Action Plan 4.0

Strengthening Sanctions Against the Russian Federation

Working Group Paper #22

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The International Working Group on Russian Sanctions aims to provide expertise and experience to governments and companies around the world by assisting with the formulation of sanctions proposals that will increase the cost to Russia of invading Ukraine and that will support democratic Ukraine in the defense of its territorial integrity and national sovereignty. Our working group is comprised of independent experts from many countries. We coordinate and consult with the Government of Ukraine and those governments imposing sanctions. This consultation process helps to inform our views. Still, our members express independently held opinions and do not take direction from or act at the behest of the Government of Ukraine or any other government, person, or entity. All members of this working group participate in their individual capacity.

INTRODUCTION

Time for Europe to Take the Lead on Sanctioning Russia

With U.S. support for Ukraine eroding under the new Trump administration, European support for Ukraine must grow. That greater support must include more economic pressure on Russia as a means to hasten the end of Russia's invasion and occupation of Ukraine. It must also include new resources for Ukraine. In this working paper, we suggest ideas for how to do both. We remain hopeful that the Trump administration might see the benefits of increasing pressure on Putin's Russia as part of a strategy to end the war. For instance, after meeting President Zelenskyy in Rome in April, President Trump observed, "It makes me think that maybe he doesn't want to stop the war, he's just tapping me along, and has to be dealt with differently, through "Banking" or "Secondary Sanctions?"

If President Trump is ready to follow up on these words with actions, our working paper also has suggestions for the U.S. government. But Europe cannot wait for the Americans any longer. Europe has significant leverage over Russia, including being the largest purchaser of Russian gas, the leading provider of shipping and insurance services to the Russian oil fleet, and the location of the vast majority of Russia's $300 billion in frozen central bank reserves. It should now use this leverage and take the lead in putting more pressure on Russia and giving more support to Ukraine.

As Russia's invasion of Ukraine has tragically entered its 4th year, we have written a 4th Action Plan for increasing sanctions and other economic measures as a means to hasten the end of this war. Our Action Plan 4.0 consists of 11 sections: (1) New Sanctions to Reduce Russian Revenues for Financing the War; (2) New Sanctions to Weaken Russia's Military Industrial Complex; (3) Confiscate Frozen Russian Assets Abroad; (4) Expand Financial Sanctions; (5) Reduce Russian Access to Western Technology; (6) Impose Goods and

Services Trade Export Quotas on High-risk Intermediary Countries; (7) Condition Multilateral Program Participation on Sanctions Compliance; (8) Introduce Customs-based Trade Friction for At-Risk Supply Chains; (9) and Announce Pre-emptive Sanctions Designations with Grace Periods for Divestment**.**

1. New Sanctions to Reduce Russian Revenues for Financing the War

The international sanctions coalition should take further steps to reduce revenues to the Russian state. At the top of that list should be additional limits on Russia's export of fossil fuels, the primary source of income for Putin's regime. Through the first three years of the war, the oil and gas markets have been tight, driving elevated oil and gas revenues and supporting the Russian budget and economy. However, oil and gas markets are now softening as additional supply comes online and growth slows, which should expose Russia's vulnerability to low oil and gas prices. Low oil prices drove downturns and periods of weakness in Russia through the 1990s, especially in 1998, 2008, 2014, and 2020. There is now an opportunity to use this vulnerability to constrain Russia while eliminating Europe's energy dependency on a strategic adversary.

In the short run, eliminating dependence on Russia will likely generate heightened European dependence on American gas. This has caused some concern among European leaders that the U.S. could weaponize its market power, given the recent adversarial behavior of the current U.S. administration towards Europe. These concerns are exaggerated. First, the dependence will be materially lower, since the American companies will supply around one-third of European gas imports—about the same as Norway—once Russia has been removed from the European gas supply. In contrast, Russia provided over half of European gas imports before the pandemic, far more than Norway. Second, the Trump administration supports U.S. energy exports and would face significant pressure from the domestic oil and gas industry if it jeopardized European exports. Third, LNG is a liquid global market, so Europe can buy LNG indirectly from the U.S. via allies, such as the UK, Japan, and South Korea, who can sell their long-term contract gas to Europe and buy any withheld U.S. volumes. In the longer term, security of supply lies in diversity, and the EU should support new sources of gas supply from other jurisdictions—for example, Canada, Tanzania, and Mozambique—and continue to support measures to reduce gas demand, such as the electrification of heating and the build-out of renewable energy sources.

Regarding Russian oil, we recommend lowering the G7 oil price caps, which are now set above the price at which Russian oil and oil products are trading. We recommend lowering them by $15 on each barrel of crude oil (bbl) for crude and heavy products to $45 per barrel and $30 per barrel, respectively. Furthermore, we recommend a more substantial reduction of $25/bbl for light products to $75/bbl, since the premium price cap was elevated in 2023 because of concerns about a tight diesel market, which no longer apply.

We also recommend measures to ensure the price caps' leverage and improve compliance. In early papers, our Working Group also made recommendations for fixing the attestation fraud issue, which is vital for making these price caps work. Without a system that generates credible information about the price of Russian oil sales, the price caps are unenforceable—and, ultimately, their level is immaterial. Recent data show that efforts to roll back the shadow fleet at scale have been successful. The January OFAC sanctions, previous sanctions, and general attrition have nearly halved Russian shadow fleet capacity (an estimated 46% reduction). This, in turn, has forced Moscow to rely more heavily on the mainstream fleet, especially for exports out of the Baltic region—which had previously relied most heavily on shadow fleet tonnage—and creates a significant vulnerability that can be exacerbated.

Building on this success, we propose a two-step approach. First, announce another expansive listing of shadow fleet tankers on the scale of OFAC's January listing, ideally slightly larger. The aim would be to remove Russia's remaining shadow fleet from operation, forcing dependency levels on the mainstream fleet back to 90% or higher. For this to be effective, it is critical to find mechanisms for the enforcement of vessel designations, in particular for those of the EU and UK, as they do not carry a threat of secondary sanctions. Actors involved in trading, transporting, and purchasing Russian goods outside the sanctions coalition—traders, port authorities, buyers, banks—must be incentivized not to interact with sanctioned ships.

Second, these high levels of dependency would give policymakers the leverage to introduce and enforce new value- and/or volume-targeted sanctions.

- **Value-targeted options**: As suggested above, the value-targeted sanctions could include ratcheting down the price caps. An additional option would be to require all mainstream (i.e., covered by Western insurance) tankers to charge any Russian exporter ***a freight surcharge*** when lifting out of Russia. The freight surcharge would be on top of their standard freight charges, would be remitted to a payment agent (usually a bank) appointed by the sanctioning authorities, and could be set, for instance, at $20/bbl, broadly in line with the proposed gap between market prices and the price caps we propose. The proceeds from this surcharge could be used to fund Ukraine's defense and reconstruction. As such, an approach would require third-country actors to collect the surcharge, and the incentive structure is key. To ensure that there is no choice but to comply with it to secure sufficient tanker capacity, vessel designations must be expanded and effectively enforced. In addition, the surcharge approach should be backed by a credible commitment to sanction any new shadow tankers that Moscow tries to purchase or charter into Russian trade.
- **Volume-targeted options:** With weakening global demand and spare OPEC production capacity, another option is to pare back Russian export volumes. While there are concerns that a blanket ban could trigger a counterproductive

supply shock, a more targeted approach, such as sanctioning additional Russian oil producers, does not entail supply risks. One option could be banning exports from a subset of Russia's 18 active export terminals. For example, mainstream vessels could be restricted from lifting from Primorsk. Targeting terminals rather than companies has several potential advantages: a) terminals are easier to monitor than production location; b) the approach provides clarity for shippers; c) it offers the flexibility to dial up or down volumes as needed by adding or removing export terminals from the list; and d) this policy creates a supply uncertainty and a reduction in Russian oil exports because there is a possibility that additional terminals could be banned.

We also propose to impose sanctions on unsanctioned Russian oil companies. While the lack of market disruption after sanctions were imposed on Gazprom Neft and Surgutneftegaz and their subsidiaries in January suggests that Russia found workarounds to maintain exports, such sanctions still isolate Russian companies from international markets and counterparties, thereby imposing significant costs. It is counter-productive that three major Russian oil and gas companies (Rosneft, Gazprom, and Lukoil) remain unsanctioned, as are several smaller Russian oil companies such as Zarubezhneft, Tatneft, and Novatek. We propose to start by sanctioning at least one of the three large unsanctioned companies and all its subsidiaries. This must be accompanied by a commitment to implement sanctions against the others over time, absent any change in Russian policy towards Ukraine. The European Union and others in the sanction coalition could start by sanctioning Lukoil, which has a substantial international footprint, including the trading subsidiary Litasco, which plays a key role in the Russian trade in oil and products but no longer supplies Europe. Europe could further make clear that if Russia's war continues, sanctions will follow on Novatek (alongside banning Yamal LNG in Europe), and on Rosneft and Gazprom (alongside ceasing residual Russian oil and gas deliveries to Europe) on a pre-specified timeline.

For Europe, the goal should be complete disengagement from the Russian gas supply as soon as possible. In June 2022, the EU committed to end all EU purchases of Russian oil, gas, and coal by 2027. This was a response to Russia's attempt to squeeze Europe's gas supply to compel Europe to accept Russian occupation of Ukraine. Since then, Europe has made significant progress towards the objective of a Russia-free European energy supply. Coal, seaborne crude, and seaborne oil product purchases from Russia have all ended. From April 2025, when the Czech Republic stopped buying Russian pipeline crude, the only remaining Russian pipeline crude deliveries in Europe are to Hungary and Slovakia along the southern Druzhba pipeline. Russian gas, however, has been more challenging to shut off completely. Russia itself shut the Yamal and Nord Stream pipelines in 2022 as part of its effort to use energy as a weapon to compel Europe not to support Ukraine. Europe could cope with the loss of Russian gas supplies by cutting consumption by over 15%—helped by two warm winters—and by buying more LNG, particularly from the U.S. Even so, the market has been tight, and prices have been high. Europe also continued to buy substantial volumes of Russian gas through the Ukrainian pipeline system until Ukraine closed it in January 2025, as well as through the Turkstream pipeline and in the form of Russian LNG.

In 2025, despite the loss of Ukrainian transit of about 15 billion cubic meters of natural gas per annum (bcm pa); the sanctioning of two small Russian LNG plants in the Baltic (3-4 bcm pa) in the last Biden sanctions package; and a colder and low-wind winter that depleted European inventories, the balance in the gas market is slowly working in Europe's favor. On the supply side, three massive LNG projects have started up this year in North America (Plaquemines, an expansion of Corpus Christi, and LNG Canada), and a further two enormous projects—in the U.S. (Golden Pass) and in Qatar—are scheduled to start up in 2026. These additional volumes are already making a difference. They are expected to drive two record years of LNG supply growth in 2026-27, increasing global supply by over 80 bcm pa, or four times more than in an average year. On the demand side, we expect that LNG demand in China, the world's leading purchaser of LNG, will fall this year, partly as a result of surging supply from cheaper domestic production and pipeline supplies, and partly because Chinese gas demand is concentrated in industry, which U.S. tariffs have targeted.

Given the opportunity presented by a loosening gas market, the EU should set a date for banning all Russian LNG from Europe within twelve months. This means banning LNG from the Yamal project, which is the remaining Russian LNG project supplying Europe. It produces about 28 bcm a year, of which about 21-22 bcm annually or nearly two bcm a month currently flow to Europe, mainly to the Netherlands, Belgium, France, and Spain. A force majeure event (government sanctions) will allow European purchasers to exit their long-term Yamal contracts without penalty, leaving them free to sign new LNG deals, likely with U.S. operators. Such a policy change could also help to reduce the EU trade deficit with the U.S. and ease trade tensions with the Trump administration. Assuming that half the Yamal volumes are lost as a result of logistical constraints (e.g., a lack of ice-reinforced LNG tankers) and the remainder is sold at a one-third discount to Asia, at current gas prices Russia would lose $5-6 bn in export revenues per annum, eroding its capacity to keep funding its invasion of Ukraine.

The earliest credible date to implement the Yamal ban is November 1, 2025. This would ensure that the prohibition does not drive a tight market and sharply higher prices, nor risk leaving Europe short of gas next winter and vulnerable to Russian blackmail. Furthermore, it would give market participants time to adjust and allow Europe to continue buying Yamal LNG for this year's injection season, where Europe needs to inject around 20 bcm more than last year to meet current storage targets. By November, the incremental additional supply from the three big new North American LNG projects should be running at over three bcm/month, comfortably covering the lost Yamal volumes, about half of which would remain in the global balances by finding a way to Asia at a discounted price. If the implementation requires more time, a more cautious date, such as January 1, 2026, or April 1, 2026, may be chosen. Ukraine's East Asian partners—notably Japan, South Korea, and Taiwan—could implement a similar ban on Russian LNG from Sakhalin.

Banning Yamal LNG would leave two final bastions of Russian fuel purchases in the EU to eliminate before 2027. Hungary and Slovakia continue to purchase Russian oil from the southern Druzhba pipeline and Russian gas from the Turkstream pipeline. To circumvent a Hungarian veto, we recommend imposing a tariff on all Russian oil and gas imports into the EU, since EU decisions on tariffs are made by a qualified majority and not by unanimity, so Hungary would not be able to block them. To enable a smooth adjustment, this tariff could be set at a lower rate through 2026, and the proceeds could be used to fund any additional infrastructure needed by Hungary and Slovakia to end their infrastructure dependence on Russian oil and gas, before being set at a level from 2027 designed to end the trade. The threat of expediting this tariff schedule could also be deployed in upcoming negotiations on the LNG ban, to persuade Hungary and Slovakia not to block the settled will of the majority of Europe.

Europe also must not reverse past successes. Despite the European Union's significant progress at eliminating dependence on Russian pipeline-delivered natural gas supplies, there remain media reports suggesting that there are individuals and entities in both EU member states as well as the United States that may be attempting to revive Russian natural gas pipelines like Nord Stream. This would be a grave error that would not only undermine support for Ukrainian victory but also would reintroduce simultaneous energy and national security risks that the Kremlin has weaponized against European democracies for years. Therefore, lawmakers on both sides of the Atlantic need to ensure that permanent blocking sanctions are introduced to ensure that Russian malign energy initiatives like Nord Stream 1, Nord Stream, 2, TurkStream, and related Russian energy export pipelines to Europe are not able to return to threaten European energy security ever again.

In addition, we propose an import tax on Russian ammonium fertilizer, which is made with gas. Such a tariff will reduce Russian sales to Europe and the price Russian fertilizer can command, and Russian fertilizer can be replaced by fertilizer from some of the mothballed European capacity. At the current low gas prices, this should not increase the price of European fertilizer. Here, too, smooth adjustment can be achieved by phasing the tariff gradually, with the initial proceeds being used to pay subsidies to European fertilizer producers during an interim period until new gas supplies arrive on the market and drive prices lower.

We also urge the EU and UK authorities to mirror the comprehensive U.S. sanctions on the provision of oil services and technologies to Russian entities put in place in the January OFAC sanctions package.

Finally, and more ambitiously, European governments should also consider and develop an alternative approach that would seek to prevent Russian access to its energy-related revenues without calamitous market effects. Such an approach could include a requirement that any bank conducting trade with Russia for energy reasons hold Russian energy revenues in restricted accounts. European governments could stress that Russian energy revenues constitute a means for Russia to evade existing sanctions, particularly those associated with more stringent export controls. Governments could insist that transactions involving Russian energy revenues be subject to a reporting and approval scheme similar to that enacted against Iran in 2010, which placed a monetary threshold on the sorts of transactions that required such review. This approach could be imposed in sweeping fashion, capturing all Russian energy-related revenues immediately or phased in over time (perhaps in relation to a percentage of revenues). It could also be relaxed in circumstances where overall purchases of Russian energy resources are being reduced, and could permit local companies to be paid for any services rendered. This alternative construct will be developed further, along with options for its employment, in a future working paper. However, given potential turbulence in energy markets, the faltering effectiveness of the present oil price caps, and the risk of unilateral sanctions relief by the Trump Administration, it is prudent for Europe to develop concepts now for a tighter set of restrictions on Russian energy export revenues in the future.

2. New Sanctions to Weaken Russia's Military Industrial Complex

Led by the European Union, the international sanctions coalition must increase and strengthen the enforcement of sanctions aimed at weakening Russia's armed forces and Russian enterprises in the military-industrial complex (MIC). As we documented in detail in previous working papers (see Working Group Paper #12 and Working Group Paper #16), too many critical technologies are flowing into Russia to build weapons which are deployed to kill Ukrainian soldiers and civilians. The sanctions coalition must tighten restrictions on Russian access to microelectronics, Computer Numerical Control (CNC) machines, software, navigation, radio, chemicals for explosives, and other components used in the defense sector. Sanctions must be designed carefully, based on a thorough analysis of the MIC's vulnerabilities, with particular focus on critical technologies, components, and raw materials. Identifying and targeting these pressure points will systematically erode Russia's ability to maintain and expand its military output.

The democratic world participating in the sanctions coalition should impose sanctions on all enterprises and subsidiaries in the Russian military-industrial complex, including Roscosmos and all its subsidiaries and Rosatom and all its subsidiaries; individual sanctions on all members of the board of directors and all members of the management board of all enterprises in the military-industrial complex, and on every general director of each subsidiary of any enterprise in the military-industrial complex; a blanket individual ban—visa ban and asset freeze—on all non-conscripted members of the Russian armed forces, all employees of the military-industrial complex, and all members of the United Russia party.

In addition, the sanctions coalition must impose sanctions on *all* companies providing components and technology to Russia's military enterprises, including a special focus on tightening restrictions on Russian access to microelectronics, CNC machines, software, and components used in the defense sector.

The process could begin by publishing the data about third-party countries and companies that support Russia's MIC, drawing, for example, on comprehensive studies conducted by the Kyiv School of Economics. In particular, greater transparency about Chinese support should be highlighted. Tragically, many companies headquartered in democratic countries also indirectly provide support to the Russian military. Many components made in the free world are still being used to strengthen Russia's killing capacity.

Currently, enforcement agencies in sanctions coalition countries are not adequately equipped to implement and enforce comprehensive export controls such as those imposed on Russia. This includes the United States, where export control measures have a longer track record. The European Union lacks unified enforcement structures, as member states remain responsible for implementing restrictive measures, including those imposed at the EU level. These weaknesses must be addressed because export controls will be an essential part of the economic statecraft toolbox for the foreseeable future. One focus for enforcement should be on tracking exports, including those produced outside the sanctioning countries, to third countries that then re-export sanctioned goods to Russia, with the goal of identifying companies in third countries that should be subject to sanctions. Furthermore, export quotas set for countries that re-export to Russia (e.g., at the levels from 2021) would ensure that those countries cannot supply Russia's war machine without diminishing the goods available for their own citizens. Quotas will provide incentives for third countries to impose their own restrictions on reexport of key goods and technologies.

Sanctions on individual companies can be imposed incrementally, in a deliberate and escalatory way, to offer those companies the option to stop their exports to Russia (often through intermediaries) unilaterally before being sanctioned.

We also recommend that democratic countries re-establish the Coordinating Committee for Multilateral Export Controls (CoCom). During the Cold War, the United States worked with allies and partners to create CoCom to limit the transfer of goods and technologies to the Soviet Union and other communist states that could be used to advance military capabilities. A new CoCom, based at the OECD, should be established today to limit the transfer of technologies to selected regimes including but not limited to DPRK and Iran.

3. Confiscate Frozen Russian Assets Abroad

Ukraine needs extraordinary financial support as well as a continued supply of weapons. It requires approximately $100 billion a year in international assistance during the war: at least $50 billion for military supplies, $40 billion to cover the budget deficit to keep the civilian government services afloat, and $10 billion for humanitarian assistance. In addition, Ukraine will need at least $500 billion over a decade or so for its reconstruction. At the same time, the sanctions coalition has immobilized Russian assets of over $300 billion. Our International Working Group on Russian Sanctions has repeatedly recommended using these Russian assets to make the aggressor pay and finance Ukraine. We have spelled out the legal reasoning and the mechanics for doing so (see our Working Paper #15). In a new paper called *Implications of the Confiscation of Russian Sovereign Assets*, our colleagues at the Kyiv School of Economics have spelled out why European seizure of these assets will not have the deleterious consequences that some suggest.

More urgently than ever, Europe must move ahead with this idea. In previous working papers, we recommended that the United States move first and help create a precedent for Europe. Given that the Trump administration appears unlikely to move forward with this idea, now is the time for Europe to act first and set a precedent for the United States. The bulk of frozen Russian Central Bank assets are held in European institutions, specifically in Euroclear. Increased uncertainty about the U.S. and China have boosted investor demand for euro assets, making it an opportune time for the EU to move forward with the asset seizure.

Doing so would be a strategic investment in Europe's own security. Ukraine's army is around 900,000 strong, the same size as the next five most significant national armed forces in Europe (Poland, France, Germany, Italy, and the UK). Moreover, the Ukrainian military is relatively inexpensive and highly effective, motivated, and battle-hardened. Ukrainian military spending on the war—$40 billion a year—-is around one-tenth of the cost of European NATO armed forces during peacetime, which cost $400 billion in 2024. With one decision, European leaders would ensure that Ukraine has the financial capacity to stay in the fight, hampering Russia's ability to launch attacks on the rest of Europe while the war lasts, and ensure that after the war Ukraine's capable and large armed forces can continue to participate in Europe's collective defense. Moreover, additional Ukrainian defense purchases will help the effort to revive Europe's defense industrial capacity.

Using Russian money to aid Ukraine and thereby enhance European security is both strategically wise and morally appropriate.

4. Expand Financial Sanctions

Financial sanctions remain the most powerful method to prevent sanctions evasion. Restricting Russia's financial sector is critical to sustaining effective sanctions pressure. Despite multiple sanction packages, Russia continues to access international financial services through gaps in compliance, the use of intermediaries, and insufficient banking oversight. A targeted effort to close these gaps would degrade Russia's ability to finance its war and circumvent existing restrictions, increasing pressure on Russia while lower oil and gas prices erode its remaining financial reserves.

Policy Proposals:

1. Ban Correspondent Banking for High-Risk Sectors:

   Prohibit correspondent banking relationships involving Russian entities engaged in energy and defense-related transactions. This will directly cut access to key international financial services that enable revenue generation and procurement for sanctioned sectors.

2. Enhance Crypto Transaction Controls:

   Strengthen Know Your Customer (KYC) and Anti-Money Laundering (AML) compliance requirements across cryptocurrency platforms operating in allied jurisdictions. Require platforms to freeze wallets associated with Russian actors and enforce reporting obligations on suspicious transactions to prevent the use of cryptocurrency for sanctions evasion.

3. Expand Investment Restrictions:

   Ban new investments in Russian sovereign debt and state-owned enterprises, including secondary market activities. Target financial structures facilitating asset swaps and other investment schemes designed to inject liquidity into Russia's state budget.

4. Target Intermediary Payment Schemes:

   Prohibit factoring and agent-based payment schemes involving Russian entities, unless they are fully transparent and licensed under strict regulatory supervision. Designate known third-country intermediaries acting on behalf of Russian companies to prevent disguised payments and logistical support.

5. Strengthen Bank Compliance Obligations:

   Impose strict KYC and compliance obligations on banks to ensure that illicit Russian financial activity is detected and blocked at the source.

Without the participation of banks, no complex evasion scheme can function. Strengthening financial sector enforcement is therefore critical to closing loopholes and sustaining overall sanctions pressure. Tightening the financial sector's role in sanctions enforcement will dismantle critical channels Russia uses to fund its war effort, prolong transaction times, increase operational costs for sanctioned entities, and force higher-risk behaviors that can be more easily detected and interdicted.

5. Reduce Russian Access to Western Technology

More than two years after initial technology sanctions were imposed, evidence overwhelmingly shows they are failing. Western semiconductors and industrial components continue to appear in Russian weapons recovered from Ukraine. Over 90% of advanced microchips in Russian military systems trace back to U.S. and European manufacturers, despite export bans. Parallel import networks through Turkey, China, the UAE, and Central Asia have expanded rapidly, with exports of dual-use goods to these regions rising by over 150%—clear signs that Russia is systematically circumventing restrictions.

This is not a bureaucratic oversight, but a strategic failure. Every Western-made semiconductor reaching a Russian missile factory strengthens Moscow's war effort and global leverage. Diverted CNC tools accelerate weapons production, and operational AI logistics systems help Russia refine battlefield capabilities in ways the West cannot easily counter. If unchecked, this will reshape the post-war security order. Russia is battle-hardening next-generation technologies—hypersonics, drone swarms, electronic warfare, and AI targeting—under live-fire conditions. Unlike the U.S., which is constrained by procurement cycles and peacetime testing, Russia is iterating in real-time. The result will be a military force not only larger, but more advanced and dangerous.

These advancements will not stay in Russia. A militarily dominant Kremlin would export tested capabilities to adversaries of the democratic world. China would gain combat-proven drone and AI models, accelerating its Indo-Pacific challenge. Iran and North Korea would acquire enhanced missile and cyber warfare tools, expanding threats in the Middle East and East Asia. A ceasefire in Ukraine would not end the conflict, but rather mark the rise of a new axis of adversarial, tech-empowered states challenging Western deterrence.

At the same time, the economic burden of these developments falls disproportionately on the U.S. and its allies. The cost asymmetry is stark: a $2,000 Russian drone built with Western chips can require a $2 million interceptor to destroy. New generations of Russian missiles demand even costlier countermeasures. At the same time, Western tech diverted to Russia is missing from U.S. and European industries, contributing to semiconductor shortages, inflating aerospace costs, and undermining competitiveness.

This is not a failure of legal architecture, but of enforcement. While direct sales to Russia are banned, re-exports through China (which accounts for 65% of rerouted flows), Turkey, and the UAE continue unabated. In 2023, Chinese chip shipments to Russia more than doubled; Turkish exports of integrated circuits rose 86%. By 2024, Turkish exports to Russia remained 60% above pre-invasion levels. In parallel, Russia has shifted payments away from the dollar system, relying on yuan and dirham transactions routed through state-backed financial structures.

Corporate compliance remains weak. While firms have halted direct exports, many lack robust end-user verification. As a result, distributors continue to divert components to Russian defense entities. A 2023 investigation into Russian UAVs found 70% of onboard chips were from U.S. companies—including Texas Instruments, Analog Devices, and Intel—despite formal adherence to sanctions. Current export controls still depend on voluntary self-reporting, without sufficient penalties to compel rigorous supply chain auditing.

The Strategic Objectives of Technology Sanctions

1. Cutting Off Russian Access to Military-Grade Components
    - Western technology firms must be fully accountable for their supply chains, with mandatory audits and severe penalties for violations.

  - Intermediary states must face automatic trade restrictions if they enable re-exports to Russia, to eliminate (reduce?) third-party circumvention.
  - Cloud computing, AI tools, and enterprise software must be completely severed from Russian hands, preventing the Kremlin from using Western digital infrastructure for military innovation.

2. Financially Crippling Russian Wartime Procurement
  - Secondary sanctions must be imposed on Chinese and UAE financial institutions that facilitate Russian purchases, making transactions prohibitively expensive.
  - Cryptocurrency and alternative payment networks used to finance illicit procurement must be aggressively tracked and disrupted.
  - Export caps on high-risk jurisdictions should limit the availability of dual-use goods, reducing the supply chain bottlenecks that Russia is exploiting.

By taking aggressive implementation action now, the West can ensure that the global military balance remains in its favor, preventing Russia from turning its wartime technological gains into a long-term strategic advantage.

Recommendations:

Enforce Secondary Sanctions on Technology Diversion Hubs

Challenge: Russia is evading sanctions via parallel import networks that reroute critical components through China, Turkey, the UAE, and Central Asian states.

Sanctions Coalition Response:

- Immediately expand secondary sanctions to cover any foreign company—especially in China and Turkey—facilitating the re-export of dual-use goods to Russian entities.

- Expand public designations of known intermediaries (e.g., Sinoelectronics, Asia Pacific Links, Enütek Makina, Azu International) as violators of U.S. export laws.
- Apply extraterritorial restrictions under the Foreign Direct Product Rule (FDPR) to all military-relevant items involving U.S. technology or software, regardless of country of origin.
- Coordinate enforcement sweeps with EU counterparts targeting UAE-based shell companies and Central Asian front firms used to disguise end-use destinations.

Mandate Supply Chain Traceability and End-User Audits

Challenge: U.S.-made components (e.g., from Texas Instruments, Analog Devices, NVIDIA) are found in Russian missiles, drones, and jamming systems due to lax downstream oversight.

Sanctions Coalition Response:

- Impose mandatory supply chain audits for all firms exporting high-risk technologies (semiconductors, sensors, industrial controllers).
- Require serialized component tracking and forensic traceability for microelectronics, with manufacturer accountability beyond first-tier distribution.
- Introduce a federal end-user certification regime with third-party verification for sales of dual-use goods.

Disrupt Russia's Alternative Financial Infrastructure

Challenge: Russia uses Chinese yuan, UAE dirhams, and crypto assets to finance illicit procurement of Western tech, bypassing dollar-denominated channels.

Sanctions Coalition Response:

- Sanction financial institutions (especially Chinese and UAE banks) that facilitate dual-use procurement on behalf of Russian military end users.
- Expand monitoring of high-risk payment flows through SWIFT, correspondent banks, and offshore crypto exchanges.
- Condition dollar access for non-U.S. banks on demonstrable compliance with U.S. sanctions enforcement related to Russia's defense sector.

Eliminate Russian Access to U.S. Cloud and AI Infrastructure

Challenge: Russian military entities continue to access U.S.-built AI platforms, cloud computing resources, and SaaS tools via VPNs and third-party resellers.

Sanctions Coalition Response:

- Enforce the ban on cloud services by ensuring AWS, Microsoft Azure, and Google Cloud terminate any indirect Russian access.
- Expand sanctions to cover SaaS and ML platforms used for logistics, coordination, and simulation (e.g., Atlassian Jira, Microsoft 365, Unity, Unreal Engine).
- Ban licensing and support of enterprise software (SAP, Oracle, Siemens NX, MATLAB, ANSYS) to Russian defense-linked users—even for legacy deployments.

Sanction Russia's Domestic AI Infrastructure Providers

Challenge: Russian data centers (e.g., Yandex Cloud's Kaluga facility) continue to operate advanced NVIDIA GPUs and provide domestic AI compute for military applications.

Sanctions Coalition Response:

- Designate Yandex Cloud, Rostelecom, IXcellerate, and Cloud.ru as critical military enablers and sanction them accordingly.

- Block any export or re-export of GPUs, networking components, and virtualization platforms to Russian-hosted infrastructure.
- Require U.S. companies to disclose historical sales of advanced AI hardware or virtualized compute services to Russian firms or intermediaries.

6. Impose Goods and Services Trade Export Quotas on High-Risk Intermediary Countries

Objective:

Prevent sanctioned goods from being re-exported to Russia through third countries by capping their access to dual-use technologies.

Actions and Responsibilities:

The sanctions coalition should impose export license quotas on high-risk jurisdictions, such as Turkey, UAE, Kazakhstan, and Kyrgyzstan, for sensitive categories including semiconductors, industrial controllers, RF components, and precision machinery. These quotas should be tied to 2021 pre-invasion trade baselines and automatically restrict new licenses when breached. Under the Dual-Use Regulation, the European Commission should adopt a parallel mechanism with synchronized control categories and thresholds. Compliance trends should be reassessed quarterly, with the possibility of tightening quotas or issuing bilateral technical assistance to improve enforcement infrastructure in cooperating jurisdictions.

7. Condition Multilateral Program Participation on Sanctions Compliance

Objective:

Leverage influence within international financial institutions to compel alignment on technology sanctions enforcement.

Actions and Responsibilities:

The sanctions coalition should advocate within the IMF, World Bank, and EBRD to condition financing approvals and technical cooperation projects on demonstrated compliance with technology sanctions. G7 member states should coordinate positions within these institutions to delay, oppose, or impose conditions on loans, grants, and credit lines benefiting jurisdictions that facilitate sanctions circumvention or host shell companies linked to Russian procurement. Due diligence guidelines should be strengthened to screen for supply chain risks, and sanctioned entities should be excluded from eligibility for development finance. Quiet diplomatic engagement should precede public moves, allowing governments the opportunity to realign trade enforcement in return for uninterrupted access.

8. Introduce Customs-Based Trade Friction for At-Risk Supply Chains

Objective:

Raising the time, cost, and regulatory uncertainty of shipments linked to circumvention pathways will disincentivize diversion through intermediary jurisdictions.

Actions and Responsibilities:

The sanctions coalition should jointly designate specific jurisdictions for enhanced outbound shipment scrutiny. This should include mandatory pre-clearance inspections, end-user verification requirements, and randomized post-export audits for dual-use goods destined for high-risk countries. Licenses for controlled exports to these countries should be subject to extended review timelines or conditional approvals. This approach retains the flexibility of open trade but injects controlled friction that discourages grey-market trade and increases the compliance burden on complicit intermediaries.

9. Announce Pre-emptive Sanctions Designations with Grace Periods for Divestment

Objective:

Create pressure for voluntary compliance by signaling intent to sanction-enabling firms while offering an exit ramp to avoid disruption.

Actions and Responsibilities:

The sanctions coalition should publish pre-designation advisories for companies suspected of materially supporting Russia's access to dual-use goods or defense financing. These firms would be given a 90-day window to divest from Russian-linked transactions before full sanctions are enforced. Embassies from countries in the sanctions coalition in relevant jurisdictions should initiate diplomatic engagement with local authorities and business associations, clarifying expectations and offering compliance assistance. Firms that cooperate would avoid designation and be removed from the pre-list. Those who fail to act would face automatic blocking measures, and public evidence summaries would accompany the designations to deter similar conduct by others.

CONCLUSION

Tightening the Screws

We see two key reasons for Ukraine's partners, led by Europe, to tighten sanctions on Russia further now. First, additional sanctions would make a ceasefire more likely by increasing the costs to Russia of persisting in its effort to capture and control more of Ukraine. Second, looser energy markets put Russia in a more vulnerable economic position and imply a larger impact on Russia from further restrictive measures. Building on our three years of research and advocacy, we propose a package of sanctions to constrain Russia further and support Ukraine, including lower oil price caps, a further round of shadow fleet designations, a ban on lifting from specific Russian oil export terminals, a ban on Russian LNG, and tariffs on any remaining Russian oil, gas and fertiliser exports to the EU, backed up by comprehensive and better-enforced sanctions in defense and finance. Europe should also seize immobilized Russian assets held in Europe and use them to finance Ukraine's defense. Given Russia's track record of poor compliance with international agreements, we would further urge that all sanctions be maintained in full force until a final peace agreement has been reached and Russia has demonstrated a track record of compliance with the terms of that agreement.

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