

**Joschka Menge**

# The Change in German Gas Policy

An Analysis of the German Gas Policy as a Reflection of the EU Guidelines



## About the Article

Germany's shift from Russian gas to LNG aligns with EU energy security goals but reveals contradictions. Joschka Menge examines how Germany diversified suppliers, invested in LNG infrastructure, and strengthened European cooperation. However, indirect Russian LNG imports and environmentally questionable investments raise concerns. While Germany meets EU guidelines on diversification and cooperation, its long-term reliance on LNG and hidden Russian gas ties highlight policy inconsistencies.

## About the Author

Joschka Menge is pursuing an B.A. in European Studies at Maastricht University (NL).

## 1. Introduction

Under the goal of improving Energy Security, the EU has changed its approach to energy policy since the Russian invasion of Ukraine. Europe's heavy reliance on Russian energy and especially gas imports has made the EU subject to Russian weaponization of energy. Especially countries like Germany, the biggest economy in the EU, which had tight bilateral bonds with Russia in the gas sector were heavily reliant on Russian gas. With the Russian invasion of Ukraine and the EU's following sanctions, the issues that came with this kind of reliance became ever so more apparent. Buying its energy from an illiberal country like Russia now had severe impacts on European Energy Security. Since then, increasing European Energy Security and becoming less dependent on Russia have been major goals of the EU and countries like Germany. Already more than 15 years ago, scholars like Garibaldi (2008, p.4) identified that "The EU is chronically incapable of reaching a common position on energy security". More recently, scholars like Mišík and Nosko (2023) argued that there is a severe solidarity problem within the EU highlighting Germany and France as a driver of the issue. For example, in 2022 when countries were supposed to voluntarily reduce their gas consumption, many member states showed significant opposition. Further, instances like Germany's involvement in the Nord Stream pipelines and differing responses to the 2009 gas crisis reveal internal divisions and a preference for bilateral agreements over a collective EU strategy. The EU aims to solve these issues by creating new energy policies that help to diversify the European energy portfolio with more reliable trade partners, cooperate more intensively within the European Community, and push for sustainable energy alternatives (European Commission, 2022a). In my article, I will be focusing on the shift away from Russian gas imports to Liquefied Natural Gas (LNG). In the center of my analysis will be Germany as it has always played an important role in the European gas sector and has been heavily affected by the Russian war. I will answer the question: "To what extent did Germany's heavy investment into LNG follow the European policy objectives

like further European cooperation as well as new partnerships with reliable countries?"

## 2. EU Strategy

As a reaction to the war in Ukraine, the EU launched the REPowerEU strategy, in which they showcase how they aim to improve the so-called European Energy Security. Throughout the document, the term Energy Security is being used to justify changes in the European energy policy, without giving a clear definition of the term. The goal to improve European Energy Security includes but is not limited to: "save energy; diversify supplies; quickly substitute fossil fuels by accelerating Europe's clean energy transition; smartly combine investments and reforms." (European Commission, 2022e, p.1). In the long run the EU aims to foster further integration among the European member states. By improving European energy security, the EU becomes a more independent and authentic actor in the global arena. By not relying on non-democratic and even autocratic countries for energy, the EU strengthens its position as a normative power in the world. For those outlined goals, countries like Germany play an important role in following European guidelines and further driving European integration, strengthening European Energy security, while also being an example for all the other Member States.

## 3. Analytical framework

Measuring whether member states are following European guidelines as well as an increase in Energy Security is a difficult thing to do. Nevertheless, to be able to measure an increase in Energy Security and to operationalize the concept of Energy Security, I will use the terms of measurement: diversification; stable supply; saving gas; reduced dependence on Russia; as well as cooperation among Germany and its fellow member states, to analyze whether Germany is meeting European goals and whether its LNG investments help Europe's Energy

<b>1. Diversification with like-minded partners</b>	<b>Spreading out the German energy, specifically, gas portfolio, to reduce dependencies on unreliable partners and build relationships with like-minded partners.</b>
<b>2. Reduced dependence on Russia</b>	<b>Reducing the reliance on Russian gas imports to be less of a subject to Russia's weaponization of energy.</b>
<b>3. Cooperation among Member states</b>	<b>Enhanced cooperation between Germany and other member states regarding Energy Policy, to ensure a stable and secure supply of energy within the Union. Especially important for this thesis are economic partnerships in gas policy like LNG investments.</b>
<b>4. Stable supply</b>	<b>Ensuring partnerships as well as using mechanisms, to secure a stable supply of energy for European countries.</b>
<b>5. Saving Energy</b>	<b>Building mechanisms and policies that help save- gas consumption. Building up gas storages to be prepared for future supply cuts.</b>

Figure 1: Terms of measurement

Security to increase. Each quality will be looked at from a perspective of change, looking at the pre-war situation versus the situation now as well as the outlook for the near future. These terms are derived from what the Commission outlined in the REPowerEU document, as well as from my definition of what Energy Security is (European Commission, 2022e). As the term "cooperation" is not listed among those, I will explain its importance under section Analysis A.

#### **a. Terms of measurement:**

In my analysis, I first look at documents and publications by the European Union to go in-depth about how the EU's energy policy has changed (3.a) and what changes the EU expects from its member states. To do that, I mainly look at publications by the European Commission like the document on the REPowerEU, on EU action to address the energy crisis, as well as documents on LNG and secure gas supplies. Secondly, I will analyze the changes in German gas policy (4.b) after the Ukraine war and how

these changes align with the European goals. For the third and fourth part I will go more in depth on German gas policy and put my focus on LNG. The third part will look at Germany's LNG import (3.c) and the way the country substituted Russian gas with LNG. Fourthly, I will look at the investments in LNG (3.d) that Germany has committed itself to and how those help to fulfill the European ideals.

## **4. Analysis**

### **a. Change in European Energy Policy**

As a direct response to the Russian war in Ukraine, the Commission launched the REPowerEU strategy, defining the three main maxims that would lead the change in European energy policy: Save energy; Produce clean energy; Diversification of energy supply (Commission, 2022a). The result of reducing dependency on Russian gas was already visible within the first 8 months after the beginning of the war, as 80% of Russian pipeline gas had been replaced already. Since September 2022, Russian

gas accounts for only 8% of all pipeline gas imported into the EU, compared to 41% of EU imports from Russia in August 2021. While Russian pipeline gas imports decreased drastically, the EU had more than doubled its LNG imports by the beginning of 2023, rising from 20% to up to 42% (Commission, 2022a). Additionally, European countries started to cooperate between each other in regional groups to assess common supply risks (Common Risk Assessments) and to develop joint preventive and emergency measures (European Commission, 2021). The very regulation EU/2017/1938 facilitating this, does not only ensure safe energy by assessing risks to the supply collectively, but it also enhances cooperation between member states. For example, it introduces EU-wide simulations of gas supply and infrastructure disruption, which help to gain a greater understanding of possible risks and weaknesses related to the energy sector. The regulation also introduces a mechanism of solidarity that can be used if an extreme gas crisis occurs. It ensures that even under extreme circumstances households will have access to gas (European Commission, 2021). Additionally, under regulation 2022/1032 member states gas storages must be filled to 80% by November 2022 and 90% by November 2023, ensuring energy safety in cases of gas import shortages. A report published by the Commission in 2024 shows that this regulation enhanced Europe's Energy Security, its supply security, helped stabilize energy prices, and therefore helped European competitiveness (European Commission, 2024). The not explicitly mentioned, but underlying goal of cooperation among member states can be seen in the regulations mentioned above. For example, the regulation EU/2017/1938 animated member states to exchange information on assessing risks cooperatively. Especially after the beginning of the war, the Commission proposed regulations COM/2022/360 and COM/2022/361 introducing plans for the EU to save gas collectively to be better prepared for a supply cut (European Commission, 2021). Further, shortly after the invasion, the EU proposed a common gas purchasing, which incorporates buying a share of the European gas together. This would help European competitiveness, as European countries do not have to compete among each

other, and the EU has greater leverage when negotiating gas deals. Using its combined purchasing power will lower prices, reduce risks to member states, and protect smaller European states, using cooperation to prioritize the notion of solidarity. To summarize, the EU launched new policies and its REPowerEU strategy to outline new goals for the EU and its member states to enhance Energy Security. Part of these policies was to cut Russian gas imports and find new energy suppliers.

## **b. Change in Germany's Gas Policy**

After the beginning of the war in Ukraine, Germany completely overhauled its gas policy with Russia, marking Russia as a not friendly and secure trading partner. Russian gas imports were cut completely by the end of August 2022, while only a few month earlier more than half of imported gas came from Russia (Bundesnetzagentur, 2024). Still, in 2022, 22% of all-natural gas imported to Germany came from Russia (Bundesnetzagentur, 2022). In 2023, it had been fully substituted by gas imports from mainly Norway and the Netherlands (Bundesnetzagentur, 2023). Not only did Germany substitute the Russian gas imports, but it also cut its entire gas import volume by almost a third, from 1.437 TWh in 2022 to 968 TWh in 2023. In addition, the German state opened several LNG hubs through which in 2023 almost 70.000 GWh (7% of the annual import volume) had been imported (Bundesnetzagentur, 2023). The federal government passed a law in June of 2022 that aims to help a fast transition away from Russian gas imports (Die Bundesregierung, 2023). The LNG-Beschleunigungsgesetz (LNG acceleration law) is an answer to the unlawful war on Ukraine, aiming to accelerate European independency from Russian gas imports. Making permits and other procedures less bureaucratic and making exceptions for environmental regulations possible, the law opened the door for the first new LNG infrastructure to be built in the summer of 2022. The law also included specific locations for the LNG hub to make the construction of LNG terminals easier (Die Bundesregierung, 2023b). In 2023, Germany imported a total of 968 TWh of natural gas. 43 percent of that total volume was imported from Norway,

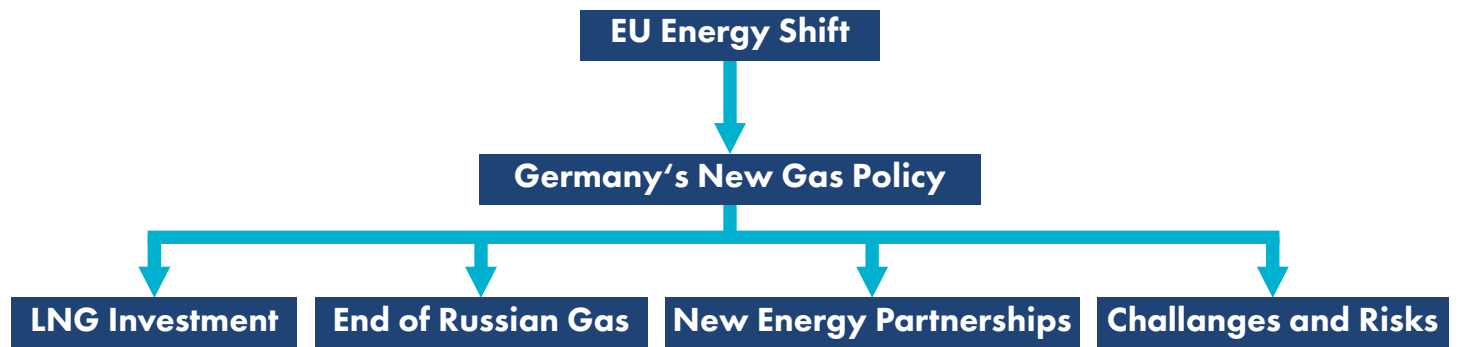


Figure 2: The shift in the EU's energy policy and Germany's compliance to those new guidelines

26 percent from the Netherlands, and 22 percent from Belgium. To rely predominantly on imports from other European countries shows Germany's commitment to intra-European cooperation and reduced dependence on third countries. Germany's one-third cut in imported gas also led to significant cuts in its export volume of natural gas, with the Czech Republic being the biggest buyer of these exports (Bundesnetzagentur, 2024). Even though the gas imports were reduced significantly, Germany managed to adhere to the gas storage terms. In 2023, Germany even managed to overshoot the goals and had its gas storages filled with 85% already in June (1st of October 85% were EU guidelines) and managed to fill them up further to 95% on September 25th (1st of November 95% were EU guidelines). Unexpectedly, Germany had its storages filled a 100% on November 4th, surpassing European expectations. One can already see the trend of diversification (1) away from Russia towards more like-minded partners like other European countries, which is in line with the ideals of the EU. Further, the massive cut in gas imports did not affect Germany's capability to adhere to the gas storage guidelines by the EU. On the contrary, Germany managed to surpass the European timetable and fill its storages up months earlier than required. The country was able to do so by saving massive amounts of energy (5), both in the private and public sectors (Bundesnetzagentur, 2024). To help that along, the government passed a so-called *Energieeffizienzgesetz* (energy efficiency law) in April of 2023, which aimed to put the saving of energy in the industry as well as the private sector into legislation (Die Bundesregierung, 2023). Lower energy consumption (5) does not only make Germany less dependent (2) on its energy importers and helped it

move away quickly from Russian gas, but also has an environmental aspect to it. Burning less gas means a lower CO<sub>2</sub> output. Even though it does not directly adhere to the goal of the EU to produce clean energy, it does have a notion of environmental protection when less energy is being used. Germany's general trend to cut gas imports, save energy, and cut gas deals with its fellow member states seems to comply with the European goal of diversification and cooperation (3) between member states. Importing gas from neighboring European countries like Belgium and the Netherlands also ensures a stable supply (4) of energy for Germany. Further, the cutting of gas consumption positively affects the environment, following the broader notion of environmental protection outlined by the EU in its goal to produce clean energy.

### c. Germany's LNG imports

On second glance, data by Kpler shows that the EU is still importing significant amounts of Russian LNG from the Yamal, Portovaya, and Vysotsk LNG terminals, and Germany is profiting from it (IEEFA, 2023). In 2022, European countries still imported 18.5 billion cubic meters (bcm) of Russian LNG, while in the first nine months of 2023 close to 14 bcm were imported. The main importing countries are France, Spain, Belgium, and the Netherlands with Spain and Belgium having their imports increased by 50% in 2023. After these increases in Russian LNG imports, Russia is Spain's second-largest LNG exporter after the US. Spain also re-exports parts of its imported LNG with Germany being the second-largest recipient of Spanish LNG exports. As mentioned before, among Germany's biggest LNG imports are the Netherlands with 26% and Belgium with 22%. Although the

Netherlands have cut their LNG imports by more than 50% in 2023, they still import Russian LNG via the Yamal terminal (IEEFA, 2023). Even though it is unclear, to what amount the Russian gas imported to Belgium and the Netherlands is being re-exported again, it is likely that some of the LNG that Germany is importing from these countries has Russian origins. Germany's second-hand dependence on Russian gas seems to be well hidden behind the diversification and newly found trade partners Belgium and Spain but is ever so evident. Especially in light of Germany's heavy investment in LNG infrastructure, addressed in the next section, ongoing dependence on Russia is risky, as one might have learned from the past. Looking at the websites and publications by the German government, the hypocrisy is hard to overlook. "Russia's war of aggression against Ukraine, which violates international law, has led the federal government to reassess the energy and security policy situation in Germany" (Die Bundesregierung, 2023,

Flüssiggas-Anbindungen schneller bauen, para. 3), claiming that the war in Ukraine led to rethinking of the German energy and gas policy, logically leading to

a distancing to Russia. While this might have happened on an official level, meaning no direct imports from Russia, Russian gas is still flowing into Germany through this backdoor. These findings contradict the previous conclusion about Germany becoming less dependent on Russia (2), as Germany seems to still import Russian gas through third countries, making Germany second hand depend on Russian gas exports. While it still holds true that Germany does not import Russian gas directly anymore and therefore has significantly reduced its dependence, other European countries that Germany imports gas from have not shown the same commitment. Nevertheless, terms 1, 3, 4, and 5 still hold true to the conclusion under section b.

#### **d. Germany's investments in LNG infrastructure**

After the start of the war in Ukraine, Germany started to heavily invest in LNG. This involves constructing new LNG

terminals and connecting them to the existing network, with a total projected investment requirement of around 45 billion euros by 2032 (Bundesnetzagentur, 2023). As part of this investment plan Germany plans to build close to 1000km of new LNG pipelines as well as several compressor stations. Through the commitment to the European environmental goals, Germany plans to convert existing gas pipelines to hydrogen and construct new ones, covering approximately 6,365 km, indicating a significant commitment to hydrogen as a future energy carrier. Contrary to this investment in hydrogen infrastructure to support the green transition; are the loans German banks are giving out for US LNG export terminal construction. Over the past decade, German banks have provided close to 5 billion dollars in loans. From January 2022 to April 2023 alone, support from German banks totalled \$2.94 billion. Major financiers include Deutsche Bank, Landesbank Baden-Württemberg (LBBW), KfW IPEX-Bank, and Siemens.

60% of loans have been given out since the beginning of the war in Ukraine with the loans being almost 60% carried by Deutsche Bank (1.9 billion) and Landesbank Baden-Würt-

temberg (LBBW) (1.4 billion). The loans supported the construction of seven American LNG export sides, passively supporting the LNG fracking industry by facilitating increased sales. It's estimated that those seven LNG export sides with their connection to fracking, produce more than 400 million tons of CO<sub>2</sub>, which is more than 50% of Germany's emitted greenhouse gases in 2022. This poses a significant contradiction to the German commitment to fulfil European environmental goals, as private German banks support the of fracking abroad. Further, the LNG contracts that have been cut with the American LNG export companies are 20 years long, compromising Germany's goal to be carbon neutral by 2045 (Gheorghiu, A., & Richter, R., 2023). These investments by German banks must be looked at from two different angles. On the one hand, these investments fulfil almost all my terms of measurement. Heavily investing in American LNG exporters is

**Energy Security:**  
The reliable and stable supply of energy at affordable prices, minimizing dependency on risky or hostile suppliers.

undoubtedly an act of diversification (1) away from Russian gas, especially since the investments have skyrocketed since the beginning of the war. Further, the LNG deals cut with American LNG exporters for the next 20 years also help reduce dependency (2) on Russia quite a lot. Long-lasting economic bonds with the US as well as the EU/Germany and the US having a similar set of values suggest that the US is a safe trade partner, and a stable supply (3) is being ensured. With the upcoming presidential elections, this is something that might need to be reevaluated, but that goes beyond the scope of this thesis. On the other hand, these investments are an environmental disaster. As shown above, the American LNG fracking projects emit more than 50% of Germany's annual greenhouse gases (Gheorghiu & Richter, 2023). Further, the practice of fracking is illegal in most European countries, with Germany banning fracking already in 2017 (Peigné, 2022). Considering the illegality of fracking in the investor's own country, the investments can be critiqued, as they do not align with the European environmental protection goals. The German Association of Gas Transmission Network Operators (FNB Gas) released a draft for the 2022–2032 gas network development plan which includes future investments in the LNG sector. FNB Gas plans to invest close to 4.5 billion euros in the expansion of the gas and LNG network, including almost 1000 km of new gas pipelines. Additionally, they aim to expand the import infrastructure for LNG from the Netherlands and Belgium (FNB Gas, 2024). Even though the 'Netzentwicklungsplan Gas 2022–2032' still needs to be approved by the Bundesnetzagentur, the trend of heavy investments in the German LNG infrastructure trade with fellow member states by the private sector is continuing. The European Commission already approved a €40 million German support measure for constructing and operating a new land-based LNG terminal in Brunsbüttel to enhance energy security and diversify supplies, aiming to reduce dependence on Russian fossil fuels (European Commission, 2023). The claim by the Commission is that this support aligns with the European Green

**Germany drives further European integration and is complying with European guidelines.**

Deal, REPowerEU Plan, and broader EU efforts to reduce dependency on Russian energy imports, contributing to the EU's Energy Security and climate goals. The project's beneficiaries are RWE (a German energy operator) and Gasunie (a Dutch energy network operator), with the terminal to be built and operated by German LNG Terminal GmbH, jointly owned by KfW (50%), Gasunie (40%), and RWE (10%) (European Commission, 2023). This marks a significant step in the direction of the broader goal of the EU to enhance cooperation among member states. Such a pan-European project makes sense in light of economic prosperity and enhances European Energy Security by friend-shoring investments. Collective investments in institutions like LNG hubs help member states be less dependent on external parties and countries. Further, these investments facilitate intra-European cooperation. The Tree Energy Solutions' (TES) Wilhelmshaven terminal by the German company E.ON cooperated with the French company France's Engie in planning the terminal. Additionally, all of the three terminals aim to transition to green energy in the future and align with the German net zero plans (Global LNG Hub, 2024). Further, the German Association of Gas Transmission Network Operators (FNB Gas) released a draft for the 2022–2032 gas network development plan on 31 March 2023, committing to 4.4 billion euro investment in in gas networks. Significant investments in connecting to neighbouring countries' LNG hubs are also planned (Centre for Eastern studies, 2023). These projects highlight Germany's efforts to cooperate with its fellow member states. German companies are switching from their Russian business partners like GazProm towards other European companies with their headquarters in like-minded countries. This process of friend-shoring aligns with the European goal of diversification and cooperation and enhances European economic unity by using the advantages of the common market. In addition, the terminals are designed to later be used for green energy like ammonia storage and e-methane production, aligning with the goal of clean energy outlined

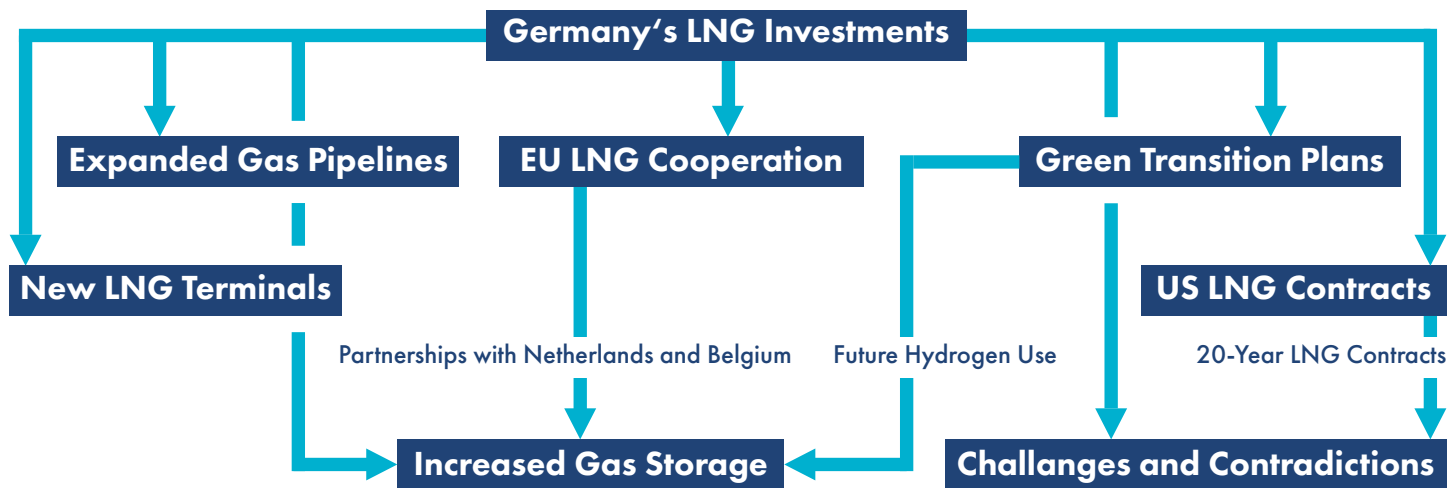


Figure 3: The pros and cons of germany's LNG investments

by the EU (Global LNG Hub, 2024). Looking at the terms of measurement, all five of them are being fulfilled by the investments of the terminals looked at above. To sum up: Diversification (1): Germany's cooperation with several fellow European member states; Reduced dependency (2): Germany's investments in infrastructure to be able to diversify away from Russian gas, is helping to reduce dependency on Russia; Cooperation (3): German companies cut gas deals with other European companies, as well as common investments in LNG infrastructure like the HEH facilitate intra-European cooperation; Secure supply (4): by cutting deals with like-minded countries and relocating investments to friendly countries, supply security is being enhanced; Save Energy (5): By preparing the German LNG infrastructure to later be able to be used for hydrogen, the saving of fossil energy is being prepared for the future.

## 5. Conclusion

Looking back at the research question of this paper: To what extent did Germany's heavy investment into LNG follow the European policy objectives like further European cooperation as well as new partnerships with reliable countries? as well as my terms of measurement (1) Diversification with likeminded partners, (2) Reduced dependence on Russia, (3) Cooperation, (4) Stable supply, and (5) saving energy, I will now answer to what extent Germany and its investments are in line with the guidelines given by the EU. The EU clearly outlined its energy goals

in the REPowerEU strategy and other, mostly Commission documents, analysed above. Germany, having been so very dependent on Russian gas, did a complete reversal in its energy policy following the Russian invasion of Ukraine. As a substitute for the cutting of the gas imports from Russia, Germany started to import heavily from Norway, the Netherlands, and Belgium, strengthening European trade and facilitating European cooperation. Looking deeper into the origins of the LNG Germany is importing from Belgium and Spain, the still existing bonds to Russia as a gas exporter become apparent. Russia is still exporting significant amounts of gas and LNG to European countries, on which Germany is now directly dependent. This means that Germany is also indirectly still very dependent on Russia, which is quite the opposite of what they aimed for when stopping all Russian energy imports. Looking at the LNG investments, a great pattern of cooperation between German companies and other European and American companies can be seen. Germany is planning major LNG onshore terminals, for which other European companies have bought stakes in. The EU clearly outlined its energy goals in the REPowerEU strategy and other, mostly Commission documents, analysed above. Germany, having been so very dependent on Russian gas, did a complete reversal in its energy policy following the Russian invasion of Ukraine. As a substitute for the cutting of the gas imports from Russia, Germany started to import heavily from Norway, the Netherlands, and Belgium, strengthening European trade and facilitating European cooperation. Furthermore, Germany

managed to meet all European timelines to fill German gas storages and even managed to fill the storages up faster and with a higher volume than demanded. Following this pattern, Germany further passed legislation to save energy, adhering to the broader notion of environmental protection outlined by the EU. The country managed to fulfil all legal requirements given by the EU and started cooperating with its fellow member states more frequently. It successfully diversified its energy portfolio away from Russia, reducing dependency on unsafe trade partners. Looking back at my terms of measurement, in all three in-

stances (Gas policy ;LNG imports ;LNG investment) Germany has fulfilled all of them, except for the questionable investments in US LNG sides and the exporting of Russian LNG through third countries. One can say that Germany does fulfil European guidelines to the best of its ability and shows great effort in becoming independent from Russian gas imports. It helps to drive further European integration and in comparison, to other member states, Germany is doing a great job in complying with European guidelines. Further, its commitment to LNG investments shows a real paradigm shift in Germany's energy policy.

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