



Russia's "Shadow Fleet" on Course to Circumvent Western Sanctions

Tymon Pastucha

A group of vintage vessels illegally transporting oil, known as the "shadow fleet", enables Russia to circumvent Western sanctions, particularly the price cap mechanism. It allows it to maintain high revenues for the Russian budget and finance the expansion of the armed forces, undermining the sense of the restrictions. At the same time, it threatens maritime and environmental security. The way to limit the expansion of the "shadow fleet" is by better identifying its activities, enforcing the restrictions adopted and lowering the price cap.

Russian Crude Exports and Western Sanctions. Sales of crude and refined products before 2022 accounted for about 40% of the value of Russia's total exports and provided about 30% of budget revenues. Most hydrocarbons went to the EU. In response to the Russian invasion of Ukraine, [EU Member States imposed an embargo on some energy supplies](#). However, Russia was able to redirect exports to more distant Asian markets, allowing the country to maintain high production and stabilise budget revenues. In response, the EU, G7, and Australia adopted an unprecedented global price cap on Russian crude of \$60 per barrel in late 2022. It was intended to limit Russia's profits from selling crude on global markets without triggering a negative supply shock (which could result in an embargo). Enforcement of the cap was to be ensured by an order to provide services only to those complying with the ceiling imposed on shipping and insurance companies from the G7 countries, which own around 90% of the market. [The price cap also extended to other refined products](#).

Initially, the mechanism had an effect, reducing total revenues from selling crude oil and refined products by around 30%. From the beginning of 2023, Russia took various measures to circumvent the sanctions, including by temporarily banning its own companies from selling oil to those complying with the cap, making changes to the tax system, and attempting to get its own insurance accepted. However, the effectiveness of the sanctions has been

challenged only by the use of the "shadow fleet", which, by transporting oil at a price higher than the cap, led to a virtually complete circumvention of the sanctions. In February 2023, it accounted for 40% of oil shipments, and a year later it accounted for almost 80%. The lingering effects of the sanctions are rising freight prices, reduced volumes of crude sold, and the need to offer discounts.

"Shadow Fleet". Merchant vessels that do not use the services provided to the maritime industry by entities from the sanctions coalition countries are referred to as the "shadow fleet". For the most part, it consists of vessels whose ownership structure is non-transparent and volatile—most often linked to Middle Eastern and Asian companies, often with no experience in the oil sector. This also applies to shippers, whose data generally remains hidden, with most of them based successively in the UAE, China, and Turkey, and from EU countries in Greece, Cyprus, and Malta. To make it more challenging to identify the vessels, their names and flag registrations are changing; among the most commonly used are the so-called flag-of-convenience states like Panama, Liberia, Gabon, and the Marshall Islands. In addition, they often conceal their location by switching off their lights and AIS transponders (a locating system designed to ensure the safety of navigation).

The "shadow fleet" vessels are primarily old and heavily used. They do not undergo regular maintenance and repairs,

increasing their risk of failure. It is estimated that more than 83% of the “fleet” is older than 15 years, with the average lifespan of tankers being 20 years. Market analyses confirm the massive buying up of old vessels by “fleet” operators—tankers older than 15 years are almost unavailable, and their price has increased by 120% in the last year.

The “shadow fleet” phenomenon has been used for years by various countries and companies to cut costs or circumvent sanctions, such as Iran, Venezuela, and North Korea, which are subject to U.S. oil sanctions. However, the scale of this activity in the case of Russia is incomparably grander. The number of vessels is constantly increasing, and data published by the Kyiv School of Economics, CREA, and analytical firms indicate that the size of the “fleet” fluctuates between 160-200 tankers in any given month, which supports around 78% of Russian crude’s maritime exports, for which around 250 tankers are needed (depending on the size and directions of exports). Vessels indirectly involved in the illegal trade of crude oil and refined products should be added to this figure.

Supply Directions and Risks of the Shadow Fleet. Due to infrastructure constraints, Russian oil exports to Asian markets are 80% from ports in the European part of Russia. This significantly lengthens the route and delivery time, raising freight costs. Limited resources and concealment of the cargo’s destination force the illegal and environmentally dangerous ship-to-ship (STS) transfer of crude is observed on the Korean, Ceuta, and Peloponnesian coasts.

Following the reorientation of Russian hydrocarbon sales destinations with the help of the “shadow fleet”, the largest customers for oil sold bypassing the price cap are India, Turkey, and China, which, in turn, account for 92% of Russian exports. India, which did not import any crude from Russia before 2022, has seen a particular increase, with around 35% of supplies now coming from that direction. The countries indicated often process imported oil and re-export it to EU countries (India became the second-largest supplier of refined products to the EU in 2023, up from 6th). Regarding the direct exports of refined Russian products, Turkey (more than 60% of Russia’s energy imports), Brazil, and Saudi Arabia remain the main customers. [The consequence of the Ukrainian strikes on the refining infrastructure](#) is the increased importance of oil supplies via the “shadow fleet” for maintaining the current level of revenues of oil companies and Russia’s budget.

The operation of the “shadow fleet” causes several risks to the environment, maritime traffic, and enables the financing

of criminal activities. Without effective insurance cover, the tankers of the “fleet” are unable to cover the costs of accidents and failures, including particularly damaging oil spills. Considering the age of the vessels, the lack of proper maintenance or STS oil transfers, the risk of environmental catastrophe is high. Hiding locations, in turn, raises the danger of maritime collisions. Due to the routing of export routes, these risks mainly affect the Baltic (Danish waters) and the Mediterranean. In addition, the fleet’s illegal activities fuel money laundering, support criminal, smuggling or terrorist activities.

Recommendations. The price cap remains the mechanism most likely to hit Russian hydrocarbon revenues hardest. Its effectiveness depends on enforcing existing restrictions. For its implementation, it is essential to monitor real oil sales prices and to identify those involved in the “fleet” and hold them accountable—something that the U.S. OFAC (the agency supervising sanctions) started in November. Raising the risk for the activities of the “shadow fleet” in this way will affect the involvement of third countries, forcing Russia, among other things, to offer higher discounts on the crude sold, consequently hitting its budget. It is also advisable to ban EU/G7 operators from selling used tankers to Russian and anonymous buyers.

The environmental and transport risks posed by the activities of the “shadow fleet” call for a strengthening of EU/G7 countries surveillance of their own waters (through which 80% of the vessels of the “fleet” pass) and checks that their spill liability insurance is adequate and up-to-date, especially in the Baltic. Countries in the region could also strengthen cooperation in preventing and tackling marine pollution by oil and chemicals. The EU may also consider sanctioning providers of freight services (e.g., from Greece or the UAE) or flags of states that provide registration services for “shadow fleet” vessels and fail to enforce international shipping standards (e.g., Gabon) fully.

Alongside these measures, a gradual reduction of the price cap from \$60 to \$25-30 per barrel (the estimated profitability of Russian crude production) is desirable. This will incentivise Russia to increase oil exports in order to maintain revenues, which in turn will create more demand for tankers, which the “shadow fleet” will not be able to meet, forcing the use of G7/EU operators to adhere to the cap. With effective insurance verification of vessels, Russia’s oil revenues will decrease by another 50%.