Europe’s changing oil map

- The war in Ukraine is transforming Europe’s oil map, with the Middle East becoming a focal point thanks to its outsized export capacity.

- Russian Urals is sweet and light and is especially suitable for producing diesel and jet fuel. Among the largest producers, only Saudi Arabia exports oil of comparable quality.

- Increased dependence on Middle Eastern oil will boost OPEC’s bargaining power and increase Europe’s vulnerability to a geopolitically chaotic region, where China’s influence is rising at a time of heightened tensions with the US.

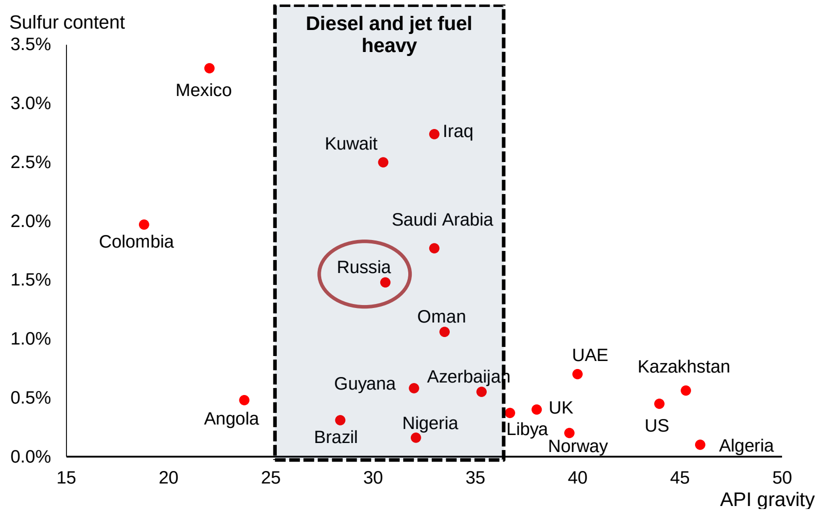
The war in Ukraine is transforming Europe’s energy map. On the natural-gas front, Russia is no longer a key supplier. LNG from Norway, Qatar and the US, along with natural gas from north African and central Asian producers, has replaced a big chunk of Russian exports. On the oil front, similar changes are now taking place in response to bans on Russian crude and petroleum products that were recently introduced at the EU level. So far, the US and Norway have primarily made up for missing Russian barrels. However, since some Russian oil is still finding its way into Europe, going forward, the Middle East will be the only region with the export capacity to replace Russian oil supplies to Europe, but this might boost OPEC’s bargaining power and increase Europe’s vulnerability to a geopolitically unstable region, where China’s influence is rising at a time of heightened tensions with the US.

Redesigning the energy map

In theory, it is easier to redesign the oil map than the natural-gas one. The oil market is globally integrated with no major barriers to the international flow of crude – besides distance, which can be overcome via higher shipping costs. The natural-gas market, on the other hand, is regionally fragmented because gas has traditionally been transported through pipelines that physically connect across bordering countries. Only if there were enough global liquefication and regassification capacity could LNG make the gas market similar to the oil one, with vessels transporting LNG across the globe to accommodate demand.

In practice, however, oil varies from one country to another, sometimes in substantial ways, limiting substitutability. Two primary qualities differentiate one type of oil from another: weight and sweetness. Heavy oil evaporates slowly and contains material used to make heavy products like asphalt. Light oil requires less processing and produces a greater percentage of gasoline and diesel than heavy oil. The standard unit denoting oil weight is API gravity, a metric created by the American Petroleum Institute. Sulfur content determines whether crude oil is sweet or sour. Midstream companies and refiners that transport, store and process sour oil need extra treating capabilities to take out sulfur and sweeten their product. Chart 1 shows that Russian Urals is sweet and light, and it is especially suitable for producing diesel and jet fuel. Among the largest producers, only Saudi Arabia exports oil of comparable quality.

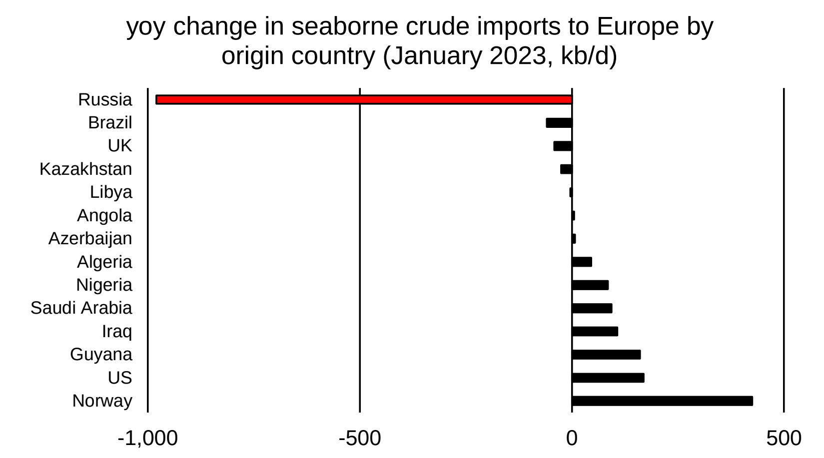
CHART 1: THE WIDE VARIETY OF CRUDE OIL



Source: BloombergNEF, UniCredit Research

Chart 2 shows that, because of the EU ban that came into force last December and self-sanctioning measures that had been adopted by private companies before then, in January 2023, Russian exports of crude oil to Europe were down by around 1mn b/d from their level in January 2022, immediately before the outbreak of the war in Ukraine. However, Russian seaborne crude exports have not dropped completely as a result of exemptions for Bulgaria and illegal violations of the ban itself. Around 600,000 b/d of Russian crude is still entering Europe. So far, Norway, the US, Guyana and Iraq have been the main countries replacing Russian supply to Europe.

CHART 2. RUSSIAN EXPORTS ARE DROPPING

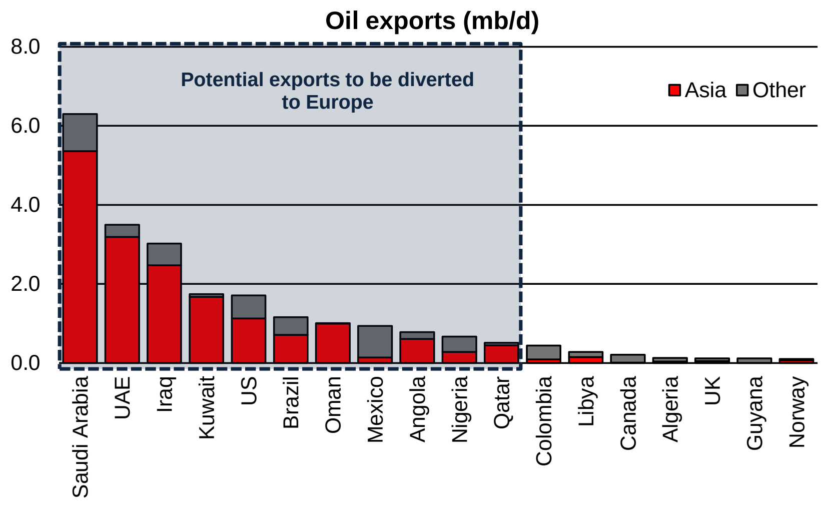


Source: BloombergNEF, UniCredit Research

Going forward, the role of Middle Eastern oil will likely increase in importance as it now represents less than 20% of total European oil imports. Saudi Arabia and the UAE together export around 10mb/d to Asia and other non-European countries. Some of these barrels could easily be redirected towards Europe, letting Russian oil go to China and India. The aim of the EU price cap on Russian crude is not to remove it entirely from the market but to let it flow freely around the world at a capped price to affect Moscow’s oil revenues. The main obstacle to such a trade diversion is the long-term contracts that tie Asian customers to Middle Eastern producers and the appeal of the Asian market compared to the European one due to higher future growth potential.

From Europe's perspective, the advantage of getting more oil from the Middle East instead of the US, for example, is that the quality would be closer to that of Urals, reducing switching costs for European refineries. US shale oil, by contrast, is mostly too light to substitute for Russian crude on a large scale, and there is a high probability that American oil exports might be redirected to domestic use to replenish strategic petroleum reserves that have been tapped substantially in recent months to prevent oil prices from rising.

CHART 3: INCREASING ROLE OF THE MIDDLE EAST

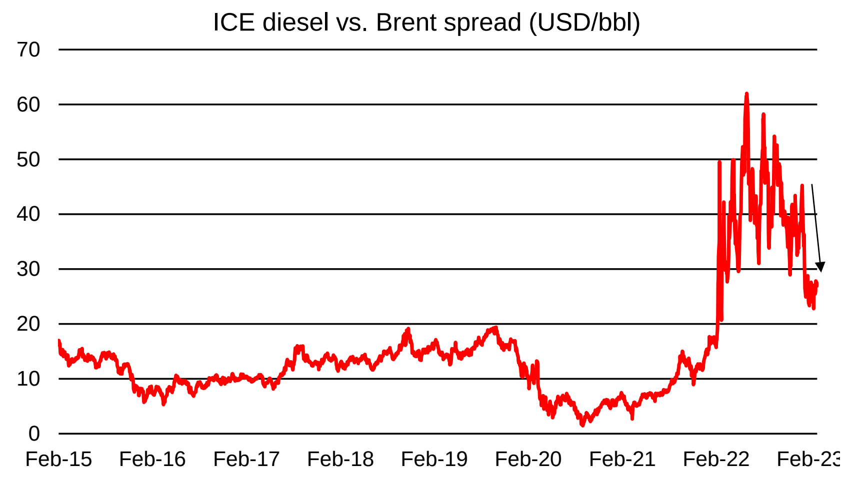


Source: BloombergNEF, UniCredit Research

The increased role of the Middle East in supplying oil to Europe can be seen in petroleum products. Europe used to be a net importer of Russian products, particularly of diesel, which is key to powering cars, trucks, ships, construction and manufacturing equipment and more. Market participants were extremely concerned in early 2023 that the continent would experience a shortage of diesel once the EU ban on Russian products was implemented in February. Russia used to export around 0.7mn b/d of diesel to Europe (roughly 50% of total imports of this product). As shown in Chart 4, the spread between the price for ICE diesel and the price for Brent reached historic highs last year as a result of such concerns. However, since February, the price differential has narrowed substantially, not only because of high European inventories but also because Middle Eastern refineries stepped in and replaced Russian supply.

Price dynamics point to market calmness that is partly due to expectations regarding diversification strategies. Last year, for example, Germany signed a contract with Qatar to receive barrels of diesel that were equivalent to around two-thirds of its imports from Russia. According to the International Energy Agency, last February, the largest increase in diesel imports to Europe came from Saudi Arabia; these increased to 0.2mn b/d from an average of 0.07mb/d from October 2021 through September 2022. The role of Turkey is also likely to increase. Since it is not part of the EU, it is still allowed to import Russian diesel within the price-cap framework. These imports could be used to satisfy domestic demand, and Turkish diesel could then be exported to Europe. Finally, China might also become a relevant European supplier going forward. Last February, European imports of diesel from China increased by 0.1mn b/d.

CHART 4. CONCERNS SURROUNDING RUSSIAN PETROLEUM PRODUCTS



Source: Bloomberg, UniCredit Research

New vulnerabilities

In just one year, Europe has managed to substantially reduce its dependence on Russian oil. However, new vulnerabilities will emerge and will require the adoption of appropriate hedging strategies. So far, Europe has not been very reliant on oil from the Middle East, and it has been primarily vulnerable to price shocks, particularly due to geopolitical tensions, that originated in that region. In the future, imports of Middle Eastern crude and products are expected to increase to balance the European market. This implies that Europe will become more vulnerable to geopolitical tensions in the region, while OPEC will see its negotiating power going up. This marks a significant shift since Europe became a major consumer of natural gas in the 1980s, which reduced its vulnerability to instability in the Middle East after the oil shocks of the 1970s. In the short term, Brussels and other European capitals should intensify diplomatic efforts to stabilize the region, while, in the longer term, they aim to accelerate their transition away from fossil fuels. In addition, European countries will be confronted with a more influential China after it brokered a deal between Iran and Saudi Arabia to normalize diplomatic relations. Beijing, a major importer of Middle Eastern oil, will try to steer market dynamics in its favor. After Washington's pivot to Asia, which reduced the relevance of the Middle East, partly thanks to the shale-oil revolution that made the US energy independent, the region might regain part of its lost energy and geopolitical prominence.

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