

Marija Klenovskaja

The Role of Ukraine in EU-Russia Energy Relations

Analyzing Critical Junctures and Interdependence
in the Energy Field (2005-2022)

Bachelor's thesis in BEUROP
Supervisor: Carine S. Germond
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Abstract

This bachelor thesis examines the complex energy relationship between the EU and Russia, with a focus on the significance of Ukraine as a transit country for Russian gas exports to Europe and its impact on energy security and diversification in Europe. The paper analyzes key events in EU-Russia energy relations from 2005 to 2022, including the 2005-2006 gas dispute, the 2014 annexation of Crimea, and Russian invasion of Ukraine in 2022, using a multiple-case study method. The research suggests that Ukraine plays a crucial role in the EU-Russia energy relationship, and its conflicts with Russia highlight the need to diversify energy sources and routes in Europe to reduce dependence on Russian gas and enhance energy security in the EU.

Key words

EU-Russia energy relations, interdependence, Ukraine, gas disputes, annexation of Crimea, Russian invasion, energy supply disruptions, energy security, energy diversification.

Sammendrag

Denne bacheloroppgaven undersøker det komplekse energiforholdet mellom EU og Russland, med fokus på betydningen av Ukraina som et transittland for russisk gass som eksporteres til Europa og dens innvirkning på energisikkerhet og - diversifisering i Europa. Oppgaven analyserer sentrale hendelser i EU-Russland energirelasjoner fra 2005 til 2022, inkludert gasskonflikten i 2005-2006, annekteringen av Krim i 2014, og Russlands invasjon av Ukraina i 2022, ved å bruke en metode med flere case-studier. Forskningen antyder at Ukraina spiller en avgjørende rolle i forholdet mellom EU og Russland når det kommer til energi, og dens konflikter med Russland understreker behovet for å diversifisere energikilder og ruter i Europa for å redusere avhengigheten av russisk gass og forbedre energisikkerheten i EU.

Nøkkelord

EU-Russland energirelasjoner, interavhengighet, Ukraina, gasskonflikter, annekasjonen av Krim, russisk invasjon, energiforsyningsforstyrrelser, energisikkerhet, energidiversifisering.

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1 Introduction

1.1 Background information on EU-Russia energy relations

Energy relation between the EU (European Union) and Russia started in 1960, but for a number of reasons have turned from an instrument of cooperation into a subject of controversy and are often perceived as a threat to the European Union due to Russia being a significant supplier of energy to the EU and EU high dependence on Russia's energy supplies (Siddi, 2017). The EU significantly relies on natural gas to support its goals of promoting peace, values, and well-being, and many of its member states depend on energy imports to benefit their populations across various sectors, including industry (Landry, 2017). After the first oil shock in 1974, the EU started considering its energy security, however, has continued to rely on external sources for over half of its energy requirements with growing dependence in recent times (Keypour & Hendla, 2019). The EU has been repeatedly affected by cut-off of Russian gas supplies to Ukraine, as a tool for political pressure on it, leading to gas supply disruptions in the EU due to conflicts between Russia and Ukraine over gas prices and transit, resulting in the EU imposing sanctions on Russia and raising concerns over energy security because of Russia's large supply of gas, crude oil, and solid fuels due to tensions escalating during the Ukraine crisis in 2014 (Siddi, 2022). Europe's energy dependence increased in 2020 due to changes in the energy sector and reduced energy supply from Russia, posing a threat as most EU countries strongly rely on energy supplies, but in 2021, the EU started reducing its dependence on Russian oil and gas and diversify its energy imports (Kravchenko, Ilyash, Smoliar, Boiarynova, & Trofymenko, 2023). The EU has taken several measures in reducing its reliance on Russian gas after the invasion of Ukraine in 2022 by diversifying imports, decreasing demand, and increasing storage levels (Kravchenko et al., 2023).

1.2 Research question and objectives

The research question of this paper is: How has the conflict in Ukraine and the interdependence between the EU and Russia impacted their energy relations since 2005, and how can understanding these factors guide energy policy decisions?

To answer the research question, the study implies a thorough review of the relevant literature, selecting significant events or turning points during the specified time frame for in-depth analysis to analyze how these critical events were affected by interdependence matters, specifically the European Union's dependence on Russian gas and the necessity to broaden energy sources and routes. By analyzing the impact of the conflict on the EU-Russia energy relationship, the study can identify potential threats and challenges to effectively managing interdependence in the energy sector.

The objectives of this study are to examine the impact of critical historical events related to the EU-Russia energy relations, to identify factors contributing to conflicts in these relations, and to answer why the EU seeks to reduce the dependency on Russian gas.

1.3 Paper structure

This paper follows a structure consisting of an introduction, literature review, methodology, analysis, and conclusion. The introduction presents background information on EU-Russia energy relations, the research question and objectives, and highlights the importance of studying EU-Russia energy relations.

The following section with literature review contextualizes the topic and theoretical framework for the research, reviewing existing literature on EU-Russia energy relations and the role of Ukraine, as well as the concept of interdependence and neorealism in these relations, while methodology section describes a multiple- case study approach and the selection of critical junctures for analysis.

The analysis section provides a detailed examination of three critical junctures: the 2005-2006 gas dispute, the 2014 annexation of Crimea, and the 2022 Russian invasion of Ukraine, followed by an analysis of factors influencing the transformation in EU's reliance on Russian energy and a conclusion summarizing the findings.

1.4 The significance of the study

The significance of studying the dynamics of the EU-Russia energy relations lies in the identification and acknowledgment of the challenges and threats in the relationship, allowing the appropriate implementation of measures to address them effectively by understanding the reasons behind the threats. The understanding of why and how Ukraine is involved in Russia supplying energy to the EU, and the degree of interdependence in EU energy relations with Russia is necessary to create an effective strategy for energy securitization, which together with knowledge of the Russian political structure to implement targeted sanctions to safeguard EU's energy supply and enhance its overall security.

2 Literature review

2.1 Data collection

The source of the data in the paper is based on various sources, including news article, existing studies and literature on EU-Russia energy relations, neorealism and interdependency theory. To support the data obtained from the literature, information from official EU websites, providing relevant policies and energy supply figures, has also been used. This combination of sources ensures reliability of information and contributes to a better understanding of the complicated energy ties between the EU and Russia.

2.2 EU-Russia energy relations and the role of Ukraine

When gas pipelines from the Soviet Union to Western countries in 1970 were built, Russia's role as energy supplier became obvious, especially for natural gas (Keypour & Hendla, 2019). The trade of gas between the EU and Russia has faced challenges as a result of different views in regulations, commercial interests, and foreign policy goals, with Russia's desire to maintain the control over the post-Soviet territory going against the EU's policies promoting its norms and economic system in the same region (Siddi, 2018). According to Siddi, Russia used its energy exports to gain geopolitical power, particularly in its relationship with Ukraine (Siddi, 2018). Russia has demonstrated its energy power as energy supplier to both Ukraine and Europe through cutting off energy supplies to Ukraine in 2006 and 2009 due to disagreements over gas prices (Siddi, 2018).

In 2014, during the Ukraine crisis, gas disruptions in the EU repeated, which highlighted the vulnerability of the EU's energy security and as a result, led to the EU implementing measures to diversify suppliers and strengthen its ability to prevent sudden supply disruptions by constructing new pipelines for importing non-Russian gas, and expanding gas storage capacity (Siddi, 2022). Despite political tensions, EU-Russia gas trade continued and intensified between 2014 and 2019, thanks to successful negotiations and mutual dependence (Siddi, 2022).

Russia has used its energy relationship with Ukraine as a tool to gain political concessions and exert geopolitical power by offering Ukraine discounts on gas prices in exchange for these concessions (Siddi, 2018). At the same time, Russia directed its efforts to reduce Ukraine's influence as a transit country through finding alternative gas transportation routes, and building new pipelines, while the EU was solving conflicts between Russia and Ukraine over gas supplies (Siddi, 2018). The Russian energy company, Gazprom, initiated two gas pipeline projects, Nord Stream 2 and Turkish Stream, resulting in a weakened importance of Ukraine as a transit route, as Russia can now supply gas to Europe bypassing Ukraine, securing Russia's position in the European market (Siddi, 2018). Some Eastern EU countries were skeptical about increasing energy trade with Russia, and the European

Commission started investigating Gazprom for accusations of unfair business behavior in East-Central European markets, based on Lithuania's complaint (Siddi, 2018).

Gazprom's Nord Stream-2 and Turkish Stream projects aim to secure gas supplies to Europe while bypassing Ukraine, but are vulnerable to changing political configurations and face competition from EU-supported import diversification projects (Siddi, 2018). The EU made rules to control how Russian energy company Gazprom sells gas in Europe, and evaluated Gazprom's actions to ensure it was not breaking any rules or participating in unfair business practices such as charging unfair prices, and control over its behavior through regulatory measures was aimed at limiting the power (Siddi, 2018). Despite political tensions between the EU and Russia, Gazprom has adapted its energy export strategy to comply with EU regulations and market principles, maintaining a mutually beneficial and interdependent energy relationship despite tensions and differences through regulatory measures (Siddi, 2018).

Russian gas exports to Europe recorded its best results from 2016 to 2018, motivated by business factors such as increased EU gas market interest, lower Russian gas prices, constrained availability of liquid natural gas (LNG) not sourced from Russia, and favorable climate conditions for gas transportation, rather than influenced by political factors (Siddi, 2022). Gazprom boosted gas supplies to the EU by maximizing pipeline capacity, increasing exports through Ukraine, benefiting from Russian gas's cost advantage over LNG, and undertaking new infrastructure projects for gas export to Europe factors (Siddi, 2022).

The significant turning point in European politics, security, and the economy, was the Russian invasion of Ukraine in February 2022 (Siddi, 2022). The worsening of connection between the EU and Russia can be explained by factors such as competition for power and Russia's feeling of insecurity, ultimately affecting the EU to react to Russia's confident and forceful behavior and take necessary steps (Cross & Karolewski, 2021). The conflict in Ukraine has deeply changed European politics and security, leading the European Union to reconsider its stance and strategy in response to Russia's actions (Cross & Karolewski, 2021). Maintaining Ukraine's gas transit role is crucial for EU politicians to ensure energy security, as gas flow to the EU has continued and even grown, but the construction of alternative pipelines raises concerns about Ukraine's income and strategic position (Siddi, 2022).

Russia's Rosatom, a significant supplier of uranium and fuel for reactors constructed during the Soviet era in EU member states, plays an increasingly important role in EU-Russia energy relations, as it expands nuclear power domestically and internationally, highlighting its cost advantage in uranium production and access to state funding, while contributing the reduction of greenhouse gas emissions by replacing fossil fuel-based electricity generation (Siddi, 2022). Both the European Union and Russia aim to use more renewable energy sources such as nuclear, hydroelectric, wind, and geothermal power, with the EU having more ambitious targets, and there are encouraging advancements and opportunities for collaboration with Western companies and technologies in Russia's initiatives involving biofuels and renewable energy projects (Siddi, 2022).

The EU-Russia energy trade, focused on fossil fuels, has maintained resilience despite the Ukraine crisis and growing climate change concerns (Siddi, 2022). The key concern is determining future gas export routes, particularly regarding Ukrainian transit pipelines, which have been addressed through a 5-year energy supply agreement between the EU, Russia and Ukraine in 2019, ensuring substantial gas transit until 2024 (Siddi, 2022).

2.3 The concept of the interdependence in EU-Russia energy relations

Interdependence, which refers to mutual dependence, is seen as unequal in EU-Russia energy relations according to some scholars, including Casier (2011), Krickovic (2015), Galytska (2021), Keohane and Nye (1989), who agree that the EU's heavy dependence on Russia for its energy supply results in Russia's dominance and the EU's vulnerability in this

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interdependent relationship. Recent advancements in data accessibility, estimation methods, and data analysis have led to a significant increase in empirical research exploring the relationship between trade flows and interstate relations, particularly focusing on how two-way trade impacts the likelihood of military conflicts, while considering factors like the military power of countries and whether they have nuclear weapons (Pevehouse, 2004).

Russia played a significant role as a supplier to the EU by exporting a substantial amount of natural gas in 2020, as well as providing 25.7% of the EU's crude oil imports and 52.7% of its hard coal imports during the same year, highlighting Russia's important role as an energy supplier, remaining important even despite changes in the EU's energy import sources over time (Eurostat, 2022). Europe continues to rely on Russian gas as its own gas production decreases, demand remains stable, and alternative sources are limited, leading to Russia filling the increasing gap between supply and demand, even though there has been a slight increase in LNG imports and small deliveries from other countries (Corbeau, 2022).

The EU's energy relationship with Russia is viewed as a security concern due to significant dependence on Russian energy and rising energy prices, resulting in a shift from an economic focus to a geopolitical and strategic approach, emphasizing issues of dependence and security (Casier, 2011). The crisis in Ukraine shows that economic interdependence doesn't always prevent conflict, as the EU-Russia energy relationship has increased competition and security worries, leading to opposing support in the civil war and highlighting the limitations of interdependence in promoting cooperation (Krickovic, 2015).

Koehane and Nye define interdependence as the mutual effects of transactions, where sensitivity relates to responsiveness within a policy framework, and vulnerability represents the costs faced when alternatives are limited, where the EU's vulnerability arises from its reliance on Russia for oil and gas, and energy diversification aims to decrease this vulnerability (Keohane & Nye, 1989). Efforts to diversify supply routes and liberalize the energy market have led to tensions, with Russia seeking alternative markets and reinforcing control over energy supplies, heightening European anxieties and raising doubts about Russia's intentions (Krickovic, 2015).

Both sides are dependent on energy exports for their economic well-being and development, leading to a significant security issue, since Russia depends on the sale of oil and gas while Europe seeks affordable energy prices, resulting in conflicting interests that are challenging to resolve (Krickovic, 2015). Asymmetrical interdependence can result in power disparities, seen in the EU-Russia energy relationship, where both parties seek diversification, raising questions about their level of dependency on each other (Galytska, 2021).

Europe and Russia have different views on the government's involvement in the energy sector, with Europe favoring reduced government influence and competition, while Russia supports a strong government role to benefit its own companies and maintain control over valuable resources, raising concerns in Europe about Russia's intentions and use of energy as a foreign policy tool (Krickovic, 2015). The energy relationship between Russia and the EU instead of stronger cooperation, has increased tensions due to concerns about imbalanced advantages and the possibility of one side taking advantage of the other, resulting in conflicts and security concerns (Krickovic, 2015).

The conflict between Russia and Ukraine in 2022 has created a big problem for Europe's energy supply, with prices going up and worries increasing about relying too much on Russia for natural gas, coal, and oil (Corbeau, 2022). After Russia invades Ukraine, the European Commission has introduced the REPowerEU Plan, aiming to address the difficulties caused by the global energy market disruption, which seeks to address two main goals: reducing the EU's dependence on Russian fossil fuels and addressing the climate crisis (European Commission, 2022). Through collaborative efforts as a Union, reducing its reliance on Russian fossil fuels by using different energy sources and promoting the widespread use of renewable energy instead of fossil fuels in various areas to reduce

greenhouse gas emissions, enhance security, and improve competitiveness (European Commission, 2022).

2.4 The concept of neorealism in EU-Russia energy relations

Realists believe that interdependence can lead to stress and conflict between states because unequal gains from trade can create power imbalances and tensions, making trade a source of tension instead of preventing conflicts (Pevehouse, 2004). Some realists argue that trade levels have minimal influence on political-military conflicts, as political players prioritize factors like military strength, the ability to prevent nuclear attacks, the distribution of power, and advancements in military technology over economic considerations when it comes to using force (Pevehouse, 2004; Buzan, 1984; Gilpin, 1987).

Experts in EU-Russia relations mainly discuss two rational approaches: one that emphasizes conflicts and competition for influence in the region (neorealism), and another that focuses on problem-solving based on shared interests, but faces difficulties to explain worsening relations when institutions fail to provide solutions (neoliberalism) (Zaslavskaya, 2022). Since 2014, institutions failed to address new challenges and relationship between the EU and Russia worsened, raising doubts regarding the idea of common interests and their ability to drive international cooperation, leading to a reevaluation of the liberalist explanations offered for EU-Russia relations (Zaslavskaya, 2022).

Neorealist scholars, on the other hand, have criticized the high level of interdependence in energy relations, arguing for a more strategic approach to relations with Russia, suggesting a focus on maximizing national interests and security considerations (Siddi, 2022). This approach corresponds to the EU's energy concerns and perspective on energy security, recognizing the significance of energy as a critical security concern and implementing measures securing a stable and trustworthy energy supply. The EU is actively engaged in diversifying its energy sources and suppliers, promoting renewable energy, and financing projects strengthening its energy system by reducing dependence and vulnerabilities associated with interdependent energy relations with Russia (European Commission, 2022).

The realist approach in international relations focuses on state power politics and sees energy as an important strategic resource, emphasizing the need for state intervention and control over domestic and external energy resources (Romanova, 2021). This theory reflects the significance of energy in the EU-Russia relationship, acknowledging the influence of power dynamics on energy policies and emphasizing the necessity for states to safeguard their interests in order to maintain a favorable position in the global energy market. The thinking was applied in both EU and Russia policies, adopting measures to protect their energy interests, promote energy security, and increase their positions in the global energy market by diversifying energy sources (Siddi, 2018). However, the EU and Russia have different perspectives on energy security; Russia seeks to secure buyers and demand, and the EU focuses on solving the problems of energy dependency and security of supply (Siddi, 2018).

Neorealists claim that Russia is motivated by security concerns and the need to balance the influence of NATO, which is the collaboration of Western countries working together for defense purposes, leading to its prioritization self-interests by aligning with the EU to gain more control over European security dynamics and prevent potential dominance by the United States (Zaslavskaya, 2022). Russia decision-makers believed that by aligning with the EU, Russia could counterweight the influence of NATO and exercise greater control over European security dynamics, but their contrasting visions for security cooperation, with the EU focusing on existing frameworks and Russia seeking to establish a new European security structure under its influence caused conflicts and led to the EU and NATO rejecting Russia's proposal to create a binding agreement concerning European security (Schmidt-Felzmann, 2016). Russia's military actions in Ukraine, particularly to safeguard its position as an energy supplier, have raised significant defense concerns within the EU.

3 Methodology

3.1 Research methodology: multiple-case study

The multiple-case study method is a research approach that involves studying and analyzing multiple cases. In this paper, three events related to EU-Russia energy relations, where Ukraine was involved are examined with the purpose of gaining a deeper understanding of a phenomenon or research question.

Yin (1994) proposed a case study model that serves various purposes. The method allows to untangle complex relationships between causes and effects in real-life interventions, provides a detailed description of the specific context in which actions take place, a description of the actions themselves, and enables us to explore scenarios where the outcomes of evaluated actions lack clarity (Yin, 1994). The multiple case study in this paper is used to identify reasons behind the Russian-Ukrainian energy conflict to analyze its implications for EU-Russia energy relations. By using this method, the goal is to understand the complex connections between reasons and outcomes, describe the specific factors that shape the conflict and study the actions of key participants.

Yin (1994) recommended incorporating diverse sources of evidence as a means to improve the construct validity of information. In addition to information from different sources, Yin recommended to create a centralized database for organizing data, and maintain a clear record of the research process to ensure reliable findings (Yin, 1994). Following these principles, the paper collects data from various time periods and authors to ensure a comprehensive and diverse examination of EU-Russia energy relations. By incorporating multiple sources, including historical records, academic studies, and expert opinions, the paper aims to provide an inclusive analysis with different perspectives and improves the validity and reliability of the research findings. The database played a significant role in supporting the research process and data organization, contributing to the development of the paper's content and analysis. It helped identify and connect the relevant cases related to EU-Russia energy relations, allowing for a thorough examination of each event and their relationship.

Yin (1994) highlighted the significance of a well-defined protocol in case study research, particularly in multiple-case studies, which includes an overview of the project, field procedures, case study questions, and a report guide, as it promotes focus, problem identification, effective communication, and early planning for the reporting phase. The paper incorporates a protocol similar to Yin's (1994) suggestions, including an overview of the case study project, discussing its objectives, the relevant issues related to EU-Russia energy relations, and providing a comprehensive presentation of the topic under study, while the case study questions, which guide the data collection process, are clearly identified and kept in mind throughout the study. By following the specified protocol, which includes a guide that outlines how the case study report should be structured and presented, the paper upholds discipline, effectively addresses main tasks and goals, and ensures a systematic and organized approach to reporting the findings.

3.2 Selection of critical junctures (cases) for analysis

The paper analyzes critical events in EU-Russia energy relations between 2005 and 2022, which demonstrate how Ukraine has been a source of conflict between Russia and the European Union. Three critical junctures were selected for analysis: the 2005-2006 gas dispute between Russia and Ukraine, the 2014 annexation of Crimea, and the 2022 Russian invasion of Ukraine. These junctures represent significant events in EU-Russia energy relations and highlight the role of Ukraine as a key transit country for Russian gas to Europe. Using information about specific events can offer a more accurate way to measure both conflicts and collaborations when testing theories about interdependence (Pevehouse, 2004).

4 Cases: Examining key moments in EU-Russia energy relations

This section of the paper uses descriptive, exploratory, and explanatory techniques to analyze the complicated dynamics of EU-Russia energy relations, specifically the impact of the Russia-Ukraine conflict, through multiple study approach. This includes the identification of the motives behind Russia's actions against Ukraine, their effect on the EU energy supply, and the EU response to the threats caused by Russian-Ukrainian conflict.

4.1 Case 1: The 2005-2006 gas dispute between Russia and Ukraine

The gas trade between Ukraine and Russia in the 1990s experienced challenges and issues related to Ukraine's debts and unpaid bills to Russia, and as the result reduced gas supplies from Russia (Stern, 2006). The difficulties continued, and after Ukraine proposed in 2005 to align gas transit tariffs with European levels, along with disagreements regarding the resolution of Ukraine's outstanding debts to Russia, and the creation of a joint venture (partnership)- RosUkrEnerg, the situation worsened (Stern, 2006).

In 2004, Russia, Gazprom, and Ukraine reached an agreement to address previous debts and create a more stable gas trade relationship, which involved delivering gas from Central Asia to Ukraine, resolving outstanding debts, and agreeing on sales and transit terms (Stern, 2006). However, the gas supplies between Ukraine and Russia underwent considerable adjustments after the December 2004 presidential election in Ukraine (Stern, 2006).

In the beginning of December 2004, Turkmenistan requested Russia and Ukraine higher price for the gas they were buying, and in the end of December stopped sending gas, but after talks with Ukraine, on January 3, 2005 gas deliveries to Ukraine resumed, although at a higher price (Stern, 2006). However, there was considerable confusion between Turkmenistan and Ukraine regarding gas trade supplies, and Turkmen President Niyazov firmly emphasized that any long-term gas agreements with Ukraine should involve Russia (Stern, 2006). The interruption of Turkmen gas deliveries and confusion about future supply agreements played a significant role in the failure of the partnership plan for the Ukrainian transit pipeline network, which could potentially positively affect the gas transportation between Ukraine, Russia, and other countries (Stern, 2006).

In 2005, Ukraine proposed paying gas transit fees at European rates and in dollars, which Gazprom liked, but there were disagreements about resolving previous debts (Stern, 2006). The gas relationship between Russia and Ukraine became more complex as they faced challenges to agree on gas prices; Russia pushed for higher "European prices" and Ukraine preferred a gradual increase (Stern, 2006). The Kremlin supported Gazprom's position and the higher gas prices, offering loans to Ukraine if it couldn't afford the increased prices (Stern, 2006).

In January 2006, there was a gas crisis in Europe because Gazprom and Ukraine were arguing about gas supplies, leading to Ukrainian companies redirecting gas meant for transit to Europe, resulting in lower pressure of the gas flow within the pipelines and no gas reaching European customers (Stern, 2006). Gazprom claimed they were delivering the correct amount of gas according to the contracts, but Ukraine's arguments about taking a percentage of gas or considering temperature conditions were not valid since the contracts already defined the terms and did not include such entitlements (Stern, 2006). During the gas dispute that lasted four days, European countries experienced a shortage of gas supplies (Stern, 2006).

In January 2006, Gazprom and Ukrainian Naftogaz resolved their gas dispute through an agreement, deciding on the payment amount per 100 kilometers Gazprom would give

Ukraine for transporting gas to Europe (Stern, 2006). RosUkrEnergO and Ukrainian oil and gas company Naftogaz established a collaborative partnership to sell gas in Ukraine received from Russia, where RosUkrEnergO would handle gas delivery to Ukraine and Naftogaz would stay away from exporting gas from Russia; however, the agreement did not address the gas price beyond June 2006 (Stern, 2006).

The European press and the US Secretary of State believed that the gas dispute between was driven by politics, with Russia using economic pressure to unbalance Ukraine and possibly remove its leader (Stern, 2006). There was also a believe that Russia had a specific reason for its actions because it focused on countries that had left the Soviet Union or had pro-European governments, and increased price increases for most of these countries in 2006, except Belarus, indicated a political motive behind the crisis (Stern, 2006). According to other academics, the gas conflict arose because Russia pushed Ukraine joining the Eurasian Customs Union due to unwillingness of Ukraine coming to a deal with the EU (Seitz & Zazzaro, 2020). As a consequence, resulting in Russian cut-off of gas to Ukraine and its rise in price (Seitz & Zazzaro, 2020).

The Russian-Ukrainian conflict did not affect the EU gas supplies significantly, and was not specifically targeted at EU countries (Stern, 2006). However, the gas crisis showed Europe that depending too much on one gas supplier or route is dangerous, and they need international agreements to solve problems and keep energy supply secure (Stern, 2006). To prevent gas-related issues, international agreements like the Energy Charter Treaty are needed, with the European Union promoting transparency in gas contracts and flows, the Energy Charter monitoring and enforcing measures, and Gazprom ensuring uninterrupted gas supply to EU countries to avoid political motives (Stern, 2006). However, in January 2009, a similar dispute occurred, and it increased concerns about energy security in relation to Russia due to the sustained gas cut-offs (Sauvageot, 2020).

4.2 Case 2: The 2014 annexation of Crimea

Ukraine shifted its focus towards Western countries in 2014, what Russia saw as a threat and wanted to weaken Ukraine economically and strategically, which involved preventing Ukraine joining Western institutions and its ability to support the EU's efforts to decrease dependence on Russian gas by creating instability in Eastern Ukraine, through annexing Crimea (Keypour & Hendla, 2019). From a realist perspective, Russia's claim in referendum that they took this action to protect the Russian ethnicity, is questionable, as realists view the action in the concept of maintaining a balance of power (Keypour & Hendla, 2019). The annexation of Crimea is seen as Russia's attempts to restore a regional power balance prioritizing Russia over the West due to perceiving Ukraine's increasing connections with Western countries by Russia as a threat, and responding with actions to hinder it (Mearsheimer, 2014; Keypour & Hendla, 2019). Russia wanted to prevent Ukraine's energy independence and break its energy ties with Europe, to ensure Europe's continued dependence on Russian energy (Keypour & Hendla, 2019).

The energy factor played a significant role as Russia aimed to block Ukraine's access to Black Sea resources, important for Ukraine's economic growth and future energy market plans, leading to divisions between the two countries (Keypour & Hendla, 2019). This idea proposes viewing the annexation as a part of Russia's energy strategy towards the EU, through weakening Ukraine's role in natural gas transportation by building new pipelines like Nord Stream and Turkish Stream (Keypour & Hendla, 2019).

Russia's strategy towards Ukraine is seen as "a test of the Western-Europe politicians," to figure out the extent to which the EU will go to protect its energy independence (Klimczak, 2015). The annexation of Crimea together with the crisis in Ukraine, which began in late 2013, has had a direct impact on the natural gas market in Europe affecting energy security, especially in terms of the gas supply consistency due Russia mentioning possible interruptions in supplies (Klimczak, 2015). The Ukraine crisis wasn't only about energy, but energy was very important element, especially because Russia heavily depends on oil

and gas money and there were disagreements over natural gas prices, contributing to the overall reasons behind the conflict (Van de Graaf & Colgan, 2017).

In April 2014, an open communication from Vladimir Putin to European leaders about the potential halt in gas supply, coupled with Gazprom's request for increased prices and upfront payments, undermined trust and highlighted the importance of gas supply routes through alternative transportation routes (Klimczak, 2015). For a long time, Germany believed in energy partnership with Russia and political support, ignoring the importance of Ukraine within Russia's historical geographical region, until the annexation of Crimea and the crisis in Ukraine violated this belief (Klimczak, 2015; Saparov, 2014). When Russia took control of Crimea, Germany gained more influence in making decisions within the EU because of its large economy and dependence on Russian energy (Pelayo, 2023). However, at the beginning, Germany preferred to have diplomatic discussions with Russia instead of supporting imposing sanctions on it (Pelayo, 2023).

The EU imposed economic sanctions against Russia in 2014, however, Pelayo criticizes these sanctions for not being effective enough because they focused on limited measures such as travel bans and freezing assets (Pelayo, 2023). The author suggests that measures directly affecting Russia's income from energy exports, would have had a more significant impact on both Russia's economy and Europe's energy supply (Pelayo, 2023). The author raises concerns about the EU prioritizing energy trade relations with Russia over upholding Ukraine's self-governance, resulting in continued energy cooperation despite the conflict in Ukraine (Pelayo, 2023). The EU's dependence on Russian energy challenged it agreeing on stronger sanctions, revealing Europe's vulnerability to Russia and the EU's inability to effectively organize sanctions (Pelayo, 2023).

4.3 Case 3: The 2022 Russian invasion of Ukraine

The EU is using more energy, and in 2015, more than half of the energy it used came from other countries, showing the EU high dependence on energy sources from outside its borders (Seitz & Zazzaro, 2020). Tensions between Ukraine and Russia are lasting for decades and emphasize the vulnerability of the EU's energy supplies. The Russian invasion last year escalated concerns regarding energy security and highlighted the need to reassess the EU energy relations with Russia (Welfens, 2023).

The Russo-Ukrainian war in 2022, has history roots, starting around 2013 when Russia started making plans to take control of Crimea and its annexation in 2014 (Welfens, 2023). The war initially revolved around the eastern Donbas region, but in August 2022, Ukraine's attempt to reclaim Crimea escalated the conflict according to the Russian government (Welfens, 2023). Welfens (2023) connects Putin's motivation for attacking Ukraine with the idea of historical and cultural ties between the two countries and Russia's defence concerns about Ukraine's desire to join the EU and NATO.

The war started by Russian President Vladimir Putin in 2022, has revealed issues within Putin's leadership and created the risk of gas shortages, while Ukraine has received help from Western countries (Welfens, 2023). The conflict between Russia and Ukraine is considered as Putin's attempts to empower Russia by controlling the region (Welfens, 2023). The war between Russia and Ukraine has made many Western and Eastern European governments support Ukraine more with some countries providing weapons (Welfens, 2023). Countries in NATO and the EU are worried that Russia's aggressive military actions could harm other nations, and through sanctions against Russia and weapons to Ukraine, support Ukraine (Welfens, 2023).

Besides increased EU support for Ukraine, the Russo-Ukraine war has resulted in the threat of Russia's internet manipulation, the need for balancing fossil fuel prices, and the potential risks of large military expenses (Welfens, 2023). The war has revealed how Russia can use trolls and bots to manipulate the internet promote specific beliefs or ideologies that prioritize Russian traditional values, nationalistic attitude, and a strong military presence (Welfens, 2023). Russia has been spreading false information and distorting facts globally

to make neighboring countries unstable, as well as the EU and its member states, forcing the EU to ban several disinformation outlets spreading propaganda and disinformation (European Council, 2023).

EU countries must work together to protect themselves from more Russian aggression, increasing budgets for defense and finding solutions for industries affected by the war, while also considering the need for reliable energy sources amidst rising prices (Welfens, 2023). The energy crisis in Europe due to the Russian invasion of Ukraine has demonstrated that Europe has to transition to renewable energy more quickly and increase its independence (Kravchenko, Ilyash, Smoliar, Boiarynova, & Trofymenko, 2023). With a focus on lowering natural gas consumption and ensuring a stable energy market through imports from Algeria, Norway, and Russia, and adequate storage within the EU, the EU is actively working on diversifying energy and decreasing dependence on Russian gas after Russia invaded Ukraine (Kravchenko et al., 2023).

The conflict between Russia and Ukraine in 2022 is expected to result in higher prices, supply disruptions, reduced energy consumption, and slower economic growth in Europe (Mbah & Wasum, 2022). In contrast to the EU's relatively weak sanctions against Russia in 2014, the new sanctions in 2022 focused on economically isolating Russia, including trade restrictions on different sectors (Pelayo, 2023). To limit trade between Russia and European countries and prevent access to crucial technologies and markets within the EU, the EU implemented following sanctions: import and export restrictions, freezing of assets, bans of specific Russian media, entities and individuals, including restrictions on Russia's central bank and excluding key banks from the main global payments system, and transportation restrictions (Pelayo, 2023). However, Russian gas remains untouched due to the EU's heavy dependence on it for households and industry, but gas supplies have been markedly reduced as Russia is using gas as a political weapon (Kravchenko et al., 2023).

5 Factors contributing to conflict and transformation in the EU's reliance on Russian energy

This is a discussion section analyzing and interpreting the findings, focusing on the factors that have influenced conflicts and changes in the energy relationship between the EU and Russia. This part discusses how all three selected cases (events) shed light on the EU-Russia energy relationship and the interconnections between them.

The two major motives behind Russian actions leading to conflict with Ukraine, resulting in consequences for the EU, are based on Russia's desire to control energy supplies, and Ukraine's debts to Russia (Keypour & Hendla, 2019; Stern, 2006). The problems started between Ukraine and Russia due to Ukraine's debts since the 1990s and escalated fifteen years later, with Ukraine failing to pay off the debts, disagreements over their resolution, and disagreements about gas prices (Stern, 2006). Despite attempts to address the issues through agreements, the gas relationship remained complex, leading to a gas crisis in Europe in 2006 (Stern, 2006). The dispute was eventually resolved, but raised concerns about energy security and the necessity of international agreements for a stable energy supply, while a subsequent dispute in 2009 further emphasized these concerns regarding the EU's dependence on Russian energy (Stern, 2006). The gas dispute highlighted the critical role of Ukraine's debts in shaping its dynamics with Russia, as well as the impact of the debt factor on the energy relations between the EU and Ukraine.

Ukraine's debts to Russia have contributed to the tensions between the two countries. Due to debt buildup during the 1990s, there is a tense financial relationship since, Ukraine finds it difficult to fulfill its payment obligations (Stern, 2006). Disagreements over debt resolution and gas prices further made the situation worse, causing ongoing disputes and

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difficult discussions. Thus, the unresolved debt issues created a sense of economic vulnerability for Ukraine and gave Russia more power and influence in their relationship.

Ukraine's try to diversify energy routes and its closer ties with the Western countries in 2014, resulted in Russia's fear to lose its power as a major energy supplier to the EU, which caused it to take the military actions against Ukraine (Keypour & Hendla, 2019). Some scholars see it as Russia trying to test the politicians of Western Europe for their reaction to Russian actions that affect EU energy supplies (Klimczak, 2015). This again showed Russia's use of energy as a political tool to reach its political and economic goals. Russia's desire to control energy supplies is a significant driving force behind its actions and the country has significant power over nations dependent on its energy exports due to its important role of an energy provider. Gaining control over Ukraine's energy networks and supplies, gives Russia dominance and influence in the region, facilitating Russia's strategic superiority and giving it economic power over Ukraine and the EU.

The EU's vulnerability in terms of energy supply was primarily based on its high dependence on Russian energy, making tensions between Ukraine and Russia a significant factor impacting the EU's energy security. The gas crisis in Europe in 2006 made obvious the difficulties in the gas connections between Ukraine and Russia (Stern, 2006). This crisis had significant implications for energy security in the region and raised concerns about the reliability of energy imports and the necessity of international agreements to ensure stable energy supplies, with subsequent dispute in 2009 further emphasizing these concerns and showing the EU's dependence on Russian energy and potential risks associated with it (Stern, 2006).

The result of the increasing EU's reliance on Russian energy was the implementation of EU such measures as diversifying energy suppliers and reducing dependence on Russian energy. Thus, the knowledge about what role Ukraine plays in EU-Russia relations on the vulnerability of EU energy supplies, can assist in energy policy decision making by giving an understanding of challenges and suggesting ways to address serving as a tool in planning and implementing measures to improve energy security and prevent energy supply disruptions.

The EU's reliance on natural gas and its failure to significantly reduce this dependence have been contributing factors to Russia's military actions and the conflict in Ukraine. However, the EU's failure to reduce reliance on natural gas is not the only cause of Russia's military aggressions against Ukraine, which was also motivated by Russia's self-interest in maintainin the power. As a result, the military actions put both the EU's energy supply and common defense at risk, leading the EU's stronger sanctions against Russia in 2022 for its energy resources' protection and support for Ukraine over energy relations with Russia (Pelayo, 2023).

The Russia-Ukraine conflict is complicated and has many reasons behind it, like strategic factors, historic tentions, and past problems. While energy dynamics and control over energy supplies did impact the conflict between both Russia with Ukraine, and with the EU, however that the EU hasn't significantly reduced its dependence on Russian natural gas, should be analyzed together with other factors of the conflict. Self-interest and security concerns are a combination of elements that motivate Russia's activities in Ukraine. While Russia may have gained some power or influence as a result of the EU's energy dynamics and reliance on Russian natural gas, should be explained in the larger political context and relevant historical events. That the EU was not able to significantly reduce its reliance on natural gas from Russia is just one aspect contributing to Russia's military actions in Ukraine besides Russia's fear of losing energy supplier power and wider interests in the region. These factors highlight the complex interplay between energy security, political motivations, economic consequences, and the need for a coordinated response from the EU to address the conflict and protect its interests.

The EU's overdependence on energy sources from outside its borders, particularly natural gas from Russia, made it vulnerable to disruptions in energy supplies. The 2022 Russian

invasion of Ukraine, which began with the annexation of Crimea earlier, intensified the conflict and increased already existing energy vulnerability, regional stability, and security fears. Putin's reasons for invading Ukraine are also related to Russia having defense worries due Ukraine's attempts to join the EU and NATO (Welfens, 2023). In addition, could stronger ties between Ukraine and the EU lead to Russia's decrease in power or influence. The war has shown the problems with Putin's leadership and raised the risk of gas shortages, leading to Western countries supporting Ukraine (Welfens, 2023). The conflict is expected to result in negative economic consequences for Europe; increased energy costs, supply interruptions, decreased energy usage, and slower economic growth, resulting the EU's stricter sanctions against Russia to isolate it economically, but the heavy dependence on Russian gas remains a challenge. In order to sa safeguard the EU against further Russian aggression, the EU members must cooperate in expending the energy transition and investing in renewable energy technologies to improve energy security and reduce potential threats arising from political, economic, or strategic factors (Welfens, 2023).

The war between Russia and Ukraine, which has impacts for the EU, has been affected by a number of conditions. The EU's heavy reliance on external energy sources, historical tensions between Ukraine and Russia, Putin's motivations, and risks of gas shortages. These factors have highlighted the significance of collaboration among EU countries to ensure their own and energy protection.

6 Conclusion

The paper provided the interconnectedness of Russia-Ukraine-EU relations and the importance of considering Ukraine's role in analyzing EU-Russia energy relations. The conflict between Ukraine and Russia has a direct impact on the EU, including its energy supply and potential military threats, highlighting the consideration of both economic, political and defense factors in addressing the situation.

The strong connection between political goals and energy supply in EU-Russia energy relations highlights Russia's use of energy resources to achieve political objectives, which poses risks and vulnerabilities for the EU due to its heavy reliance on Russian energy imports. The EU adopts a systematic strategy to address the issues of energy dependence and geopolitical instability, by focusing on diversifying energy sources, reducing eliance on Russian energy, promoting renewable energy, supporting affected industries and Ukraine, and closer member state cooperation for improving energy security and competitiveness.

In order to develop and diversify the EU's energy system, identificantion of challenges and threats in energy relations between Ukraine, Russia, and the EU is significant. In order to promote energy security and lessen reliance on Russian energy, these issues can guide future energy policy decisions. The current understanding of the factors led to the EU starting diversifying energy sources, developing alternative gas routes, investing in renewable energy, and strengthening partnerships with other energy suppliers. These factors also assist in predicting Russia's actions based on what Ukraine does, which helps in taking necessary steps to protect energy resources and ensure regional defense.

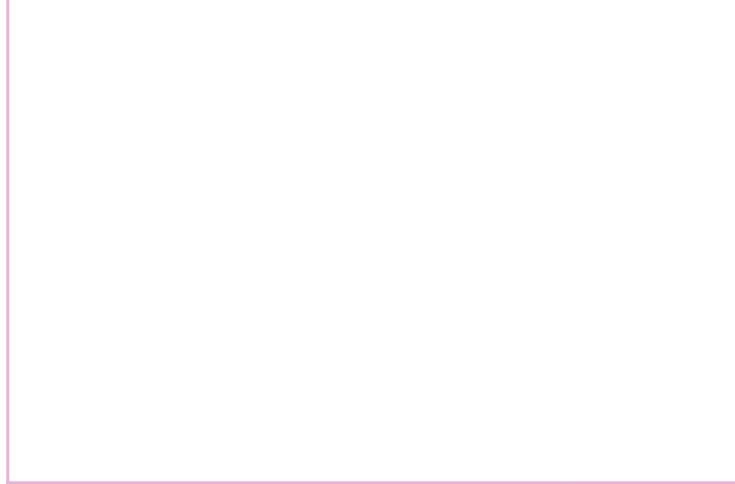
The energy dependence has played a significant role in shaping the EU's response to Russia in both 2014 and 2022 (Pelayo, 2023). The EU focused more on its economic interests than on human rights during annexation of Crimea, resulting in a lack of strong sanctions and increased imports of energy from Russia (Pelayo, 2023; Welfens, 2023). The war between Russia and Ukraine in 2022 disrupted global order and prompted the EU to impose strict sanctions despite causing an energy crisis due to its dependence on Russian energy, leading to the need for the EU to prioritize stopping Russian manipulation, ensuring energy security, and moving more quickly to toward renewable energy sources (Pelayo, 2023; Welfens, 2023). The Russian invasion of Ukraine triggered shifts in the EU-Russia energy relations, making the importance of adapting energy policies to ensure energy security and resilience obvious in response to changing conditions and Russian military aggression.

References

- Buzan, B. (1984). Economic Structure and International Security: The Limits of the Liberal Case. *International Organization* 38(4), 607.
- Casier, T. (2011). The Rise of Energy to the Top of the EU-Russia Agenda: From Interdependence to Dependence? *Geopolitics*, 16(3), 536-552.
- Corbeau, A. S. (2022, March 14). Energy: How Deep Is Europe's Dependence on Russian Oil? *Columbia Climate School*. <https://news.climate.columbia.edu/2022/03/14/qa-how-deep-is-europes-dependence-on-russian-oil/>
- Cross, M. A. K. D., & Karolewski, I. P. (Eds.). (2021). *European-Russian Power Relations in Turbulent Times*. University of Michigan Press.
- European Commission. (2022, May 18). *REPowerEU: A Plan to Rapidly Reduce Dependence on Russian Fossil Fuels and Fast Forward the Green Transition**. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3131
- European Council. (2023, April 14). *EU Sanctions Against Russia Explained*. <https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/sanctions-against-russia-explained/>
- Eurostat. (2022, March 4). *EU Energy Mix and Import Dependency*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_imports_from_Russia_-_statistics&oldid=556977
- Galytska, K. (2021). *European-Russian Energy Relations: From Dependence to Interdependence*. Firenze University Press.
- Gilpin, R. (1987). *The Political Economy of International Relations*. Princeton University Press.
- Keohane, R. O., & Nye, J. S. (1989). *Power and interdependence: World Politics in Transition*. New York: Little, Brown and Company.
- Keypour, J., & Hendla, I. (2019). The Annexation of Crimea: A Realist Look from the Energy Resources Perspective. *TalTech Journal of European Studies*, 9(3), 148-165.
- Klimczak, D. (2015). Influence of Ukrainian Crisis on the European Gas Market. *Energy & Environment*, 26(3), 425-435.
- Kravchenko, M., Ilyash, O., Smoliar, L., Boiarynova, K., & Trofymenko, O. (2023). Changes in the Energy Supply Strategy of the EU Countries amid the Full-Scale Russian Invasion. *IOP Conference Series: Earth and Environmental Science*, 1126(1). IOP Publishing.
- Krickovic, A. (2015). When Interdependence Produces Conflict: EU-Russia Energy Relations as a Security Dilemma. *Contemporary Security Policy*, 36(1), 3-26.
- Landry, P. (2017). Positive and Negative Security: A Consequentialist Approach to EU Gas Supply. In K. Szulecki (Ed.), *Energy Security in Europe: Divergent Perceptions and Policy Challenges* (pp. 275-310). Palgrave Macmillan.
- Mbah, R. E., & Wasum, D. F. (2022). Russian-Ukraine 2022 War: A Review of the Economic Impact of Russian-Ukraine Crisis on the USA, UK, Canada, and Europe. *Advances in Social Sciences Research Journal*, 9(3). 144-153.
- Mearsheimer, J. J. (2014). Why the Ukraine Crisis Is the West's Fault: The Liberal Delusions That Provoked Putin. *Foreign Affairs*, 93, 77.
- Pelayo, J. (2023). Comparing the European Union's Sanctions Against Russia in 2014 vs. 2022: Energy Dependence as a Tool of Political Divergence. *Flux: International Relations Review*, 13(2), 79.

The Role of Ukraine in EU-Russia Energy Relations: Analyzing Critical Junctures and Interdependence in the Energy Field (2005-2022)

- Pevehouse, J. C. (2004). Interdependence Theory and the Measurement of International Conflict. *The Journal of Politics*, 66(1), 247-266.
- Romanova, T. (2021). Russia's Political Discourse on the EU Energy Transition (2014-2019) and Its Effect on EU-Russia Energy Relations. *Energy Policy*, 154, 112309.
- Saparov, A. (2014). *From Conflict to Autonomy in the Caucasus: The Soviet Union and the Making of Abkhazia, South Ossetia and Nagorno Karabakh*. Routledge.
- Sauvageot, E. P. (2020). Between Russia as Producer and Ukraine as a Transit Country: EU Dilemma of Interdependence and Energy Security. *Energy Policy*, 145, 111699.
- Schmidt-Felzmann, A. (2016). The Breakdown of the EU's Strategic Partnership with Russia: From Strategic Patience towards a Strategic Failure. *Cambridge Review of International Affairs*, 29(1), 99-127.
- Seitz, W., & Zazzaro, A. (2020). Sanctions and Public Opinion: The Case of the Russia-Ukraine Gas Disputes. *The Review of International Organizations*, 15, 817-843.
- Siddi, M. (2017). Identities and Vulnerabilities: The Ukraine Crisis and the Securitisation of the EU-Russia Gas Trade. In K. Szulecki (Ed.), *Energy Security in Europe: Divergent Perceptions and Policy Challenges* (pp. 251-273). Palgrave Macmillan.
- Siddi, M. (2018). The Role of Power in EU-Russia Energy Relations: The Interplay between Markets and Geopolitics. *Europe-Asia Studies*, 70(10), 1552-1571.
- Siddi, M. (2022). EU-Russia Energy Relations. In M. Knodt & J. Kemmerzell (Eds.), *Handbook of Energy Governance in Europe* (pp. 237-261). Springer Nature.
- Stern, J. (2006). Natural Gas Security Problems in Europe: the Russian-Ukrainian Crisis of 2006. *Asia-Pacific Review*, 13(1), 32-59.
- Van de Graaf, T., & Colgan, J. D. (2017). Russian Gas Games or Well-Oiled Conflict? Energy Security and the 2014 Ukraine Crisis. *Energy Research & Social Science*, 24, 59-64.
- Welfens, P. J. (2023). *Russia's Invasion of Ukraine: Economic Challenges, Embargo Issues and a New Global Economic Order*. Palgrave Macmillan.
- Yin, R. (1994). *Case Study Research: Design and Methods* (2nd ed.). Thousand Oaks, CA: Sage Publishing.
- Zaslavskaya, N. (2020). EU-Russia Relations: a Theoretical Interpretation of Russia's Perception of the European Union. *Studia Politologiczne*, 56(56), 195-212.



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