February 24, 2022 - November 30, 2023

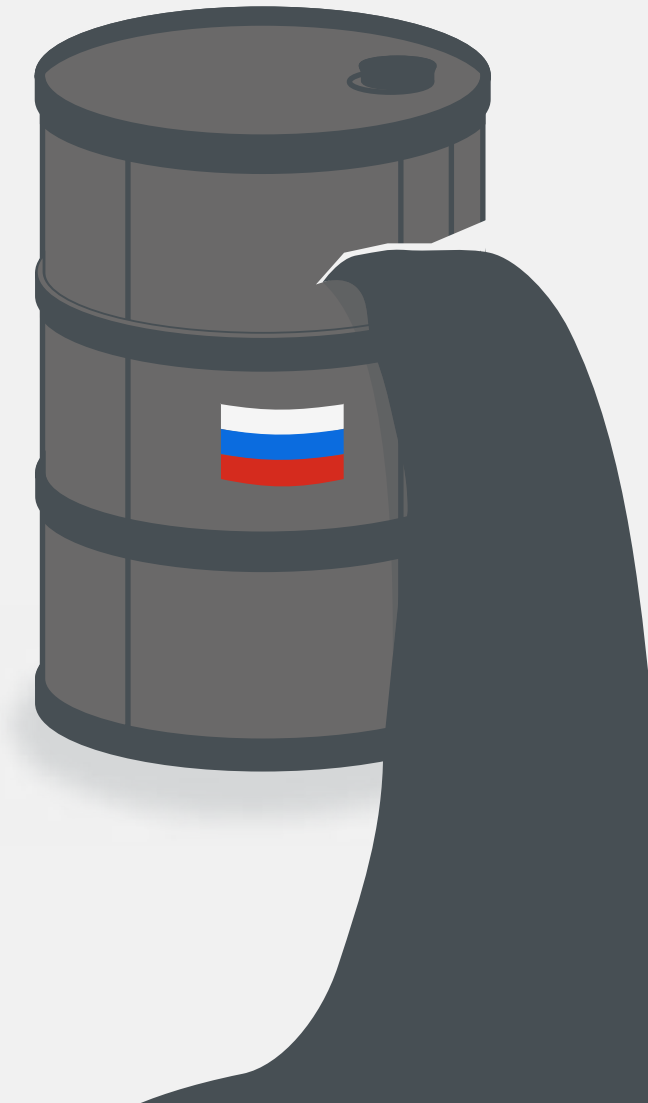
RAZOM WE STAND

THE CARBON WAR:

ACCOUNTING FOR THE GLOBAL PROLIFERATION OF RUSSIAN FOSSIL FUELS

AND

THE CASE FOR UNPRECEDENTED INTERNATIONAL SANCTIONS RESPONSE



Kyiv - Dubai, December 2023

Razom We Stand (RazomWeStand.org), a civil society group focusing on efforts to impose a total and permanent embargo of Russian fossil fuels, and promoting a green and sustainable rebuilding of Ukraine.

Our NGO was formed last year in response to Russian aggression and as a successor to the Stand With Ukraine campaign, which has united more than 860 organisations and groups from 60 countries to fight Russia on the energy front.

We seek to build momentum for a redesign of the global economy and major financial mobilisation for investments into new clean, smart and efficient energy systems based on renewables.

We are grateful to the partners who contributed to the preparation of this report:

CREA
Centre for Research on Energy and Clean Air

Centre for Research
on Energy and Clean Air

B4Ukraine

Business for Ukraine Coalition

RAZOM WE STAND

CONTENT

INTRODUCTION

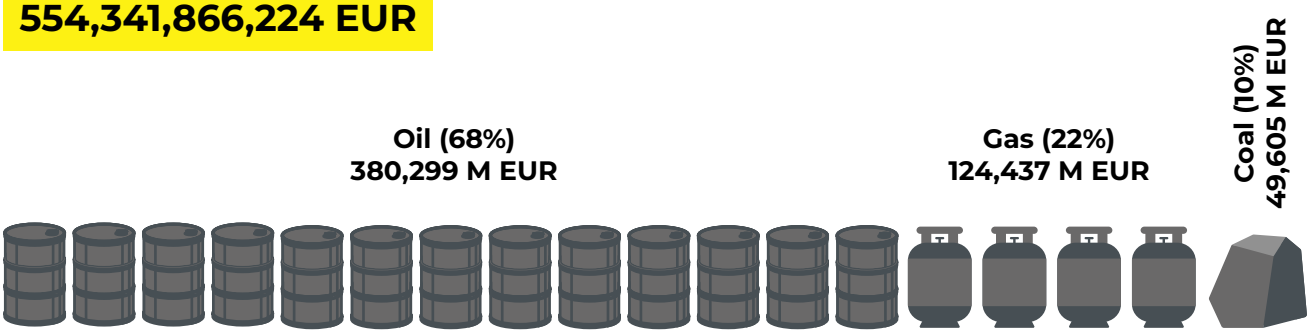
This report aims to offer a comprehensive overview and a broader perspective on the global uncontrolled addiction of fossil fuels, notably those originating from Russia. It seeks to elucidate how this continuous proliferation has led the world to its current precarious state, marked by an escalating climate crisis, increased energy poverty, the emergence of petro-dictators and autocracies, and the breakdown of the international rules-based order.

In the year following the commencement of the invasion in Ukraine (from February 24, 2022, to February 24, 2023), Russia's income from fossil fuel exports soared to €475 billion ($519 billion, £412 billion), based on data compiled by the Centre for Research on Energy and Clean Air (CREA).

Oil keeps the federal budget going with 68% of Russia's fossil fuel export revenues, gas contributes significantly with 22%, while coal only has regional significance and accounted for 10% of total exports since the start of Russian invasion.

Russia's fossil fuel export reventues since 24 February 2022.

554,341,866,224 EUR

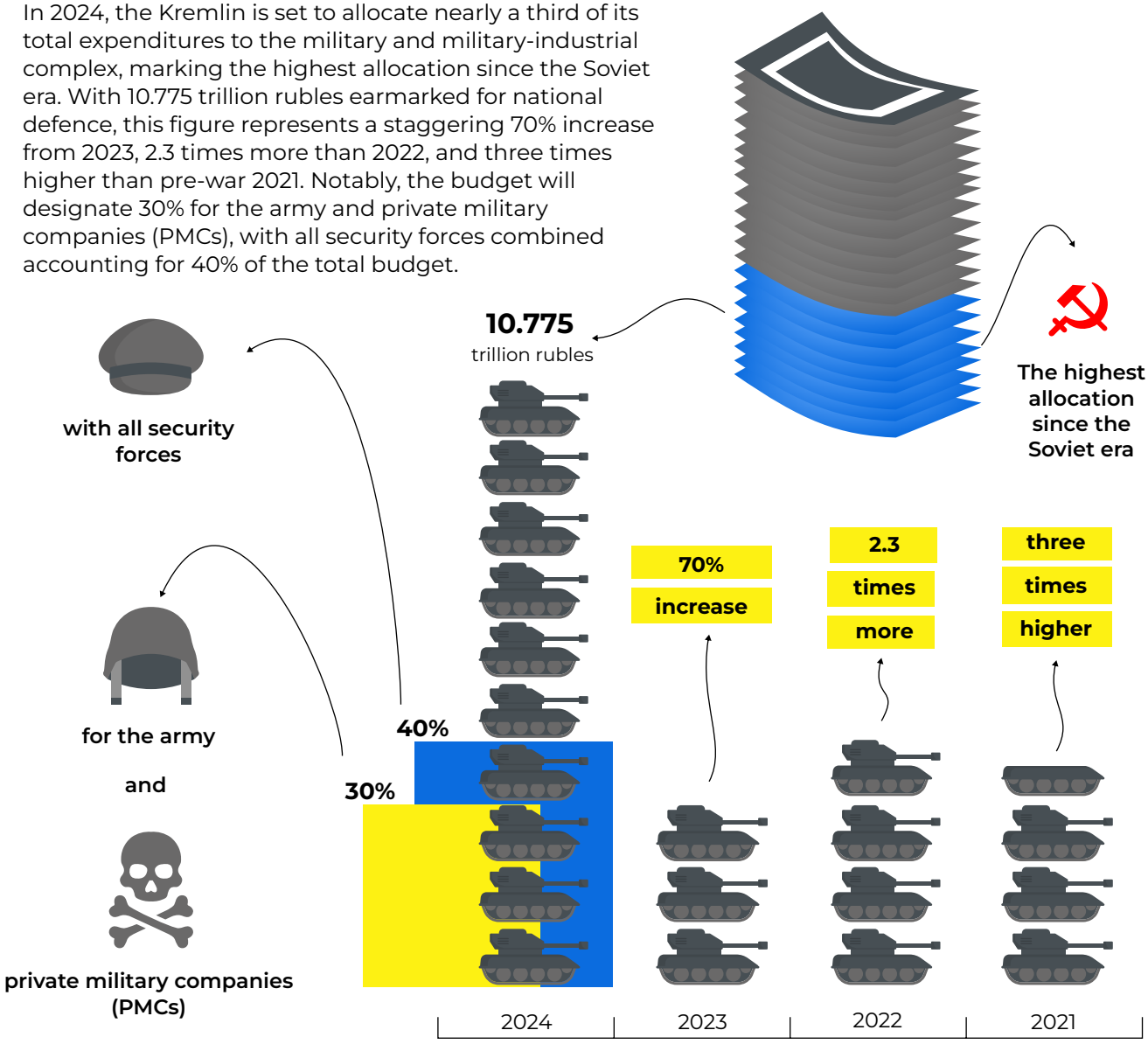


Source: russiafossiltracker.com, accessed December 4, 2023

According to **CREA estimates**, from the start of the full-scale war in Ukraine until November 30, 2023, Russia accumulated more than EUR 550 billion ($604bn, £476bn) in revenue from fossil fuel exports. Of this total, European Union countries accounted for EUR 183 billion ($201bn, £158bn) in purchases.

The share of oil and gas in the Russian GDP in the first two quarters of 2023 **accounted for 16-17%**. By the third quarter of 2023, the portion of fossil fuel export earnings in the Russian **federal budget plunged to its lowest level in 16 years**, yet still representing over 28% of the Kremlin's total income. Factors contributing to this decline include dwindling global oil prices and regulatory changes, causing a nearly 15-percentage-point drop compared to the preceding year. In absolute figures, revenues saw a one-and-a-half-fold decrease, dwindling to 5.58 trillion rubles from 2.9 trillion rubles, marking the minimum contribution of oil and gas revenues to the federal budget since at least 2007.

In 2024, the Kremlin is set to allocate nearly a third of its total expenditures to the military and military-industrial complex, marking the highest allocation since the Soviet era. With 10.775 trillion rubles earmarked for national defence, this figure represents a staggering 70% increase from 2023, 2.3 times more than 2022, and three times higher than pre-war 2021. Notably, the budget will designate 30% for the army and private military companies (PMCs), with all security forces combined accounting for 40% of the total budget.



By sustaining connections with Russian oil and gas, international energy companies, commodity traders, shippers, insurers, and banks are extending the genocidal war in Ukraine and exacerbating the climate crisis. The ethical ramifications of this conduct, coupled with reported instances of involvement in Putin's war crimes, have cast doubt on the societal acceptance of these institutions. Consequently, persisting engagement in producing Russian oil and gas poses substantial business, legal, and reputational risks for these entities and their executives.

The conversation regarding the inadequacy of international sanctions reemerges as Russia's economy has navigated the initial challenges and transitions toward a comprehensive war mobilisation effort. The actions implemented by G7 nations, such as partial embargoes and capping oil prices, have proven ineffective in curtailing the surge of Russian fossil fuel exports. These sales of oil and gas serve as a crucial revenue source for the aggressor nation. Russia's disregard for and violation of international norms undermines global endeavors to construct equitable transition strategies and address climate change.

The Russian Federation committed over 100,000 war crimes in Ukraine, predominantly financed by oil and gas profits. Additionally, the Russian nation appears hesitant to embrace the end of the fossil fuel era, perceiving the **21st century as the pinnacle of fossil fuel prominence**.

Against this backdrop, the UN continues to grant Russia participation in the Conferences of Parties to the Paris Agreement and permits representatives of Russian oil and gas companies to join the official delegation in international negotiations. These practices underscore the need to cease this unlawful conduct and implement extraordinary sanctions explicitly aimed at curbing and reversing the spread of Russian fossil fuels.

There are currently no sanctions imposed on Russia's gas exports. However, the volumes of pipeline gas supplied to Europe have experienced a significant decline subsequent to the confrontation over control of gas infrastructure and the sabotage of the Nord Stream pipelines in September 2022.

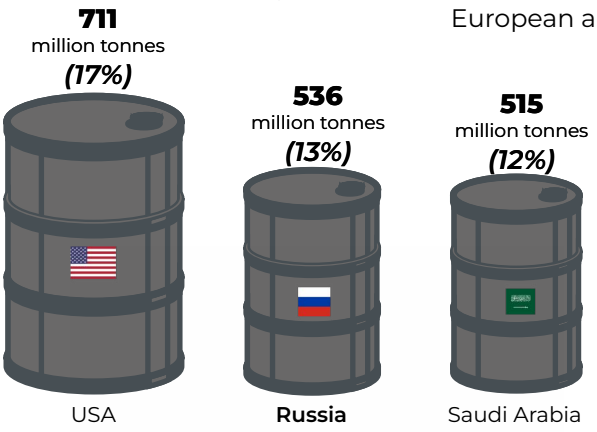
Oil and gas companies constitute the most significant taxpayers in Russia, playing a pivotal role in shaping the balance of payments and stabilizing the national currencies. The substantial financial gains from the oil industry have led to a 10% tariff hike in Russia's 2024 federal budget, projecting revenues of 11.5 trillion rubles from the oil and gas sector. Approximately **6% of the total budget is allocated to defence spending**, nearly doubling from the previous year.

WHY DEFEATING IMPERIAL RUSSIA IS CRITICAL FOR PEACE AND CLIMATE ACTION

Russian Federation is currently the fourth largest greenhouse gas emitter behind China, the US and India.

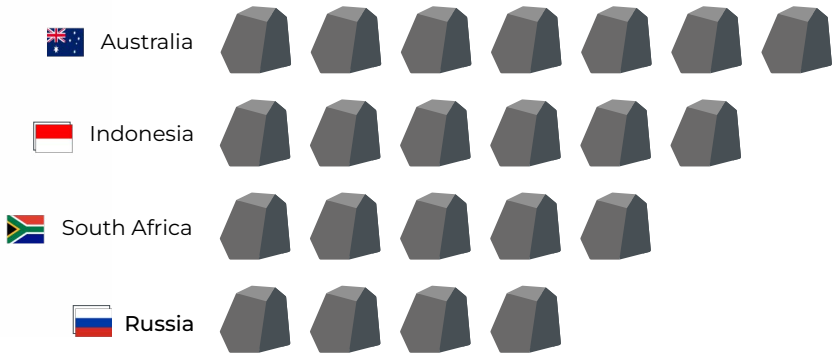
Before Russia's invasion of Ukraine in February 2022, Russia was the EU's largest source of imported energy, supplying 41% of the bloc's gas needs, 27% of its oil and 47% of its coal.

In 2021, a substantial 45% of the Russian federal budget was sustained by taxes and dividends from oil and gas companies. Additionally, revenues from oil and gas projects, supported by European and U.S. companies, have infused Putin's regime with nearly $100 billion since 2014, coinciding with Russia's invasion of Crimea and the initiation of the war in Donbas.



In 2021, Russia ranked as the **world's second-largest oil producer**, with an output of 536 million tonnes, trailing behind the United States at 711 million tonnes but slightly ahead of Saudi Arabia, which produced 515 million tonnes. In terms of global production, Russia contributed nearly 13%, coming second after the United States (17%) but maintaining a slight edge over Saudi Arabia (12%).

Russia was the world's **fourth-largest coal exporter** behind Australia, Indonesia and South Africa, and has the ability to supply both the Atlantic and Pacific basins. Total Russian volumes of coal consumed in Europe, Japan and South Korea combined, amounting to 100 mio t of the total 225 mio t of last year's coal exports, will be at risk in 2023.



Russia holds the largest proven reserves of fossil gas in the world. Gas production in Russia peaked in 2021, estimated at **763 billion cubic meters** (bcm). These volumes were directed into nearly 202 billion cubic meters of gas exports via pipelines and over 40 billion cubic meters of liquefied natural gas (LNG) shipments. Germany notably received close to 24% of Russia's total gas exports that year in physical terms.

According to the **IEA's global methane tracker**, Russia is the second biggest source of global energy-related methane emissions. Russia's oil and gas infrastructure, including production facilities and pipelines, is notoriously leaky and emits massive amounts of methane to the atmosphere, despite calls for the government to take action. There are also globally significant methane emissions from Russian coal mines. Ahead of the COP26 climate talks in Glasgow, the US and the EU launched a global methane pledge that aims to reduce methane emissions by nearly a third by 2030.

On February 24, 2022, the Russian Federation initiated a full-scale war of aggression against Ukraine that resulted in massive atrocities, war crimes and destruction of civilian infrastructure.

Russia's oil and gas industry is now shrinking. This means declining production volumes and export value, increasing production and transportation costs, and much slimmer profit margins. Russia's earnings potential is being eroded. The country's economic capabilities are being degraded. And sanctions **will become even more of a "big deal" as time passes**.

Russia is no longer an energy superpower.

Since then the world has changed dramatically. We are still in proccess of defeating the fossil fuelled aggressor but renewable energy has taken a drastic rise.

Russia's invasion of Ukraine has prompted the EU and its allies to take steps towards ending the imports of fossil fuels from Russia. As a result, the European Commission has released its REPowerEU strategy that foresees structural decline of gas demand in the EU and aims for the phase out of imports of Russian fossil fuels by 2027.

Latest data shows that Russian fossil fuels are particularly damaging for the climate. The **2019 study by the US National Energy Technology Laboratory** found that Russian gas piped to Europe emits more greenhouse gases than European coal which has been mined domestically.

According to the IEA's **global methane tracker**, Russia is the second biggest source of global energy-related methane emissions. Russia's gas infrastructure, including production facilities and pipelines, is **notoriously leaky** despite calls on Russian government to take action. Ahead of the COP26 climate talks in Glasgow, the US and the EU launched the **Global Methane Pledge** that aims to reduce methane emissions nearly a third by 2030. Nine of the world's top 20 emitters have signed onto the effort. Russia did not.

There are also massive methane emissions from **Russian coal mines**. In June 2022, private satellite monitoring company GHGSat released data on methane emissions from the Raspadskaya Mine in the Kemerovo region in southern Russia, in what has been described as the **biggest leak of methane ever detected** from a single facility. Satellite images have also shown that Russia has been flaring massive amounts of gas, which originally had been produced for exports to Germany.

> ***Razom We Stand strongly condemns the global push for gas infrastructure expansion, including LNG terminals and US Gulf coast 'sacrifice zone" formation given the dire environmental and climate consequences, as well as financial risks involved in creating stranded assets. With excess windfall profits stemming from market volatility worsened by Putin's brutal invasion in Ukraine, the gas industry must be subject to taxation and regulation, not supported with public subsidies for their expansion plans. In the world hit by the climate crisis there clearly should be no place for expansion of the gas infrastructure – not in Europe, not in the USA and definitely not in Russia or other petro-dictatorships.***

*Razom We Stand **position on natural gas**, 18 July 2023.*

In an open letter to the leaders of the G20 ahead of their gathering in India, Razom We Stand, together with 50+ civil society organizations across all parts of the world, urged heads of state to take immediate action to phase out imports of fossil fuels from Russia and exit from any joint ventures in oil and gas with Russian companies.

> ***We implore the G20 to get on track by fair and fast investing in clean energy technologies, including developing countries and post-war Ukraine to protect the economy and the planet. G20 governments must take immediate action to end reliance on Russian fossil fuels and stop the expansion of Russian oil and gas infrastructure, including LNG. G20 cannot afford to continue supporting Putin's war machine and contributing to unravelling climate catastrophe. The democracy and human lives are at stake***

open letter to the G20 Summit, 4 September 2023.

STATUS OF INTERNATIONAL SANCTIONS ON RUSSIAN FOSSIL FUELS AND THEIR IMPACTS

The ban on Russian coal imports, initiated by the EU and G7 nations in August 2022, impacts a significant quarter of Russia's global coal exports, resulting in an approximate annual loss of €8 billion in revenue for the country.

On December 5, 2022, the EU and G7 implemented a series of sanctions targeting Russian oil exports. Despite the EU's adoption of an **import ban** covering 90% of its current oil imports from Russia, the country still managed to accumulate EUR 177 billion in revenue from oil exports between December 2022 and October 2023.

CREA estimates indicate that approximately EUR 59 billion stemmed from crude oil exports to nations outside the price cap coalition from December 2022 to October 2023. This revenue from crude oil comprised 43% of all exports to countries beyond the price cap coalition. Following closely behind were oil products, the second-largest fossil fuel export type, amounting to 35% and valued at EUR 70 billion.

The situation surrounding Russian fossil gas exports remained largely unaffected by sanctions until November 2, 2023. The decline in oil and gas revenues stemmed primarily from a drop in the average price of Urals oil, plummeting from $82.9 per barrel (December 2021 to August 2022) to $55.9 per barrel (December 2022 to August 2023). Additionally, adjustments in energy production and export volumes, alongside the stabilization of gas prices, contributed to this downturn. Recent US sanctions targeting Arctic LNG 2 could potentially strip Russia of 3-4% of its LNG market share previously claimed by Novatek. Even the most conservative estimates by the IEA suggest a decline in Russia's global gas market share from 30% in 2021 to 15% by 2030.

In October, Gazprom **cut its 2023 investment program** to 1.97 trillion rubles ($21.22 billion), down from the initial 2.30 trillion rubles, as it redirects exports to China and Turkey, demanding substantial investments in gas transport infrastructure. Should the EU halt Russian LNG purchases, Gazprom anticipates a potential reduction of gas exports by one and a half times in 2023.

The Russian Chamber of Accounts highlights a significant decrease in export customs duty rates on oil and oil products, reducing by half compared to 2022. For instance, the duty rate on crude oil dropped from $52 per ton in September 2022 to $21.4 per ton in September 2023. Consequently, revenue from oil tax for the first nine months of 2023 plummeted by nearly half, from 1.37 trillion rubles in 2022 to 704 billion rubles in the same period in 2023.

In 2024, oil and gas revenues are expected to comprise roughly 33% of the federal budget's total income. However, despite adjustments in the Urals discount and currency fluctuations, the trends in tax benefits for oil production might counter the growth in oil and gas revenues. Essentially, Russia aims to sustain itself by moderating taxation related to oil production and trade, potentially hindering revenue growth from this sector.

According to the **World Bank**, Russia's GDP is anticipated to rise by 1.6% in 2023, attributed to robust consumption and increased government spending on military and social provisions. The nation's energy sector also experienced a milder contraction than expected. However, sustained growth is predicted to remain feeble, averaging only 1.1% annually between 2024 and 2025 due to limitations in capacity, tight labor markets, and restricted access to technology and equipment owing to sanctions. Should the sanctions ease, Russia's revenue from oil and petroleum products could potentially reach $178 billion in 2023 and $212 billion in 2024.

COVERAGE OF RUSSIAN FOSSIL FUELS IN THE EU SANCTIONS PACKAGES (2022)

1 Nothing on oil, coal and gas. Mainly restrictions on the **financial sector** *(banks and SWIFT).*

23/02

2 No concrete ban. The Council agreed to prohibit the sale, supply, transfer or export to Russia of specific goods and technologies in oil refining and will introduce restrictions on the provision of related services.

25/02

28/02-02/03

3 Nothing connected to the energy sector. Sanctions mainly related to **aviation and finance.**

15/03

4 Adopted restrictions ban on new **investments** in the Russian energy sector.

08/04

5 The package comprises a prohibition to purchase, import or transfer **coal and other solid fossil fuels** into the EU if they originate in Russia or are exported from Russia, as from August 2022.

30/05-31/05

6 Covers **crude oil, as well as petroleum products, delivered from Russia to member states**. A **temporary exception for crude oil** delivered by pipeline will be made. In case of sudden interruptions of supply, emergency measures will be introduced to ensure the security of supply.

In light of previous decisions to ban imports from Russia and the European Commission's presentation of the REPowerEU plan, EU leaders have called for:

- in the short term, their priorities involve diversifying supply sources and routes while ensuring energy remains affordable. Leaders encouraged the immediate use of the EU energy purchase platform before the next winter, tasked the Commission with investigating ways to control rising energy costs (including potential temporary price caps), urged the Council to progress the EU's external energy engagement strategy, and acknowledged the significance of domestic energy sources for supply security.
- **accelerating the deployment of renewables**, which will require immediately speeding up permit-granting procedures for renewables projects and improving innovation, capacity, skills and supply chains
- **further improving energy efficiency** wherever possible, and promoting energy savings
- completing and **improving interconnection of European gas and electricity networks by investing in infrastructure** for existing and new projects, including in future-proof electricity and hydrogen-ready gas interconnections throughout the EU and in renewable production capacity

21/07

7 The EU decided to extend the exemption from the prohibition to engage in transactions with certain state-owned entities as regards **transactions for agricultural products and the transport of oil to third countries**.

06/10

8 Introduces into the EU legislation the basis to put in place a **price cap related to the maritime transport of Russian oil for third countries** and further restrictions on the **maritime transport of crude oil and petroleum products** to third countries.

The measures entail a clear framework: **Maritime transport and related services for Russian crude oil or petroleum products are prohibited to third countries.** However, a price cap exemption allows these services if the products are bought below the set limit. Once unanimously decided by the Council, EU vessels will be banned from transporting these items to third countries. This price cap will significantly slash Russia's oil revenues amidst the inflated global energy market due to its war on Ukraine, potentially stabilizing global energy prices.

03/12

9 EU agrees on price cap at $60 per barrel.

The Council decided to set an oil price cap for **crude oil and petroleum oils** and oils obtained from bituminous minerals which originate in or are exported from Russia, at $60 per barrel.

16/12

O This package prohibits targeting new investments in the Russian energy sector by additionally **prohibiting new investments in the Russian mining sector**, except mining and quarrying activities involving certain critical raw materials.

COVERAGE OF RUSSIAN FOSSIL FUELS IN THE EU SANCTIONS PACKAGES (2023)

04/02

The Council decided to set **two price caps for petroleum products** falling under CN code 2710 which originate in or are exported from Russia.

These are the price per barrel at or below which petroleum products from Russia are exempt from the prohibition to provide:

- maritime transport of petroleum products to third countries
- technical assistance, brokering services, financing or financial assistance, related to the maritime transport of petroleum products to third countries

The price cap for petroleum products:

- traded at a **discount to crude** oil is set at **USD 45 per barrel**
- traded at a **premium to crude** is set at **USD 100 per barrel**

25/02

10 The Council introduced the **prohibition to provide gas storage capacity** (with the exclusion of the part of LNG facilities) to Russian nationals, to protect the security of gas supply in the EU, and avoid Russia's weaponisation of its gas supply and risks of market manipulation.

23/06

11 **Prohibition of access to EU ports and locks to any vessels that engage in ship-to-ship transfers**, if the competent authorities have reasonable cause to suspect that the vessel is either in breach of the ban on **importing seaborne Russian crude oil** and petroleum products into the EU, or is transporting Russian crude oil or petroleum products purchased above the price cap agreed by the Price Cap Coalition.

The same prohibition will apply to vessels when competent authorities have solid reasons to suspect that they illegally interfere, **switch off or otherwise disable their navigation system** when transporting Russian crude oil and petroleum products in breach of international agreements, rules and standards.

The temporary derogation granted to Germany and Poland for the supply of crude oil from Russia through the northern section of the Druzhba oil pipeline will end. However, the oil which originates in Kazakhstan or another third country will be able to continue to transit through Russia and imported into the EU via the Druzhba oil pipeline.

December

upcoming

12 Proposes to adopt new import and export bans , as well as new actions to narrow the oil price cap and to counter circumvention of EU sanctions.

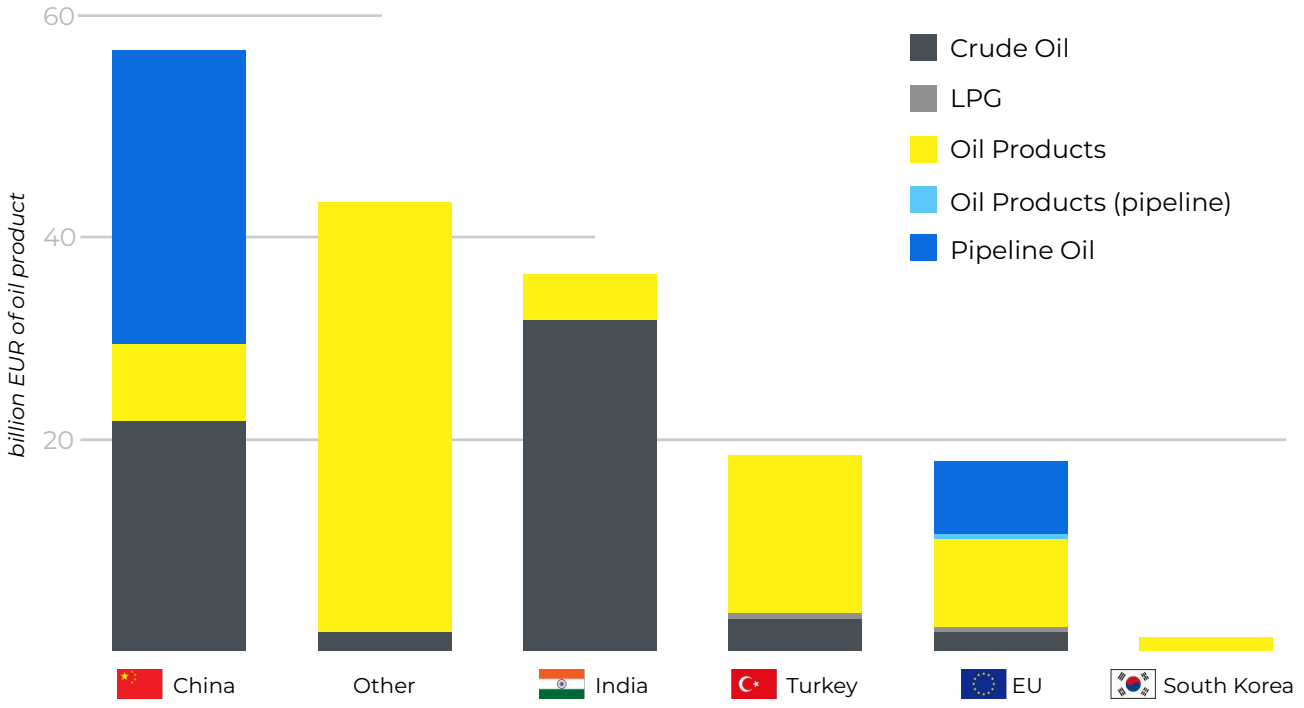
OVERVIEW RUSSIAN'S OIL EXPORTS

In 2021, the total value of EU energy imports from Russia reached approximately $150 billion, with $104 billion allocated to oil products. From the last quarter of 2021 to January 2022, imports from Russia fluctuated between 39,657 barrels and 49,698 barrels, accounting for 24% to 31% of total imports.

Since the introduction of sanctions, Russia's revenues from oil have been dominated by China (36% worth EUR 57 bn), India (23% worth EUR 36 bn) and Turkey (12% worth EUR 18 bn). The majority of Russia's oil exports to China have consisted of EUR 21 bn crude oil (38%) and EUR 27 bn oil via pipeline (48%).

Who is buing Russian oil?

December 2022 - October 2023



Source: CREA analysis using Kpler data

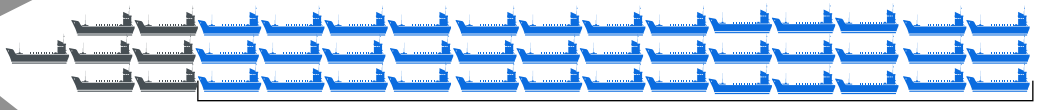
"Other" regions in the chart that buy large amounts of Russian fossil fuels, mostly oil products, include Malaysia (EUR 6.4 bn), UAE (EUR 6.2 bn), Saudi Arabia (EUR 5.4 bn) and Brazil (EUR 4.7 bn).

Who is buying Russian oil now?

China was the biggest importer of Russian fossil fuels in October 2023.

Russia's monthly revenue from crude oil exports to China increased by **4%** in October, amounting to **€190** million per day

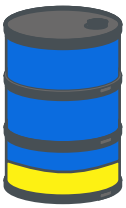
Since the sanctions were implemented, India has imported Russian crude oil worth **EUR 31 bn**.



87% of its oil imports from Russia consist of crude oil.

€0.84 billion

€0.15 billion



The port of Sikka in India was the foremost destination for Russian fossil fuel imports in October, with monthly import volumes estimated at EUR 1 bn. These imports were predominantly composed of crude oil (EUR 0.84 bn) and oil products (EUR 0.15 bn).

Loopholes in EU's sanctions on Russian oil

Refineries within the EU, such as those in Bulgaria, have leveraged exemptions on crude oil imports to access inexpensive Russian crude, subsequently distributing refined products within the EU.

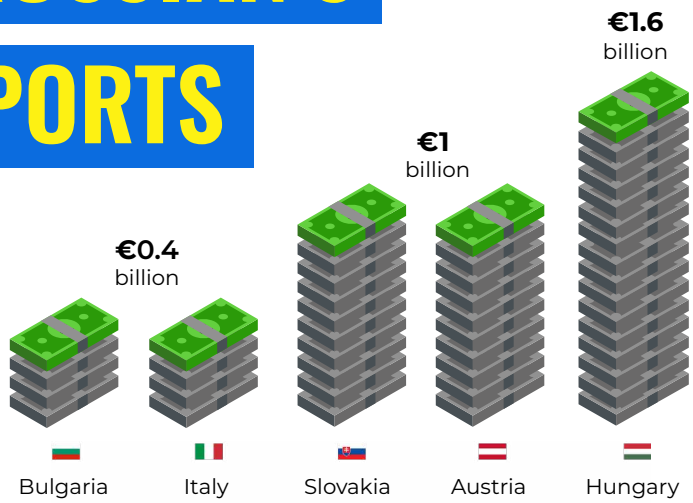
One prominent instance is the Neftochim Burgas refinery owned by Lukoil in Bulgaria. Despite Bulgaria's exemption for domestic supply security and fuel sales to Ukraine, this refinery exported oil products totaling EUR 242 million to the EU from December 2022 to October 2023. Notably, 91% (EUR 220 million) of these products originated from Russian crude oil.

A recent **CREA investigation** revealed that despite the EU's ban on Russian crude oil imports, Burgas has managed to import Russian crude oil, generating over EUR 1.1 billion in tax revenues for the Kremlin.

While the sanctions prohibit imports of Russian crude oil into the EU, there are multiple loopholes that allow countries not imposing sanctions on Russia (e.g. India, China and the UAE) to legally import Russian crude oil, refine it into oil products, and export those petroleum products to the EU.

The review of country derogations should be enforced with strict timelines to swiftly terminate them. Closing the refining loophole that enables Russian oil to circulate globally, partly driven by Western demand, can significantly diminish Russian revenue streams. Additionally, the EU should conduct a thorough investigation into Lukoil's Burgas refinery to assess potential violations of sanctions through the export of refined products to countries imposing sanctions.

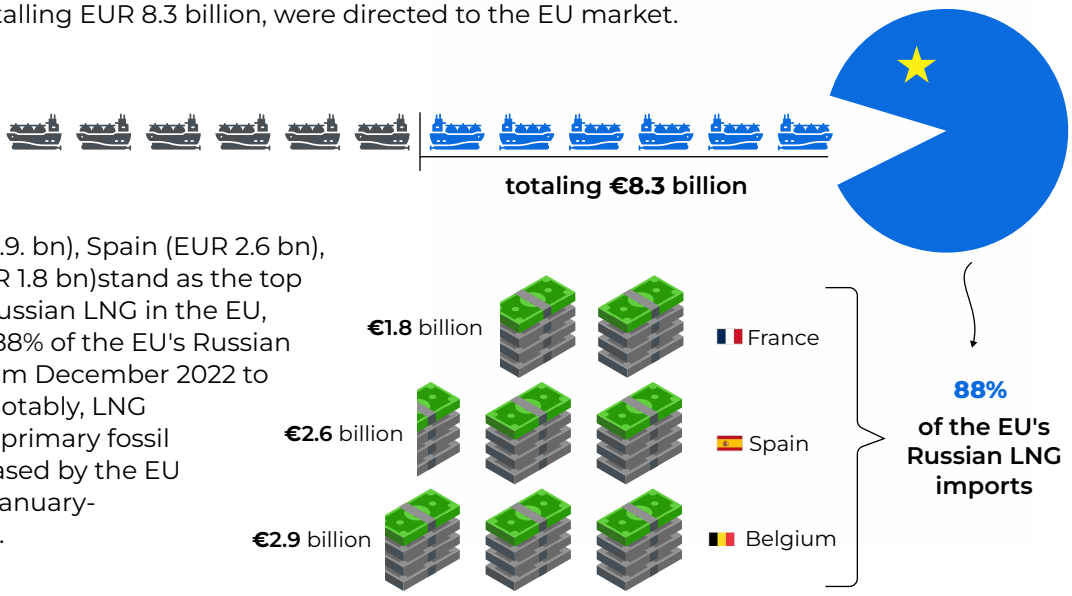
OVERVIEW OF RUSSIAN'S FOSSIL GAS EXPORTS



Regardless of the decrease in Russia's total fossil gas pipeline exports to Europe, from 64% in 2022 to 34% in 2023 in terms of volume, the European market retains considerable importance for Russia. Notably, during the period from January to August 2023, the largest direct buyers of Russian pipeline gas within the European Union were Hungary (EUR 1.6 billion) which started importing additional fossil gas quantities from Russia in August 2023, Austria (EUR 1 billion), Slovakia (EUR 1 billion), Italy (EUR 0.4 billion), and Bulgaria (EUR 0.4 billion). These figures exemplify the enduring significance of the European market in Russia's fossil gas export dynamics.

The EU's acquisition of EUR 4.9 billion worth of pipeline gas from Russia from January to August 2023 has emerged as a significant revenue stream for the Kremlin, potentially underpinning the financing of the full-scale invasion of Ukraine. Notably, there has been a discernible reduction in the export of Russian pipeline gas to other major partners. China, for instance, witnessed a EUR 2.1 billion decline in its purchases during the same period compared to the previous year, while sales to Turkey experienced a notable EUR 5 billion decrease. These trends underscore the enduring importance of the EU gas market for Russia's exports.

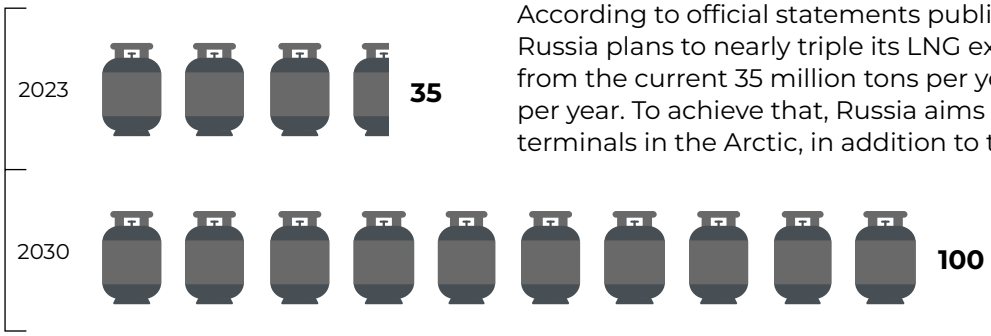
Russia saw a surge in revenue from LNG exports, particularly as its LNG remains unsanctioned by the EU. From December 2022 to October 2023, half of Russia's LNG exports, totalling EUR 8.3 billion, were directed to the EU market.



Belgium (EUR 2.9. bn), Spain (EUR 2.6 bn), and France (EUR 1.8 bn)stand as the top consumers of Russian LNG in the EU, accounting for 88% of the EU's Russian LNG imports from December 2022 to October 2023. Notably, LNG constituted the primary fossil fuel type purchased by the EU from Russia in January-November 2023.

In October 2023, Russia experienced a significant 27% increase in LNG exports to Europe. The EU continued as the primary purchaser, acquiring 48% of Russia's LNG exports in October. China followed at 24%, and Japan at 17%.

Russia's second-highest revenue from gas exports has come from China (EUR 9 bn). Japan is the third highest importer of Russian gas in the same period (EUR 2.7 bn).



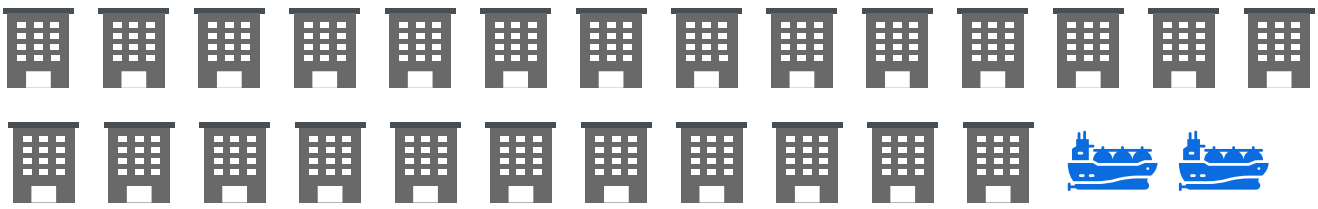
According to official statements published on March 9, 2023, Russia plans to nearly triple its LNG export capacity by 2030, from the current 35 million tons per year to 100 million tons per year. To achieve that, Russia aims to build four new LNG terminals in the Arctic, in addition to the existing Yamal LNG.

The cumulative emissions linked to Russian LNG projects could reach 16.5 Gt CO2e, equating to 8% of the world's remaining carbon budget for a 1.5°C target. The proposed expansion of Russian LNG exports could significantly hinder the objectives outlined in the Paris Agreement.

To access global markets, Russia transports its LNG from the Arctic to pivotal transshipment hubs using specialized "icebreaker" LNG carriers. However, Russia has a restricted count of these icebreaker carriers, and their operational costs surpass those of conventional vessels.

For the operational Yamal LNG project, transshipment services continue at the ports of Zeebrugge (Belgium) and Donges (France), allowing the costly icebreaker LNG carriers to bypass lengthy voyages to China or India. This necessitates the use of third-party conventional LNG carriers by Russia. Furthermore, this arrangement enables increased LNG export capacity from Yamal LNG, as the icebreaker LNG carriers spend significantly less time away.

On September 14, 2023, the US Department of State expanded the sanctions regime by officially designating 37 entities engaged in developing Russia's LNG production and potential export capabilities, including two associated vessels - Koryak FSU and SAAM FSU. These designations included entities and individuals involved in critical energy projects and related infrastructure development, including Russia's Arctic LNG 2, led by private company Novatek. Furthermore, the list included entities engaged in procuring materials and technology for future energy projects, areas where Russia has historically depended on expertise and technology from foreign companies.



On November 2, 2023, the US Department of State also designated as a target for sanctions ARCTIC LNG 2 LLC, the operator of the Arctic LNG 2 Project, pursuant to section 1(a)(i) of Executive Order 14024.

Consequently, in accordance with Executive Order 14024, all property and interests in property of the designated persons that are in the United States or in possession or control of U.S. persons are blocked and must be reported to the Department of Treasury's Office of Foreign Assets Control (OFAC). Furthermore, any individuals or entities holding direct or indirect ownership of 50% or more by blocked individuals or entities are also subject to being blocked.

The sanctions adopted by the US State Department against Arctic LNG 2 are blocking European and Asian countries from buying the project's LNG, which was scheduled for deliveries early next year.

Office of Foreign Assets Control of US Treasury under **General Licence NO. 76** has authorised the wind-down of transactions involving blocked entities, including ARCTIC LNG 2 LLC, with an exemption valid until January 31, 2024. Any transactions involving ARCTIC LNG 2 LLC after January 31, 2024, would be considered violations of US sanctions.

To maintain consistency with the sanctions policy against Russia and the EU's climate commitments, EU member states should adopt an exit strategy from importing and trading Russian LNG and take timely steps to implement it.

As a first step, EU Member States should immediately ban transhipment of Russian LNG in their ports that further travel onwards to non-EU destinations. Russia is reliant on these ports for the logistics and storage of LNG that travel to non-EU destinations. Banning transhipment of Russian LNG that travels onwards to non-EU countries would make logistics of LNG exports difficult without impacting EU energy security or prices whilst lowering Russia's profits & volumes.

Further steps should be directed to phase out of Russian LNG in Europe. Reducing reliance on LNG imports from Russia could provide greater energy price stability for EU member states.

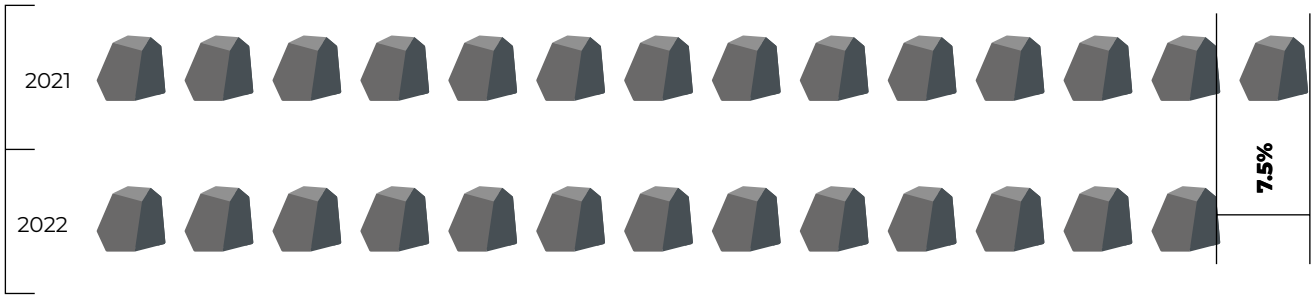
European companies should be prohibited from supplying engineering services and equipment for the construction of ice-class LNG tankers to be used in Russian LNG projects, including Arctic LNG 2, whether or not they are built in Russia.

The European Commission should broaden the list of banned items for export to further limit Russia's capacity to develop new upstream gas projects and hinder its ability to build infrastructure along the Northern Sea Route. EU member states should ban their suppliers from signing new gas contracts from Russia's LNG Arctic-2 to reduce long-term reliance on Russian fossil gas.

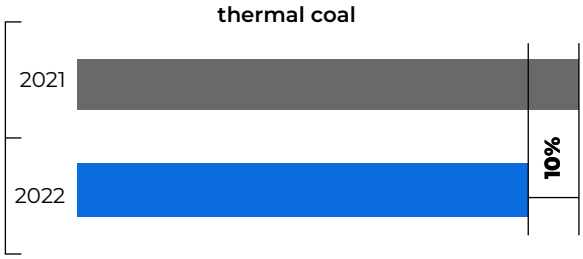
OVERVIEW OF RUSSIAN'S COAL EXPORT

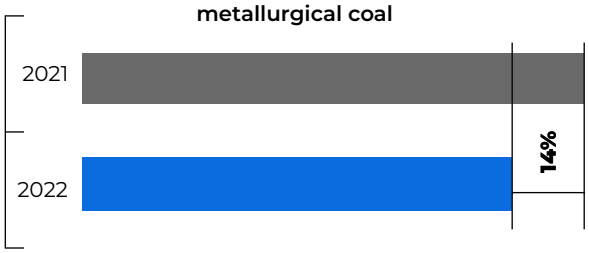
Coal embargo (announced by the EU in May 2022)

Result: coal exports declined by 7.5% in 2022 compared to 2021 according to Russia's official statistics. The actual drop is likely to be even higher.



According to the IEA estimates published in July 2023 report, in 2022, Russian thermal coal exports decreased by 10%, while metallurgical coal – by 14%.





An embargo on Russian coal was announced by the EU and G7 in May 2022 and implemented in August 2022, resulting in an annual decline of Russia's coal exports by 7.5% in 2022 compared to 2021. According to the July 2023 report of IEA, in 2022, Russian thermal coal exports decreased by 10%, while metallurgical coal – by 14%.

The decline reflected the loss of the European, and gradually also the Japanese, markets, and shows, thus, that initially, the coal embargo had an effect on Russian export volumes.

During 2023, Russian coal producers have secured alternative markets in Asia, and therefore, the impact of the sanctions is less significant in terms of the export volumes. Coal exports from Russia had increased by 7.1% during Jan- Sep 2023 compared to the same **period in 2022**, and the forecasts for 2023 range **between 2.5** - **5.3%** above the 2022 level.

Despite the declining volumes of exports in 2022, the Russian coal industry made record profits in 2022. The global market price for thermal coal was growing already in January 2022, and it jumped dramatically after Russia invaded Ukraine, remaining between 350 and 410 USD/T for the following year. This also allowed the Russian coal producers to export their coal at 50% discount – and in some cases even cheaper – in the search for new markets. For instance, in Russia's main coal-producing region, Kuzbass, the year 2022 has been labelled as 'the Golden Year'. The coal industry accounted for over two-thirds of contributions to the regional budget.

The Russian coal industry saw a sharp profit decline in 2023, marked by plummeting prices and increased transport expenses. Na Gora coal analytics noted a 53% drop in sector profits between January and July 2023 compared to the same period in 2022. CREA's data further shows a 20% fall in exported coal value between August and September 2023, notably to India. While prices have ranged between $125 and $150 USD/ton in the latter half of 2023, they remain notably higher than the **$50 to $120** USD/ton range seen in the previous decade, **limiting significant discounts since mid-2022**.

Transport capacity remains the bottleneck of the Russian coal sector's 'turn to the east' strategy and reduces the profitability of exports due to much longer and more expensive export routes. There is much more demand for Russian coal in Asia than Russia can transport. Thus, in terms of rail capacity to the east, the Western sanctions have caused congestion and domestic competition between coal-producing regions as well as between coal and other export products, such as metals and oil, and continue to do so, eating up the profits. Regardless of financial losses, coal transport costs have previously been heavily subsidised by the Russian Railways Monopoly (RZD) and some regions have given guarantees of annual transport volumes to ports. In 2022, abolishing the quotas resulted in lower transport volumes for coal, and as a result, they were reintroduced, and there are social pressures to increase them. In 2023, Kuzbass was guaranteed to transport 53.1 mln tons to eastern ports, and now the region is trying to increase this amount by 4%, to 55 mln tons, for 2024. Coal export quotas have also been established for the republics of Buryatia, Sakha, Tyva and Khakassia.

RZD freight railway tariffs were indexed by 11% from June 2022 and a further 10% from January 2023. Moreover, from June 1, 2022, the Russian government **eliminated the railway transport cost-related subsidies**. The additional costs increased the loaded tariff. For instance, coal delivery from Kuzbass to Vanino, Murmansk and Taman increased by 60%, 52%, and 47%, respectively. Further, the cost of shipping coal from Kuzbass to the Asian markets is more than **three times that** of previous routes to Europe.

The government also introduced coal export duties tied to the ruble exchange rate starting from October 1, 2023. As a result of this some coal mining companies found themselves on the brink of profitability, especially if they transport coal to the east through the southern port of Taman. **Russian coal has been sold at a premium towards the end of 2023**. This may indicate declining profitability due to increased transport costs and fiscal burden. In autumn 2023, the reduction in discounts that supported Russian supplies in 2022 was making **Russian coal less attractive** compared to its peers.

In September-October 2023, 73.4% of the ships transporting coal from Russia were owned or insured in countries implementing sanctions on Russia. In August 2022, the EU prohibited EU companies from transporting or providing insurance and financial services to Russian coal. However, this ban was lifted in September 2022 'to combat food and energy insecurity worldwide.' The UK prohibited the direct or indirect provision of technical assistance, financial services, funds, or brokering services related to Russian coal and **coal products to be delivered to the UK** and Switzerland prohibited the transport and provision of related services, **including financial services**.

The Russian coal sector has its regionally specific features, and therefore, the country level analysis fails to capture many details about the condition of the sector. From the regional point of view, there are losers as well. Whilst the sector overall has been increasing its exports, the main coal producing region, Kuzbass, exported some 4.5% **less in Jan-Oct 2023** than during the same period in 2022. This illustrates the importance of the transport capacity available to the east; regions closer to Asia account for the better results, which bring the total exports to growth. Also, the Republic of Khakassia, where the **coal sector contributed about 40%** of exports in 2021, is in clear decline due to limited access to rail capacity, as in 2022, coal production **declined by 10% compared to 2021**.

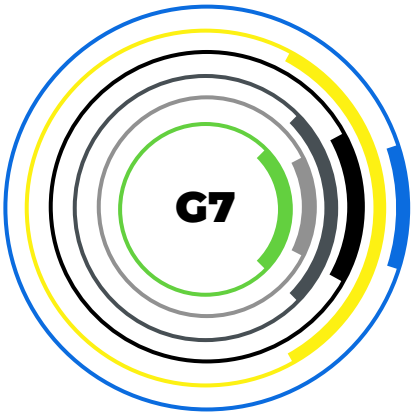
There are also technological sanctions in place – a ban by the EU on the export, supply and delivery of items that might contribute to Russia's advancement in several sectors, including coal. This might affect efforts to modernise Russian coal production, though Russia is seeking alternative deliveries, especially from China. However, it is difficult to estimate how efficiently the technology sanctions work; still, in June 2023, the Russian producers of coal sector equipment continued complaining that the Kuzbass coal companies are not purchasing their products, which are **being developed to advance import substitution**.

The effectiveness of sanctions against the Russian coal sector could be improved by banning European companies from transporting or providing insurance and financial services to Russian coal when transported to third countries. Once introduced, they can disrupt Russian coal exports, and it will take some time until Russia adapts to this and finds alternatives. More research is needed to establish the leaks of technology sanctions on the coal sector via third countries.

Asian demand for Russian coal that is compensating for the European deliveries cannot be sanctioned directly. The EU could further reduce its dependence on coal to ease the price pressures on coal. Low global coal prices could cause more Russian coal producers, who are facing increasing transport costs and fiscal burden, to lose the profitability of exports to Asia. Nevertheless, Russian coal miners might be eager to deliver coal to Asia even if they incur losses for some time, to snap up a higher market share.

G7 ROLE IN COUNTERING RUSSIA'S WAR OF AGGRESSION

The G7 is a crucial group of nations because it comprises some of the world's most powerful and influential economies. These countries play a significant role in shaping global economic trends, political developments, and environmental policies.



- **Population:** The combined population of the G7 countries is approximately 770 million, representing about 10% of the world's population.
- **Wealth:** The G7 economies account for about 34% of global GDP, making them the world's largest economic bloc.
- **Fossil Fuel Reserves:** The G7 countries hold approximately 16% of the world's proven oil reserves, 25% of natural gas reserves, and 15% of coal reserves.
- **Emissions**: The G7 countries collectively emit about 25% of global carbon dioxide emissions, contributing significantly to the climate crisis.

Role G7 in countering Russia's war of agression

The G7 has reacted strongly to Russia's war in Ukraine, imposing a wide range of sanctions on the country and its leaders. They have also provided significant financial and military aid to Ukraine.

I. G7 Leaders' Statement on Ukraine

> *Since February 2022, we have adopted sanctions, import bans, and other measures to reduce our dependence on Russia's source of energy. In addition, in Elmau, we agreed to launch a price cap on Russian oil and petroleum products.*
>
> *We will continue to reduce Russia's revenue to finance its illegal aggression by taking appropriate steps to limit Russia's energy revenue and future extractive capabilities, building on the measures we have taken so far, including export bans and the price cap for seaborne Russian-origin crude oil and refined oil products*

II. Oil price cap policy

Introduced in December 2022 by the G7 countries and their allies (a coalition of service providers)

Two main objectives:

is an integral part of a broader sanctions package aimed at reducing Russia's foreign exchange income and reducing its ability to wage war in Ukraine.

to allow Russian oil to remain on the world market in the face of the impending total embargo of the EU and the ban on services.

III. What is covered by the price cap?

Price caps of **$60** per barrel for Russian seaborne crude exports

$45 per barrel for lower-value **petroleum products** like fuel oil,

$100 per barrel for higher-value products like gasoline and diesel.

IV. Reviews of the oil price cap scheme

(September - November 2023)

Most Russian crude is trading above the limit because of a rally in global crude prices.

Russian producers have found ways to sell oil using fewer Western ships and insurance services, making it difficult for the West to enforce the existing price cap because the companies facilitating the trade are outside of their remit.

The G7 foreign ministers reiterated their commitment to bolster sanctions against Russia and lend support to Ukraine during a session focused on the Ukrainian situation held in Tokyo.

Critique of the G7, especially the USA and European Union members, has been widespread as sanctions have failed to stop money flowing from Western countries into Russia's war budget.

The U.S., EU, and other countries enforcing the oil price cap have neglected their commitment to review and maintain the cap at least 5% below the average market price for Russian oil. Despite the Urals crude price soaring above the USD 60 per barrel cap since early July 2023, tankers owned or insured by the price cap coalition still handle the majority of Russian oil, as per CREA's analysis.

Price cap efficiency assessment

Contrary to ominous forecasts, setting the price cap for Russian oil at $60 per barrel appears to have four broad yet temporary effects:

1. Studies show that the Kremlin's oil-related revenues fell by 49% compared to the period March-November 2022 and by 23% compared to the period from January 2021 to January 2022.
2. Oil production volumes in Russia have increased, not decreased, following the adoption of the policy.
3. The introduction of the EU embargo has not caused global oil prices to rise but has even stabilised prices.
4. Most Western service providers remained engaged in trade with Russia

The reality is that the **original** EU sanctions would have had a significant impact on Russian oil exports, at least initially. A primary goal of the price cap was to **blunt** those sanctions and prevent a large drop in Russian exports, and these goals have taken precedence over efforts to reduce Russia's oil revenue and contain its proliferation to other markets.

The imposition of the $60 price cap saw the price for Urals crude oil drop to its lowest level in January 2023 ($45). Since July 2023, the price of Urals crude has rebounded, rising to a high of $84 in September 2023.

In October, the average price for the Russian Urals was USD $76.5 per barrel — a month-on-month decrease of 2%. The most important way to cut Russia's export revenues further will be to drive down the oil price cap. Lowering the price cap would be deflationary, reducing Russia's oil export prices and inducing more production from Russia to make up for the drop in revenue.

A price cap of USD $30 per barrel (still well above Russia's production cost which **averages USD $15 per barrel**) would have slashed Russia's revenue by EUR 59 bn (49%) since the sanctions were imposed until the end of October. October revenues alone would have seen a reduction of EUR 7.82 bn or 52% with a USD 30 price cap per barrel.

The persistence of vessels owned or insured by G7 and European countries in loading Russian oil at all Russian ports stands as compelling evidence of violations against the price cap policy. Despite clear evidence of sanction breaches—such as oil carried on tankers owned or insured by price cap coalition countries trading above the USD 60 per barrel cap — **public information about enforcement agencies implementing penalties** against shippers, insurers, or vessel owners remains scarce. Implementing penalties against violating entities would elevate the perceived risk of being caught in such actions.

G20 POLICIES ON OIL AND GAS, 2022-2023

I. Role of G20

Comprising 85% of the global GDP ■ and two-thirds of the world's population ■, the G20 collectively contributes to around 81% of global CO2 emissions ■, which reached 38.0 billion tonnes in 2021.

II. G20 Summit in India, 9–10 September 2023

Softened Stance on Ukraine Conflict - The G20 refrained from directly criticizing Russia for the war in Ukraine, marking a departure from its prior condemnation and demand for Russia's withdrawal.

Incremental Progress on Climate Change - Leaders pledged to triple global renewable energy capacity by 2030 and acknowledged the necessity to reduce unabated coal power. However, concrete plans or policies to achieve these goals were notably absent, with the estimated $4 trillion yearly needed for green energy transition remaining unaddressed.

So far the G20 nations were hindering their own energy security, and the urgently needed decarbonisation of economies by allowing their companies to participate in oil and gas joint ventures with Russia and providing inefficient and harmful public subsidies that incentivise higher demand for fossil fuels.

The outcomes of the G20 Summit were closely monitored in anticipation of the upcoming COP28 U.N. climate summit in the United Arab Emirates.

III. G20 Bali, November 2022

Condemnation of Russian Aggression - Earlier meetings were hindered by Russian opposition to addressing the conflict in Ukraine. However, during this summit, leaders unanimously deplored Russia's aggression and demanded its unconditional withdrawal from Ukraine.

Climate Change Commitments - G20 members reiterated efforts to cap global temperature rise at 1.5 degrees Celsius, aligning with the 2015 Paris Agreement. During the sidelines of the summit, the United States, Japan, and partners pledged $20 billion to assist Indonesia in expediting the closure of coal power plants and advancing the sector's emission reduction targets by 2030. President Biden and President Xi pledged to resume cooperation on climate change.

IV. G20 Nations Sanctioning Russia's Oil and Gas

United States | United Kingdom | France | Italy | Australia

European Union | Canada | Germany | Japan

Of the EUR 56.8 bn oil imports into the EU, an estimated EUR 6.5 bn (11%) still consisted of oil products derived from Russian origin crude between December 2022-October 2023.

V. G20 Nations not imposing sanctions on Russia

Turkey

Remains the third biggest buyer of Russian oil (12% worth EUR 18 bn) and the **largest buyer of LPG** (purchasing 52% of Russia's LPG exports). The Ceyhan Delta Rubis Petrol refinery in Turkey relies entirely on Russian crude for its operations and exports EUR 1.3 bn of oil products derived from Russian crude into the EU.

Brazil

Continues to buy large amounts of Russian fossil fuels, spending an esteemed EUR 4.7 bn in the last year.

Mexico

A trading unit of Lukoil PJSC is **launching a Mexico operation** as the oil giant seeks new markets for Russian products under widespread sanction.

India

India increased oil imports from Russia by 11 Times: on August 9, 2023, 23% of Russia's oil revenue came from India, worth EUR 36 bn.

China

Continues to be Russia's top buyer of fossil fuels, the majority of Russia's oil exports to China have consisted of EUR 21 bn crude oil (38%) and EUR 27 bn oil via pipeline (48%). It also exports 2nd biggest importer of Russian fossil fuel.(24%)

South Africa

Bilateral trade between Russia and South Africa increased by 16.4% in 2022 compared to the previous year and reached **US1.3 billion**. Over the past two years, exports to the African continent of Russian crude oil, petroleum products and LNG have **increased by 2.6 times**. Russia's key investments in Africa are in the oil and gas sectors. Several Russian companies, such as Gazprom, Lukoil, Rostec, and Rosatom, are active in Africa.

 Saudi Arabia

According to CREA reporting, Saudi Arabia has spent EUR 5.4 bn on Russian fossil fuels (mostly oil) in the last year.

 Argentina

Russia's largest producer of liquefied natural gas (LNG) Novatek (NVTK.MM) last year **offered technology to build a plant to produce the gas** from Argentina's Vaca Muerta field, a highly-placed source familiar with the proposal said, though the talks have since broken off.

 South Korea

(Implemented limited sanctions against Russian banks and export controls on various strategic items to Russia): South Korea continues to increase LNG imports from Russia, the world's third-largest importer of LNG, as well as purchasing 12% of Russias coal exports.

The main outcomes highlighted a softened approach towards addressing the aggression in Ukraine, with a deliberate avoidance of direct criticism aimed at Russia and omitting any mention of the role fossil fuels play in funding the war.

Progress on climate change saw commitments to triple global renewable energy capacity by 2030 and acknowledgement of the need to phase down unabated coal power, although concrete plans and funding strategies for achieving these goals were notably lacking.

The G20 also shows division among member countries, with several, including the US, EU, UK, and others, imposing sanctions on Russian oil and gas, while others, such as China, Brazil, India, and Turkey, have yet to implement such measures, showcasing a split stance within the group regarding sanctions.

WARS AND CONFLICTS CONNECTED TO FOSSIL FUELS

There are **52 nations** with a dictator or authoritarian regime ruling the country: 3 in **Latin America** and **South America**, 27 in **Asia** and the Middle East, and 22 in **Africa**.

The war between Ukraine and Russia is not the only war that is fueled by fossil fuels. Nations heavily **reliant on fossil fuel exports** and lacking diversification tend to fall into authoritarian regimes. Gas, oil, and coal extraction present substantial market entry barriers, facilitating monopolization and easy appropriation of wealth by political elites. More often a curse than a blessing, fossil fuels frequently breed oligarchy and empower dictators who incite aggressive conflicts.

YEMEN

The Yemeni civil war began in 2014 when Houthi insurgents, Shiite rebels with ties to Iran, seized control of Yemen's capital and largest city, Sana'a. Their demands included lower fuel prices and a change in the government structure.

Since 2014, Yemen has been embroiled in a civil war between the Saudi-backed government and the Houthi rebels. Saudi Arabia has repeatedly conducted airstrikes targeting Houthi positions, while the Houthis retaliated by attacking facilities owned by Saudi Arabia's oil giant, Aramco. A pivotal event occurred in July 2018 when the Houthis attacked two Saudi oil tankers in the Red Sea, prompting Saudi Arabia to temporarily halt oil shipments via the Bab al-Mandeb Strait.

The country's location at the Bab el-Mandab, **a key chokepoint in international shipping**, makes Yemen important in terms of international energy trade.

LIBYA

Libya’s crude oil production averaged nearly 1.2 million barrels per day (b/d) during 2021. In late December 2021, **armed militants shut in an estimated 0.4 million b/d of crude oil production**. In April 2022, protesters across the country began to blockade several major ports and oil fields in Libya, causing production to fall to around 0.5 million b/d by July 2022. According to our Libya Country Analysis Brief, Libya’s crude oil production has continually fluctuated because of armed conflict and political instability since Libya’s first civil war, which began in 2011.

SOUTH SUDAN

Conflict has persistently simmered in South Sudan, characterized by ongoing disputes over oil resources and territorial claims.

Earlier this year, South Sudan experienced a significant climate emergency marked by severe flooding of the Nile and Lol Rivers in May. This calamity impacted eight of the nation's ten states, leaving over 800,000 people grappling with the aftermath. Despite its magnitude, this crisis received minimal attention in international news coverage.

CONCLUSIONS

Russia's brutal invasion in Ukraine and persistent efforts to undermine international law confronts the world with the spectre of a grimmer future, where both natural and social systems could collapse and violence become the dominant force.

Since launching its full-scale war of aggression against Ukraine on 24 February 2022, Russia has amassed more than €550 billion ($604 billion, £476 billion) in **revenue from fossil-fuel exports**. This colossal flow of money has made it possible for Russia to put its economy on a war footing and increase the production of weapons used in the brutal war against Ukraine, while also incentivising further expansion of fossil fuel infrastructure in Russia and locking in further GHG emissions for decades.

Continuation of Russian fossil fuels expansion and gas exploration in the Arctic and increased production may also increase geopolitical tensions in the region and lead to militarization and deployment of new types of weapons in the most environmentally sensitive region of the planet, including new nuclear weapons.

The international community must respond with decisive action to reduce Russian fossil fuel production and exports, which are a key source of Russia's war of aggression and a major driver of the climate crisis. The effectiveness of the embargo on Russian coal and oil in the EU shows the path of stronger international sanctions against all Russian fossil fuels.

We are calling governments and representatives at COP28 to:

- Aligning national energy and climate policies with the demands of climate science and international justice by implementing effective policies to eliminate dependencies on Russian fossil fuels, including LNG.
- Ensure a just, rapid, complete and financed phase-out of all fossil fuels, starting with an immediate end to fossil fuel expansion.
- Exit from all existing fossil fuel projects and joint ventures with Russia, including Arctic LNG-2 and Sakhalin-2.
- Impose an immediate and effective ban on new investments in Russian fossil fuel infrastructure projects.
- Prohibit the provision of transport, insurance and any other financial services for the unsanctioned export of Russian fossil fuels;
- Enforce sanctions and technology export controls against the Russian LNG sector in order to block Russia's plans to expand LNG production and, in particular, to stop the Arctic LNG-2 project, limit the transfer of LNG from Yamal LNG.
- Strengthen and enforce embargoes on all Russian fossil fuels.
- Impose permanent international sanctions against the Russian fossil fuel industry. World peace and climate action need consistent efforts to keep Russian fossil fuels in the ground and particularly prevent its expansion along the LNG vector.