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Russia's Use of the "Energy Weapon" and Bulgaria's Foreign Policy Alignment: Balancing Dependence on Russian Natural Gas Supplies

Master's Thesis

Author of the Thesis: Jaklin Atanasova Study programme: International Security Studies Supervisor: Mgr. Jan Mazač Year of the defence: 2024

Declaration

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- 2. I hereby declare that my thesis has not been used to gain any other academic title.
- 3. I fully agree to my work being used for study and scientific purposes.

In Prague on 31 July 2024

Jaklin Atanasova

References

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Abstract

This master's thesis explores the complex Russo-Bulgarian energy relationship, focusing on Bulgaria's efforts to secure energy diversification and reduce dependence on Russian gas amidst evolving geopolitical pressures. Covering the period from the 2009 Russo-Ukrainian gas dispute to 2023, the study employs content analysis of Bulgarian official documents to understand how external factors, such as Russia's geopolitical actions and EU energy alignment, have influenced Bulgaria's foreign and energy policies. The research categorizes and analyses terms and themes related to energy security, diversification, and European alignment, highlighting patterns and shifts in policy discourse. Findings reveal a significant increase in Bulgaria's focus on energy diversification and security, particularly following events like the war in Ukraine and the subsequent European gas halt. The study underscores Bulgaria's alignment with EU strategies in shaping its energy policies, reflecting broader geopolitical shifts within Europe, especially post-Ukraine conflict. This thesis contributes to understanding the concept of the energy weapon, offering valuable insights into the challenges and strategies of a smaller EU member state facing geopolitical energy threats. It provides a nuanced perspective on Bulgaria's role within the EU's energy landscape and the complex interplay between national and regional strategies for achieving energy security.

Abstrakt

Tato magisterská práce se zabývá složitými rusko-bulharskými energetickými vztahy a zaměřuje se na snahu Bulharska zajistit energetickou diverzifikaci a snížit závislost na ruském plynu v podmínkách měnících se geopolitických tlaků. Studie, která pokrývá období od rusko-ukrajinského sporu o plyn v roce 2009 do roku 2023, využívá obsahovou analýzu bulharských oficiálních dokumentů, aby pochopila, jak vnější faktory, jako jsou geopolitické kroky Ruska a přizpůsobení se EU v oblasti energetiky, ovlivnily bulharskou zahraniční a energetickou politiku. Výzkum kategorizuje a analyzuje termíny a témata související s energetickou bezpečností, diverzifikací a přizpůsobováním se Evropské unii, přičemž upozorňuje na vzorce a posuny v politickém diskurzu. Zjištění odhalují výrazný nárůst důrazu Bulharska na energetickou diverzifikaci a bezpečnost, zejména po událostech, jako byla válka na Ukrajině a následné zastavení dodávek plynu do Evropy. Studie zdůrazňuje, že Bulharsko se při utváření své energetické politiky přizpůsobuje strategiím EU, což odráží širší geopolitické změny v Evropě, zejména po ukrajinském konfliktu. Tato práce přispívá k pochopení konceptu energetické zbraně a nabízí cenné poznatky o výzvách a strategiích menšího členského státu EU, který čelí geopolitickým energetickým hrozbám. Poskytuje diferencovaný pohled na roli Bulharska v rámci energetického prostředí EU a na složitou souhru mezi národními a regionálními strategiemi pro dosažení energetické bezpečnosti.

Keywords

Energy weapon, Bulgaria, Russia, dependency, energy security, natural gas

Klíčová slova

energetické zbraně, Bulharsko, Rusko, závislost, energetická bezpečnost, zemní plyn

Název práce

Využití "energetické zbraně" Ruskem a zahraničněpolitické směřování Bulharska: Vyvažování závislosti na dodávkách ruského zemního plynu

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List of Terms, Abbreviations, and Acronyms

ACER – The EU Agency for the Cooperation of Energy Regulators

Balkan Stream - A pipeline extension of TurkStream, which transports Russian

natural gas from Turkey to Bulgaria, Serbia and Hungary

bcm – billion cubic metres

BEH - Bulgarian Energy Holding

Bulgargaz – The largest Bulgarian natural gas distribution company

Bulgartransgaz - Combined transmission and storage system operator of Bulgaria

CEE – Central and Eastern Europe

EC – European Commission

EIA – US Energy Department's Energy Information Administration

ENTSOG - European Network of Transmission System Operators for Gas

EU – European Union

FSRU - Floating Storage Regasification Unit

Gazprom - The largest Russian natural gas company

ICGB – Greece-Bulgaria Gas Interconnector

IEA – The International Energy Agency

IP – Interconnection Point

LNG – Liquefied Natural Gas

Nabucco - A failed pipeline project for natural gas from Turkey to Austria

SEE - Southeastern Europe

SGC – Southern Gas Corridor

SouthStream - A cancelled pipeline project for natural gas from Russia to Austria,

later becoming TurkStream (or Turkish Stream)

TANAP - Trans-Anatolian Pipeline

TAP – Transadriatic Pipeline

TJ – terajoule

Trans-Balkan Pipeline – A natural gas pipeline between Ukraine, Romania, Bulgaria

and Turkey

TSO – Transmission System Operator

TurkStream - A natural gas pipeline running from Russia to Turkey then Bulgaria,

Serbia and Hungary (initially Turkish Stream)

TWh - terawatt-hour

US – The United States

USG – Underground Gas Storage

Introduction

The interplay between energy resources and geopolitical strategy is a well-documented and critical aspect of international relations. Within this context, the concept of the "energy weapon," particularly the natural gas weapon, has emerged as a significant tool for exerting political influence. This master's thesis conducts a comprehensive historical analysis of bilateral energy transactions between Bulgaria and Russia, spanning from the Russo-Ukrainian gas dispute in January 2009 to Bulgaria's emergence as a regional energy player in 2023. The objective is to uncover the contemporary natural gas politics between Bulgaria and Russia.

This research adopts a positivist epistemological approach, which holds that knowledge is most effectively gained through empirical observation and measurable data (Alharahsheh et al., 2020). The aim is to gather objective data on energy agreements and policy decisions, and to assess the impact of Russia's energy strategies on Bulgaria. This approach facilitates a systematic and objective analysis of the research problem.

In terms of ontology, the study is grounded in objectivism, which asserts that an objective reality exists in international relations, where states are key actors seeking power and security. This framework examines the interactions between Russia and Bulgaria through a Realpolitik perspective, concentrating on state interests, power dynamics, and the material dimensions of energy security and foreign policy alignment (Bahari, 2010).

The current state of knowledge highlights the strategic use of energy resources by Russia to influence neighbouring countries, particularly those with significant dependency on Russian natural gas (Korteweg, 2018). Similar to many European countries, Bulgaria was heavily dependent on Russian gas supplies, placing it in an asymmetric interdependency relationship (DaDalt et al, 2021). This dependency rendered Bulgaria vulnerable to potential energy-related coercion by Russia, making it a crucial case for examining the effects and responses to energy weaponization (Clayton et al., 2012).

Throughout the period covered, Bulgaria faced two politically motivated disruptions in its pipeline technology supply: the first in 2009 and the second following the onset of the war in Ukraine in 2022. Consequently, this research will analyse the timeframe from 2009, when

Russia first utilized the "energy weapon," to 2023, when Bulgaria stopped receiving Russian natural gas.

Despite extensive research on the broader concept of the energy weapon, a notable gap exists in academia regarding the specific dynamics of the Russo-Bulgarian energy relationship, particularly in light of recent geopolitical shifts and Bulgaria's efforts toward energy security. The literature lacks a comprehensive examination of how Bulgaria has managed to counter Russia's use of the energy weapon. While broader EU strategies and the actions of larger member states have received significant attention, Bulgaria's ongoing efforts and challenges in reducing its reliance on Russian gas have not been thoroughly explored.

This thesis aims to fill that gap by examining Bulgaria's foreign policy responses to its dependency on Russian natural gas and the strategies it employs to enhance its energy security. This involves assessing the direction taken by various Bulgarian prime ministers' administrations to mitigate potential energy-related coercion. Additionally, the study explores how these strategies aided Bulgaria's alignment with Western institutions such as the European Union.

The significance of this study lies in its potential to provide valuable insights into Bulgaria's foreign policy strategies for enhancing energy security and reducing asymmetric interdependency on Russian natural gas. By tracing the development of the pipeline system and highlighting significant crises that have shaped Russo-Bulgarian energy relations, this research describes the concept of the gas weapon and its practical applications. Furthermore, the study investigates how Bulgaria shapes its foreign policy in response to these energy dynamics, rather than focusing solely on Russia's political objectives in Bulgaria. It traces the evolution of Russian-Bulgarian diplomatic relations, which shifted from cooperative principles to a focus on energy security and independence.

This research is of critical importance because energy security is a dynamic and rapidly evolving issue that requires continuous monitoring and research. Concerns regarding a Soviet/Russian "energy weapon" have lingered since the onset of East-West energy transactions, especially in (South)Eastern Europe. The Western world has contended with an economically robust Russia, driven by its vast oil and gas resources and governed by a regime with a definitive geopolitical agenda (Sonmez et al., 2016). However, the situation has evolved, and after 2022, Russia's position in the EU energy market has significantly

weakened. This shift reflects the EU's efforts to diversify its energy sources and reduce dependence on Russian supplies in response to geopolitical tensions and supply disruptions (Ateed, 2024).

The thesis argues that Russia has persistently used energy resources as a means of political manipulation against Bulgaria. It contends that the most effective strategy for states to counteract the energy weapon is through diversification of their energy markets by incorporating LNG and partnering with alternative exporters. Reducing dependence on Russian natural gas is expected to result in a diminished alignment of Bulgaria's foreign policy with Russian interests, thus overcoming the energy weapon strategy.

By providing a nuanced understanding of Bulgaria's foreign policy choices in response to its energy dependency, this thesis contributes not only to the professional knowledge and practice in the fields of international relations and energy security in the region, but also the rest of the world.

In pursuit of the objectives stated, the research question will be:

How does Bulgaria's dependence on Russian natural gas influence its foreign policy decisions and alignment with the European Union over time?

By addressing this question, the thesis aims to contribute to the broader discourse on energy security, foreign policy, and regional alignment, offering implications for European security and the global energy landscape. In addition, this thesis will fill existing research gaps by achieving several interrelated objectives:

The first chapter will give a historical overview and review relevant literature. It will underscore the significant role of various governments and political parties in historical energy-related events. The section will also explore efforts to develop new energy infrastructures and institutions following the onset of the war in Ukraine, with particular emphasis on recent diversification projects.

The second chapter will provide statistics and figures on dependency, gas imports, and exports, offering a clearer understanding of the energy environment in the researched country.

The third chapter will establish the theoretical and conceptual framework. This section will explore Liberalism and Realism as grand theories and it will conceptualise the use of the "energy weapon", the weaponization of interdependence, the asymmetric interdependence between Russia and Bulgaria and then the idea that Russia used the concept of energy statecraft in order to gain political leverage over the dependent side.

The fourth chapter will detail the methodological approach used to analyse how Bulgaria is addressing its dependency on Russian gas to enhance energy security and counter Russian influence in the energy sector. The methodology will integrate quantitative and qualitative content analysis method to provide a comprehensive understanding of how these strategies affect resilience to energy-related coercion and align with broader geopolitical goals, with Bulgaria as a case study. The approach examines key governmental documents over the fifteen-year period, which reflect the country's evolving security environment and policy priorities.

The fifth chapter will thoroughly analyse and explore the results of Bulgaria's foreign policy alignment, highlighting the complexities of balancing economic interests, energy diversification efforts, and political relationships within Europe's energy landscape. It will search to explain how Bulgaria mitigates risks associated with dependency on Russian energy supplies, ensuring resilience in the face of geopolitical pressures.

The conclusion will summarize the findings on pipeline politics between Bulgaria and Russia, arguing that Bulgaria is on its way to diminishing the role of the Russian "energy weapon." Furthermore, it will outline future possibilities for diversifying Bulgaria's energy sector, aiming to bolster more decarbonization strategies in order to ensure energy security.

1. Chapter 1: Historical overview/Literature Review:

To better illustrate the case of Bulgaria, it is important to do an overview of the development of its gas transmission infrastructure and its impact on energy security, thus, the ENTSOG and GIE System Capacity Map 2024 (**Appendix no. 1**) is included in this research. This map details key gas infrastructure in Bulgaria, including the Trans-Balkan and TurkStream pipelines (as well as, TAP and TANAP), interconnectors with neighboring countries, the ICGB, LNG terminals, and the Chiren UGS. The map is essential for understanding the distribution of gas supply routes and current transmission capacities.





Researching Bulgaria's energy security involves analysing its national and regional characteristics and understanding its role within the EU's energy policy. Bulgaria's strategic location and historical ties with Russia make it crucial to Russia's energy strategy and geopolitical influence in Europe. Once part of the Warsaw Pact, Bulgaria is now a member of NATO and the EU. Despite this shift, Russia remains Bulgaria's fifth-largest trade partner and second-largest exporter, mainly of energy resources (Russian Federation Embassy in the Republic of Bulgaria, 2024).

The literature suggests that, since the start of gas exports from the Soviet Union to Bulgaria in 1974 (through the 2009 gas halt, until the 2022 gas dispute), the relationship has been marked by asymmetric interdependence, with Bulgaria heavily reliant on Russian natural gas (DaDalt et al., 2021; Denchev, 2014). This dependence created vulnerability, as disruptions can have severe economic impacts in the country. Russia has used low gas prices as a political tool, making economically weaker countries like Bulgaria susceptible to the influence of its energy weapon strategy (Clayton et al., 2012; Shaffer, 2009).

However, in the wake of the war in Ukraine and the European gas halt in 2022, Bulgaria has embarked on a new path towards energy security and independence. The completion of the network of interconnectors with neighbouring countries, including the Interconnector Greece-Bulgaria (ICGB), the integration into the Southern Gas Corridor (SGC) with Azerbaijan, and the LNG imports have been pivotal in diversifying Bulgaria's energy sources and reducing its reliance on Russian gas. Reframing Europe's energy interdependence with Russia necessitates the exploration of new partnerships to substitute the lost Russian gas and to ensure a secure supply. In the near-to-medium term, this strategic shift involves diversifying natural gas sources and investing in infrastructure to enhance existing pipeline capacities. This approach is aimed at stabilizing energy supplies and managing the economic impacts of reduced reliance on Russian energy resources (Skalamera, 2023).

Beyond enhancing supply security, these projects aim to foster gas-to-gas competition and establish Bulgaria as a key gas trader (Belchev, 2018; IENE, 2018). This infrastructure development marks significant progress towards a more resilient European gas supply system, enhancing energy security and diversification within the region and have the potential to serve as foundational components of a comprehensive transport corridor, facilitating natural gas delivery to the Balkan region.

This chapter will provide comprehensive information on both Russia and Bulgaria, enabling a better understanding of the dynamics of their energy relations.

1.1 Background Information on Russia

Russia, rich in abundant natural energy resources and the world's most developed export pipeline system (Golunov, 2021), is an energy superpower with substantial oil and the

largest natural gas reserves, giving it significant geopolitical leverage (Sonmez et al., 2016). Classified as an energy-rich authoritarian state with a Freedom House Global Freedom Score of 13 (not free) (Freedom House, 2023), Russia has leveraged its energy dominance since the Soviet Union's collapse. Lacking military might, Russia used energy as a coercive tool, nationalizing key companies like Gazprom (Bos, 2012). Under Putin, Russia's foreign policy aggressively utilized energy resources, enhancing dependency through strategic pipeline investments and new technologies. This approach bolstered Russia's economy and political influence and positioned Gazprom as a tool for Kremlin objectives (Bos, 2012; Golunov, 2021), and through liberalization frameworks like the Energy Charter Treaty, massively deepened dependency (Blackwill et al., 2016). Russia's control over energy resources allows it to use energy price discounts, supply cuts, and strategic contracts to maintain leverage and political influence (Korteweg, 2018). This is academic literature is often termed as the "energy weapon".

1.1.1 Literature Review: Russia's Use of the Energy Weapon

Russia employs non-military strategies, often referred to as "asymmetric warfare," to augment its economic and political power while expanding its sphere of influence (Jasper, 2021). These strategies include leveraging economic tools such as sanctions and assistance to place smaller states in dependent positions, thereby influencing their foreign policies. A central element of Russia's strategy is its energy resources, which are utilized as a coercive tool to enhance geopolitical leverage (Sonmez et al., 2016; Korteweg, 2018). Energy resources enable Russia to challenge adversaries and shape international relations, going beyond mere economic interests (Golunov, 2021). Russia's ability to "punish and reward" consumer states through gas supplies underscores its use of energy as a political weapon, complicating the implementation of sanctions and interventions (Korteweg, 2018, p.2). Gazprom, in particular, actively resists European diversification efforts to preserve its monopolistic status, highlighting its role in maintaining Russia's energy dominance (Bos, 2012).

The strategic use of energy resources by Russia has been explicitly recognized, with terms like "gas attacks" reflecting the tactical nature of this approach (RIA Novosti, 2005). The Russian Ministry of Energy's website in 2011, has openly acknowledged that energy

resources serve as instruments of both domestic and foreign policy (Smith Stegen, 2011), illustrating the integral role that energy plays in Russia's broader strategic toolkit.

Nevertheless, for the longest time, many scholars argued that Russia would not risk jeopardizing its long-term prosperity and relationships with major European countries by using the "energy weapon" for short-term political gain (Götz, 2007). According to Drezner (2021), this belief is widespread because the longer a central power refrains from exploiting another state, the more it appears reassuring that it will not do so, which leads to deeper interdependence.

Others contend that such tactics would be ineffective because Russia cannot afford prolonged supply cuts or disruptions due to the liberal interdependence between countries (Smith Stegen, 2011). They also argue that Russian energy demand remains relatively stable despite fluctuations in foreign policy dynamics. However, the situation since then has changed.

Bulgaria serves as an example of the opposite situation. Bulgaria experienced severe gas supply disruptions, which highlighted its vulnerability and the potential for Russia to use energy as a geopolitical tool. This incident demonstrated that Russia could and would leverage its control over energy supplies to exert political influence, undermining the argument that it would avoid such actions for the sake of long-term prosperity.

Yet, since the onset of the war in Ukraine in 2022, the dynamics within Europe have shifted significantly. Russia no longer holds the same level of power and influence over European energy markets as it once did. This conflict has accelerated European efforts to diversify their energy sources, diminishing Russia's leverage. Bulgaria, in particular, has successfully reduced its dependency on Russian energy by pursuing diversification strategies. This shift highlights a critical change in the energy geopolitics landscape, illustrating how major geopolitical events can rapidly alter established power dynamics. There is a clear gap in the literature in focusing on these recent developments, especially how countries like Bulgaria have adapted their strategies in response to the new geopolitical realities.

1.2 Background Information on Bulgaria

As a key transit state, Bulgaria plays a significant economic and political role by transporting gas volumes far exceeding its own consumption. Typically, Bulgaria's gas transit volumes are about half the EU average per capita and are 4 to 5 times greater than its domestic consumption, which is roughly 15 bcm (Dimitrov, 2023). This will be elaborated upon in the subsequent chapter. However, Bulgaria's transit infrastructure has predominantly served Gazprom, giving Russia leverage through the ability to halt supplies to Bulgaria while maintaining distribution to other partners due to restrictive contractual terms (Vikhristyuk, 2021).

Despite these challenges, Bulgaria is constrained by the EU's internal energy market regulations, which prevent Gazprom from dominating its transit routes and distribution networks. Moreover, any interruption in gas flow aimed at countering Russia and gaining political leverage could provoke adverse reactions from Central Europe and destabilize relations with the EU. Consequently, Bulgaria is driven to diversify its energy suppliers to bolster its security and enhance its negotiating power (Shaffer, 2009).

As mentioned, Bulgaria operates within EU laws and relies on European nations as key donors and trade partners, despite the EU's fragmented sovereignty and centralized authority over energy matters, due to national security concerns (Wyciszkiewicz, 2012). The EU has developped a comprehensive strategy to address energy security and climate policy, aiming to combat supply threats through collective action rather than individual negotiations. A primary objective of recent EU initiatives is not only to reduce dependency on Russian natural gas supplies, but a complete phaseout, as stated in the European Council conclusions of 23 June 2022, after the beginning of the war in Ukraine.

Nevertheless, given that energy decisions in the EU are primarily made by national governments, it is clear why Russia has prefered engaging with individual states and companies rather than the European Commission itself, when supplying natural gas (Smith Stegen, 2011). Therefore, analyzing how different Bulgarian governments have aligned their foreign policies is crucial for understanding Bulgaria's alignemtns vis-à-vis the Russian energy weapon.

As shown in the table (**Appendix no. 2**), in the period covered by this research, from 2009 to 2023, Bulgaria had 7 governments. During this time, governments of various political stripes —left, center, or right—viewed Russia primarily as a beneficial business partner rather than a security threat and anticipated Russian investment and budgetary resources (Belchev, 2018). Both the Bulgarian Socialist Party (BSP), which governed from 2005 to 2009 and again from 2013 to 2014, and the center-right Citizens for European Development of Bulgaria (GERB), in power from 2009 to 2013, from 2014 to 2017, and again from 2017 to 2021, managed a delicate balance. They engaged with Russia while trying to avoid straining relations with Western allies, often navigating a path to benefit from both sides (Belchev, 2018).

Literature suggests a pattern where Russian energy ventures in Bulgaria often start under leftist administrations and face challenges under rightist governments, which take more pragmatic and less favorable stances toward Russia, e.g. the South Stream Pipeline project (Jirušek et al., 2017). Arguably, the biggest change in energy foreign policy came from the centrist party We Continue the Change (PP) from 2021 to 2022 and from 2023 to 2024, illustrating how a consumer state can develop countermeasures against the supplier state's manipulation.

Year	Political	Political Political	
	Party	Party 2	Party 3
2005	BSP		
2006	BSP		
2007	BSP		
2008	BSP		
2009	BSP	GERB	
2010		GERB	
2011		GERB	
2012		GERB	
2013	BSP	GERB	
2014	BSP	GERB	
2015		GERB	
2016		GERB	
2017		GERB	
2018		GERB	
2019		GERB	
2020		GERB	
2021		GERB	PP
2022			PP
2023			PP
2024			PP

Appendix no. 2 - Bulgarian governments between 2005 and 2024. Table: author

1.3 Timeline of gas events and Russo-Bulgarian relations from 2009 until 2023

During the governance of the Bulgarian Socialist Party (BSP), led by leftist Sergey Stanishev, Bulgaria collaborated with Russia on several energy projects integral to Russia's geopolitical strategy, including the South Stream pipeline project (Belchev, 2018). Despite this, in January 2009, during the Second Russo-Ukrainian gas dispute, Moscow accused Ukraine of diverting gas intended for Europe through the Trans-Balkan pipeline, resulting in a two-week halt in gas exports to Bulgaria and the rest of Europe. Bulgaria was among the most affected countries, suffering significant economic losses (Christie, 2011). This incident prompted Moscow to brand Ukraine as an "unreliable transit country" and spurred the development of two new (now failed) pipeline projects: Nord Stream 2¹ and the already mentioned South Stream (Korteweg, 2018).

¹ Nord Stream 2 is the Baltic Sea gas pipeline project, intended to double the direct flow of Russian gas to Germany, which Germany suspended following Russia's formal recognition of two separatist regions of Luhansk and Donetsk in eastern Ukraine in late February 2022 (Wettengel, 2023).

The gas conflict which severely impacted Bulgaria, was the first time Russia utilized its "gas weapon" against Bulgaria (Collins, 2017). Dissatisfaction with Russia as an energy supplier contributed to Stanishev's downfall and in July 2009, parliamentary elections led to a political shift, with the centre-right party Citizens for European Development of Bulgaria (GERB) winning 39.7% of the vote (Denchev, 2014).

When Boyko Borisov's ("Borisov 1") cabinet came into power in 2009, it marked a new phase in Bulgaria's political landscape. Borisov signalled a shift in Bulgaria's energy strategy, implying that the previous government's approach to Russia was flawed. He supported both the Russian South Stream and the EU's Nabucco projects, reflecting a commitment to a balanced and diversified energy strategy through significant infrastructure developments (Denchev, 2014).

Launched in 2004 by Austrian energy company OMV, the Nabucco gas pipeline aimed to reduce Western Europe's dependence on Russian gas by diversifying energy sources. The pipeline was planned to run from Turkey through Bulgaria, Romania, and Hungary to Austria's Baumgarten hub (Smith Stegen, 2011). The U.S. supported Nabucco as part of the broader "Southern Gas Corridor," (SGC) which sought to enhance EU energy security by connecting Europe to Central Asian and Middle Eastern resources, particularly from the Caspian region and Azerbaijan (Orban, 2008). Nabucco ultimately declined in 2013 due to rising Russian geopolitical assertiveness and competition from projects like the Trans-Anatolian Natural Gas Pipeline (TANAP) and the Trans-Adriatic Pipeline (TAP), also part of the SGC, which continued EU's efforts to diversify energy supplies and reduce reliance on Russia (Orban, 2008).

In contrast, the South Stream project aimed to consolidate Gazprom's control and maintain Russian dominance in European markets (Orban, 2008). Vladimir Putin's South Stream pipeline project, designed to transport Russian gas from Turkey through Bulgaria, Serbia, Hungary, and Slovenia to Austria, exemplified Russia's strategy of integrating foreign policy with energy interests. The project aimed to counter the Nabucco pipeline and assert Russian influence over European energy markets. However, it encountered significant hurdles, including geopolitical resistance from the EU and the U.S. due to concerns about consolidating Russian control over gas supplies and regulatory conflicts with the EU's

Third Energy Package, which restricts non-EU companies from owning energy transport networks (Orban, 2008).

The initial agreement for Bulgaria's participation was made in June 2007 and formalized in January 2008 (Orban, 2008). Yet, the "Borisov 1" administration, after the 2009 elections, questioned these agreements, suspended negotiations, and demanded a review of the projects for national interest alignment (Jirušek et al., 2017; Denchev, 2014). After a year of fluctuating relations, a new agreement was reached in November 2010, with a joint venture established between Gazprom and the Bulgarian Energy Holding for the crucial Bulgarian section of the pipeline, marking a strategic advancement for both countries (Denchev, 2014).

The 2013 Bulgarian elections led to a coalition government between the pro-Russia Socialists (BSP) and the Turkish minority party DPS (Movement for Rights and Freedoms), who aligned with Putin's interests. Prime Minister Plamen Oresharski faced the challenge of balancing Moscow's interests with EU pressure. Gazprom's head, Aleksey Miller, promised to fund the \in 3.1 billion construction of the Bulgarian segment of South Stream. However, Oresharski faced scrutiny from the European Commission, investigating BEH's involvement in the project (Denchev, 2014). EU pipeline regulations of the Third Energy Package, which prevent a single company from both producing and controlling the pipeline, posed a significant obstacle, insisting that South Stream should allow access to other gas producers to reduce reliance on Russia (Stefanov et al., 2017; Yardley, 2014).

During the Maidan protests in Ukraine, Bulgaria adopted a "wait-and-see" approach but supported EU sanctions against Ukrainian officials and criticized the Crimean referendum (Cholakov, 2022). Despite this, Putin's annexation of Crimea initially had little impact on Bulgaria's energy policy. Experts noted that Bulgaria irrationally prioritized South Stream over regional interconnectors and EU gas market reforms, continuing to support the project despite rising risks and financial issues (Centre for the Study of Democracy, 2019).

On April 4, 2014, Bulgaria's Parliament passed a bill exempting South Stream from EU regulations by reclassifying it as a "gas-sea" interconnector. This move was challenged by the EU (Yardley, 2014). In June, the European Commission pressured Bulgaria to halt South Stream due to potential regulatory violations, leading to the suspension of EU development

funds (Belchev, 2018). The EU's actions intensified political friction within the coalition, contributing to the resignation of Oresharski's government by July 2014 (Staridolska, 2014). Nevertheless, on December 1st, during a state visit to Turkey, Putin announced the end of the South Stream project, blaming Europe and expressing frustration with Bulgaria. Instead, he introduced the "Turkish Stream," which would deliver Russian gas to Turkey and then to Central Europe (Belchev, 2018; Yardley, 2014).

Putin's decision to reroute South Stream through Turkey highlighted Russia's growing susceptibility to international pressure from the EU and the U.S. This significant shift was seen as a "rare diplomatic defeat" for Putin, costing \$4.5 billion due to prior investments and limiting Gazprom's regional influence. The change reflected a diminished effectiveness of Russia's "energy weapon," as increasing regional economic resilience and transnational pressures reduced Russia's leverage (DaDalt et al., 2020).

The project's termination was a strategic win for the EU and the U.S., preventing Russian energy dominance over European markets and underscoring the importance of alternative energy routes and diversified supplies (Orban, 2008). The South Stream episode exposed significant governance and transparency issues within Bulgaria's energy sector and highlighted the challenges of aligning national interests with EU regulations and international relations. It underscored the need for a more cohesive and strategic energy policy framework for Bulgaria (Stefanov et al., 2017).

Therefore, in October 2014, the GERB-led coalition government ("Borisov 2") and the pro-EU Reformist Bloc took office, pledging to revitalize Bulgaria's energy sector with a new strategy focused on establishing a gas trading hub. This plan aimed to leverage Bulgaria's geographic position to become a key player in regional gas distribution by bringing in both Russian gas via the Black Sea and Caspian gas from Azerbaijan through the "Southern Gas Corridor" (Belchev, 2018).

In 2016, Bulgaria achieved a significant milestone in its energy policy by importing non-Russian gas for the first time. This was accomplished by reversing the flow of the Trans-Balkan Pipeline and by establishing a reverse flow capacity of 0.36 bcm/year between Bulgaria and Greece at the Kulata/Sidirokastro connection point (Dimitrov, 2023). Additionally, the GERB administration secured a 25-year contract with Azerbaijan's TSO SOCAR in September 2016 for one billion cubic meters of gas annually from the Shah Deniz-2 field, marking a major step towards energy diversification (Barber, 2022; Belchev, 2018).

During the same period, Bulgaria enhanced its energy links with Romania by launching a gas interconnector at Negru Voda 1/Kardam and introducing IP Ruse/Giurgiu in 2017 (Dimitrov, 2023). The GERB administration, with support from the EU and the U.S., made substantial progress in reducing Bulgaria's dependency on Russian energy. This included advancing projects like cross-border pipelines to Greece, North Macedonia, Serbia, and Turkey, and a joint Bulgarian-Greek initiative for a liquefied natural gas terminal at Alexandroupolis.

In 2017, construction began on the TurkStream (formerly Turkish Stream) pipeline, designed to transport gas from Russia through the Black Sea to Turkey, and extending to Bulgaria, Serbia, and Hungary. The pipeline, with a capacity of 31.5 bcm, aims to bypass Ukraine, formerly a key transit route for Russian gas to Western Europe, thus reducing reliance on Ukraine as a transit partner and showcasing Russia's use of energy as a political tool against the state (Angelov, 2022). It competes with Azerbaijan's "Southern Gas Corridor" (including TANAP and TAP) in delivering gas to Southeastern Europe (SEE) (Golunov, 2021).

Later, Prime Minister Boyko Borisov's third cabinet ("Borisov 3") adopted a mixed foreign policy approach. On one hand, Foreign Minister Ekaterina Zaharieva aligned with NATO and EU positions on the Ukraine conflict, on the other hand, Bulgaria did not expel Russian diplomats following the Skripal affair in 2018. In addition, during Borisov's 2018 visit to Moscow, he and Putin signed a "Roadmap" with Gazprom, which included altering gas flows and constructing a pipeline through Bulgaria as an extension of TurkStream, often referred to as "Balkan Stream" in Bulgarian literature (Angelov, 2022).

Despite significant US opposition, the construction of the TurkStream pipeline in Bulgaria began in 2019 under the GERB administration and became operational in January 2020 (Cholakov, 2022). However, although the pipeline was touted as a source of investment for Bulgaria, it primarily benefits Russia. Bulgaria, which only collects transit fees, will take at least 15 years to recoup the nearly 3 billion BGN (excluding VAT) cost for the

infrastructure. In addition, the pipeline's capacity is almost entirely reserved by Gazprom until 2039, meaning Bulgaria cannot export gas through it, effectively placing it under Russian control (Radio Free Europe, 2023).

Still, the TurkStream project facilitated the creation of the "Balkan Gas Hub" in 2019, transforming Bulgaria from a transit country into a central energy player in Southeastern Europe (Angelov, 2022). This hub integrates gas production, transmission, storage, distribution, and supply, enhancing Bulgaria's role in regional energy security and stability. By allowing gas imports from various sources and distributing it across Europe, the hub supports energy diversification and strengthens Bulgaria's strategic importance (Assenova, 2018). Until the end of 2019, Russian gas flowed through the Trans-Balkan Pipeline to Greece, North Macedonia, and Turkey via the Strandzha/Malkoçlar interconnector. From 2020 onwards, gas began entering Bulgaria through TurkStream and was then distributed to Greece, North Macedonia, and, from 2021, to Serbia and Hungary (Dimitrov, 2023).

During the COVID-19 pandemic in 2020, Bulgaria's natural gas consumption dropped significantly to about 2.37 billion cubic meters (bcm) due to the global economic slowdown and reduced industrial activity (Dimitrov, 2023). This period marked a turbulent phase for Bulgaria, with widespread protests demanding the resignation of Prime Minister Boyko Borisov's government over allegations of corruption and mismanagement. Borisov's administration struggled to advance the key energy projects essential for Bulgaria's energy security. Notably, it failed to finalize a strategic intersystem agreement with Turkey and complete the interconnector with Greece. These unfulfilled projects were missed opportunities to reduce Bulgaria's heavy reliance on Russian gas and diminish Gazprom's near monopoly in the Bulgarian market.

Borisov's tenure left Bulgaria dependent on Russia for around 90% of its natural gas, highlighting the country's continued vulnerability to geopolitical pressures from Moscow. As Burzakov (2022) points out, this dependency exposed a significant flaw in Bulgaria's energy security framework, presenting an opportunity to seek alternative energy solutions and mitigate geopolitical risks.

Therefore, in 2021, Kiril Petkov from the centrist party We Continue the Change (PP) became Prime Minister. His coalition government, including the Bulgarian Socialist Party (BSP), Democratic Bulgaria (DB), and There Is Such a People (ITN), aimed to address significant governance issues. Petkov, a Harvard-trained businessman with a strong pro-Euro-Atlantic stance, emphasized the need to enhance energy independence by reducing reliance on imported energy (Gotev, 2021). During this period, the IP Kireevo/Zaychar interconnector with Serbia began operations. This project was pivotal as it facilitated Bulgaria's connection to the Trans Adriatic Pipeline (TAP), a key component of the EU's efforts to diversify its energy sources and reduce dependence on Russian gas (BNT, 2023).

Notably, the Russian military invasion of Ukraine on February 24, 2022, profoundly impacted European energy strategies, compelling the EU to reassess its economic and foreign relations. Although EU-Russia relations had been increasingly strained since the annexation of Crimea in 2014, European sanctions had largely been symbolic, allowing Gazprom to remain a major supplier to the EU. However, the invasion marked a pivotal shift, accelerating EU's efforts to reduce dependency on Russian energy, which led to more stringent sanctions and a focus on alternative sources (Dimitrov, 2023).

In early 2022, Russia used its "energy weapon" again, halting gas supplies to Bulgaria and Poland, and later to other European countries, including Germany, after they refused to pay in rubbles, labelling them "unfriendly nations" (Strzelecki et al., 2022). This disruption was perceived as a tactic to exert economic and political pressure, aiming to bolster the Russian currency and induce public dissatisfaction that might force the EU to lift sanctions for the sake of energy stability (Dimitrov, 2023).

The abrupt cutoff of gas on April 27th, despite Bulgaria's compliance with contract terms and payment transfer, was viewed as a unilateral breach by Russia. This breach was both illegal and politically unjustifiable, leading Bulgaria to increase its efforts to diversify its energy sources. Ending reliance on Russian gas has now become a strategic imperative for Bulgaria and the EU, aiming to mitigate the economic and political leverage Russia exerts through energy (Burzakov, 2022; Boute, 2022).

The war in Ukraine marked a "turning point" in European policy towards Russia, a shift referred to as "Zeitenwende" by German Chancellor Olaf Scholtz (Scholz, 2022). This halt in gas supplies was also a "watershed" moment in Bulgarian energy policy, ending the rhetoric about "brotherly nations," Russia's love for Bulgaria, and other narratives promoted by Russian proxies in Bulgaria (Burzakov, 2022).

The outbreak of the Ukraine war, alongside the COVID-19 pandemic and escalating energy prices, accelerated efforts by both Bulgaria and the EU to diversify their energy sources (Skalamera, 2023). The EU's response, marked by the European Council conclusions of June 23, 2022, the Versailles Declaration, and the REPowerEU package, signalled a strategic shift away from Russian energy. The European Commission aimed to cut Russian gas imports by two-thirds by the end of 2022 and to achieve full energy independence from Russia by 2030, focusing on increased liquefied natural gas (LNG) imports and enhanced use of EU gas storage facilities, such as Bulgaria's Chiren Underground Gas Storage (UGS) (European Commission, 2022; Dimitrov, 2023).

In Bulgaria, the period of 2022-2023 was characterized by political instability and rising energy prices. Despite several elections, stable governance was elusive. The coalition government led by Prime Minister Nikolay Denkov, which included "We Continue the Change" (PP), "Democratic Bulgaria" (DB), and "Citizens for European Development of Bulgaria" (GERB), took notable actions such as deporting over 80 Russian agents and launching a media fact-checking program against Russian disinformation campaigns. However, the administration struggled with internal divisions and was short-lived, reflecting ongoing challenges in Bulgaria's political landscape (Roussi et al., 2024).

Regardless, Bulgaria, traditionally dependent on Russian gas, made significant progress in diversifying its energy sources by collaborating with Greece and Turkey. This diversification includes importing Azeri gas via the Trans Adriatic Pipeline (TAP) and Trans Anatolian Natural Gas Pipeline (TANAP), as well as developing LNG projects through the Greece-Bulgaria Interconnector (ICGB) and an agreement with Turkey.

In late 2022, Bulgargaz initiated a tender to import 0.5 bcm of LNG. Initially, LNG was imported via the Greek Revithoussa terminal and the IP Kulata/Sidirokastro. Then,

Bulgartransgaz also acquired a 20% stake in the Alexandroupolis LNG terminal, which is expected to become operational in 2024. This terminal will have a capacity to import up to 5 bcm annually, with Bulgartransgaz reserving one billion cubic meters per year. This project is poised to strengthen Bulgaria's energy resilience and could serve as an LNG hub for the entire SEE region (Aleksieva et al., 2023).

The Greece-Bulgaria Interconnector (ICGB), operational since 2022, is a key component of Bulgaria's energy strategy. Owned 50% by the Bulgarian Energy Holding EAD, it has a current capacity of 1 bcm per year, with an expansion of an additional 1 bcm from Azerbaijan (Kokalova-Gray, 2023). However, Bulgaria received less than one-third of the contracted volumes from Azerbaijan due to delays in the ICGB's completion (Dimitrov, 2023).

In early 2023, Bulgaria signed the Turkey-Bulgaria LNG agreement with Botaş, the Turkish TSO. This 13-year contract allows for the import of up to 1.5 bcm of gas per year from five Turkish terminals, providing an alternative to LNG imports from Greece and further enhancing Bulgaria's energy security. This project, connecting to the Malkoçlar/Strandzha 2 pipeline, took 15 years to complete (Spasić, 2023; Krastev et al., 2010).

Nevertheless, there are concerns about the agreement between Turkey and Bulgaria regarding LNG access as it may breach EU regulations and pose risks of receiving Russian gas. The deal is under scrutiny by both the Bulgarian prosecutor's office and the European Commission for potential violations, including unlawful state aid and abuse of monopoly power. A key issue is the lack of a renegotiation clause, which obligates Bulgaria to make payments even if gas is not delivered (Petrov, 2023; Vassilev, 2023).

Bulgaria's energy diversification is advancing through development of LNG supply contracts and Azeri gas via the ICGB, with new interconnectors to North Macedonia and Serbia, and an expanded Chiren underground gas storage to 1 billion cubic meters (IENE, 2017). Bulgaria has also reversed the Trans-Balkan pipeline flow and now supplies gas to Moldova and Ukraine, showcasing a shift in regional strategy (Aleksieva et al., 2023). Despite these advances, Bulgaria continues to seek reduced dependence on Russian gas, focusing on partnerships with Greece, North Macedonia, Romania, Serbia, Hungary, Ukraine, and Moldova to enhance energy security (Aleksieva et al., 2023). Long-term goals include securing stable LNG agreements with suppliers like the U.S., Qatar, or Algeria.

Moreover, in October 2023, Bulgaria became the first EU member to impose a 20 BGN per megawatt-hour transit duty on natural gas from Russian-origin. This move aimed to curtail Russia's revenue amid the Ukraine conflict and marked a significant shift in Bulgaria's EU energy policy stance (Afanasiev, 2023a). The measure faced strong backlash from pro-Russian governments, with Hungary challenging it before the European Commission as a threat to energy security and Serbia condemning it as a 'hostile act' (Atanasova, 2023). In response, Bulgaria's ruling majority decided to cancel the tax and reaffirm their commitment to a unified European energy policy (Nikolov et al., 2023). Despite this, this policy reflects Bulgaria's growing assertiveness in EU energy affairs, leveraging its role as a key transit state to influence supplier and customer governments, and align more closely with the EU's strategic energy goals (Afanasiev, 2023b).

This thorough historical overview shows that Bulgaria has significantly developed its energy security over the past 15 years. The country has diversified its energy sources, built critical infrastructure, and formed strategic partnerships to reduce its reliance on Russian gas. However, despite these advancements, there is a notable gap in the literature regarding Bulgaria's foreign policy shift. Specifically, not enough research has been conducted on how Bulgaria has transitioned from being a traditional ally of Russia to becoming a pivotal gas trader within the European Union. This shift entails not just changes in energy infrastructure and supply chains but also significant diplomatic and geopolitical realignments. Before it is explored how Bulgaria addresses asymmetric dependency through the lens of theoretical frameworks in international relations and energy security, the next chapter will give more insights on numbers and statistics.

2. Chapter 2: Energy Data: Analysing Dependency on Russian Natural Gas:

Cultural, social, historical, linguistic, religious, political, and economic ties link Bulgaria and Russia, and Bulgaria's heavy reliance on Russian gas makes the country particularly vulnerable to potential Russian "interference" (Jirušek et al., 2017). As Bulgaria reduces its heavy reliance on domestic coal and has closed reactors of its nuclear power plants in Kozloduy due to safety concerns, it found itself as one of the most dependent countries on Russian gas in Europe (IEA, 2000; 2024). Nonetheless, Bulgaria's relatively small market size and lower natural gas consumption compared to other European countries position it advantageously, as its reliance on natural gas is less pronounced. For example, in 2021, Bulgaria's gross natural gas consumption was 68,672 TJ (IEA, 2024), while its dry natural gas imports totalled 103 billion cubic feet, or 2.92 bcm (EIA, 2024). This chapter will delve into more detailed analysis of these statistics.

2.1. Trends

The U.S. Energy Information Administration (EIA) presents data on Bulgaria's total dry natural gas imports, which refers to the amount of natural gas that a country or region brings in from other countries, as well as, its total dry natural gas consumption, which measures the total volume of natural gas used within a country or region. The latter one is the amount of gas consumed by residential, commercial, industrial, and power generation sectors.

According to the data, which is illustrated in **Appendix no. 3** and **Appendix no. 4**, Bulgaria's total natural gas imports in 2009, a year marked by a significant gas supply halt, were substantially lower than those in 2022, when the country also experienced a gas supply halt. Specifically, imports in 2009 amounted to 73 billion cubic feet (2.07 bcm), which was approximately 1.41 times less than the imports in 2022.

This comparison underscores the overall increase in natural gas imports over the years, despite periods of supply disruption. Between 2014 and 2018, there was a notable gradual rise in natural gas demand, leading to increased imports. Imports grew from 3.06 bcm in 2015 to 3.25 bcm in 2017, while consumption rose from 3.14 bcm to 3.31 bcm. The growth in imports was in line with the rising consumption and in the context of the EU's efforts to

diversify its energy sources to reduce dependence on Russian gas, reflecting a growing awareness of the risks associated with energy dependency.

The years 2019 and 2020 were marked by significant disruptions due to the COVID-19 pandemic, which caused a sharp decline in natural gas consumption and, consequently, in imports. However, in 2021, due to market revival, imports began to recover. Both imports and consumption increased significantly. Imports reached 116 billion cubic feet = 3.28 bcm and consumption was at 3.37 bcm, showing a recovery to pre-pandemic levels of demand and import activity.

In 2022, the natural gas market in Bulgaria faced significant challenges. The European Union's sanctions package against Russia, enacted in response to Russia's invasion of Ukraine, coupled with Gazprom's suspension of pipeline gas supplies, drove up gas market prices and prompted the EU to implement measures aimed at optimizing gas consumption. These factors collectively influenced both gas supply and demand across the continent.

As a result of these developments, Bulgaria experienced a notable contraction in gross natural gas consumption in 2022. Nontheless, despite this significant reduction, it did not reach the historic drop observed in 2009 relative to 2008. In absolute terms the 2022 consumption level was the lowest consumption level recorded in the past 13 years.



Appendix no. 3 - Imports

31



Appendix no. 4 – Consumption

2.2 Measuring Dependency

Domestically, Bulgaria produces minimal amounts of natural gas, making it an energy dependent country, predominantly reliant on imports. According to the Energy Statistical Pocketbook of 2023 from the European Commission, as seen in **Appendix no. 5**, and Eurostat in **Appendix no. 6**, the data reveals several key historical trends and implications for Bulgaria's energy security:

In 2010, 92,6% of Bulgaria's natural gas was imported, indicating high dependency on external gas supplies. In 2015, the dependency increased to 97.0%, showing that nearly all of Bulgaria's natural gas was imported. In 2019, Bulgaria imported more gas than its total domestic consumption, indicating a significant reliance on imports. This table suggests that Bulgaria might have imported extra gas to compensate for storage or future use. In 2020, the dependency slightly decreased to 96.4%, but Bulgaria was still heavily reliant on imported gas. In 2021, the dependency was 96.2%, showing a very similar level of reliance on imported natural gas as in 2020.

The import dependency data illustrates Bulgaria's longstanding reliance on imported natural gas. Over the years, this dependency has fluctuated but remained consistently high, which poses challenges for Bulgaria's energy security. The slight reductions in recent years indicate some progress in diversifying sources or managing supply needs, but the overall dependency remains a critical issue for the country's energy policy.

Appendix no. 5 – Source: EU ENERGY IN FIGURES 2023

Table: author

Natural Gas Import Dependency [Year]	2000	2010	2015	2019	2020	2021
Natural Gas Import Dependency [%]	93.5%	92.6%	97.0%	100.4%	96.4%	96.2%

Appendix no. 6 – Bulgarian Natural Gas Import Dependency. Graph: Eurostat



This graph has been created automatically by ESTAT/EC software according to external user specifications for which ESTAT/EC is not responsible. General disclaimer of the EC website: https://ec.europa.eu/info/legal-notice_en.html

eurostat 🖸

In 2021, the Agency for the Cooperation of Energy Regulators (ACER) assessed Bulgaria's natural gas import patterns, shown in **Appendix no. 7**, and found that the country had

historically been heavily reliant on Russian gas. During the years 2015 to 2017, Russia was the sole or dominant supplier of gas to Bulgaria, with Russian gas accounting for 92% of imports in 2015, 97% in 2016, and 97% in 2017. This over-reliance on Russian gas meant that any disruption in Russian gas supplies posed significant risks to Bulgaria's energy security.

However, the dependence on Russian gas evolves. By 2019, Bulgaria began to shift its strategy towards diversifying its natural gas sources. During this year, the gas import structure saw a notable change with 79% of imports coming from Russia and 19% from Greece, reflecting the start of Bulgaria's efforts to reduce its dependency on a single supplier. The diversification strategy continued in 2020, with 77% of gas imports sourced from Russia, 19% from Greece, and the remaining contributions coming from Azerbaijan and domestic production.

This period marked a significant strategic transition for Bulgaria, aligning with the European Union's broader efforts to diversify energy sources and enhance energy security. The EU aimed to reduce dependence on Russian gas by developing alternative routes and increasing the number of suppliers.

By 2021, Bulgaria's gas import portfolio had become significantly more diversified. The sources included 79% from Russia, 19% from Azerbaijan, and 1% from Greece. The total number of distinct sources used increased to five (including LNG), reflecting a significant advance in diversification compared to the previous years (ACER, 2021).

Despite the ups and downs of the dependence on Russian gas observed, the diversification efforts of 2021 underscore Bulgaria's and the EU's ongoing commitment to mitigating the risks of over-reliance on Russian energy supplies and improving the resilience of the European energy market. This strategic shift not only aimed to bolster Bulgaria's energy security but also aligned with broader EU policies to achieve a more stable and diverse energy supply system.
Appendix no. 7 – Table: ACER

MS	Year	% - 1st source	Origin 1st source	% - 2nd source	Origin 2nd source	% - 3rd source	Origin 3rd source	% - others	Total distinct sources
BG	2015	0,92	RU	0,08	D.P.*				2
BG	2016	0,97	RU	0,03	D.P.				2
BG	2017	0,97	RU	0,03	D.P.				2
BG	2018	1,00	RU						1
BG	2019	0,79	RU	0,19	GR	0,01	D.P.	0,01	4
BG	2020	0,77	RU	0,19	GR/AZ	0,01	D.P.	0,03	4
BG	2021	0,79	RU	0,19	AZ	0,01	AZ	0,00	5

Data set: Estimated number and diversity of supply sources

*D.P. = domestic production

2.3 Emerging gas hub

In 2023, the physically transited quantities of natural gas across borders amounted to 145,573 TWh, which is over 7.5% more than in 2022 (135,391 TWh). These transited quantities fully meet the consumption needs of the Republic of North Macedonia and cover a significant portion of the consumption in Greece and Serbia (Bulgartransgaz, 2024). In the upcoming years, with the implementation of new intersystem connectivity projects, increased technical transmission capacity, and other priority projects in the region, the transited quantities of natural gas are expected to rise and surpass the levels of 2022 and 2023. Additional growth in cross-border transit is also anticipated due to the realization of strategic projects, driven by the EU's demand for supplies from alternative sources of pipeline gas and LNG.

The cross-border transit through Bulgaria for the period 2009-2023, presented by countries is shown in the following graphs in **Appendix no. 8** and **Appendix no. 9**:

Appendix no. 8 – Source: BULGARTRANSGAZ



BULGARTRANSGAZ

Appendix no. 9 – Source: BULGARTRANSGAZ



In 2008, total transit transmission stood at 173.47 TWh, followed by a significant drop to 128.02 TWh in 2009 and further to 126.46 TWh in 2010. This early volatility could be attributed to the Russian gas halt, which likely impacted energy consumption patterns. From 2011 to 2013, the transit volume stabilized, averaging around 156.74 TWh, with a slight peak at 165.69 TWh in 2013. This period of stability suggests a recovery from the crisis, with consistent demand for natural gas transit services.

The total transit demand initially increased from 156.20 TWh in 2014 to a second peak of 173.37 TWh in 2017, matching the 2008 levels. This peak likely reflects increased demand for natural gas in Europe, possibly driven by economic growth and energy policies favouring natural gas. In 2018, there was a decline back to 151.03 TWh. The demand dropped dramatically in 2019 to 74.43 TWh, which is a 50.75% decrease from 2018. It then experienced a significant decline, reaching a low of 38.14 TWh in 2020, during COVID-19 pandemic. Post-2020, the demand recovered to 101.78 TWh in 2021 and continued to increase, reaching 145.57 TWh by 2024.

The data shows a period of stability followed by sharp declines and then a gradual recovery. This pattern indicates that Bulgartransgaz EAD's cross-border transmission services demand is sensitive to economic and possibly geopolitical factors. The significant recovery in the later years suggests resilience and a potential return to pre-decline levels, but the demand is still below the peak observed in 2017. Future trends will depend on continued economic stability and energy policy developments.

Turkey's demand for transit natural gas was consistently high, starting at 142.58 TWh in 2008, experiencing a low of 103.48 TWh in 2010, and, peaking at 139.50 in 2017, however, there was a drastic drop in demand starting in 2019, reaching nearly zero from 2020 onwards. Turkey's demand plummeted post-2018, reflecting a significant shift in its natural gas transmission patterns. This could be due to geopolitical factors, changes in domestic energy policies, or diversifications in energy sources.

Greece's demand for transit natural gas showed a steady trend, with minor fluctuations but overall stability, ranging from 21.42 TWh in 2009 to 18.45 TWh in 2014 to 34.76 TWh in 2018. After peaking in 2018, the demand fluctuated, dropping to 23.56 TWh by 2024. Despite fluctuations, Greece maintained a relatively high and stable demand for natural gas,

indicative of its consistent energy requirements and possibly stable economic and industrial activities.

North Macedonia's demand increased gradually over the years. Starting from a low base of 1.25 TWh in 2008, to 1.42 TWh in 2014 to 4.50 TWh in 2021, then slightly decreasing to 3.95 TWh in 2024. North Macedonia showed a steady, albeit modest, increase in demand, which could be attributed to gradual economic growth and industrial expansion.

As there were no existing interconnector points, Serbia showed no demand until 2021, when it entered with 29.42 TWh, and its demand increased significantly to 89.58 TWh by 2024.

Similar to Serbia, Romania showed no demand until 2019, after which it gradually increased, reaching 32.49 TWh in 2021 and then fluctuating to 28.48 TWh by 2024. Serbia and Romania emerged as significant players in the natural gas transmission market starting in 2019 and 2021, respectively. Their rapid increase in demand indicates growing energy needs and possibly new infrastructural developments to support this demand.

Appendix no. 10 - Source: BULGARTRANSGAZ



The percentage distribution of the cross-border transmission in 2023 by countries is:

2.4 Energy Mix and Sectoral Consumption

As mentioned above, Bulgaria is often cited as one of the most vulnerable countries in the Central and Eastern European (CEE) region regarding energy security due to its high dependency on Russian gas. However, it is frequently overlooked that natural gas accounts for only about 14.4% (118 944 TJ) of the country's total energy consumption for 2021 (IEA, 2024). Diversification is relatively achievable for Bulgaria, as the country consumes about 3 million cubic meters of natural gas, which is less than half of the consumption levels following the fall of the communist regime. Just before the end of the planned economy, gas consumption peaked at 7 billion cubic meters per year (Dimitrov, 2023).

The natural gas share in the country's energy mix remains below the average of EU countries, but there is potential for significant and consistent growth. This is driven by increasing gasification efforts and the role of natural gas as a transitional fuel towards a low-carbon economy (Bulgartransgaz, 2024). Bulgaria was heavily dependent on Russian gas for its consumption, but not excessively reliant on gas as a raw material. The Bulgarian energy mix is mostly dominated by coal, which makes up 26.7% and oil - 22.3% of the total energy supply for 2021 (Belchev, 2018; IEA, 2024).

In addition, the natural gas imports are predominantly consumed by the industrial sector, which stood at 64% of total final consumption of natural gas, including glassmaking, chemicals, fertilizers, and ceramics, and the transportation and residential sectors with a consumption of 9,9% and 7,7% respectively (IEA, 2024).

The gas primarily serves district heating companies and industrial sectors, both of which have viable alternatives. For instance, in district heating, there is a growing trend of individuals switching from gas to electricity for heating. In the industrial sector, there is potential to substitute natural gas with electricity or alternative fuels such as propanebutane, which has already replaced about 20% of gas consumption (Center For The Study Of Democracy, 2023). However, these industries can also rely on gas from Azerbaijan, and some companies can operate using ammonia (Burzakov, 2022).

Historically, Bulgaria has been highly reliant on Russian gas, with significant imports contributing to its energy vulnerability. Despite efforts to reduce this dependency, the

country has faced challenges. Recent developments, including the EU's sanctions on Russia and a shift towards alternative suppliers, have prompted Bulgaria to diversify its energy sources, incorporating imports from Greece, Azerbaijan, and other sources. This diversification aligns with broader EU strategies to enhance energy security. Additionally, Bulgaria's has an emerging role as a key transit hub for natural gas in the region and the country's gradual shift towards a more balanced energy mix, where natural gas, though still important, constitutes a smaller share compared to coal and oil.

The next chapter outlines the theoretical and conceptual framework employed to address the research question and from which the hypotheses are derived. The framework integrates international relations theories, geopolitical considerations, and energy concepts, in order to provide a comprehensive understanding of the dynamics affecting natural gas security.

3. Chapter **3**: Theoretical and Conceptual Framework:

The theoretical framework for this research employs a multidimensional approach, integrating theories from International Relations (IR), specifically Realism compared to Liberalism, with concepts from Energy Security studies, including the notion of the previously mentioned "energy weapon." This approach aims to comprehensively analyse how Bulgaria shifted its energy dependence on Russia to a more diversified energy market.

From the IR perspective, the framework uses economic statecraft theory to explore power relations, economic interdependence, coercion, leverage, and energy diversification strategies (Golunov, 2021; Blanchard et al., 2008). Therefore, the economic statecraft theory is instrumental in understanding how states leverage economic tools to achieve foreign policy goals and navigate power dynamics, as well as how other countries can respond to such strategies.

In addition, Energy Security studies provide critical insights into the specific aspects of energy-related foreign policy. The concept of energy security is pivotal for examining how Bulgaria's reliance on Russian natural gas influenced its national security and foreign policy

decisions. Furthermore, the idea of energy weaponization—where energy resources are used as a coercive instrument—corresponds closely with the research's empirical focus (Cherp et al., 2011).

By integrating these theoretical perspectives, the research aims to explore the intersection of power politics and energy security in Bulgaria's response to Russia's use of energy as a geopolitical tool. It seeks to understand how Bulgaria navigates its foreign policy choices, assesses its alignment with Western policies, and manages vulnerabilities which stemmed from its dependence on Russian natural gas. This combined theoretical framework provides a solid foundation for analysing the complex dynamics of energy geopolitics and its impact on Bulgaria's foreign policy alignment.

3.1 The Failure of Liberalism and the Return to Realism

Liberalism, as both a political theory and ideology, has undergone significant evolution since the Enlightenment. Influenced by thinkers like John Locke, early liberalism emphasized individual rights, democracy, and the rule of law, focusing on limiting monarchical power and advocating for personal freedoms and economic liberties. Today, liberalism is a dominant ideology in the West, commonly associated with democratic governance, market economies, and the protection of individual rights (Bell, 2014). Liberalism is grounded in the belief that the international system is characterized by interdependence, cooperation, and the possibility of conflict resolution through institutional frameworks (Moravcsik, 1992) In addition, scholars such as Immanuel Kant have argued that liberalism is a kind of "utopian" movement towards world peace, envisioning that nations would abandon their selfish intentions and embrace a cooperative and ethical approach to international relations (Moravcsik, 1992).

In energy, Liberalism (in particular liberal economic theory) emphasizes that cooperation is crucial for resolving conflicts over energy resources and achieving stability (Lipson, 1984). This perspective demonstrates how economic interdependence can reduce state-centric energy conflicts. By fostering collaboration and mutual benefits, liberalism suggests that states can reach better energy security and global stability through cooperative frameworks and shared governance. Notably, Liberalism argues that increasing regional cooperation

among EU member states has reduced the ability of monopolistic states to exert political influence.

From a liberal perspective, cooperation, international norms, and institutions are crucial for reducing conflicts and ensuring stability in energy markets. Thus, researcher Buchan (2009) supported the liberalization of the energy market and emphasizes the importance of maintaining strong EU-Russia relations to secure the European energy future, especially as the EU's dependence on fossil fuel imports is set to rise (Franc, 2024).

In addition, Liberalists argue that Russia's economic interests were deeply intertwined with those of European markets: just as the EU depended on Russia for its energy needs, Russia benefited significantly from selling gas to the EU, making interdependence a crucial aspect of their relationship. Since the Russian government depends heavily on hydrocarbon revenues to sustain the state, with oil and gas exports constituting 45% of federal income in 2021 (IEA, 2022), therefore, a significant reduction or halt in energy exports to Europe would ultimately be detrimental to Russia in the long term (DaDalt et al, 2021). In the same year, as a consequence of Russia's steep supply cuts, the share of Russian gas in the European Union's gas demand fell 40% (Beyer et al., 2022).

In contrast to Liberalists, Realists (and in particular Neorealists/Structural Realists), have long contended that interdependence often leads to conflict rather than cooperation. They argue that increased interactions of rational states in an anarchic international system heighten the potential for friction and rivalry as states strive to maintain a balance of power (Drezner, 2021).

Realism is a theory in IR that emphasizes the competitive and conflictual nature of global politics. According to (neo)realists, states are the primary actors in international relations, driven by the pursuit of their own security and national interests rather than ethical considerations. (Neo)realists argue that states continuously seek to maximize their power and influence, often engaging in conflicts to maintain or enhance their dominance. In this view, international politics is seen as a domain where conflict is inherent, and ethical norms play a limited role (Korab-Karpowicz, 2010).

For decades, the relationship between Russia as a natural gas supplier and Europe as a gas consumer has been a prime example of mutually beneficial interdependence. Until recently, all parties involved have honoured each other's interests and protected this interdependence from internal conflicts and external challenges (Krutikhin, 2021). Russia's weaponization of Europe's gas dependency, challenged the fundamental assumption of liberal economic theory that economic interdependence promotes peace.

After the full-scale invasion of Ukraine in 2022, however, even staunch proponents of this idea, like Germany, have altered their approach, marking a significant policy shift described as the "Zeitenwende" (Scholz, 2022). This shift represents a move away from the German doctrine of "Wandel durch Handel" (transformation through trade), which assumed that increased economic interdependence would lead to political cooperation and alignment, reducing the likelihood of conflict (Blumenau, 2022). The approach, which had guided EU policy towards closer relations with Russia, proved insufficient.

The war in Ukraine acted as a catalyst for a profound reassessment of the benefits of trade interdependence concerning strategic goods. For Europe, it led to a shift towards more securitized energy supply policies and a revival of the classical Realpolitik spirit. While previous scholarship suggested that the breakdown of EU-Russia cooperation or the financial strain of Putin's war in Ukraine was unlikely due to interdependence, recent developments have demonstrated that fossil fuel interdependence not only funded Putin's military ambitions, but also shifted focus towards the securitization of energy trade (Skalamera, 2023). Therefore, (neo)realism provides a nuanced understanding of these dynamics by highlighting how states often prioritize strategic and security concerns over immediate economic benefits. As a result, EU states might be willing to endure higher energy costs if it means achieving long-term energy security (Česnakas, 2010).

Thus, from a (neo)realist perspective, Bulgaria's further alignment and integration into the European Union can be understood as a strategic move driven by the need to enhance security, stability, and relative power within the international system (Wivel, 2004). This process is part of the broader European effort to balance the dominance of Russia in the world order, thereby reinforcing the EU's position as a significant global actor. Bulgaria's alignment with the EU benefits from the collective security arrangements and economic

advantages of membership, thereby increasing its own and the EU's relative power. Therefore, Bulgaria's EU membership enhances both its national and regional security, as well as energy security.

(Neo)realism offers a robust framework for analysing the dynamics between Russia and Bulgaria in the context of the "energy weapon." It emphasizes how power dynamics, dependence, and security concerns shape their interactions. Offensive Realist scholars like John Mearsheimer (2019) argue that the liberal order has failed, highlighting the inadequacy of the assumption that economic interdependence automatically promotes peace. The EU-Russia energy relationship illustrates this failure, as Russia's use of energy as a political tool and the EU's subsequent policy shifts reveal the limitations of relying solely on economic ties for stability. Mearsheimer suggests that, despite being a great power, Russia is likely to be the weakest among major powers in a multipolar world, which limits its influence compared to others. Thus, (neo)realist perspective effectively explains Bulgaria's shift away from Russia and pursuit of energy independence.

(Neo)realism offers a more in-depth understanding of the dynamics of energy dependency and strategic choices, particularly in the context of Bulgaria's European integration efforts and its deepening energy relations with the EU. (Neo)realism emphasizes power, security, and state interests, making it particularly well-suited for analysing how Bulgaria manages its energy reliance on a dominant power like Russia. This theory elucidates how Bulgaria's strategic decisions—such as diversifying its energy sources and aligning with EU energy policies—are driven by the imperative to mitigate vulnerabilities and enhance national security.

3.2 Energy Security

Realist scholars traditionally defined national security in military terms, but this definition has significantly expanded. Critical theory, including perspectives from the Copenhagen School and advocates like Barry Buzan and Ole Wæver (1998), argues that security threats extend beyond military aggression to encompass environmental, economic, societal, and political challenges that endanger national survival and development. Since then, traditional security approaches emphasize the necessity for states to have

uninterrupted access to natural resources to maintain their security. Consequently, energy security has become integral to national security, highlighting the essential role of natural resources in maintaining power and stability (Arman et al., 2021).

By expanding security frameworks to include non-traditional threats, states can enhance their resilience and contribute to global efforts in addressing the interconnected challenges of the energy sector and beyond. This comprehensive approach promotes a more sustainable and secure global energy system, capable of adapting to and withstanding diverse and evolving threats (Misiągiewicz, 2023).

Energy security by itself, is a multifaceted concept that has garnered significant attention in international relations, leading to varying definitions. For instance, Chester (2010) discusses four dimensions of energy security: availability, adequacy, affordability, and sustainability. Cherp and Jewell (2011) provide an in-depth analysis through the lenses of sovereignty, robustness, and resilience. In another article, Cherp and Jewell (2014) focus on energy security as vulnerability, defined by the "four As" concept: availability, affordability, affordability, and acceptability.

Classical energy security studies by Deese (1979) and Yergin (1988) prominently featured availability and affordability, which remain central to the European Commission and the International Energy Agency's mainstream definition of energy security as "the uninterrupted availability of energy sources at an affordable price" (IEA, 2014). Therefore, common elements of energy security encompass accessibility, reliability (available, uninterrupted, constant supplies), affordability (cheap and stable prices), and sustainability (low environmental impact) of energy resources, which are crucial for the economic stability and strategic autonomy of nations (Brown et al., 2007; Zhiznin et al., 2020).

These definitions reflect both national interests and global interdependencies, highlighting the importance of energy security in shaping economic stability, environmental sustainability, and geopolitical strategies worldwide (Zhiznin et al., 2020).

In addition, the concept of energy security is inherently ambiguous due to the divergent interests of various stakeholders in the energy sector. There is a notable distinction between the interests of net producers and exporters of energy resources and net consumers and importers. Additionally, countries involved in the transit of energy resources have unique interests in ensuring stable transit routes to secure revenue from energy transport (Golunov, 2021).

For major net importers of energy resources, the primary concern in energy security is to guarantee reliable access to these resources at stable and affordable prices. Disruptions in supply or significant price increases can have severe economic repercussions, compelling these countries to adopt various strategic measures to safeguard their energy interests. These measures may include diversifying their energy sources, developing alternative supply routes, or engaging in diplomatic and economic actions against those who threaten their energy security (Golunov, 2021).

The expansion of security frameworks to include non-traditional threats underscores the crucial role of energy security in modern international relations. This broader understanding of security seamlessly integrates into the concept of statecraft, where energy resources are not only vital for national stability but also serve as instruments for achieving political objectives and ensure national resilience against diverse and evolving threats and risks. This includes leveraging energy as a tool of power and will be further explored in the next subchapter.

3.3 Energy Statecraft and Weaponized Interdependence

Political elites frequently address challenges by relying on established strategies and methods, a practice known as statecraft, as described by Golunov (2021). Understanding statecraft is crucial for analysing recurring patterns in IR and comparing political strategies across different countries. Economic statecraft refers to the strategic use of economic tools and policies, such as sanctions, to achieve foreign policy objectives and influence international relations. The concept of economic statecraft encompasses a range of actions designed to leverage economic power in the pursuit of political, security, or strategic goals. It intersects with both interdependence and national security by using economic tools and strategies to influence other states, manage dependencies, and address security concerns (Mastanduno, 1999).

In the energy sector, statecraft involves navigating two main challenges: ensuring energy security and using energy resources to achieve political goals beyond mere economic benefits. Foreign policy tools in the energy sector can be examined through the lens of statecraft, which categorizes these tools into "positive" (carrots) and "negative" (sticks) strategies. "Positive" tools aim to build cooperation and mutual benefits, exemplified by forming strategic alliances and initiating joint energy projects. Conversely, "negative" tools are designed to apply pressure or impose costs, including sanctions, embargoes, boycotts, price wars, and other forms of political and economic coercion (Golunov, 2021).

Within the energy sector, states can deploy a range of "negative" tools to coerce and damage their adversaries. These tools include aggressive market competition, economic blackmail, supply disruptions, sanctions, and even more severe actions like coups and military interventions. The use of energy resources and related technologies as instruments of foreign policy is known as "energy statecraft," a strategy that can pursue various objectives from promoting peace and interdependence to achieving geopolitical dominance (Sovacool et al., 2023).

This approach can also be viewed as a way to "weaponize interdependence." Daniel Drezner (2021) defines "weaponized interdependence" as a situation where an actor exploits its position within a complex network to gain a bargaining advantage over others in that system. Traditionally, as already mentioned, the liberal perspective on international politics has viewed interdependence as a positive force. Liberals argue that economic interdependence and globalization reduce the likelihood of conflict. According to this view, economic ties make disruptions more costly, thus encouraging continued cooperation and reducing the chances of defection.

A dependency relationship often exists between an energy supplier and its consumers, particularly when the supplier holds a monopoly in the market. Hence, in contrast, (neo)Realist view argues that this dependency provides political leverage for the supplier, that can be used to prevent external interference, ensure regime survival, or assertively pursue foreign policy goals (Korteweg, 2018). Many energy-rich authoritarian states leverage their energy resources to ensure regime continuity, consolidate domestic power, and deter external influence. They achieve this by establishing economic ties with global

actors through pipelines and supply contracts, using energy revenue to develop security apparatuses, build military forces, and suppress domestic dissent.

The concept of weaponized interdependence transforms traditional economic statecraft by reducing the need for multilateral cooperation. In this framework, central actors within a network can unilaterally exert coercion by leveraging their position of power, thus altering the dynamics of how economic leverage and statecraft are employed in international relations (Krutikhin, 2021). In energy politics, this concept is called the "energy weapon", which will be discussed in the next subchapter.

Nevertheless, in this context, the "interdependence" theory, developed in the 1970s by Liberal American scholars Robert O. Keohane and Joseph S. Nye, becomes particularly relevant. This theory explores how complex and reciprocal relationships between states influence both cooperative and conflictual outcomes in international relations. A key aspect of this theory is the distinction between symmetrical and asymmetrical interdependence. While symmetrical interdependence involves a balanced level of dependence between states, asymmetrical interdependence occurs when one state is significantly more dependent on another, therefore allowing the more powerful state to leverage its position for strategic advantages (Keohane & Nye, 1977).

The idea of asymmetric interdependence, first introduced by Albert Hirschman's in 1945, suggested that countries can exploit asymmetric trade relations as a means of political influence, often at the direct expense of their trading partners' security (DaDalt et al, 2021). Therefore, understanding Bulgaria-Russia energy relations through the lens of asymmetric interdependence theory can illuminate the strategic dynamics at play, highlighting how Russia's monopoly on energy supplies enabled it to wield significant influence over Bulgaria and, by extension, the EU.

This understanding sets the stage for a deeper exploration of the concept of the "energy weapon" as a consequence of the weaponization of interdependence in energy statecraft. The next section will examine how energy resources, particularly natural gas, are employed as strategic tools in international relations. By analysing the mechanisms and implications of energy weaponization, the study will further illuminate the intricate interplay between energy dependence and geopolitical power.

3.4 Natural Gas and the Energy Weapon

In military operations, "asymmetric warfare" describes strategies and tactics that leverage an opponent's vulnerabilities while avoiding direct engagement with their strengths (DOD, 2018). In the context of its relations with the rest of the world, Russia usually adopts an asymmetric approach. This strategy involves using unconventional methods and capabilities to counterbalance the superior military strength of its adversaries. By emphasizing asymmetric warfare, Russia aims to support its ambitions as a great power, by reinforcing its diplomatic and geopolitical objectives (Jasper, 2021).

While Russia often uses its military presence to project a sense of menace, it does not always engage in full-scale warfare. Instead, Russia adopts a strategy of probing the boundaries of armed conflict through more ambiguous methods, such as employing the "energy weapon." This approach involves leveraging energy resources as tools of geopolitical influence in ongoing competition with the United States and its allies. Such asymmetric warfare manifests through persistent confrontations and strategic manoeuvres rather than conventional military engagements, reflecting a calculated effort to shape international relations and exert influence without resorting to direct warfare (Jasper, 2021).

The concept of leveraging control over energy supplies to influence the political behaviour of client states was first termed the "oil weapon" during the 1973 oil embargo. In her 2013 article, Shafer expanded this idea by introducing the term "energy weapon" to encompass not only oil but also natural gas and other energy sources. This broader concept views fossil fuels as tools of coercion that can be used to disrupt energy supplies for political and economic leverage. The effectiveness of such a strategy depends largely on the target state's dependency on these energy resources (Hughes et al., 2016).

Unlike oil, which is liquid and more easily transported, natural gas is usually in a gas form, which makes it less flexible and more difficult to transport. This characteristic enhances its potential use as a foreign policy 'weapon' (Sonmez et al., 2016). The significant expense and logistical constraints associated with transporting pipeline natural gas often necessitate

long-term partnerships between suppliers and consumers, making it challenging for states to diversify their energy sources. Furthermore, due to the lengthy period required for investments to yield financial returns, both suppliers and consumers often prioritize maintaining positive relations to mitigate any potential disruptions. In addition, because there is no global price for natural gas and prices are usually negotiated through bilateral agreements between exporting and importing states, more often natural gas functions as a tool for coercion (Sonmez et al., 2016; Shafer, 2009).

Of course, this situation is not static. LNG (liquefied natural gas) technology provides a flexible alternative to pipeline gas, traded globally, which is particularly advantageous for Western Europe. However, Eastern Europe faces significant challenges due to its landlocked geography and the high costs associated with LNG infrastructure, including specialized plants, ships, and port facilities (Korteweg, 2018). Despite these obstacles, the expansion of LNG infrastructure is expected to reduce costs over time, making LNG a more viable option (Deniozos, 2018). Nonetheless, issues such as limited free market access, solidarity mechanisms, allocated offloading slots, and higher resale prices remain problematic for the region (Vassilev, 2023).

Energy supplies are increasingly leveraged as instruments to advance foreign policy objectives, with both oil and gas wielded as "weapons". The expansion of natural gas pipeline connections amplifies the intersection with politics. Given that states typically lack multiple gas supply infrastructures, they become reliant on specific suppliers, rendering them vulnerable to the gas weapon and susceptible to political influence and geopolitical agendas. The dominant party tends to hold sway by virtue of its larger market and greater alternatives in the event of disruptions, thereby limiting consumers' ability to negotiate advantageous terms with the producers (Shafer, 2009; Hughes et al., 2016).

The energy supplier's strategy to leverage its power for political advantage can manifest through threats or actions such as increasing prices or causing supply disruptions (either partial or total). To deflect international scrutiny, the supplier might blame these disruptions on factors like weather conditions, sabotage, technical issues, or other reasons. Politically driven price hikes are challenging to identify because they can also be justified on commercial grounds. Nonetheless, the timing and extent of these price changes can suggest political motives, especially when disparate treatment is given to different customers (Smith Stegen, 2011).

To significantly impact a targeted country's behaviour through trade restrictions, states must effectively block a substantial portion of the target's resource sales or purchases. Therefore, only major hubs in the energy trade system—such as globally dominant importers or exporters, or states that monopolize energy trade with a specific country—have the unilateral capability to effectively weaponize the energy trade network (Meierding, 2021).

Bulgaria's reliance on Russian natural gas has necessitated a balancing act between aligning with Western institutions like the EU and accommodating Russian interests. This dual alignment was evident in Bulgaria's efforts to adhere to EU regulations and policies while managing its energy dependence on Russia. The invasion of Ukraine by Russia in February 2022 marked a significant turning point in Bulgaria's energy policy and foreign policy alignment. The EU's response to the invasion, including sanctions on Russian energy exports and efforts to reduce dependence on Russian gas, intensified Bulgaria's efforts to diversify its energy sources.

Therefore, in order to counter the energy weapon as part of Russia's energy statecraft strategy, the EU and Bulgaria implemented several measures aimed at enhancing energy security and reducing dependency on single suppliers. Key strategies include diversifying gas suppliers and routes, investing in network infrastructure, increasing the share of renewable, unconventional and liquefied natural gas (LNG), and enhancing energy efficiency and fuel-switching. Effective contingency planning and European resilience can further help manage disruptions. Collectively, these efforts aim to neutralize Russia's energy weapon and restore a balanced power dynamic (Smith Stegen, 2011).

The theoretical and conceptual framework for this research integrates (neo)realism with Energy Security studies to analyse how Bulgaria's foreign policy has shifted in response to Russia's use of the "energy weapon." The framework highlights that while Liberalism traditionally advocates for cooperative interdependence to enhance stability, (neo)realism offers a critical perspective on how Russia's strategic manipulation of energy supplies disrupted this notion, exposing vulnerabilities and prompting strategic adjustments. In this context, asymmetric interdependence presents both challenges and opportunities: while it can leave dependent states vulnerable to coercion, it also incentivizes them to diversify their energy sources and reduce their vulnerabilities. The concept of energy security underscores the necessity of stable and affordable diversified energy supplies for national stability, while energy statecraft demonstrates how Russia exploits its energy dominance to exert geopolitical pressure. These theoretical insights support the hypotheses that Bulgaria's response to Russia's energy coercion will likely involve a realignment away from Russia, a cautious stance due to its high dependency, and increased engagement with EU to enhance energy diversification and security.

In the context of the research topic "Russia's Use of the 'Energy Weapon' and Bulgaria's Foreign Policy Alignment: Balancing Dependence on Russian Natural Gas Supplies," and the based on the outline theoretical and conceptual frameworks, there are two hypotheses that can be formulated in order to explore how Russia's energy strategies impacted Bulgaria's foreign policy decisions:

Hypothesis 1 (H_1): Increased mentions of Russia's geopolitical actions in Bulgarian official documents will correlate with a shift towards more proactive energy diversification strategies. If Russia's geopolitical strategies are more frequently mentioned in official Bulgarian documents, the author expects to observe a parallel increase in documented efforts by Bulgaria to diversify its energy sources.

The author expects that if Bulgarian documents frequently reference Russian geopolitical pressure or economic sanctions, this will correlate with an increase in official statements, policies, or initiatives aimed at reducing reliance on Russian energy supplies. This reflects a (neo)realist approach to enhancing national security by minimizing vulnerability to external coercion. The diversification strategies mentioned in the documents might include new energy partnerships, investments in alternative energy sources, or technological advancements aimed at reducing dependency on Russian natural gas.

Hypothesis 2 (H_2): Increased references to EU energy cooperation in Bulgarian official documents will be positively correlated with improvements in Bulgaria's energy security efforts. The author expects to find that as Bulgaria's official documents show more

references to cooperation with the EU on energy matters, there will be a corresponding increase in the implementation of energy security strategies.

The author expects that documents highlighting Bulgaria's alignment with EU energy policies and initiatives will reflect growth in energy security reforms. These improvements might be documented as tangible advancements in more accessible, reliable, affordable, or sustainable energy projects, supported by EU funds or policies, showcasing a (neo)realist perspective on enhancing national security through strategic alliances and external support.

4. Chapter 4: Methodology

This master thesis seeks to uncover how energy security considerations and power politics intersect in Bulgaria's response in the context of energy dependence and Russia's energy weaponization. The research looks for changes or shifts in Bulgaria's foreign policy, which might be reflected in its diplomatic relationships, international alliances, statements, agreements or policy decisions related to Russia and the EU.

The primary research approach was content analysis, which is well-suited for an in-depth exploration of complex geopolitical and energy-related dynamics. This involved examining official government documents, within their historical context. For this case study, empirical data was collected from open sources.

Additionally, for the background information which helps with the analysis of the collected data, the study reviewed energy agreements, policy reports, and materials from think tanks and research institutions specializing in foreign policy and energy policy. Academic literature on Bulgaria's energy policies and its relationship with Russia, particularly in response to Russia's energy strategies in the region, was also examined. Supplementary information, including details on significant events, was sourced from newspaper articles, specialized energy sector websites, books by various authors, handbooks, theses, and university library resources. Furthermore, a great number of statistics and data on natural gas dependencies, imports, demand, and supply disruptions from reputable institutions like the

European Commission, the International Energy Agency, ACER, and Eurostat were also incorporated to facilitate the analysis.

This research employs the quantitative and qualitative data analysis technique of content analysis to examine the collected data. Content analysis is utilized to scrutinize policy documents and agreements, then pattern identification highlights recurring themes within these documents. This qualitative analysis categorizes the data to identify key themes and concepts related to Bulgaria's energy dependence, Russia's energy strategies, and Bulgaria's foreign policy alignment with the EU. The analysis aims to identify connections with foreign policy measures or alignment with international institutions, such as the EU.

In addition, the conceptualization involves the already developed theoretical framework that elucidates the nuanced relationships between energy security, foreign policy, and power dynamics, with a particular focus on Bulgaria. The goal is to provide a rich, contextually informed understanding of the research problem, facilitating the generation of insightful findings and future policy recommendations.

4.1 Content Analysis

For this master's thesis, the research follows the content analysis technique, emphasizing the systematic nature and replicability of compressing text into fewer content categories based on coding rules (Belderbos et al., 2017, p. 313). The approach is inspired by supervisor Mazač's (2019) master thesis. This research primarily utilizes Krippendorff's framework for making accurate and replicable inferences, ensuring thorough examination, comparison, repeatability, and facilitating ongoing systematic improvements (Krippendorff, 2013, p. 24).

Content analysis is a complex technique without straightforward guidelines for data analysis, as each research project is unique. In fields like energy security, research is still in its early stages. Therefore, the results of such analysis heavily depend on the analyst's skills and background knowledge (Elo et al., 2008, p. 113).

The research employs six conceptual components: (1) data selection, (2) research question, (3) context, (4) operationalization or an analytical construct, (5) inferences, and (6) validation (Krippendorff, 2013, p. 35). The following sections will elaborate on these

components, with the exception of context and research question, which have already been addressed.

4.1.1 Data Collection

To address the proposed research question and hypotheses, a content analysis was conducted on official government documents, such as policy decisions, strategies, transcripts of sessions, written parliamentary scrutinises, legislative proposals and reports, from 2009 to 2023. As already explained, this period encompasses the administrations of the leftist Bulgarian Socialist Party (BSP), (2005-2009; 2013-2014), the centre-right Citizens for European Development of Bulgaria (GERB) (2009-2013; 2014-2017; 2017-2021), and the centrist party We Continue the Change (PP) (2021-2022; 2023-2024).

In addition, the analysis focuses on specific incidents and periods of heightened tension and covers a crucial timeframe, marked by significant geopolitical events and shifts in energy dynamics. This timeframe includes the initial deployment of Russia's energy weapon with the gas halt in January 2009, as well as the annexation of Crimea, and the termination of the South Stream project. It then extends through to the ongoing conflict in Ukraine, the subsequent use of the energy weapon, and its repercussions into 2023. These events have been pivotal in shaping energy policies and geopolitical strategies, offering essential context for understanding the evolving landscape of energy security and international relations in Bulgaria.

Legislative documents offer context and insights into the legislative process, policy decisions, and the political environment in Bulgaria. They were sourced from the website of the legislative body of the Bulgarian Parliament - the Republic of Bulgaria National Assembly's database. Additionally, accessing these documents allows for a deeper understanding of the direction and nuances of natural gas discussions in the Bulgarian Parliament. This is crucial for analysing the country's energy policies and strategies.

Nevertheless, the database's search engine proved quite unreliable, making it difficult to use effectively for locating relevant documents and information in chronological order. Despite this, the search focused on "energy-related" documents by examining different categories for the keywords "natural gas", "Committee on Energy" and "National Assembly". As already

mentioned, the selected categories included transcripts of sessions, legislative proposals and reports. All the materials were in Bulgarian.

This search retrieved a dataset of 4060 energy-related documents, but only 900 on natural gas, which is approximately 22.17%.

4.1.2 Sample

Given the extensive volume of official documents, analysing the entire collection is impractical. Therefore, a representative sample must be selected to keep the research manageable. Two critical criteria must be met: the sample should be sufficiently large to confidently address the research question, and the sampling plan must be carefully designed to avoid bias (Krippendorff, 2014, p. 114). For this analysis, in order to avoid cognitive bias, two text-sampling techniques were employed: stratified sampling and systematic sampling.

Initially, the research applied a stratified sampling technique to divide the entire dataset into distinct sub-populations (strata), each displaying a certain degree of homogeneity to ensure that items within each stratum are similar (Zhao et al., 2018, p. 419). The energy-related documents were organized into 15 strata, with each stratum corresponding to a specific year within the study period. Once the strata were established, systematic sampling was performed within each stratum to select representative documents (Krippendorff, 2013, p. 116).

Given the frequent publication and potentially repetitive nature of energy-related documents, systematic sampling was applied within each stratum. This random sampling method involves selecting every kth unit from the text after establishing a random starting point (Krippendorff, 2013, p. 114).

To determine the appropriate sample size, a benchmark of 10% of the population or a minimum of 6 documents per stratum was established (Liu and Yang, 2015, p. 392). The initial sample included 90 natural gas-related documents. However, adhering to the principle that a larger sample size is necessary when crucial text units are rare (Krippendorff, 2013, p. 122), the final sample was expanded by an additional 43 documents, resulting in a total of 133 coded documents. This expansion was deemed necessary to ensure robust findings, as an additional sample set that does not significantly

alter the overall pattern indicates an adequate sample size. On average, there were 8.87 documents per stratum, with the largest stratum, 2012, containing 14 documents.

Year	Sample
(stratum)	size
2009	9
2010	11
2011	12
2012	14
2013	8
2014	6
2015	7
2016	6
2017	7
2018	10
2019	7
2020	13
2021	6
2022	9
2023	8
Total	133

Appendix no. 11 - Sample Size Shares. Table: author

4.1.3 Operationalization

The Operationalization details the analytical process designed in order to interpret the data and address the research question, thereby deriving overall conclusions. Based on the previously described conceptual framework of energy security and Russia's energy weapon, a categorization matrix was created. Each coding unit (quotation) was reviewed and categorized according to its date, context and pattern. The content analysis was conducted using ATLAS.ti text analysis software, which was primarily employed for organizing and managing the textual data into coding units. However, since the data was in Bulgarian, ATLAS.ti proved unreliable for reading texts in the Cyrillic alphabet, and its AI functions were ineffective. Consequently, the actual coding was performed manually by the author, making this a human-based content analysis.

Krippendorff defines coding units as distinct segments that are individually described and categorized within sampling units (2013, p. 100). These coding units may span multiple sentences or paragraphs, incorporating various meanings. This can make the analysis

challenging, as such units may be too complex for accurate coding. Conversely, very narrow coding units, such as individual words, can lead to excessive fragmentation (Elo et al., 2008, p. 109; Krippendorff, 2013, pp. 100-101). To address this, content analysts often find it useful to first describe smaller, more manageable units that are easier to agree upon and then apply analytical methods to derive insights from larger text units (Krippendorff, 2013, p. 101).

Appendix no. 12 - An Example from a Categorization Matrix.

Coding Unit	Date	Indicator
each such infrastructure project		
in the energy sector is carried out		
according to certain rules. These		
are the rules of the European		
Union, of which we are a member,		
and I dare say that we are an		
extremely loyal member of the		
European Union. These rules must		
be respected. We respect them		

Table and translation: author

To ensure that coding units effectively capture all necessary information, this analysis defines a coding unit as a single sentence containing one or more energy-related keywords. It is important to note that the presence of natural gas-related keywords in a coding unit does not always pertain to the examined dependency on Russian gas and foreign policy alignment towards the EU. For instance, it might refer to technical questions or to thermal power stations switching to natural gas supply. Therefore, not all 555 coding units are specifically focused on natural gas in the context to Russia.

Year	Sample
(stratum)	
2009	52
2010	21
2011	49
2012	20
2013	33
2014	69
2015	18
2016	25
2017	29
2018	32
2019	63
2020	29
2021	7
2022	72
2023	36
Total	555

Appendix no. 13 - Coding Units Distribution – Breakdown. Table: author

Conversely, the coding units include natural gas-related keywords but do not express any of the indicators that this research is interested it, as they might have a different context. These units are categorized as "no code," excluded from the coding list, and not analyzed further. The discrepancy between the number of codes and coding units is expected and illustrated in **Appendix no. 14**:

Year	Sample
(stratum)	
2009	51
2010	21
2011	47
2012	18
2013	31
2014	69
2015	15
2016	22
2017	27
2018	27
2019	57
2020	24
2021	6
2022	69
2023	34
Total	518

Appendix no. 14 - Final Version of Codes Distribution - Breakdown. Table: author

To address the hypotheses and measure the frequency and context of mentions of Russian natural gas actions impacting Bulgaria, Bulgarian foreign policy actions towards the EU, actions towards reducing dependency, and mentions of cooperative projects in the official documents, a detailed indicator coding scheme was employed.

To identify and count references to EU energy cooperation in the documents, terms related to: EU-funded projects, collaborative initiatives, or policy alignment with EU energy regulations. To identify and measure reported improvements in energy diversification, categories included: new energy projects, increased use of alternative energy sources, or successful implementation of EU-funded projects. Examples of codes (indicators) used include: "energy security," "diversification," "alternative supply," "green energy," "regional cooperation," "dependency," "EU collaboration effort," "foreign policy alignment,", "new strategies," and "Russia's actions".

In addition to the necessity for coders to have the cognitive ability to clearly understand what they read (Krippendorff, 2013, p. 128), two other critical criteria enhance the reliability of coding: categories must be mutually exclusive and exhaustive (Krippendorff, 2013, p. 132). "Exhaustive" means that the coding framework must cover all possible units of analysis,

ensuring that no unit is excluded due to a lack of descriptive categories. "Mutually exclusive" ensures that the coding framework can distinctly categorize each phenomenon being analyzed (Krippendorff, 2013, p. 132). However, mutual exclusivity does not imply that each coding unit must be assigned only one category (Krippendorff, 2014, p. 155). Therefore, coding units can have multiple interpretations and can be assigned to more than one category, allowing for multi-valued descriptions.

Thus, they were summarized into bigger themes, correlating with the hypotheses:

- "*Russia's Geopolitical Actions*": Mentions of Russia's geopolitical strategies or actions (e.g., military movements, political influence, use of the "energy weapon").
- "Energy Diversification": References to Bulgaria's efforts to diversify energy sources (e.g., investments in renewables, new energy partnerships). In general, the term "diversification" refers to increasing the number of suppliers to significantly reduce reliance on the leading supplier. However, gas diversification encompasses three main dimensions: diversifying supply sources by increasing the number of suppliers to minimize dependency on a single source; diversifying supply routes by developing multiple routes for gas delivery to ensure security and flexibility; and balancing contract types by combining long-term contracts with spot market purchases to hedge financial risks, as different contract types involve various pricing formulas (Dimitrov, 2023).
- "*EU Energy Cooperation*": Mentions of collaboration with the EU on energy matters (e.g., EU-funded projects, alignment with EU policies and increased EU integration).
- "*Energy Security*": Statements about Bulgaria's energy security concerns or improvements, based on the previous conceptualization of Energy Security as ensuring the uninterrupted availability of energy resources at stable and affordable prices while maintaining sustainability and low environmental impact and risk.

According to the hypotheses established in the conceptualization; after reading a coding unit, the coder may assign it one or more category codes that reflect various indicators. While most coding units were semantically assigned to a single category, some required multi-valued descriptions because their content addressed more than one indicator. It is important to recognize that a single coding unit may fall into multiple categories.

Appendix no. 15 - Examples from Categorization Matrix. Table and translation: author

Coding Unit	Date	Indicator
each such infrastructure project in the	2019	EU Energy Cooperation
energy sector is carried out according to		
certain rules. These are the rules of the		
European Union, of which we are a		
member, and I dare say that we are an		
extremely loyal member of the European		
Union. These rules must be respected.		
We respect them		
We have also declared, which is very	2019	Energy Diversification
important for diversification of sources, a		
minority stake in the Alexandroupolis		
LNG terminal, where we will be able to		
draw from another source, not from		
Russia, so that we can diversify the		
sources as well, not just the routes.	0045	5 0 1
Energy is one of the most important	2015	Energy Security
sectors in the country's economy and an		
element of national security.		
Putin halted gas for Bulgaria.	2009	Russia's Geopolitical Actions
from the conflict between Russia and	2011	EU Energy Cooperation
Ukraine very specific measures were	2011	Energy Diversification
prepared, related to the		Energy Security
interconnections with Greece, with		Russia's Geopolitical Actions
Romania, and money was guaranteed		
from the European Union in a		
considerable amount for their		
construction. Talks have also been held		
with the European Bank for		
Reconstruction and Development		
regarding the expansion of our gas		
storage facility in Chiren.		
Prices for individual customer groups are	2013	No code
in line with the costs of		
the supply of natural gas to those		
customers.		

To analyse patterns and trends, these codes were processed using the Query tool in ATLAS.ti, which employs Boolean operators (AND, OR, NOT, XOR) to examine the cooccurrence of words or phrases. Boolean operators facilitate combinations of search terms and define their logical relationships, making correlation analysis easier (ATLAS.ti, 2024). The results of these search expressions will be in the next chapter.

5. Chapter 5: Findings and Discussion

This chapter will focus on the findings from the content analysis for the selected 15-year period, followed by its subsequent discussion.

Content analysis helps to understand how external pressures, such as Russia's geopolitical actions or EU policies, influence Bulgaria's internal policy decisions and strategies regarding energy diversification. Beyond mere frequency counts, it provides insights into the context in which specific terms and themes are discussed. This helps to understand the rationale behind Bulgaria's policy decisions and the influence of external factors on these decisions.

To gain a comprehensive understanding of shifts in policy, changes in discourse, and correlations between Russian actions and Bulgaria's foreign policy responses, the study evaluates three distinct periods.

After the first initial Russian gas halt and BSP government from 2009 until 2013. This period follows the initial halt of Russian gas supplies and is characterized by the government led by the Bulgarian Socialist Party (BSP). Although the leftist administration came to power in 2005, the focus is on understanding how Bulgaria's foreign policy and energy strategies were influenced during a period of heightened energy insecurity, making 2009 a particularly significant year. Then, the transition period under GERB and mixed projects with Russia form 2014 until 2018. During this period, the GERB (Citizens for European Development of Bulgaria) party was in power, and Bulgaria engaged in projects with Russia (e.g. South Stream), while also striving for greater openness towards the EU. This phase is critical for analysing the balance between maintaining relations with Russia after the annexation of Crimea and increasing integration with the EU. And finally, the PP government and the change with the aftermath of the war in Ukraine between 2020 and 2023. This recent period is marked by a complete shift in policy following the war in Ukraine, led by the We Continue the Change (PP) party, after the COVID-19 pandemic. The focus is on the cessation of Russian gas imports and a decisive move towards energy diversification and alignment with Western institutions.

Even before interpreting the results of the content analysis, ATLAS.ti allows for the visualization of some of the most frequently occurring words in the sample of documents. In

this case, terms like "energy," "Commission," "Bulgaria," "electricity," "proposal," "gas," "minister," "supports," "law," and "establish" are among the most popular, indicating their significance in the context of the analyzed documents. This initial visualization (**Appendix no. 16**) helps to quickly identify central concepts and areas of focus in the research material. The absence of mentions of Russia and the clear focus on the EU in the frequently occurring words indicate a distinct orientation towards aligning Bulgaria's foreign policy with European Union priorities. This suggests that Bulgaria is prioritizing its relationship with the EU and emphasizing energy policies and strategies that are in line with EU standards and cooperation frameworks.

допълнения българските министерския ^{Ко}	омисия правят <mark>текста</mark> паз	ар господа страната доставчик енергетика рамките
заседание _{стратегия} енергиі изменение лумите С	ината народното запо Бвет енепгетика	вядаите сигурност _{българската} ГА съхранение емергийни
иел република ГСрб	електрическ	а реплики политика отношение
изменя закон второ става СЪЗДАВА	комисията	група _{против кб} Закона енергийна
система въпрос га вносителя	з енергия м	част ИНИСТЪР предлага
следните СЪбрание искам точка мпежа	българия по	ДКРЕПЯ проект услуги развитие
принцип европейския Пре връзка внесен законопроект	С С Сарание Сригоден Гласува	ШСНИС СТРАНА СРОК КЛИСНТИ МЯСТО ВЪПРОСИ НС побард уважаема имаме
реплика мерки думата министъра съоръжения	ефективност правител представител законопров	цииави Іството въздържали възможност Кта министелството гласуваме

Appendix no. 16 - Words distribution. Graph and translation: ATLAS.ti and author

Furthermore, the level of attention given to the indicators of its perceived importance, was preliminarily examined. The author follows a straightforward principle: the more frequent the observations, the greater the intensity of attention (Liu and Yang, 2015, p. 392).

		• 🔿 Energy Diversif	Energy Security	EU Energy Coo	Russia's Geop
		172	150 150	19 99	9 7
2009	🗋 9 😕 29	1,57%	2,22%	1,05%	1,83%
2010	🗋 11 🧿 14	2,22%	1,59%	1,59%	1,27%
[] 2011	🗋 12 🗿 31	2,55%	1,70%	1,28%	1,13%
2012	🗋 14 😕 16	2,59%	2,59%	1,48%	
2013	🗋 8 😕 23	1,72%	2,15%	1,08%	1,72%
2014	🗋 6 💷 39	1,35%	1,45%	2,13%	1,74%
2015	🗋 7 😕 13	1,78%	2,67%	2,22%	
2016	6 🧿 17	2,73%	2,42%	1,21%	0,30%
2017	D 7 🧿 15	1,73%	2,96%	1,48%	0,49%
[] 2018	🗋 10 💷 22	2,47%	2,22%	1,23%	0,74%
2019	D 7 🧿 43	2,69%	2,57%	1,29%	0,12%
2020	🗋 13 🗿 21	3,06%	1,67%	1,94%	
2021	696	4,44%	1,11%		1,11%
2022	9 9 42	2,42%	1,35%	0,29%	2,61%
[] 2023	🗋 8 💷 23	2,55%	1,18%	0,98%	1,96%

Appendix no. 17: Distribution of Indicators - Breakdown. Table: author and ATLAS.ti

Appendix no. 17 shows the distribution of the coded themes across different years. The percentages in the cells represent the normalized frequency of each of the four key codes: "Energy Diversification," "Energy Security," "EU Energy Cooperation," and "Russia's Geopolitical Actions" for that year. Normalization adjusts for differences in document lengths or the number of documents per year (ATLAS.ti, 2024).

There is a noticeable increase in mentions of energy diversification over the years, with significant peaks in 2020 and 2021 at 3.06% and 4.44%, respectively. This suggests heightened activity or focus on diversifying energy sources during these years, likely driven by geopolitical events or shifts in energy policy. It highlights Bulgaria's proactive efforts to reduce dependency on a single energy source by exploring alternative suppliers and multiple energy options. The average normalized frequency during these peak years is approximately 3.75%, indicating that decision-makers frequently addressed energy diversification, particularly during periods of heightened geopolitical tension. A significant boost in mentions follows crises such as the annexation of Crimea in 2014 and the war in Ukraine in 2022.

The frequency of mentions for energy security remains relatively steady with a slight increase over the years. Peaks are observed in 2017 (2.96%) and 2018 (2.69%), indicating periods where concerns about the stability and reliability of energy supplies became more prominent. This trend might be connected to external pressures or internal policy shifts aimed at strengthening Bulgaria's energy infrastructure and resilience. The average normalized frequency during these peak years is approximately 2.83%. In general, energy security is consistently addressed by decision-makers, highlighting its ongoing importance. Slight increases in mentions are observed following crises, suggesting a moderate boost in focus, while a slight decline post-2018 might reflect a shift towards diversification.

Mentions of EU energy cooperation are relatively low compared to other categories. A significant peak is observed in 2015 (2.22%) and a slight increase in 2016 (2.21%). The lower frequency suggests that while EU cooperation and engagement with EU energy policies and funding mechanisms are part of the discourse, they are not as emphasized as energy diversification or security. The average normalized frequency during peak years (2015-2016) is approximately 2.22%. EU energy cooperation is addressed less frequently by decision-makers compared to energy diversification and security, with a moderate boost observed post-2014, indicating increased alignment with EU policies following geopolitical tensions. However, there is a significant decrease post-2016, suggesting a shift towards other priorities.

The frequency of mentions for Russia's geopolitical actions fluctuates over the years. Notable peaks occur in 2014 (1.74%), 2022 (2.61%), and 2023 (1.96%), likely driven by the geopolitical ramifications of the annexation and subsequent war in Ukraine. These peaks correspond with periods of increased tension or significant actions taken by Russia that impact Bulgaria's energy policies. The average normalized frequency during peak years (2014, 2022-2023) is approximately 2.10%, indicating that this topic is frequently addressed during periods of heightened geopolitical tension. There was a significant boost following the annexation of Crimea in 2014 and the war in Ukraine in 2022, with mentions increasing in line with geopolitical tensions and no significant decreases noted.

Still, when the data results are grouped by periods, the results are more clear, as shown in **Appendix no. 18.**

Appendix no. 18: Distribution of Indicators in Groups – Breakdown. Table: author and ATLAS.ti

		• 🔷 Energy Diversif	Energy Security	EU Energy Coo	Russia's Geop
		● 172	1 50	9 9	19 97
 2009 - 2013	🗋 54 😕 113	10,32%	10,12%	6,15%	6,75%
 2014 - 2018	🗋 36 😶 106	9,17%	10,42%	8,75%	5,00%
L 2019 - 2023	🗋 43 😳 135	13,33%	8,60%	4,56%	6,84%

From 2019 to 2023, energy diversification was at its highest, with mentions reaching 13.33%, underscoring a significant shift towards reducing dependency on Russian gas and expanding energy sources. This period corresponds with heightened geopolitical tensions, notably following the war in Ukraine, suggesting a direct correlation between increased mentions of Russia's geopolitical actions and Bulgaria's shift towards more proactive energy diversification strategies. The increased focus on energy diversification during this time aligns with the hypothesis that Russia's actions serve as a catalyst for Bulgaria to explore and invest in alternative energy sources to mitigate dependency on Russian gas. This recent period is marked by a complete policy shift, led by the We Continue the Change (PP) party, after the COVID-19 pandemic, focusing on the cessation of Russian gas imports and a decisive move towards energy diversification.

In contrast, from 2009 to 2013, mentions of energy diversification were lower, reflecting a less urgent focus on reducing dependency on Russian gas during this period. However, from 2014 to 2018, there was an increase in mentions, indicating a growing awareness and strategic shift towards diversification, driven by the geopolitical impact of the annexation of Crimea.

Energy security remained relatively consistent during the period following the initial halt of Russian gas supplies. During the government led by the Bulgarian Socialist Party (BSP) from 2009 to 2013, mentions of energy security stood at 10.12%. In the subsequent period from 2014 to 2018, the figure slightly increased to 10.42%. However, there was a slight decrease in mentions from 2019 to 2023, dropping to 8.60%. This could suggest that while energy security remains a crucial concern, there might be a shift towards more proactive

diversification strategies during the recent years, particularly in response to heightened geopolitical tensions and a concerted effort to reduce dependency on Russian gas.

EU energy cooperation was most pronounced during the 2014-2018 period, with mentions reaching 8.75%. However, there was a significant decrease in mentions from 2019 to 2023, dropping to 4.56%. This decline coincides with notable improvements in Bulgaria's energy security measures and strategies. The trend suggests that while initial collaboration with the EU was robust, Bulgaria has shifted towards more autonomous energy strategies in recent years. This shift might be due to increased internal capabilities or evolving dynamics within the EU. Despite the reduction in mentions of EU cooperation, the ongoing emphasis on energy security during this later period indicates that EU collaboration has had a lasting impact on Bulgaria's energy security strategies. From 2009 to 2013, there was a lower frequency of mentions, indicating less emphasis on EU collaboration during that time.

During the 2014-2018 period, there is a slight dip in the focus on Russia's geopolitical actions. This coincides with the GERB (Citizens for European Development of Bulgaria) party's governance, during which Bulgaria engaged in projects with Russia, such as South Stream, while also striving for greater integration with the EU. This phase reflects a balance between maintaining relations with Russia after the annexation of Crimea and increasing integration with the EU. However, the focus on Russia's geopolitical actions increased and peaked again in the 2019-2023 period, reaching 6.84%. This suggests renewed concerns or increased activities by Russia that have significantly impacted Bulgaria's energy policies. This period includes recent geopolitical tensions, such as the aftermath of the war in Ukraine, which have heightened awareness and reaction to Russian influence. The trends indicate that increased geopolitical actions by Russia correlate with heightened energy diversification efforts in Bulgaria and that initial EU cooperation helped drive these efforts.

Furthermore, analyzing co-occurrence of themes provides deeper insights.

		• 🔷 Energy Divers	• 🔷 Energy Security	• 🔿 EU Energy Co	Russia's Geop
		① 172	1 50	9 9	9 7
Energy Diversification	① 172		64 (0.25)	48 (0.22)	41 (0.18)
Energy Security	150	64 (0.25)		49 (0.24)	35 (0.17)
EU Energy Cooperation	9 9	48 (0.22)	49 (0.24)		16 (0.09)
Russia's Geopolitical	9 7	41 (0.18)	35 (0.17)	16 (0.09)	

Appendix no. 19: Indicators Co-occurrence Distribution. Table: author and ATLAS.ti

There are 41 instances where Energy Diversification co-occurs with Russia's Geopolitical Actions (coefficient of 0.18). The co-occurrence indicates that discussions on energy diversification are often contextualized within the framework of Russia's geopolitical actions. This suggests that geopolitical tensions with Russia are a significant driver of Bulgaria's push towards energy diversification.

Appendix no. 20: Energy Diversification and Russia's Geopolitical Actions Cooccurrence Distribution. Table: author and ATLAS.ti



In addition, there are 35 instances where Energy Security co-occurs with Russia's Geopolitical Actions (coefficient 0.17), suggesting significant but not dominant influence by Russia on Bulgaria's energy security policies. This underscores the impact of geopolitical risks on Bulgaria's energy security strategies.

While there is a noticeable co-occurrence, the rate is not very high compared to other pairs like Energy Diversification and Energy Security. This suggests that while Russia's geopolitical actions do influence energy diversification efforts, they may not be the primary factor driving these efforts. Other factors like energy security concerns might also play a significant role. On the other hand, it is to be expected that Energy Diversification and Energy Security co-occur the most, as diversification is most often a result of acknowledged risk to energy security. This implies a holistic approach where securing reliable energy supplies includes diversifying sources. This suggests that discussions about diversifying energy sources are often linked to concerns about securing a stable and reliable energy supply.

In addition, there are 48 instances where Energy Diversification co-occurs with EU Energy Cooperation (0.22). This indicates strong alignment with EU policies in pursuit of energy

diversification. The notable co-occurrence suggests that efforts to diversify energy sources are frequently discussed alongside cooperation with the EU. This points to a collaborative approach where EU policies and support play a crucial role in Bulgaria's diversification strategies.

Furthermore, the 49 instances where Energy Security co-occurs with EU Energy Cooperation (an also significant coefficient of 0.24), highlight the EU's role in both diversification and overall energy security and suggesting that strong EU cooperation has directly influenced Bulgaria's efforts to bolster its energy security, aligning with the hypothesis that increased references to EU energy cooperation led to more robust energy security measures. This strong co-occurrence suggests that EU energy cooperation is closely tied to discussions on energy security. It highlights the role of the EU in helping Bulgaria achieve a secure energy supply.

Appendix no. 21: Energy Security and EU Energy Cooperation Co-occurrence Distribution. Table: author and ATLAS.ti



Lower co-occurrence rates between EU Energy Cooperation and Russia's Geopolitical Actions (0.09) suggest that while EU cooperation and Russian geopolitical actions both influence Bulgaria's energy policies, they do so through different mechanisms or in different contexts. The relatively lower co-occurrence suggests that while EU cooperation and Russia's actions are both important, they are less frequently discussed together. This might indicate that these themes are often treated separately in policy discussions.

Another approach to looking at the results of the content analysis and addressing the hypotheses is by examining specific quotations where the codes appear together to better understand the context and how these concepts are discussed together. For instance, quotations coded with both "Russia's Geopolitical Actions" and "Energy Diversification" appear in the Forty-Ninth National Assembly Committee on Energy report on the activities
of the Energy and Water Regulatory Commission for 2022, document N° 48-320-00-8, submitted on 29 March 2023, which stated (p.1):

"The presentation stated that the priorities in the Energy sector in 2022 are to minimize the impact of the dramatic spike in electricity and natural gas prices caused by the onset of military conflict and the COVID-19 pandemic as the economic and geopolitical implications for Bulgaria and Europe make it necessary to secure alternative energy suppliers."²

There is a clear indication that Bulgaria's strategic approach to energy diversification is significantly influenced by geopolitical events involving Russia. This example demonstrates how the intersection of geopolitical pressures and energy strategy is explicitly recognized and addressed in Bulgarian policy discussions.

In addition, co-occurrence of the "Energy Security" and "EU Energy Cooperation" indexes can be found in the Forty-Third Extraordinary Session held in Sofia on Monday, 12 January 2009. During the session, it was stated:

"We stress the priority of a common energy policy for the European Union based on the principles of energy security and solidarity and on transparency, which should include an early warning system, eliminate intermediaries and guarantee the reliability of supply enshrined in a common energy charter."³

This statement clearly illustrates the alignment between Bulgaria's national energy strategies and the broader EU objectives. The co-occurrence in this context highlights the necessity of collaborative approaches to address energy challenges. The emphasis on a common energy policy, transparency, and reliability of supply reflects Bulgaria's commitment to integrating its energy security efforts with the EU's strategic framework.

5.1 Inferences and Validation

To ensure robust inference and validation, this chapter employs pattern identification and contextual analysis. It presents key findings and validates them against established theories and empirical data, providing a comprehensive overview of the research results.

² Translation: author

³ Translation: author

A notable correlation emerges between geopolitical crises involving Russia and Bulgaria's increased emphasis on energy diversification and security. Russian geopolitical actions prominently influence Bulgaria's energy strategies during periods of heightened tension. Peaks in EU energy cooperation align with major EU initiatives and funding, but this emphasis diminishes as Bulgaria shifts focus towards strengthening its own energy capabilities and reducing reliance on external sources. This trend is particularly evident during and after crises such as the annexation of Crimea and the war in Ukraine, when mentions of energy diversification and security surge. This reactive approach reflects Bulgaria's strategic adjustment in response to immediate geopolitical pressures.

The theoretical framework of (neo)realism provides a valuable perspective for understanding Bulgaria's energy policy decisions. (Neo)realism highlights the central role of power and security in state behaviour, evident in Bulgaria's proactive measures to diversify its energy sources in response to perceived threats from Russia. According to (neo)realism, states act out of self-interest and react to external threats by enhancing their security and power (Korab-Karpowicz, 2010). Bulgaria's increased focus on energy diversification and security, particularly in reaction to Russian geopolitical manoeuvres, aligns with this (neo)realist perspective. The country's shift from reactive measures to proactive diversification underscores a pragmatic approach to managing threats and ensuring national security. This approach also reveals the broader challenges faced by the EU in managing conflicts and strengthening institutional frameworks to address contemporary energy security issues. By adapting its policies to geopolitical events, Bulgaria navigates its own security needs and reflects the complexities of power dynamics and collective action in the global arena.

The war in Ukraine acted as a significant catalyst for a shift in Bulgarian energy policy (Burzakov, 2022). Following the outbreak of the conflict, Bulgaria adopted a more urgent and proactive stance towards energy diversification and security, reflecting heightened awareness of geopolitical risks and the need for resilience. The interruption of Russian gas supplies accelerated Bulgaria's efforts to secure alternative energy sources and develop a more robust energy strategy. Empirical data from content analysis supports these theoretical insights, providing a detailed understanding of how external pressures shape Bulgaria's energy policies and strategic responses.

Statecraft involves the strategic use of political, economic, and military resources to achieve national objectives. Russia's gas halts illustrate the application of statecraft, as Russia leverages its energy resources as a geopolitical tool. In response, Bulgaria has embraced an adaptive (neo)realist statecraft strategy, focusing on energy diversification and alignment with the EU to bolster national security and mitigate vulnerability. This shift to diversification reflects a strategic adjustment driven by ongoing geopolitical tensions with Russia and supported by EU cooperation.

Analysis over the selected 15-year period reveals several key trends in Bulgaria's energy policies. Mentions of energy diversification have increased significantly, peaking in 2020 and 2021, aligning with geopolitical events and a strategic shift towards reducing dependency on Russian gas. This trend supports the hypothesis that Russia's actions have prompted Bulgaria to explore alternative energy sources.

Bulgaria's strategic efforts to diversify its energy sources, including projects like the Interconnector Greece-Bulgaria (ICGB) and LNG imports, are closely linked to its pursuit of energy security. These initiatives aim to reduce reliance on Russian gas, addressing vulnerabilities highlighted during supply disruptions. The strong association between energy security and diversification underscores Russia's historical use of energy resources to exert geopolitical influence over Bulgaria. Mentions of energy security remain relatively steady, with slight increases reflecting ongoing concerns about the stability and reliability of energy supplies.

EU energy cooperation, while less frequent compared to other categories, shows significant peaks in 2015 and 2016. This indicates that while EU cooperation is part of the discourse, it is not as emphasized as energy diversification or security. However, the data reveals that EU cooperation significantly drives energy diversification efforts, supporting the hypothesis that EU policies play a crucial role in Bulgaria's energy strategies. Bulgaria's alignment with EU energy policies and infrastructure projects, such as the Southern Gas Corridor, highlights the EU's role in helping member states achieve energy diversification and security.

The frequency of mentions regarding Russia's geopolitical actions fluctuates, with notable peaks in 2014, 2022, and 2023. These peaks correspond with significant geopolitical events, such as the annexation of Crimea and the war in Ukraine, illustrating the direct impact of Russian actions on Bulgaria's energy policies. Russia's actions have compelled Bulgaria to

seek alternative energy sources and align more closely with EU energy policies. The data confirms the interconnectedness of energy diversification, security, and alignment in shaping Bulgaria's response to Russian energy coercion.

In addition, the findings support both hypotheses. H_1 is supported as there is a clear correlation between increased mentions of energy diversification and significant geopolitical events involving Russia. The peaks in discussions around energy diversification coincide with periods of heightened tension, particularly following the annexation of Crimea and the failure of the South Stream project, as well as the war in Ukraine and the subsequent European gas halt. The discussions on energy diversification are often contextualized within the framework of Russia's geopolitical actions, underscoring the influence of external threats on national policy decisions.

Analysis of the data shows that peaks in "Russia's Geopolitical Actions" in 2014, 2022, and 2023 correspond with increases in "Energy Diversification" in subsequent years (e.g., 2015, 2016, 2020, and 2021). This pattern suggests that when Russian actions are highlighted, there is a corresponding increase in efforts to diversify energy sources. The significant rise in energy diversification efforts (13.33%) during the 2019-2023 period aligns with the increased mentions of Russia's geopolitical actions (6.84%), further supporting H₁.

 H_2 is also supported by the data. The co-occurrence analysis reveals strong correlations between EU energy cooperation and both energy security and diversification efforts. The significant peaks in EU cooperation discussions during 2015 and 2016 align with increased focus on energy security, indicating the EU's pivotal role in shaping Bulgaria's energy policies. This highlights the role of the EU in enhancing Bulgaria's energy security, suggesting that EU integration is a critical component of national energy strategies.

The peak in EU energy cooperation mentions during the 2014-2018 period (8.75%) aligns with a slight increase in energy diversification efforts (9.17%). However, the decline in EU energy cooperation mentions in the 2019-2023 period (4.56%) contrasts with the rise in energy diversification (13.33%), suggesting that recent diversification efforts might be driven more by geopolitical concerns rather than EU cooperation. This partially supports H_2 , indicating that while EU cooperation was important, other factors are now driving diversification.

Conclusion

In conclusion, the research question "How does Bulgaria's dependence on Russian natural gas influence its foreign policy decisions and alignment with the European Union over time?" is answered through the significant impact of this dependency on Bulgaria's strategic vulnerabilities and efforts to mitigate them. With 88.4% of Bulgaria's gas supply in 2022 imported from Russia, this heavy reliance posed substantial geopolitical risks. Disruptions or manipulations by Russia severely affected Bulgaria's economy and security.

To address these vulnerabilities, Bulgaria focused on diversifying its energy sources and developing infrastructure, aligning its legislative and policy framework with EU energy policies. Strengthening ties with the EU, participating in EU-funded projects, and forming strategic partnerships with Western countries have been crucial steps. Consequently, Bulgaria has increasingly synchronized its energy policies with the EU, reducing dependence on Russian gas and enhancing overall energy security. This strategic shift reflects Bulgaria's broader foreign policy adjustment to bolster resilience against Russian geopolitical pressures.

Historically, Bulgaria's heavy reliance on Russian gas, rooted in long-standing agreements, limited its foreign policy autonomy. However, the 2022 gas halt decreased Moscow's influence over Sofia, as Bulgaria accessed reverse flows and alternative exporters. This shift contributed to a more secure and integrated European energy market. Despite local pro-Russian lobbying, Russia's strategy to use gas as a weapon failed in Bulgaria, marking a significant political loss for Russia in Europe. This failure allowed Bulgaria to transition from high dependence on Russian energy to becoming a key energy hub in the Balkans, fostering greater energy independence.

The EU's strong response to external threats has been evident through coordinated efforts by member states to advance energy security. Throughout the energy dispute with Russia, both the EU and Russia applied indirect pressure to assert their interests. Bulgaria's strategic measures included diversifying natural gas supplies, developing alternative pipelines, and implementing reverse gas flows. Integrating more firmly into the EU energy framework

aligned Bulgaria with collective European energy security goals, reflecting the complex interplay of interests in the EU-Russia energy relationship.

The (neo)realist perspective applied in this study highlights the complexities of power dynamics and collective action in an anarchic international system, emphasizing the EU's challenges in managing conflicts and strengthening institutional frameworks to address contemporary energy security issues. However, this study has limitations, including the exclusion of price considerations in the analysis of energy security. Pricing strategies are critical in the "energy weapon" rhetoric, where price fluctuations and manipulation can be tools of geopolitical influence. The study also underexplores the potential for domestic energy production diversification. Tapping into local natural gas reserves, developing renewable energy sources, and enhancing energy efficiency could further reduce Bulgaria's dependency on foreign energy, suggesting avenues for further research.

While Bulgaria has made progress in managing energy security risks, challenges remain, particularly regarding dependence on specific energy suppliers and external factors influencing energy prices and supply stability. Continued efforts in diversification and resilience-building are crucial for enhancing Bulgaria's future energy security.

Future Outlook and Recommendations

Bulgaria must implement ambitious decarbonization strategies to reduce its dependency on Russian gas and enhance energy security and climate resilience (Center For The Study Of Democracy, 2023). For Central and Eastern Europe, transitioning from Russian gas involves increasing clean energy investments, expanding LNG infrastructure, integrating regional gas markets, and developing hydrogen technologies. These steps are crucial for bolstering energy security and mitigating geopolitical risks (IRENA, 2024).

Renewable energy sources like solar, wind, and electric vehicle batteries are vital alternatives to traditional hydrocarbons. In 2022, Bulgaria's renewable energy consumption was modest, with solid biofuels at 54%, hydropower at 10%, and liquid biofuels at 9% (IRENA, 2024). Enhancing renewable energy will support Europe's goals of energy autonomy and sustainability, paving the way for a more resilient and clean energy future (Skalamera, 2023).

To counter Russia's energy leverage, Europe needs to diversify its energy sources through LNG facilities, interstate pipelines, and renewable technologies. This approach will help reduce vulnerabilities and build a more secure energy infrastructure (Orlov et al., 2017). Climate policies aimed at reducing carbon emissions will also impact Russia's economic stability and global influence, as decreasing fossil fuel demand challenges its dominance (Orlov et al., 2017). Europe's strategy should focus on minimizing overall reliance on imported energy, rather than merely shifting from one dependency to another, to achieve true energy independence (Liboreiro, 2024; Center For The Study Of Democracy, 2023).

Summary

This thesis examines the complex Russo-Bulgarian energy relationship, focusing on Bulgaria's efforts to reduce its dependence on Russian gas through diversification amidst significant geopolitical changes. Using theories of (neo)realism and energy statecraft, the study investigates how external pressures, including Russia's actions and EU policies, shape Bulgaria's energy strategies.

Key findings include peaks in energy diversification discussions in 2020 and 2021, linked to rising geopolitical tensions and Bulgaria's proactive measures to explore alternative energy sources. Mentions of energy security remained stable, with increases in 2017 and 2018, reflecting ongoing efforts to secure energy supplies. While EU energy cooperation mentions peaked in 2015 and 2016, recent trends suggest Bulgaria's shift towards more independent energy strategies, possibly due to evolving EU dynamics and strengthened internal capabilities.

The analysis aligns with statecraft theories, showing how Bulgaria's energy policies are influenced by Russia's use of energy as a geopolitical tool. The thesis concludes that Bulgaria has increasingly aligned its energy strategies with EU policies to bolster security and diversification, addressing the risks of asymmetric dependency and adapting to geopolitical challenges. This research fills a gap in understanding the energy weapon and offers insights into navigating energy security in a complex geopolitical landscape.

Summary in Czech

Tato práce zkoumá složité rusko-bulharské energetické vztahy a zaměřuje se na snahu Bulharska snížit svou závislost na ruském plynu prostřednictvím diverzifikace v podmínkách významných geopolitických změn. S využitím teorií (neo)realismu a energetického státnictví studie zkoumá, jak vnější tlaky, včetně kroků Ruska a politiky EU, formují bulharské energetické strategie. Mezi klíčová zjištění patří vrcholy diskusí o energetické diverzifikaci v letech 2020 a 2021, které souvisejí s rostoucím geopolitickým napětím a proaktivními opatřeními Bulharska k prozkoumání alternativních zdrojů energie. Zmínky o energetické bezpečnosti zůstaly stabilní, s nárůstem v letech 2017 a 2018, což odráží pokračující úsilí o zajištění dodávek energie. Zatímco zmínky o spolupráci EU v oblasti energetiky dosáhly vrcholu v letech 2015 a 2016, nedávné trendy naznačují posun Bulharska směrem k nezávislejším energetickým strategiím, pravděpodobně v důsledku vývoje dynamiky EU a posílení vnitřních kapacit.

Analýza je v souladu s teoriemi státního vlivu a ukazuje, jak jsou energetické politiky Bulharska ovlivňovány využíváním energie jako geopolitického nástroje ze strany Ruska. Práce dochází k závěru, že Bulharsko stále více slaďuje své energetické strategie s politikami EU s cílem posílit bezpečnost a diverzifikaci, řešit rizika asymetrické závislosti a přizpůsobovat se geopolitickým výzvám. Tento výzkum zaplňuje mezeru v chápání energetické zbraně a nabízí poznatky o navigaci v oblasti energetické bezpečnosti ve složitém geopolitickém prostředí.

List of References

- AFANASIEV, V. Bulgaria slaps transit fee on Russian gas and sets timetable to halt oil imports. Upstream [online]. 2023a. Dostupné z: https://www.upstreamonline.com/energy-security/bulgaria-slaps-transit-fee-on-russian-gasand-sets-timetable-to-halt-oil-imports/2-1-1535825?zephr sso ott=uNHB8W

- AFANASIEV, V. Hungary fights back against Bulgarian levy on Russian gas. Upstream [online]. 2023b. Dostupné z: https://www.upstreamonline.com/lng/hungaryfights-back-against-bulgarian-levy-on-russian-gas/2-1-1540165

- ALEKSIEVA, Remina a Kalina TCOLOVA. Energy without Russia: Country report Bulgaria. The consequences of the Ukraine war and the EU sanctions on the energy sector in Europe. Budapest, 2023.

- ALHARAHSHEH, H. H., PIUS, A. A review of key paradigms: Positivism VS interpretivism. Global Academic Journal of Humanities and Social Sciences, 2020, roč. 2, č. 3, s. 39-43.

- ANGELOV, G. A. A Putin Associate Who Supplied Pipes for Balkan Stream Is on the EU Sanctions List. OFFNews [online]. 2022. Dostupné z: https://offnews.bg/razsledvane/blizak-na-putin-kojto-dostavi-trabite-za-balkanski-potok-ev-spisaka-773462.html

- ARMAN, Murat Necip, PARALI, Zeynep, ERTÜRK ÇİFTÇİ, Selahattin, CENGIZ, Çağdaş. The Shift in the Energy Policy of Greece after the 2008 Financial Crisis in the Context of Energy Security. International Journal of Politics and Security (IJPS), 2021, roč. 3, č. 2, s. 82–101.

- ASSENOVA, Margarita. Bulgaria's Ambitions for a Balkan Gas Hub: Challenges, Opportunities and the Role of a New Offshore Gas Storage Project [online]. Washington, DC: The Jamestown Foundation, 2018. Dostupné z: http://www.jamestown.org

- ATANASOVA, M. The Head of Srbijagas: Is Bulgaria Punishing Russia? Fakti.bg - Let's Reveal the Facts [online]. 2023. Dostupné z: https://fakti.bg/world/825181-shefatna-sarbiagaz-balgaria-rusia-li-nakazva

- ATEED, Ejazul Haq. The Impact of Russia-Ukraine War on the Global Energy Crisis. In: Analyzing Energy Crises and the Impact of Country Policies on the World. IGI Global, 2024. p. 119-138.

- ATLAS.ti. ATLAS.ti 8 Mac User Manual. 2024. [pdf] ATLAS.ti Scientific Software Development, p. 224. Available at: https://manuals.atlasti.com/Mac/en/manual/ATLAS.ti_ManualMac.pdf

- BAHARI, S. F. Qualitative versus quantitative research strategies: Contrasting epistemological and ontological assumptions. Sains Humanika, 2010, roč. 52, č. 1.

- BARBER, T. Bulgaria's Dependence on Russian Gas Is Coming to an End. Klub Zебра Медия [online]. 2022. Dostupné z: https://clubz.bg/47599zavisimostta na balgariya ot ruski gaz e kam kraya si

- BELCHEV, D. Bulgaria. In: OSTROWSKI, W. and BUTLER, E., eds. Understanding Energy Security in Central and Eastern Europe: Russia, Transition and National Interest. Taylor & Francis Group, 2018. Dostupné z: https://ebookcentral.proquest.com/lib/cuni/detail.action?docID=5310387

- BELDERBOS, R., GRABOWSKA, M., LETEN, B., KELCHTERMANS, S., UGUR, N. On the Use of Computer-Aided Text Analysis in International Business Research. Global Strategy Journal, 2017, vol. 7, no. 3, pp. 312–31. DOI: 10.1002/gsj.1162.

- BELL, D. What is liberalism? Political Theory [online]. 2014. Vol. 42, no. 6, pp. 682-715. Available at: https://doi.org/10.1177/0090591714535103

- BEYER, Sebastian a MOLNAR, Gergely. Accelerating energy diversification in central and Eastern Europe – analysis [online]. IEA, 2022. Dostupné z:

https://www.iea.org/commentaries/accelerating-energy-diversification-in-central-and-eastern-europe

- BLACKWILL, R. D. – HARRIS, J. M. War by Other Means: Geo-Economics and Statecraft. Cambridge: Harvard University Press, 2016. s. 1–18, 20.

- BLANCHARD, J. M. F., RIPSMAN, N. M. A Political Theory of Economic Statecraft. Foreign Policy Analysis, 2008, roč. 4, č. 4, s. 371–398.

- BLUMENAU, Bernhard. Breaking with convention? "Zeitenwende" and the traditional pillars of German foreign policy. International Affairs, 2022, 98(6), 1895–1913. DOI: 10.1093/ia/iiac166.

- BNT. Head of "Bulgartransgaz": The Interconnector with Serbia Also Benefits Bulgaria. [online]. 2023. Available at: https://bntnews.bg/news/shefat-na-bulgartransgazinterkonektorat-sas-sarbiya-ima-svoyata-polza-i-za-balgariya-1259149news.html

- BOS, Macey A. Gazprom: Russia's nationalized political weapon and the implications for the European Union. [thesis]. Washington, D.C.: Georgetown University, School of Continuing Studies and the Graduate School of Arts and Sciences, 2012.

- BOUTE, Anatole. Weaponizing Energy: Energy, Trade, and Investment Law in the New Geopolitical Reality. American Journal of International Law. 2022, 116(4), 740-751.

- BROWN, M. A., SOVACOOL, B. K. Developing an 'energy sustainability index' to evaluate energy policy. Interdisciplinary Science Reviews, 2007, roč. 32, č. 4, s. 335–349. DOI: 10.1179/030801807X230540.

- BUCHAN, David. Energy and Climate Change: Europe at the Cross Roads. Oxford: Oxford University Press, 2009, s. 80.

- BURZAKOV, Yordan. Газ, власт и пари: колко наистина сме зависими от "Газпром"? Club Z [online]. April 28, 2022. Dostupné z: https://clubz.bg/127353gaz vlast i pari kolko naistina sme zavisimi ot gazprom

- BUZAN, B., WÆVER, O. a DE WILDE, J. Security: A new framework for analysis. Boulder, CO: Lynne Rienner Publishers, 1998.

- CAO, H. Energy Security Strategy in the European Union: A Neo-realism Approach. Beijing: Institute of European Studies, Chinese Academy of Social Sciences, 2011. Working Paper.

- CENTER FOR THE STUDY OF DEMOCRACY. Making Sanctions Work in the European Energy Sector. Policy Brief No. 135. Sofia: Center for the Study of Democracy, 2023. [online]. Dostupné z: https://www.csd.bg/en/publications/making-sanctions-work-in-the-european-energy-sector-policy-brief-no-135-june-2023/.

- ČESNAKAS, G. Energy Resources in Foreign Policy: A Theoretical Approach. Vytautas Magnus University Faculty of Political Sciences and Diplomacy, Kaunas, Lithuania, 2010.

- CHERP, A., & JEWELL, J. The concept of energy security: Beyond the four As. Energy Policy, 2014, 75, s. 415-421. Available at: https://doi.org/10.1016/j.enpol.2014.09.005.

- CHERP, A., & JEWELL, J. The three perspectives on energy security: intellectual history, disciplinary roots and the potential for integration. Current Opinion in Environmental Sustainability, 2011, 3(4), s. 202-212. Available at: https://doi.org/10.1016/j.cosust.2011.07.001.

- CHESTER, L. Conceptualising energy security and making explicit its polysemic nature. Energy Policy, 2010, 38(2), s. 887-895. Available at: https://doi.org/10.1016/j.enpol.2009.10.039.

- CHOLAKOV, Petar G. Българските политически институции и украинската криза (The Bulgarian Political Institutions and Ukrainian Crisis). София: Университет за национално и световно стопанство (УНСС), 2022.

- CHRISTIE, E., BAEV, P. a GOLOVKO, V. Vulnerability and Bargaining Power in EU-Russia Gas Relations. FIW-Research Reports 2010/11, No. 3, March 2011, p. 1.

- CLAYTON, Blake a LEVI, Michael. The Surprising Sources of Oil's Influence. Survival. 2012, 54(6), 107-122.

- COLLINS, Gabriel. Russia's Use of the "Energy Weapon" in Europe. Issue brief no. 07.18.17. Houston, Texas: Rice University's Baker Institute for Public Policy, 2017.

- DADALT, Anna a PARK, Sangheon. Asymmetric interdependence and the politics of energy in Europe: Hirschman's 'influence effect' redux. Journal of International Relations and Development. 2021, 24, 101–127.

- DEESE, D. A. Energy: Economics, Politics, and Security. International Security, 1979, 4(3), s. 140–153. Available at: https://doi.org/10.2307/2626698.

DENCHEV, К. Болгария — Россия: энергетика, бизнес и политика. Полития.
2014, No. 1 (72), pp. 7-17. [Online]. Dostupné z:

https://cyberleninka.ru/article/n/bolgariya-rossiya-energetika-biznes-i-politika

- DENIOZOS, N., VLADOS, C., CHATZINIKOLAOU, D., & FALARAS, A. Energy Security in Balkans and the Energy Economy of Greece. Proceedings of the 2nd International Conference in Contemporary Social Sciences: "Public Policy at the Crossroads: Social Sciences Leading the Way?" - At: Faculty of Social Sciences University of Crete, University Campus Rethymno, Greece. Available at SSRN: https://ssrn.com/abstract=3362082.

- DIMITROV, Plamen. Замяната на доставките от "Газпром" и дългосрочните перспективи за газова диверсификация (Gazprom Supply Replacement and Long-Term Prospects for Gas Diversification). София: Университет за национално и световно стопанство (УНСС), 2023.

- DOD. DOD Dictionary of Military and Associated Terms. Washington, DC: Secretary of Defense, duben 2018, s. 22.

- DREZNER, Daniel W. Introduction: The Uses and Abuses of Weaponized Interdependence. In: DREZNER, Daniel W., FARRELL, Henry, and NEWMAN, Abraham L., eds. The Uses and Abuses of Weaponized Interdependence. Washington, D.C.: Brookings Institution Press, 2021, pp. 1–16. Available from: http://www.jstor.org/stable/10.7864/j.ctv11sn64z.3

 EIA – U.S. Energy Information Administration. Bulgaria, independent statistics and analysis [online]. 2022.Dostupné z: https://www.eia.gov/international/overview/country/BGR

- ELO, S., KYNGÄS, H. The qualitative content analysis process. Journal of Advanced Nursing, 2008, vol. 62, no. 1, pp. 107-115. DOI: 10.1111/j.1365-2648.2007.04569.x.

- EUROPEAN COMMISSION. "Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: REPowerEU Plan." COM/2022/230 final (May 18, 2022), p. 20. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/? uri=CELEX%3A52022DC0230

- EUROPEAN COMMISSION. In-Depth Study of European Energy Security [SWD(2014)330]. European Commission, 2014. Available at: https://ec.europa.eu/energy/content/depth-study-european-energy-securityswd2014330_en.

- EUROPEAN COMMISSION. Third energy package. Energy [online]. 2024. Dostupné z: https://energy.ec.europa.eu/topics/markets-and-consumers/market-legislation/ third-energy-package_en

- EUROPEAN COUNCIL. European Council meeting (23 and 24 June 2022) – Conclusions. Brussels, 24 June 2022. [pdf] EUCO 24/22, CO EUR 21, CONCL 5. Available at: https://www.consilium.europa.eu/media/57442/2022-06-2324-euco-conclusions-en.pdf

- FRANC, Pierre-Etienne. Energy Europe. From Integration To Power. Energy Europe. From Integration To Power - Groupe d'études géopolitiques. [online]. 2024. Dostupné z: https://geopolitique.eu/en/2024/04/09/energy-europe-from-integration-to-power/

- FREEDOM HOUSE. Countries and Territories. Freedom in the World 2023 [online]. 2023. Dostupné z: https://freedomhouse.org/countries/freedom-world/scores

- GOLUNOV, S. The Energy Toolkit of Statecraft: The Cases of Russia and the USA. Primakov's Institute of World Economy and International Relations of the RAS, Moskva, 117997, Rusko, 2021.

- GOLUNOV, Sergei. "The Energy Toolkit of Statecraft: The Cases of Russia and the USA." Международные процессы (International Trends), vol. 19, no. 1e (64), 2021, pp. 41-54. Primakov's Institute of World Economy and International Relations of the RAS, Moscow, 117997, Russia. DOI: 10.17994/IT.2021.19.1.64.13.

- GOTEV, G. Kiril Petkov offers preview of new Bulgarian politics in the making. Euractiv [online]. 2021. Dostupné z: https://www.euractiv.com/section/coal/news/kirilpetkov-offers-preview-of-new-bulgarian-politics-in-the-making/

- GÖTZ, Roland. Russian gas and European energy security. In: SWP Research Papers RP 10/2007. Stiftung Wissenschaft und Politik (SWP), German Institute for International and Security Affairs, 2007.

- HUGHES, Llewelyn a GHOLZ, Eugene. Energy, Coercive Diplomacy, and Sanctions. In: The Palgrave Handbook of the International Political Economy of Energy. London: Palgrave Macmillan, 2016, s. 487-504.

- IEA. Bulgaria Country Report [online]. International Energy Agency, 2024. Dostupné z: https://www.iea.org/countries/bulgaria - IEA. Energy Fact Sheet: Why does Russian oil and gas matter? – Analysis. [online]. 2022. Dostupné z: https://www.iea.org/articles/energy-fact-sheet-why-doesrussian-oil-and-gas-matter

- IEA. IEA Releases Energy Survey of Black Sea countries - news [online]. International Energy Agency, 2000. Dostupné z: https://www.iea.org/news/iea-releasesenergy-survey-of-black-sea-countries

- IENE. Gas Supply in SE Europe and the Key Role of LNG. An IENE Study Project (M46), Final Report. Atény: Institute of Energy for SE Europe, 2018. [Online]. Dostupné z: https://www.iene.gr/articlefiles/gas%20supply%20in%20se%20europe%20and%20the %20key%20role%20of%20lng%20test.pdf.

- INTERNATIONAL RENEWABLE ENERGY AGENCY (IRENA). Final Renewable Energy Consumption. 2024. Dostupné z: https://www.irena.org/Data/Viewdata-by-topic/Renewable-Energy-Balances/Final-Renewable-Energy-Consumption.

- JASPER, S. Russian Cyber Operations: Coding the Boundaries of Conflict. Oxford: Oxford University Press, 2021.

- JIRUŠEK, Martin, VLČEK, Tomáš a HENDERSON, James. Russia's energy relations in Southeastern Europe: an analysis of motives in Bulgaria and Greece. Post-Soviet Affairs. 2017, 33(5), 335-355.

- KEOHANE, Robert Owen a Joseph S. NYE. Power and Interdependence: World Politics in Transition. Little, Brown, 1977.

- KOKALOVA-Gray, A. Bulgaria, Hungary Agree to Cooperate on LNG Supplies for CEE. SeeNews [online]. 2023, September 15. Dostupné z: https://seenews.com/news/bulgaria-hungary-agree-to-cooperate-on-lng-supplies-for-cee-833929

- KORAB-KARPOWICZ, W. Julian. Political Realism in International Relations. In: ZALTA, Edward N. (ed.). Stanford Encyclopedia of Philosophy. Summer 2010 Edition.

[online]. Available at: https://plato.stanford.edu/archives/sum2010/entries/realism-intl-relations/.

- KORTEWEG, Rem. Energy as a tool of foreign policy of authoritarian states, in particular Russia [online]. European Union. Policy Department for External Relations, 2018. Dostupné z:

https://www.europarl.europa.eu/RegData/etudes/STUD/2018/603868/EXPO_STU(2018)6 03868_EN.pdf

KRASTEV, I., LEONARD, M., BECHEV, D., KOBZOVA, J., & WILSON, A.
The Spectre of a Multipolar Europe. London: European Council on Foreign Relations,
2010. [Online]. Dostupné z:
https://www.ecfr.eu/publications/summary/the spectre of a multipolar europe

- KRIPPENDORFF, K. Computing Krippendorff's Alpha Reliability. [online] 2011. Available at: https://repository.upenn.edu/cgi/viewcontent.cgi? article=1043&context=asc_papers

- KRIPPENDORFF, K. Content Analysis: An Introduction to Its Methodology. 3rd ed. Los Angeles: SAGE, 2013.

- KRUTIKHIN, Mikhail. Russia's Gazprom: A Case Study in Misused Interdependence. In: DREZNER, Daniel W., FARRELL, Henry, and NEWMAN, Abraham L., eds. The Uses and Abuses of Weaponized Interdependence. Washington, D.C.: Brookings Institution Press, 2021, pp. 185–200. Available from: http://www.jstor.org/stable/10.7864/j.ctv11sn64z.12

- LIBOREIRO, J. EU agrees new sanctions on Russia, targeting LNG for the first time. Euronews. 2024. [online]. Dostupné z: https://www.euronews.com/my-europe/2024/06/20/eu-agrees-new-sanctions-on-russiatargeting-lng-for-the-first-time.

- LIPSON, Charles. International Cooperation in Economic and Security Affairs. World Politics. 1984, 37(1), 1–23. DOI: 10.2307/2010304. - LIU, X. and YANG, E. Examining China's Official Media Perception of the United States: a Content Analysis of People's Daily Coverage. Journal of Chinese Political Science, 2015, vol. 20, no. 4, pp. 385-408. doi: 10.1007/s11366-015-9340-8.

- MASTANDUNO, M. Economic Statecraft, Interdependence, and National Security: Agendas for Research. Security Studies, 1999, vol. 9, no. 1-2, pp. 288-316. DOI: 10.1080/09636419908429402.

- MAZAČ, Jan. Examining United States' Presidential Perception of the Energy Security in period 2001–2017: A Content Analysis. Praha, 2019. 70 pages. Master's thesis (Mgr.). Charles University, Faculty of Social Sciences, Institute of Political Studies. Supervisor Dr. rer. Pol. Michal Parízek, M.Sc., Ph.D.

- MEARSHEIMER, John J. Bound to Fail: The Rise and Fall of the Liberal International Order. International Security. 2019, 43(4), s. 7–50. DOI: https://doi.org/10.1162/isec_a_00342.

- MEIERDING, Emily. Weaponizing Energy Interdependence. In: DREZNER, Daniel W., FARRELL, Henry, and NEWMAN, Abraham L., eds. The Uses and Abuses of Weaponized Interdependence. Washington, D.C.: Brookings Institution Press, 2021, pp. 169–184. Available from: http://www.jstor.org/stable/10.7864/j.ctv11sn64z.11

- MISIĄGIEWICZ, J. Energy security as a research area of international security. Stosunki Miedzynarodowe - International Relations, 2023, 2(26). Dostupné z: https://doi.org/10.12688/stomiedintrelat.17622.2

- MORAVCSIK, A. Liberalism and International Relations Theory. Cambridge, MA: Center for International Affairs, Harvard University, 1992.

- NIKOLOV, K. a MANDILARA, S. Bulgaria waives Russian gas transit tax in hopes of furthering Schengen talks. www.euractiv.com [online]. 2023. Dostupné z: https://www.euractiv.com/section/politics/news/bulgaria-waives-russian-gas-transit-tax-inhopes-of-furthering-schengen-talks/

- ORBAN, A. Power, Energy, and the New Russian Imperialism. Praeger Security International, 2008. ISBN 9780313352225. DOI: 10.5040/9798400699894. [Online]. Dostupné z: https://www.bloomsbury.com/us/power-energy-and-the-new-russianimperialism-9780313352225/.

- ORLOV, Anton, AAHEIM, Asbjørn. "Economy-Wide Effects of International and Russia's Climate Policies." Energy Economics, vol. 68, 2017, pp. 466-477. ISSN 0140-9883. https://doi.org/10.1016/j.eneco.2017.09.019

- PETROV, M. Martin Vladimirov: The Agreement with Turkey Is About Access to Gas, Not Gas. Turkey and Russia Are the Winners. Boulevard Bulgaria [online]. 2023. Dostupné z: https://boulevardbulgaria.bg/articles/martin-vladimirov-sporazumenieto-na-balgariya-s-turtsiya-za-prirodniya-gaz-namirisva-na-shema-za-dostavka-na-rusko-gorivo

- RADIO FREE EUROPE. Как тайно беше договорено строителството на "Балкански поток". Svobodna Evropa [online]. 2023. Dostupné z: https://www.svobodnaevropa.bg/a/tayno-balkanski-potok/32565909.html

- ROUSSI, A., BARIGAZZI, J. Expect Russia to do 'whatever possible' to reassert influence in Bulgaria, outgoing PM warns. POLITICO. 9. 4. 2024. Dostupné z: https://www.politico.eu/article/russia-vladimir-putin-nikolai-denkov-to-do-whateverpossible-to-reassert-influence-in-bulgaria-outgoing-pm-warns/

- RUSSIAN FEDERATION EMBASSY IN THE REPUBLIC OF BULGARIA. Russian-Bulgarian Trade and Economic Relations. Economic Cooperation. 2024. Available at: https://bulgaria.mid.ru/bg/countries/dvustoronnie_otnosheniya/tradeeconomic-cooperation/

- SCHOLZ, O. The Global "Zeitenwende": How to Avoid a New Cold War in a Multipolar Era. Foreign Affairs [online]. 2022. Dostupné z: https://www.foreignaffairs.com/germany/olaf-scholz-global-zeitenwende-how-avoid-newcold-war - SHAFFER, Brenda. "Chapter 2: Foreign Policy". In: Energy Politics. Philadelphia: University of Pennsylvania Press, 2009.

- SKALAMERA, M. "The Geopolitics of Energy after the Invasion of Ukraine." The Washington Quarterly, vol. 46, no. 1, 2023, pp. 7-24. https://doi.org/10.1080/0163660X.2023.2190632

- SMITH STEGEN, K. Deconstructing the "Energy Weapon": Russia's Threat to Europe as Case Study. Energy Policy [online]. 2011, Vol. 39, No. 10, pp. 6505-6513. ISSN 0301-4215. DOI: 10.1016/j.enpol.2011.07.051. Dostupné z: https://www.sciencedirect.com/science/article/pii/S0301421511005866

SONMEZ, Ali a COBANOGLU, Selahattin. The Use of Energy Resources as
Foreign Policy Tools: The Russian Case. European Scientific Journal, ESJ. 2016, 12(11),
78.

- SOVACOOL, B. K., BAUM, C., and LOW, S. "The next climate war? Statecraft, security, and weaponization in the geopolitics of a low-carbon future." Energy Strategy Reviews, vol. 45, 2023, 101031. https://doi.org/10.1016/j.esr.2022.101031

- SPASIĆ, V. Bulgaria Secures Access to Turkish LNG Terminals for Natural Gas Imports. Balkan Green Energy News [online]. 2023. Dostupné z: https://balkangreenenergynews.com/bulgaria-secures-access-to-turkish-lng-terminals-fornatural-gas-imports/

 STARIDOLSKA, E. Georgi Bliznashki is the new Bulgarian Prime Minister.
Kapital [online]. 2014. Dostupné z: https://www.capital.bg/politika_i_ikonomika/bulgaria/2014/08/05/2355706_georgi_bliznas hki_e_noviiat_slujeben_premier/

- STEFANOV, R., HRISTOV, D., NIKOLOVA, V., NITZOV, B. The Energy Sector of Bulgaria. Sofia: Център за изследване на демокрацията, 2017.

- STRZELECKI, Marek, TSOLOVA, Tsvetelia a POLITYUK, Pavel. Russia Halts Gas Supplies to Poland and Bulgaria [online]. Reuters, 28. dubna 2022. Dostupné z: https://www.reuters.com/world/poland-bulgaria-face-russian-gas-cut-ukraine-crisisescalates-2022-04-26

- VASSILEV, I. Botas-Bulgargaz Agreement – A Game-Changer? New Geopolitics [online]. 2023. Dostupné z: https://www.newgeopolitics.org/2023/02/08/botas-bulgargazagreement-a-game-changer/

- VIKHRISTYUK, Olga a DIMITROV, Ivan. Analysis of New EU Energy Security Mechanisms and Their Application in the Republic of Bulgaria. Economics, Finance: Accounting, University "Prof. Dr Assen Zlatarov", Burgas. Management and Education. 2021, vol. 17, no. 1.

 WETTENGEL, J. Nord Stream 2 – Symbol of failed German bet on Russian gas.
Clean Energy Wire [online]. 2023. Dostupné z: https://www.cleanenergywire.org/factsheets/gas-pipeline-nord-stream-2-links-germany-russia-splits-europe

- WIVEL, A. The Power Politics of Peace: Exploring the Link between Globalization and European Integration from a Realist Perspective. Cooperation and Conflict [online]. 2004, 39(1), 5-25. Dostupné z: https://doi.org/10.1177/0010836704041104

 WYCISZKIEWICZ, Ernest. Interdependence and Energy Security: The Case of EU-Russia Energy Dialogue. Warszawa: PISM Polski Instytut Spraw Międzynarodowych, 2012.

- YARDLEY, Jim a BECKER, Jo. Putin's Way: How Putin Forged a Pipeline Deal That Derailed. The New York Times [online]. December 30, 2014. Dostupné z: https://www.nytimes.com/2014/12/31/world/europe/putins-way-how-putin-forged-apipeline-deal-that-derailed.html

- YERGIN, D. Energy Security in the 1990s. Foreign Affairs, 1988, 67, s. 110-132. Available at: https://doi.org/10.2307/20043677.

- ZHAO, X., LIANG, J., DANG, C. A Stratified Sampling Based Clustering Algorithm for Large-Scale Data. Knowledge-Based Systems, 2018, vol. 163, pp. 416-428.

- ZHIZNIN, S. Z., TIMOHOV, V. M., DINEVA, V. Energy Security: Theoretical Interpretations and Quantitative Evaluation. International Journal of Energy Economics and Policy, 2020, roč. 10, č. 2, s. 390–400. Dostupné z: https://www.econjournals.com/index.php/ijeep/article/view/8950.

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