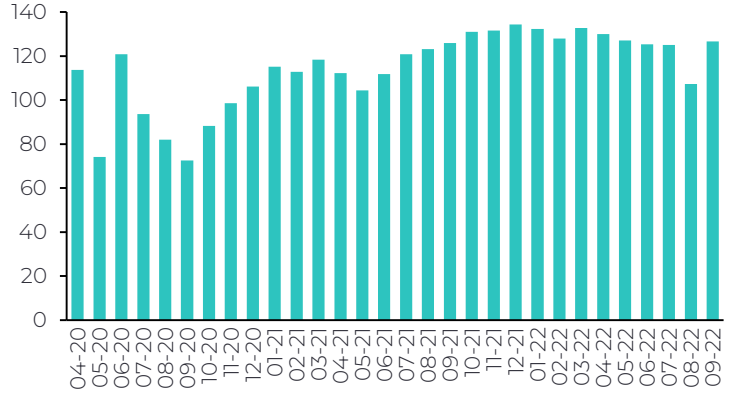
Azerbaijan's gas pipelines carried a total of 28.5 billion cubic meters between January and September, which is 12.1% more than a year earlier.

As Europe looks to diversify away from Russia towards other gas suppliers, Azerbaijan plans to ramp up exports to this region by 40% to 11,5 billion cubic meters. If this works, the Southern Gas Corridor project will start operating at full capacity.

Azerbaijan agreed with the EU in July to double gas exports to the bloc by 2027 via both the TANAP and TAP, with their capacity to be increased to 32 billion and 20 billion cubic meters, respectively.

Average daily output – Crude and condensate
thousand barrels per day

Average daily output – Gas
million cubic meters per day



Sources: Ministry of Energy of Azerbaijan, InfoTEK, State Statistical Committee of the Republic of Azerbaijan

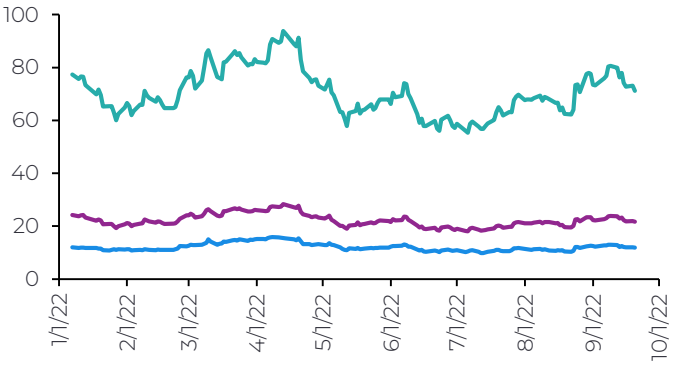
In this issue

'Peaceful atom' as a cure for the energy crisis

Nuclear power is again on the radar as the energy crisis picks up steam, with no letup in sight.

Uranium price, $/pound

Uranium ETF price, $/share



Global X Uranium ETF
Sprott Physical Uranium Trust
Sprott Uranium Miners ETF

Source: investing.com

Japan plans to restart more idled nuclear plants in the coming years and is looking to develop next-generation reactor, in line with its recent statement that nuclear generation will play a crucial role for the country's energy security. Europe is also witnessing a resurgence of nuclear energy, which until recently was seen as holding no promise for the future: the worsening energy crisis has spurred renewed interest in France, while Belgium is backtracking on its resolve to phase out nuclear electricity generation. In Germany, the energy crisis has also revived a debate over whether to take another look at a technology it had long turned its back on.

Global operating nuclear power capacity now stands at around 388 GW, provided by 433 operational reactors. The top five countries are the US, France, China, Russia and Japan. However, this ranking may soon change. IHS Markit expects that China's total newly built capacity will overtake that of France within five years and the United States within 10 years. Atomic power is high on the agenda not only among nuclear energy champions. Turkey is planning to launch the first reactor of its first nuclear power plant in the next 12 months, while Poland, the only EU country without a nuclear plant, is already negotiating a number of nuclear projects.

The nuclear renaissance is marked by a rise in uranium prices, which have now climbed to $50 per pound after falling briefly this summer. Uranium funds – ETF Global X Uranium, Sprott Uranium Miners ETF and Sprott Physical Uranium Trust – have also soared from their summer lows on the back of renewed interest in nuclear power.

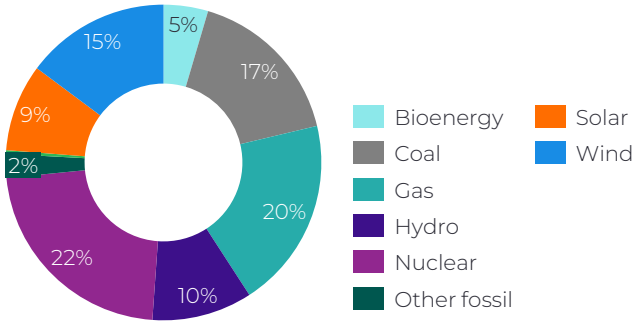
While IHS Markit points to additions of 355 GW of new nuclear capacity between 2022 and 2050, global installed capacity will grow only 33% to 555 GW, with much of the new build to be offset by the retirement of old reactors. Considering also the wider use of other energy sources, nuclear energy's share of global power generation will therefore decline from the current 10% to 7% over the same period.

In this issue

Will Europe have to backtrack on climate pledges?

While the EU is considering a price cap on Russian gas, which could lead to a complete halt in its flows to the region, European businesses are trying hard to curb staggering energy costs in order to stay afloat.

European electricity generation by source
January-September 2022



EU ETS futures price, euro per $mtCO_2e$

Source: Ember

Natural gas imports from Russia, which account for around 20% of European electricity generation, have dropped 48% between January and September, having dealt a severe blow to the region's energy market. Electricity prices have soared to record highs, forcing local manufacturers to suspend production.

Those countries which earlier decided to gradually phase out coal generation now have to backtrack on their plans and are looking to extend the life of coal mines and coal-fired power plants. While coal is becoming more prominent in Europe's power generation mix (17% in January-September, compared with 14% last year), switching to this fossil fuel has not proved an effective tactic for easing the current energy squeeze.

With more coal being burnt to generate electricity, emissions are now on the rise (coal accounted for over 40% of the overall growth in global CO_2 emissions in 2021), which puts additional pressure on European producers as they have to pay more for carbon permits. European carbon prices hit a record €98 per tonne of CO_2 equivalent in mid-August, though two months later they fell below €70 per tonne. Over the first nine and a half months of 2022, EU carbon permits appreciated 66% YoY to €81 per tonne.

A temporary suspension of the EU carbon market was originally viewed as a possibility to ease pressure on local players, but the International Emissions Trading Association has dismissed this suggestion, saying it should be considered at a different level and will take about 1-2.5 years to decide. While European governments are looking for alternatives, companies will have to tighten their belts even further in the face of the growing energy crisis.

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