

Swedish Imports of Russian LNG: A Funding Source of Aggression in Ukraine

October 16, 2023

Summary

- Fossil fuel exports are an essential source of budgetary revenue for the Russian Federation. As such, they are the key enabler of the military buildup preceding Russia's full-scale invasion of Ukraine and of the gargantuan military spending required to sustain the illegal invasion. Historically, fossil fuel prices and Russia's military spending are highly correlated.
- While the EU has banned the imports of coal and seaborne oil, and the imports of oil and natural gas via pipeline have fallen to a fraction of pre-invasion levels, LNG imports have increased since the invasion. Combined with high prices, LNG has gained prominence as the single most valuable fossil fuel export from Russia to the EU as well as to Sweden in 2023.
- Purchases of LNG from Russia contribute to the country's federal budget through the Mineral Extraction Taxes and Profit Taxes. Approximately 22% of the value of LNG cargo is appropriated by the Kremlin as Mineral Extraction Tax alone.
- Following Russia's invasion of Ukraine until the end of September 2023, Sweden imported 95,000 tonnes of LNG from Russia via direct shipments valued at EUR 82.6 million. Sweden's imports of Russian LNG since the invasion of Ukraine contributed an estimated EUR 18 million in Mineral Extraction Tax alone received by the Russian Ministry of Finance. Sweden received 26 shipments of LNG directly from Russian ports since Russia's full scale invasion.
- As an example of these shipments, the Coral Energy vessel (IMO number 9617698) dispatched an estimated EUR 1.8 million worth of LNG when it arrived at the Nynashamn port in Sweden in September 2022 which could be estimated to correspond to around EUR 400,000 in Mineral Extraction Tax alone received by the Russian Ministry of Finance.

Since Russia's full scale invasion of Ukraine on February 24, 2022, fossil fuel revenues have contributed to Russia's budget and have provided crucial financial support for Russia's military aggression on Ukraine.

The EU has reduced its imports of Russian fossil fuels through the implementation of multiple rounds of sanctions. LNG is the largest fossil fuel type that the EU purchased in value terms from Russia in 2023 (between January and September). The EU has purchased an estimated EUR 21.7 billion worth of Russian LNG since the beginning of the full-scale

invasion of Ukraine¹. These purchases have contributed to around EUR 4.8 billion in Mineral Extraction Tax alone received by the Russian Ministry of Finance.

Crucial role of fossil fuel revenues in Russia's federal budget

According to the Ministry of Finance of the Russian Federation (MOF), the state budget's fiscal framework is underpinned by two primary revenue pillars: income streams from fossil fuels and those from non-fossil fuel sectors. An analysis² of data dating back to 2006 shows that fossil fuel revenues play an indispensable role in Russia's fiscal revenue, accounting for an approximate 42% share of the Russian Federation's overall revenue.

In the fiscal year 2022, non-fossil fuel revenues stayed at the same level, mirroring the levels in 2021. Conversely, fossil fuel revenues experienced a notable surge of 27%. Military expenditures witnessed a substantial 24% increase compared to the levels observed in 2021. The imperativeness of upholding this balanced fiscal stance has been further accentuated by a notable upswing in resource allocation toward military spending prompted by the full-scale military intervention in Ukraine.

Since Russia's full scale invasion of Ukraine on February 24, 2022, fossil fuel revenues have not only buttressed the budget but have also provided crucial financial support for Russia's military aggression on Ukraine.

The initial disruption in the flow of natural gas via pipelines to the European Union (EU), leading to market perturbations and associated revenue setbacks, was deftly countered by a strategic pivot towards increased reliance on LNG shipments, primarily targeting the EU. According to CREA estimates, EU member states have disbursed a cumulative sum of EUR 21.7 billion to Russia in exchange for LNG imports since the inception of the invasion. Between January and September 2023, LNG made up over a quarter of all fossil fuels purchased by the EU from Russia.

While Russian natural gas exports via pipeline have lost most of their market share in the EU, LNG exports have surged in prominence. In 2022, Russian-sourced LNG accounted for a

¹This is based on CREA's data which applies pricing models to the Kpler flows providing data on the volumes of seaborne LNG that are transported from Russia to the EU. The time period mentioned is from Russia's full-scale invasion of Ukraine until the end of September 2023. Data on shipments are recorded on the date of arrival into their port of destination. CREA's pricing models aim to estimate actual trade prices using observed relationships between historical trade prices and market indexes (i.e. TTF in the case of LNG). More details are available here <https://www.russiafossiltracker.com/methodology/>.

²Ministry of Finances of the Russian Federation, "Краткая ежегодная информация об исполнении федерального бюджета (млрд. руб.)" [Brief Annual Information on the Execution of the Federal Budget (BillionRUB)], https://minfin.gov.ru/ru/document?id_4=80041-kratkaya_ezhegodnaya_informatsiya_ob_ispolnenii_federalnogo_byudzhet_mlr_d_rub (accessed October 3, 2023).

notable 37% of the total gas export volumes imported into the EU. Fast-forward to 2023, and this share has elevated to a formidable 47%. In summary, Russian exports of LNG to the EU have increased by 26% in volume terms since the full-scale invasion of Ukraine.

Analysis based on CREA data reveals that spanning from the onset of the invasion until the accounting date of October 6, 2023, the Russian Federation has [amassed](#) a substantial EUR 433 billion in revenue generated from fossil fuels, with LNG autonomously contributing EUR 39 billion.

An overview of Russian LNG taxation

The Mineral Extraction Tax (MET) is a crucial component of Russia's fiscal policy. It is levied on the extraction of natural resources, including oil, gas, and other minerals, and is based on volume or weight. MET plays an important role in revenue generation for the government, mainly due to the state's substantial natural resource reserves.

Revenue from the MET significantly contributes to funding various government sectors, including military and national security expenditures. This form of taxation is a cornerstone of Russia's budgetary framework, ensuring a steady income stream for essential state services and economic stability. Natural gas represents a significant portion of the natural resources subject to taxation and accounted for 18% of the total MET in 2022.

In addition to MET, other forms of taxation, particularly profit taxes, apply to LNG companies, contributing substantially to the budget. LNG enterprises currently bear a 20% profit tax which is slated to increase to 34%³ in 2023.

According to data compiled by Energy Intelligence⁴, between February 2021 and May 2022, Russian companies have paid a total of USD 2.5 billion in Mineral Extraction Tax for gas condensates extracted from Russia's soil. The annualised 2022 value of the Mineral Extraction Tax for gas condensates is estimated to be around USD 2.9 Billion. Based on Mineral Extraction Tax data from Energy Intelligence and the value of all LNG exported by Russia in the months of April and May 2022, we can estimate that roughly 22% of the value of an LNG cargo goes to the federal treasury as Mineral Extraction Tax. In short, one in five euros paid by EU countries for Russian LNG ends up in the state budget implicitly financing the war against Ukraine. By this estimation method, with the EU purchasing EUR 21.7

³In February 17 2023, the State Duma passed a federal law No. 22-FZ "On Amendments to Part 2 of the Tax Code of the Russian Federation" that which exempts Gazprom and its subsidiaries from the increased income tax for liquefied natural gas (LNG) exporters in 2023-2025.

⁴Russian Energy Revenues Resistant to Sanctions, Energy Intelligence, <https://www.energyintel.com/00000181-629c-dc60-afe3-eaffd9db0000> (accessed October 4, 2023).

billion worth of Russian LNG since the start of the full-scale invasion of Ukraine⁵, the EU's LNG imports have contributed to around EUR 4.8 billion in Mineral Extraction Tax alone received by the Russian Ministry of Finance. In reality, some new LNG projects⁶ benefit from tax exemptions due to their high cost of development. Thus the LNG that is taxed under the MET is taxed at a rate exceeding 22% of the cargo value on average. This does not include other taxes paid by Russian companies exporting LNG to Europe such as corporate taxes that they must pay to the Russian Ministry of Finance.

Sweden's LNG imports from Russia

From the start of Russia's invasion of Ukraine until the end of September 2023, Sweden imported 95,000 tonnes of LNG from Russia via direct shipments valued at EUR 82.6 million. Sweden's imports of Russian LNG since the invasion of Ukraine could be estimated at contributing around EUR 18 million in Mineral Extraction Tax alone received by the Russian Ministry of Finance.

As detailed in the Annex, there have been 26 shipments of Russian LNG that have arrived in Swedish ports from Russia directly since the full-scale invasion of Ukraine (24 February 2022). 4 of the 26 shipments of LNG undertook ship-to-ship transfers in Swedish waters. 22 of these shipments arrived in the port of Nynashamn. The vessel named Coral Energie undertook 9 of these shipments whilst the vessel Coral Energy transported 16 of these LNG shipments from Russia to Sweden. All of the 26 shipments of LNG that departed from Russia to Sweden set sail from the port of Vysotsk.

The Coral Energy vessel (IMO number 9617698) dispatched an estimated EUR 1.8 million of LNG when it arrived at the Nynashamn port in Sweden which could be estimated to correspond to around EUR 400,000 in Mineral Extraction Tax alone received by the Russian Ministry of Finance.

On September 4, 2022, the vessel Coral Energy (IMO number 9617698) embarked on its voyage, carrying a cargo of 14,162 m³ of LNG, sourced from Novatek's train. Of this cargo, 7,081 m³ of LNG, was directed to the Pori LNG terminal in Finland, while the remaining 7,081 m³ (or 3,200 tonnes) was dispatched on September 9, 2022 to Nynasham, Sweden⁷. Based on price derived from Sweden trade data in July 2022⁸, the payment for this cargo alone totaled an estimated EUR 1.8 million, exclusive of any additional taxes or fees.

⁵This is based on CREA's data which applies our pricing model to the Kpler flows providing data on the volumes of seaborne LNG that are transported from Russia to the EU. The time period mentioned is from Russia's full-scale invasion of Ukraine until the end of September 2023.

⁶James Henderson, Russian LNG: Becoming a Global Force, The Oxford Studies for Energy Studies, <https://www.oxfordenergy.org/wpcms/wp-content/uploads/2019/11/Russian-LNG-Becoming-a-Global-Force-N-G-154.pdf> (accessed October 4, 2023)

⁷Kpler shipment data is used to track vessel locations on specified dates using AIS data verified with other sources too.

⁸Source: COMTRADE data, indicates an average price of EUR 565 per tonne for July 2022.

Annexed graphs and tables:

Exports of Russian LNG shipments from Vysotsk in Russia arriving in Sweden between 24-02-2022 and the end of September 2023 - Kpler data				
Vessel Name	Shipment date arrival at destination	Volume (tonnes)	Arrival port	Ship-to-ship transfer in Swedish Waters?
Kairos	2022-02-28	3,274	Nynashamn	No
Coral Energice	2022-03-05	7,857	Lysekil	No
Coral Energice	2022-03-18	7,857	Nynashamn	No
Coral Energice	2022-05-04	3,929	Lysekil	No
Coral Energy (transferred cargo to Kairos)	2022-06-09	3,150	Nynashamn	STS occurred at - Nynashamn Lightin.
Coral Energice	2022-06-28	4,577	Nynashamn	No
Coral Energice	2022-07-08	5,858	Nynashamn	No
Coral Energy (transferr	2022-08-01	1,580	Visby	Yes - STS occurred at Visby with an unknown vessel.

ed cargo to unknown vessel)				
Coral Energy (ship-to-ship with the vessel Kairos)	2022-08-05	1,580	Nynashamn	STS occurred at - Gotland Lightin.
Coral Energy (ship-to-ship with the vessel Kairos)	2022-08-15	230	Gotland Lightin.	STS occurred at - Gotland Lightin.
Coral Energy	2022-08-24	3,186	Nynashamn	No
Coral Energy	2022-09-09	3,186	Nynashamn	No
Coral Energice	2022-12-05	2,619	Nynashamn	No
Coral Energy	2023-01-02	3,210	Nynashamn	No
Coral Energy	2023-01-12	3,689	Nynashamn	No
Coral Energy	2023-01-27	3,186	Nynashamn	No

Coral Energy	2023-02-14	3,186	Nynashamn	No
Coral Energy	2023-02-24	3,186	Nynashamn	No
Coral Energy	2023-03-09	3,186	Nynashamn	No
Coral Energy	2023-04-03	3,186	Nynashamn	No
Coral Energice	2023-04-15	5,904	Nynashamn	No
Coral Energy	2023-07-17	3,186	Nynashamn	No
Coral Energy	2023-08-06	3,186	Nynashamn	No
Coral Energice	2023-08-17	3,929	Nynashamn	No
Coral Energy	2023-09-11	3,186	Nynashamn	No
Coral Energice	2023-09-21	3,929	Nynashamn	No

Source: Kpler dataset on shipments transporting fossil fuels that departed from Russian ports recorded on the LNG terminal.

This statement has been provided by Lauri Myllyvirta and the Europe-Russia Policy & Energy Analysis Team at CREA:

Lauri Myllyvirta, Lead Analyst, lauri@energyandcleanair.org, +358 50 3625981.
www.linkedin.com/in/lauri-myllyvirta-3164703b

Lauri has over 10 years of experience as an energy expert. He has led numerous research projects on energy markets and trends. Lauri has also contributed to numerous publications around energy solutions and air pollution and regularly attends seminars and conferences as an expert speaker. His research has been published and utilised in numerous countries in East Asia, Southeast Asia, South Asia, and Europe, as well as Turkey, South Africa, and elsewhere. Lauri has degrees in economics from Helsinki University and in environmental science from University of Jyväskylä.

About CREA

Centre for Research on Energy and Clean Air (CREA) is an independent research organisation focused on revealing the trends, causes, and health impacts, as well as the solutions to air pollution. CREA uses scientific data, research, and evidence to support the efforts of governments, companies, and campaigning organisations worldwide in their efforts to move towards clean energy and clean air, believing that effective research and communication are the key to successful policies, investment decisions, and advocacy efforts. CREA was founded in December 2019 in Helsinki and has staff in several Asian and European countries. Our work is funded through philanthropic grants and revenue from commissioned research. Our Europe-Russia team publishes weekly and monthly snapshots along with other analysis tracking Russian fossil fuel flows as well as sanctions impact which can be seen on our page of publications⁹.

Signature:



Name: Lauri Myllyvirta

Date: 16/10/2023

⁹ <https://energyandcleanair.org/financing-putins-war/>