



2024,

A BUMPER YEAR FOR RUSSIAN LNG EXPORTS TO THE EU

— ABETTED BY GERMANY

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KEY FINDINGS

- Our analysis shows that the flow of Russian LNG to the EU increased by **9 % in 2024** compared to 2023, while imports of Russian LNG to the EU – excluding transshipments/re-exports to non-EU countries – rose by a staggering **19,3 %**.
- The German company **SEFE** played a leading role in the EU's entanglement with Russian LNG, purchasing 58 shipments with a total volume of **5,7 bcm** in 2024, — representing a **six-and-a-half-fold increase** compared to 2023.
- Due to indirect imports via France and Belgium, the share of Russian LNG in Germany's total gas imports ranged between **3 % to 9,2 % in 2023**. The uncertainty range in our findings is caused by a lack of transparency in the internal EU gas market that enables the whitewashing of Russian gas.
- Our analysis of past sanctions and the identification of specific vulnerabilities linked to the exploitation and export of Russian Arctic LNG show that **the EU is capable of dismantling** Russia's Arctic LNG business.

INTRODUCTION

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The Russian war of aggression in Ukraine has now been raging for over a thousand days – and the Russian Federation is still generating direct and indirect income from energy exports directed to both Asian markets and markets in the European Union. This is associated with ongoing plans to massively expand fossil gas exploitations in Russia, which jeopardises climate targets. Although the European Union has imposed sanctions on Russian energy imports in a large number of sanctions packages, these remain incomplete to this day. In particular, liquefied natural gas (LNG) continues to reach the European Union or is shipped onwards from there. Against this backdrop, the EU Commission has announced that it will present a roadmap at the end of February 2025 towards ending all Russian energy imports.

The environmental organisations **Deutsche Umwelthilfe, urgewald** (both based in Germany), **Razom We Stand** (Ukraine) and **Bond Beter Leefmilieu** (Belgium) took this as an opportunity to analyse comprehensive market data to investigate the role of Germany and the federally owned company **SEFE GmbH** in the import of Russian LNG. The analysis shows that, although Germany has not directly purchased LNG supplies from Russia since the beginning of the Russian war of aggression, it plays a pivotal role facilitating the record imports of Russian LNG to the EU. Germany continues to indirectly import Russian LNG via Belgium and France. In addition, **SEFE GmbH** still imports large quantities of Russian LNG to **Dunkirk**, France. The German government must live up to its responsibility and work towards an immediate ban of Russian LNG imports.



RUSSIAN LNG IN THE EU GAS MARKET

5 The role of Russian LNG in the EU is on the rise

The analysis of KPLER data shows that 16.94 MT (23.38 bcm) of Russian LNG flowed to the EU in 2023 and 18.47 MT (25.49 bcm) in 2024¹. This represents a year-on-year increase of 9%. When looking solely at **the EU imports figures**, thus excluding the Russian LNG that is being transhipped/re-exported from the EU to non-EU countries, **the year-on-year increase was a staggering 19,3 %**.

YEAR	RUSSIAN LNG FLOW TO EU		EU RUSSIAN LNG IMPORTS		TRANSSHIPMENTS/ RE-EXPORTS TO NON-EU COUNTRIES	
2023	16,94 MT	23,38 MT	13,35 MT	18,42 bcm	3,60 MT	4,97 bcm
2024	18,47 MT	25,49 bcm	15,93 MT	21,98 bcm	2,55 MT	3,52 bcm

Russia is the second-largest LNG supplier for the EU, after the United States. Russian LNG accounted for about **6,6 %** of the total gas consumption in the EU in 2024. The **Institute for Energy Economics and Financial Analysis (IEEFA)** estimates that around 31% of the EU's imports of Russian LNG in 2024 were traded on the spot market.

The countries importing Russian LNG are mainly Belgium, France, Spain and, to a lesser extent, the Netherlands. In 2024, the lion's share of Russian LNG was imported via the ports of **Zeebrugge** (2.5 MT or 3.5 bcm – Belgium), **Montoir** (2.1 MT or 2.9 bcm – France), **Dunkirk** (4.1 MT or 5.7 bcm – France), **Bilbao** (2.7 MT or 3.7 bcm – Spain), **Mugardos** (1.1 MT or 1.5 bcm – Spain) and **Rotterdam** (1.3 MT or 1.8 bcm – Netherlands). The ports of **Zeebrugge** and **Montoir** also served as important transshipment/re-export hubs for Russian LNG deliveries to global markets (primarily Asia), respectively transshipping/re-exporting 2.2 MT (2.9 bcm) and 0.4 MT (0.6 bcm) to non-EU countries in 2024.

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GAS UNITS AND CONVERSION FACTORS

In this report, quantities of fossil gas are defined by the following units: Million Tons (MT) and Billion Cubic Meters (bcm). 'Million Tons' is mostly used for purchasing gas, while 'Billion Cubic Meters' is often used in the EU for imported and consumed volumes. The conversion of KPLER data from MT to bcm was done using the conversion factor provided by the Russian company **Novatek** itself.

For example, the LNG carriers used for exporting Russian LNG out of the Arctic, have on average a capacity of about 0.074 MT or 0.1 bcm.

Table 1: Data on the flow, imports and transshipments/re-exports of Russian LNG in the EU; Re-exports from Spain are not included

¹ KPLER flow, import and transshipment/re-export data was analysed by **urgewald** and **Bond Beter Leefmilieu** with the aid of **IEEFA**

THE ROLE OF GERMANY AND SEFE GMBH

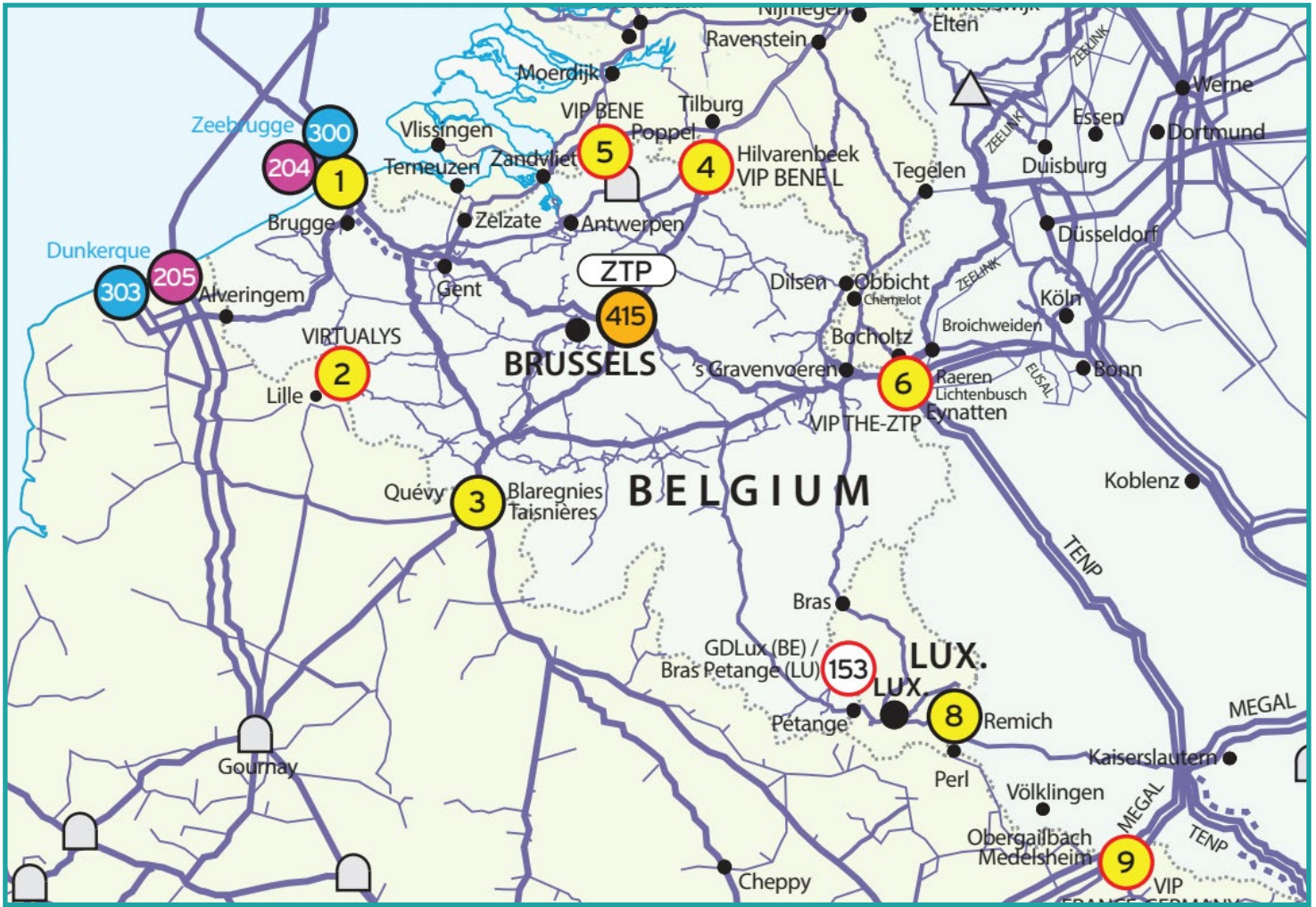
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Despite the fact that no direct supplies of Russian LNG have been shipped to Germany, the German government still plays a pivotal role in facilitating Russian LNG imports: the federally owned **Securing Energy for Europe GmbH** (SEFE) continues to service a legacy contract with **Novatek**, Russia's largest private gas company. According to the EU **Agency for the Cooperation of Energy Regulators** (ACER), the contract with an annual contract volume of 3.9 bcm was concluded in 2015 and has been in force since 2018 and runs until 2038. **SEFE GmbH** originally goes back to the German-Russian company Wingas, founded in 1993, which was taken over by Gazprom in 2015 and has since operated under the name Gazprom Germania. Following the Russian attack on Ukraine, Gazprom Germania was nationalised and renamed **SEFE GmbH**.

Fluxys LNG-Terminal in Zeebrugge



Snippet of the [ENTSO-G System Capacity Map](#)



The available data shows that **SEFE GmbH** purchased 58 LNG cargoes totaling 4.1 million tons (5,66 bcm) in 2024. This is a six-and-a-half-fold increase in volume compared to 2023, when only 12 shipments of 880.000 tons (1,21 bcm) were recorded. All deliveries were made to the French port of **Dunkirk**.

The German government argues that **SEFE GmbH** is bound to fulfil its contractual obligations and that **Novatek** could otherwise market the LNG elsewhere, which would lead to double profits. According to media reports, the German Government instructed **Deutsche Energy Terminal GmbH (DET)**, which is also state-owned, to prohibit LNG tankers from unloading Russian LNG at the **Brunsbüttel**, **Wilhelmshaven** and **Stade** terminals. However, in order to completely prevent Russian LNG imports, the next German government must advocate for a full ban on Russian LNG imports and purchases at the European level so that **SEFE** is no longer bound by contractual obligations and can invoke force majeure.

SEFE's ongoing business with **Novatek** is not the only way Germany remains connected to Russian LNG imports. As the Russian gas in **Dunkirk** as well as in **Zeebrugge** is mainly fed into the European gas grid and as Germany imports relevant quantities from these countries, it is evident that Germany is continuing to import gas from Russia, but via an indirect route.

When looking at a map of the European gas grid, the link between the port of **Dunkirk** – where **SEFE** has unloaded record volumes of Russian LNG in 2024 – and Germany via Belgium becomes clear. In addition, it can be ruled out that all these volumes would be consumed in Belgium, because Belgium publishes data on the provenance of the gas volumes it consumes contrary to Germany and France. According to the Belgian books, the consumed volumes of Russian LNG in Belgium are much lower than its own Russian LNG imports.

8 WHITEWASHING AND LACK OF TRANSPARENCY: HOW MUCH RUSSIAN LNG STILL ENDS UP IN GERMANY?

Through a quantitative analysis of five data sets the possible percentage range of Russian LNG in Germany’s total gas imports during the year 2023 was estimated with the use of three scenarios in this Chapter. Due to a lack of available data, the calculations for the year 2024 will only be possible to make around the summer of 2025. Furthermore, the fact that the report has to work with different scenarios only highlights the lack of transparency in the EU’s internal gas market. This has enabled the whitewashing of Russian LNG, for example, Russian LNG im-

ported via Belgium to Germany is labelled as gas from Belgium in [the official German gas import data](#), even though there is no such thing as Belgian gas. The same holds true for Russian LNG that enters Belgium via France, as it is labelled as French gas in the [Belgian books](#). This is seemingly not in line with the EU [Regulation on Energy Statistics](#):

“Unless specified differently, ‘imports’ refer to ultimate origin (the country in which the energy product was produced)”

ANNUAL ENERGY STATISTICS – Natural gas “To be declared are both the quantities of the total natural gas and of the LNG part of it, per country of origin for imports”

The lack of transparency in the EU’s internal gas market has also been the root cause for finger-pointing amongst member states, which has led to inaction against Russian LNG as no member state feels fully responsible. [France](#) and [Belgium](#) acknowledge that they import a lot of Russian LNG, whilst stressing that they consume either very little of it or nothing at all. The Belgian Energy Minister even stated that Russian LNG that went via Belgium to Germany was needed to ensure the German gas supply in 2022. At the same time, [the German government](#) and [SEFE](#) have been adamant that either no Russian LNG goes to Germany or at worst only very small quantities.

YEAR 2023	FRANCE	BELGIUM	GERMANY
Direct Russian LNG imports	4,68 bcm	4,00 bcm	
Total gas imports	50,53 bcm		83,48 bcm
Total gas exports	14,79 bcm	26,16 bcm	
Physical flow to Germany	0,88 bcm	18,25 bcm	
Physical flow to Belgium	5,07 bcm		
Consumption of Russian LNG		1,03 bcm	

Table 2:

- Re-exports are not included in the Belgian export figures
- Low calorific gas is not included in the Belgian data
- bcm to TWh conversion factor for France 10,54
- bcm to TWh conversion factor for Belgium and Germany 11,6

This begs the question of how much Russian LNG did actually end up in Germany via France and Belgium in 2023. To answer this question, three scenarios were developed each with a different set of assumptions. Complementing the following known data deduced from the above-mentioned data sets³:

- For France, the percentage of Russian LNG flowing through the pipeline interconnections to Belgium and Germany equals the percentage of Russian LNG in the total French gas imports.
- For Belgium, the percentage of Russian LNG flowing through the pipeline interconnection to Germany equals the percentage of Russian LNG in its total gas exports⁴.

9 01 — The even scenario

The even scenario assumes that Russian LNG is evenly distributed once it enters the EU gas grid whilst taking into account that the consumed volumes of Russian LNG in Belgium are known. This scenario is taken as the lowest value for our range of possible percentages of Russian LNG in the total German gas imports, as it goes against public statements by Belgian and France which indicate that most of their Russian LNG is exported toward Germany. The even scenario is thus based on the following two assumptions:

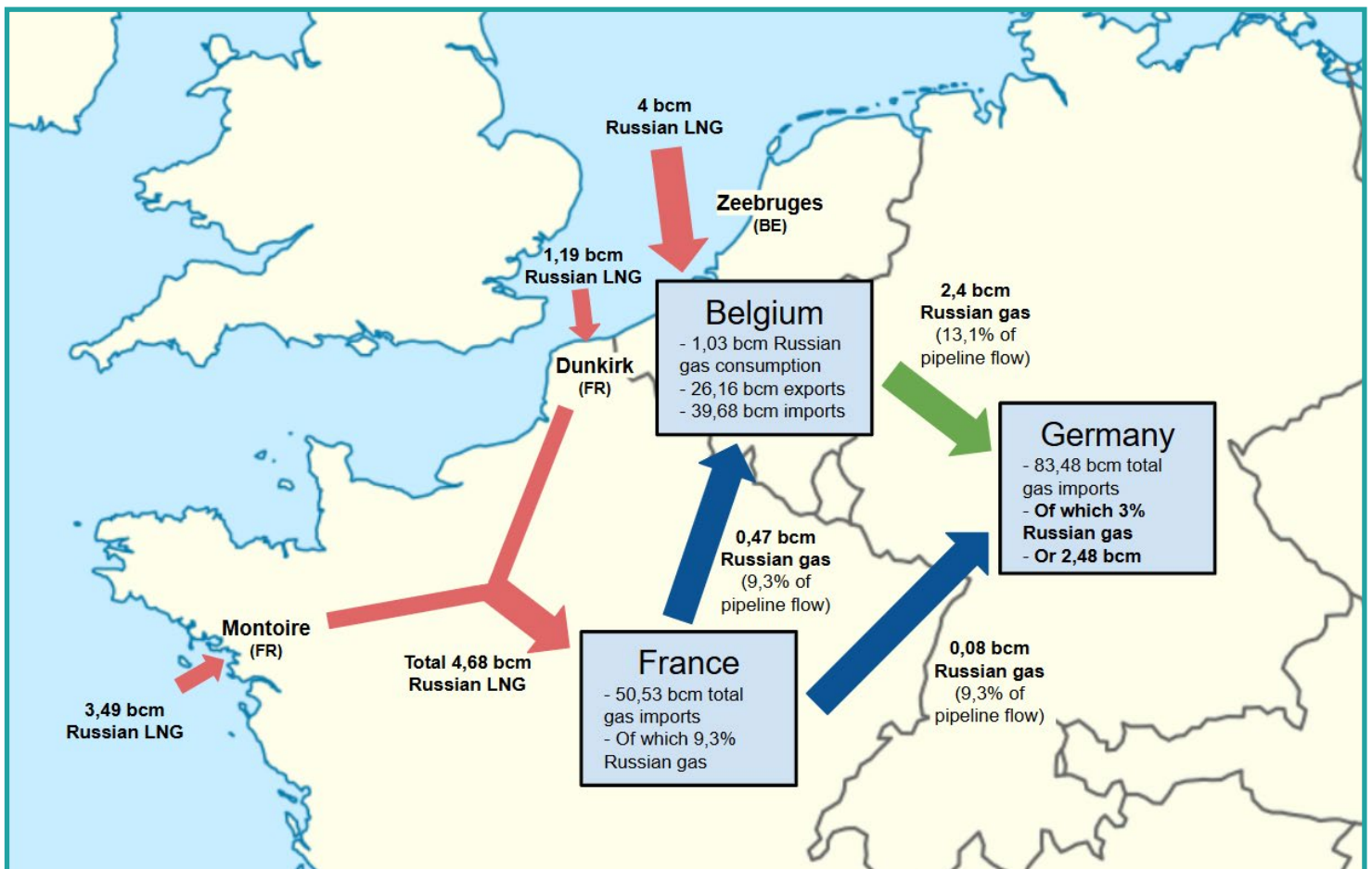
The Russian LNG flow to Germany via France and Belgium in the even scenario is visualised in the map below.

According to the even scenario, 3% of the total German gas imports in 2023 consisted of Russian LNG indirectly imported via France and Belgium. In volumes, this would be 2,48 bcm.

³ Scenarios were developed by [Bond Beter Leefmilieu](#)

⁴ Not including low calorific gas, or re-exports of LNG

Sources: [Entsog](#), French Government (Bilan énergétique de La France en 2023); Belgian Government (FOD Economie); [IEEFA](#) (European LNG tracker); Bundesnetzagentur; Note I: Low calorific gas is excluded from the Belgian gas exports; Note II: LNG re-exports are excluded from all export data



02 — The export scenario

The export scenario assumes that France doesn't consume Russian LNG and that Russian LNG is evenly distributed in its exports. For Belgium the same assumption as in the even scenario is applicable. The former assumption is based on a **public statement** by the French minister of Energy Transition **Agnès Pannier-Runacher**, stating that France doesn't consume Russian gas⁵. This scenario is taken as an intermediate value for our range of possible percentages of Russian LNG in the total German gas imports, as the French statement might not be exactly true but on the other hand, Belgium probably exports more Russian LNG to Germany than this scenario assumes. The export scenario is thus based on the following two assumptions:

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- For France, the percentage of Russian LNG flowing through the pipeline interconnections to Belgium and Germany equals the percentage of Russian LNG in the total French gas exports.

- For Belgium, the percentage of Russian LNG flowing through the pipeline interconnection to Germany equals the percentage of Russian LNG in the total Belgian gas exports⁶.

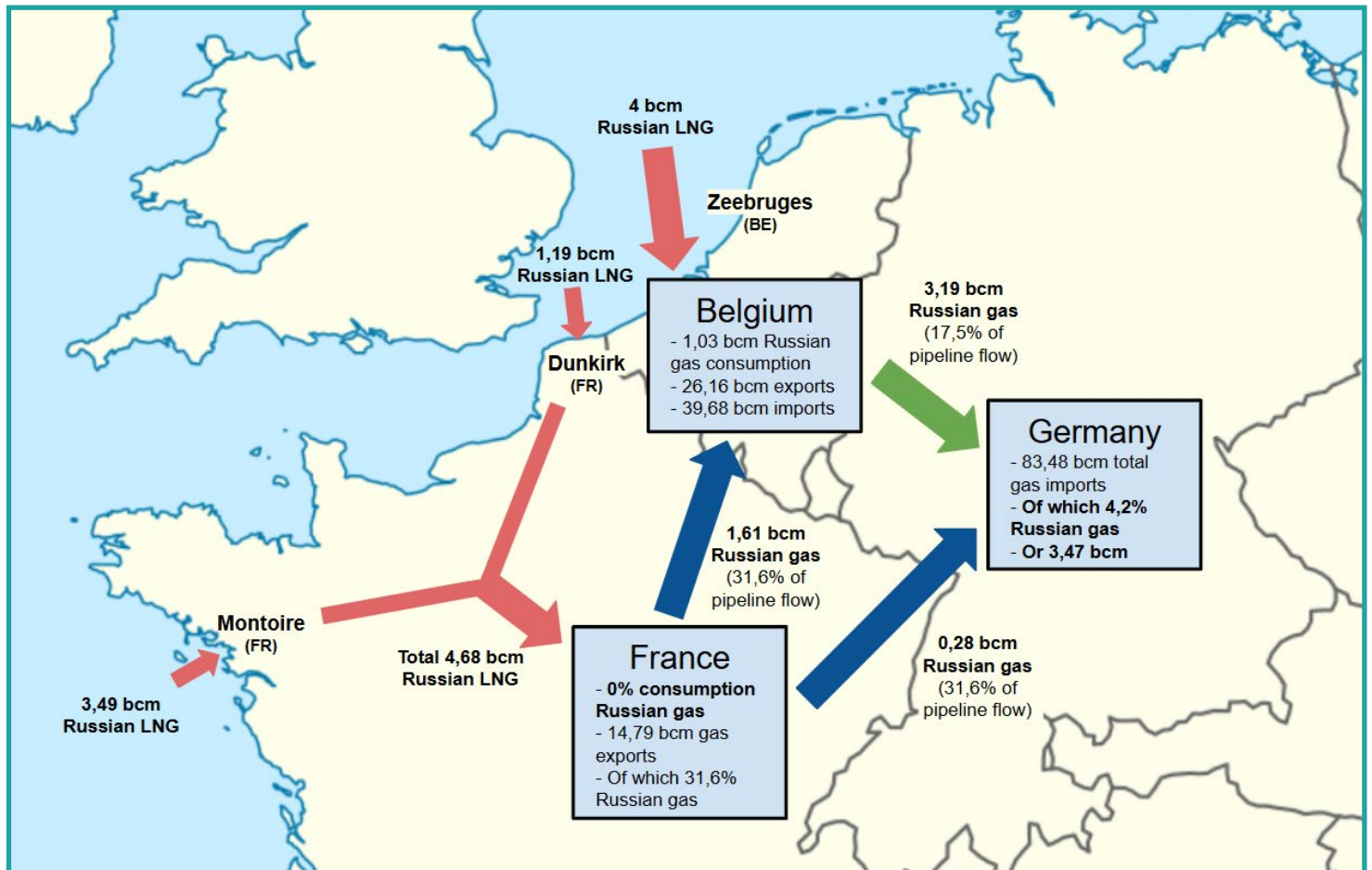
The Russian LNG flow to Germany via France and Belgium in the export scenario is visualised in the map below.

According to the export scenario, 4,2% of the total German gas imports in 2023 consisted of Russian LNG indirectly imported via France and Belgium. In volumes, this would be 3,47 bcm.

⁵ **Agnès Pannier-Runacher**, *Ministre de la Transition énergétique de la France* 2:47: "Aujourd'hui la France est un point d'entrée et de passage de ce gaz naturel liquéfié (Russe). Nous en consommons pas, mais nous sommes un point d'entrée puisque nous avons une façade maritime."

⁶ Not including low calorific gas and re-exports of LNG

Sources: **Entsog**, French Government (*Bilan énergétique de la France en 2023*); Belgian Government (*FOD Economie*); **IEEFA** (*European LNG tracker*); Bundesnetzagentur; Note I: Low calorific gas is excluded from the Belgian gas exports; Note II: LNG re-exports are excluded from all export data



03 — The worst-case scenario

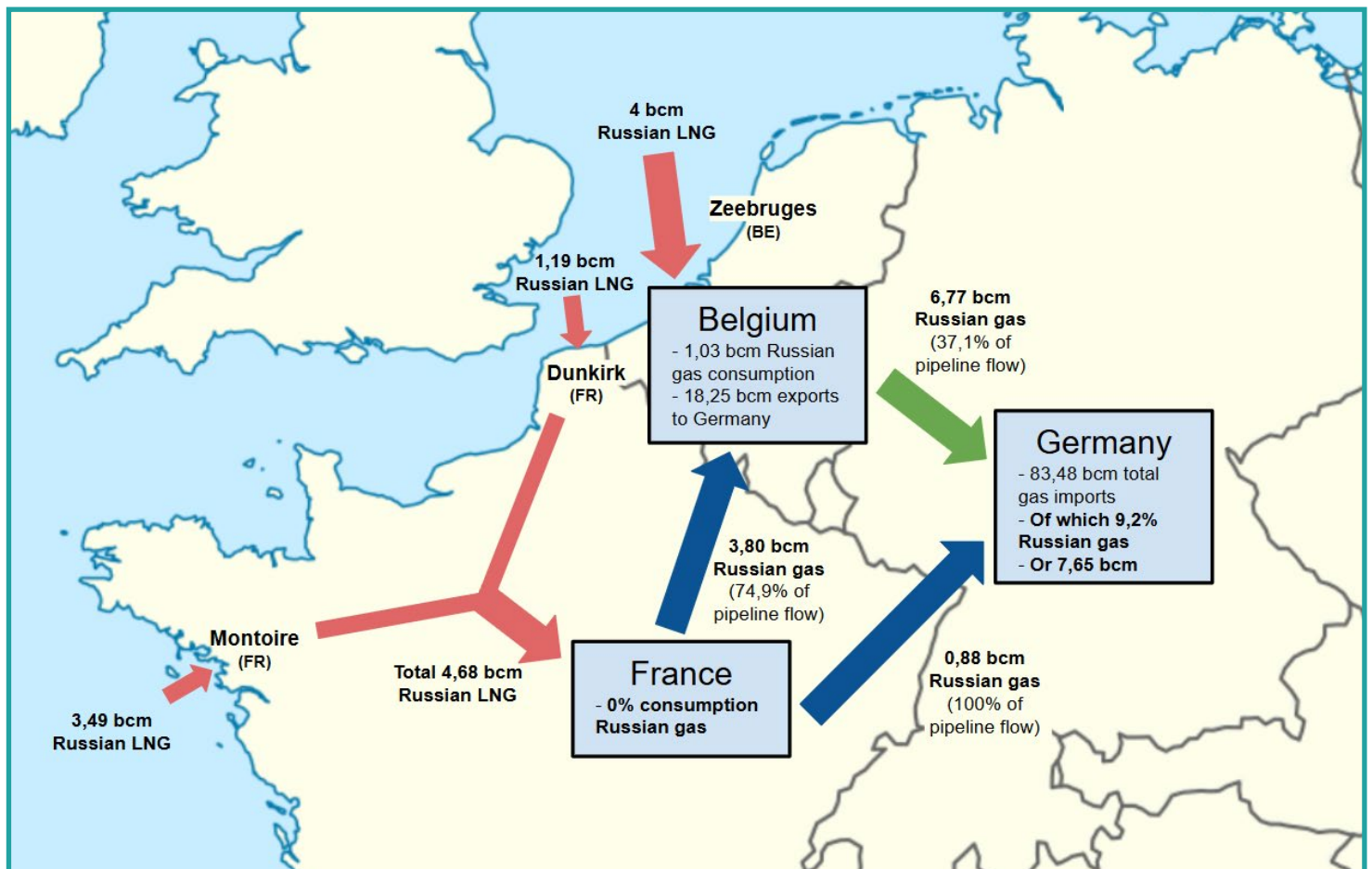
The worst-case scenario (for Germany) assumes all the French Russian LNG imports go to Germany and then Belgium, taking into account limitations set by the actual physical flow through the pipeline interconnections between France and both countries. For Belgium it is assumed that all Russian LNG imports are exported to Germany, whilst taking into account that the consumed volumes of Russian LNG in Belgium are known. This scenario is taken as the upper value for our range of possible percentages of Russian LNG in the total German gas imports. About 45 % of French gas exports went to Germany and Belgium, and about 70% of Belgian gas exports went to Germany in 2023, it is thus rather unlikely that all imported Russian LNG volumes by France and Belgium ended up in Germany. The worst-case scenario is thus based on the following two assumptions:

- For France, all the French Russian LNG imports go to Germany and Belgium, taking into account limitations set by the actual physical flow through the pipeline interconnections between France and both countries.
- For Belgium, all Russian LNG imports are exported to Germany, except for the known volumes of Russian LNG that are consumed in Belgium.

The Russian LNG flow to Germany via France and Belgium in the worst-case scenario is visualised in the map below.

According to the worst-case scenario, 9,2 % of the total German gas imports in 2023 consisted of Russian LNG indirectly imported via France and Belgium. In volumes, this would be 7,65 bcm.

Sources: [Entsog](#), French Government (Bilan énergétique de La France en 2023); Belgian Government (FOD Economie); [IEEFA](#) (European LNG tracker); Bundesnetzagentur; Note I: Low calorific gas is excluded from the Belgian gas exports; Note II: LNG re-exports are excluded from all export data



Conclusions

According to our analysis **the percentage of Russian LNG in total gas imports of Germany in 2023 ranged between 3 to 9,2 %**. The imported volumes of regasified Russian LNG by Germany thus ranged between 2,48 to 7,65 bcm. There is little reason to believe that the figures would be lower for 2024. As imports of Russian LNG into the EU have increased by 19,3 % compared to 2023. To make matters worse, the port of **Dunkirk** – which has a pipeline connection to Germany via Belgium – saw an increase in Russian LNG imports of 379%, mainly caused by a drastic increase in deliveries by **SEFE**. If the EU and member states want to have more clarity on where imported Russian LNG is ending up, more transparency on the EU internal gas market is needed:

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- A major improvement would be **tracking all gas volumes** from provenance to entry point into the EU and then to the member state of consumption.
- In addition, if all member states would **publish data on the provenance of the imported, exported and domestically consumed gas volumes**, such as Belgium already does, the responsibility of each member state would be clear.

If the above measures would be implemented, the whitewashing of problematic fossil gas and finger-pointing amongst member states could be avoided in the present and even in the future as other sources of fossil gas might turn out to be extremely problematic as well.

Sanctioned Arc 7 LNG carrier „Christoph de Margerie“, owned by **Sovcomflot**



THE TIME TO ACT IS NOW: HOW THE EU CAN TEARDOWN RUSSIA'S LNG BUSINESS

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EU SANCTIONS SO FAR: STILL ROOM FOR IMPROVEMENT

To date, the EU has issued 15 sanctions packages, all of which include energy policy measures. The most important measures are listed below:

EU measures include bans on oil imports, a coal embargo, and price caps for Russian oil, which were implemented in cooperation with the G7. In addition, European companies are prohibited from investing in new Russian energy and mining projects and from exporting specific technologies and components with energy industry applications to Russia.

However, there are still loopholes in the sanctions regime: although oil imports by sea are prohibited, some EU member states (Hungary, Slovakia, Czech Republic) are still able to purchase oil via the "Friendship" pipeline. In addition, a Russian shadow fleet is skillfully operating around the sanctions using dubious concealment tactics – and accepting high environmental risks in the process.



Vladimir Putin and Leonid Mikhelson, CEO of Novatek

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Further, some European member states are still sourcing natural gas from Russia via pipeline through Turkey, and before January 1, 2025, also through Ukraine. According to the **International Energy Agency (IEA)**, 12.8 bcm of Russian natural gas was supplied to the EU in 2023 via the Transgas pipeline, which crosses Ukraine. This corresponds to less than 4 % of total EU gas demand, but is significant for the destination countries of Austria, Hungary and Slovakia: the Russian natural gas supplied via the Transgas pipeline covered around 65 % of these countries' gas demand. However, the transit contract between Gazprom and Naftogaz Ukrainy expired at the end of 2024, which is why pipeline imports of Russian natural gas have decreased since the beginning of 2025. Nonetheless, Hungary and Slovakia are still importing some volumes of Russian gas via the Turkstream pipeline, and pipelines through Bulgaria and Serbia.

Finally, LNG originating from Russia is barely covered by the European sanctions regime. The EU's ninth sanctions package, enacted in February 2023, penalises the export of technologies and components required for the development of LNG production capacities and infrastructure. These include LNG liquefaction technologies, gas processing and compression techniques, cryogenic equipment for handling liquefied natural gas, including storage tanks and valve systems, as well as software and control systems for monitoring LNG production. The tenth sanctions package builds on this and also imposes sanctions on specific services such as maintenance or consulting in the context of these technologies and components.

Only the EU's 14th sanctions package, which was adopted in June 2024, prohibits new investments and the provision of goods, technology, and services for the completion of LNG projects under construction in Russia. Contracts concluded before 25 June 2024 are subject to an expiry date of 26 September 2024, but the purchase and import of Russian LNG and related financial services remain unaffected by the sanctions.

In addition, the re-export of Russian LNG to third countries will be banned and the import of Russian LNG will only be permitted at LNG terminals that are connected to the European pipeline network, which only rules out a handful of ports on the Scandinavian peninsula. With the ban on re-exports, which will come into force in March 2025, the EU aims to increase the cost of Russian LNG exports, as Russian LNG tankers will now have to travel greater distances to reach third countries without jeopardising the import of LNG into the EU. At the same time, this measure runs the risk of increasing imports of Russian LNG into the European domestic market.

After **Ursula von der Leyen** took office as President of the **European Commission** in December 2024, the Commission announced that they would present a roadmap in the first quarter of 2025 to end all Russian energy imports. It remains to be seen whether this goal will be achieved through legally binding sanctions or regulations or a combination of both. In January 2025, a **group of ten member states** subsequently called for a full embargo on Russian LNG and the sanctioning of the Russian LNG carrier fleet. However, this did not include Belgium, France, Spain and the Netherlands – the countries that play key roles in the import of Russian LNG.

How the EU can teardown Russia's LNG business

Russia is the fourth largest LNG producer in the world after the USA, Qatar and Australia. The Kremlin plans to become a leading player in the LNG market and has stated that its goal is to export 100 million tonnes of LNG by 2030. LNG is seen as a relevant pillar of its fossil fuel-based economy. Knowing that the global demand for crude oil is declining and that the European demand for natural gas is **forecasted to decline drastically by 2030**, LNG represents an opportunity to access and supply global markets, thereby avoiding being dependent on their immediate neighbouring countries as main buyers.

Currently, the **Yamal** LNG terminal is a central hub for Russian LNG exports to Europe. In 2023, about 80% of the LNG volumes produced there went to the EU, when taking into account the transshipped / re-exported volumes about 60% was destined for the EU market. More than 90% of the Russian LNG imported into the EU comes from **Yamal**. The terminal is operated by a consortium that includes **Novatek**, the China National Petroleum Corporation (CNPC), the Chinese **Silk Road Fund** and the French company **TotalEnergies**.

Table 3: Russian LNG expansion plans until 2031

PROJECTS	STATUS	DEVELOPER	LOCATION	CAPACITY
Yamal LNG	In operation	Novatek (51%), TotalEnergies, CNPC, Silk Road Fund	Arctic	29,4 bcm/year
Sakhalin-2	In operation	Gazprom (77,5%), Mitsui, Mitsubishi	Okhotsk Sea	16,0 bcm/year
Portovaya LNG	In operation	Gazprom	Finnish gulf	2,1 bcm/year
Arctic LNG2	Under construction	Novatek (60%), CNOOC, CNPC, TotalEnergies, JOGMEC and Mitsui	Arctic	27,7 bcm/year
Obskiy LNG	Planned 2026	Novatek	Arctic	7,0 bcm/year
Arctic LNG1	Planned 2027	Novatek	Arctic	27,7 bcm/year
Murmansk LNG	Planned 2027	Novatek	Barent Sea	28,6 bcm/year
Sakhalin-2 LNG T3	Planned 2027	Gazprom (77,5%), Mitsui, Mitsubishi	Okhotsk Sea	7,6 bcm/year
Arctic LNG3	Planned 2030	Novatek	Arctic	17,1 bcm/year
Yakutsk LNG	Planned 2031	A-Property	Arctic (Far East)	24,8 bcm/year
Total Russian LNG export capacity in 2031				187,9 bcm/year

The **Yamal** Terminal is located on a peninsula bearing the same name in the region of Arctic Siberia, which is characterised by permafrost and sub-zero temperatures. It has been in operation since 2017 and is located in the port of Sabetta, which is only accessible by ice-class LNG carriers for most time of the year due to adverse weather conditions. **Yamal** therefore operates with the help of 15 ice-class LNG carriers of the type **Arc7** that can navigate to Europe all year round and directly to Asia via the Northeast passage only between July and November. These were the first of their kind and were built especially for the **Yamal** project by the South Korean shipbuilding company Hanwha Ocean Shipping (formerly Daewoo Shipbuilding & Marine Engineering, or DSME for short).

The **Arc7** LNG carrier fleet of 15 vessels includes the **Christophe De Margerie**, which belongs to the Russian state-owned company Sovcomflot and is operated by a company from the United Arab Emirates. The company and its managing director Igor Vasilyevich Tonkovidov were added to the EU sanctions list as part of the European Union's 14th sanctions package mentioned above, which is why European companies are prohibited from providing services such as maintenance or insurance for Sovcomflot Group ships. The **Christophe de Margerie** was designated by the EU in its 15th sanctions

Yamal LNG terminal operated by Novatek



package and is as well **sanctioned by the US**. Therefore, only fourteen of the fifteen **Arc7** LNG carriers remain for deliveries from **Yamal** to EU ports. These fourteen vessels belong to Western, Japanese or Chinese companies. **If the EU were to sanction the use of ice-class vessels for the transportation of Russian LNG, the Yamal LNG project would no longer be economically viable.** This is all the more imperative as many of these ships are operated by Western companies. For example, the Greek shipping company Dynagas has chartered five **Arc7** and four **Arc4** vessels to **Yamal** LNG under a long term contract till 2034. The company owned by billionaire George Prokopiou might sound familiar as it also chartered two FSRUs to **Deutsche Energy Terminal GmbH (DET)** in 2022.

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Table 4: List of LNG carriers related to the Yamal LNG Project

VESSEL	TYPE	OPERATOR / MANAGER	MANAGEMENT HOST COUNTRY	LNG SHIPMENTS EX-YAMAL IN 2024
Boris Davydov	Arc7 ice breaker	Dynagas LTD	Greece	17
Boris Vilkitsky	Arc7 ice breaker	Dynagas LTD	Greece	16
Christophe De Margerie	Arc7 ice breaker	GAS CARRIERS SCF MGMT FZCO	UAE	12 SANCTIONED
Eduard Toll	Arc7 ice breaker	Seapeak Maritime	Bermuda	16
Fedor Litke	Arc7 ice breaker	Dynagas LTD	Greece	18
Georgiy Brusilov	Arc7 ice breaker	Dynagas LTD	Greece	17
Georgiy Ushakov	Arc7 ice breaker	Seapeak Maritime	Bermuda	17
Nikolay Urvantsev	Arc7 ice breaker	MOL LNG Ship Management PTE	Japan/China	20
Nikolay Yevgenov	Arc7 ice breaker	Seapeak Maritime	Bermuda	16
Nikolay Zubov	Arc7 ice breaker	Dynagas LTD	Greece	15
Rudolf Samoylovich	Arc7 ice breaker	Seapeak Maritime	Bermuda	17
Vladimir Rusanov	Arc7 ice breaker	MOL LNG Ship Management PTE	Japan/China	19
Vladimir Vize	Arc7 ice breaker	MOL LNG Ship Management PTE	Japan/China	19
Vladimir Voronin	Arc7 ice breaker	Seapeak Maritime	Bermuda	17
Yakov Gakkel	Arc7 ice breaker	Seapeak Maritime	Bermuda	16
Clean Horizon	Arc4 ice breaker	Dynagas LTD	Greece	5

VESSEL	TYPE	OPERATOR / MANAGER	MANAGEMENT HOST COUNTRY	LNG SHIPMENTS EX-YAMAL IN 2024
Clean Ocean	Arc4 ice breaker	Dynagas LTD	Greece	3
Clean Planet	Arc4 ice breaker	Dynagas LTD	Greece	3
Clean Vision	Arc4 ice breaker	Dynagas LTD	Greece	2
Lena River	Arc4 ice breaker	Dynagas LTD	Greece	4
North Sky	Arc4 ice breaker	LNG Gamma Shipping PTE LTD	UAE	2 SANCTIONED
Yenisei River	Arc4 icebreaker	Dynagas LTD	Greece	2
LNG Dubhe	no ice class	MOL LNG Ship Management PTE	Japan/China	3
LNG Megrez	no ice class	MOL LNG Ship Management PTE	Japan/China	3
LNG Merak	no ice class	MOL LNG Ship Management PTE	Japan/China	3
LNG Phecda	no ice class	MOL LNG Ship Management PTE	Japan/China	3
Seapeak Yamal	no ice class	Seapeak Maritime	Bermuda	4

Table 4: List of LNG carriers related to the Yamal LNG Project

An overall EU embargo on Russian LNG would also pull the plug out of the Yamal LNG project as it mainly delivers the EU market and exporting to other more distant markets would be impossible, except for in the summer months. **The combination of both sanctions would kill the Yamal LNG project indefinitely.**

In addition to **Yamal**, there are also other LNG terminals that would be affected by a European embargo on Russian LNG. The data also shows that smaller quantities of LNG were shipped from the LNG terminals **Portovaya** and **Vysotsk** to the EU. **Portovaya** and **Vysotsk** are both located in the Finish gulf about 150 km from Saint Petersburg as the crow flies and are therefore not dependent on ice-class LNG carriers.



SANCTIONS WORK: THE EXAMPLE OF ARCTIC LNG 2

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Russia's plan to become an LNG superpower is currently suffering major setbacks. The litmus test of this plan is the **Arctic LNG 2** project, located on the **Gydan** Peninsula. Like **Yamal**, it is also located in Arctic Siberia. The terminal draws a large proportion of its gas from the Utrenneye field, which at over 1.98 trillion cubic metres is one of the largest gas fields in the world. The exploitation of Utrenneye would massively jeopardise global climate targets. However, European and US sanctions regimes are having an effect on Russia's ability to execute the project and are a clear example of the possible impact of sanctions.

The development of the **Arctic LNG 2** terminal began back in 2019 and was driven forward by an international consortium led by **Novatek**. In addition to Chinese and Japanese consortia, **TotalEnergies** also has a ten per cent stake in this project, although the company announced last year that it would not be providing any further capital for the project. In addition, European companies were also involved in the project development – and supplied relevant technology components long after the start of the war in Ukraine: According to the **Anti-Corruption Data Collective**, **Arctic LNG 2** was still able to purchase goods worth over 400 million US dollars from European manufacturers after February 2022. Among the suppliers was the German company **Linde**, which provided heat exchangers needed to cool the gas.

As a result, the first production line of **Arctic LNG 2** was completed in August 2023 – shortly before the **ninth EU sanctions package** came into force, which penalised the export of LNG technologies. Russia was thus able to complete the facility, as it still had access to state-of-the-art technologies by Western companies. In September 2023, **US sanctions** were finally imposed on companies involved in the development of **Arctic LNG 2**. These included Russian construction companies, energy companies and ship-building companies, but also an engineering company based in the United Arab Emirates, which provided engineering services for the project that were previously provided by European service companies.



The sanctions have repeatedly caused problems for the project in the recent past: The construction of new production lines has been halted. The production of new ice-class LNG carriers for **Arctic LNG 2** by Russian shipbuilding companies is also facing immense challenges, as important European suppliers such as MAN and Wärtsilä have withdrawn from the Russian market and relevant technology components are no longer available. At the same time, the transfer of already completed ice-class LNG carriers from Hanwha Ocean Shipping is being blocked by US sanctions. Press reports also document that vessels loaded with LNG from **Arctic LNG 2** were unable to find customers for long periods of time. Thus far, Russia was able to build just one additional Arc7 LNG carrier in the Russian port **Zvezda**, which is currently undergoing sea trials. This was possible with the help of Western technology, which Russia was able to acquire before the Western sanctions came into force.

The former US administration under President **Biden** issued a further sanctions package on January 10, 2025. From now on, the US will put secondary sanctions on companies that help to circumvent sanctions on **Arctic LNG 2** or Sovcomflot. This includes companies that support the aforementioned entities with services or material supplies. A large proportion of the companies sanctioned are Asian companies based in China. In addition, the **Portovaya** and **Vysotsk** LNG terminals were also sanctioned.

The Russian LNG strategy is closely linked to the industrialisation and exploitation of the Arctic. This is an increasingly geopolitically contested area, not least due to the effects of climate change, as the thawing ice opens up new trade routes and raw materials become available. The industrialisation of the Arctic can have immense environmental impacts. The expansion of Russian LNG production capacities poses a massive threat to global climate targets. In addition there is a risk of massive methane leaks along the value chain, with the Russian authorities only paying very limited attention to mitigating, recording and reporting of methane emissions, whilst avoiding international controls. This shows that the issue of Russian LNG represents an extremely relevant climate, energy and security policy nexus and that there is an urgent need for action on the part of the EU Commission and the German government.

CONCLUSION: MEASURES TO BE IM- PLEMENTED BY THE EU

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Deutsche Umwelthilfe, urgewald, Razom We Stand and **Bond Beter Leefmilieu** are pleading to the **EU Commissioner for Energy, Dan Jørgensen**, to present an ambitious roadmap and to complete the phase-out of Russian energy imports as quickly as possible. This also includes an immediate and full ban on Russian LNG imports and purchases so that EU companies such as **SEFE GmbH** could claim force majeure and would no longer be bound to its contractual obligations towards **Novatek**, as well as the listing of the **Yamal LNG** and **Arctic LNG 2** terminals on the EU sanctions list. The German government must advocate for the rapid implementation of an ambitious catalogue of measures in the European Council.

In conclusion, we strongly recommend the EU to implement the following measures:

- **An immediate and full EU ban on Russian LNG imports and purchases.**
- **No new fossil dependencies.** Russian LNG supplies should not be replaced by new fossil dependencies, but rather made superfluous through decarbonisation, electrification and efficiency improvement measures by delivering on the goals of the Fit-for-55 package and the **REPowerEU** plan. Only the energy transition is a reliable instrument for reducing energy dependencies on autocratic regimes and ensuring security of supply. The European Commission must address this in the forthcoming revision of

the Security of Supply (SoS) regulation. Furthermore, we urge the lawmakers in the **ITRE Committee** of the European Parliament to adopt a decisive stance against Russian LNG imports in the upcoming Ini-Report on Security of Supply.

- **Sanctioning the singular fleet of ice-class LNG carriers linked to the Yamal LNG project.** Sanctioning LNG carriers is highly effective, as the number of ice-class LNG carriers in the world is limited: there are only 15 operational **Arc7** vessels and 11 **Arc4** vessels in the world. In addition, LNG tankers are more dependent on Western technologies and insurance services than oil tankers, which is why shipping companies have an interest in not being sanctioned or violating sanctions. The loss of sanctioned ice-class LNG carriers can therefore not be substituted.
- **Sanctioning of Novatek and its CEO Leonid Mikhelson.**
- **Mandatory divestment strategies.** An investment ban is not enough. European companies such as **TotalEnergies** must submit mandatory divestment/exit strategies for Russian LNG projects by the end of 2025.
- **More transparency on the EU gas market,** tracking all gas volumes from provenance to entry point into the EU to the Member State of consumption. Furthermore, member states should publish data on the provenance of the imported, exported and domestically consumed gas volumes, such as Belgium already does, making the responsibility of each member state crystal clear. These measures would not only **avoid the whitewashing of problematic fossil gas** in the gas consumption books of Member States in the present but also in the future.

