

NEFTE COMPASS®

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SPOT CRUDE OIL PRICES

(\$/barrel f.o.b. terminal, or c.i.f. destination)	Aug 2	Jul 26	Chg.
Dated Brent f.o.b. (38 API)	106.51	107.32	-0.81
Russian Urals c.i.f. NWE (31 API)*	73.85	75.87	-2.02
Russian Urals c.i.f. Med (31 API)†	77.40	79.42	-2.02
Azeri Light (35 API)	108.10	115.27	-7.17
CPC Blend c.i.f. Med (45 API)†	104.35	106.37	-2.02
ESPO (35 API)	87.09	92.35	-5.26
Dubai (30 API)	98.15	102.69	-4.54

PRODUCT PRICES

(\$/ton, c.i.f. basis)	Aug 2	Jul 26	Chg.
ICE LSGO Futures (front month)	1,014.50	1,069.50	-55.00
ICE LSGO Futures (second month)	999.00	1,047.50	-48.50
0.1% Gasoil NWE*	1,046.75	1,095.75	-49.00
0.1% Gasoil Med*	1,048.75	1,096.00	-47.25
10 ppm Diesel NWE*	1,047.25	1,096.25	-49.00
10 ppm Diesel Med*	1,074.75	1,122.00	-47.25
HSFO NWE*	470.75	470.00	0.75

LSGO – low sulfur gas oil. *Basis Rotterdam. †Basis Augusta. Source: Energy Intelligence

GEOPOLITICS

Russia, Saudi Arabia Strengthen Ties

The decision by the Opec-plus group on Aug. 3 to increase production next month by a combined symbolic 100,000 barrels per day in September suits Russia well.

Moscow is not interested in a significant growth of oil flows on the global market as it would like to see prices stay high, allowing Russia to keep offering steep discounts for its export volumes.

According to the Russian finance ministry, prices for Urals crude export blend averaged \$78.41 per barrel in July.

Russian Deputy Prime Minister Alexander Novak said that despite a recovery in demand, the “cautious decision” by Opec-plus was due to market uncertainties, including the growing number of Covid-19 cases and the destruction of transportation and logistics chains because of sanctions against Russia, Novak told the Rossiya 24 TV channel.

The decision of the producer group also demonstrates that the Opec-plus de facto leaders Saudi Arabia and Russia remain aligned in their views on the global market and the way it should be managed.

Novak was in Riyadh on Jul. 29 for talks with Saudi Arabia’s Energy Minister Prince Abdulaziz bin Salman. The two discussed energy markets and trade and economic cooperation between the two countries.

Novak said that Russia and Saudi Arabia plan to develop cooperation in a wide range of areas, including energy, renewables, petrochemicals, technology and transportation, as well as education, health care and others.

Novak and the Prince

Together with Prince Abdulaziz, Novak co-chairs the intergovernmental commission between the two countries on trade and economic cooperation, which will gather for its next meeting in Moscow in the middle of October.

The new reality could require a new form of coordination between Russia and Saudi Arabia taking into consideration the changing patterns of flows of huge volumes of oil and products on global markets since the start of the war in Ukraine in February.

Novak’s trip was preceded by a telephone conversation between Russian President Vladimir Putin and Saudi Arabia Crown Prince Mohammed bin Salman on Jul. 21, in another sign of the close coordination between the two countries.

The Opec-plus decision to increase output in September has little impact on Russia’s quota as it is already producing some 1 million b/d below its ceiling. According to sources familiar with Russia’s official data, the country’s crude oil and condensate production grew by a miniscule 0.1% in July from the previous month. It averaged 10.738 million b/d, 11,800 b/d higher than in June.

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Production of crude oil without gas condensate could stand at 9.8 million b/d, according to Energy Intelligence estimations, while Russia's quota for July under the Opec-plus deal was set at 10.833 million b/d.

Russia was producing 10.5 million b/d of crude and 11.2 million b/d of crude and condensate before the current Opec-plus deal came into force in May 2020. Theoretically, that leaves it with spare capacity of about 500,000–700,000 b/d.

Russia's current flexibility to increase production is dependent on its ability to market its volumes, and this is the territory of uncertainty which will only grow next year after the oil embargo comes into force.

But Saudi Arabia and Opec's new secretary-general, Haitham al-Ghais, from Kuwait, seem ready to accommodate Russia.

Al-Ghais was quoted as saying to Kuwait's *Alrai* newspaper that Russia's membership in Opec-plus is vital for the success of the agreement. He added that Opec is not in competition with Russia, calling it "a big, main and highly influential player" in the world energy map.

Russian Joint Ventures Send Output Down

Output by Russian majors rose by nearly a combined 50,000 b/d last month from June. However, joint ventures, medium and small independents demonstrated a decline of nearly the same size.

Russia's three production-sharing agreement (PSA) projects were 19,300 b/d lower than in June. Sakhalin-1 PSA operated by Exxon Mobil nearly halted production completely, keeping it at a minimum level of just 5,430 b/d.

Staff Reports

GEOPOLITICS

Foreign Majors Get Mixed Results in Russia Exits

The exit of international majors from Russia is showing mixed progress. Baker Hughes agreed to sell its Russian unit to the company's local operation. Shell said it is unlikely to apply for a stake in a new operating company for Sakhalin-2. BP is "unable to ascribe probabilities to possible outcomes of any exit process." It claims the situation is complicated by Moscow's restrictions on divestments of Russian assets by foreign investors.

Moscow, for its part, could run out of patience with what it sees as foot dragging by the foreign firms.

A case in point is the Sakhalin-1 production sharing agreement project on the Russian Pacific shelf operated by Exxon Mobil. The US supermajor brought production at the venture to a near halt, keeping it at just 5,430 barrels per day in July, a minimum needed to secure the operation of the wells.

According to sources, Sakhalin-1 could carry on like that for only about another month, then the wells should be mothballed completely to avoid any possible accidents, or brought on stream again.

This could push Moscow into a decision that would squeeze Exxon out of its 30% stake in the project. Other participants of the venture include Japanese consortium Sodeco (30%), Russian oil giant Rosneft (20%) and Indian Oil and Gas Corp. (20%), which is deemed a "friendly" investor whose interest should not be hurt.

Majors Move Out

Russian President Vladimir Putin already issued a decree creating a new Russia-registered operating company for the Sakhalin-2 upstream and LNG scheme, in which Shell holds 27.5%, while Japan's Mitsui and Mitsubishi have 12.5% and 10%, respectively. The foreign partners could apply for stakes in the new operator. As opposed to Shell, the Japanese companies plan to do so but their application has to be approved by Moscow.

Shell was among the first of the international oil companies to announce plans to exit Russia, but so far the company has only sold its lubricants business to Lukoil.

Shell said it transferred its 50% stake in the exploration joint venture set up to develop two areas on Gydan Peninsula to its partner Gazprom Neft. However, less clarity was provided on its already producing Salym Petroleum joint venture with Gazprom Neft. Shell only reported a \$233 million impairment for Salym in the first quarter.

Shell said last week its directors resigned from Salym, "joint control was lost early in the third quarter 2022 and as of that date Salym will be accounted for as a financial asset at fair value, with a carrying value of zero," a line used by BP in its second-quarter financial report as well.

Sources say the Salym licenses should also be transferred to a Russian-registered company.

As a 19.75% shareholder in Rosneft, BP is entitled to a dividend payment of 49 billion rubles (\$814 million under the current exchange rate) before withholding tax approved at the Russian major's annual general meeting in June. But BP said it cannot take the dividend as it

is to be paid from a special bank account and requires the approval of the Russian government for transfer out of Russia. “It is not clear in what circumstances such approval would be given,” BP said.

OFS Firms Take Different Tack

Schlumberger, which has the largest exposure to Russia among the big three oil-field services companies — including Baker Hughes and Halliburton — is staying in Russia provided its operations are in full compliance with sanctions.

Schlumberger CEO Olivier Le Peuch said during its conference call devoted to second-quarter results that it had “suspended new investment and technology deployment into Russia” but “our structure gives us the flexibility to have operations in country in full compliance with international sanctions.”

Schlumberger’s Russian assets are valued at about \$1 billion, with revenues from the Russian business accounting for roughly 5% of its worldwide revenue during the first half of 2022.

Sources at Russian oil companies confirm that Schlumberger keeps providing its services under existing contracts. Schlumberger was at some point looking for a buyer of its assets in Russia and the option is still on the table, but for now, its operations look relatively safe.

Schlumberger prefers to keep a low profile in Russia, but insiders say the company is concerned about losing the Russian market and being replaced by other players, including Russian oilfield service providers, which are becoming more active as part of Russia’s import-replacement efforts.

Baker Hughes announced this week that its Russian unit being sold to its local management team would be run independently and operate under a different brand name.

The new outfit would also assume all of Baker Hughes’ assets, liabilities and commercial obligations, severing the services giant’s ties to Russia when the deal closes in the second half of 2022. Halliburton also said that its Russian assets are up for sale.

Staff Reports

GAS

Gazprom Demands Nord Stream Guarantees

Stoking the tensions around its Nord Stream gas supplies to Europe, Gazprom last week demanded guarantees that the pipeline and its equipment are safe from sanctions. The Russian state-run gas giant blamed German engineering company Siemens Energy for the reduced flows.

Gazprom cut gas exports via the pipeline to 40% of capacity in mid-June and 20% of capacity last week, citing sanctions-driven problems with the repair of Siemens gas turbines used at Nord Stream’s Portovaya compressor station in Russia. But many in Europe believe the sharp reduction in Nord Stream flows could not be justified by purely technical reasons.

Gazprom Deputy CEO Vitaly Markelov said on Russian TV that Europe should take responsibility for the sanctions that have hindered the repair of turbines, while Siemens Energy was guilty of failing to fulfill obligations under a service contract for Nord Stream turbine maintenance.

“We call on [European] partners to solve their own problems shortly, and then the situation around the gas supply to the European market will immediately normalize,” Markelov said.

His comments might, however, signal that Nord Stream supplies won’t be restored anytime soon.

Turbines Status

Only one of six main 52 megawatt gas compressor units is now in working condition at Portovaya, and another one of the same capacity is in reserve, which is why Nord Stream can only ship 33 million cubic meters per day to Europe, Markelov said.

The 52 MW compressor units use Siemens SGT-A65. There are also two 27 MW compressor units using smaller SGT-A35 turbines.

One SGT-A65 turbine, No. 073, was sent for an overhaul to Canada in December last year because it had reached its runtime limit of 25,000 hours and was supposed to return in May, Markelov said. But it was stranded in Canada because of Ottawa’s sanctions against Moscow. It was sent to Germany in mid-July after Canada issued a sanctions waiver and is now pending transportation to Russia.

SGT-A65 turbines can only be overhauled in Canada, while SGT-A35 turbines are repaired in Aberdeen in the UK.

Three more turbines — 072, 074 and 121 — reached their runtime limit in April, June and July, and also require an overhaul, according to Markelov. There are not enough documents now that would approve the transportation and repair of the turbines, he said.

Three other turbines — 075, 076 and 120 — were switched off because of failures — 11 failures were registered in May-June — and should be repaired by Siemens Energy on site, Markelov said. Gazprom sent 10 letters to Siemens Energy, but the German engineering company has fixed no more than 25% of the failures, he added.

“We currently have no access to the turbines on site and we have not received any further damage reports from Gazprom so far. Therefore, we have to assume that the turbines are operating normally,” Siemens Energy has said.

However, Markelov said there are no restrictions that would hinder Siemens Energy work on site. “We are looking forward to its specialists’ arrival at Portovaya,” he said.

Gazprom’s Concerns

Gazprom has a range of concerns regarding the sanctions risks for Nord Stream turbines which it believes are not resolved by the Canadian waiver.

Ottawa’s approved return of the 073 turbine to Germany rather than Russia violates the service contract between Siemens Energy and Gazprom. Moreover, as Russia is still a final destination for the turbine, that might violate Canada’s waiver, Markelov said. A revoked waiver would mean that other SGT-A65 turbines cannot be overhauled, he added.

Also, the waiver was given to Siemens Energy Canada, a subsidiary which has no contracts with Gazprom, while the German documents for the return of the turbine to Russia wrongly state that the recipient Gazprom Transgas St. Petersburg is a subsidiary of Gazprom Neft rather than Gazprom.

The return of the turbine via Germany and the fact that the UK’s Industrial Turbine Co. is a party in the service contract raises Gazprom’s concerns over the EU and UK sanctions, Markelov said. Industrial Turbine Co. is a Siemens subsidiary that services the SGT-A35 turbines.

Gazprom needs official clarifications along with permits from the EU and UK that would guarantee that the repair of all other turbines is possible despite anti-Russian sanctions, Markelov said.

Staff Reports

EXPORTS

Russia Finds Oil Sales Balance Amid Market Mayhem

Russian oil producers have seemingly managed to find a subtle balance for their export patterns, at least for the time being, as flows are partially rerouted to Asia-Pacific markets while European buyers still import as much as they are allowed under the political will of each EU member state. Sources say that such a balance would not require the construction of new export capacities to further reroute flows when the full EU embargo on crude comes into force on Dec. 5.

Russian crude oil exports to countries outside the former Soviet Union (FSU) fell by 112,000 barrels per day in July, marking the second consecutive month-on-month decline, according to industry sources. July exports of 4.885 million b/d to non-FSU states

were well below the numbers posted in April-May, when anticipation of bans and disruptions in Russian supplies triggered a flurry of buying. At the same time, however, July exports still remained above prewar levels.

The decline in exports in July was more than offset by higher shipments to domestic refineries last month, which jumped by over 260,000 b/d on June. The focus on refining is also part of a normal seasonal trend that traditionally changes starting from late August when domestic demand wanes and refineries start undergoing planned maintenance. The same process will likely happen this year, market players say, adding, however, that much will still depend on overall demand.

Exxon Dents Sales

Meanwhile, in July, crude oil exports via the system of national oil pipeline monopoly Transneft were down by 130,000 b/d on the month, while shipments bypassing the Transneft network increased slightly on the month, but were well down from their usual levels largely as a result of a complete halt in exports from the Exxon Mobil-led Sakhalin-1 production-sharing agreement project.

Russian seaborne exports to the West saw the largest month-on-month decline, according to data from Kpler, while exports from the Kozmino outlet on the Pacific Coast rose modestly last month. According to sources, Russian seaborne shipments from key export terminals dropped by 245,000 b/d in July to 2.679 million b/d. Of the total decline, Kpler data suggest that Baltic and Black Sea ports accounted for the largest drop.

Market players admit that Russian seaborne exports, which stayed at the highest levels in April-May for fears of supply disruptions among EU customers and on the back of rising appetite from India and China, are declining, or rather returning to usual levels as both Russian producers and their customers find a workable balance.

Kpler data suggest that the bulk of volumes from Primorsk and Ust-Luga on the Baltic Sea and Novorossiysk on the Black Sea still go to traditional destinations in Europe. Turkey, India and China are increasing purchases, attracted by the lower Urals price, which dropped to an average of \$78.41 per barrel in July. New destinations such as Egypt, Cuba, Sri Lanka and the United Arab Emirates have also emerged on the destinations list.

EU Embargo

Insiders say that EU customers will continue purchasing Russian barrels at least until Dec. 5 and that demand from China and India for Urals is also likely to stabilize. There might be some turbulence ahead as Russian companies will continue to reroute their barrels, especially from the West in anticipation of the embargo and plans of customers along the Druzhba pipeline to end Russian imports. In the meantime, exports to Europe via the Druzhba pipeline stood at 825,000 b/d last month, up from 764,000 b/d in June. Sources say that Druzhba flows face certain difficulties in terms of payment

delays because of financial sanctions, which are being resolved on a case-by-case basis.

Market players say that Moscow now looks more confident with its export capacities as the dust of sanctions settles, and is less enthusiastic about building new infrastructure to reroute volumes. There are spare export capacities in the port of Primorsk, which can also be expanded, if necessary, by using the oil product pipelines that are now being underutilized due to lower product exports. Ust-Luga was initially built to handle higher crude exports and its existing capacities can easily be expanded. In the Black Sea, expansion of the Novorossiysk terminal has recently been completed allowing the port's two berths to load tankers simultaneously. In the east of Russia, Kozmino can handle bigger tankers, while capacities of the pipeline running to the port can be expanded using additives — something that is already being done to meet rising demand in the Asia-Pacific region. Later this year, railway shipments to Kozmino should also start, sources say.

The availability of extra export capacities would also make it easier for producers to reroute their barrels from the Druzhba pipeline, if Germany and Poland decide to completely stop Russian imports from 2023.

Staff Reports

UPSTREAM

Russia Needs Technology to Avoid Reserves Decline

Russia sees no imminent risks for the pace of its reserves replacement rate because of sanctions, but admits that slower exploration and poor development of technologies could have an impact on future reserves growth, Igor Shpurov, the head of Russia's State Commission on Mineral Reserves, told Energy Intelligence in an interview.

Russia has yet to complete the assessment of its oil and gas reserves for 2021, but "we can already say that the trend is not changing — the increase in reserves will be higher than production," Shpurov said. He added, however, that the "shocks" of recent years, including the Covid-19 pandemic and the global economic downturn, have had an adverse impact on exploration.

Russian companies slowed down or delayed some exploration projects as a result of the pandemic, but most admitted that exploration was crucial to sustain reserves growth. However, little was said by Russian firms on exploration plans and activities since February, when most Russian majors were forced to review their priorities following unprecedented sanctions imposed by the West against Russia, including the country's oil and gas sector, in a move to stem the flood of revenues to Moscow.

Pace Setters

Asked whether the commission sees slower exploration activities among Russian majors because of sanctions, Shpurov said it is too early to talk about trends, but added that there were some concerns in March or April that the exploration activity might slow down. As of now, the commission sees that the pace hasn't dropped and that companies continue to prepare project development plans for new areas. Recent discoveries, including that of Rosneft in the Pechora Sea, confirm that companies have no intention to slow their exploration activities, Shpurov said.

Following the invasion of Ukraine on Feb. 24, most Western majors, including BP, TotalEnergies, Exxon Mobil, Shell and the top four global oil-field service providers — Schlumberger, Baker Hughes, Weatherford and Halliburton — either pledged to completely withdraw or stop investments in Russia. The mass exodus of Western majors has raised concerns that the loss of technologies would impact Russian production.

Shpurov explained that some 25% of Russia's production — that stood at roughly 11 million barrels per day before the war — was using technologies that are currently banned, but that doesn't mean that this production would be lost in the short term as Russian firms have over the past year developed a bunch of their own technologies. But he added that new technologies would be crucial to sustain current output and to bring new reserves on stream, including hard-to-recover reserves.

Massive Potential

According to Shpurov, Russia has potential to increase reserves by 27 billion metric tons of oil equivalent by 2025, provided that oil firms continue exploration and provided that new technologies are being developed. He added that cooperation with other countries was still necessary and that a focus can be made on so-called friendly countries. According to Shpurov, the world will still need new fossil fuel reserves as rapidly growing alternative energy sources would not be able to compensate for the growing energy demand by 2050 — a position that Russian officials have been advocating for over the past several years.

With hydrocarbons set to keep an important role in the coming decades, the idea of creating oil storage facilities in Russia was raised again several times in recent years and was paid special attention again this year as Russian barrels are traded at huge discounts and are being banned by the West as part of sanctions packages. Speaking about the potential of creating oil storage in Russia — similar to those in the US — Shpurov admitted that the idea is not new and that potential sites for such storages have already been found.

He said that a proposal to use a fund of unfinished wells — first mooted in 2020 as a way to help support the oil-field service sector — would not be helpful for creating storage facilities. Shpurov also said that oil companies need to show more initiative if they

want to have oil storage facilities that would allow them to store crude when the market environment is not favorable and release oil when necessary. However, industry players say that Russian companies are unwilling to invest in storage facilities and that the idea is generally finding little support.

Staff Reports

OIL MARKETS

Russian Espo Firms as China, India Chase Cargoes

The spot market for key Russian East Siberia-Pacific Ocean (Espo) crude oil strengthened considerably, lifted by firm demand from China and India.

September-loading spot Espo that sold to Chinese independent refiners mostly traded at levels ranging from discounts of around \$1.50 per barrel to the ICE Brent futures benchmark to around parity to or slightly higher than ICE Brent, said five trading sources, including two from Chinese market players. The prices are all for delivery to Chinese ports.

Some cargoes sold at as high a premium of \$1.00/bbl to ICE Brent, with offers rising to as much as a premium of \$1.50, also on a delivered basis into China, said three market sources.

The spot price differentials are a major increase from last month, when August-loading spot Espo that independents bought mostly traded at discounts ranging from \$3.00/bbl to \$1.50/bbl to ICE Brent delivered into China.

Espos sold on a loading basis from around Kozmino usually trades at a differential to the Dubai benchmark price. It is bought by market players who then resell some of the cargoes to Chinese ports after adding any trading profits and risk premiums.

“In between, there is a premium for the seller who is taking all the risks,” said a trader.

Chinese buyers snapped up most of the September-loading spot Espo cargoes, with Indian buyers also buying some cargoes, said a Chinese market source and a trader who markets to independents.

And the spot market has been boosted by this firm demand chasing what are still very cheap Espo cargoes, trading sources said.

Ultimately, compared to the landed prices of competing crudes such as Norwegian Johan Sverdrup, West African grades and some Brazilian crudes, Espo is still “the cheapest,” said two trading sources.

And now, several months after Russia invaded Ukraine, buyers are also getting more familiar and comfortable with buying Espo, which is also helping to boost demand, said two Chinese market sources.

In addition, Indian demand is likely also responsible for part of the increase in Espo spot price differentials this month, said five trading sources, including two from Chinese market players.

“Sellers know they are not restricted to Chinese buyers,” one of the Chinese market sources added.

Diesel Drops on Non-Russian Supply Surge

Ultra-low-sulfur diesel (ULSD) differentials collapsed in Northwest Europe after cargoes of guaranteed non-Russian fuel were left unsold in the end-of-day pricing window. It follows a months-long scramble for alternatives to Russian ULSD as Western sanctions against Moscow have intensified ahead of a full embargo from the start of next year.

Oil major BP and Swiss trader Mercuria have both struggled to find buyers for non-Russian ULSD cargoes offered in the last week despite dramatic price drops. BP cut the price of its mid-August arriving cargo into Le Havre from \$43.50 per metric ton over August ICE low-sulfur gasoil futures last week to just \$19/ton over the screen Aug. 2, still to no avail.

A busy August for East of Suez arrivals is set to culminate in another newbuild very large crude carrier the *Erietta Latsi* arriving in NWE with 270,000 tons of ULSD from Ruwais in the United Arab Emirates on board. At the latest count, at least 10 LR2 tankers — each holding 100,000 tons or so — are also coming from Saudi Arabia, the UAE, Kuwait and India this month. Multiple smaller ships are also due from the US, including one destined for Poland.

Price pressure comes despite a dramatic drop in Russian ULSD loadings from Primorsk expected this month. Official loading schedules are no longer available and just two tankers holding 56,000 tons are currently booked for the first week of August, barely a quarter of the volume seen in the first week of July. Russian fuel is already shunned in the spot market but term volumes have continued to flow at least until now.

Europe’s own booming ULSD production could also be about to collapse. Regional refiners have been forced to slash their natural gas use in response to EU rationing. Shell CEO Ben van Beurden told investors last week that the oil major was using 40% less gas at its biggest Pernis refinery in Rotterdam and 70% less at plants across Germany.

Europe’s refineries have seen their gas operating costs rise from \$3/bbl to \$12/bbl in the first half of 2022 versus 2021, according to energy consultants Baker & O’Brien. Refiners use gas in thermal units to power units and in hydrogen production.

Freddie Yap, Singapore, Kerry Preston, London

INTERVIEW

Risks Remain for Russia's Reserves Growth

The future of Russia's oil and gas industry is in the spotlight because of the unprecedented sanctions imposed by Western countries. In an interview with Energy Intelligence, the head of the State Commission for Mineral Reserves, Igor Shpurov, outlines the prospects and trends for the country's oil and gas reserves.

Q: The first question is a rather traditional one — has the assessment of Russian oil and gas reserves for 2021 been completed? How do you see the trend?

A: Recoverable oil reserves in Russia amount to 31.3 billion metric tons, profitable reserves are 19.7 billion tons. Recoverable gas reserves in Russia amount to 67.1 trillion cubic meters (as of Jan. 1, 2022, preliminary data). The availability of oil reserves does not exceed 40 years. Russia has enough profitable reserves of free gas for more than 70 years at the current level of production. The reserves estimate for 2021 will be completed and revealed in October–November. However, according to preliminary estimates, we can already say that the trend is not changing — the increase in reserves will be higher than production.

Q: Do you see risks that this trend will change because of the current events?

A: We continue to see a positive trend of reserves growth. However, it is necessary to realize that a lot will depend on how actively subsoil users are engaged in exploration, how actively licensing is going on. Unfortunately, the shocks of recent years — I mean shocks of various kinds, including the pandemic, the slow-down in global demand and the economy — have a negative impact on sustainability and risks, including in exploration. There are some concerns that less exploration will be carried out, which could lead to slower reserves growth or stagnation in growth. However, today we have no serious fears that this could happen.

Q: Is it possible to talk about trends in terms of reserves growth this year?

A: It will be possible to talk about this only close to the year end. Back in March, we did not understand at all how the situation with licensing and exploration would develop. We were afraid that exploration would decrease and project documents for the development of fields would not come. However, companies are very aware that they need to continue to invest in exploration. After March–April, we saw that the dynamics of the provision of documents to the State Commission of Reserves has not changed, including the project documents for the development of fields. We see that there are new discoveries, companies come up with good, big discoveries.

Q: You said recently that Russia has good potential for reserves growth until 2050.

A: The potential of our country is huge. According to various estimates, Russia can increase reserves by about 27 billion tons of oil

equivalent by 2050. Today, about half of all the country's resources have not even been explored. Today we see fairly large discoveries in the Krasnoyarsk region, in the north of West Siberia, in Timan–Pechora region. On the shelf, it is planned to bring new fields into development by drilling from onshore. In addition, when we talk about the potential for increasing reserves, we are talking about putting into development about 12 billion–13 billion tons of hard-to-recover reserves — the reserves of the Bazhenov, Domanik, Khadum, Tyumen formations. Solutions have already been found to develop Achimov deposits, but they need to become more efficient and cost-effective.

Q: In 2019, after the inventory of reserves was completed, it was revealed that only 65% of technically recoverable reserves were profitable. Has this figure changed today?

A: The inventory data has not been updated, but looking at the incoming field development projects we see that the dynamics have not changed. The share of profitable reserves in the total share of technologically recoverable reserves remains at the level of 65%. However, this does not mean that nothing has changed. We conducted a study that showed that in 2008 the share of new technologies in Russia's total production was 35%, and in 2020 this share increased to 65%. Over 12 years, the share of new technologies in production has almost doubled, and at the same time, the volume of production has grown. This suggests that with the help of new technologies, we are bringing new reserves into development, including hard-to-recover reserves. This trend will continue.

Q: Will the withdrawal of Western companies and the ban on technology imports affect the development of reserves? You said that about 25% of the country's oil production is under threat due to the withdrawal of Western companies.

A: This is not a completely correct interpretation. I said that 25% of the oil in the country is now produced using technologies that have become unavailable. But this does not mean a halt or loss of this production. Risks exist if they are not predicted and if there are no attempts to minimize them. We understood that such a situation could happen and developed our own technologies. Some companies turned out to be more prepared for such a situation, some to a lesser extent.

The degree of import substitution in the industry today is quite high. We will not lose our current production. However, in order to further develop the industry, we need to develop our technologies and continue international cooperation. International cooperation is necessary, a country cannot be isolated from all sides. We can cooperate with countries that want to continue friendly relations.

Q: In 2020, there was an idea to create a fund of uncompleted wells to support the oil-field service industry. How reasonable is this idea today in light of limitations on the purchase of Russian oil? Can such a fund of wells become a kind of oil storage?

A: I think that this idea is not justified. The well cannot stand for a long time without being operated; it is necessary to carry out perforation, development, workover. It's like a house you don't live in — sooner or later it will fall into disrepair. The idea of creating underground oil storage facilities is much more reasonable.

Q: This idea of ??creating underground storage facilities is on the agenda again, because today Russian oil is sold at huge discounts. However, it is not new. Are there any prospects that this issue will be considered more thoroughly today?

A: The Russian science and research geological petroleum institute (VNIGNI) has already identified promising areas for the creation of underground storage facilities. Those are located in the Volga-Ural province, East Siberia, in salt deposits. If there are certain tasks set, such storages can be created in the horizon of three to four years.

Q: What is the potential of such storage facilities?

A: Our storage facilities are quite capable of storing 100 million tons of oil, which is comparable to US oil storage facilities. At the corporate level, oil and gas companies should also take the initiative if they are interested in building such storage facilities.

Q: The idea of ??creating CO2 storage facilities as part of decarbonization plans was also actively discussed last year. How relevant are these ideas today?

A: This issue was not on the public agenda recently, but it continues to be actively developed at the level of various departments. The work is quite intense. The State Commission on Reserves has prepared methodological recommendations on how to select areas for CO2 storage facilities. These recommendations are now being considered.

Companies are actively engaged in choosing areas for storages, there are already proposals for licensing sites for such projects. Companies like Gazprom Neft, Tatneft, Sakhalin Energy actively discussed the issues of pilot projects. Work in this direction is under way, because no one has canceled the decarbonization target by 2060. Climate issues have nothing to do with geopolitics, so we continue to move toward our goals.

Q: Has Russia abandoned its plans to develop its shelf?

A: No one is now planning a large-scale development of the shelf, especially the Arctic shelf. This is because of the “green agenda,” economic feasibility, the projected demand for hydrocarbons until 2050, and the potential of traditional resources onshore. However, work on shelf development continues, we see new discoveries offshore. Rosneft recently announced the discovery in the north of the Pechora Sea. We expect that the company may soon submit a pilot development project for this field. Work continues on the shelf of the Sea of Okhotsk. We are confident that these resources will be in demand even with the growing share of renewable energy in the global energy mix.

According to various estimates, the growth of renewable energy provides for an increase in the production of onshore wind energy by 10 times by 2050, offshore wind by 43 times and solar by 17 times. But even such an unprecedented growth in energy production from new sources — by 7.5 times in 30 years — will only compensate for 36% of the emerging demand, even taking into account nuclear and hydropower.

Therefore, there are no alternatives to fossil fuels in the 21st century. Fossil fuels will prevail and in 2050 should provide 64% of the world energy consumption. Experts' calculations show that gas production and consumption should increase by 30%, while oil output should stand approximately at the level of 2021. And it is impossible to compensate for this growth through existing projects alone. It is necessary to significantly increase production through new exploration projects and the commissioning of reserves, which are currently classified as hard-to-recover due to the lack of economically viable technologies for their efficient extraction. Such reserves, as I have already said, in Russia include deposits of ultra-high-viscosity crude, Bazhenov, Domanik, Khadum, Tyumen, Achimov deposits, and ultra-low-permeability rocks.

Calculations made as part of the inventory of oil reserves in Russia in 2019–21 showed that maintaining current production volumes until 2050 requires the current pace of geological exploration to ensure the growth of new profitable reserves of at least 4 billion tons of oil and 11 Tcm of gas, and the creation of modern innovative technologies to allow the development of 7 billion tons and 5 Tcm of hard-to-recover hydrocarbon reserves. Therefore, we simply need to carry out exploration, and I hope that no shocks will stop this process.

Staff Reports

IN BRIEF

Russian Gas Output Drops

Russia's natural gas production dropped for the fourth consecutive month in July, largely on the back of falling output by leading producer Gazprom amid declining exports to Europe.

According to industry sources, Russian gas production averaged 43.768 Bcm in July, down by almost 5% versus June and by 24% year on year. In January–July, Russian total gas production stood at 409.867 Bcm, down by 7.3% from the same period last year.

Gazprom said that its production during the first seven months of this year fell by 12% compared with the same period of last year to 262.4 Bcm. According to Energy Intelligence calculations, the state-run company's gas production in July alone stood at 24 Bcm — down from 37.4 Bcm in July of last year and also less than the 27 Bcm produced in June of this year.

The company said its combined gas exports to Europe (including Turkey) and China, totaled 75.3 Bcm in the first seven months of 2022, which was down by 34.7% from the same period of last year. The company's July exports totaled just 6.4 Bcm, down sharply from 15.4 Bcm a year ago and compared with 7.9 Bcm in June.

Tatneft Eyes Carbon Farms

Russian oil producer Tatneft aims to create so-called carbon farms in its home region of Tatarstan as part of its efforts to become carbon neutral by 2050.

Tatneft said it started relevant studies to create carbon farms — areas where the absorption of greenhouse gases increases due to the implementation of special measures, including new woods. The company said that the biological method of CO₂ capture can become one of the tools for the company to reach carbon neutrality by 2050. Predictive models of greenhouse gas absorption for the period up to 2050 in potentially suitable areas will be prepared based on the field study results taking into account the initiatives that increase the absorption capacity of the forest.

Russia has long pledged that its forestry has huge CO₂ capturing capabilities and can be widely used to help the country meets its decarbonization targets by 2060.

Russia Mulls CO₂ Penalty

Russia's economic development ministry has submitted to the government a draft resolution that would set a penalty for exceeding a CO₂ emissions quota within the so-called Sakhalin experiment.

The fee was proposed at 1,000 rubles — or \$16 at the current exchange rate — per each extra metric ton of CO₂ emissions that would be paid to the regional budget by participants of the experiment. The rate was determined “based on international experience” when a fine for exceeding the quota at initial stage was three to 10 times higher than the market value of a ton of emissions in regulated markets, the economic development ministry explained.

The decree should come into force on Mar. 1, 2023 and run until the end of 2028. The Sakhalin experiment, formally set to start on Sep. 1, 2022 and last until Dec. 31, 2028, is aimed at reaching carbon neutrality for the region in 2025 and testing the country's carbon trading system.

CPC Troubles Deepen

The Caspian Pipeline Consortium (CPC), which operates a 1,500 km oil pipeline from Kazakhstan to a terminal near the Russian Black Sea port of Novorossiysk, said late Aug. 3 that shipments via the 1.4 million b/d line were “significantly reduced” because of issues in Kazakhstan.

CPC said that production at the Kashagan field was shut down, while the Tengiz field was contributing lower volumes because of maintenance. Kazakhstan's three giant oil and gas fields — Tengiz, Kashagan and Karachaganak — together account for the bulk of Kazakh crude transported via CPC. Kazakhstan pumps roughly 1.2 million b/d via the line. CPC shipments have been in the spotlight lately having been hit by storm damage to port infrastructure and

disruptions in Russia during unplanned checks. Flows have also been threatened by claims of violations as well as by recent power outages in Kazakhstan.

Some insiders believe that CPC's troubles have more to do with politics these days when global oil flows are already disrupted by sanctions on Russian crude.

Lukoil Offers Bonds Buyback

Lukoil has offered to buy back its bonds worth a combined \$6.3 billion. The offer applies to five issues of bonds that mature in the period of between 2023 and 2031.

Russia's top independent oil producer said its decision was due to difficulties caused by Western financial sanctions against Russia and countermeasures taken by Moscow.

Lukoil said that under recently adopted legislative acts, Russian holders of the bonds should receive coupons in direct payments rather than via international clearing. When making payments to international holders of the bonds, Lukoil needs to get a special license from the government. The Russian major cannot guarantee it could get such a license.

There could be further restrictions for servicing the securities or even a complete ban on it, Lukoil warned. There are also risks of a failure by the agents to fulfill their obligations.

Lukoil said it has enough financial resources to buy back all the bonds that are now in circulation. Lukoil plans to cancel the repurchased bonds. The price of the buyback would be discussed individually with each client.

Like other Russian companies, Lukoil stopped publishing financial results under international financial reporting standards (IFRS).

Under Russian accounting standards, Lukoil's net profit reached 520.5 billion rubles (\$8.7 billion under the current exchange rate) in the first half of 2022, 3.7 times higher than a year ago.

NEFTE COMPASS DATA

DATA: Comprehensive Nefte Compass datasets are available for download in the Nefte Compass Data Service, including FSU crude production, exports, refinery activity, prices, natural gas production and other fundamentals. Click [here](#) to access.

RUSSIAN GAS PRODUCTION, JULY 2022

(MMcm)	Year-To-Date	July	Change From Previous Month
Lukoil	10,820.8	1,503.6	31.1
Surgutneftegas	4,897.7	675.4	20.1
Rosneft	26,832.3	4,145.0	247.3
Gazprom Neft	20,035.2	2,871.4	148.5
Slavneft	481.3	72.1	4.9
Russneft	1,246.0	177.9	3.1
Tatneft	527.7	78.6	2.5
Bashneft	459.9	71.2	5.5
IPC (Neftegasholding)	3,465.0	542.4	17.5
Russian Oil Company Total	68,765.9	10,137.7	480.4
Novatek	46,774.8	6,247.6	-16.0
Gazprom	262,400.0	24,000.0	-3,000.0
Other Producers	16,168.4	1,917.2	233.7
PSA Operators	15,757.4	1,465.2	45.2
Russia Grand Total	409,866.5	43,767.6	-2,256.7

Download full dataset [here](#). Source: Energy Intelligence

RUSSIAN CRUDE OIL AND GAS CONDENSATE PRODUCTION

('000 b/d)	Jul 22	%Chg.	Jun 22
Rosneft	3,415.1	5.77%	3,402.0
Lukoil	1,606.8	6.05	1,606.9
Surgutneftegas	1,193.4	7.97	1,174.9
Gazprom Neft	813.8	2.35	805.5
Tatneft	579.2	3.15	575.4
Other Producers	3,129.9	9.38	3,161.8
Russian Grand Total	10,738.2	2.63%	10,726.4

Change from July '21. Table is based on conversion rate of 1 metric ton = 7.32 barrels.

NEFTE COMPASS DATA

DATA: Comprehensive Nefte Compass datasets are available for download in the Nefte Compass Data Service, including FSU crude production, exports, refinery activity, prices, natural gas production and other fundamentals. Click [here](#) to access.

RUSSIAN REFINERY ACTIVITY, JUNE 2022

('000 b/d or metric tons)	Year-To-Date		Processing		Change From Previous Month		Jun Crude Oil Deliveries	
	(b/d)	(tons)	(b/d)	(tons)	(b/d)	(tons)	(b/d)	(tons)
Bashneft	264.6	6,543.6	270.1	1,107.0	54.5	194.0	221.4	907.3
Lukoil	861.4	21,299.4	945.7	3,875.7	111.1	341.2	881.9	3,614.4
Gazprom Neft	652.7	16,139.3	703.9	2,885.0	39.5	70.9	658.1	2,697.3
Surgutneftegas	360.5	8,914.7	293.2	1,201.6	-61.5	-300.4	292.8	1,200.0
Slavneft	280.3	6,930.8	292.1	1,197.0	85.3	321.4	292.2	1,197.4
Rosneft	1,221.5	30,202.7	1,166.1	4,779.2	196.8	674.0	1,093.0	4,479.5
TAIF-NK	127.0	3,141.1	129.9	532.6	4.7	2.2	109.8	449.9
Gazprom Neftekhim Salavat	140.3	3,469.5	152.5	625.0	-2.0	-29.3	0.0	0.0
Gazprom Refineries	122.0	3,017.5	91.1	373.4	0.4	-10.8	0.0	0.0
IPC	97.9	2,420.7	106.2	435.4	8.3	20.7	104.9	430.0
Russneft	0.3	6.3	0.2	0.7	-0.1	-0.5	0.0	0.0
Tatneft	325.8	8,055.6	330.3	1,353.8	1.3	-39.4	298.2	1,222.0
Novatek	138.2	3,418.1	121.1	496.5	-19.3	-98.2	0.0	0.0
FortelInvest	239.0	5,909.2	257.3	1,054.6	11.2	12.1	195.5	801.1
Rusinvest	101.2	2,502.5	70.2	287.5	-31.2	-141.6	70.7	289.9
Petrosakh	0.6	15.0	0.6	2.5	0.0	0.1	0.0	0.0
Mariisk	2.4	60.6	0.0	0.0	0.0	0.0	0.0	0.0
Krasnodareconeft	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yaroslavl-Mendeleyev	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	396.2	9,797.0	435.9	1,786.3	28.6	61.4	387.2	1,587.0
Russia Total	5,332.0	131,843.5	5,366.5	21,993.7	427.6	1,077.7	4,605.7	18,875.9

('000 b/d or metric tons)	Mazut		June Output		Gasoline		Jet Fuel	
	(b/d)	(tons)	(b/d)	(tons)	(b/d)	(tons)	(b/d)	(tons)
Bashneft	16.1	72.5	100.8	405.3	76.8	270.7	0.0	0.0
Lukoil	101.0	456.1	400.3	1,609.8	219.4	773.4	50.6	189.9
Gazprom Neft	38.8	175.3	254.6	1,023.8	195.3	688.4	64.8	243.0
Surgutneftegas	79.6	359.5	126.9	510.5	49.5	174.4	7.0	26.1
Slavneft	110.0	497.1	71.3	286.8	48.0	169.3	31.4	117.9
Rosneft	222.0	1,003.0	368.6	1,482.2	222.3	783.6	40.3	151.1
Taif-NK	5.4	24.3	71.0	285.6	13.6	48.0	0.0	0.0
Gazprom Neftekhim Salavat	1.6	7.2	51.9	208.8	38.4	135.5	0.0	0.0
Gazprom Refineries	0.0	0.0	22.0	88.7	35.6	125.5	0.3	1.0
IPC	32.5	146.9	25.2	101.4	16.4	57.9	4.5	16.8
Russneft	0.0	0.0	0.1	0.4	0.0	0.0	0.1	0.2
Tatneft	0.0	0.0	157.1	631.9	56.9	200.7	8.2	30.7
Novatek	0.0	0.0	0.0	0.0	0.0	0.0	20.0	75.0
FortelInvest	26.8	121.2	49.8	200.3	18.5	65.3	3.0	11.3
Rusinvest	0.0	0.0	27.4	110.1	0.0	0.0	0.0	0.0
Petrosakh	0.0	0.0	0.0	0.0	0.3	1.0	0.0	0.0
Mariisk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Krasnodareconeft	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yaroslavl-Mendeleyev	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	62.5	282.6	12.9	51.9	30.4	107.1	0.8	3.0
Russia Total	696.3	3,145.8	1,740.0	6,997.3	1,021.4	3,600.8	230.9	865.9

Table is based on the following factor for conversion to barrels: Crude oil and gas condensate - 7.32; Mazut - 6.64; Gas Oil - 7.46; Gasoline - 8.51; Jet Fuel - 8.00. Crude deliveries include deliveries via the Transneft pipeline system only. Totals may not add due to rounding. Data for the previous month were revised. . Download full dataset [here](#). Source: Energy Intelligence.