

Bold Measures Are Needed as Russia's Oil Is Slipping Beyond G7 Reach

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Following Russia's full-scale invasion of Ukraine in 2022, the EU, US, UK and other allies imposed sanctions on Russian oil exports, including, the G7/EU price cap, which took effect in December of last year. This measure hinges on Russia's need for shipping and insurance services from G7/EU countries and mandates that such services can only be provided if the oil is sold under \$60/barrel. Almost a year later, Russia relies on a "shadow fleet" of vessels not owned and/or insured by G7/EU companies for more than 70% of its seaborne crude oil exports, and even where it does use G7/EU services it does in violation of the price cap. Thus, it is no surprise that Russia's export earnings as well as budget revenues from oil are rising again.

The bold action is urgently needed to make the existing price cap system work, including investigating transactions, strengthening access to credible pricing information, and maintaining the price cap's leverage by preventing circumvention via the shadow fleet. The [Working Paper of the International Working Group on Russian Sanctions](#) details all critical measures necessary to enforce the energy sanctions. In the light of the recent findings, we would highlight the necessity of the following measures:

(1) G7/EU authorities should ensure that Price cap coalition service providers have sufficient proof of oil sales prices and can effectively implement the price cap.

(2) EU coastal states leverage geographical "choke points" to limit Russia's use of a "shadow fleet" of tankers not subject to the price cap.

(3) Price cap coalition countries step up penalties on entities that violate the price cap or facilitate such violations.

Recent data suggests that price cap violations became widespread, ...

Information on prices for Russian crude oil, including from the IEA as well as Russia's Ministry of Finance, has raised concerns about the level of price cap compliance in recent months as global oil prices rose and discounts on Russian exports shrunk considerably. For instance, Russia [reported](#) an average Urals price (i.e., exports from Baltic and Black Sea ports) of \$81.52/barrel in October, which means that, under the assumption of 100% compliance with the price cap for the 39% of volumes shipped with G7/EU participation, the remainder would have been sold at above \$95/barrel – very unlikely given that this would represent a premium to Brent.

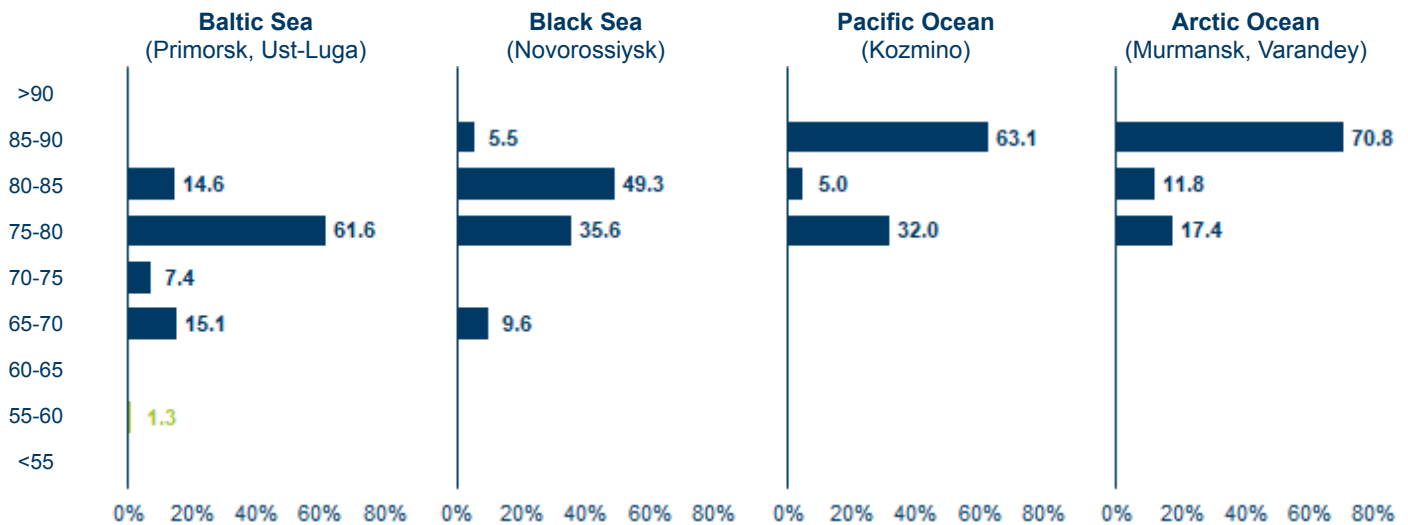
KSE Institute's analysis³ shows that, in fact, more than 99% of seaborne crude oil exports took place at a price above the \$60/barrel threshold in October 2023 – a situation that appears to be consistent across different regions/ports (Figure 1). On average, Urals prices (i.e., Baltic and Black Sea exports) at \$77.0/barrel are somewhat lower compared to ESPO prices (i.e., Pacific Ocean exports) at \$83.0/barrel, and those for crude types shipped from Arctic Ocean ports (\$85.0/barrel). Altogether, we estimate that total seaborne crude oil exports reached an average FCA/FOB price of \$79.4/barrel last month.

¹ Analysis of the oil data is performed by Benjamin Hilgenstock, Anatoliy Kravtsev, and reviewed by Elina Ribakova, Jacob Nell, Borys Dodonov, Nataliia Shapoval, and Craig Kennedy. The KSE Institute sanctions team includes Nataliia Shapoval, Elina Ribakova, Benjamin Hilgenstock, Yulia Pavytska, Borys Dodonov, Anna Vlasniuk, Olena Bilousova, Anatoliy Kravtsev, Vira Ivanchuk, Dmytro Pokryshko, Svitlana Taran, and Tymofiy Mylovanov. KSE non-resident research fellows also include Vladyslav Vlasniuk. The KSE sanctions team has received analytical guidance and advice from Jacob Nell (KSE non-resident research fellow; use of affiliation requires permission by current employer), Craig Kennedy, and Michael McFaul for development of sanctions-related products. Experts mentioned here are also members of the Yermak-McFaul Group on Russian Sanctions.

² Please see a more detailed, non-confidential analysis for September [here](#).

³ We rely on data on crude oil and oil exports from a broad range of sources. See details in our previous [reports](#).

Figure 1: Distribution of crude oil export prices by region in October 2023



Source: KSE Institute

We believe that a problem previously identified for a segment of crude oil exports (i.e., shipments from the port of Kozmino) – “attestations fraud” – has spilled over into the broader market for Russian oil. Close to 30% of all seaborne crude oil was shipped with P&I (i.e., protection and indemnity) insurance from G7/EU countries or relying on other G7/EU services (e.g., vessel ownership and/or management). Under the assumption that the data accurately reflects sales prices as well as physical shipments, this points to widespread violations of the price cap regime in the form of “attestations fraud.” This means that oil traders/brokers are likely providing falsified pricing information to G7/EU service providers on the attestations that are required under the price cap regime. Many of the entities attesting to compliance are either direct subsidiaries of Russian oil companies or suspected to be linked to them, which represents a key challenge for effective enforcement.

... and that the price cap’s leverage is shrinking considerably.

Russia is increasingly using a “shadow fleet” of vessels that are neither owned nor insured by G7/EU and, thus, do not fall under the price cap. As of October, KSE Institute estimates that 28.5% of total seaborne exports of Russian crude oil took place with G7/EU participation in October (Figure 2), a noticeable decline compared to H1 2023 (51%) or H2 2022 (58%). The share of G7/EU services differs considerably across export regions (Figure 3 & Appendix Table 1): It was highest for Black Sea (41%) and Baltic Sea (39%) shipments, followed by Arctic Ocean (23%) and Pacific Ocean exports (12%).⁴ Differences can be partially explained by oil price dynamics in 2023: The price for Urals stood significantly below \$60/barrel for most of the year before rising above in H2, meaning that no strong incentives existed to move away from G7/EU services for these exports. At the same time, ESPO consistently traded above the threshold, making the investment worthwhile.

Interestingly, we do not observe the same dynamics for oil products’ exports. This could be a result of different conditions in the market for used products tankers and/or stem from products price caps that are relatively close to market prices for premium and discounted products, respectively, which creates smaller incentives for price cap circumvention. After all, the acquisition of the “shadow fleet” is a costly endeavor which can eat up a significant portion of oil export earnings as the U.S. Treasury Department has rightfully [pointed out](#).

⁴ See also KSE Institute October [Russian Oil Tracker](#).

Figure 2: G7/EU participation over time

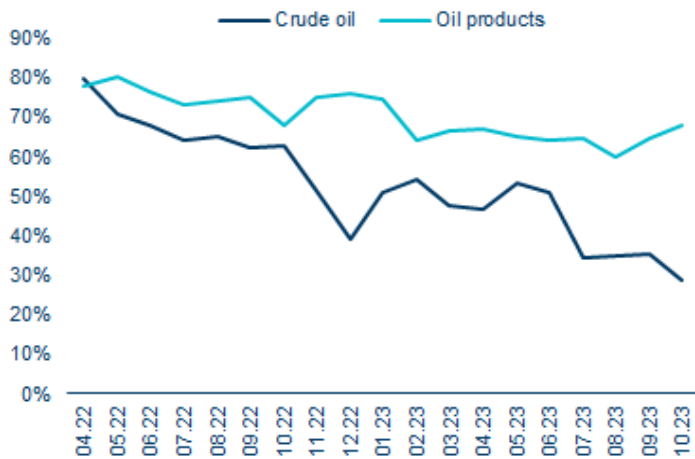
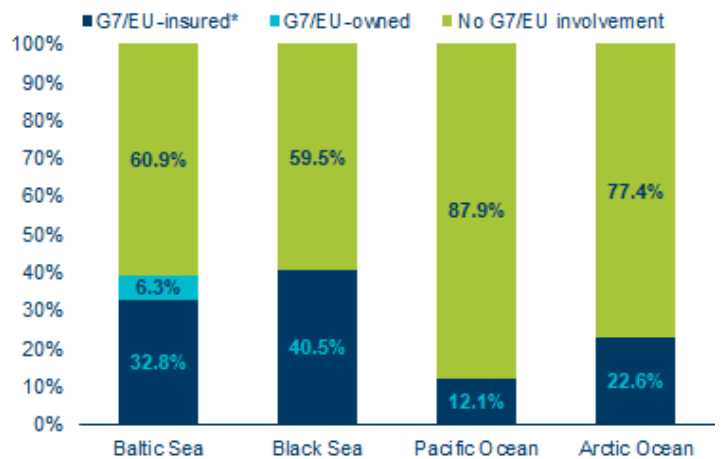


Figure 3: Crude oil exports in October 2023



Source: Kpler, P&I Clubs, KSE Institute *includes Norway

Russia’s increasing reliance on a shadow fleet creates significant environmental risks to coastal states. First, this fleet largely consists of relatively old tankers (78% of vessels used to transport Russian oil in September were older than 15 years) and that are not insured by reputable maritime insurance providers. In the case of an oil spill, for instance in the Baltic Sea or Mediterranean, there are serious doubts about the involved companies’ ability to cover clean-up costs, which can easily reach above \$1 billion according to the experts’ estimates. Such an incident almost took place in May 2023 when an 18-year old shadow tanker, fully laden with 340k barrels of crude oil lost engine power in the Baltic Sea and nearly ran aground one mile off the coast of Denmark.⁵ The 2002 Aframax *Prestige* disaster off the coasts of France and Spain serves as a direct parallel to potential mishaps involving vessels from the Russian ‘shadow fleet. At the time of the catastrophe, the ship was 26 years old, and investigations failed to ascertain the ultimate beneficiaries of either the vessel or the transported oil. Moreover, the vessel had evaded critical inspections at the departure port, namely the Russian city of Saint Petersburg. The aftermath of the oil spill required several years of remediation efforts and incurred a staggering cost of over €2.5 billion.⁶

Bold and rapid action is needed to preserve the effectiveness of oil sanctions.

The October data suggest that problems with price cap implementation and enforcement are much bigger than [previously expected](#). Not only does the price distribution point to very low compliance levels and, thus, a spreading of the “attestations fraud” issue to the broader market for Russian crude oil. But the sharp decline in G7/EU involvement means that the price cap’s leverage is increasingly under threat. To ensure that sanctions continue to constrain Russia’s ability to wage its war of aggression on Ukraine – and that the coalition’s efforts to do so [preserve their credibility](#) – additional steps urgently need to be taken.

⁵ See [Measuring the Shadows](#) by Craig Kennedy.

⁶ https://en.wikipedia.org/wiki/Prestige_oil_spill

Fundamentally, to maintain pressure on Russia, the coalition countries face the choice of either [making the existing price cap system work](#) – by preserving its leverage and stepping up enforcement – or considering much broader sanctions. Below we outline 3 critical measures that can tackle Russian effort of sanctions evasion.

- (1) **G7/EU authorities should ensure that Price cap coalition service providers have sufficient proof of oil sales prices and can effectively implement the price cap**, including by: a) leveraging the involvement of G7/EU banks and other financial institutions in the Russian oil trade and their knowledge of important transaction details; b) requiring attestations to be provided by reputable entities defined via transparent criteria and subject to sanctions in the case of violations; and/or c) stepping-up of documentary evidence requirements for G7/EU service providers under the current system. Financial institutions are already part of the regulations (as “tier 2 actors”) but not subject to expanded reporting requirements.
- (2) **EU coastal states should leverage geographical “choke points” to limit Russia’s use of a “shadow fleet” of tankers not subject to the price cap** by [requiring proper spill insurance](#) for vessels’ passage through their territorial waters, including in the Baltic Sea and Mediterranean. Importantly, this will also help address important environmental risks that have emerged due to the increasing use of old and under-insured tankers. For this purpose, establish a system to allow for timely and efficient verification of insurance information and/or make use of the already existing (public) insurance database by the P&I clubs.
- (3) **Price cap coalition countries should step up penalties on entities that violate the price cap or facilitate such violations.** For G7/EU companies, this should include tougher monetary penalties and expanded lockout periods. For third-country actors, price cap coalition countries should impose “direct” sanctions (e.g., SDN listing in the United States or use of the European Union’s anti-circumvention tool established in the 11th package) and consider the [application of extraterritorial \(“secondary”\) sanctions](#) by the U.S., leveraging the continued critical importance of its financial system for internationally operating businesses.

Appendix

Appendix Table 1: G7/EU participation in crude oil exports by region, in kb/day and % of total

	Baltic Sea ports				Black Sea ports			
	G7/EU-insured	G7/EU-owned	Shadow fleet	Total	G7/EU-insured	G7/EU-owned	Shadow fleet	Total
Apr. 2022	1,385 (83%)	24 (1%)	260 (16%)	1,669	669 (82%)	-	148 (18%)	817
May 2022	1,173 (68%)	-	541 (32%)	1,714	771 (83%)	10 (1%)	145 (16%)	917
Jun. 2022	1,008 (67%)	-	497 (33%)	1,505	579 (78%)	-	160 (22%)	739
Jul. 2022	872 (65%)	23 (2%)	442 (33%)	1,337	488 (78%)	-	138 (22%)	626
Aug. 2022	909 (67%)	21 (2%)	434 (32%)	1,364	565 (78%)	-	156 (22%)	721
Sep. 2022	861 (62%)	-	523 (38%)	1,384	489 (74%)	-	170 (26%)	659
Oct. 2022	729 (58%)	-	519 (42%)	1,248	589 (85%)	-	108 (15%)	697
Nov. 2022	630 (50%)	24 (2%)	615 (48%)	1,268	327 (66%)	-	170 (34%)	497
Dec. 2022	337 (32%)	-	714 (68%)	1,051	313 (56%)	-	243 (44%)	556
Jan. 2023	652 (42%)	23 (1%)	863 (56%)	1,537	388 (70%)	20 (4%)	145 (26%)	553
Feb. 2023	804 (51%)	51 (3%)	733 (46%)	1,589	280 (66%)	-	142 (34%)	422
Mar. 2023	622 (45%)	-	754 (55%)	1,376	503 (65%)	-	268 (35%)	770
Apr. 2023	800 (51%)	24 (2%)	755 (48%)	1,579	454 (62%)	-	275 (38%)	729
May 2023	1,019 (30%)	24 (1%)	657 (39%)	1,700	534 (74%)	-	191 (26%)	725
Jun. 2023	819 (59%)	119 (9%)	458 (33%)	1,396	408 (62%)	-	245 (38%)	652
Jul. 2023	394 (35%)	139 (13%)	578 (52%)	1,110	256 (47%)	-	284 (53%)	451
Aug. 2023	384 (33%)	91 (8%)	702 (60%)	1,177	364 (61%)	33 (6%)	198 (33%)	595
Sep. 2023	403 (28%)	73 (5%)	967 (67%)	1,443	524 (80%)	-	131 (20%)	654
Oct. 2023	448 (33%)	86 (6%)	833 (61%)	13,66	215 (41%)	-	315 (59%)	530
	Pacific Ocean ports				Arctic Ocean ports			
	G7/EU-insured	G7/EU-owned	Shadow fleet	Total	G7/EU-insured	G7/EU-owned	Shadow fleet	Total
Apr. 2022	695 (66%)	23 (2%)	340 (32%)	1,058	274 (93%)	-	20 (7%)	294
May 2022	523 (58%)	23 (3%)	351 (39%)	898	235 (72%)	-	92 (28%)	327
Jun. 2022	523 (56%)	24 (3%)	391 (42%)	937	241 (75%)	-	79 (25%)	321
Jul. 2022	406 (45%)	23 (3%)	476 (53%)	905	182 (73%)	-	68 (27%)	249
Aug. 2022	449 (47%)	-	504 (53%)	952	278 (76%)	-	90 (24%)	368
Sep. 2022	415 (50%)	-	415 (50%)	830	187 (73%)	-	69 (27%)	256
Oct. 2022	482 (49%)	-	494 (51%)	975	246 (75%)	-	84 (25%)	330
Nov. 2022	528 (49%)	-	543 (51%)	1,071	112 (34%)	-	213 (66%)	325
Dec. 2022	334 (34%)	-	640 (66%)	974	147 (45%)	-	181 (55%)	328
Jan. 2023	474 (41%)	22 (2%)	654 (57%)	1,150	238 (71%)	-	99 (29%)	337
Feb. 2023	499 (43%)	-	668 (57%)	1,167	250 (87%)	-	37 (13%)	288
Mar. 2023	355 (32%)	-	742 (68%)	1,096	236 (63%)	-	138 (37%)	374
Apr. 2023	315 (27%)	-	846 (73%)	1,160	177 (58%)	-	128 (42%)	305
May 2023	240 (21%)	-	913 (79%)	1,153	277 (82%)	-	58 (18%)	330
Jun. 2023	122 (12%)	72 (7%)	810 (81%)	1,004	207 (54%)	-	176 (46%)	384
Jul. 2023	187 (17%)	23 (2%)	915 (81%)	1,125	68 (22%)	-	243 (78%)	310
Aug. 2023	97 (9%)	-	1,034 (91%)	1,131	137 (48%)	-	148 (52%)	285
Sep. 2023	95 (9%)	47 (5%)	889 (86%)	1,031	69 (23%)	-	231 (77%)	300
Oct. 2023	141 (12%)	-	1,018 (88%)	1,158	67 (23%)	-	231 (77%)	298