

October monthly update

EU fossil fuel payments to Russia in first fall below pre-invasion level in October

Türkiye provides a new outlet for Russian crude oil

Key findings

- In October, Russia's revenues fell to their lowest level since the start of the full-scale invasion of Ukraine. Earnings from exports to the EU dipped below 2021 levels for the first time, on a year-on-year basis, per CREA estimates. The sharp increase in fossil fuel prices caused by Russia's gas blackmail and other disruptions due to the war have buoyed the country's revenue until now, although earnings have been falling month-on-month since March.
- Oil shipments out of Russia are falling and oil is building up in tankers ahead of the EU's ban on seaborne crude oil and expected oil price cap becoming effective on 5 December. The drop is particularly pronounced in shipments out of Russia's Baltic Sea ports which supply the European market. There is no sign of a last-minute flurry to secure supplies from Russia.
- Easing fossil fuel demand in Europe and uncertainty around the specifics of the oil price cap are likely contributing to softening exports and export prices.
- A new route for Russian oil to the EU is emerging through Türkiye, where increasing amounts of Russian crude oil are refined, while the country increases exports of refined oil products to the EU and the US. The EU ban on imports of refined oil products from Russia only becomes effective on 5 February.
- Setting price caps on all Russian fossil fuels imported into the EU or carried aboard European-owned or insured ships would have cut Russia's export income by an estimated 23% (EUR 20 billion) in July–October.

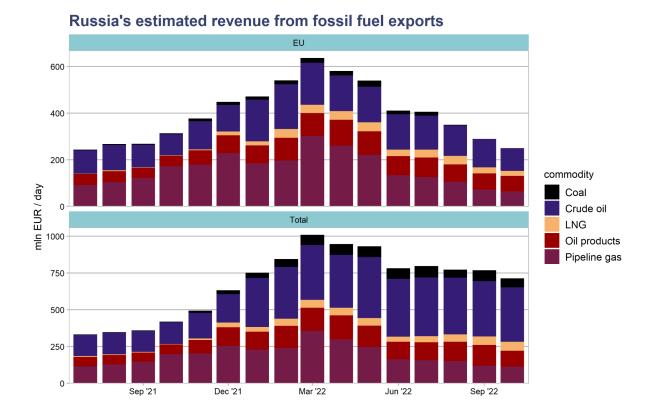


Russia's fossil fuel export earnings fell below 2021 levels for the first time

Russia's fossil fuel export revenues fell to their lowest level since the start of the full-scale invasion of Ukraine in October. Earnings from exports to the EU dipped below pre-invasion levels, on a year-on-year basis, for the first time, per CREA estimates. The sharp increase in fossil fuel prices caused by Russia's gas blackmail and other disruptions due to the war has buoyed the country's revenue until now, although earnings have been falling from the highs reached in March.

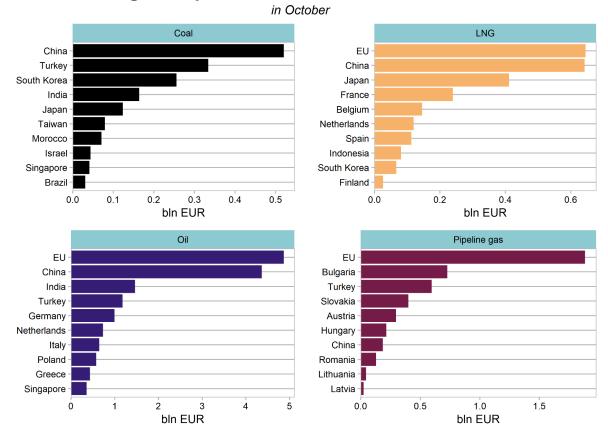
Estimated total revenue in October was EUR 21 billion, of which EUR 7.5 billion from exports to the EU, the lowest share on record. Total revenue fell 7% month-on-month, with falls across all commodities except LNG, which increased an estimated 9% month-on-month. Revenue from exports to the EU fell by 14%, with the largest reduction in crude oil (19%).





Even after the decline, the EU remained the largest importer of Russian oil, pipeline gas and LNG, ahead of China, showing that the elimination of EU demand will have a strong impact on Russia's exports.





Largest importers of fossil fuels from Russia



Drop in oil shipments: no scramble for Russian oil ahead of the EU ban

Oil shipments out of Russia are falling and oil is building up in tankers ahead of the EU's ban on seaborne crude oil and expected oil price cap becoming effective on 5 December. The drop is particularly pronounced in shipments out of Russia's Baltic Sea ports which supply to the European market. There is no sign of a last-minute flurry to secure supplies from Russia.

Oil shipments from Russian ports fell 11% from August to October, ahead of the EU oil ban. The drop was driven by a 15% reduction in volumes out of Baltic Sea ports which supply primarily the European market and have long transport distances to other markets, showing Russia's struggle to find buyers for the oil that Europe soon won't be purchasing.

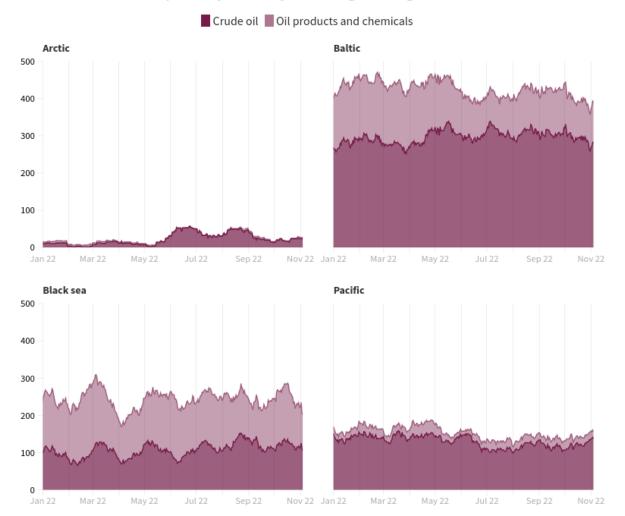
Imports from Russia fell in part due to lower oil demand driven by weak economic activity in Europe. As the expectations of China loosening COVID-19 controls were not realized, once again, China's oil demand expectations were also downgraded.

Major <u>oil</u> traders and banks warned already about reduced demand in the coming months while the International Energy Agency in its October <u>Oil</u> Market Report has reduced demand growth for 2023 by 10% citing the relentless deterioration of the economy.

The oil price cap, due to enter into force on 5 December, could already be contributing to the drop in shipments, as many tankers departing Baltic ports take a month or more to reach their destination. <u>Russia</u> is putting as much oil at sea as possible given the significant increase in shipments without destination, suggesting that it is already struggling to find new buyers due to the upcoming sanctions, lackluster global economy and possibly beefing up floating storage in the hope of finding ways to sell it without being affected by sanctions and bans.

We don't observe a major increase in oil exports to the Pacific markets, highlighting that Russia has little to no capacity to shift exports between the two markets. For coal, limited capacity exists and exports have been picking up accordingly.





Fossil fuel shipment departures from Russia

Thousand tonnes per day, 30-day running average

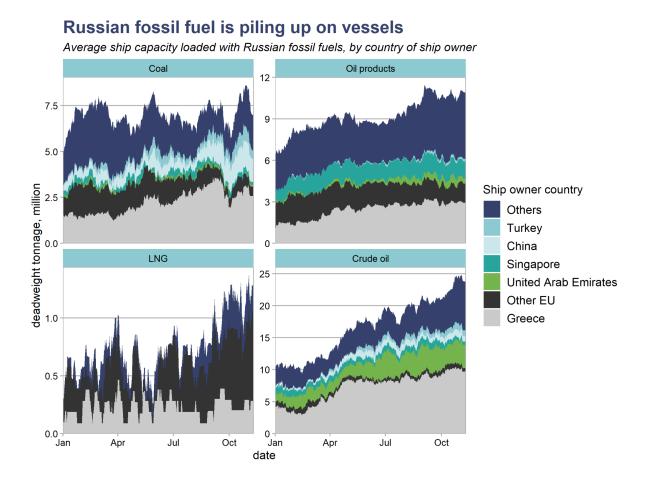
Source: CREA analysis.

Daily updated graph



The drop was preceded by an increase in "floating storage", oil loaded on tankers but not being discharged in destination ports, reflecting weak demand and difficulty in finding buyers. LNG floating storage has also increased as EU storage filled up and prices dropped, leading to a glut of shipments with no taker.

Despite the drop in shipments to the EU, European-owned ships continue to provide the majority of capacity for exporting Russian fossil fuels. This shows, again, that the EU and the UK can exert major leverage on Russia's fossil fuel exports and pricing through strong implementation of price caps.





Türkiye is refining Russian oil to the EU and the US markets

A new route for Russian oil to the EU is emerging through Türkiye, a growing destination for Russian crude oil, while the country increases exports of refined oil products to the EU and the US. The EU ban on imports of refined oil products from Russia only becomes effective on 5 February.

Since the beginning of Russia's invasion of Ukraine, Türkiye has increased the imports of Russian crude oil. In September–October, exports of oil products from the two main refining hubs (Nemrut/Aliaga and Körfez) taking Russian crude oil spiked. In addition, the Marmara Ereglisi fuel oil terminal appears to act as a transshipment facility for oil products, including from Russia. The largest recipients of oil product exports from these facilities included Spain, France, the U.S., Romania and the Netherlands. In September–October, the U.S., Spain and Italy also imported oil products from the Jamnagar refinery in India, which is the main destination for Russian oil being imported into the country.

Turkish refiners are therefore providing an outlet for Russia's oil exports, by refining products for markets that are either not willing to import Russian crude oil directly or don't have the refining capacity to process it. As the EU bans crude oil imports from Russia on 5 December, this loophole could become important.

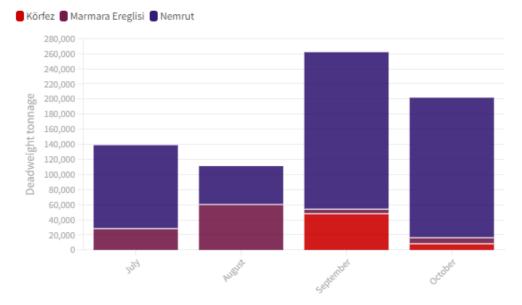
It's essential for EU countries and the US to ensure that effective enforcement is in place to prevent imports of refined oil that includes Russian feedstocks, and take further steps to prevent imports from refineries that take Russian crude oil, regardless of whether the oil molecules from Russia end up in the products they import.

Exports of Turkish oil products arriving in EU and US ports have picked up by 85% in the September-October period compared to July and August. The volumes have increased substantially from Nemrut on the Aegean Sea and have been complemented by exports from Körfez just south of the Bosporus Strait. These increases have significantly outweighed falling EU- and US-bound exports from Marmara Ereglisi.

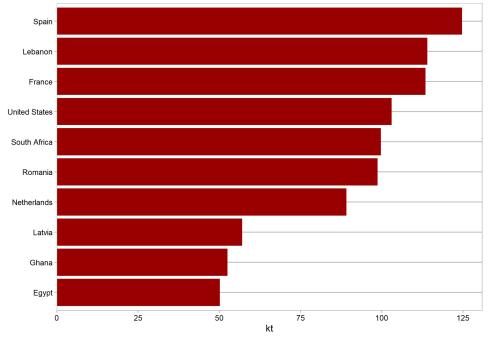


Türkiye's oil product exports by port

Tonnes of oil products arriving in EU & US ports in July-October 2022



Exports of oil products by country from Türkiye in September-October





Türkiye's imports of Russian crude oil and exports of oil products are to a large extent enabled by EU, US, UK, and Norwegian shipping infrastructure. At least 50% of the volumes exported to EU and US ports in the July–October period were carried onboard vessels owned by EU countries, and at least 90% of the volumes were exported on ships insured in the UK, Norway, and the US. The ownership structure changes when looking only at September and October, with the EU share falling to a minimum of 33%. Greek-owned ships carried the largest quantity of Turkish oil products to EU and US ports both in the July–October (38% of the total) and September–October period (27%).

16 ports across the EU and the US have received oil products from Türkiye during the last four months, including 15 European ports and Houston in the US. Of these ports, six ports received shipments in July, while the number was four in August, six in September and seven in October. This indicates that the customer base has been broadening over the last two months.

EU & US imports of seaborne oil products from Türkiye by port

Amsterdam (NL) Bilbao (ES) Constanta (RO) Venezia (IT) Ventspils (LV) Galati (RO) 100 80 60 40 20 JUI AUB GERT OC PUB CER OC JUN AUSCONT OCT MUS GER OCT Le Havre (FR) Huelva (ES) Rotterdam (NL) Tarragona (ES) 100 80 60 40 20 JUN HUB CER OG IN MUS COL OC In MARCED OG Houston (US) Lavéra (FR) Ploce (HR) Thessaloníki (GR) 100 80 60 40 20 0 Jul and est of JUT HUB COL OCT JUT HUB ER OCT

July-October 2022, Mt



Over the July–October period, the largest volumes were received in Constanta (125Mt), Amsterdam (103Mt), and Ventspils (93Mt). Ventspils was the largest importer in July with 53Mt. Le Havre in France was the largest importer in August with 51Mt. Constanta was the largest importer in September with 90Mt, with Houston following in second place with 50Mt. Amsterdam represented the largest importer in October with an import of 51Mt.

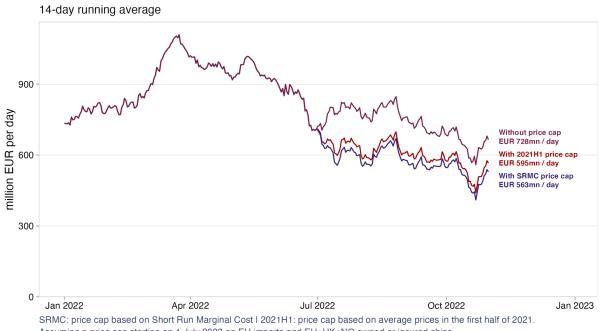
Effective price caps can further cut into Russia's revenue

Price caps on Russian fossil fuels are a key instrument to reduce Russia's revenues from the sale of fossil fuels. Price caps set at levels slightly higher than the short run marginal cost of supplying these fossil fuels to the market maintain the production and delivery incentives while diminishing the potential revenues of the Russian Federation. Price caps effectively steepen the discount curve on which the Russian fossil fuels are priced as willing buyers will be able to ask for higher discounts to take on additional risk. The current oil, gas and coal prices are significantly above historical averages and above the short run marginal costs (SRMC) of Russian fossil fuels allowing for a swift implementation of price caps.

Russia earned EUR 728 mn per day, on average, from 1 July to the end of October from its sale of fossil fuels at market prices. Our estimates are that these revenues could have fallen by 18%, to EUR 595 mn per day if price caps had been in place from 1 July. More so, placing the price caps at close to short run marginal prices, a riskier approach given the incentives not to supply the fossils, could have reduced revenues by 23% to EUR 563 mn per day.

While not a silver bullet, price caps can significantly dent Russian fossil fuel revenues that ultimately finance the war against Ukraine as every additional EUR withheld from Russia will translate to less hardware available for the continuation of the war.





Potential impact of price cap on Russia's fossil fuel revenues

Assuming a price cap starting on 1 July 2022 on EU imports and EU+UK+NO owned or insured ships. Source: CREA analysis.