

Should ban on gas be included in the sanctions against Russia?

Abstract

The war in Ukraine brought the energy dependency of Europe into the light. EU countries unequivocally condemned the Russian aggression against Ukraine, until May, five packages of sanctions were adopted at light-speed. Yet, hydrocarbons remained a noticeable exception, there were rumours about cutting off Russian oil and gas has been from the beginning of the crisis but never made it to EU agenda until the European Commission proposed to target oil in the sixth package of sanctions. After weeks of negotiations and stalemate, the EU eventually adopted this package granting exceptions to some Member States, notably, Hungary, Croatia and Slovakia.¹ However, there is still an elephant in the room: will the EU go one step further and add the ban on Russian gas in the list of sanctions? As for oil, some Member State argue that this move would be suicidal while others support it, claiming that it will be more painful for Russia and the EU can find alternative solutions. This paper examines the potential effects of adding the ban on gas to the EU sanctions by focusing on a simple underlying question: who will suffer more, Russia or the EU should a ban on gas eventually be included in a forthcoming package of sanctions?

1) What sanctions has the EU adopted so far against Russia?

Many if not most western countries have put up sanctions against Russia², but the EU in particular has made the harshest ones in wide-ranging fields to hinder the war effort against Ukraine and limit and halt the Russian war economy.³ Among others, the EU banned the exports of dual-use goods and technology for military use, banned exports of goods and technologies in the oil refining sector,⁴ it closed its airspace, ports and roads to Russian vehicles. Moreover, it excluded several Russian banks from the SWIFT system (with the notable exception of Gazprombank, so the EU could still pay for Russian oil and gas). Travel bans and the freezing of assets have also been imposed on high-ranking officials, businesspeople and oligarchs too. There is also a suspension of visa facilitation provisions for Russian officials and businesspeople in effect. The EU also adopted secondary sanctions⁵ too to

¹ <https://www.politico.eu/article/orban-hungary-eu-oil-ban-exempt-euco/>

² <https://graphics.reuters.com/UKRAINE-CRISIS/SANCTIONS/byvrjenzmve/>

³ <https://www.consilium.europa.eu/en/infographics/eu-sanctions-ukraine-invasion/>

⁴ <https://www.consilium.europa.eu/en/infographics/eu-sanctions-ukraine-invasion/>

⁵ Secondary sanctions are when a sanction-imposing country can directly or indirectly discourage a third-party from interacting with the sanctioned country by potentially forbidding its own citizens and firms from dealing with said third-

discourage other countries from dealing with Russia.

Finally, on the 3rd of June, the EU adopted its sixth package which includes oil import restrictions, the phasing out of Russian oil products. Countries which would be affected the most are given a temporary exemption. Oil transport services to third countries are also being phased out. Three more Russian state-owned outlets had their broadcasts suspended, and further export restrictions were introduced, particularly for chemicals that can be used for chemical weapons.⁶

2) What would be the likely effect of adding gas ban to the sanctions?

- *Impact on Russia*

Gas is the second most important export commodity of Russia, after oil and petroleum products. Last year, Russia exported \$54.2 billion worth of gas through pipelines, including \$7.6 billion as LNG. These numbers amount to 3,7% of its GDP⁷ (about the same as its defence spending), which is a significant sum. Combined with oil, it accounts for 36% of the country's budget.⁸ With the war going on, and both oil and gas prices soaring, this amount is expected to multiply, Russia will have ample financial reserves to divert to suffering industries and to its war effort. There is also the danger, that the promise and threat of sanctions will raise the prices, so the EU and other sanctioning countries are indirectly making it more expensive for themselves to sanction Russia.

Nevertheless, Russia also runs the risk of becoming very much dependent on income from hydrocarbons and it is put on a trajectory that is unviable in the long-term. Even if we disregard the fact that fossil fuels are finite, it is obvious that having a "single resource" economy is a risky business. In addition, by pushing up oil and gas prices and using them as a "weapon", Russia forces EU countries to accelerate their path towards energy independence without having the certainty of being able to replace them.

In order to assess the impact of a suspension of gas trading, let us first take the extreme scenario of a radical, sudden and total interruption. Considering that Russia exports 8.9 trillion cubic feet per year

party if it does not comply with the sanctions.

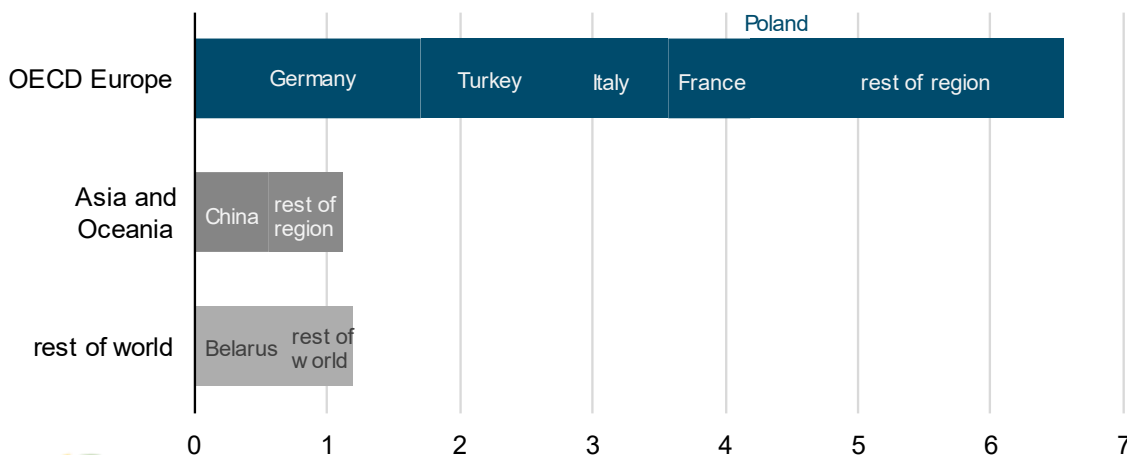
⁶ https://ec.europa.eu/commission/presscorner/detail/en/IP_22_2802

⁷ <https://icds.ee/en/european-energy-security-and-russian-natural-gas/>

⁸ <https://www.reuters.com/markets/europe/russias-oil-gas-revenue-windfall-2022-01-21/>

in natural gas⁹, and 74% of it is bought by the OECD Europe countries,¹⁰ a total ban would entail that Russia could potentially lose two-thirds of its overall natural gas export¹¹, and would be a massive hit to its economy.

Natural gas exports from Russia (2021)
trillion cubic feet



Source: Graph by the U.S. Energy Information Administration, based on Russia's export statistics and partner country import statistics published by Global Trade Tracker

Could Russia find other clients to sell what Europeans would stop consuming? The main limiting factor in this regard is the capacity and destination of its pipelines through which most of the gas is transported. Russia overall has an annual gas pipeline capacity of 225 billion cubic metres.¹² This is a hard limit that cannot be expanded easily or at an affordable cost. Out of this amount, there is only capacity for 38 bn m³ for China and 47, 5bn m³ for Turkey, the rest of the capacity is going directly to EU countries¹³. If the transportation and trade of gas would stop with the EU, Russia would have these two alternatives, that however are not very promising. While in China, probably, there would be a demand for the gas that Russia could reroute to this direction (most likely at a lower price), the latter does not have the capacity to do so. As far as Turkey is concerned, the existing capacity is slightly higher, but there is simply not enough demand to substitute the EU.

⁹ 84% of which is transported by pipelines, the rest as LNG

¹⁰ <https://www.eia.gov/todayinenergy/detail.php?id=51618>

¹¹ Turkey excluded, counting only EU countries

¹² GECF Annual Statistical Bulletin 2021, page 35

¹³ The currently built but unused Nordstream 2 included (55bn m³)

- *Impact on the EU*

What about the EU? Could Member State economies weather the storm of cutting Russian gas? The very first consequence would be soaring energy prices while the EU would still have to find alternative providers. Last year, nearly 43% of the EU's natural gas import came from Russia.¹⁴ This rate has been roughly the same in the last two decades. While Russia is more dependent on Europe than vice-versa,¹⁵ there are no obvious alternatives for the EU. For example, Norway and Algiers (the second and third providers to the EU) together do not account for nearly as much gas as Russia.¹⁶ There are talks of American LNG shipments¹⁷, but those cannot fully replace Russian gas either. The reason for that is that American LNG production is already at its peak, so it could only increase supply to Europe by rerouting more of its existing production to the continent. In 2021, 24% of US LNG exports went to Europe, while in the first few months of 2022 it skyrocketed to 70%.¹⁸ Yet it is not nearly enough to replace Russian gas.¹⁹ It is evident that in the short term, there is no alternative for Russian gas, at least, not without severe energy shortages.

However, we should not forget that the EU is a collection of heterogeneous countries with very different level of dependency on Russian resources, a factor that brings an extra layer of complexity. Some countries are virtually independent of Russia, such as the Netherlands, while others are receiving gas exclusively from Russia, such as Hungary. This makes forming united standpoint difficult as some countries have the capacity to impose harsher sanctions on Russia by only paying a reasonable price, while others might have their economies heavily damaged by such sanctions.

This asymmetry is obvious when we have a closer look at the individual situation of three representative Member States, i.e., Hungary, Germany, and Poland. Indeed, substituting Russian gas is not as simple as putting aggregate numbers, each country has its own characteristics and accessibilities.

¹⁴ <https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html#carouselControls?lang=en>

¹⁵ It must be noted, that being on the importer side always carries more risk, since losing a product is more harmful than losing the income from the said product.

¹⁶ <https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html>

¹⁷ <https://www.reuters.com/business/energy/could-us-ship-more-lng-europe-2022-03-25/>

¹⁸ <https://www.freightwaves.com/news/armada-carrying-us-lng-heads-to-europe-but-it-wont-be-enough>

¹⁹ "There isn't enough seaborne gas available to replace Russian volumes," -Evercore ISI analyst Sean Morgan

3) Asymmetric situations within the EU: the cases of Hungary, Germany and Poland

- Hungary

In terms of gas dependency, Hungary imports over 90% of its gas need from Russia.²⁰ The reason for this is mostly historical-As a former eastern bloc country, Hungary traditionally relies on Russia for many of its resources. After the regime change in 1989, governments kept using the same infrastructure and Russia remained a major partner²¹. While on the one hand, this meant stability and lower market prices, it also meant a much greater dependence on Russia, on the other

Regarding Hungary's energy consumption, 25% comes from oil, 7,8% from coal and most importantly, 19,5% from natural gas²², which is not overwhelming but still a significant amount²³. Finally, heating is also one of the main sources of natural gas consumption. In Hungary almost 60% of all households use natural gas in some form for heating²⁴. Of all the areas of gas use this is the most vulnerable to sanctions, especially during winter months. If Russian gas supply were to be cut, it could result in millions of people ending up without heating, which would be devastating for the country. The current level of gas in storage is low. In March it reached a five-year record low²⁵, as the main idea was to use previously bought and stockpiled gas and wait until gas prices level-out after the war. However, the war is still going on, the prices remain high, and this strategy led to depleting stockpiles. As for alternatives, the Hungarian gas pipeline system is focused on Russian import and its transport and distribution²⁶, at the same time, it is not connected to other potential lines that could replace Russian import. The closest main line connected to Atlantic and African sources is located in Slovakia and Hungary only has small capacity connections to it, having a much stronger focus on transmitting gas from Russia to Serbia.²⁷

²⁰ <https://www.penzcentrum.hu/gazdasag/20220320/igy-fugg-az-orosz-gaztol-az-eu-magyarorszagnak-szuperkegyetlen- lenne-a-levalas-1123066>

²¹ A small exception can be seen from 2004 to 2009, but Russia still accounted for 75% of imports

²² <https://www.worldometers.info/energy/hungary-energy/>

²³ Also important to mention, nuclear energy and its expansion is also closely tied to Russia

²⁴ https://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_zhc019a.html

²⁵ <https://www.portfolio.hu/gazdasag/20220405/beszakadt-magyarorszag-orosz-gazimportja-az-otszoros-piaci-ar-mellett-537653>

²⁶ <https://energyindustryreview.com/oil-gas/dnv-assesses-hydrogen-readiness-of-hungarian-gas-pipeline/>

²⁷ https://ec.europa.eu/energy/infrastructure/transparency_platform/map-viewer/main.html

- Germany

66% of German's natural gas needs are met by imports from Russia, as well as 34% of its oil, and, since last year, 57% of its coal needs²⁸. Unlike Hungary, Germany is dependent on Russia for all three fossil fuels, making it particularly vulnerable. Germany also has a stake in energy infrastructure with the two NordStream pipelines connecting the two countries. Germany's energy mix is also cause for concern. 29% of energy consumption comes from oil, 19,5% from gas, and 17% from coal, while nuclear is being steadily phased out.²⁹

Regarding heating, more than half of German homes are heated by natural gas. This is a slightly better ratio than in Hungary, but still a significant dependence on Russia.³⁰ It is clear, that Germany is rather dependent on Russia for natural resources, in some ways, even more than Hungary. There is However, Germany has significant advantages: its economy and location. Through its ports, the country is able to potentially import LNG and other resources more easily. However, the county so far has no operating LNG terminals capable of handling imports, and the first one is expected to launch this winter only ³¹ A stronger economy also means better bargaining power when it comes to potentially accessing other sources of energy or natural gas. The country also has access to western transit pipelines that connect Germany to the Atlantic trade route.³²

- Case Study: Poland

Poland's energy mix is rather unusual for a developed country. 53% of the country's energy consumption comes from coal, 30% from oil and only 16% from natural gas.³³

²⁸ https://www.bgr.bund.de/EN/Themen/Energie/Downloads/energiestudie_2019_en.pdf?__blob=publicationFile&v=6

²⁹ <https://www.worldometers.info/energy/germany-energy/>

³⁰ especially as 25% is heated by oil, also dependent on Russian resources

³¹ <https://www.offshore-energy.biz/uniper-to-build-operate-germanys-first-lng-terminal-in-wilhelmshaven/>

³² <https://www.enerdata.net/publications/daily-energy-news/eu-delays-decision-gazproms-access-opal-gas-pipeline-germany.html>

³³ <https://wysokienapiecie.pl/14929-pep2040-energetyka-wiatrowa-w-polsce-plany-rzadu/>

Poland's fossil fuel imports in 2020



| Raw material | Domestic consumption | Total imports | Imports from Russia (volume) | Share of deliveries from Russia in total imports (%) |
|--------------|----------------------|---------------|------------------------------|--|
| Natural gas | 20.6 bcm | 17.9 bcm | 9.6 bcm | 55% |
| Crude oil | 26.1 mln t | 25.4 mln t | 16.8 mln t | 66% |
| Hard coal | 62.6 mln t | 12.9 mln t | 9.4 mln t | 75% |

Source: Own study based on GUS data

³⁴. Hence, Poland also depends on Russian resources, especially on oil and to a smaller extent on gas. But it is also true, that unlike the previous two countries, Poland is the most independent in terms of fossil fuels, thanks to its massive coal-powered industry.³⁵ In terms of heating, the situation is similar. Over 60% of overall homes are heated by coal, 15% by natural gas, the rest by a combination of biomass, oil and electricity³⁶. Coal, the country's main source of power and heating, is secured, but there is still a strong dependence on oil and gas. Focusing on natural gas, Poland could weather a sanction on Russian gas relatively well, especially with ports capable of processing LNG from other countries.

4) Conclusion and projections

Overall, there exists a strong and mutual interdependence between the EU and Russia. Russia largely depends on purchases from the EU while the EU is heated and powered by Russian gas. If gas supply were suspended, both sides would suffer greatly. That is why any intention to include gas within the European package of sanctions (be it drastically or progressively) must be carefully assessed.

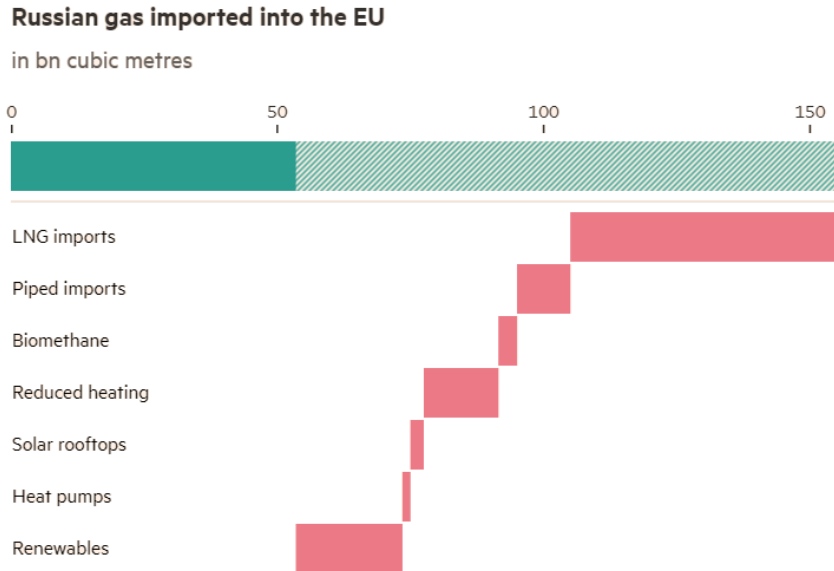
Yet, if such a decision were to be taken how could the EU mitigate the impact of this scenario? First, in terms of alternative sources, Norway is the best possibility. In addition, LNG imports can also be

³⁴ <https://www.forum-energii.eu/en/blog/stop-import-rosja>

³⁵ not taking into account the long-term viability of such industry

³⁶ <https://forum-energii.eu/public/upload/articles/files/Heating%20in%20Poland.pdf>

scaled up, even though this would be more of a medium-term goal. With these measures 30 billion cubic meters of gas could be acquired from non-Russian sources.³⁷ Another important step is the increase of renewables and the modernisation of heating systems all over Europe.³⁸



39

Finally, minimum gas storage level should be increased and secured. This would help with price fluctuations and would ensure a stable supply for every heating season and any vis-major situation. The EU has already decided to try and implement many of these measures to reduce its dependence on Russia through its REPowerEU program.⁴⁰ However, as it is visible from the graph above, even with all the aforementioned measures there is still a sizable portion of Russian gas that just cannot be substituted, at least certainly not in the short term.

For the time being, in the absence of credible and feasible alternatives, the best solution is to remain prudent and refrain from adopting sanctions that would be a zero-sum game at best, and for some EU countries, an economic disaster at worst.

About the author

Dávid Pércsi holds a degree in Political Sciences from Corvinus University of Budapest. He is a junior researcher in the Centre for European Studies at Mathias Corvinus Collegium, in Budapest. His main research field covers Brexit and EU-third country relations. In his Master's thesis he compared the Europe-visions of Viktor Orbán and David Cameron.

³⁷ https://www.iea.org/reports/a-10-point-plan-to-reduce-the-european-unions-reliance-on-russian-natural-gas?fbclid=IwAR1GPgaHyFZWfz-MEirM9DvwnXdkGZnOFN4YzBuZci4ZPNpx_HrtBDLIYYQ

³⁸ <https://www.euronews.com/green/2022/04/27/europe-scrambles-to-keep-the-lights-on-as-it-sidelines-russian-gas>

³⁹ <https://ig.ft.com/europes-race-to-replace-russian-gas/>

⁴⁰ https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511