CENTER FOR THE STUDY OF DEMOCRACY

EUROPE WILL MAKE DO WITHOUT RUSSIAN OIL

Policy Brief No.111, May 2022

The Kremlin finances its aggression against Ukraine primarily with the revenues from selling oil and gas to Europe. Yet, the European Union and its member states have only grudgingly come to terms with an oil embargo on Russia. In early May 2022, three months after the start of the war, the European Commission proposed a complete ban on oil imports from Russia.[1] But a group of member states have been blocking an EU decision on the matter. Even after it was partially accepted on 30 May, demands for the granting of exemptions from the new sanctions would water down the efficacy of the embargo and open loopholes enabling evasion. Meanwhile, the jump in crude oil prices to around $110 per barrel[2] is providing the Kremlin with even more firepower in Ukraine. In fact, Russia's current account surplus has tripled in the first four months of 2022 on a year-on-year basis, reaching $96 billion, the highest since 1994.[3]

Europe can survive without Russian oil. There is sufficient alternative supply to keep the oil market running, while the logistical and pricing arguments against the embargo are exaggerated to serve other political purposes. For landlocked countries such as Hungary, Slovakia and Czechia, Russian supply has stopped before, during the outage of the Druzhba oil pipeline in 2019, and the impact on prices and the national economies was not calamitous, contrary to the popular arguments of many national and EU politicians.[4]

[1] The proposal included a complete ban on any crude oil and refined product imports from Russia, phased in gradually with crude purchases set to halt fully within six months and for refined products – by the end of 2022.

[2] Europe Brent Spot Price, based on data from Energy Information Administration.

[3] Bloomberg, "Russia Current Account Surplus Jumps to Record Despite Sanctions," May 16, 2022.

[4] During the Druzhba outage, seaborne crude exports from Russia increased.

KEY POINTS

- Europe can **survive without Russian oil.** The pushback against an EU-wide oil ban is not rooted in reality but in vested political and economic interests.
- There is sufficient **alternative supply** to keep the oil market running, while the logistical and pricing **arguments against the embargo are exaggerated**.
- A ban on Russian oil imports will deliver a **critical blow to Kremlin's war chest**, as the sanctions will remove the Kremlin's main source of tax revenues and the engine of the whole economy.
- The challenge of replacing Russian oil has two key elements: 1) securing alternative supply and 2) impact on prices. **Neither of the two issues represents an insurmountable challenge** for the global oil market.
- The EU can **strengthen its long-term energy security** by eliminating its dependence on Russian fossil fuels and on the oligarchic networks that have been thriving on this long-standing relationship.
- To effectively phase out Russian oil, the EU should adopt a **full oil embargo** including crude and refined products with a short phase-in period of no more than 6 months.
- The EU should introduce a robust EU-level **sanctions implementation regime** ensuring Russian oil is not sold to the market by third parties with Russia-linked **ultimate beneficial ownership.**

The following analysis sheds light on the importance of Russian crude oil sales to Europe for the survival of the Kremlin regime, as well on the potential impact on the global oil market of a European embargo on Russia's oil. The analysis considers a *Base Case* and a *High Impact* scenario for Russian crude oil output, depending on key assumptions for exports and domestic refining activity. Furthermore, the analysis exposes the enablers of Kremlin's continuing economic influence in Europe that have undermined the EU's common position on sanctions.

Why it matters

Russia's economy and public finances depend heavily on oil and gas sales revenues. The Russian federal budget for 2022 adopted in October 2021 projected that oil and gas tax revenues would account for 38% of total budget revenues. Oil exports (including of crude oil and refined products) make up the bulk of the energy sector's contribution to the budget, as they are more heavily taxed than natural gas exports. In April 2022, Russia's federal budget saw oil and gas revenues at RUB 1.8 trillion (USD 27.8 billion), of which only 17% came from levies on natural gas. The risk premium added to international crude oil prices amid the war in Ukraine and the threat of an oil embargo, have provided a significant boost to budget revenues, largely offsetting the effect of the roughly $35 discount for the Urals blend versus the international Brent crude oil benchmark.[5] The higher crude oil prices in turn have contributed to higher margins for Russian refiners, as the current taxation system in Russia provides generous subsidies that increase with higher crude prices.[6]

Imposing an immediate oil embargo will deprive the Kremlin of its main source of funding for its military campaign in Ukraine. The embargo is a crucial step not only because the European market absorbs about half of Russia's oil exports, but also because it will allow for secondary sanctions by the EU, US and the UK. The latter will limit the Kremlin's ability to divert crude sales to other customers such as India and China. The experience from the implementation of the Iranian sanctions regime revealed that although these measures may not be able to fully prevent oil exports, the scope for sanctions evasion may be more limited in scale and at the cost of much greater discounts for the Russian crude sales.[7]

Even if Russia is to reroute some of its oil to alternative clients, the market for sanctioned Russian crude faces a key structural limitation. China, which has historically been the main outlet for crude under international sanctions such as Iranian and Venezuelan blends, is unlikely to boost its imports of Russian oil by much. China imports typically about 1.5 million b/d of Russian oil, which already makes up for a high market share in the country. Russia often competes with Saudi Arabia on a monthly basis for the title of top importer. A significant further increase of imports from Russia would imply replacing some Middle Eastern heavy barrels, and conflict with China's supply diversification and security of supply policy.

Moreover, any additional purchases of Russian oil are likely to happen at a very steep discount, as Russia currently is in a weak bargaining position, with few alternatives available. For example, the 400,000 b/d Vadinar refinery in India, which is partially owned by Rosneft and could potentially buy more Russian oil, is already facing major issues in financing oil trade activities.[8] India's history of compliance with oil sanctions on Iran and Venezuela suggests a limited potential for absorbing sanctioned Russian oil in case of secondary sanctions. In this case, third countries that have not themselves imposed an embargo, such as India and China, would risk being cut off from the US, UK and EU financial system if they import Russian crude. Such secondary sanctions, similar to those imposed by the US on Iran in 2018, would make it difficult for Russia to reroute its oil exports to alternative markets. Other net importing countries in Asia, Latin America, and Africa that are most likely to be willing to buy Russian crude have limited oil demand or have relatively simple refineries that cannot process heavy crude.

[5] Urals is heavier and contains more sulfur than the international benchmark Brent, and consequently has always tended to trade at a barrel-on-barrel discount to Brent. Recently, Urals has been trading at much heavier discounts vs. Brent of about USD 30 per barrel, as difficulties in securing financing and insurance for purchases of Russian crude and the risk of potential sanctions have been deterring buying interest.

[6] Export duties on refined products are determined as a percentage share of the crude export duty (30% for light products such as gasoline and diesel), with the resulting difference between the export duty for crude oil and for refined products providing an additional margin for Russian refiners. This difference increases in monetary terms with a higher crude oil price and hence, a higher crude oil export duty.

[7] India in particular has demonstrated relatively strong compliance with sanctions on Iran and Venezuela and even without secondary sanctions has been cautious in purchasing Russian crude oil, Seshasayee, H., *US Secondary Sanctions and Petroleum Imports: Safeguarding India's Energy Security*, ORF Issue Brief No. 532, Observer Research Foundation, April 2022.

[8] Verma, N., Anand, N., and Thomas, Ch., "Some banks stop credit for oil imports by Rosneft-owned India refiner Nayara," *Reuters*, April 12, 2022.

With limited options to export its oil elsewhere and insufficient oil storage capacity on its territory, Russia would be forced to cut production. The latest U.S. Energy Information Administration (EIA) data shows Russian oil production dropping from around 11 million b/d at the start of 2022 to about 10 million b/d in April, with the EIA projecting further, albeit milder, decline over the coming months (see Figure 1). Lower buying interest due to existing sanctions and higher financing and insurance costs has contributed to a 9% loss in Russia's crude output. This suggests that any onshore oil storage capacity has already been maxed out, as otherwise Russian companies would have used it to prevent production cuts, which have high technical and economic costs and risk permanent capacity loss of the oil wells. What the market is seeing is a steady jump in oil stored in ships on the seas looking to deliver to an ever-dwindling number of customers around the world.[9] Yet, storing oil seaborne has its limits especially if the West imposes stricter sanctions on providing freight and insurance support on Russia.

Sensitivity Analysis

Assuming a gradual loss of the European market due to a phased-in embargo with secondary sanctions, the additional output loss could reach another 1.5 million b/d (around 1.2 million considering the latest exemptions provided to Central European countries) before the end of 2022.[10] In this *Base Case scenario*, production would be 30% lower in December vs. January 2022 levels compared to just 17% decline in the EIA's projections.

With crude consumption by Russian refiners standing typically at close to 6 million b/d, production levels at 7.9 million b/d imply exports of 1.9 million b/d. These are typical exports to Asian countries (including China). Some rearrangement of export flows due to secondary sanctions could see China absorbing a large part of the normal exports to countries such as South Korea and Japan, possibly in exchange for even more significant price discounts.

Further crippling the Russian oil industry requires tackling its refined product exports and its domestic refineries. Russia typically exports almost half of all the oil products it refines (over 2 million b/d). Most of the product exports are diesel fuel and heavy gasoil[11] (about two-thirds of exports) as gasoline production remains limited for technical reasons, just enough to meet domestic demand (exports are less than 10% of total supply on annual average basis).[12] Most Russian refineries have low technological complexity, resulting in high share of heavier, less valuable products, such as fuel oil and heavy gasoil in total production. Additionally, the fact that they can only rely on domestic crude as feedstock severely constrains their operational flexibility, so unlike other relatively simple refineries, they cannot switch to a lighter crude to be able to produce a higher share of lighter products such as gasoline.

Of the circa 0.9 million b/d of gasoil/diesel exports out of Russia, over 0.5 million b/d end up in the EU, with the UK and Turkey also being major buyers within the wider European region. The UK, which imported 0.1 million b/d in 2019, is already phasing out Russian oil products, aiming for a complete ban by the end of 2022. The situation is very similar for residual oil, with complex refiners in the EU and the US typically absorbing most of the Russian exports, using the heavy oil as feedstock and converting it into lighter products such as gasoline and diesel.

If imports of refined products from Russia are banned in the EU, Russia will struggle to find alternative markets, even though the global market is currently suffering from tight supply. Europe is the main import market globally and the key region that faces tight supply. The US is dominating the Latin America export market with its geographical proximity offering a key advantage. Import demand in Africa cannot absorb significant additional volumes as demand is relatively

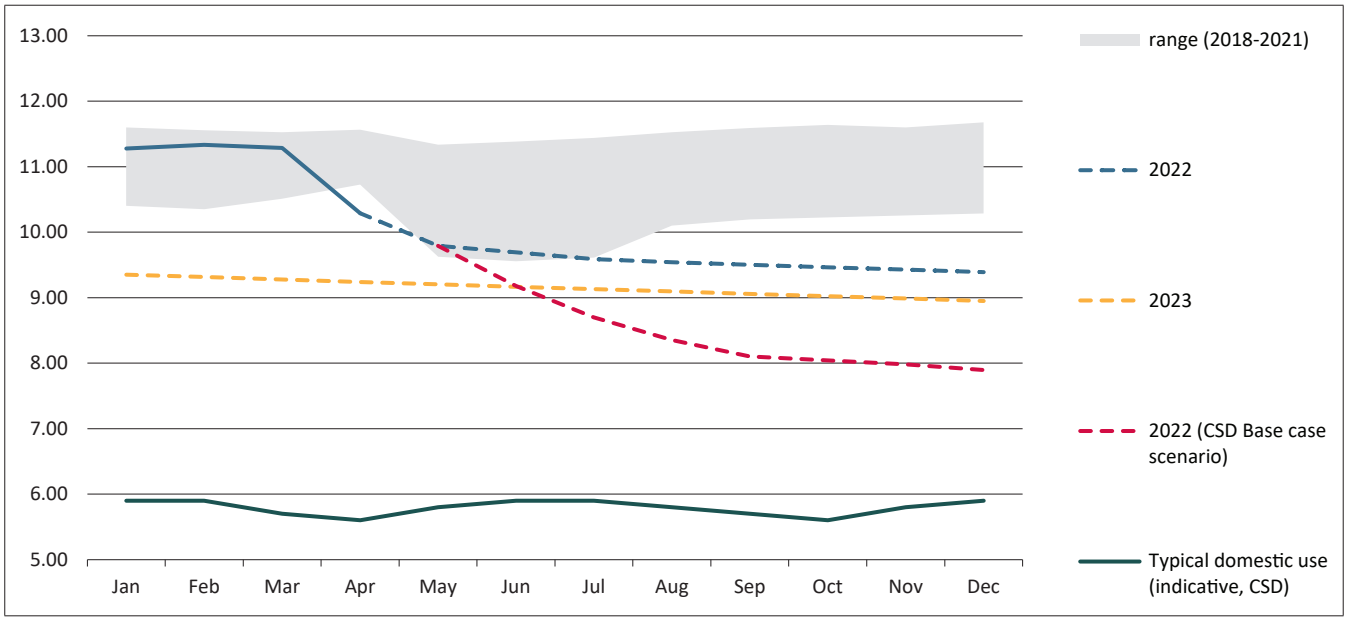
[9] Cargoes on tankers that have left the port of loading but have no destination (no confirmed laycan at a port for offloading) are known as "distressed". Such cargoes trade on the spot market, often at heavy discounts, and add to volume of oil that is on the high seas. Another factor which adds to such volume is the forcing of vessels to longer voyages when transporting Urals crude oil from Russia's western ports to Asia rather than Europe, with a one-way journey to China typically taking around two months. Industry sources indicate that as of May 26, 2022, about 57 million barrels of Urals and 7.3 million barrels of Russian Far East ESPO crude were observed to be on the water, compared with 19 million of Urals and 5.7 million of ESPO in late February. Cf. Cho, Sh., "More Russian oil than ever before heading for China, India amid sanctions," *Bloomberg*, May 27, 2022.

[10] This scenario assumes that most of the lost buying interest so far has been from the European market.

[11] Gasoil/diesel refers to a fraction of middle distillates, which differ mainly in their sulphur content. The lower sulphur diesel fuel is used for road transportation, while gasoil has a higher sulphur content and slightly higher density and is used primarily as heating fuel.

[12] Residual refined products refer to fuel oil and vacuum gasoil (VGO). These products are mainly used as a bunker fuel or as a refinery feedstock to be transformed into higher-value products such as gasoline and diesel by more technically advanced refineries.

Figure 1. ***Base Case Scenario*: Russian Petroleum and Other Liquids Production (million barrels per day)**

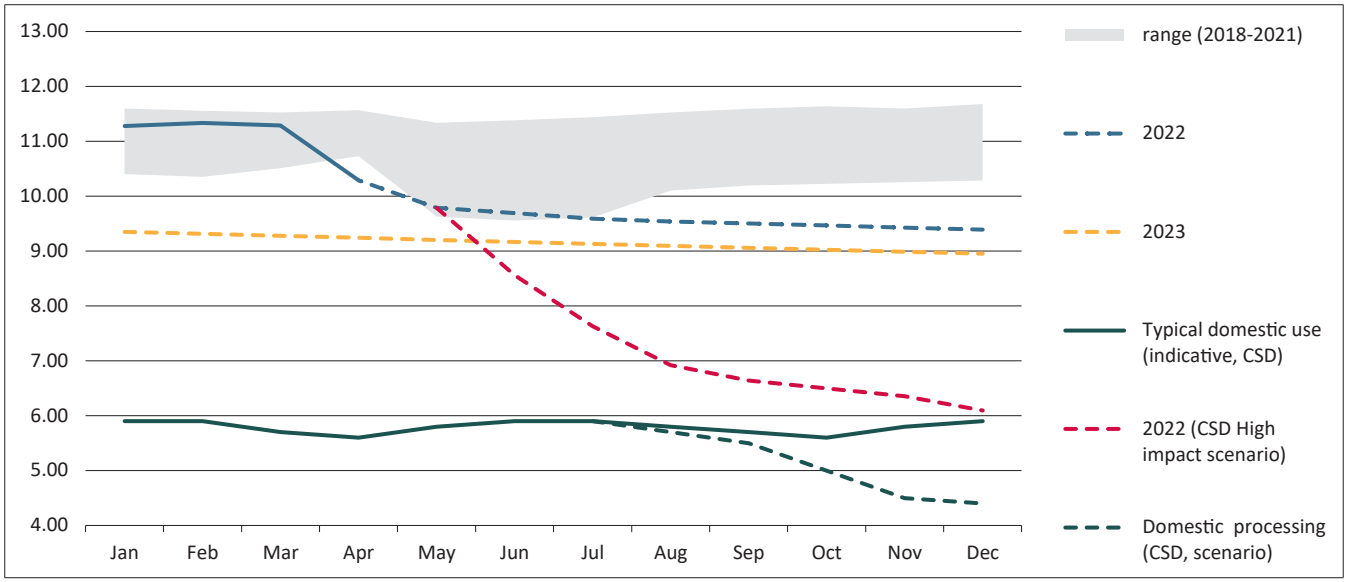


***Source**: CSD based on EIA data.*

small and key countries such as Nigeria rely mainly on crude for product swap deals to supply their domestic market. Meanwhile, Asia and the Middle East are net exporting regions, so they cannot import more Russian products.

This vulnerability can be exploited by cutting off the outlets for other product exports, forcing Russian refiners to significantly reduce their crude processing. Similar to the situation with crude oil, onshore storage capacity for products in Russia is limited, implying that blocking export outlets will soon lead to a production cut. In turn, a decline in refinery operations will slash domestic demand for crude oil, adding yet another source of pressure on Russian oil output. In addition, lower refinery utilization rates will significantly reduce gasoline supply, leading to price spikes and shortages on the domestic

Figure 2. ***High Impact scenario*: Russian Petroleum and Other Liquids Production (million barrels per day)**



***Source**: CSD based on EIA data.*

market.[13] If Russian diesel exports are reduced from the typical 0.9 million b/d to 0.4 million b/d (removing the EU and UK outlets and assuming rearrangement of flows to the tune of 0.1 million b/d), a conservative estimate would see a crude processing cutback of 1.5 million b/d (26%).[14] Correspondingly, gasoline supply will decrease by at least 23%, assuming some flexibility in maximizing gasoline yields, to just under 0.8 million b/d. This is barely enough to meet Russia's annual average consumption and certainly insufficient to meet peak summer demand of about 1 million b/d.

In a *High Impact scenario*, where Russian crude intake is reduced by 1.5 million b/d and re-routing of crude oil imports to third countries such as China and India is avoided almost completely, Russian crude production could fall to just 6 million b/d (see Figure 2).

The networks of influence blocking the embargo

The EU dragged its feet on imposing an oil embargo against Russia with disastrous consequences for the West's ability to counter the Russian aggression in Ukraine. The six rounds of EU sanctions are undoubtedly without a precedent but they have failed to pressure the Kremlin to stop the war. Russia's trade surplus has kept on growing, and the most lucrative source of funding for the state budget, oil, has suffered only marginally. This has provided Russia with enough resources to continue its war effort.

The oil embargo was painfully delayed by short-term political interests and the local enablers of Russian political and economic influence in Europe. Europe's long-standing *Ostpolitik* has accommodated the Kremlin in developing vast and powerful oligarchic networks[15] that the Russian government leverages to influence the EU's strategic decisions. Central and Eastern European governments, and in particular Hungary, Slovakia, Czechia and Bulgaria, have sought derogations from the common sanctions regime on the basis of misinformation about the ability of refineries in these countries to operate with non-Russian crude or on the premise that there are no supply routes for alternative deliveries. In reality, these processing units are able to source alternative crude supplies and can do so without a significant increase in costs.[16] For Bulgaria, the technological complexity of the national refinery and sea port access make this task relatively simple. At the same time, Central European countries can deliver alternative crude via the Adria pipeline from Croatia and via the Western portions of the Druzhba pipeline system connected to oil terminals on the North and the Baltic Sea.

European oil and gas companies have played a central role in locking national economies in an import dependence vis-à-vis Russia. This dependence is particularly strong in Central and Eastern Europe and in Germany and Finland (see Figure 3). Doing business with Russian companies close to the Kremlin for decades has brought lucrative business deals to European oil companies. The profits of these deals have in many cases been used for direct political support, for example to cut short term energy prices before critical elections. In addition, large shares of such profits have often been transferred and layered in European and other offshore tax havens, obfuscating their final beneficiaries. In turn such political-oligarchic beneficiaries have often become key enablers of the Kremlin's political and economic influence in Europe. As a result, the economic interests of such beneficiaries are now directly exposed to potential sanctions.

A close examination of the refining industry in Europe reveals the main buyers of Russian crude. PKN Orlen, which owns the largest refinery in Poland, but also the Mazeikiai refinery in Lithuania and the Litvinov refinery in the Czech Republic, comes on top with typical Russian crude purchases likely to be close to 450,000 b/d. Finland's Neste is also among the top buyers, as the operator of the only two refineries in the country.[17]

[13] Center for the Study of Democracy, "The Strategic Role of Diesel in Countering the Kremlin Aggression in Europe," *CSD blog post,* April 2022.

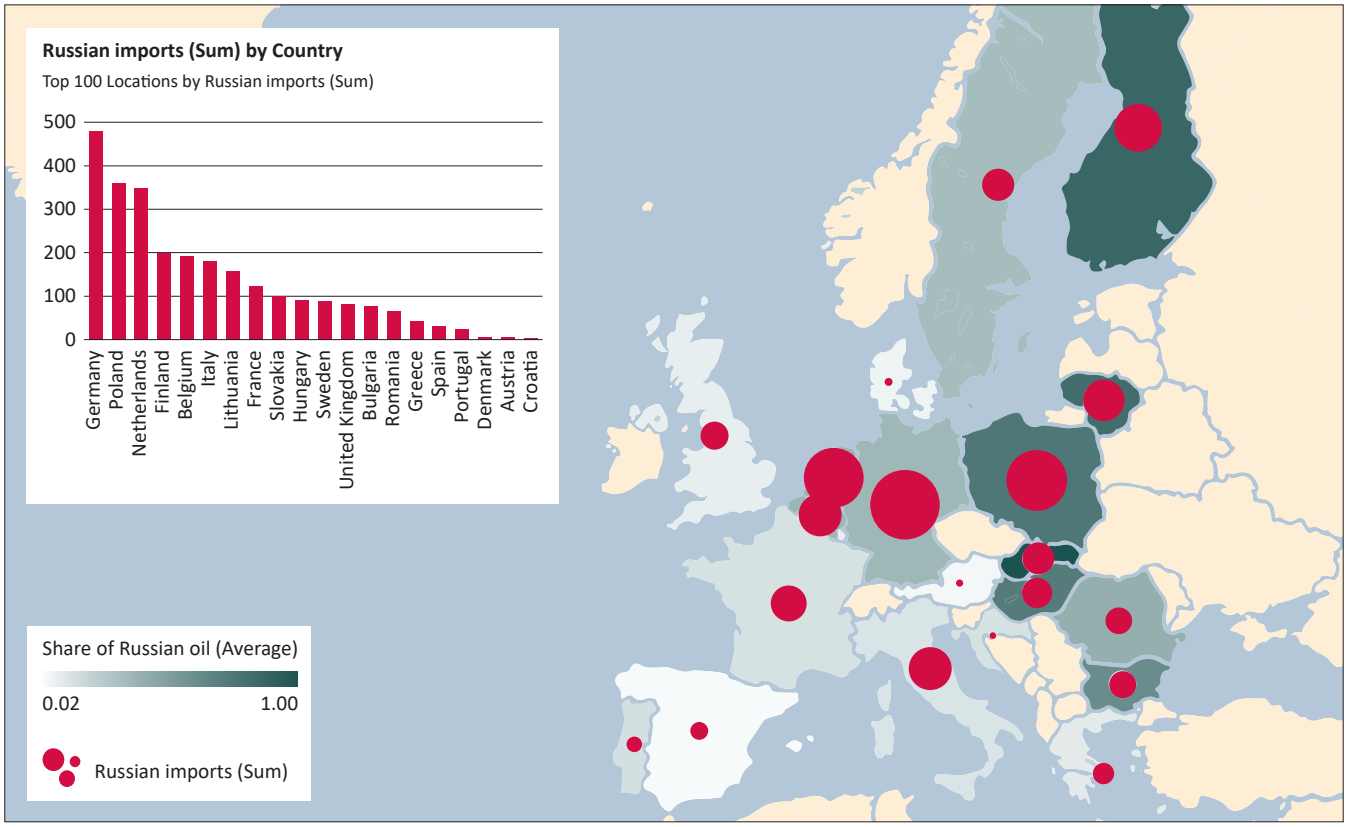
[14] The estimate is based on the assumption that domestic diesel production needs to decrease by 0.5 million b/d. This is achieved by assuming some flexibility in shifting the typical yield of diesel from 29% to 27% of crude intake. This contributes to about 0.1 million b/d of the necessary diesel supply reduction. The remaining 0.4 million b/d reduction is achieved by lowering crude intake.

[15] Conley, H. et al., *The Kremlin Playbook 2: The Enablers*, New York: Rowman & Littlefield, 2019.

[16] Center for the Study of Democracy, *Can Bulgaria Survive without Russian Oil?*, Sofia: CSD, 2022.

[17] Finland's Neste was one of the first major buyers of Russian crude to announce that it has "mostly replaced Russian crude oil with other crudes". Nevertheless, this statement failed to disclose that in reality only spot purchases (typically representing only a small fraction of a refinery's crude purchases) have been replaced, while Neste still has long-term contracts lasting until the end of the year: Neste Corporation, "Neste has mostly replaced Russian crude oil with other crudes," official company press release, March 1, 2022. This information was disclosed more than two weeks later: Reuters, "Neste still has contracts for Russian oil lasting until year-end – executive," March 17, 2022.

Figure 3. Imports of Russian Crude by European Countries ('000 b/d) and Share in Total Imports



***Source**: CSD calculations based on DG Energy data (2018-2019 average imports).*

Critically, major refineries in Germany are partly owned by Russia's Rosneft,[18] while Lukoil also has a notable presence across Europe (with refineries in Bulgaria, Romania, the Netherlands and Italy).[19]

The loudly proclaimed voluntary rejection of Russian crude by European oil companies since the start of the war has been primarily the result of the uncertainty about potential sanctions, the difficulties in obtaining financing and insurance, as well as the potential reputational damage from trading with Russia.[20] Yet, the reality is that the disruption of Russian crude flows has been limited to the decline in spot-based purchases of cargoes destined for Europe. Meanwhile, the majority of trade with Russian energy companies is linked to existing long-term contracts and remains intact, contributing to high profits for the buyers of Russian crude at the current crude oil prices.[21]

The continued talk about oil import sanctions has so far only served to support the rise in global crude and oil product prices. Paradoxically, this benefits vertically integrated Russian oil companies that either own or have access to refining capacity in Europe, as they can now tap in the lucrative netbacks resulting from the spread in the price of heavily discounted Russian crude oil and the rising prices of products – and helps to directly put money in the hands of the Russian government. This also benefits the buyers of Russian crude, as they make considerable margins from refining the relatively cheaper Russian crude and selling to an overheated products market. The profitable business of buying Russian crude puts **European refiners and oil traders in a dependency of choice** vis-à-vis Russia. Counting on their voluntary rejection of doing business in Russia would be wishful thinking.

[18] In early 2020, Rosneft increased it share in the Bayeroil refinery from 25% to 28.57%. In November 2021 Rosneft increased its share in the PCK (Schwedt) refinery from 54.17% to 91.67%. With its 24% stake in the Miro refinery, these deals made Rosneft the second biggest refiner in Germany by refining capacity, coming second to Shell.

[19] Lukoil has full ownership of the Burgas refinery in Bulgaria, the Priolo refinery in Italy, and the Ploiesti refinery in Romania, as well as a 45% share in the Vlissingen refinery in the Netherlands.

[20] As a notable example, Shell's purchase of a cargo of Russian crude in early March received very negative media coverage, which led to an official apology from the CEO Ben van Beurden a few days later and a commitment to stop all spot purchases.

[21] Center for the Study of Democracy, *EU Energy and Climate Security Strategy to Counter the Russian Aggression in Europe*, Policy Brief No. 108, March 2022.

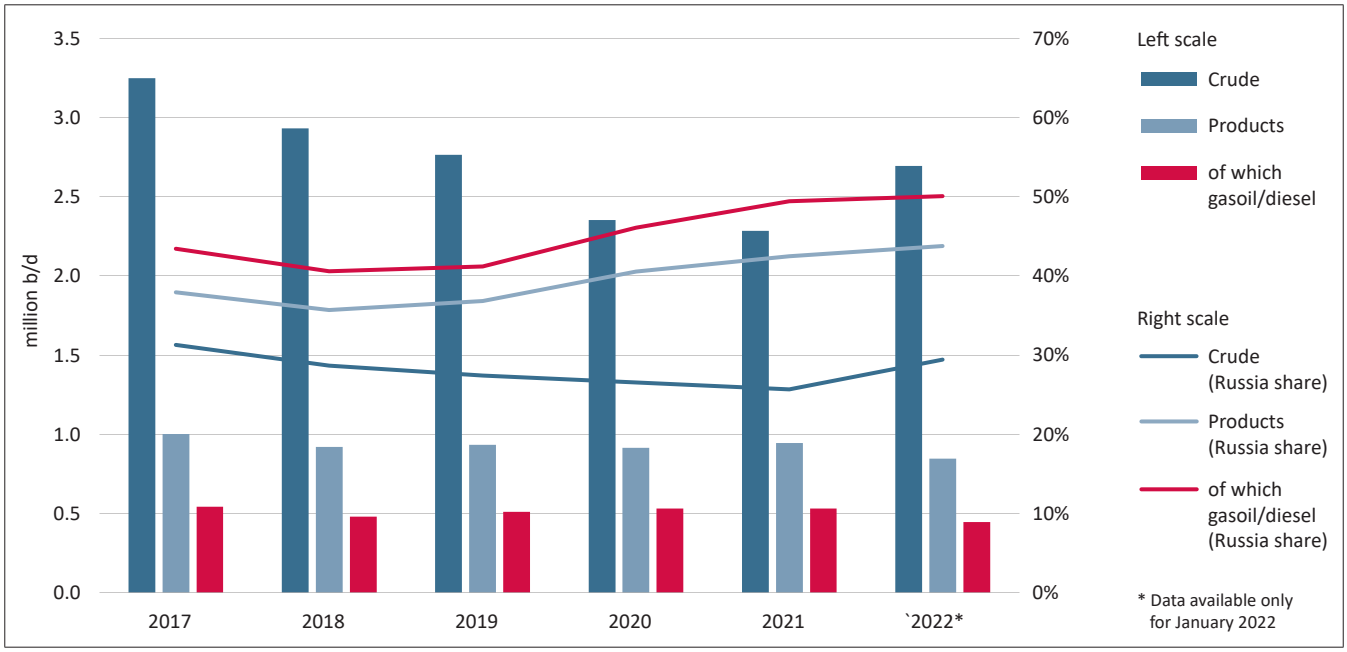
Europe can survive without Russian oil

The logistical and pricing considerations that have been used as arguments against the oil embargo have been exaggerated. A close examination of Europe's current dependencies and the global crude and refined product markets clearly shows that Europe can do without Russian oil. Typically, Europe relies on Russian crude oil for over a quarter of its imports, with the share of Russian crude oil in total imports standing at 30% in January 2022 (see Figure 4). The reliance on Russia for the imports of refined products is even stronger, with Russia accounting for over 40% of total oil product imports. For diesel, the reliance on Russian exports stands at 50%.

The *Base Case scenario* for Russian crude production will result in a supply deficit (see Figure 6). Nevertheless, it will be well within the 2018-2021 range and inventories would fall 6% below 2021 levels by December 2022 (13% below 2019 levels), which would be manageable levels for the market.

Higher oil production from OPEC countries could offset the cutback of Russian supply and keep the global market in a surplus. Grabbing some of Russia's share in the European market would be a tempting opportunity for a number of OPEC countries. However, the widening rift between Saudi Arabia and the US may be a geopolitical constraint difficult to overcome. Assuming that the OPEC spare crude oil production capacity, estimated by the EIA at over 3 million b/d as of April 2022, is partially utilized (full utilization is technically and politically impossible at the moment)[22] over the coming months, the expected drop in Russian supply under the *Base Case scenario* will be fully offset (see Figure 6). There might even be slightly higher supply surplus over the summer months compared to the EIA's projections, depending on the speed of the ramp up in the OPEC spare capacity (currently assumed to be maximized by July).

Figure 4. EU-27 imports of Crude Oil and Refined Products from Russia and Share in Total Imports

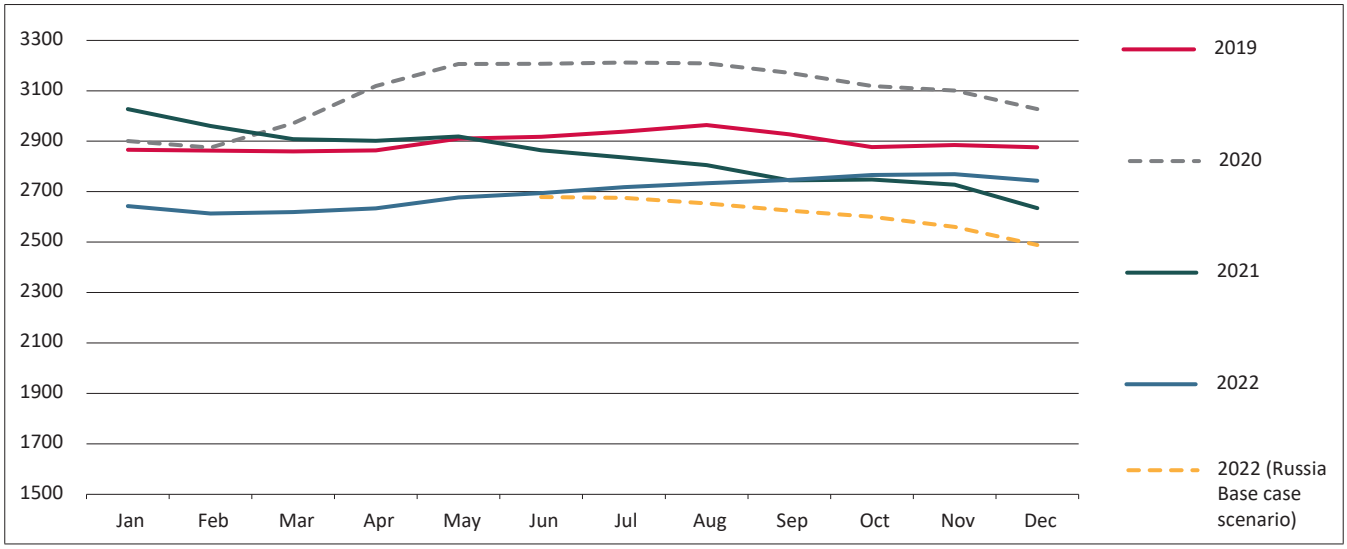


***Source**: CSD based on Eurostat data.*

The challenge of replacing Russian oil has two key elements: 1) securing alternative supply and 2) impact on prices. Neither of the two issues represents an insurmountable challenge for the global oil market. The EIA's current projections for the global oil supply and demand sees OECD commercial oil inventories building over the second half of 2022 due to a consistent supply surplus. The main contributor to the higher surplus is rising US supply (+1.2 million b/d y-o-y by December 2022). OECD commercial oil inventories are expected to surpass 2021 levels already by September (see Figure 5).

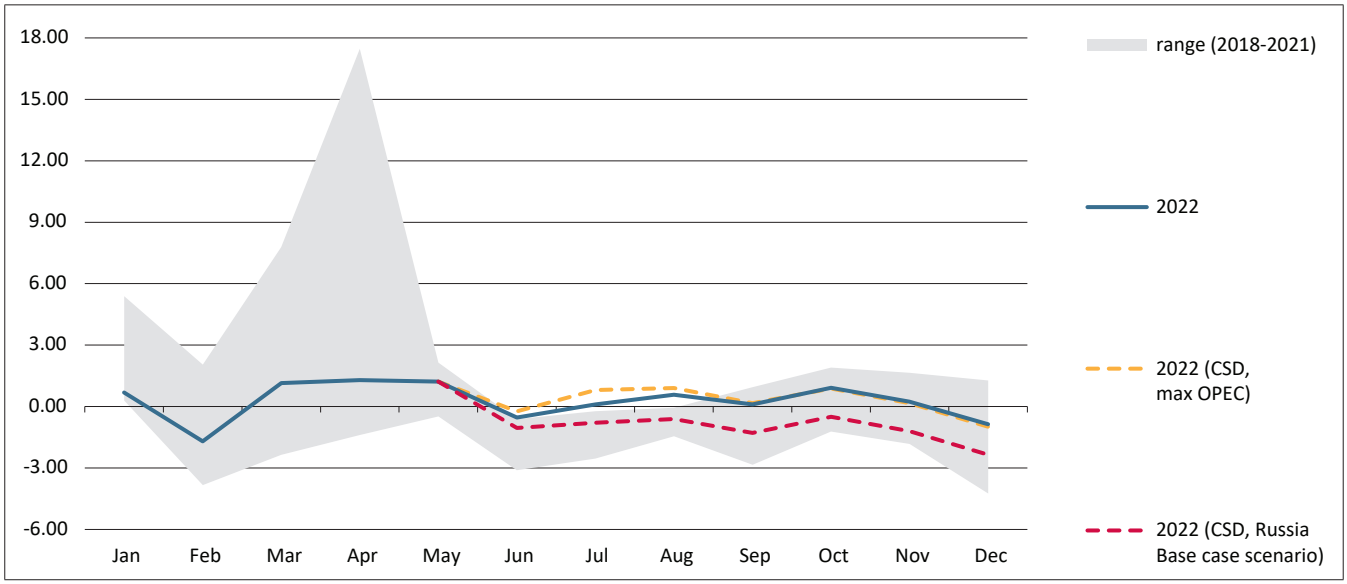
[22] The higher OPEC spare capacity utilization scenario assumes that the remaining spare capacity decreases to 1.9 million b/d, the median spare capacity over 2018-2019. This would still see OPEC total oil production staying on average 0.4 million b/d below 2018 levels (-1%).

Figure 5. OECD End-of-Period Commercial Crude Oil and Other Liquids Inventories (million barrels)



Source: *CSD based on EIA data.*

Figure 6. Global Oil Surplus/Deficit (million b/d)



Source: *CSD based on EIA data.*

In terms of the typical quality of crude oil used in European refineries, replacing the Russian medium heavy, sour barrels will also not be a significant challenge. The loss of the Russian supply and the higher U.S. oil production will result in making the global crude slate lighter, which means lower availability of heavy fuel oil.[23] As Middle East crude is generally very similar to Russian Urals, potentially higher OPEC supply would actually offset the change in the global crude slate.

In terms of logistical costs, the impact of replacing Russian crude is also not significant. Typically, refiners source the crude they process from all over the world to maximise their margins. The additional logistical costs linked to the longer distance travelled by crude tankers would be largely offset by the high insurance and financing costs that Russian crude purchases currently require.

[23] This will mainly result in making heavier crude slightly cheaper relative to the higher quality light crudes, but would not negatively impact the netback value of the refined products basket due to the higher yield of such light products.

The biggest logistical challenge is faced by countries that are landlocked and rely on the Druzhba pipeline to receive Russian crude through Belarus. However, a cut in the supply through the Druzhba pipeline is not without precedent. In 2019, the pipeline suffered a major outage due to the contamination of the oil with organic chlorides. Countries dependent on the Druzhba overcame the unexpected disruption relatively smoothly through a combination of inventory draws and the maximization of alternative supply deliveries. In fact, the Adriatic pipeline from Croatia's Omisalj terminal can supply refineries in Croatia, Hungary, Czech Republic and Slovakia. The pipeline's installed capacity of 400,000 b/d is more than enough to cover their normal operating needs at about 80% utilisation rate. The use of drag-reducing agents could also increase the operational capacity of the pipeline, allowing for even higher utilisation rates. Additionally, the Transalpine pipeline connecting the Trieste port in Italy to Austria, South Germany and the Czech Republic offers further alternative oil supply routes and connecting the Austrian refinery near Vienna and the Slovak refinery near Bratislava requires minimal infrastructure investment due to their geographical proximity.

From a pricing perspective, the risk of an oil embargo is already factored in to a great extent, making further potential price increases minimal. History has shown that on previous occasions such as the threat of US sanctions on Iran in 2017 contributed to a continuous increase in oil prices over that year but then prices dropped by $12 per barrel (-16%) between the actual announcement in May 2018 and the full entry into force of the ban in November 2018.[24] Currently, the use of discounted Russian crude does not result in lower prices for refined oil products, it translates into higher margins for refiners[25] and – yes, regretfully – for the Russian oil companies and the Russian government.

This is because global oil product markets do not depend solely on the price of crude oil and the operational costs of refineries. Product markets have supply-demand fundamentals of their own, which depend on things like the operational rate of refineries, the choice of products, global trade, etc. If several refineries manage to secure cheaper crude, they would see a higher margin (all other things being equal), but the oil product markets will not see different pricing. On the country level, the price for net importers of oil products are determined by the price of the marginal import barrel. For net exporters, the domestic market price is a netback to the nearest export market. By this market logic, if domestic prices are below the price in the nearest export market (minus the cost to bring the supply to the export market), the domestic producer will prioritise the export market and starve the domestic market.

When it comes to oil product import dependency, the most problematic segment is gasoil/diesel. Close to 60% of all European product imports from Russia is gasoil/diesel. Meanwhile, Russian diesel represents 50% of total European diesel imports. Nevertheless, Russian diesel exports can be replaced by a combination of alternative supplies, higher crude intake (from alternative suppliers), and some demand-side measures including higher use of public transportation, small limitations to the use of cars in large Europe cities, etc. (see Figure 7).

For the past several months, the global diesel market has been very tight, contributing to abnormally high prices. However, the typical spring maintenance period has offered many refiners the possibility to make technological adjustments to maximise their diesel production in response to the attractive pricing.[26] These refineries will come back online over the next few weeks and provide a strong boost to global supply. Additionally, two very large new refineries in the Middle East are reportedly ramping up production right now – the 400,000 b/d Jizan refinery in Saudi Arabia and the 600,000 b/d Al-Zour refinery in Kuwait. Together these two plants could add at least 400,000 b/d of diesel supply to the global market, which Europe would happily absorb. With Europe set to attract additional supply from the Middle East and Asia, only minimal adjustment to local production and demand may still be necessary to fully replace Russian exports. Assuming up to 300,000 b/d of diesel come from the Middle East and another 70,000 b/d from Asia, European refiners would have to increase crude processing by 2.6% to add another 120.000 b/d of supply. A demand-side reduction of 50.000 b/d would represent a minimal 0.8% of the region's typical gasoil/diesel demand. This is roughly the daily demand of less than 5 million passenger cars.[27]

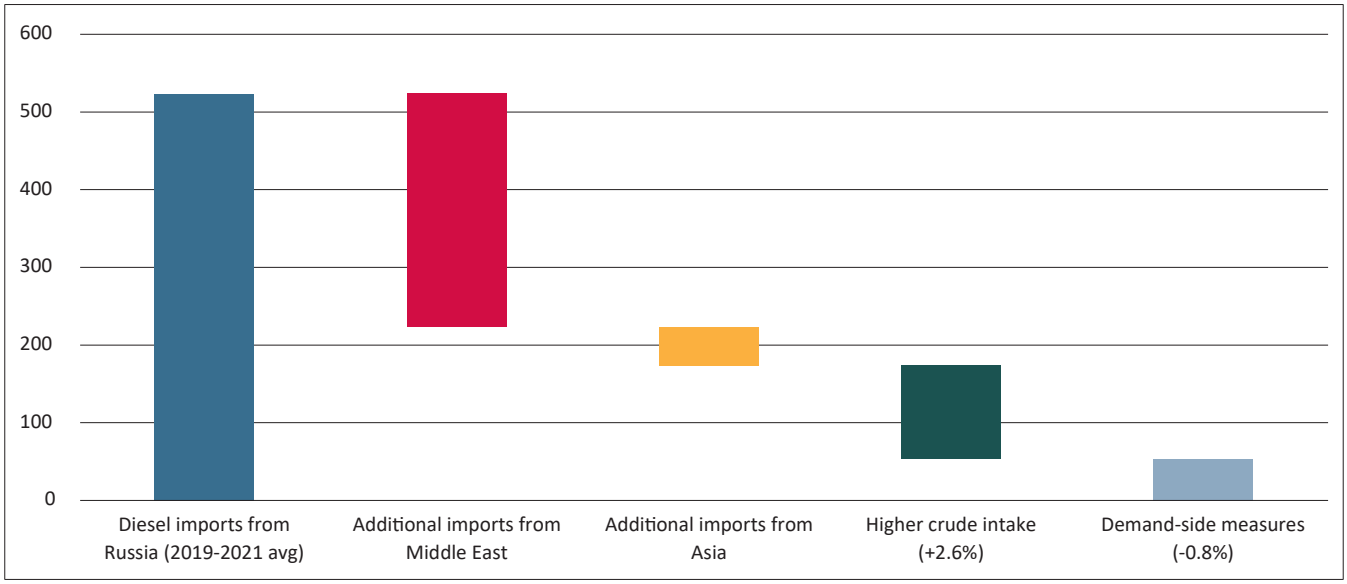
[24] CSD calculations based on EIA price data for Dated Brent.

[25] For example, Shell's Q1-2022 financial results show EBITDA in the Chemicals & Products segment tripling y-o-y.

[26] The global refinery system was forced to adjust to minimize diesel and jet fuel production due to COVID-19 oversupply over 2020 and H1-2021. These efforts take several months to reverse are likely to start materializing over H2-2022.

[27] CSD calculation based on the assumption of average daily mileage of 45 kilometers and 3.9 liters fuel consumption per 100 kilometers.

Figure 7. European Diesel Imports from Russia: Reduction Pathways ('000 b/d)



***Source**: CSD based on Eurostat data.*

Survival Is Not Enough

The EU collectively and many member-states individually have decided to cut down and eventually end their economic dependence on Russia. However, the initial determination of EU countries to counter the Russian economic and political influence in Europe and reduce the Kremlin's capacity and war chest to wage the war in Ukraine has lost steam. The current sanctions are incapable of pressuring the Kremlin into re-thinking its aggressive foreign policy. A ban on Russian oil imports will deliver a strategic blow to the Russian economy, as the sanctions will remove the Kremlin's main source of tax revenues, supporting the Kremlin war-machine. In addition, the oil embargo is a crucial step towards the strengthening of Europe's energy security. The EU should eliminate its dependence on Russian fossil fuels and on the oligarchic networks that thrive on this long-standing relationship.

To effectively phase out Russian oil from the European market, the EU and member states can take the following key policy measures:

- Impose a EU-wide full embargo on Russian crude oil and refined products with a short phase-in period of no more than 6 months.

- Increase cooperation with non-European allies including the U.S., UK, Australia, New Zealand, Japan, South Korea and India to introduce Iran-style secondary sanctions that will minimise the possibility for re-routing of Russian sales to non-European markets.

- Deny any special derogations from the sanctions' regime to prevent evasion loopholes and to ensure strict monitoring, including of ship-tracking data to detect the potential use of third-party intermediaries disguising the origin of the transported oil.

- Develop a targeted information campaign both on national and EU level to prevent panic buying from end-users that clearly explains the availability of alternative supplies and that existing strategic inventories are enough to cover 90 days of normal consumption in the event of a complete disruption of all oil supplies.

- Strengthen strategic communication efforts to debunk misinformation from Kremlin enablers that national oil industries, cannot operate normally without Russian oil.

- Provide targeted financial support to vulnerable consumers to reduce the burden on household budgets from high fuel prices in combination with incentives for wider use of the public transportation system.

- Create investment screening mechanisms to prevent strategic acquisitions in the energy sector facilitated by state and private Russian companies or by Russia-led oligarchic networks. In the oil

sector, this includes identifying the true Russian ownership of critical energy infrastructure, including pipelines, oil terminals, refineries, storage sites, and oil and gas upstream assets. This must be followed up by a close monitoring of the strategic management of these assets and the alignment of management decisions with national strategic interests.

- Ensure that Russian companies cannot use transfer pricing to tap into lucrative spreads of crude oil prices and refined product prices, and especially ensure that the proceeds from such transfer pricing cannot reach the Russian government.

- Ensure that the measures concerning the embargo on goods (crude oil and refined products) exports and the measures concerning the key petroleum market supporting services, such as the provision of shipping, insurance, inspection, certification, and financial services to the Russian petroleum industry, are consistent and do not allow or facilitate the circumvention of the embargo on the exports of crude oil and refined products.

- Introduce a robust EU-level sanctions implementation regime that will ensure that Russian oil and oil products are not delivered to European customers by third Russia-led parties such as newly-registered oil trading companies with unclear ultimate beneficial ownership, existing global commodity traders exploiting loopholes that mask the origin of the oil and oil products and Russia-friendly regimes such as China, Venezuela and Iran that can start selling Russian crude to global markets as intermediaries.

- Enact special national energy security laws, such as the legislative changes prepared in Germany, that will allow national governments to take over operational control over Russia-owned critical energy infrastructure, such as oil import, processing and fuels distribution assets in case the owners of the companies refuse to enact, sabotage or delay the implementation of the oil embargo.

- Design an EU-wide solidarity mechanism based on a joint release of strategic national fuel stocks that will guarantee the supply of oil products to landlocked member states. Generally, the release of the strategic petroleum reserves should be avoided as it creates market volatility and ultimately has a weak effect on lowering prices. Flooding the market with the petroleum reserves should be a last-resort option in cases of major physical supply disruption.

- Provide financial and political incentives to Western Balkan countries to join the EU-wide oil embargo and not become a hub for the rerouting of Russian oil and oil products. Currently, the majority of the oil import, refining and wholesale fuels distribution market in the region is controlled by Russian state-owned companies including Gazprom Neft, Lukoil and Zarubezhneft.

- Strengthen the independence and capacity of the anti-trust and energy regulatory institutions across the EU as to prevent a potential oil market concentration, and abuse of the dominant position of large oil firms operating on the wholesale market and the evasion of sanctions by oil firms with close ties or dependent on Russia.

- Prepare an emergency strategy to withstand a potential complete cut of Russian gas supply in retaliation to the oil embargo. The strategy must ensure that domestic consumption is met and vulnerable consumers – protected through targeted measures such as a common gas purchasing mechanism for emergency stocks, demand response via tenders for industrial consumption savings and the optimization of the use of LNG regasification and underground storage facilities.[28]

- Invest further in improving the quality of governance that focuses on countering corruption and state capture risks in the energy sector. Objective, data-driven comparative assessment of Member States' progress towards shared goals is a critical step towards deeper cooperation and the closing of existing governance gaps that prevent joint EU action.

[28] Center for the Study of Democracy, *EU Energy and Climate Security Strategy to Counter the Russian Aggression in Europe*, Policy Brief No. 108, March 2022.