argusmedia.com

March 2023

Argus Special Report:

Ukraine Anniversary — Oil Markets Adapt

INTRODUCTION: Firing blanks

One year on from Russia's invasion, the war in Ukraine continues to play havoc with oil markets. Amid the wholesale rewiring of trade flows, Russia has been forced to find new customers, Europe has had to find new suppliers, and other market participants have had to consider whether the new oil market dynamic presents only risk, or perhaps opportunity.

But as we examine in this Argus special report, which draws its content from our *Argus Global Markets* and *Petroleum Argus* business intelligence reports, oil markets have proved surprisingly adaptable in the face of the stresses placed upon them. When Moscow launched its invasion in February last year, the consensus view was that the west's liberal democracies were vulnerable to hydrocarbon blackmail because of Russia's huge presence in oil and gas export markets and the reliance, particularly in Europe, on its crude and products. Fast forward one year and the picture looks very different. Russia is losing ground in the energy war it felt sure to win a year ago.

Russia's attempted weaponisation of its oil and gas resources failed partly because Europe weaned itself off Russian imports with much less disruption than expected. Germany was one of the first to officially acknowledge that losing Russian hydrocarbons might not be the calamity it seemed before the war when economy minister Robert Habeck said in late April that a total oil embargo was "manageable". Much of the change was down to the ability of some German and other European refiners to switch out of running Russia's Urals crude. Transatlantic flows of WTI crude rose sharply over the course of 2022, freed up by the release to US refiners of 1mn b/d from strategic reserves.

The other leg of the adjustment came through the rerouting of Russian oil to Asia-Pacific markets. Indian refiners have boosted their imports of Russian crude to more than 1mn b/d — after taking almost nothing before the invasion — and are selling the same molecules back to Europe as refined products. The plan by the G7 and EU to limit access to freight insurance and trade financing to deals done under its price cap has largely worked. Russian oil continues to flow, yet Moscow's revenues are constrained by the big discounts sellers must offer to move cargoes.

Still, Russian crude suppliers are beginning to feel the squeeze. Deputy prime minister Alexander Novak's announcement in February that Russia will cut 500,000 b/d of production appears to be the result of a lack of access to export markets. The move will reduce exports from Russia's western ports by 25pc. But demand for this mostly Urals crude is already showing signs of levelling out. At least two very large crude carriers with part-cargoes of Urals are stationary in the west Mediterranean. More Urals is accumulating in floating storage off Singapore and Malaysia. And cargoes that are moving east are doing so slowly, sometimes finding buyers just days before reaching Asian ports.

Russia will also struggle to place all its diesel after the EU embargo and price cap system extended to refined products on 5 February. Crude shippers can draw on an extensive flotilla of larger long-range vessels — including a significant network of older tankers in the "dark fleet" able to ignore western restrictions. The same cannot be said of clean products trade.

Markets have stepped up to the challenge of rebalancing crude flows. Some economies have paid the price of recession to wean themselves off Russian oil. But the fallout for the industry has not been the meltdown that appeared a possibility when hostilities erupted 12 months ago. Whether this calmer prospect can continue for the next 12 months is a hard question to address. Spare capacity in the global oil supply chain is still too tight to be complacent.

CRUDE MARKETS: Rolling with the punches

Global crude markets have weathered a year of turmoil with a resilience few suspected when Russia's tanks rolled into Ukraine on 24 February last year.

The big supply story of the past year is how redirecting crude from Russia's European customers to the Asian market has calmed oil markets. But it has come at a major logistical cost. Tankers and capital are tied up for longer, ferrying Urals crude from Baltic and Black Sea terminals to India and China. The story over the next 12 months is likely to be the extent to which refiners outside the G7 and EU can absorb more Russian crude. Russia is already showing signs that it cannot place all of its crude outside Europe. Deputy prime minister Alexander Novak says it will cut production by 500,000 b/d to 9.3mn b/d in March.

Russian president Vladimir Putin picked the perfect time — from his perspective — to launch the attack on Ukraine. Russia's leverage on importers of its crude, particularly in Europe, had never been greater than it was in early 2022. Global oil stocks had been falling for 18 months as Opec+ production cuts and the return of major economies from their Covid deep freeze combined to tighten crude markets sharply. The closely-watched commercial oil inventories of the OECD had fallen to less than 58 days of forward demand, the lowest relative to pre-pandemic averages in 20 years. And, of those, commercial crude inventories registered the biggest deficit to seasonal averages in over 30 years.

Putin's assessment that western governments would not punish Russia through an oil embargo proved correct at first. The scale of potential disruption in the crude markets appeared truly huge a year ago. Russia was exporting 3.2mn b/d of crude, including nearly 1.8mn b/d to the EU, the UK and the US. Western democracies quickly quashed talk of oil sanctions. Some European governments blocked a move to exclude Russia from the Swift banking system for fear that it would threaten oil and gas flows. And the US exempted energy-related transactions from new punitive measures. "I will do everything in my power to limit the pain the American people are feeling at the gas pump," President Joe Biden said.

Ebb and flow

The invasion triggered a sharp crude rally. North Sea Dated was $100/bl on the eve of the invasion, having steadily risen from $70/bl two months earlier, as markets tightened and Russian troops massed along Ukraine's border. It hit a 14-year high of $138/bl within a fortnight. Yet, one year on, global crude markets have settled at around $80/bl, and Russia's crude is nearly $40/bl lower than that.

Policy makers in the liberal democracies of the EU and G7 largely accepted the need to keep Russian crude flowing from the first days of the war. EU sanctions, adopted in June and taking effect in December-February, cut off access to European maritime insurance and financing in a move that would have frozen the vast bulk of Russian oil exports. The scheme to allow exceptions — in crude's case, as long as it traded below $60/bl — succeeded in keeping oil flowing.

Reorienting such large amounts of crude has left winners and losers. Indian refiners are benefiting from lower-cost crude.

Disruption has not only been about volume. The evaporation of the delivered Urals markets in Rotterdam and Sicily left Europe without a de facto sour crude benchmark. Mideast Gulf producers relied on the discount of Urals to North Sea Dated as a guide when setting their own term contract prices. When that discount fell to more than $40/bl, the price signal became useless. In its place, new sour crude indications have sprung up, including Argus' Brent Sour index, based on some of the more liquid higher-sulphur North Sea streams. The price of Norwegian medium sour grade Johan Sverdrup is gaining traction as a result.

PRODUCT MARKETS: Brave new world

An EU ban on importing Russian products began on 5 February, almost a year after Russia invaded Ukraine, forcing the redirection of 1.3mn b/d of Russian exports.

The idea that Europe could halt Russian products imports would have been unthinkable before 2022, such was its dependency, on diesel in particular. The scale of the challenge facing Europe is clear. Russia accounted for over half of Europe's diesel imports last year, and 40pc in 2023 until 5 February, Vortexa data show. The last-minute rush to fill stocks — and in a backwardated market with prompt prices at premiums to forward values — illustrates how difficult market participants expect securing future supplies to be.

The wave of pre-embargo imports, combined with a drop in demand from a wider economic slowdown, may have left Europe well supplied in the short term. But this could change quickly. Early indicators suggest that the slowdown in economic growth will be less severe than expected, which will sustain fuel demand, while import rates have slowed, early data suggest.

Maintaining imports will be particularly important because of refinery capacity cuts in the wake of the Covid-19 pandemic. Nearly 650,000 b/d of capacity has been closed or converted to biofuels production in Europe since 2020. But challenges lie ahead. Europe is increasingly relying on imports from east of Suez since the embargo came into force. Greater reliance on longer-haul imports delivered on larger tankers has pushed up freight rates. Imports from China provided a boost to supply in Europe over the winter, but Beijing's reversal of its zero-Covid policy is likely to limit diesel exports as China's economic activity gathers pace.

Mouths to feed

Diesel supply issues are made worse by the scarcity of upgradeable Russian residues, such as vacuum gasoil (VGO) and straight-run fuel oil. Russian VGO has been a key feedstock for Europe's cracking units for decades, and Russia was the world's leading exporter before the Ukraine invasion. Refiners are now less flexible and more reliant on crude runs. Running at higher rates — with a lighter crude slate as Russian Urals is replaced by US and west African alternatives — could boost light products output, mitigating the shortfall in Russian naphtha imports.

VGO and fuel oil were the first oil products to be hit by EU sanctions. The bloc placed an embargo on Russian coal from 10 August, and a technicality of customs codes meant that petroleum residues with high aromatics content were counted under the same import category as coal. The ban mostly affected high-sulphur fuel oil, rather than VGO. But as with most Russian-origin products, buyers in western Europe had long since "self-sanctioned" anyway, and relied on local output and supply from east of Suez.

The EU's embargo is likely to lead to an overall drop in Russian products exports. Limits on larger products tanker capacity and adverse long-haul trade economics will make sales from Russia to all destinations harder. And Moscow has announced that it will cut crude production by 500,000 b/d from March. Russian refiners are likely to have to adjust their products output as a result. Russian refinery throughputs will fall by around 1mn b/d from January to around 4.9mn b/d later this year, the IEA forecasts. This will work against European buyers, as global competition for non-Russian supplies intensifies.

The embargo is still in its early stages. Russia has sustained total diesel exports at just under 1mn b/d in February. But, unlike crude, diesel will be more difficult to redirect as the year progresses. Not all countries that still import Russian diesel will be able to export as much of their own output. And when pre-embargo stockpiles are exhausted, the global diesel market will look much tighter.

OPEC+: Shutting out the noise

Opec and its non-Opec partners appear clear in their minds about what production policy should look like one year on from Russia's invasion of Ukraine.

The outbreak of war involving one of the world's top two oil exporters shook markets. Oil prices, already high, soared in the days that followed. Ice Brent crude futures rose above $100/bl for the first time in seven years. Within days, all eyes turned to Opec and its allies, known collectively as Opec+, to boost supplies to help cool rising prices. But the group kept calm, despite the pressure, and carried on with the plan it had mapped out well in advance of the invasion. Opec+ ministers reminded the major consuming countries that the group works to fundamentals, and despite the rising oil price, they insisted that the fundamentals were sound and supplies ample. There was no need for a knee-jerk reaction.

Fast forward to today and the group finds itself in a similar position. Four months after agreeing a then-controversial 2mn b/d cut to its output target from November to the end of 2023, the eyes of the market are back on Opec+. Fears of an economic slowdown in many OECD countries still abound, but growing optimism around a recovery in China and renewed concerns about Russian supply have the market again asking whether Opec+ needs to increase supply. Moscow's planned "voluntary" 500,000 b/d production cut in March, with the possibility of more to come, has heightened these concerns.

But once again, Opec+ is pointing to its principles. Navigating the oil market over the past 12 months has been a challenge, Opec secretary-general Haitham al-Ghais says, as several opposing factors have clouded the outlook. "This year, and probably next", is unlikely to be different, he says, given the many structural changes the market is undergoing, largely owing to sanctions on Russian seaborne crude and products. With that in mind, ministers say they remain fully committed to the policy, and the output targets agreed in October. That agreement "is here to stay for the rest of the year", Saudi oil minister Prince Abdulaziz bin Salman says, stressing the need for wariness in the face of increased "uncertainty".

Seeing is believing

This cautious approach is nothing new and has — to the chagrin of some consumer country governments — largely defined the group's strategy since it took the decision in April 2020 to scale back its collective output by 9.7mn b/d in response to the collapse in oil demand induced by Covid-19. But now, "in retrospect", everybody accepts that these were the right decisions, al-Ghais says.

Oil futures have been moderating down in recent months, indicating that, despite the concerns, the market is well supplied. Russian oil production has remained remarkably stable, despite the rerouting of much of its crude exports away from Europe to Asia-Pacific. This will no doubt have played a large part in the group's recent messaging on keeping policy unchanged. It is messaging that should not be ignored, given how rare it is for any minister — let alone one as influential as Prince Abdulaziz — to communicate so bluntly the group's thinking behind its policy moves ahead of time.

But future changes to Opec+ policy should not be ruled out, particularly when considering the challenging nature of today's oil market. Opec+ ministers have repeatedly said the group will step in if needed to help return stability to markets. But whereas before the coalition may have been more willing to act on projections, today facts are king. "We are dealing with a much bigger level of uncertainty, and diverse uncertainty," Prince Abdulaziz says. "And for that, I cannot think of any remedy but one — being excessively cautious. I will believe it when I see it."

TANKERS: Invasion strains and divides fleet

Russia's invasion of Ukraine and subsequent US and European embargoes have lengthened oil supply chains, straining the capacity of the global tanker fleet.

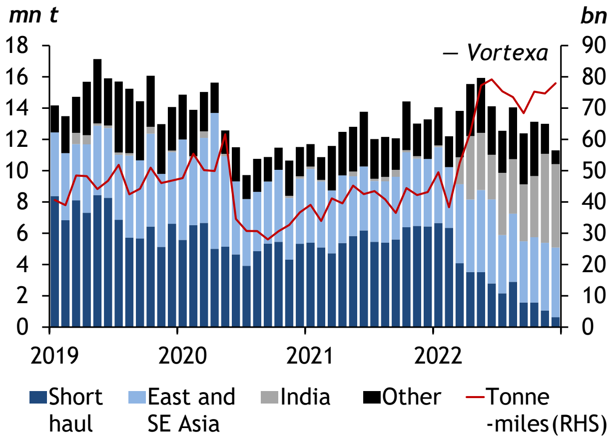
Just under half of Russia's seaborne crude exports — excluding Kazakh Kebco and CPC Blend — went to short-haul destinations before the invasion in late February, namely the UK Continent, Baltic Sea and Black Sea (*see graph*). Since then, most Russian oil loaded at Baltic and Black Sea ports has travelled further afield to India, which took almost no Russian crude before, and China.

This resetting of trade flows caused a dramatic increase in vessel tonne-miles — a measure of demand for freight — with longer voyages for both Russia's exports and Europe's imports, as the continent increased crude inflows from the US Gulf coast, west Africa and the Mideast Gulf to replace its lost Russian supply. This resulted in high crude tanker freight rates throughout the rest of 2022 and record quarterly profits for shipowners.

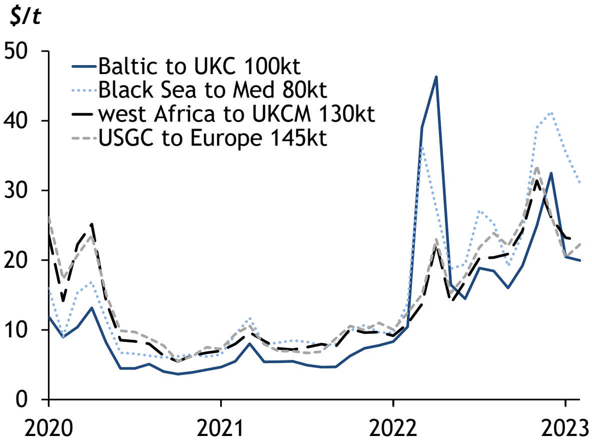
This changed again following the introduction of sanctions on 5 December, including a complete halt to Russian seaborne crude imports to the G7, EU and Australia and a ban on the provision of EU and UK shipping services — including insurance — for Russian exports to other countries except under a $60/bl cap.

These new rules helped drive a flurry of activity in sale and purchase markets, as participants looked to secure vessels to carry Russia's exports after the ban. This led to the development of a two-tier market with newer firms and older vessels taking the place of established participants in transporting Russian oil.

Russian exports by destination



Freight cost



Mainstream participants shunned the country's exports over fears of attracting bad publicity or falling foul of sanctions. In their place are small, opaque firms newly established in Dubai or Hong Kong, some of which have been linked to the trade in Iranian and Venezuelan crude, while many have little track record in shipping oil at all. An increase in older, sanctioned and even uninsured vessels on the water run by unscrupulous or inexperienced operators increases safety and environmental risks, including the chance of oil spills and the costs involved, driving other changes in the market. India has banned vessels aged 25 years or older from calling at its ports, and Turkey, another major buyer of Russian oil since the invasion, has mandated that all vessels passing through the Turkish straits must show proof of insurance, citing concerns over safety.

Higher risks

Under the price cap, firms willing to transport Russian oil can still move relatively easily between Russian and non-Russian business. One common trade involves tankers carrying Russian oil from the Baltic to the Red Sea or further east before ballasting back to carry non-Russian oil from the east Mediterranean to European ports in the Baltic. But most of Russia's exports are already carried outside of official price cap arrangements, and this share is expected to increase with the introduction of Russia's own ban on shipments to countries honouring the cap, or once the price rises.

Outside of the price cap, vessels conducting Russian trade can return to EU and UK insurance cover only after a 90-day period. This may do more to entrench a split in the global fleet between ships employed in Russian and non-Russian trades.

Ultimately, there is likely to remain some crossover between vessels carrying Russian and non-Russian crude, but there may be a tighter supply of vessels in the mainstream fleet, supporting rates in 2023 alongside higher tonne-miles. Greater risks and inefficiencies are also likely, given the different profile of the vessels on the water and of their owners and operators.

INDIA: Refiners look to Europe

Indian refiners have been among the major beneficiaries of EU and G7 sanctions on Russia's oil exports following Moscow's invasion of Ukraine.

The EU's 5 February ban on Russian products imports has led to an opening for other refining hubs such as India and China to grab a larger share of the European import market, which was previously dominated by Russian suppliers.

Europe has lost 600,000 b/d of diesel supply from Russia now that the EU import ban has taken effect, but has drawn in 365,000 b/d of additional supplies from India and China to help cushion the loss, data compiled by Japan-based investment bank Nomura show.

Indian refineries were already starting to boost their share of the European import mix even before the sanctions on Russian products became effective. India's share of the European products import market increased to more than 8pc last year from 6pc in 2021 and has risen to around 9pc so far this year, according to data from oil analytics firm Vortexa (*see table*).

Exports of gasoil or diesel, the primary product shipped from India to Europe, have more than doubled to over 258,000 b/d in February from under 100,000 b/d in January, the Vortexa tracking data show, as European importers look for alternative supply.

Indian refiners accounted for nearly 11pc of the diesel imported by Europe last year and around 10pc in 2021. And the country's share of total jet fuel shipments to Europe rose to over 15pc last year from just over 10pc in 2021, because of strong demand and the EU boycott of Russian crude.

India's share of European products imports

Year	% Share
2017	6.7
2018	7.1
2019	8.4
2020	5.1
2021	6.1
2022	8.1
2023*	8.8

* *Jan-Feb data as of 24 February*

— Vortexa

But the scope to make additional sales to Europe may be limited, market participants say. "Acceleration is possible in exports to Europe but there would be, of course, limitations to the amount they can export because of prior term contracts," a Nomura oil market analyst says.

Growing Reliance

Indian private-sector refiners Reliance Industries and Nayara Energy are the major exporters of oil products and stand to benefit the most from the possibility of firmer European demand and strong middle distillate margins. Private-sector refiners account for 84pc of India's products exports.

Reliance Industries, India's largest products exporter, is likely to boost its shipments to Europe this year as it benefits from processing discounted Russian crude and with no duty on its exports. The refiner accounted for 77pc of Indian products exports last year, and sent 200,000 b/d to Europe. Reliance says it intends to continue to "maximise gasoil exports" in the expectation that international gasoil margins will remain strong this year on account of low inventories.

India's state-controlled refiners lack the same incentive to export products as they have been hit by a tax on some refined products shipments. They have made representations to the government on providing some relaxation to the special additional excise duty regime imposed in July 2022.

Mangalore-based refiner MRPL, India's second-largest exporter in 2022, is at a disadvantage to private-sector refiners such as Reliance Industries and Nayara, whose refineries are located in special economic zones, which are exempt from the new export duty. State-controlled refiners make little more than half of the margin available in the international markets on their middle distillates because of the export duty and state requirements to sell products at below market prices to domestic buyers to help fight high inflation.

For more information:

contact@argusmedia.com +44 20 7780 4200 www.argusmedia.com @argusmedia