Centre for Global Studies Strategy XXI

SYNERGING ENERGIES

JUNE 2022

POLICY BRIEF

POSSIBLE MECHANISMS TO STRENGTHEN UKRAINE'S SECURITY IN ENERGY SECTOR AND BLACK SEA SECURITY ISSUES

This policy brief "Possible mechanisms to strengthen Ukraine's resilience in energy sector and Black Sea security issues," has been written by the experts of the Centre for Global Studies Strategy XXI with the support of the European Endowment for Democracy (EED) within Project "Strengthened Ukraine's Resilience in the face of Russian Aggression with Quality Analysis and Advocacy." Its content does not necessarily reflect the official position of EED. Information or views, expressed in this material are the sole responsibility of its authors.

Since February 24, 2021, Russia has been carrying out a full-scale military invasion in Ukraine. Not only military, but also industrial, energy, transport infrastructure is destroyed, the blockade from the sea is carried out. This sharply reduces the country's economic opportunities, isolates it from external support. This situation affects the ability to resist further, affects military and economic stability, especially in the coming autumn-winter period of 2022-2023. Oil and gas embargo may substantially affect Russia's ability to fund war in Ukraine, since the Russian budget is dependent on energy exports. Every day Russian cruise missile destroy critical energy infrastructure in Ukraine and kill dozens of its citizens, ***so the most effective mechanism to strengthen Ukraine's resilience in the energy sector is to force Russia stop the war.***

On May 31, the leaders of the European Union agreed on the sixth package of sanctions against Russia, which provides for a significant restriction on the import of oil from the Russian Federation. On June 27, it became known that the leaders of the G7 countries are close to establishing a price limit for Russian oil.

In 2021, Russia earned $253,2 billion for energy supplies, while Russia's military budget amounted to €62,5 billion. This year, Russia earns €1 billion per day by selling gas and oil, so the revenues from the energy export will be even higher than in previous years.

Russian energy policy is guided not by business logic but by an ambition of geopolitical supremacy. Russia may halt gas transit through Ukraine, causing a significant increase in gas price, to put pressure on Europe in response to its intention to impose a gas and oil embargo

There is some doubt whether the EU will manage to reduce its demand for Russian gas by 100 billion cubic meters before the end of the year, as declared by the REPowerEU plan, outlined by the European Commission. The REPowerEU plan subordinates the reduction of the Russian gas consumption to the longterm climate goals, which may delay the process for years. Meanwhile**, Russia's war must be deprived of its export revenues from oil and gas as soon as possible.**

EVEN IF EU'S IMPORTS OF RUSSIAN GAS WILL BE REDUCED THIS YEAR, IT WILL NOT SIGNIFICANTLY AFFECT RUSSIA'S ENERGY REVENUES BECAUSE OF THE INCREASED GAS PRICE. THE EUROPEAN INSTITUTIONS HAVE TO RESOLVE THIS ISSUE WITHOUT DELAY, PROBABLY WITHIN THE SEVENTH PACKAGE OF SANCTIONS.

One of the fastest ways to reduce Russian gas consumption is to decrease thermal acceptability by 2 Celsius degrees. According to the International Energy Agency, it will reduce the EU's demand for Russian gas by 28 billion cubic meters.

Another way is to set a fixed price for Russian gas. This would prevent price escalation arising from market distorting policy by Russian Gazprom.

Besides, the EU should diversify gas supply sources with special focus on the liquified gas import. For this purpose, the EU and the USA reinvigorated the transatlantic energy partnership at the EU-U.S. Energy Council on February 7.

The sanction mechanisms applied by the EU so far, including the oil embargo, will show notable effects only next year.

HOW TO MAKE SANCTIONS PAINFUL FOR RUSSIA IMMEDIATELY

Physically, the volume of Russian energy exported to the EU is declining. However, the financial revenues are not. On the contrary, compared to the same period last year, they have even increased. **Russia sells less but gets more. If to compare the volumes of tax revenues of the Russian Federation from the extraction and export of hydrocarbons (mineral extraction tax + export duty) for 5 months of 2021 and 2022, the figures will be eloquent:**

Year Month	2021, $ bln	2022, $ bln
January	**6,6**	**10,4**
February	**7,3**	**12,6**
March	**7,8**	**11,7**
April	**11,7**	**23,1**
May	**8,4**	**14,0**
Total for 5 months	**41,8**	**71,8**

Source: Energy Intelligence

The war is currently and temporarily beneficial for the oil and gas sector of the Russian Federation, especially under the circumstances when the EU oil embargo has not fully worked and gray schemes to bypass it are being developed in parallel. This situation is due to both the high specific weight of the Russian Federation in the supply of hydrocarbons to the EU, and the successful special operation in the second half of 2021 to unwind the spiral of gas prices in Europe, which continues up today.

CURRENT SANCTIONS FOR RUSSIA WILL HAVE AN EFFECT, BUT ONLY FROM 2023; RUSSIA MEETS ITS FINANCIAL GOALS FOR 2022 FOSSIL FUEL EXPORTS.

Losing the European market, Russia can partially focus on other markets. China and India are its main saviors.

China already takes large volumes of oil from the Eastern Siberia-Pacific Ocean pipeline, so it can further increase imports only slightly. The capacity of ESPO and Power of Siberia pipelines leading to China is significantly inferior to the infrastructure in Europe. Russia is not able to manipulate the market in China as it does in Europe. China has a diversified system of oil and gas supply, which makes it relatively independent of any supplier. Russia is planning to connect its Western and Eastern oil and gas systems by the Power of Siberia pipeline to expand its collaboration with China. It will take years and tens of billions of dollars. Still, it will not be on par with the capacity of infrastructure in Europe.

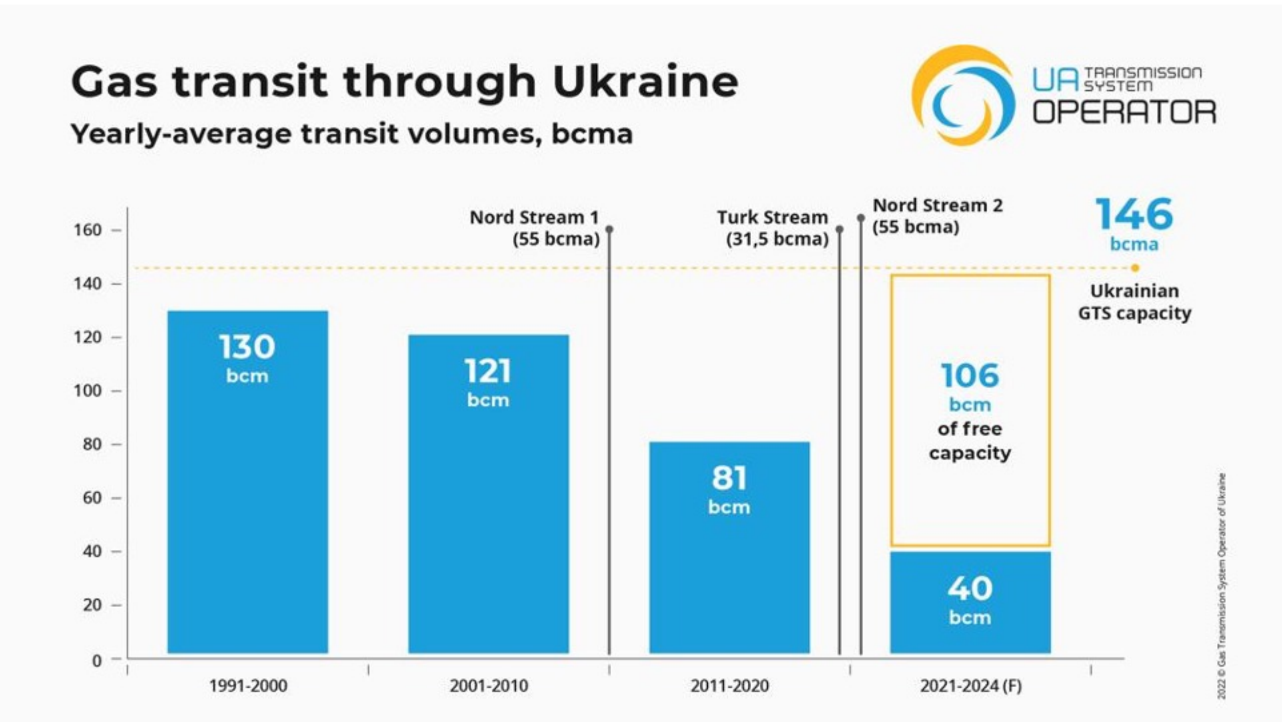
As for **India,** because of geographic logistics, this market was not important for Russia before. However, even with the discount that Russians gives to India now - $32 per barrel, the price of Russian oil for India is about $80 per barrel. This is approximately in line with the forecasts of the Ministry of Economic Development of Russia set for 2022. **So, they will get what they expected.**

RUSSIAN COUNTERATTACK: INCREASING ENERGY PRICES IN EUROPE BY EXACERBATING THE GAS DEFICIT

Now the Kremlin is starting a "gas counterattack." The recent interruption in supplies through Nord Stream 1 is an indicator of such action. It was cleverly disguised as if "we just send turbines for maintenance to Canada and your sanctions don't allow them to be returned." But this is a serious manipulation. **There are always spare turbines to replace those that are sent for repair (***for more details see article «Turboattack of Gazprom: How it threatens Europe and Ukraine» by Mykhailo Gonchar, Denys Vynskii)*

In the Kremlin, they believe that Europeans will not be able to fully compensate for the lack of Russian gas. **High gas prices remain in the European market since Russia** launched this "special operation" to raise gas prices last year**,** by halting supplies. And now, with this situation with the Nord Stream 1, they are **repeating the same scenario.**

What the European Commission did not say or will not say yet, is that there will be no catastrophe if North Stream 1 is shut down, because there is spare transit capacity equal to the amount of both Nord Streams through Ukraine's gas transportation system. It is clear why Russia does not mention it, but **the European Commission should clarify that there are no problems with gas delivery, Russians should use the route through Ukraine.**



The Russians were preparing for war and sanctions, they created a price escalation in the EU market, and the West naively thought that dialogue would solve all issues. All the logic of Russia is on the surface.

The loss of significant gas volumes on the market and uncertainty instantly causes the price escalation. The Russians' two-fold goal at the current stage is to prevent the filling of European gas underground storage facilities and impede the EU's decision-making on imposing a gas embargo similar to the oil embargo. As of June 22, the EU UGS is 54.77% full, and Gazprom's destabilizing actions hamper achieving of the minimum target of 80 percent by the beginning of winter.

Gazprom's behavior is dominated not by commercial but by military logic set by the Kremlin. Its goal is to provoke an energy crisis in the EU through the escalation of gas prices and interruption of supplies and to force Brussels to lift sanctions against Russia, with the parallel launch of Nord Stream 2 to "save" European consumers, refusing to support Ukraine.

Excessive dependence on supplies from Russia has made the European market vulnerable to market abuse and manipulation by Gazprom as the dominant supplier. The "drainage" of the EU market, which Gazprom has been carrying out since last year, has continued this year.

In January-February 2022, imports of Russian gas was the lowest in 2015-2021 and amounted to only 6-7 billion cubic meters per month. The loss of significant volumes of gas on the market and uncertainty instantly cause an escalation of prices. High prices naturally lead to a decrease in the global gas consumption rate. According to IEA expectations, in 2022, the fall in consumption may reach 6%. In Ukraine, Russia's aggression has caused both a decrease in gas production and a drop in overall demand for gas. According to current estimates, the destruction of industry, infrastructure, and housing will reduce the total gas consumption in 2022 by about 28% – to 21 billion cubic meters.

SOME OTHER WAYS TO REDUCE DEPENDENCE ON RUSSIAN GAS

To begin with, it is necessary not to switch off coal power plants and nuclear power units as was planned this year. The second option is to save as much as possible. There was already a proposal to reduce the heating temperature by 1 or 2 degrees, which will decrease the gas consumption by 28 billion cubic meters within the EU instantly. This is equal to half of the annual supplies through Nord Stream.

As for alternative supplies of gas to Europe, this is mainly liquefied natural gas (LNG) from the US and Qatar. However, the Biden administration has imposed severe restrictions on the development of new areas for shale oil and gas production**,** given the climate criteria.

Currently, Biden's team does not dare to lift these restrictions. In our opinion, such a policy is irrational in current circumstances because it doesn't decrease gas consumption, only allows Russia to maintain its influence in the European market, and together with Saudi Arabia to dictate oil prices in the OPEC+ format. This could be leveled by American oil and gas production. The US promised Europe to help reduce gas dependence on Russian supplies, and the US supplies LNG, but this is not enough without serious additional production.

Qatar has ambitious plans for LNG. The North Field East expansion project will expand Qatar's LNG export capacity from the current 77 to 110 million tons per year in 2025.

Another producer of LNG is **Australia**, but it is quite far from Europe. However, agreements were reached to help Europe last year, that Australian LNG will enter the Asian market and American gas will come to Europe instead.

Theoretically, in the long run, there could be additional supplies of **Turkmen** or **Iranian gas** to Europe. But these are ideas from the 1970s and 1990s, which require huge investments and several years to construct pipelines to Europe that are unlikely to happen. Russia, on its part, has openly threatened that it will stop the construction of the Trans-Caspian pipeline project if it is launched. While only a limited increase of imports from **Norway** and **Algeria** is possible.

THE MOST REALISTIC SCENARIO REMAINS LNG FROM THE UNITED STATES AND QATAR, WHICH ALSO REQUIRES AN INCREASE IN EXTRACTION.

Another thing that can effectively reduce Russia's revenue by reducing global energy prices is the creation of a cartel of oil consumers. There is a cartel of exporting countries, OPEC, which actually dominates the global oil market – having 80% of the oil reserves, more than 40% of the production, and more than 60% of the export. In contrast to this cartel, it is necessary to create a cartel of consumers that will set oil prices. This discussion has started, and this is the right direction.

SANCTIONING TANKERS WITH RUSSIAN OIL AND GAS, BLOCKING BLACK AND BALTIC SEAS FOR THEM IS THE ONLY EFFECTIVE WAY TO ENSURE AN OIL EMBARGO

Blocking the passage of tankers with Russian oil is the only effective option that can physically have an effect and make an embargo that corresponds to the meaning of the word. Simply, the navies of some NATO countries can stand in the Danish Straits and near the Dardanelles and not allow passing of the tankers if they go to Russia for loading. This will effectively limit Russian oil exports not only to the EU, but also to third countries.

The Kremlin is openly laughing when it says "yes, you have imposed sanctions, but we still get our money."

Even during the Cold War, the Soviet Union managed to circumvent the sanctions by purchasing high-tech equipment. An example is the scandal with the Japanese company Toshiba, which sold to the Soviet Union eight digitally controlled machines for the production of controllable pitch propellers for warships and submarines.

In 1983 the USSR managed to build a gas pipeline in Siberia using stolen software for compressor stations, they wrote "Mr. Reagan, your sanctions are licked!"

There will always be options for circumventing sanctions, but if tough and radical measures are taken, there will be very few such options and sanctions will be effective. Current sanctions are obviously “not without loopholes,” when Russia blends its oil in the open sea and then manages to sell it.

CONCLUSIONS AND RECOMMENDATIONS

Excessive dependence on supplies from Russia has made the European market vulnerable to market abuse and manipulation by Gazprom as the dominant supplier. The "drainage" of the EU market, which Gazprom has been carrying out since last year, has continued this year. However, compared to the same period last year, energy revenues have even increased. Russia sells less but gets more.

The war is currently and temporarily beneficial for the oil and gas sector of the Russian Federation, especially under the circumstances when the EU oil embargo has not fully worked and gray schemes to bypass it are being developed in parallel. This situation is due to both the high specific role of the Russian Federation in the supply of hydrocarbons to the EU, and the successful special operation in the second half of 2021 to unwind the spiral of gas prices in Europe, which continues up today.

The most effective way to strengthen Ukraine's resilience in energy sector is to deprive Russia of its possibility to get energy revenues that means to wage a war. In this context, it is important to resort to the following initiatives:

1) Unblocking of the Black Sea

Unblocking of the Black Sea is important not only for the export of grain, but also for the import of oil products and coal, as well as facilitating the organization of alternative schemes of logistic for importing energy for Ukraine. Adopting resolutions on Black Sea security by the U.N. Security Council, the European Parliament, the NATO PA, the US Congress, the Parliament of Great Britain, are necessary not only to prevent global food crisis, but also to strengthen Ukraine's resilience in energy sector.

2) Promotion of initiatives to limit the payment of oil imports to the level of production cost ($15 instead of $80-120).

The cost of oil production consists of the following indicators: operating costs ($3-10), capital investments ($5-10), transport ($5), taxes. The cost of oil production in Russia, taking into account the full cycle of costs, varies between $15-45 per barrel. Such a statement was made by P. Sorokin [[i]], deputy head of the Ministry of Energy: «*If the price will be $50-60 per barrel, most of our production will pass, will not be closing, and we will save our market share…*». The cost of oil production on new projects including taxes is 42-44 dollars per barrel, according to research [[ii]] of the Saudi state oil company Saudi Aramco. So, the oil price should tend to the level of production cost. In

Russia, light oil from traditional reservoirs is at a late stage of exploitation, and new oil has a higher cost, and at some stage this rent will disappear. Under low oil prices, in ten years, the quality of the oil produced in Russia will deteriorate so much that almost all of it will pass into the category of hard-to-extract, that is, the cost of its production will be significantly higher than now from traditional reserves.

3) Establishment of a cartel of consumers as opposed to the cartel OPEC+

Recently, Italy's prime minister, Mario Draghi, broached the idea of creating a "cartel" of oil consumers. Just as the biggest oil-producing nations club together through Opec to agree annual oil production quotas, Draghi has suggested big energy consumers join forces to increase their bargaining power. [[iii]] Two options could be on the table: either "a cartel of buyers" working together to negotiate prices, or a "preferred path" of persuading Opec and other big producers to increase output. The proposed oil buyers' cartel, more a priority for the US, is simply at the idea stage, but could become a mechanism to convince Opec to increase production should the EU decide to block imports of Russian energy.

4) Substantial additional volumes of LNG

Where to get LNG for Europe? The three largest producers of LNG in 2021 were Australia with approximately 297 million cubic meters (mcm) per day, Qatar with 286 mcm and the United States with 277 mcm, which is more than half of world supplies. The important point is that they all export natural gas at or near the maximum their liquefaction capacity allows, and new liquefaction capacity takes from two to four years to build. Significant additional volumes of LNG will appear on the market in 2024-2025.

5) Demand-side options could be a potentially significant quick win

Simple energy saving actions such as turning down the thermostat or turning up the air conditioning by just 1°C, could save app. 28 bcm of natural gas that is a half of Nord Stream 1 capacity. For this to happen, governments must actively promote awareness campaigns, adopt financial schemes to prompt households to save energy, and introduce regulations mandating energy savings in public buildings. Each cubic metre of gas not consumed is important. As Italian prime minister Mario Draghi asked recently, "Do we want to have peace, or do we want to have the air conditioning on?" This underlines the basic truth that it is an individual responsibility to take simple daily actions that might ultimately not even impact lifestyle, in order to contribute to peace in Europe. [[iv]]. European governments must stop subsidising oil and gas and ask people to consume less. Since September 2021, the EU's four largest economies – Germany, France, Italy and Spain – have each spent €20bn-€30bn to artificially lower gas and electricity bills, as well as gas and diesel prices, according to Brussels thinktank Bruegel [[v]]. These subsidies undermine the EU's support for Ukraine by helping to fund Moscow, as well as draining public finances and harming the environment.

6) Implementing a cap on wholesale gas prices

The idea of a cap of wholesale gas prices was initially proposed by Italy. Although some states like France and Spain have backed the idea, another group of states, Germany and Netherlands, opposed it defending the concept of a free market. In its Communication [[vi]], the EC argued the proposal should only be a last resort for an emergency: "Capping or modulating the gas price through regulatory means is an option that may be considered, as it would have an immediate impact on price levels. It can give an important signal that the EU will not pay any price for gas but such an intervention should only be envisaged as last resort, as it entails some drawbacks in terms of security of supply of gas flows." Recent actions of Russia as cutting off all gas supply to the EU, reducing below the contract level volumes of transit through the territory of Ukraine and interrupting gas supply through the NS1 in the period of preparation to the winter season in Europe, in our opinion, should be considered by the EU as the exactly last resort.

A complete embargo on all Russian energy sources is the most desirable and correct course of action. Making it impossible for the aggressor to receive income from the sale oil and gas most effectively affect the Russian economy. A partial or short-term embargo is a flawed and dangerous strategy. It can lead to a further increase in prices, in particular for gas, which, obviously, fully compensates Gazprom for the loss of export volumes, as it was already during the second half of 2021, and fund directly Russian war in Ukraine.

REFERENCES

[i] https://u.to/jf82HA

[ii] https://www.aramco.com/-/media/images/investors/saudi-aramco-prospectus-en.pdf?la=en&hash=8DE2DCD689D6E383BB8F4C393033D8964C9F5585

[iii] https://www.theguardian.com/business/2022/may/30/could-a-cartel-of-large-energy-consumers-cut-oil-and-gas-prices

[iv] https://www.bruegel.org/2022/04/europe-must-get-serious-about-cutting-oil-and-gas-use/

[v] ibid

[vi] https://energy.ec.europa.eu/system/files/2022-03/Communication_Security_of_supply_and_affordable_energy_prices.pdf

Project Team: Mykhailo Gonchar, Oksana Ishchuk, Olena Bezludna, Tanteli Ratuvukheri, Pavlo Lakiichuk, Sergii Dyachenko.