MASTER THESIS:

EU-RUSSIA ENERGY RELATION BETWEEN 2008 AND 2022: INTERNATIONAL COOPERATION LEVERAGE OR THREAT TO THE SECURITY OF THE EUROPEAN UNION?

AUTHOR: DAVIDE AGIMAN
STUDENT N°: 668081

EU-RUSSIA ENERGY RELATION BETWEEN 2008 AND 2022: INTERNATIONAL COOPERATION LEVERAGE OR THREAT TO THE SECURITY OF THE EUROPEAN UNION?

BY DAVIDE AGIMAN

STUDENT N°: 668081

MASTER:

"GLOBAL HISTORY AND INTERNATIONAL RELATIONS"

ERASMUS UNIVERSITY OF ROTTERDAM

SUPERVISOR: DR. IWONA GUSC

SECOND READER: DR. LARA GREEN

MASTER THESIS
JUNE 2023

ACKNOWLEDGEMENTS

To those who believed in me and supported this project in the Netherlands, allowing me to pursue my passions in history and international relations subjects. I am deeply grateful to my entire family for allowing me to embark on this journey and to whom pragmatically supported me in the year's conclusion, particularly my parents and my aunt Cinzia.

Special thanks to those with whom I shared my most recent academic achievement, as well as those with whom I shared this experience and memories.

This work represents a turning point in my life, the end of my preparation to face the world and, with it, the challenges, hardships, personal achievements, and, hopefully, the full realization as an individual. Thank you also to all of my friends who remained in Milan, with whom I discovered true bonds and an altruistic desire for my success, which I reciprocate in their regard.

To the future me: I hope this study could be a reminder of the inconsistency of human beings and that you could accept this behavioral trait as part of the full spectrum of man actions and emotions, not limiting who we are to one extreme or the other.

SIC PARVIS MAGNA

EU-RUSSIA ENERGY RELATION BETWEEN 2008 AND 2022: INTERNATIONAL COOPERATION LEVERAGE OR THREAT TO THE SECURITY OF THE EUROPEAN UNION?

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

1.1) Research introduction

Energy is the key-factor in the growth of economies and wealth for nations. It is used to activate the three-different-type sectors: agriculture, industrial sector, and service industry. Every nation's economy considers it as a strategical industry. Its availability and price determine the performance capacity and, with it, also the competitiveness of a country.[1]

For many years, countries have worked together to ensure their energy security, particularly those that heavily rely on imports to meet domestic demand. Energy is taking center stage in international diplomacy, and there is a complex global network of cross-border energy relationships and development partnerships. This kind of relations could create international cooperation or tension.[2]

The EU is one of the most influential actors of the world, but it lacks energy resources, which increases the importance of actors exporting them to Europe: OPEC for Oil,[3] Russia for Natural Gas,[4] and Niger for Uranium[5] are just the first in the class of actors involved in the import for each resources quoted to produce energy. This energy dependence obliges the EU to have strong relations with all these exporting states to keep the economy and wealth at the known standards.

Russia has a special relationship with the EU because it represents the first partner for Natural Gas exports, for Uranium and for oil it is second only to the OPEC countries combined.[6]

In the future, the EU's goal is to become more independent in this field with the implementation of renewable energy resources.[7] Nevertheless, the production of the infrastructure, in Europe, depends on the rare earth metals, that are mostly produced and exported by China which is not the focus of this paper.[8]

---

1 Urs Meister e Michel Grandjean, *Energie für Wirtschaft und Wohlstand* (Zurich: Avenir Suisse, 2009). pp 2-10

2 Chris Lo, "Power Plays: The Role of Energy in Modern Geopolitics", *Power Technology*, 26 April 2018, https://www.power-technology.com/features/power-plays-role-energy-modern-geopolitics/.

3 Michael McGovern, Sophie Heald e Jamie Pirie, "*Oil Dependency in the EU*", Cambridge Econometrics, May 2020, https://www.transportenvironment.org/wp-content/uploads/2021/07/2020_CE_Oil_Dependency_in_EU_report.pdf. pp.16-17

4 European Commission, "*Quarterly report On European gas markets*," Volume 14 (4), 2021, https://energy.ec.europa.eu/system/files/2022-04/Quarterly%20report%20on%20European%20gas%20markets_Q4%202021.pdf.

5 Fabiana Luca, "L'indipendenza energetica dell'Unione europea passa anche per l'uranio russo", *EUnews*, 19 April 2022, https://www.eunews.it/2022/04/19/lindipendenza-energetica-dellunione-europea-passa-per-uranio-russo/.

6 European Commission, "Quarterly report On European gas markets, Volume 14 (issue 4, covering fourth quarter of 2021)", 2021. P.13.

7 "*REPowerEU: Affordable, Secure and Sustainable Energy for Europe*", European Commission, 22 May 2022, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en.

8 Jason Mitchell, "China's Stranglehold of the Rare Earths Supply Chain Will Last Another Decade", *Mining Technology*, 22 April 2022, https://www.mining-technology.com/analysis/china-rare-earths-dominance-mining/.

This political landscape is also the result of the difficulties faced by the European Union in the relations with Russia, and this thesis will use the most important events (for instance, all the events in Ukraine from 2008 till 2022) as guidelines to analyze how the partnership between the two actors has changed over the past 15 years, and the EU's reasons to move forward.

In summary, the European Union is facing a difficult period, where the relation with its most important supplier has been changing due to different political views and the new energy strategy aims to diversify the energy production, reducing the EU's dependence from Russia, and changing providers/sources for the energy supply.

This thesis aspires to highlight the relationship evolution under the geopolitical aspects over the last 15 years, analyzing the impacts the events had on trades in the energy field. In fact, some happenings, in the period accounted, had been affecting the relationship between EU and Russia and, consequently, the market of the most important assets traded between the two players: energy resources (especially Natural Gas, which Russia provides to the EU being the most important supplier).

In conclusion, the result of this thesis will focus on the analysis of the political-geopolitical relations and the most important events occurred because of the Russia's behavior, followed by the energetic trades' evolution. Therefore, the main focus of my thesis, in the difficult relationship between the EU and Russia, is to understand whether or not the political condemnation of the events that shook the relationship between the two actors was followed by consistent actions in the energy market.

1.2) Research question and sub-questions

The thesis aims to analyze the energy resources condition of the EU and its international relations with its most important partners have changed over the last 15 years (2008-2022), namely the relation with Russia. So, the question is: how has Russia's international behavior influenced energy relations with the EU, specifically the Gas and Electricity market, during the above-mentioned period?

It is crucial to ponder sub questions to answer the RQ because they will assist in breaking the main questions down into smaller ones and in the topic's gradual development.

The sub questions are: 1) What is the "energy" role in the modern world? 2) What is the resources situation in Europe? 3) How has the perception on the reliability of Russia changed since 2008? 4) What are the key events changing that relationship? 5) Why has the relationship been changing with the main partner (in natural gas) over the past 15 years (Russia has been the most important partner for EU)? 6) How the geopolitics impacted the trade of energetic resources? 7) Did EU political position align to the trade in this industry? 8) Can we assume that political actions and behaviors in the energetic field are coherent?

1.3) Historiography of the energy sector between EU and Russia

Various scholars have studied the energy field in the EU and have proposed numerous interpretations for different periods based on the dates of publication of their works. The only constant variable that remains is the *dependency from the export of different partners of the European Union*. In fact, there are no scholars who express a different opinion on energy dependency, because EU has changed its approach to this area in the last 15 years, but the production for the internal consumption is still more than insufficient to say that the EU is energy independent. The energy has become a key-aspect of the European strategy, and its sources, according to Keppler, must follow three standards: security, environment, and competitiveness. In other words, the resources used must be easy to obtain, environment friendly and cheap for the customers.[9]

Another point, which the scholars cannot neglect, is the leading role of Russia as the energy partner for the EU: all scholars are aware of the importance of the Kremlin, but a lot of debates took place as far as the role of Russia is concerned. Russian influence is no more – as it was during the Cold war - "measured in ballistic missile accuracy or bomber production but in miles of pipelines constructed and barrels of oil per day exported" as Baran, a scholar and expert in energy security in Europe and Asia, ironically points out in relation to Russia's evolving leadership role and leverage in the energy field.[10]

However, in 2007, just a year before the period I am debating, Keppler argued that Russia was a reliable partner despite the increased tension in the 2005-2006 period due to the Ukrainian gas crisis. Yet, the author believed that Russia would have lost its importance in future, and even if it was an important energy actor, we had not to overestimate its influence.[11] In contrast to Keppler's theory, other researchers, including Marco Siddi, Zeyno Baran and Tom Casier, have shown that cooperation in the energy sector has persisted despite the multiple crises in Ukraine, demonstrating the continued interdependence of the EU and Russia in this area. Moreover, Russia's importance has not decreased, and its importance in exporting these resources allowed, for instance, the illegal invasion of Crimea in 2014, with the EU divided in the way of reacting due to the high risks of intervention.[12]

---

9 Keppler, Jan Horst. "*International Relations and Security of Energy Supply: Risks to Continuity and Geopolitical Risks.*" Brussels, Belgium: European Parliament Directorate-General for External Policies of the Union Policy Department, February 2007.
https://ketlib.lib.unipi.gr/xmlui/bitstream/handle/ket/476/EP.pdf?sequence=2&isAllowed=y. P.6

10 Baran, Zeyno. "EU Energy Security: Time to End Russian Leverage". *Washington Quarterly 30,* n. 4, Autumn 2007, 131–44. https://doi.org/10.1162/wash.2007.30.4.131. P. 131

11 Keppler, Jan Horst. "*International Relations and Security of Energy Supply*." P. 24- 27.

12 Casier, Tom. "Russia's Energy Leverage Over the EU: Myth or Reality?" *Perspectives on European Politics and Society* 12, n. 4 (December 2011): 493–508. https://doi.org/10.1080/15705854.2011.622963, Baran, Zeyno. "EU Energy Security: Time to End Russian Leverage". *Washington Quarterly* 30, n. 4, Autumn 2007, 131–44.

As we can see, the perception of Russia's role before the period accounted is very optimistic, in fact, the idea is that Russia will not have a great influence on Europe's security forever, conditioning the EU political choices on international stage due to its leverage in the energy field. This has not been confirmed by the events that took place in the quoted period and by scholars.

The interdependence between the actors is motivated by common interests; indeed, Russia's desire to increase its influence and trade opportunities balances the EU's need for resources. Precisely for this last aspect, both scholars Keppler and Baran assessed the EU approach to the sector as wrong, because if from European side the approach was more commercial, on the other side, Russia's approach was to cow the partners by imposing its desire unquestioned and unchallenged.[13]

For this reason, these two different ways of thinking (EU vs Russia) over the energy field, encouraged the scholars to approach the topic from a perspective of geopolitics, instead of economic and commercial one. One of the scholars who highlighted the necessity to approach the issue of energy in the political relation between EU and Russia was Tom Casier, who described this partnership in 2011 and dwelled on the fact that trade agreements are highly dependent on the development of the relations between the two actors.[14]

This point is well explained from the standpoint of the isolation that EU experiences in terms of the supply of these resources: for instance, one of Russia's strategies, acknowledged by Baran, is to make it difficult for the EU to engage in new supply routes with various partners; Baran explains in her article how Russia avoids new energy partnerships: eroding the EU support and financing new supply projects.[15]

For instance, projects that would reduce dependency are strongly obstructed by Russia, such as in the 1990s the BTC (Baku-Tiblisi-Ceyan) or the SCP (South Caucasus Pipeline). A more recent example is in 2007, while the EU was trying to integrate the different members policies in the field in one European policy, Putin closed advantageous deal beneficial to Russia: the Burgas-Alexandroupolis pipeline, the Nabucco pipeline and the attempt to grant Gazprom direct access to the TGI (Turkey-Greece-Italy).[16]

Another strategy is to sell raw materials under privileged conditions because the supply infrastructure (the route) is already built and operational and no further investments and time are needed. So, the

---

https://doi.org/10.1162/wash.2007.30.4.131, Siddi, M. (2020). EU-Russia Energy Relations. In: Knodt, M., Kemmerzell, J. (eds) *Handbook of Energy Governance in Europe.* Springer, Cham. https://doi.org/10.1007/978-3-319-73526-9_54-1. P.2

13 Baran, Zeyno. "*EU Energy Security: Time to End Russian Leverage*". P.131; Keppler, Keppler, Jan Horst. "*International Relations and Security of Energy Supply*." P. 25

14 Casier, Tom. "Russia's Energy Leverage Over the EU: Myth or Reality?" *Perspectives on European Politics and Society* 12, n. 4 (December 2011): 493–508. https://doi.org/10.1080/15705854.2011.622963.

15 Baran, Zeyno. "*EU Energy Security: Time to End Russian Leverage*". P. 134-135

16 Baran, Zeyno. "*EU Energy Security: Time to End Russian Leverage*". P. 138.

foreign policy of some EU-members is conditioned by the necessity to gather resources, forcing members to limit their criticism of Moscow. Russia's behavior on transparency, human rights and governance has remained unquestioned and undermine EU support from Central Asia countries, which are strongly influenced by the Kremlin, and could be partners for diversifying the EU supplier.[17]

The necessity for Russia to behave in this way is twofold: firstly, politically, in order not to lose influence in Central Asia (a possible partner for EU for the implementation of the diversification strategy), and to have influence on and within the EU (Eastern Europe, for instance, is highly dependent from Russian export). The second reason is economic: Russia has always been strongly dependent from the export of resources, and the economy plays an important role not only on the international stage, but also for the stability of the country itself; oil, natural gas and coal are the main resources exported, making an important contribution in the Russian GDP.[18]

Nevertheless, Europe has always been Russia's main partner since 1993 accounting for a big quota of its annual export and representing a potential threat of loss for Moscow in the event of a break in trade relations between the two players.[19]

Exploring Russia's economic and political position is important to better understand the EU's difficulty in obtaining energy resources securely. Keppler believes that the Russia's perception of these resources matter as the main problem in the EU-Russia relationship: they are not considered commercial goods but a political leverage; the solution according to Keppler's conception, is a strong commitment to a free global energy market, backed and guaranteed by the EU.[20]

The other quoted scholars, instead, express concern about the fragmentation of the different member states goals and the instruments used to achieve them. An important step, according to Pigliucci, an Italian researcher, was the draft of the Energy Union Strategy published on 25 February 2015. European countries are still divided since each member-state has a single national strategy and vision, so the strategy/policy is still inoperative, due to the absence of common policy on the energy issue. Furthermore, each member-state disagree about a common strategy: some countries would prefer to increase domestic production, even including polluting techniques such as coal and shale gas and oil, while other members strongly oppose these resources, due to environmental reasons, and favor the

17 Baran, Zeyno. "*EU Energy Security: Time to End Russian Leverage*". P. 133.

18 Bradshaw, Michael J., and Richard Connolly. "Russia's Natural Resources in the World Economy: History, Review and Reassessment." *Eurasian Geography and Economics* (2016), 700-726, https://doi.org/10.1080/15387216.2016.1254055. P. P. 13-17

19 Rasoulinezhad, Ehsan, Farhad Taghizadeh-Hesary, Jinsok Sung, and Nisit Panthamit. 2020. "Geopolitical Risk and Energy Transition in Russia: Evidence from ARDL Bounds Testing Method" *Sustainability 12, no. 7: 2689*. https://www.mdpi.com/2071-1050/12/7/2689. P. 1-2.

20 Keppler, Jan Horst. "*International Relations and Security of Energy Supply*." P. 7.

implementation of a sustainable and green strategy. In addition, in the relationship with Russia, EU members are implementing their own energy supply strategy, despite the need of a common vision.[21] Michele Pigliucci categorizes the members countries in two groups: Anti-Russian and "lone wolves". The first category includes the nations that constitute the anti-Russian countries group, most of which grew closer to Europe (and NATO) in an effort to shake off Russian influence and strongly push for an energetic European independence from Russia due to cultural reasons. In fact, after the collapse of the Soviet Union, these nations strengthened their ties with Europe (and NATO) to be protected from Russian influence.[22]

The "lone wolves" group is made up of all nations striving to deepen their ties with Russia, in defiance of Western sanctions imposed on the Kremlin after the 2014 invasion of Crimea and the EU policy proposals in 2015, which calls for European nations to become less reliant on Moscow. Some of these nations are working to develop national strategies for energy supply, which is directly at odds with EU directives, and at the same time are not looking for a special relationship with Russia but just at their own interests.[23]

Many projects have been launched under controversy, such as Turk Stream, Yamal-Europe and Nord Stream; the latter is the clear example of the different vision of the EU members: Germany and Austria are trying to start and conclude the project, improving their position and relation with Russia to become the main energy Hub in the region; meanwhile, the eastern countries lose their importance, getting exposed to strong political, economic and stability risks.[24]

The EU is working to develop an organization that brings together the energy field of all members, deciding as one rather than multiple bodies. Because of the circumstances and the different agenda of every single member, the EU implemented two strategies: the diversification of resources or partners and enacted the Green Deal in December 2019.[25]

Diversification was the strategy that these scholars have strongly proposed since the first tension with Russia in 2006 as the best solution, that could work for both the short-term and the long-term as well. In 2007, Keppler recommended the use of LNG (Liquid Natural Gas), that due to its specific nature is easy to transport and the EU could involve partners, geographically further away, that were infeasible in the past.[26]

---

21 Pigliucci, Michele. "Russo-Ukrainian Gas War: The Lack of a Common Strategy Jeopardizes European Unity." *Advances in Economics and Business 4, no. 3* (2016): 124-131. doi:10.13189/aeb.2016.040302. P. 127- 128.
22 Pigliucci, Michele. "*Russo-Ukrainian Gas War*." P. 128.
23 Pigliucci, Michele. "*Russo-Ukrainian Gas War*." P.128.
24 Siddi, M. (2022). "*EU-Russia Energy Relations*." P. 11- 14.
25 Leonard, Mark, et al. "*The Geopolitics of the European Green Deal*". P. 1.
26 Keppler, Jan Horst. "*International Relations and Security of Energy Supply*." P. 35.

Baran, alternatively, proposed the engagement of the Caspian Sea: the project to build new pipelines without transiting through Russia not only would reduce the strong dependency in energy but also would improve the affinity between the EU and the Central Asia Republics.[27]

The second strategy is the implementation of the renewable's sources of energy, that would improve the EU's independence and at the same time, the cohesion of the members. The Green Deal is the most concrete initiative proposed to change the European economy and consumption habits in 2019 to start solving the risks resulting from the Ukraine issue. Since it involves a major overhaul of the European energy system, it will also alter how the EU works in conjunction with its neighbors and redefine Europe's priorities for international policy.[28]

Griffiths states that the geopolitics of energy will be fundamentally altered by this low-carbon energy transition and its many facets in different ways, including a changing political power dynamics among and between energy producers and consumers.[29]

The Green Deal is a foreign policy development with significant geopolitical ramifications as a result. Several regional partners, such as Russia, will suffer because of Europe's move away from its big reliance on fossil fuels, and they might even become politically and economically unstable. The most likely geopolitical response from Russia will be to expand the types of customers purchasing its energy. The long-term risk for Russia is that it will become more dependent on China if this effort to enter the Chinese market is not accompanied by a green transformation that will allow Russia itself to continue serving the European market.[30]

A more recent study by Rasoulinezhad et. all demonstrates that the future of Russia depends from the transition to greener resources; in fact, in the short- term, a country like Russia, that built its economy on the export of raw materials will face negative growth of the economy, population and inflation, but, on the other hand, it may expect a positive valuation of ruble (Russian currency) and financial openness; the geopolitical risk variable is positive, which means that in the short period the risks of political crisis may increase. However, in the long- term the geopolitical risk variable for Russia is negative, which means that crisis risks are less likely to happen, and tensions are highly correlated with trade in energy resources.[31]

Other aspects that may be influenced by the Green Deal are the energy market, global oil market, by depressing prices and reducing the income of the main exporters, even if they do not trade much with

---

27 Baran, Zeyno. "*EU Energy Security: Time to End Russian Leverage*". P. 135- 137

28 Leonard, Mark, et. al. "*The Geopolitics of the European Green Deal*". P. 1

29 Griffiths, Steven. "Energy Diplomacy in a Time of Energy Transition". *Energy Strategy Reviews* 26 (November 2019): 100386. https://doi.org/10.1016/j.esr.2019.100386. P. 1-5.

30 Leonard, Mark, et al. "*The Geopolitics of the European Green Deal*". P. 2

31 Rasoulinezhad, et al. "*Geopolitical Risk and Energy Transition in Russia: Evidence from ARDL Bounds Testing Method*" P. 11-14.

the EU. The Green Deal will impact Europe's international competitiveness, so it is important to manage the transition to remain domestically and internationally competitive.[32] As Keppler highlighted, the three main components for the energy supply are the costs, the pollution to produce it and the securitization.

In the production "The Geopolitics of the European Green Deal" from Leonard et al., the authors have considered the following crucial to making the transition possible: a greener Europe will be more dependent on imports of products and raw materials that serve as inputs for clean energy and clean technologies. The transition to renewables needs raw materials to produce infrastructures or components that are key factors to implement the strategy of the EU.

Some of the essential elements needed are the Rare Earth Elements (REE). In 2018, almost 60% of the global production took place in China, followed by the United States, Myanmar, and Australia, giving to the four countries 90% of global production. China government controls the corporations that dig and work the REE, and the Chinese government is now merging assets from several state-owned firms to create the China Rare Earth Group. The new firm will control 70% of China's output of REEs and have the power to set prices. China can control production – and thus the global availability – of metals of ever-increasing economic importance due to years of research and industrial policy in a worsening geopolitical context that has led the governments of major consuming states to search for alternative producers. However, with its continued dominance in the production of refined REEs (85%), China retains strong control over the supply chain, although opinions differ on the magnitude of this risk. This dominance of these materials could be a threat to the EU's strategy, which risks just to change its partner of influence from Russia to China.[33]

The rapid and significant proliferation of clean energy requires a world in which a strong global energy governance prioritizes the sustainability agenda.[34] The Global Energy Governance definition drawn by Griffiths is applicable also on a smaller level than the world stage, such as the EU. In the article "Renewables and the Future of Geopolitics: Revisiting Main Concepts of International Relations from the Lens of Renewables", the impact of the renewables is applied to the political world system, but the same rules can be applied also to the European Union case and the possibility of leverage by Russia. The development of renewable energy has an impact on international relations

32 Leonard, Mark, et al. "*The Geopolitics of the European Green Deal*" P. 2

33 Gielen, Dolf, e Martina Lyons. "*Critical Materials for the Energy Transition: Rare Earth Elements*." May 2022. https://www.researchgate.net/profile/Dolf-Gielen-2/publication/361276473_CRITICAL_MATERIALS_FOR_THE_ENERGY_TRANSITION_RARE_EARTH_ELEMENTS/links/62a849e4c660ab61f87c61f9/CRITICAL-MATERIALS-FOR-THE-ENERGY-TRANSITION-RARE-EARTH-ELEMENTS.pdf. P. P. 35- 38.

34 When Griffiths talks about strong global energy governance, the author refers to international governance that is effective in reaching an energy system planned and managed to achieve the collective best interests of the global community.

through two different channels: (i) the immediate transfer of energy, such as electricity, and (ii) the transfer of technology and raw materials required for renewable energy. Both processes unsettle current power relations among states and pose challenges to the existing global governance frameworks for trade and energy.[35]

This transition is either a possibility to reach a common strategy and cohesion in the EU or a threat to foreign leverage to create tension within the Union. Griffiths highlights another possible problem to reach this agreement at the Union level: the difficulties to reach an unanimity, quite impossible in this industry; the author suggests the bilateral diplomacy which is the best in this case. However, the EU has already overpassed this stage and is trying to reach the integration of the different nations into a single system.[36]

I have structured the historiography in a way to emphasize the evolution of this case study, with the different solutions and the problematics, during the period considered. Scholars have studied many aspects of the energy relationship between Russia and the EU: from the role the two actors attribute to energy resources to the strategies implemented to improve their conditions (political and economic), from Russian behavior as influential actor on the international stage to European policies to reduce energy dependency.

What emerges from the literature review are the gaps in the knowledge about the energy trade trends evolution between the two actors. The EU continue to propose different approaches to the energy issue, and the scholars studied the strengths and the weaknesses of those solutions. However, this work is important to deepen into pragmatical facts, expressing in numerical data the relationship between the EU and Russia over the last 15 years. My thesis will compare the concrete effects of the political declarations in the field with the actual volumes of traded resources and the energy prices within the EU over the period, trying to uncover the coherence between the trades and Union answers to Russia's behavior.

1.4) Primary sources and source criticism

The primary sources used to construct the case study come from within the EU institutions, such as energy policies (e.g., the Green Deal), energy regulations and Eurostat data. Reports from other institutions and from external sources hired by the EU, such as Think Tanks, were also analysed. This means that primary sources highlight the EU's situation, perceptions and strategies for dealing with the energy market. Of course, documents that highlight the relationship between the European Union

35 Hatipoglu, Emre, Saleh Al Muhanna e Brian Efird. "Renewables and the Future of Geopolitics: Revisiting Main Concepts of International Relations from the Lens of Renewables". *Russian Journal of Economics* 6 (14 December 2020): 358–73. https://doi.org/10.32609/j.ruje.6.55450. P. 358.

36 Griffiths, Steven. "*Energy Diplomacy in a Time of Energy Transition*". P. 4-5-9.

and Russia can be also of use for this thesis, such as reports from "EU-Russia summit", and agreements between the two actors or EU's laws enforcements. Nevertheless, my intention is to base my study on the relationship that trade in energy resources has with the evolving political context and to understand how (geo)political events have made the trade between the two characters progressively more difficult and tense. In order to discuss this subject, the *Quarterly Report on European Gas Market* and *Quarterly Report on European Electricity Market*, both contained in the Communication and Information Resource Center for Administrations, Businesses and Citizens database *(CIRCABC)*, will be my main sources of information for achieving this objective. I need the data about both markets because the first explains the number of resources imported from Russia, while the latter explains the costs that the EU faces to produce the energy. In fact, this thesis needs both the resources reports because the gas market reports are useful for the gas volumes, but what if the events escalated and the number of EU's imports did not change? The energy market reports will be the solution to check if the prices of energy have been influenced by the events and will help to explain industry context (the same reasoning can be done on the opposite: the energy costs can be explained with the volumes).

Furthermore, these sources are useful because thanks to Europe's decision to be open source and transparent, the data are available from a first-hand source. In fact, the primary sources selected are available on the European Commission website and cover the period from 2008 until the end of 2022. Nonetheless, the sources have some gaps in information: firstly, the relationship with Russia is sometimes described in a very diplomatic manner or is not addressed at all, which means I will be unable to use only those sources to describe the political context; however, the sources that explain the relationship between EU and Russia did not lack: indeed, the political relationship is well reported in many EU sources; secondly, while the energy market report is useful for observing variations in the price of the commodity, the gas market report does not always include the volumes imported only from Moscow but the aggregate volumes; thus, I will have to rely on other sources, such as the website Eurostat (the European Commission's opensource dataset) to confront the EU's gas imports only from Russia and not the entire NG's annual import.

In conclusion, the sources have many benefits, such as the control over the markets of interest all over the EU in the period of the events analyzed, and create the possibility to develop an in-depth thesis, but they are not always enough to explain all the political relations between the EU and Russia (EU commission reports on the topic, e.g. the 'European Energy Security Strategy', and secondary sources

will solve this problem), and they lack some details on the resource, which, thankfully, are presented by another reliable European organization (Eurostat).[37]

1.5) Methodology and Theoretical framework

The energy issue has been studied in scholarly literature from various perspectives and as demonstrated in the historiography, EU-Russia relations are an important study case that has been approached in an interdisciplinary manner.

Using the primary sources quoted in the last paragraph, this thesis aims to understand if there is consistency between the political context and the trade of resources. In fact, in the analytical chapter - the last one- I will focus my analysis on the quarterly reports of natural gas imported into the EU from the main partner in this market: Russia.

Since 2008, the EU has published a quarterly report on the gas market, which includes the state of the market and the gas volumes imported. I will analyze the 110 quarterly reports for the period considered (2008-2022) on imported gas volumes and related market conditions. The objective is to understand changes in the volumes of gas imported into the EU from its main partner over the past 15 years, with a greater focus on the turning points (2009, 2014, 2022). The numbers will be analyzed with the contextualization of the period reported in the fourth chapter of this thesis, highlighting the relation of the geopolitical field with the energy market for gas. The Quarterly Reports for both markets are available in the CIRCABC database from 2008 to 2020, with the last two years, 2021 and 2022, available on the European Commission's website.

Even though this thesis focuses on natural gas, I am also analyzing reports on the European electricity market because they will help to understand the adjustments that only analyzing one type of source will not be explained. In fact, the availability of cheap electricity is a key factor for the growth and stability of the EU, so the trends in the prices for the electricity become crucial to understand why the relationship with the main supplier of gas is so important and how much our lives as individuals and as a community are affected by events that do not happen in "our own backyard." Furthermore, European Commission "*Quarterly Report on the European Electricity Market*" are available from 2008 to 2022, so the analysis will be carried out in tandem with the gas market.

The method to describe the thesis will start with a reference to the context reported in the precedent chapter for the year 2008, with the tension and condition of the relationship between the EU and Russia; this will allow to understand why the levels of the resource imported are the ones reported in the primary sources and, consequently, the average price for the energy during the year. Afterwards,

37 Eurostat. "*Imports of Natural Gas by Partner Country*". Eurostat- European Commission, 26 January 2023. https://ec.europa.eu/eurostat/databrowser/view/nrg_ti_gas/default/table?lang=en.

this process will be repeated for every single year until the last one taking into consideration, thus year 2022; in any case, not every year can be compared to the others, hence the years when nothing special happened will be the bridge to understand the market trend. On the contrary, during the years in which tension rises, the markets will be better analyzed because the geopolitical challenges somehow impacted, if not the volumes of imported gas, at least the prices of energy in the EU.

The result will be the parallel evolution during the period in the gas market and price of energy, highlighting the strong relationship that exists between the geopolitical field and energetic trades.

This thesis is linked to different theoretical frameworks, for instance the energetic securitization, that has become a well-known subject for scholars after the Ukraine gas crisis in 2009 and, for the EU, after the 2014 Crimea's invasion, when the "European Energy Security Strategy" was published.[38]

Daniel Yergin, one of the most famous scholars on the energy security subject, theorized the classic definition by writing : *"the objective of energy security is to assure the adequate, reliable supplies of energy at reasonable prices in ways that do not jeopardize major national values and objectives"*; the link with this case study is easy, considering that Keppler reported that EU energy resources follow both the standards mentioned in the definition, adding the environmentally friendly standard.[39]

The other perfect fit for this topic would be the evolution of the relationship between the Eastern and Western worlds, applying this theory over the last 15 years, even if the roots of this theory are older and considering a huge number of actors that are not directly involved in this case study.[40]

In fact, over the past two decades, the relations between Eastern and Western worlds have become more conflictual, with a crisis of leadership and identity in the latter and the desire to emerge in the former. Depending on the perspective, Russia is included in the definition of Eastern world, which generally refers to the regions of Asia (China and India) that are trying to emerge as new powers. The world has changed the players involved in the decision-making process, with some minor actors emerging as contenders, e.g., the BRICS nations, for the position always taken up by the Western world.[41]

Since the 2014 invasion of Crimea, President Putin has pursued a public image and declaration strategy in which he attempts to construct a new narrative of events: Russia is seeking to protect itself from the Western dominion strategy. The messages attempt to legitimize Kremlin's behavior in

---

38 Szulecki, Kacper. "*Energy Security in Europe: Divergent Perceptions and Policy Challenges*." Palgrave Macmillan, 2017. P.P. 1-4

39 Yergin, Daniel. "*Energy Security in the 1990s*". *Foreign Affairs* 67, n. 1 (1988):
110. https://doi.org/10.2307/20043677. Yergin, Daniel. "Ensuring Energy Security," *Foreign Affairs 85, no. 2* (2006): 69–82.

40 Malik, Charles. "The Relations of East and West." *Proceedings of the American Philosophical Society* 97, no. 1 (1953): 1–7. http://www.jstor.org/stable/3143724.

41 Ungari, Andrea. "Tra Est e Ovest del mondo, un incontro/scontro di lunga durata". *Open Society Off*, September 26, 2019. https://open.luiss.it/2019/09/26/tra-est-e-ovest-del-mondo-un-incontroscontro-di-lunga-durata/.

Ukraine and the desire to spread Russian culture, undermining the western international position and opposition.[42]

The connection to the topic of this thesis is easy to point out with both theories mentioned above; however, as the methodology explains, this work emphasizes other aspects and does not really fit into either theory. It is important to stress this point because the angle I am analyzing is not circumscribed to just one theory, but that does not mean these theories will not be quoted in some passages; indeed, they will better explain cultural or political aspects that the facts and the numbers do not reveal, expanding and deepening the analysis I will conduct. On one hand, the theory on the energy security is vital to explain the EU desire to protect its energy supplies, support economic stability, reduce geopolitical risks, advance climate and environmental goals, and achieve its energy policy objectives. On the other hand, the second theory will help to better understand how the new narrative is used by the other actor involved, namely Russia, to erode the support and the cohesion from the international community towards the West; this use of the international image has been fight by the EU, for instance reporting different version of the events from the Russian propaganda; the management of the relations and positioning are prominent issue for the EU as well.

To deepen the analysis, it instead takes a comprehensive approach, exploring cultural, political, and numerical aspects. The concept of energy security, as defined by Daniel Yergin, emphasizes the EU's commitment to dependable, affordable, and environmentally sustainable energy supplies. Furthermore, the Eastern-Western relationship theory sheds light on President Putin's efforts to construct a new narrative, erode international support for the West, and the EU's efforts to counter this propaganda.

42 Bridget Kendall, "Crimea crisis: Russian President Putin's speech annotated," *BBC News*, March 19, 2014, accessed May 16, 2023, https://www.bbc.com/news/world-europe-26622558.

CHAPTER 2: INTRODUCTION TO THE ENERGY

2.1) Role of the energy in modern world

The concept of energy is one of utmost importance in the modern world, as it is the driving force behind all aspects of human activity. From powering homes and businesses to fueling transportation and industrial production, it is impossible to overstate the vital role that energy plays in facilitating our daily lives. In recent years, the pressing issues of climate change and energy security have brought increased attention to the sources, availability, and distribution of energy, creating complex and sometimes contentious dynamics among key players in the market sector. For the European Union, a region with a high demand for energy but limited domestic resources, navigating these issues has become an increasingly important priority. Understanding the EU's energy situation, partnerships and relationships is essential to assessing the region's current and future role in the global energy and political landscape.[43]

In physics, energy is defined as the capacity of a physical system to do work. Simplifying, energy is a concept that encompasses the ability to perform work or to cause change in a system. It can be classified as kinetic energy, which is the energy associated with motion, and potential energy, which is the energy associated with the position of an object within a gravitational, electric, or magnetic field. The different forms of energy include heating, lighting, mechanical, nuclear, and gravitational. The importance of energy lies in its ability to power human activities, sustain environments, and create economic development, thus making it a crucial aspect of modern society.[44]

As previously stated, energy is extremely important for every industry, starting from agricultural and industrial production, that are two of the most significant drivers of economic growth and development. Both sectors are known to consume a vast amount of energy, with industrial production being responsible for approximately 40% of world energy consumption. Modern agriculture heavily depends on artificial fertilizers, pesticides, and mechanized farming equipment, all of which require substantial amounts of energy to operate. Despite the ongoing efforts to minimize energy consumption in these sectors, they continue to be energy intensive.[45]

---

43 International Energy Agency, "*World Energy Outlook 2021*," accessed April 28, 2023, https://www.iea.org/reports/world-energy-outlook-2021; European Commission, "Energy Union," accessed April 28, 2023, https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/energy-union_en.

44 Smil, Vaclav. "Energy and Civilization: A History. Cambridge," *MA: MIT Press*, 2018, p. 3-5.

45 United Nations Industrial Development Organization, "*Industrial Development Report 2016: The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development*" (Vienna: United Nations Industrial Development Organization, 2016), p. 194-196.

Transport has always played a vital role in modern society: the development of transport initiated the first wave of globalization and the achievement of the standard of living we know today. It allows people and goods to move quickly and efficiently, enabling communication and economic growth.[46] However, transportation also has a significant impact on energy consumption and gas emission. In fact, nowadays the majority of transports is still reliant on fossil fuels, contributing to air pollution and climate change. The industry sector was the third largest consumer of final energy inside the European Union in 2021, behind households and transport, accounting for the 25.6% of EU's final energy consumption.[47]

By facilitating the exchange of information and ideas, Information and communications technology (ICT) have revolutionized the way we communicate and interact with each other. The emergence of the internet, smartphones, and social media platforms have brought people closer and have enabled them to share their views, opinions and experiences in real-time. Furthermore, advanced communication technologies have again transformed several sectors, including healthcare, finance, and education. By making communication and information more accessible and efficient, technology has played a decisive role in shaping modern society and facilitating its rapid progress.[48]

The last sector with a high energy demand is domestic/household sector, which accounts for a significant part of the world's energy consumption. Energy use in households is mainly for heating, cooling, lighting, and appliances such as refrigerators, washing machines and televisions.[49]

Energy also plays a primary role in international relations, as countries heavily rely on their energy partners for trade and political relationships. Both imports and exports of this commodity can create dependencies and vulnerabilities, and countries often use energy as a key tool for diplomacy and influence. In terms of energy, the European Union stands as a major player in the global market. With a population of over 500 million people, the EU demands a high amount of energy to fuel its daily operations. In recent years, the EU has been working to diversify its energy sources, moving away from traditional fossil fuels towards renewable energy. However, the EU is still heavily dependent on natural gas imports, mainly from Russia. This has caused concerns about the EU's dependence on

---

46 Baldwin, Richard, e Philippe Martin. *Two Waves of Globalization: Superficial Similarities, Fundamental Differences*. Cambridge: National Bureau of Economic Research, 1999. https://www.researchgate.net/publication/5194879_Two_Waves_of_Globalisation_Superficial_Similarities_Fundamental_Differences, P. 2-7.

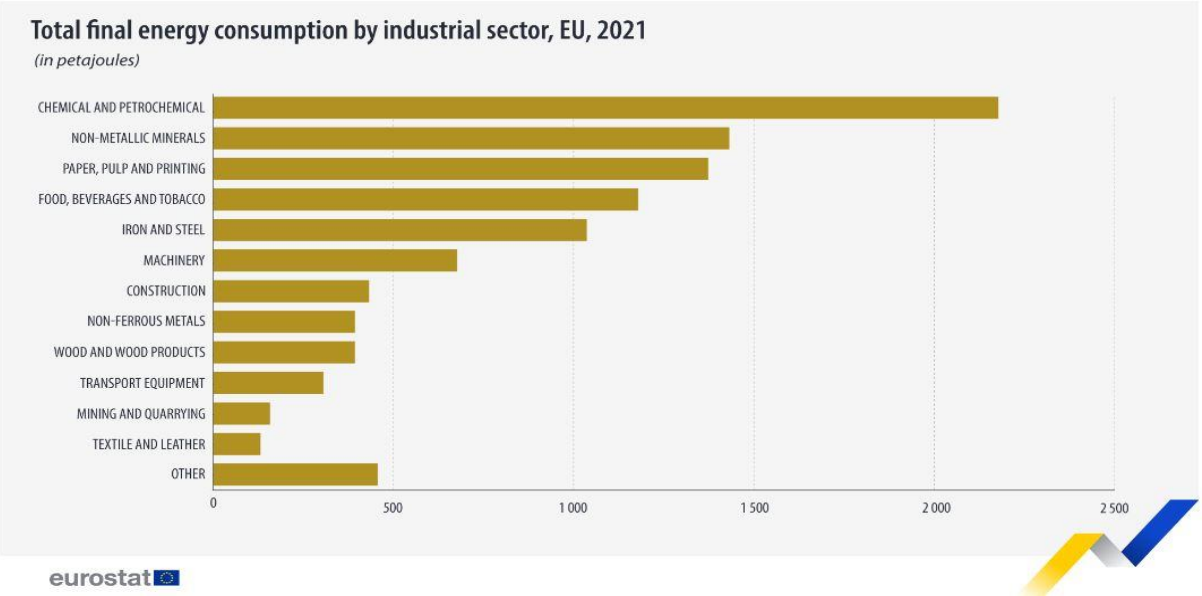
47 Eurostat, "*Industry relied mostly on natural gas & electricity*," Eurostat (12 May 2023), https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230512-1.

48 Baldwin, Richard, e Philippe Martin. *Two Waves of Globalization: Superficial Similarities, Fundamental Differences*. Cambridge: National Bureau of Economic Research, 1999. https://www.researchgate.net/publication/5194879_Two_Waves_of_Globalisation_Superficial_Similarities_Fundamental_Differences, P. 2-7.

49 "*Energy consumption in households - Statistics Explained,"* Eurostat, last modified January 22, 2021, accessed April 29, 2023, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_consumption_in_households.

Russia, particularly in light of political tensions between the two entities.[50] In 2021, the EU's industrial sectors which reported the largest shares of final energy consumption were chemical and petrochemical, with more than one-fifth (21.5%), non-metallic minerals (14.1%), paper, pulp and printing (13.6%), food, beverages and tobacco (11.6%) and iron and steel (10.2%). The lowest share of total final energy consumption was recorded for the textile and leather sector, with 1.3% (Figure 1).[51]

Figure 1 Total final energy consumption by industrial sector, Eurostat: https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230512-1.



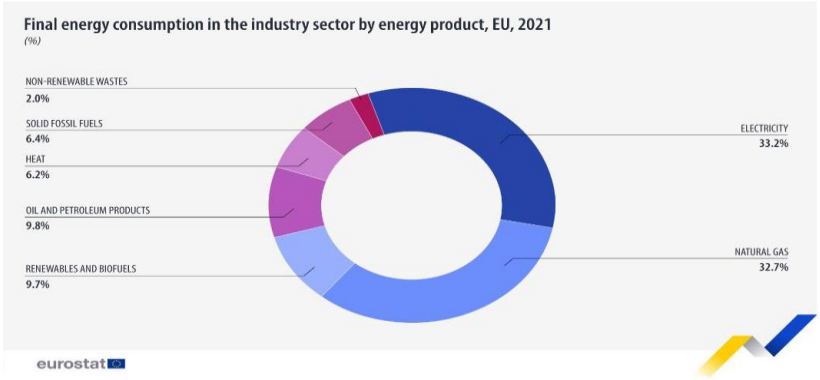
2.2) What is the energy situation inside EU?

The energy situation within the EU is complex and multifaceted. The EU heavily relies on imported fossil fuels, with over half of its energy consumption coming from oil, gas, and coal (Figure 2).

50 European Commission. "*EU Energy in Figures*." Luxembourg: European Commission, 2021. https://op.europa.eu/en/publication-detail/-/publication/41488d59-2032-11ec-bd8e-01aa75ed71a1/language-en. p. 10-32.

51 Eurostat, "*Industry relied mostly on natural gas & electricity*," Eurostat (12 May 2023), accessed on 26/06/2023, https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230512-1.

Figure 2 Final energy consumption in the industry sector by energy product, Eurostat: https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230512-1.



However, there is a growing emphasis on renewable energy sources, through the implementation of the Green Deal policy, aiming to achieve 32% renewables in its energy mix by 2030. The EU has also implemented various policies, such as the Emissions Trading System[52] and the Energy Efficiency Directive[53], to reduce carbon emissions and increase energy efficiency. Numerous countries, including Russia, Norway, Algeria, and Qatar, are among the EU's energy partners, which is crucial for the EU's supplier diversification policy.

The European Union represents the world's third-largest energy consumer area, behind the US and China. The EU's energy mix is composed of various sources, including fossil fuels, nuclear power, and renewable energy. Fossil fuels still dominate the EU's energy mix, accounting for around 70% of primary energy consumption in 2022, with oil being the most significant contributor at 35%, followed by gas almost at 24% and solid fossil fuels at 12%. Nuclear power accounts for around 13% of the EU's electricity generation, while renewable energy sources, including wind, solar, hydro, and bioenergy, make up approximately 18% of the EU's total energy consumption. However, the share of renewable energy in the EU's energy mix has been growing rapidly in recent years, with the EU aiming to reach a 32% share by 2030 (Figure 3).[54]

52 The EU Emissions Trading System (EU ETS) is a cap-and-trade system designed to limit greenhouse gas emissions from installations in the energy and industrial sectors, European Parliament. "The EU Emissions Trading Scheme (ETS) and Its Reform in Brief ". *News European Parliament*, 13 February 2017. https://www.europarl.europa.eu/news/en/headlines/society/20170213STO62208/the-eu-emissions-trading-scheme-ets-and-its-reform-in-brief.

53 This policy aims to increase energy efficiency across all sectors, including buildings, transport, and industry. It sets binding targets for member states to improve their energy efficiency by reducing energy consumption and promoting the use of energy-efficient technologies, European Commission. "Energy Efficiency Directive". *Energy*, 2018. https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficiency-targets-directive-and-rules/energy-efficiency-directive_en.

54 European Environment Agency, "*EU Energy Mix*," Signals 2022, accessed April 29, 2023, https://www.eea.europa.eu/signals/signals-2022/infographics/eu-energy-mix/view.

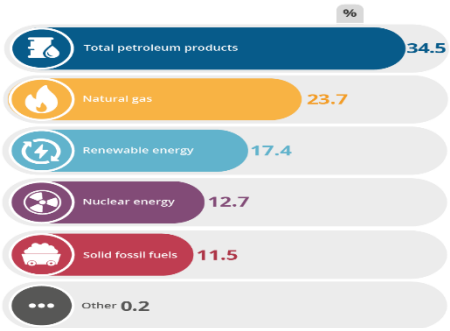


Figure 3 EU Energy Mix in 2022 https://www.eea.europa.eu/signals/signals-

Although the EU has made significant progress in reducing its carbon emissions, it is still heavily dependent on fossil fuels, which accounts for over two-thirds of its energy consumption. EU's energy imports mainly come from Russia, which represents its largest natural gas supplier, however, there are concerns over its dependence on Moscow and the perceived trustworthiness of the latter, especially after the Ukrainian gas crisis in 2006 and 2009, the Crimea invasion in 2014 and, lastly, the Ukraine war in 2022.

The High Representative of the Union for Foreign Affairs and Security Policy Josep Borrell, while visiting Kyiv declared in January 2022 shortly before the Russian invasion: "*There is no security in Europe without the security of Ukraine.*"[55]

Borrell with this statement expressed the necessity for the EU security, both political and energy, to solve the border tension. The EU, due to the risks it is exposed, has adopted a "diversification policy" over the years by diversifying its energy sources and investing in renewable energy production.[56]

The European Union has also opened new partnerships with several countries to ensure a stable and secure energy supply, such as the Southern Gas Corridor with Azerbaijan[57] and the Euro-Mediterranean Energy Partnership.[58] However, the EU's relationship with its principal energy supplier, Russia, is often fraught with tension due to political/economic disagreements and perceived trust issues that could affect the future of the European Union. The EU must navigate these complexities and continue to pursue a sustainable and secure energy future.

2.3) The perceived trustworthiness of the EU towards Russia

The EU relies on Russia for approximately one-third of its natural gas supply, making it the EU's largest external gas supplier. Energy relations between the EU and Russia have been a source of tension due to disputes over pricing, market access, and the security of energy transit routes. The EU

55 European External Action Service. "*EU Diplomatic Outreach in the Context of Security Challenges with Russia*." EEAS - European External Action Service, 1 February 2022, https://www.eeas.europa.eu/eeas/eu-diplomatic-outreach-context-security-challenges-russia_en.

56 European Parliament. "Energy Policy: General Principles". Fact Sheets on the European Union, April 2023. https://www.europarl.europa.eu/factsheets/en/sheet/68/energy-policy-general-principles.

57 European Commission, "*Diversification of Gas Supply Sources and Routes*", Energy, consultation on 26 June 2023, https://energy.ec.europa.eu/topics/energy-security/diversification-gas-supply-sources-and-routes_en#developing-the-mediterranean-hub.

58 European Commission, "EU Neighborhood-South", *Energy*, consultation on 26 June 2023, https://energy.ec.europa.eu/topics/international-cooperation/key-partner-countries-and-regions/neighbourhood-south_en.

has worked to diversify its energy supply by investing in renewable energy sources, increasing energy efficiency, and exploring alternative gas pipelines. However, despite efforts to reduce dependency, Russia remains a significant energy partner for the EU. European countries have tried to decrease their subordination to Russian natural gas by increasing imports from other countries such as Norway, Algeria, and the United States; however, the presence of functioning infrastructures and the low costs of energy resources have slowed this process of differentiation.

The perceived trustworthiness of the EU towards Russia has been a hotly debated topic in recent years, starting from 2009 gas flow interruption, following the annexation of Crimea in 2014 and the subsequent sanctions imposed by the EU on Russia, hence the political relations between the two entities have been strained. Many EU member state politicians consider the EU's actions as a response to Russian aggression and a demonstration of their commitment to upholding international law; others argue that the EU's reliance on Russian oil and gas undermines the credibility of its actions; those different opinions divide the EU members on the strategy to implement to step away from Russia.[59]

The energy relation between the European Union and Russia is of extreme importance, given that Russia is one of the EU's largest energy suppliers. Within the EU, over 40% of natural gas consumption is imported, and around one-third of that gas comes from Russia. Therefore, any instability in the energy partnership between the EU and Russia could have significant consequences for the EU's energy security, such as a supply shutdown occurred in January 2009. Additionally, the EU and Russia's energy relationship goes beyond being purely economic but becoming more and more political. The dependence on Russian energy has raised concerns over the EU's energy security, which leads to questions about the EU's foreign policy towards Russia. The EU needs to ensure a reliable supply of energy and, in doing so, reduce their energy imports from Russia. This creates a delicate balancing act to maintaining a reliable source of energy while also reducing dependence on Russia.[60]

The perceived trustworthiness of the European Union towards Russia is a complex and multifaceted issue. On one hand, the EU has historically been a major importer of Russian energy resources, which helped to fuel the growth of the Russian economy. At the same time, the EU criticized many times the human rights situation in Russia and imposed economic sanctions in response to its military intervention in Ukraine in 2014.[61] At the moment the relationship between the two actors has been

59 Race, Michael. "EU Divided Over How to Step Away from Russian Energy". *BBC News*, 2 May 2022. https://www.bbc.com/news/business-61298791.

60 Keppler, Jan Horst. "*International Relations and Security of Energy Supply*." P.25.

61 European Council, "*Russia: EU renews economic sanctions over Russia's military aggression against Ukraine for further six months*," press release, July 26, 2022, https://www.consilium.europa.eu/en/press/press-releases/2022/07/26/russia-eu-renews-economic-sanctions-over-russia-s-military-aggression-against-ukraine-for-further-six-months/

interrupted due to the invasion of Ukraine in 2022. This led to a tense relationship between the two powers, on one side Russia seeks to diversify its energy exports away from the EU and towards other countries like China, on the other side the European Union starts to weave relationship with new suppliers to compensate for the failed export from Moscow.[62]

The Nord Stream 2 gas pipeline is a further important issue that has impacted how Russia consider the EU's level of trustworthiness. The EU has started a heated debate on this pipeline, planned to transport natural gas from Russia to Germany via the Baltic Sea. Critics contend that the pipeline would have increased Europe's dependence on Russian gas and jeopardized the EU's energy security; while proponents assert that it would have given the EU a reputable energy source and helped reduce carbon emissions by displacing coal-fired power plants.[63]

Cybersecurity is another element that aggravated the relations between the EU and Russia. In recent years, numerous high-profile cyber-attacks on EU institutions and Member States have been linked to Russian hackers; the 2017 attack targeted the French presidential election. These attacks sparked concerns about the vulnerability of the EU's digital infrastructure and the need for increased cyber security cooperation between the EU and Russia.[64]

The EU's relations with Russia have also been impacted by the Syrian conflict. Russia's military involvement in the Syrian conflict has drawn criticism from the EU, which has responded by sanctioning Russia. This has further damaged the mutual trust between the two powers and made it more challenging to agree on other issues.[65]

In conclusion, there are many different economic, political, and security factors that have an impact on the EU reliability towards Russia. The EU's dependence on Russian energy, the Nord Stream 2 pipeline, cyber security worries, the Syrian conflict, and, of course, the tensions in Ukraine that erupted into war last year, are all factors that have strained relations between the two parties.

2.4) Briefing information

Before moving on to the next chapter, which will explain the historical relationship between Russia and the EU over the last 15 years, with a focus on 2008 growing tension in Ukraine (the year before the Ukraine gas crisis) and ending in 2022, when Vladimir Putin, President of the Russian Federation,

---

62 Anna Shiryaevskaya, "Russian Gas Pivot Toward China Will Ease Europe's Energy Crunch," *Bloomberg*, July 29, 2022, accessed April 30, 2023, https://www.bloomberg.com/news/articles/2022-07-29/russian-gas-pivot-toward-china-will-ease-europe-s-energy-crunch#xj4y7vzkg.

63 Siddi, M. "EU-Russia Energy Relations." In *Handbook of Energy Governance in Europe*, edited by M. Knodt and J. Kemmerzell, 237-261. Springer, Cham, 2022.

64 Mark Hosenball, "Russian intelligence attempted to hack French election: cyber experts," *Reuters*, May 6, 2017, https://www.reuters.com/article/france-election-russia-idINKBN1852KG.

65 Kaczmarski, Marcin. "The Ukraine Crisis and EU-Russia Relations: Strategic Consequences for the European Union." *Journal of Contemporary European Studies 24, no. 4* (2016): 471-86. doi:10.1080/14782804.2016.1213467. p.478.

declared the start of the invasion of Ukraine, it is important to summarize the key information from this chapter.

In conclusion, the EU's energy situation is difficult and multifaceted. The Union is heavily dependent on energy imports, with around 70% of its energy needs being met by external sources such as Russia, Norway, and Middle Eastern countries. Meanwhile, the EU is trying to implement policies to reduce its reliance on fossil fuels and promote renewable energy sources such as wind, solar, and hydropower, even if these policies have met with opposition from some EU member states who argue that they are too expensive and damage their economies. In fact, EU member states are frightened of the large upfront investments costs as well as the impact on their traditional industries that rely on mining coal and hydrocarbon fossils. In addition, the investments would require price increases that would reduce the competitiveness of their products.

This dependence condition necessitated the search for a partner willing to export these resources, and one such supplier has been Russia, which is the main supplier of gas imports and one of the most important for oil and nuclear.

Nonetheless, energy relations between the two actors were tested by several political issues that eroded the EU's trust in the Kremlin; the events, which will be discussed further in the following chapter, led to the demise of the energy partnership.

CHAPTER 3: HISTORICAL BACKGROUND

3.1) Energy partnership between Europe and Russia during the Cold War to the beginning of the 21st century

The early years of the Cold War (1947-1962) were marked by tensions and rivalries between the United States and the Soviet Union, which also used Europe as stage for their feuds. The conflict between the US and USSR was characterized by a series of proxy wars, espionage, and nuclear arms races. The conflict was mainly based on the ideological and geopolitical struggle for global influence between the two superpowers. The Truman Doctrine, which was implemented in 1947, marked the official start of the Cold War. The "Doctrine" stated that the United States should provide material support to any democratic nation that was at risk – from anti-democratic forces, that is, communism. President Truman declared: "it *must be the policy of the U.S. to support free people who are resisting attempted subjugation by armed minorities or by outside pressures."* In accordance with the Truman Doctrine, the United States enacted the Marshall Plan, which provided economic assistance for all European countries willing to participate, including the Soviet Union, who refused and created, in 1947, their own Molotov Plan for the Eastern Bloc. The Molotov Plan and the Warsaw Pact, a Treaty of Friendship, Cooperation and Mutual Assistance established in 1955, were designed to strengthen Soviet influence in Eastern Europe. The Soviet Union refused the aid because Stalin believed that the economic integration with the West Nations would allow Eastern Bloc countries to leave the Soviet control. The Molotov Plan later expanded into the COMECON: a system of bilateral trade agreements and an economic alliance between socialist countries in the Eastern Bloc. The tensions peaked in 1962, during the so-called Cuban Missile Crisis, which brought the two superpowers to the brink of nuclear war that would involve the entire world, but ultimately led to the signing of the Limited Test Ban Treaty in 1963, which prohibited nuclear weapons testing in the atmosphere, outer space and underwater. These early years of the Cold War set the tone for the coming decades, as the conflict continued to shape global politics and foreign relations.

The role of Soviet oil and natural gas played a significant role in Europe's post-World War II economic recovery. Soviet energy exports were not only a critical source of fuel for Europe's growing economy, but they also served as a lifeline for countries struggling to rebuild after the war. The Soviet Union's vast reserves of oil and natural gas provided Europe with stable and secure energy supplies, which helped to spur economic growth and modernization throughout the continent. Moreover, the willingness of the Soviet Union to provide energy supplies to Europe helped to create a strong economic partnership between the two regions, which lasted throughout the Cold War and beyond.

Overall, the role of Soviet oil and natural gas in Europe's economic recovery was vital and played an essential part in shaping the economic and political relations between Europe and the Soviet Union.[66] One significant event that took place during the Cold War and helped to build the energy partnership between the western European countries and Soviet Union was the energy crisis of 1970s. The global energy market witnessed a huge price increase following the 1973 OPEC oil embargo imposed by Arab countries against the United States and its allies. This crisis directly affected the economies of the West and created a sense of insecurity due to the dependency on Middle Eastern oil. However, the crisis played a positive role in promoting "détente" between the Soviet Union and the West. Energy became a topic for discussion between the superpowers, and negotiations for cooperation on energy issues began. During this period, the Soviet Union increased its oil exports and established pipelines to Western Europe. The détente period resulted in the relaxation of tensions between the two superpowers and facilitated cooperation in areas of common interest such as energy.[67]

The 1970s energy crisis had a significant impact on the relationship between Western Europe and Russia: in fact, Western Europe became heavily dependent on Russian oil and gas imports. Moscow had already exported oil and gas to Western Europe in the early 1970s, but the energy crisis provided a unique opportunity for the Soviet Union to become the main energy supplier to Europe due to its reliability and low resources prices.[68] This industrial partnership between the two actors during the Cold War was primarily driven by the need for energy security for Western European countries, meanwhile, the establishment of the Soviet Union's energy dominance over the continent was a strategic achievement that would have given the country significant leverage in its negotiations with Europe in the future. The Soviet Union had vast oil and gas reserves, and through its state-owned energy companies, was able to dictate terms and pricing to European customers. Additionally, the Soviet Union built extensive infrastructure to transport its oil and gas from Siberia to Western Europe. Among them, the Trans-Siberian pipeline was a crucial link that connected the Soviet Union's oil and gas fields to its European markets.[69]

In the 1980s, the Soviet Union also began exporting natural gas, which quickly became a significant source of revenue. The combination of vast reserves, transport, infrastructure, and competitive pricing put the Soviet Union in an advantageous position and enabled it to establish energy dominance over

66 Melvyn P. Leffler and Odd Arne Westad, eds., "*The Cambridge History of the Cold War*", Volume 2 (Cambridge: Cambridge University Press, 2010), P. 283.

67 Perović, Jeronim, and Dunja Krempin. "'The Key Is in Our Hands:' Soviet Energy Strategy during Détente and the Global Oil Crises of the 1970s*." Historical Social Research / Historische Sozialforschung 39, no. 4* (150) (2014): 113–44. Accessed May 1, 2023. http://www.jstor.org/stable/24145530. P.P. 128-131.

68 Perović and Krempin, "The key is in our hands." P. 132-134

69 Connolly, Daniel, e Jae-Seung Lee. "Pipeline Politics Between Europe and Russia: A Historical Review from the Cold War to the Post-Cold War". *Korean Journal of International Studies* 14, n. 1 (30 April 2016): 105. https://doi.org/10.14731/kjis.2016.4.14.1.105, P. 106-114.

Europe. This dominance continued until the dissolution of the Soviet Union into several independent countries in 1991. In fact, multiple countries had origin from the USSR, for instance Ukraine, Moldavia, Belarus, Estonia, Latvia and Lithuania in the European side, Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyzstan and Tajikistan in Central Asia and of course the Russian Federation.[70]

The end of the Cold War and the expansion of energy trade between Europe and Russia was a significant turning point in their relationship, which would ultimately shape the energy landscape for years to come. In the mid-1980s, Soviet leader Mikhail Gorbachev embarked on a new path of economic and political reforms, known as "Perestroika" (meaning "reconstruction") and "Glasnost" (meaning "openness"), which ultimately led to the fall of the Berlin Wall and the end of the Cold War. This new political and economic order paved the way for the expansion of energy trade between Russia and Europe, which now includes not only pipelines and infrastructures, but also joint-ventures and investments in upstream and downstream projects. Over the next two decades, Russia became the dominant supplier of natural gas to Europe, providing much-needed diversification and security of supply to reduce Europe's dependence on the Middle Eastern oil.[71]

However, the collapse of the Soviet Union had a significant impact on European energy security. With the dissolution of the Soviet Union, the main reserves of Oil and Natural Gas remained in Russia, who began to undergo a massive transition in its political and economic systems. The new international context in Europe changed with the fall of the Soviet Union: the former Soviet republics gained independence and emerged as new players in the energy sector, leading to new dynamics and difficulties in the sector, especially for the transit of resources. The new Russian government implemented policies aimed at liberalizing the country's economy, including the energy sector; energy production and distribution have been affected by the transition from a planned to a more market-based economy, which has influenced the stability and reliability of energy supplies to European countries. This led to the rise of new private energy companies, which brought new and different approaches to operating and trading energy resources. This period of transition posed significant challenges for the European energy sector. European countries were heavily reliant on the Soviet Union for their energy supplies, and the change in the Russian energy market left them in a precarious position. Thus, Europe was forced to conduct extensive negotiations with the new Russian government to ensure the security of its energy supplies, giving rise to new forms of cooperation between the two regions.[72]

---

70 Perović and Krempin, "*The key is in our hands*" P. 137-139

71 Hill, Fiona. "Energy Empire: Oil, Gas and Russia's Revival." *Foreign Policy Centre*, 2004. P.P. 1-57.

72 Aalto, Pami. "European Perspectives for Managing Dependence." In *Russian Energy Power and Foreign Relations: Implications for Conflict and Cooperation*, edited by Jeronim Perovic, Robert W. Orttung, and Andreas Wenger, 157-180. Routledge, 2009. https://doi.org/10.4324/9780203880098.

The response to growing concerns was the establishment of the European Union's energy policy aimed at promoting a diverse, independent, and low-carbon energy mix, with a focus on the promotion of renewable energy sources. It has enabled the harmonization of the energy policies of Member States' energy policies, making it possible to coordinate efforts to increase energy efficiency, diversify energy sources, and reduce greenhouse gas emissions. Furthermore, the policy facilitated the development of energy infrastructure, including interconnections between different countries, which contributed to improved energy security and greater market integration. Ultimately, of the European Union's energy policymaking has been instrumental in promoting a secure, sustainable, and competitive energy sector in Europe.[73]

In the first half of the first decade of the new millennium, energy security has been a major challenge for the global community. Instability in the Middle East and the growing demand for energy from emerging economies such as China and India put immense pressure on the global energy market. The increasing reliance on fossil fuels and the persistent lack of investment in alternative energy sources deepened concerns about energy security. Rising oil prices have also presented a significant challenge for energy-intensive countries, driving the need to diversify energy sources. Furthermore, geopolitical tensions between major energy producers such as Russia and the United States have raised concerns about energy availability and accessibility. Addressing the challenge of energy security required collaboration and partnerships between energy producing and consuming nations, highlighting the importance of establishing an energetic partnership between Europe and Russia. In the early years of the millennium, Russia has become one of the world's leading energy producers, and its energy resources have granted the country substantial economic and political power. The Kremlin uses its energy as a tool to pursue its geopolitical objectives and to protect its interests. Moreover, as Europe is dependent on Russia's energy resources, Moscow has often used this as leverage to pursue its international and political objectives.[74]

On 7 May 2000, Vladimir Putin was elected President of the Russian Federation after the resignation of the of his predecessor, Boris Yeltsin; Putin will cover the position for the second time from 2004 until the end of the mandate. During his first two presidential terms, Vladimir Putin implemented numerous policies and reforms in the Federation, for instance, Economic Reforms (stabilizing the Russian economy and improving life standards for many Russians; he also introduced a flat tax rate

73 European Commission. "*2006. White Paper: A European Strategy for Sustainable, Competitive, and Secure Energy*." Brussels: European Commission. https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:317E:0876:0889:EN:PDF.

74 Corbeau, Anne-Sophie. "*How Deep is Europe's Dependence on Russian Oil*?" Columbia Climate School News. March 14, 2022. https://news.climate.columbia.edu/2022/03/14/qa-how-deep-is-europes-dependence-on-russian-oil/.

of 13%, which simplified the tax system and attracted foreign investment)[75] or Social Welfare (increasing the access to healthcare and education for many Russian).[76] Putin also had interest in the reform of energy industry, starting with nationalizing energy assets and expanding oil and gas production, subsequently increasing export to Europe and opening new paths to Asia. Putin has used energy exports and energy-related infrastructure projects as a tool for diplomacy and leverage.[77]

To illustrate this, some of the major events of this period were energy-related, such as the gas disputes between Russia and Ukraine, a major one in 2006, which had a significant impact on Europe's energy security. The dispute led to a sharp reduction in the delivery of Russian natural gas to European countries. This fact led to a massive energy crisis that affected several European countries in Eastern and Central Europe, including Germany, Italy (24% reduction), France (25-30% reduction), and Poland (14% reduction). The crisis raised serious concerns about the reliability of Russian gas supplies and highlighted Europe's energy dependence on Russia. It has also sparked a renewed interest in developing alternative energy sources, such as renewables and liquefied natural gas (LNG), which could ensure Europe with greater energy security. The dispute underlined the need for a more diversified energy supply and the importance of energy security in Europe's foreign policy.[78]

To sum up this very long-time span, the energetic partnership between Europe and USSR and, later, Russia during the Cold War till the early years of the 21st century was characterized by both tension and cooperation, as each side worked to advance its own interests while recognizing the need for stability and security in the region. Although ideological differences and political tensions occasionally threatened to derail the partnership, both sides ultimately recognized the benefits of continued cooperation and worked to manage their differences through diplomatic channels.

3.2) The first shock: disruption of natural gas supply in 2009

The period from 2006 to 2009 has been characterized by complex and tense relations between the EU and Russia. In these three years, many events changed the context in which the two actors were involved such as the political aspect: alignments changed, EU and NATO expansionism came to a standstill, the different political positioning in international affairs and, finally, the economic aspect with regard to energy cooperation.

---

75 Guriev, Sergey. "20 Years of Vladimir Putin: The Transformation of the Economy." *The Moscow Times*, August 16, 2019. https://www.themoscowtimes.com/2019/08/16/20-years-of-vladimir-putin-the-transformation-of-the-economy-a66854.

76 European Parliament Think Tank. "*Human Development in Putin's Russia: What the Data Tell Us*." Briefing, April 21, 2022. Accessed May 2, 2023. https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)729375, P.P. 3-7

77 Hill, Fiona, and Florence Fee. "Fueling the Future: The Prospects for Russian Oil and Gas." *Demokratizatsiya 10, no. 4 (Fall 2002*): 462-487.

78 BBC News. "Ukraine 'stealing Europe's gas'." *BBC*, January 2, 2006, http://news.bbc.co.uk/2/hi/europe/4574630.stm.

Due to the 2006 gas dispute between Russia and Ukraine occurred in 2006, the latter played an important role in the EU supply chain at the time, accounting for the transit of almost 80% of supplies. Transit through Kiev territory increased from a volume of 112,4 bcm per year in 2003 to a peak of 121,5 bcm per year in 2005. The first interruption the following year led to a less reliance on the Ukrainian pipelines in the coming years.[79]

In May 2007, Russian President Vladimir Putin, accompanied by the Foreign Minister Sergey Lavrov, hosted the EU-Russia summit in Samara. On the table of this meeting there were many topics, due to the increasing tension between the two actors, such as: preparations for a new EU-Russia agreement to replace the current Partnership and Cooperation Agreement, the state of progress of Russia's accession to WTO, the implementation of the Kyoto Protocol and the preparations for post-2012 climate change negotiations, cooperation in the field of freedom, security and justice, international issues, such as Kosovo, the Iranian nuclear program and the Middle East and of course energy cooperation and a better exchange of information on possible problems with gas and oil supplies.[80]

The Samara Summit, in its entirety, was a reflection of the escalating differences between the EU and Russia over a number of issues as well as the parties' difficulties in preserving a constructive relationship and dialogue in the face of these differences. Although the summit did not yield any outstanding results because due to the controversy in Eastern Europe and the Balkans, it gave the two sides the chance to communicate and express their priorities and concerns.[81]

Relations deteriorated the following year, 2008, as many situations worsened; in chronological order, the first event was the negotiation of a new partnership agreement to replace the 1997 Partnership and Cooperation Agreement, which expired in July 2008. The aim of the new agreement was to reach 'legally binding commitments' in areas such as political dialogue, justice, freedom, security, economic cooperation, research, education, culture, trade, investment and energy.[82]

However, the negotiations were fraught with difficulties, and, in August of the same year, the second event happened: the war in Georgia which led to a temporary cooling of relations with the European Union. At the time, Russia attacked Georgia under the guise of defending pro-Russian separatists in the South Ossetia region, but three years later, then-president Dmitry Medvedev acknowledged that

79 Pirani, S., Stern, J., & Yafimava, K. "*The Russo-Ukrainian Gas Dispute of January 2009: A Comprehensive Assessment.*" Oxford Institute for Energy Studies, 2009, P. 6.

80 European Commission. "*EU-Russia Summit: Joint Statement, Samara, 18 May 2007*." Press release, Brussels, 16 May 2007, https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_07_682/IP_07_682_EN.pdf.

81 Harding, Luke, and Ian Traynor. "EU-Russia Summit in Danger of Unravelling." *The Guardian*, May 17, 2007, https://www.theguardian.com/world/2007/may/17/eu.russia.

82 European Parliament. *"Russia: Agreements in force*." Last modified June 2021. Accessed May 3, 2023. https://www.europarl.europa.eu/factsheets/en/sheet/177/russia.

the war had delayed Tbilisi's application for NATO membership, suggesting that this had been its true goal the entire time.[83]

The EU condemned Russia's actions and demanded an immediate end to the conflict, which increased tensions between the EU and Russia. Russia's recognition of South Ossetia and Abkhazia as independent nations was also criticized by the EU as a breach of Georgia's territorial integrity. The conflict emphasized not only the EU's dependence on Moscow but also made the latter emerge as an important geopolitical actor in the Central Asian region, influencing many other EU suppliers, such as Kazakhstan, Turkmenistan, and Uzbekistan. The energy security of many EU members may have been affected by the destruction of pipelines during the war, underlining the need for the EU to diversify its energy sources.[84]

Ultimately, the hard period in relations between the two players culminated with the last third 3) event of the year: the so-called Ukraine Gas Crisis during the last part of 2008 and in January 2009. The roots of the crisis started to grow earlier, with several contract and pricing disputes between Russian and Ukrainian gas/transit companies. To solve this problem, Yulia Tymoshenko, the prime minister of Ukraine, and Vladimir Putin, the prime minister of Russia, agreed to a deal in October 2008 to raise import costs and transit tariffs to "market-based, economically based and mutually agreed levels" over three years. The agreement also stated that Naftogaz would purchase gas directly from Gazprom and act as the sole importer of gas into Ukraine, cutting out intermediaries. Similar terms were included in a long-term agreement that Gazprom and Naftogaz signed in November, but this agreement differed in that it mentioned transit fees remaining at the 2008 level and didn't specify an import price. In the third week of November, Gazprom CEO Miller warned that prices might increase significantly above what was being proposed if an agreement was not reached by the end of the year. A few days later, Prime Minister Putin warned that gas supplies to Ukraine would be halted if there was any interference with the gas transit. During December, these warnings were reiterated along with those of a possible supply disruption in Europe. The Energy Charter Secretariat released a statement on December 23 recalling the principle of uninterrupted transit. This served as a warning to Ukraine regarding its responsibilities under the Energy Charter Treaty, which it signed and ratified, unlike Russia. Large amounts of Naftogaz debt remained outstanding by the end of the year. The situation evolved in a declaration debate until the 30 December, when Naftogaz paid part of the debt to RosUkrEnergo for outstanding gas deliveries. Negotiation escalated with Gazprom threatening to

83 Martin Russell, "The EU and Russia Locked into Confrontation," *EPRS | European Parliamentary Research Serv*ice, July 2020, https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/652030/EPRS_BRI%282020%29652030_EN.pdf.

84 Barysch, Katinka. "*Europe and the Georgia-Russia conflict*." Centre for European Reform. 30 September 2008. https://www.cer.eu/in-the-press/europe-and-georgia-russia-conflict.

cut of the export of gas for Ukraine and Naftogaz considering gas transit to Europe as belonging to "unidentified owner" and using it to keep the system running. On December 31, after which gas supplies to Ukraine would be cut off, the two players failed to come to an agreement on transit and import prices, and barriers remained.[85]

The crisis officially started between January 6th (deliveries to Europe drastically reduced) and 7th (deliveries to Europe completely cut off) 2009. For 13 days, gas was completely cut off to south-eastern European countries entirely reliant on imports from Russia, as well as partially to other countries; for instance, Bulgaria had a cut of 100%, Slovakia 97%, Austria 66% and Cech Republic 71%.[86] Meanwhile, both Russia and Ukraine pointed the finger at the other showing little urgency in reaching a preliminary agreement. The EU tried to find a compromise between the two without success. The crisis persisted until January 19th, when the two firms finally negotiated two new supply and transit contracts. Gas started to flow normally to Europe in the morning of 20 January.[87]

It is undeniable the deep cooperation between Gazprom and the Russian government, in fact, the reaction, resulting from the dispute, compared to the economic damage received, is incomprehensible. This demonstrates that the political role of Ukraine was central to Moscow: destabilizing an already unstable Ukrainian political and economic system, especially its president due to his support for EU and NATO policies along with Georgia, during Russia's 2008 invasion. Under the economic standpoint, Russia wanted to reduce control over infrastructure and reduce Ukraine's influence/power in the energy industry and Russia-EU relations.[88]

From the EU's point of view, this crisis ruined trust in the long-standing partnership with Russia. The gas outage in January 2009 caused shortages in many EU member states, particularly in Eastern and Central Europe, resulting in price increases as well as economic and humanitarian damage in these countries. The crisis highlighted for the first time the EU's dependence on Russian gas and underlined the need for the EU to diversify energy sources and suppliers to increase its energy security. It also revealed the EU's potential susceptibility to Russian political pressures in the energy sector. [89]

To conclude this chapter, it should be emphasized that relations between the EU and Russia were extremely difficult in the period 2006 - 2009. Concerns about energy security and dependence on Russian exports arose because of the 2006 Russia-Ukraine gas dispute and the subsequent reduction

---

85 Pirani, S., Stern, J., & Yafimava, K. "*The Russo-Ukrainian Gas Dispute of January 2009: A Comprehensive Assessment*." P.12-18.

86 Pirani, S., Stern, J., & Yafimava, K. "*The Russo-Ukrainian Gas Dispute of January 2009: A Comprehensive Assessment*." P. 53-55.

87 Pirani, S., Stern, J., & Yafimava, K. "*The Russo-Ukrainian Gas Dispute of January 2009: A Comprehensive Assessment*." P. 19-25.

88 Pirani, S., Stern, J., & Yafimava, K. "*The Russo-Ukrainian Gas Dispute of January 2009: A Comprehensive Assessment.*" P. 31-36.

89 Pirani, S., Stern, J., & Yafimava, K. "*The Russo-Ukrainian Gas Dispute of January 2009: A Comprehensive Assessment.*" P. 58-59.

of gas flow to EU Member States. Both sides had the opportunity to express their priorities and concerns at the 2007 EU-Russia summit in Samara, but there were no notable results. Due to difficulties in negotiating a new partnership agreement, the war against Georgia and the gas crisis in Ukraine, relations between the two countries deteriorated in 2008. The latter event greatly influenced the quality of relations, because for the first time the EU realized the risks of the energy partnership with Gazprom, which was extremely bound up with political issues. Meanwhile, Russia began to show a desire to maintain influence and security in the region, with a particular interest in maintaining physical distance with NATO and the EU.

3.3) Invasion of Crimea in 2014

Due to its emphasis on the EU's reliance on Russian energy resources and the potential risks associated with it, the 2009 gas crisis was a significant development in Russia-EU relations. Indeed, concerns about Russia's intentions towards the EU, particularly regarding energy security, were raised using gas as a political tool during the crisis.

Despite these tensions, the EU and Russia continued to engage in economic and political cooperation through various channels. Following this event, the EU and Russia discussed and launched initiatives to increase the EU's energy security and diversify its energy supply. The EU's Third Energy Package, adopted in 2009, is one such initiative, with the aim of stimulating competition in the energy market and reducing dependence on a single supplier. The unbundling of energy supply and production companies is one of the most important provisions of the package.

In order to promote fair competition and avoid discrimination against new market entrants, energy companies must separate production and supply activities from transmission networks. Secondly, it also calls for the establishment of independent National Regulatory Agencies (NRAs) for the energy sector: these NRAs are tasked with ensuring the fair functioning of the energy market and defending the interests of consumers. Finally, this policy includes measures to increase market transparency, such as requiring energy companies to disclose details of costs, agreements, and ownership arrangements. The package also includes clauses to encourage the use of renewable energy sources and energy efficiency.[90]

Russia, however, opposed the package because it jeopardized its hegemonic position in the European energy market. In fact, these measures would limit Russia's control over the European energy market and its ability to influence energy prices and supplies. In addition, Gazprom would have to separate

90 European Parliament and Council of the European Union. 2009. "*Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC."* Accessed May 8, 2023. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0073&from=EN.

its supply and production operations and sell its pipeline-related assets, which could undermine its business model and limit its ability to control gas prices by reducing its dominance over the entire supply chain. Lastly, according to Russia, NRAs would be used to discriminate against its energy companies, preventing them from accessing the European market and being competitive.[91]

In the following year, the two actors tried to strengthen their bonds with many initiatives, to heal relations and demonstrate to the world the desire and willingness to cooperate. The main one of this initiative was the 25th Summit on 31 May – 1 June 2010, in Rostov-on-Don; the European Union and Russia launched the Partnership for Modernization to the mutual benefit of their citizens.

Quoting the EU's documentation: "the priority areas of the Partnership for Modernization will include: expanding investment opportunities in key sectors driving growth and innovation, enhancing and deepening bilateral trade and economic relations, and promoting small and medium sized enterprises; promoting alignment of technical regulations and standards, as well as a high level of enforcement of intellectual property rights; improving transport; promoting a sustainable low-carbon economy and energy efficiency, as well as international negotiations on climate change; enhancing co-operation in innovation, research and development, and space area; ensuring balanced development by addressing the regional and social consequences of economic restructuring; ensuring the effective functioning of the judiciary and strengthen the fight against corruption; promoting people-to-people links; and enhancing dialogue with civil society to foster participation of individuals and business."[92]

Another important forum for energy cooperation between the EU and Russia took place in 2010: the EU-Russia Energy Dialogue. The discussion was aimed at increasing energy security, promoting the use of renewable energy sources and market transparency and stability in the energy sector. This event actively demonstrates the actors' desire to become closer partners under many aspects, first and foremost in the energy trade, even after a huge crisis that caused a transformation in relations.[93]

2011 was a very controversial year. Moscow while demonstrating many acts of cooperation, such as WTO membership or the willingness to facilitate the mobility of Russian and EU citizens, however, implemented strategies to create tensions including strong objections to the Third Energy Package

91 Fox, Benjamin. "Russia to File WTO Lawsuit Against EU Energy Laws." *EUobserver*, May 1, 2014, Brussels. https://euobserver.com/news/123984.

92 Council of the European Union, "*Joint Statement on the Partnership for Modernization, EU-Russia Summit, 31 May-1 June 2010,*" Rostov-on-Don, 1 June 2010, 10546/10, PRESSE 154. https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/er/114747.pdf.

93 European Commission, "*EU-Russia Energy Dialogue Thematic Group on Energy Efficiency*," Report 2010, (2010), accessed May 9, 2023, https://energy.ec.europa.eu/system/files/2014-10/2010_energy_efficiency_report_0.pdf.

and the Kremlin's role in the Syrian civil war (since the beginning of the Syrian conflict in 2011, Russia has provided political and arms support to Syria's incumbent president, Bashar al-Assad).[94]

The same controversies continued the following year, while in 2013, relations between Russia and the EU began to show signs of weakness that would eventually lead to the events of 2014. Ukrainian President Yanukovych, elected in 2010, decided not to sign the European Union–Ukraine Association Agreement, deciding instead to establish a closer relationship with Russia and Eurasian Economic Union following pressure from the Kremlin. In fact, Russia's opposition to Ukraine's association agreement with the EU emerged loud and clear during the summer of that year, when Moscow imposed restrictions on Kiev's exports and proclaimed that for Ukraine to sign the agreement would be 'suicide'.[95]

This action by Yanukovych distanced the Ukraine process of integration from the EU and NATO, provoking reactions from pro-EU citizens in November 2013, which erupted into protests against the Ukrainian President. The peaceful protests quickly turned violent as the police started to repress the protesters. As a result, there were clashes between the protesters and the police that left several protesters and police officers dead. As the situation worsened, the Ukrainian parliament decided to depose Yanukovych in February 2014, establishing a pro-Western interim government. The implications of this deposition interested not only Ukraine, but also the EU and Russia: in fact, the first saw its influence increase by this move, meanwhile, the latter saw the party most aligned with its policy lose consensus in a neighboring country.[96]

At a press conference in Russia on 27 February, Yanukovych declared that he was still the president of Ukraine. Key structures were under the control of pro-Russian gunmen in the Autonomous Republic of Crimea. Pro-Russian protests against the new government took place in major cities in eastern and southern areas of Ukraine. On March 1st, the Russian Parliament granted Putin the use of military force to protect Russian interests in Ukraine. After five days the peninsula was *de facto* under Russian control; on 21 March, after a questioned referendum on the region’s independence and with the approval of the Russian parliament, Putin signed a law formally annexing Crimea to Russia. In eastern part of Ukraine, Russian-backed separatists declare their independence and start a protracted and violent conflict.[97]

---

94 Louis Charbonneau. "Russia, China resist U.N. Syria sanctions push: envoys." *Reuters,* August 26, 2011. Accessed on May 8, 2023. https://www.reuters.com/article/us-syria-un-idUSTRE77P4X920110826

95 Andrew Gardner, "The EU-Ukraine association agreement: a potted history," *Politico*, September 17, 2014, https://www.politico.eu/article/the-eu-ukraine-association-agreement-a-potted-history/.

96 Open Society Foundations, "*Understanding Ukraine's Euromaidan Protests*," last modified May 2019, https://www.opensocietyfoundations.org/explainers/understanding-ukraines-euromaidan-protests.

97 Ray, M. "Ukraine crisis." *Encyclopedia Britannica*, May 6, 2023. https://www.britannica.com/topic/Ukraine-crisis.

This sequence of events brought the EU and Russia to the lowest level of relations until then; due to the unsuccess of the diplomatic way, the EU imposed sanctions on Russia in response to its actions in Ukraine. The EU governments agreed to impose sweeping sanctions that targeted state-owned banks, imposed an arms embargo, and restricted sales of sensitive technology and the export of equipment for the country's oil industry. The sanctions imposed particularly the energy sector:

- price cap related to the maritime transport of crude oil and petroleum products.
- prohibition on:
    - imports of coal from Russia
    - imports of oil from Russia, with limited exceptions
    - exports of goods and technologies in the oil refining sector to Russia
    - new investments in the Russian energy and mining sector
    - providing gas storage capacity (with the exclusion of the part of LNG facilities) to Russian nationals.[98]

Moreover, since the annexation of Crimea, Russia has been widely condemned by the international community, including the EU, which refuses to legitimize the border change between Ukraine and Russia. All bridges of communication between the two actors were partially cut, with the suspension of several cooperation mechanisms with the Kremlin, including the EU-Russia Summit and the negotiation of a new partnership agreement.

In conclusion, what emerges between the two powers in the period between the 2009 gas crisis and the 2014 Crimean invasion is the characterization of politically difficult interactions and agreements. The facts clearly demonstrate the desire and the necessity for both actors to heal the wounds after the gas shutdown in early 2009, through the organization of several summits. The EU and Russia have shown the world a constructive approach towards the many topics discussed, but at the same time, the poor results reveal that the differences and, above all, economic and security priorities matter more than a stable political relationship. Moreover, all discussions were obscured by the policies/decisions aimed at defending their own security, starting from their positions in the Syrian Civil War to the most tense period ever with the Crimea annexation. This period showed how the EU-Russia relationship had suffered the different interests, initiating with series of political conflicts that widened the gap between the two and put the actors in a defensive position where the security is more important than the political dialogue.

98 Council of the European Union, " *EU restrictive measures against Russia over Ukraine (since 2014*)," last modified March 2022, https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/#economic.

3.4) The final break: Ukraine-Russia war in 2022

The Ukraine's events narrated in the quoted paragraph did not end with the illegal annexation of Crimea: as matter of fact, the war expanded in other regions of Kiev territory in March 2014. The so-called Donbass War began shortly after Russia's annexation of Crimea and was characterized by clashes between Ukrainian armed forces and Russian-backed separatist groups. The conflicts involved the two regions of Donetsk and Luhansk, collectively named 'the Donbas', which took advantage of the events to declare the two republics independent, following disputed referendums, by Ukraine government on April 7th. Russia's involvement in this revolt was immediately uncovered, with Moscow supporting the separatists with troops and weapons.[99]

After rejecting the legitimacy of these referenda, in an effort to retake the separatist-controlled territories, the Ukrainian government launched a military operation called "Operation Anti-Terrorism." Control over important cities and strategic locations frequently changed hands as a result of both sides' offensives and counter-offensives. Urban warfare, the shelling of residential areas and the use of heavy weapons were the main characteristics of the conflict. The clashes continued until early August when Ukrainian troops had almost recovered all separatist regions. At that point, Russia changed tactics by sending military convoys. On 14 August, NATO Secretary General Anders Fogh Rasmussen declared: "last night we saw a Russian incursion, a crossing of the Ukrainian border."[100] The Russian Defense Ministry totally denied the existence of such convoy, but, on the other hand, the leader of the rebels, Alexander Zakharchenko, contradicted Russian declaration.[101]

The war persisted and, with the support of Russian military arm, the separatist pushed back the Ukrainian troops. The invasion drew widespread condemnation from the international community, with the EU and many other countries denouncing Russia's actions as a violation of Ukraine's sovereignty and territorial integrity. The EU stated after a "Foreign Affairs Council meeting":

"Any unilateral military actions on the part of the Russian Federation in Ukraine under any pretext, including humanitarian, will be considered by the European Union as a blatant violation of international law." [102]

Furthermore, the EU answered imposing additional sanctions on Russia, targeting key individuals and entities involved in the invasion, for instance Banks or Russian oligarchs. However, EU members had different opinions on the sanctions to be imposed: some of them, such as Poland, UK and Baltic

99 Ray, M. "Ukraine crisis." *Encyclopedia Britannica*, May 6, 2023. https://www.britannica.com/topic/Ukraine-crisis.
100 CNBC, "Russia masses military vehicles as aid convoy waits near Ukraine border," *CNBC*, August 15, 2014, https://www.cnbc.com/2014/08/15/russia-masses-military-vehicles-as-aid-convoy-waits-near-ukraine-border.html.
101 BBC News, "Russia aid convoy halted near Ukraine border," *BBC News*, August 22, 2014, accessed May 10, 2023, https://www.bbc.com/news/world-europe-28817347.
102 European Council, "*Council conclusions on Ukraine*," press release, Brussels, August 15, 2014, accessed May 10, 2023, https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/144314.pdf.

States, adopted a more hawkish stance, calling for tougher sanctions against Russia and stressing the necessity to hold Russia responsible for its activities in Ukraine, while others, such as Germany, Greece, France or Italy, advocated a more cautious approach. Russia's intervention complicated the dialogue between the parts for a ceasefire, incrementing the tension of the EU-Russia relations.

On 5 September 2014, in Minsk, under the auspices of the Organization for Security and Co-operation in Europe (OSCE), Ukraine, Russia, the DPR,[103] and the LPR[104] agreed to a ceasefire. The Minsk Protocol I outlined a list of actions for both sides, including the immediate cessation of hostilities, the removal of heavy weapons from the front lines, and the creation of a buffer zone to keep the warring parties apart. The agreement also called for the facilitation of humanitarian aid to the affected areas and the release of prisoners.[105]

The cease-fire agreement was seen as a crucial step in finding a peaceful solution to the conflict. The international community and the EU welcomed it as a positive development towards a prospect of political talks and offered hope for a long-lasting peace. However, the ceasefire did not last long. In fact, clashes resumed in January 2015 leading to the second ceasefire on 12 February of the same year, under the name of Minsk II.

French President François Hollande and German Chancellor Angela Merkel played a key role to avoid the escalation; on one side, some EU members and the US planned to send armaments to help Ukraine defeating the pro-Russia separatists, but as Merkel declared:

"The progress that Ukraine needs cannot be achieved by more weapons."[106]

On the other side, Russia's involvement in the rebellion was clear but President Hollande tried to reduce the misalignment between the two sides; French President indeed declared:

"I'm not for the policy of attaining goals by making things worse, I think that sanctions must stop now... Mr. Putin does not want to annex eastern Ukraine, I am sure — he told me so… What he wants is to remain influential. What Mr. Putin wants is that Ukraine not become a member of NATO. The idea of Mr. Putin is to not have an army at Russia's borders."[107]

---

103 Donetsk People's Republic

104 Luhansk People's Republic

105 Mark Trevelyan, "Factbox: What are the Minsk agreements on the Ukraine conflict?" *Reuters*, December 6, 2021, accessed May 10, 2023, https://www.reuters.com/world/europe/what-are-minsk-agreements-ukraine-conflict-2021-12-06/.

106 Michael R. Gordon, Alison Smale, and Steven Erlanger, "Divisions on Display over Western Response to Ukraine at Security Conference," *The New York Times*, February 7, 2015, accessed May 10, 2023, https://www.nytimes.com/2015/02/08/world/europe/divisions-on-display-over-western-response-to-ukraine-at-security-conference.html.

107 Andrew E. Kramer, "French Leader Urges End to Sanctions Against Russia Over Ukraine," *The New York Times*, January 5, 2015, accessed May 10, 2023, https://www.nytimes.com/2015/01/06/world/europe/francois-hollande-says-destabilizing-sanctions-on-russia-must-stop-now.html.

The conflict in Eastern Ukraine persisted despite the signing of Minsk Protocol II, with regular escalations of violence and tensions between the contending sides. Numerous obstacles, including as disagreements over the order of events, the status of separatist-held areas, and the general political will to create a durable peace, prevented the agreement from being fully implemented. The incomplete implementation of Minsk II led to intermittent confrontations and deaths in eastern Ukraine and a protracted conflict.

In 2016, Ukraine did not lose any territories to pro-Russian forces, marking the first conflict year without territorial losses. However, heavy fighting erupted again in January 2017, centered around the city of Avdiivka. The following month, President Putin signed a decree recognizing personal and vehicle-registration documents issued by the self-proclaimed Donetsk People's Republic and Luhansk People's Republic. This move provoked a struggle in the discussions for a new ceasefire because Russia officially recognized the rebels who issuing the documents.[108]

The Donetsk and Luhansk republics were referred to as "temporarily occupied territories" and Russia was designated as the "aggressor" in a measure that the Ukrainian parliament enacted in January 2018 to retake control of the separatist-held areas. The Russian government denounced the Act of Ukraine parliament, calling it "preparations for a new war."[109]

The situation did not evolve, as the ceasefire failed and was not respected by both the sides until June 2019, when Russia started giving out passports to Ukrainians in the Donbas region, which Ukraine considered as a step towards annexation.[110] In an effort to end the fighting in the Donbas region, Ukraine, Russia, the DPR, the LPR, and the OSCE signed an agreement, called "Steinmeier Formula" bearing the name of the former German foreign minister, on 1 October 2019. The deal called for the holding of OSCE-observed free elections in the DPR and LPR regions, followed by the reintegration of those territories into Ukraine with special status.[111]

This formula did not really end the crisis in Ukraine although it led to a marked decrease in fighting and casualties, the exchange of all remaining prisoners of war, work on new elections in the Donbas

108 BBC News, "The conflict in Ukraine: A timeline." *BBC News*, February 19th, 2017, accessed on May 11th, 2023, https://www.bbc.com/news/world-europe-39018429.

109 Yhiah Information Agency, "Russia hysterical about Ukraine's Donbas law, says Kyiv 'preparing for new war'," *Yhiah Information Agency*, January 18, 2018, accessed May 10, 2023, https://www.unian.info/politics/2353903-mfa-russia-hysterical-about-ukraines-new-donbas-de-occupation-law-says-kyiv-preparing-for-new-war.html.

110 Alex Wickham, Daryna Krasnolutska, Natalia Drozdiak, "Russia Is Trying to 'Erase' Ukrainian Identity in Captured Territories, European Officials Allege," *Time*, May 9, 2023, accessed May 10, 2023, https://time.com/6278148/russia-erase-ukrainian-identity/.

111 Christopher Miller, "Explainer: What Is the Steinmeier Formula and Did Zelenskiy Just Capitulate to Moscow?", *Radio Free Europe/Radio Liberty (RFE/RL)*, October 2, 2019, accessed May 11th, 2023, https://www.rferl.org/a/what-is-the-steinmeier-formula-and-did-zelenskiy-just-capitulate-to-moscow-/30195593.html.

and the scheduling of further talks. In addition, the COVID-19 pandemic in 2020 worsened living conditions in the conflict area with quarantine measures restricting access to access to resources.[112]

In the two-year period between 2021 and 2022, the world witnessed of the escalation that led to the ongoing war in Ukraine. The period of tension started in March/April 2021, when Russia began the military build-up near Ukraine boarders. The Russian Defense Ministry announced the deployment of 3,000 paratroopers to the Ukrainian border on 21 February 21 for "large-scale exercises," in which they would be trained to "seize enemy structures and hold them until the arrival of the main force." The military reinforcement has since expanded to include more than 100,000 Russian troops. The United States and its allies hurriedly reacted by sending planeloads of weapons to Ukraine and hundreds of troops to defend the NATO alliance's eastern border. The ensuing impasse rekindled Cold War tensions and brought Europe dangerously close to a massive armed confrontation.[113]

Apparently at the end of April the risk of invasion subsided; Russian Defense Minister Sergei Shoigu declared the maneuvers were over: the troops should return to their bases by 1 May, but their heavy armament will be kept in Western Russia for another massive military exercise. Those declaration decreased the tension between the parties, starting a short period of relax.[114]

Nevertheless, in September 2021, the Donbass issue started to escalate once again with new military buildups followed by declaration of "alarmism". One of the most famous statements was that of President Putin in an interview with the Rossiya TV channel who, when asked about the tension between the West and Russia, said:

"I have not seen such alarmist declarations, so far, at least. But I suppose it is as you say. Indeed, the United States and their NATO allies are presently conducting an unscheduled, and I want to stress that it is unscheduled, drill in the Black Sea. They deployed a powerful naval group, and they are also using the air force in the drill, including strategic aviation."[115]

President Putin shifted the media's attention to the West's moves, trying to build a narrative of legitimate strategy to counter the menace. In the same interview, he also added that Russia and the Donbass separatist regions are completely cooperative, but the condition are not adapted:

---

112 International Crisis Group, "*Visualizing the Dynamics of Combat and Negotiations in Donbas*," International Crisis Group, August 3, 2021, accessed May 11, 2023, https://www.crisisgroup.org/europe-central-asia/eastern-europe/ukraine/visualising-dynamics-combat-and-negotiations-donbas.

113 Simon Shuster, "The Untold Story of the Ukraine Crisis," *Time*, February 2, 2022, accessed May 12, 2023, https://time.com/6144109/russia-ukraine-vladimir-putin-viktor-medvedchuk/.

114 Vladimir Isachenkov, "Russia-Ukraine tensions rise amid waning cease-fire hopes," *AP News*, April 22, 2021, accessed May 12, 2023, https://apnews.com/article/world-news-russia-government-and-politics-crimea-ukraine-e6e8d6c0792517f753fc774713d1fe44.

115 Pavel Zarubin, "The President Vladimir Putin answered questions: the topic were the issues between West and Russia on the Ukraine issue," *Rossiya TV channel*, November 13, 2021, accessed May 12, 2023, http://www.en.kremlin.ru/events/president/transcripts/67100.

"Second, regarding Ukraine. We are being urged to implement the Minsk agreements and are often accused of not observing them. However, when we ask our partners, including in the Normandy format, exactly which part of the Minsk agreements Russia is not fulfilling and what, in their opinion, Russia is supposed to do under the Minsk agreements, we get no answer. This is exactly what they say: – We cannot put it into words. I am not kidding; this is the dialogue we are having. And what exactly have the Lugansk and Donetsk people's republics failed to do regarding the Minsk agreements? There is no answer either; again, they cannot put it into words. Meanwhile, they publicly demand that we implement them."

Despite those declarations, the reality seemed different, with the Kremlin's army moving numerous men and resources to the Ukrainian border, menacing Kiev's security.[116]

The first two months of the year 2022 had been extremely difficult because of the several events that showed an imminent invasion. Indeed, in January, Russian embassy staff in Kiev started a slow evacuation, the military buildups accelerated, Russia and Belarus planned a joint military exercise on Belarusian land in the following month;[117] furthermore, the Russian Black Sea fleet was recalled but Turkey could stop it in the Bosporus because of the Montreux Convention.[118]

The chessboard was ready at that point, but Russia had no reasons to provoke the conflict: Putin needed the *casus belli* to attack. In the middle of February, the Russian-led rebels in Donbas sharply increased their artillery fire, which Ukraine and its allies interpreted as an effort to provoke the Ukrainian army and create a pretext for invasion. Russia accused Ukraine of several illegality, which it denied the involvement, such as sabotage[119] and FSB facility destroyed.[120]

The EU stressed the urgent need for Russia to de-escalate the tensions caused by the military build-up and aggressive rhetoric; the Union also reiterated its full support for Ukraine's sovereignty and

116 Shane Harris and Paul Sonne, "Russia planning massive military offensive against Ukraine involving 175,000 troops, U.S. intelligence warns," *The Washington Post*, December 3, 2021, accessed May 12, 2023, https://www.washingtonpost.com/national-security/russia-ukraine-invasion/2021/12/03/98a3760e-546b-11ec-8769-2f4ecdf7a2ad_story.html.

117 Ellen Mitchell, "Russia sends troops to Belarus for war games," *The Hill*, January 18, 2022, accessed May 12, 2023, https://thehill.com/policy/defense/590270-russia-sends-troops-to-belarus-for-war-games/.

118 Thomas A. Brooks, "Turkey, the Montreux Convention, and Russian Navy Transits of the Turkish Straits," *U.S. Naval Institute*, proceedings 148, no. 3 (March 2022): accessed May 12, 2023, https://www.usni.org/magazines/proceedings/2022/march/turkey-montreux-convention-and-russian-navy-transits-turkish.

119 TASS, "Russian servicemen killed five saboteurs from Ukraine while violating the border," *TASS*, February 21, 2022, accessed May 12, 2023, https://en.wikipedia.org/wiki/Prelude_to_the_Russian_invasion_of_Ukraine#cite_ref-326.

120 Georgij Tadtaev and Alexander Atasuntsev, "The FSB reported that a shell hit the border checkpoint on the border with the DPR," *RBK Daily*, February 21, 2022, accessed May 12, 2023, https://www.rbc.ru/politics/21/02/2022/621360d79a79470fcd422edd.

territorial integrity and menacing Russia of massive consequences and severe costs in response, including restrictive measures coordinated with partners.[121]

On 21 February, President Putin recognized the two republics and signed a treaty on friendship and cooperation including military cooperation with them. However, just on the 24th the invasion began: President Putin authorized more Russian troops to enter Donbas on what was referred to as a "peacekeeping mission" by Russia. This event triggered the beginning of the war.[122]

Relations between the EU and Russia have progressively deteriorated and broken after the Ukraine invasion, with the European Union implementing new sanctions relegating the Kremlin to a position of isolation; for instance, Russia was banned from the Society for Worldwide Interbank Financial Telecommunication (SWIFT), the suspension of Russia Today and Sputnik broadcasts, the restriction for Russian nationals to hold any position in the governing bodies of EU critical infrastructures and entities.[123]

Also, the energy trades between the EU and Russia were strongly influenced by the events, with the Union aiming to secure the energy supply:

- EU member states agree to reduce gas demand by 15%[124]
- ensuring affordable and competitive energy for EU consumers
- increasing the EU's energy security and preparedness in the event of emergencies
- strengthening the energy resilience and autonomy of EU countries

To reach the goals, the EU countries worked together on:

- limiting excessively high gas prices
- improving solidarity and sharing supply
- cutting energy costs for households and businesses
- reducing the EU's energy dependencies
- securing gas supplies
- accelerating the green transition[125]

---

121 Council of the European Union, "*Declaration by the High Representative on behalf of the EU on the situation in eastern Ukraine and the Russian military build-up*," press release, February 19, 2022, accessed May 12, 2023, https://www.consilium.europa.eu/en/press/press-releases/2022/02/19/declaration-by-the-high-representative-on-behalf-of-the-eu-on-the-situation-in-eastern-ukraine-and-the-russian-military-build-up/pdf.

122 Tim Lister, Tara John, and Paul P. Murphy, "Here's what we know about how Russia's invasion of Ukraine unfolded," *CNN*, February 24, 2022, accessed May 12, 2023, https://edition.cnn.com/2022/02/24/europe/ukraine-russia-attack-timeline-intl/index.html.

123 Council of the European Union, "*Timeline: EU Response to Ukraine Invasion*," accessed May 12, 2023, https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/timeline-eu-response-ukraine-invasion/.

124 Council of the European Union, "*Timeline: EU Response to Ukraine Invasion*," accessed May 12, 2023, https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/timeline-eu-response-ukraine-invasion/.

125 Council of the European Union, "*Energy Prices and Security of Supply*," accessed May 12, 2023, https://www.consilium.europa.eu/en/policies/energy-prices-and-security-of-supply/.

In conclusion, the period between 2015 and 2022 was incredibly difficult for the two parties, due to the adamant positions of the two sides. The last seven years of this relationship has never demonstrated an openness and constructive desire to reach a compromise in any of the disputes that have occurred during this time. The escalation in Ukraine highlights the EU's inability to firmly adopt a position to counter Russian moves; on the other hand, Putin managed the Ukraine conflict in a way that did not provide the EU with reliable landmarks, stating false positions and intentions, creating instability and confusion, and, lastly, disobeying to protocols.

CHAPTER 4: MARKETS AND POLITICS: ALIGNMENT ANALYSIS

In this last chapter of my thesis, which is divided into two paragraphs, I will first analyze the gas and electricity market data and trends extrapolated from almost 120 quarterly reports from 2008 until the declaration of war in 2022; I will then analyze how Russia's international behavior and political relations with the EU, which were explored in depth in the previous chapter, have influenced energy relations between the two actors.

4.1) Quarterly reports on Gas and Electricity market trends

The 2007 US financial crisis resulted in financial fear and reduction in the aggregate demand, so, both the gas and electricity market suffered the economic recession in 2008; even if the volumes of natural gas (N.G.) imported shows an increase (Figure 4), the consumption of the year across Europe was, on average, lower, resulting in a reduction of gas and electricity prices.[126] A trade dispute between a Russian and a Ukrainian company provoked a 3-week interruption of natural gas supply at the EU–Ukrainian border in early January 2009. Member States with diversified import structures, such as Italy, managed to replace part of the missing delivery of natural gas and, with the help of the European gas industry, to act in solidarity with countries which were facing critical situations, like domestic heating due to the low temperatures. Other gas supplying countries, such as Norway, were also able to step up their production during the period of the conflict. Trends show a strong reduction of gas import from Russia because 23% of the EU's the gross domestic gas consumption comes from the Kremlin, of which around 80% passes through Ukraine.[127] The electricity sector saw an increase in both consumption and price due to the gas crisis in Ukraine (Figure 5).[128]

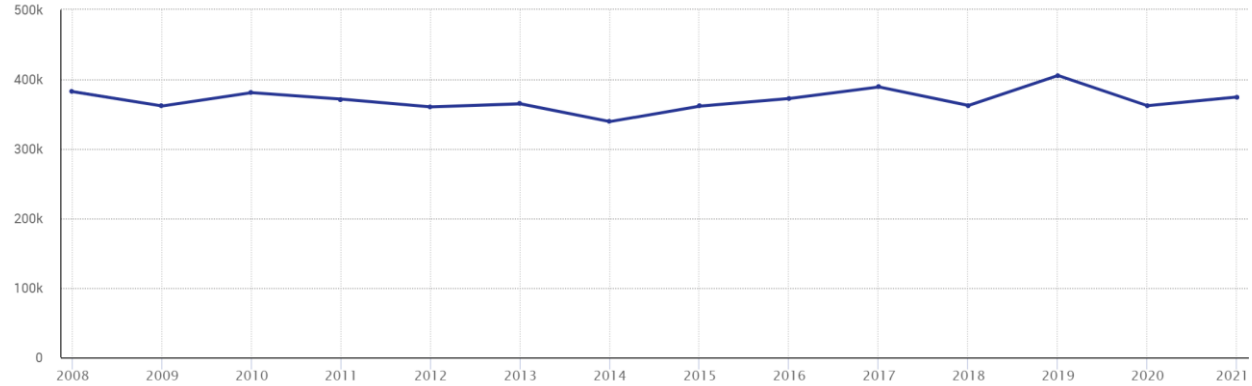
In 2010, the gas consumptions had an overall growth: in Q1 consumption increased between a range of 8-12%,[129] Q2 showed an increase of consumption confronted to the two previous years,[130] Q3 showed the worst result in consumption,[131] meanwhile in Q4 the increase was 7.6%.[132] Prices followed the same trends as consumption, with an important price increase in the last quarter. Electricity prices across the different European regions moved in line with gas prices.[133] This

---

[126] European Commission, "*Quarterly report On European gas markets*", Volume 1 (4), 2008, P. 2-3; European Commission, "*Quarterly report On European electricity markets*", Volume 1 (3), 2008, P. 2-15.
[127] European Commission, *"Quarterly report On European gas markets*", Volume 2 (1), 2009, P. 2-4-18-19.
[128] European Commission, "*Quarterly report On European electricity markets*," Volume 2 (1), 2009, P.1-2.
[129] European Commission, "*Quarterly report On European gas markets*", Volume 3 (1), 2010, P. 1-3.
[130] European Commission, "*Quarterly report On European gas markets*", Volume 3 (2), 2010, p.1-3.
[131] European Commission, "*Quarterly report On European gas markets*", Volume 3 (3), 2010, P. 1-3.
[132] European Commission, "*Quarterly report On European gas markets*", Volume 3 (4), 2010, P. 1-3.
[133] European Commission, "*Quarterly report On European electricity markets*," Volume 3 (1), 2010, p. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 3 (2), 2010, p. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 3 (3), 2010, P.1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 3 (4), 2010, P.1-3.

development may indicate that market players increasingly consider the gas-fired power plants as a good back-up choice to intermittent renewable energy, as opposed to oil and coal. Electricity had a huge fall in Q2 and Q3 but recovered in Q4. Due to this reason, 2010 net imports increased in both overall graph and Russia's graph.

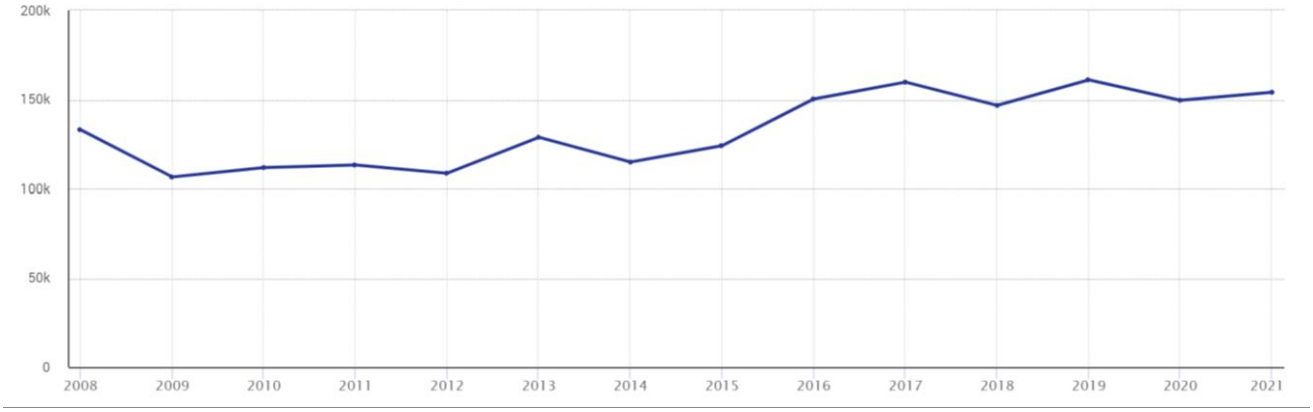
Figure 4 Total imports of NG by the EU, Eurostat: https://ec.europa.eu/eurostat/databrowser/view/nrg_ti_gas/default/table?lang=en.



The 2011 trend in the first quarter is in line with the quarterly consumption of previous years (2010, 2009, 2008 Q1) Q2 and Q3 showed lower gas consumption than in the third quarter of the two previous years, and much less than Q3 gas consumption in 2008.[134] EU natural gas consumption in Q4 2011 fell to historically low levels.[135] These historic lows in consumption were accompanied by a continued slow-down in economic growth. From the imports volume standpoint, the total decreased but the quantity coming from Russia slightly increased. The combination of reduced demand for heating from households and a slowdown in industrial demand for energy led to one of the lowest levels of electricity consumption, recording in the last decade; prices experienced a continuous downslide.[136]

[134] European Commission, "*Quarterly report On European gas markets*", Volume 4 (1), 2011, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 4 (2), 2011, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 4 (3), 2011, P.1-3.
[135] European Commission, "*Quarterly report On European gas markets*", Volume 4 (4), 2011, P. 1-3.
[136] European Commission, "*Quarterly report On European electricity markets*," Volume 4 (1), 2011, P.1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 4 (2), 2011, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 4 (3), 2011, P. 1-3. European Commission, "*Quarterly report On European electricity markets,*" Volume 4 (4), 2011, P. 1-3.

Figure 5 Russian imports of NG by the EU, Eurostat: https://ec.europa.eu/eurostat/databrowser/view/nrg_ti_gas/default/table?lang=en.



Natural gas consumption in the EU in the first half of 2012 dropped by 7% and decreased in 2011 compared to 2010.[137] In the opposite trend, prices of all natural gas contracts - hub, LNG, long-term pipelines - increased during the same period. The levels in Q3 2012 represented the lowest quarterly consumption in ten years, contributing to EU consumption for the first ten months of 2012 being 6% lower than in the same period in 2011.[138] Furthermore, Russia suffered an 8% drop in export to the EU because of high prices and price differentials in member states. In September, the European Commission decided to launch an investigation into whether Gazprom's sales of Russian gas to Eastern Europe are anti-competitive.[139]

The growth rate of the EU economy in 2012 was the lowest compared to the two previous years. This impacted gross inland consumption of electricity in the EU, which slightly decreased. Wholesale electricity prices in most European markets rose to their highest level in several year and market fears of a possible natural gas supply disruption caused gas prices to almost double over a couple of days.[140] The 2013 trend shows an important boost in gas consumption due to a harsh winter during the first quarter of 2013. In contrast, mild weather during the winter months of 2013/2014, coupled with a slight improvement in economic performance, led to relatively stable consumption levels during that period compared to the same period of the previous year. However, consumption remains stable, while total imports remain in line with those of recent years, but the Russian market share increases

[137] European Commission, "*Quarterly report On European gas markets*", Volume 5 (1), 2012, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 5 (2), 2012, P. 1-3.
[138] European Commission, "*Quarterly report On European gas markets*", Volume 5 (3), 2012, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 5 (4), 2012, P.1-3.
[139] European Commission, "*Quarterly report On European gas markets*", Volume 5 (4), 2012, P.24-25.
[140] European Commission, "*Quarterly report On European electricity markets*," Volume 5 (1), 2012.
European Commission, "*Quarterly report On European electricity markets*," Volume 5 (2), 2012, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 5 (3), 2012, P. 1-3. European Commission, *"Quarterly report On European electricity markets*," Volume 5 (4), 2012, P. 1-3.

dramatically, which means an increase in Russia's importance in the European gas market, reaching the 2008 peak.[141]

2014 was the year of the Crimea invasion; nevertheless, by the end of the first half of 2014 the political situation in Ukraine had no observable impact on levels of imports of natural gas from Russia into the EU. On the contrary, in the first half of 2014, imports from Russia reached unprecedented levels (due to the new North Stream pipeline). The situation highlights the importance of Russian gas for meeting the domestic demand, but also for storage injection in the EU.[142] However, at the end of 2014 the growth in imports of natural gas from Russia was considerably lower compared to the previous year.[143] EU gas consumption declined by 14% in the first nine months of 2014 compared to the previous year, mainly driven by weather conditions, the slow recovery of economic activity and the poor competitiveness of gas in the energy sector. In Q3, the decrease was 1% year-on-year. The EU-brokered 'winter package' agreement allowed the resumption of gas deliveries from Russia through Ukraine, while the latter continued to buy gas from the EU. As a result of the agreement, gas deliveries from Russia to Ukraine resumed in December, after having been interrupted on 16 June 2014 due to the growing Ukrainian debt. The electricity market remained stable in consumption, but the Ukraine conflict had an impact only on prices.[144]

The beginning of the following year began with consumption level up 12%, but Russian imports continued their decreasing trend: in Q1 2015, Russian gas represented only 29% of total imports, with other suppliers, such as Norway, being a strong alternative.[145] The markets responded to the new tension between Ukraine and Russia with an increase in prices. Nevertheless, imports from Russia grew during the rest of 2015.[146] Russian gas accounted for an average of 42% of total imports, compared to 33% in Q1, consequently prices decreased. Trends in 2015 changed due to the trilateral talks resumed in March: Ukraine, Russia and EU agreed to fully implement the «winter package». In early April the parties agreed on supply terms for Q2 2015 similar to the failed 'winter package' in

---

[141] European Commission, "*Quarterly report On European gas markets*", Volume 6 (1), 2013, P. 1-3. European Commission, "Quarterly report On European gas markets", Volume 6 (2), 2013, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 6 (3), 2013, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 6 (4), 2013, P. 1-3.

[142] European Commission, "*Quarterly report On European gas markets*", Volume 7 (1), 2014, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 7 (2), 2014, P. 1-3.

[143] European Commission, "*Quarterly report On European gas markets*", Volume 7 (3), 2014, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 7 (4), 2014, P. 1-3.

[144] European Commission, "*Quarterly report On European electricity markets*," Volume 7 (1), 2014, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 7 (2), 2014, P. 1-3. European Commission, *"Quarterly report On European electricity markets*," Volume 7 (3), 2014, P. 1-3. European Commission, "*Quarterly report On European electricity markets,"* Volume 7 (4), 2014, P. 1-3.

[145] European Commission, "*Quarterly report On European gas markets*", Volume 8 (1), 2015, P. 1.

[146] European Commission, "*Quarterly report On European gas markets*", Volume 8 (2), 2015, P.1. European Commission, "*Quarterly report On European gas markets*", Volume 8 (3), 2015, P. 1. European Commission, "*Quarterly report On European gas markets*", Volume 8 (4), 2015, P. 1.

the second half of 2014. However, the electricity market saw an increased consumption during the year with different switch of sources: at first renewables and coal, at the end gas became more competitive due to reduction in prices.[147]

Gas consumption in the EU slightly increased in the first nine months of 2016: by 1% in Q1, 4% in Q2 and 3% in Q3, compared to the same period in 2015.[148] Data showed that the increase accelerated in the last quarter: increased by 18% year-on-year.[149] Relatively cold temperatures in Q4 fueled demand for space heating, while high coal prices and French nuclear power issues helped gas gain ground in power generation.[150] In the fourth quarter of 2016, EU gas imports were 15% higher than a year earlier according to ENTSO-G data. The drop in oil-indexed prices allowed Russia to increase its exports by 22% year-on-year while imports from Norway, the second largest supplier, grew by 6%. Most of Russian additional supplies came through Ukraine: imports on this route rose by 45% year-on-year. In 2016, Russia remained the EU's top supplier, covering 42% of extra-EU imports. The share of the main supply routes of Russian gas imports was as follows: Ukraine 43%, Nord Stream 28% and Belarus 26%. Incoming volumes through Ukraine were 30% higher in 2016 than in 2015. The electricity market followed the gas trend because the sustainability of this resource made it the main one for producing electricity in the EU.

In the first three quarters gas consumption increased by an average of 10% to stop in the 4th quarter with a decrease of 2%. Over the whole of 2017, driven by growing gas-fired generation, EU gas demand increased by 6%, reaching the highest level since 2010.[151]

In 2017, EU gas imports were 10% higher than a year earlier. Apart from Libya, all import sources (Russia, Norway, Algeria, and LNG) registered a year-on-year growth and Russia remained the EU's top supplier, covering 43% of extra-EU imports. Ukraine remained the main supply route of Russian gas to the EU, covering 50%; following a court ruling lifting a suspension of Gazprom's right to book additional capacity on the OPAL pipeline. In the last quarter of 2017, a considerable share of

---

[147] European Commission, "*Quarterly report On European electricity markets*," Volume 8 (1), 2015, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 8 (2), 2015, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 8 (3), 2015, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 8 (4), 2015, P. 1-3.

[148] European Commission, "*Quarterly report On European gas markets*", Volume 9 (1), 2016, P. 1-3. European Commission, *"Quarterly report On European gas markets*", Volume 9 (2), 2016, P. 1-3. European Commission, *"Quarterly report On European gas markets*", Volume 9 (3), 2016, P. 1-3.

[149] European Commission, "*Quarterly report On European gas markets*", Volume 9 (4), 2016, P. 1-3.

[150] European Commission, "*Quarterly report On European electricity markets*," Volume 9 (1), 2016, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 9 (2), 2016, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 9 (3), 2016, P. 1-3. European Commission, "*Quarterly report On European electricity markets,"* Volume 9 (4), 2016, P. 1-3.

[151] European Commission, "*Quarterly report On European gas markets*", Volume 10 (1), 2017, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 10 (2), 2017, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 10 (3), 2017, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 10 (4), 2017, P. 1-3.

Ukrainian transit was rerouted to Nord Stream, but Ukraine remained the main supply route of Russian gas to the EU, covering 39% of the total, while Nord Stream accounted for 34%. Prices fluctuated during the year, increasing the trend in the last two quarters. Electricity increased in Q1 and Q4 remaining stable in Q2 and Q3; the energy mix propelling was gas and in the last part of the year coal.[152]

In 2018 as whole, gas consumption in the EU decreased slightly, down 1.8% compared to 2017; the only quarter that showed a different trend was the first, meanwhile the other three decreased. The imports to EU decreased in the first two quarters and rose in the last two. Overall, the net import showed a decrease; nevertheless, supplies from Russian pipelines remained the EU's main source of imports, covering over 40% of extra-EU imports in 2018. Ukraine was the main gas transit for the Union throughout the year but, in Q2, was overtaken by North stream. The prices fluctuated all year long, starting to decrease in Q4 due to the new LNG deal.[153] Electricity prices were stable at the beginning of the year then increased slightly during the rest of the year. The energy mix saw a reduction of gas due to its cost.[154]

In 2019, consumption had a decrease in Q1 but remained in the range of the last five years; Q2 and Q3 saw an increase of 20% and 7% and the last quarter Q4 remained stable. Gas-fired electricity production increased significantly in the EU, by an average of 22,5%. Net imports increased by 15%, 0,5%, 21% and 8% over the year. Imports from Russia grew the most, even in Q3 when the growth was just 0.5%. Russia remained the main exporter for the EU with a market share between the 40 and 50% throughout the year. The main route remained Ukraine with 40/45% of total Russian exports to the EU. Prices decreased over the year, reaching the lowest level at the end of 2009; with the exception of the fourth quarter when prices bounced back.[155]

---

[152] European Commission, "*Quarterly report On European electricity markets*," Volume 10 (1), 2017, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 10 (2), 2017, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 10 (3), 2017, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 10 (4), 2017, P. 1-3.

[153] European Commission, "*Quarterly report On European gas markets*", Volume 11 (1), 2018, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 11 (2), 2018, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 11 (3), 2018, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 11 (4), 2018, P. 1-3.

[154] European Commission, "*Quarterly report On European electricity markets,"* Volume 11 (1), 2018, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 11 (2), 2018, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 11 (3), 2018, P. 1-3. European Commission, "*Quarterly report On European electricity markets,*" Volume 11 (4), 2018, P. 1-3.

[155] European Commission, "*Quarterly report On European gas markets*", Volume 12 (1), 2019, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 12 (2), 2019, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 12 (3), 2019, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 12 (4), 2019, P. 1-3.

Electricity consumption declined and rose between +1% and -1% during the year; prices fell following the trend of the gas market and rose in the last quarter.[156]

At the beginning of 2020, Covid-19 coronavirus began to spread first in China and then in the West, prompting the adoption measures of containment measures, restricting the free movement of people and leading to a substantial decrease in economic activity. On 9 March 2020 strict nationwide lockdown measures were adopted in Italy, and within the course of the same month similar measures were introduced in almost all EU countries, also impacting the energy market, significantly reducing the demand for energy products and leading to decrease in energy prices. As a result, the EU recorded a decrease in consumption over the whole year: 5%, 10%, 0,5% and an increase only in Q4 of 1,3%. Energy consumption decreased and the role of gas was taken over by the renewables. Net imports decreased by 7%, 14%, 6% and 9% even though Russia remained the EU's main supplier through pipelines. The surprising fact is the route: Ukrainian pipelines declined to such an extent that the North Stream pipeline became the most important one; Ukraine was still the second, but all the others, such as Belarusian, Yamal and Turk Stream, were becoming more and more predominant (Figure 6). The decrease of Russian gas imports into the EU mainly impacted the Ukrainian transit route. Prices suffered a decrease in the first two quarters and recovered during the other two.[157] Electricity suffered a loss in consumption but the growing importance of renewables in the mix increased; prices de creased in the first half of the year and increased in the latter part of the year.[158]

[156] European Commission, "*Quarterly report On European electricity markets*," Volume 12 (1), 2019, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 12 (2), 2019, P.1-3. European Commission, "*Quarterly report On European electricity markets,"* Volume 12 (3), 2019, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 12 (4), 2019, P. 1-3.

[157] European Commission, "*Quarterly report On European gas markets*", Volume 13 (1), 2020, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 13 (2), 2020, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 13 (3), 2020, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 13 (4), 2020, P. 1-3.

[158] European Commission, "*Quarterly report On European electricity markets*," Volume 13 (1), 2020, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 13 (2), 2020, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 13 (3), 2020, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 13 (4), 2020, P. 1-3.

Figure 6 Russia' pipeline system into Europe, https://aspeniaonline.it/the-ukrainian-conflict-and-the-long-story-of-energy-pipelines/

In 2021, consumption rose in the first half of the year contracting in the last half; imports also grew over the year, but tensions with Russia determined a change in exports: Q1, Q2, Q3 saw Russian exports representing over 40% of gas imports, but Q4 saw the first data under the 40% (nominally 37%). The first half of the year saw the Ukrainian route decline in terms of gas volumes, becoming the third largest route surpassed by Yamal (Belarus). The last half of the year saw a decline in exports volumes through Belarus (Q3 15%, Q4 56%) and Ukraine (Q4, 36%). Political developments and geopolitical tensions, which principally impacted energy relations between the EU and Russia, had a key role in shaping the wholesale gas markets. The suspension of the certification of the Nord Stream 2 pipeline, the rising tensions over Ukraine, with the deployment of many Russian troops at the border prior to the invasion, were more important than gas market laws (supply and demand), leading to extreme volatility in gas prices in recent months. Prices: volatility in the first half of the year, with a slight increase in the third quarter and a sharp rise in the fourth. Electricity consumption increased to almost the pre pandemic level.[159] Wholesale electricity prices have reached historic highs, triggering considerable political and social concerns in an increasing number of Member States.[160]

The latest figures considered in my analysis, date from the first half of the 2022: as could be expected, consumption fell in Q1 by 8% and in Q2 by 16%. Policy measures had a fundamental impact on gas market developments in Q1 2022 and beyond. EU net gas imports rose by 10% year-on-year in Q1 2022. Russian pipeline supplies saw a steep fall by 31% year-on-year, and for the first time since the time series became available, they lost their principal position in EU gas supply, ensuring only 28% of the total extra-EU gas imports. Russian gas imports continued to fall abruptly through the

[159] European Commission, "*Quarterly report On European gas markets*", Volume 14 (1), 2021, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 14 (2), 2021, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 14 (3), 2021, P. 1-3. European Commission, "*Quarterly report On European gas markets*", Volume 14 (4), 2021, P. 1-3.

[160] European Commission, "*Quarterly report On European electricity markets*," Volume 14 (1), 2021, P. 1-3. European Commission, "*Quarterly report On European electricity markets*," Volume 14 (2), 2021, P. 1-3. European Commission, "*Quarterly report On European electricity markets,"* Volume 14 (3), 2021, P. 1-3. European Commission, "*Quarterly report On European electricity markets,"* Volume 14 (4), 2021, P. 1-3.

Belarusian and Ukrainian transit routes (by 71% and 41% respectively), whereas through Nord Stream 1 they decreased by only 4% and through Turk Stream they rose by 34%. In Q1 2022 Nord Stream's share of Russian gas imports rose to a record 57%, followed by the Ukrainian transit (21%), the Belarusian route (down to 12%) and the Turk Stream (11%).[161]

In May 2022 flows via the Belarusian route fell close to zero and in early June, flows through Nord Stream were cut back in two steps by 60%. In the period January-May 2022, 25% of gas supplies from Russia were cut, 41 bcm gas through pipelines, 10 bcm of LNG, which means that total gas imports decreased by 18 bcm, compared to the same period in 2021. Russian gas supplier Gazprom made a series of announcements for a dozen of Member States to reduce or completely terminate gas supplies in Q2 2022, principally referring to non-compliance with the Russian presidential decree on payments in rubles, or to other technical reasons. As of June, due to technical problems (failure to repatriate some spare parts of compressors being repaired abroad and needed for operating pipelines) Gazprom started to gradually reduce gas supply on Nord Stream 1, reaching zero in September. In Q2, Russian pipeline supplies saw a steep fall, by 45% year-on-year, providing less than 23% of the total extra-EU gas imports. Russian gas imports fell significantly through all transit routes in Q2 2022:

- Flows through the Belarusian transit route fell by a staggering 90% year-on-year, while in May flows fell practically to zero.
- Flows via the Ukrainian route fell by 51% in Q2 2022.
- In April and May, flows on Nord Stream 1 did not show big changes year-on-year, however, in June a steep fall followed, and flows decreased by 12% in Q2 2022. In August, the monthly flow fell below 1.0 bcm, compared to 5.0 bcm in April and May 2022.
- Flows through the Turk Stream also fell back, by 14% year-on-year in Q2, however, in July and August they picked up again.[162]

The electricity market was marked by the impact of the unprovoked Russian invasion of Ukraine, the associated international energy sanctions, and the fears of supply disruption on a market already tight.[163]

4.2) Analysis of coherence between markets and EU-Russia political relations

[161] European Commission, "*Quarterly report On European gas markets*", Volume 15 (1), 2022, P. 1-3.
[162] European Commission, "*Quarterly report On European gas markets*", Volume 15 (2), 2022, P. 1-3.
[163] European Commission, "*Quarterly report On European electricity markets*," Volume 15 (1), 2022, P. 1-3. European Commission, *"Quarterly report On European electricity markets*," Volume 15 (2), 2022, P. 1-3.

Following the conclusion of my analysis of markets, international and political happenings involving Russia and the EU, this last section seeks to understand if the geopolitics has had an impact on energy markets and if the EU's political stance is aligned and coherent with the trends.

I will begin my analysis by starting with the year 2008, which from a political standpoint was very complicated, due to the missed opportunity to find a Partnership and Cooperation agreement on the Georgia's conflict and the rising tension in Ukraine over a gas dispute. Nevertheless, the markets have not been influenced by those events: in fact, the imports (both Russian and total) increased, but the consumption has been affected by the economic recession derived by the sub-prime financial crisis in 2007.

The result of the economic recession was visible in the 2009, when disputes blocked gas supply and provoked a cut off for many reliant members; the event ruined the long-standing trust between the players, but what emerge from the sources is the belief that this dispute was considered as an economic dispute rather than political blackmail to the EU and Ukraine and this the first point. In reality, the crisis did not have a big impact on the gas wholesale markets because member states with diversified import structures managed to replace parts of the missing deliveries of natural gas and, with the help of the European gas industry, to act in solidarity with countries that were facing critical situations. What I have seen emerging from all the reports of gas and electricity is the necessity to better understand what the internal EU context is how to solve possible crisis, such as: the harmonization of statistical data in the Contracting Parties and Observatories of the Energy Community Treaty, understanding the situation of the energy market in the EU, building the internal electricity market, the Southern Corridor pipeline (engaging new actors from the Central Asia), the buzzword is "diversification", gas storage and different gases (such as coalbed methane, shale gas, tight gas). Each reports presents a section, called "Focus on", deepening one of the above-mentioned topics; the EU has started to plan for supplier and resource diversification to be less fragile to exogenous factors, this is the second point. It is worth mentioning another key event of the year was the launch of the Energy Third Pack, but in the end, it did not bring the desired result for Moscow.

In the period between 2010 and 2012, EU-Russia relationship witnessed ups and downs in the political field, with many initiatives to show the desire to heal the wound of the gas shutdown in 2009; summits, agreements and the join of WTO are the main ones, but other events showed the differences between the actors: for instance, Russian position in the Syrian civil war in 2011. On the other hand, the markets answered in a different manner: during an economic recession, even if the consumption decreased, the energetic partnership between the actors generally improved exception made from the EU Commission investigation in 2012 on the Russia behavior on export and pricing of gas, which slightly decreased the export of the year. This actively demonstrates that gas trade has not been influenced by geopolitics during this time frame, showing that the desire to recover from 2009 has

been stronger than geopolitical interests, for example, in Syria, and that the major factor influencing markets has been the global economic recession this is the third point.

In 2013 the political situation was more contentious, with the Ukrainian opposition rising up against the pro-Russian president and accusing him of double-dealing after the secret Janukovyč/Putin summit who had decided to move closer to the Kremlin because of unveiled blackmail if a new agreement with the EU was signed. Peaceful protests quickly turned violent, leading to the decision to establish a new pro-Western government and depose Janukovyč. Nevertheless, exports to EU saw an increase in Russian volumes, with Ukrainian pipelines as the main route, at the lowest peak of gas volumes imported into the EU. At this point, it should be emphasized how inconsistent the markets' behavior was with the political context of the period: extremely enhanced gas trade while tensions on the European continent were rising between the two players, influence over Ukraine was on the agenda.

In the early months of the following year several clashes broke out between the pro-Western Ukrainian government and Russian rebels, leading to the illegal invasion of Crimea by the Russian Federation. The EU backed the Ukrainian government, imposing several sanctions on Russian key people or institutions.[164] In the energy market there has been a sanction focused on restricting the export of specific technologies that could be used for oil exploration and production in Russia, rather than imposing blanket restrictions on the industry. Once again, it is worth noting how markets have not aligned with the context, with imports from Russia not particularly impacted by the events in the first half of the year. Due to the disruption of supplies from Ukraine in June 2014, imports from the main EU's partner decreased in the first three quarters by a total of 14%. Ukraine's path opened again in December, thanks to the "winter package". The EU demonstrated the willingness to continue the partnership, with controversial acts imports of natural gas decreased due to Kiev's infrastructure shutdown, but Russia remained the EU's main supplier. In the meantime, the EU Commission has also signaled its intention to work closely together with Member States as regards to implementation of the recommendations and, in parallel, to review existing mechanisms to safeguard security of energy supply and propose their reinforcement, where necessary. Thus, the EU's behavior was incoherent for understandable reasons: several European countries heavily rely on Russian gas, being Moscow the EU's main supplier of natural gas, and imposing severe sanctions on the gas sector could have damaged the energy security of these Member States. The consequences could have been a

[164] Council of the European Union, " EU restrictive measures against Russia over Ukraine (since 2014)," last modified March 2022, https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/#economic.

disruption in Russian gas supply, resulting in shortages, creating political instability and a negative impact on the economies of these countries.

The period between the Crimea invasion and the Covid-19 pandemic in 2020 was extremely tense in Ukraine, with the two Russian-backed Donbass sides, trying to provoke escalation and the EU trying to arrange an agreement between the parts. The political stance of the EU and Russia during the Ukrainian conflict has been at odds throughout, but the behavior has been characterized by a different approach: the EU one more diplomatic and constructive, while the Russian one more captious and defiant: in fact, Russia has tried to highlight the Ukraine's behavior by looking for a *casus belli* to intervene in the dispute. At this point the gas imports are totally consistent with the EU's political position, with the latter trying to compromise and secure the pipeline flow. The increase in Russia's importance as a partner over the period is also balanced using Ukrainian oil pipelines as the main route to the resource, making this route an insurance of both sides' intentions to solve the issue. Nevertheless, during the years, we can see those other pipelines, and over all the controversial North Stream, have taken on the importance of this route, reducing Ukraine's importance to the EU and increasing the Russia's leverage for a possible war in Ukraine. Reducing the volumes transiting through Kiev's land was a huge mistake and misalignment on the chessboard committed by the European Union: first, it let Russia plays its role in the region with Ukraine; second, this reduced the EU's interests at this stage, keeping EU's energy security and needs but eroding its support towards Ukraine.

Despite the last two-year period led to the war between Ukraine and Russia, the EU's markets and policy position have remained totally aligned: all decisions implemented have led the market to adjust the partnerships, consumptions, and necessary gas reductions, placing Russia in a position where energy cannot be used to threaten the EU security. In addition to this strategy, the EU has also imposed hard economic sanctions to the Kremlin, showing to the world to fully back Ukraine's position. As a result, Russia suffered a vertically reduction of export to the EU, witnessing the total loss of influence and partnership built over a very long period.

In conclusion, we can say that Russia's international behavior and political relations with the EU have definitely influenced the energy relations between the two actors. The European Union has not always behaved consistently in its political and partnership relation with Russia: over the past 15 years the two actors have been involved in many events and dynamics of power, out of which opposing positions and interests have emerged, but the partnership has not somehow been particularly influenced by the politics. The 2009 Gas crisis influenced the trustworthiness and the reliability of Russia, but trends show a steady growth in trades until the 2013 peak. This period was influenced more by economic factors, such as the economic recession or the consumption levels.

The invasion of Crimea in 2014 started a different EU-Russia relationship and partnership showing the necessity for the EU to secure imports from Russia rather than impose real constraints, in fact, the sanctions did not mention gas exports. The EU's political position and energy partnership in this case showed an incredible misalignment. The subsequent period has been controversial for the EU, with the trend of gas imports from Russia rising sharply and the political one supporting Ukraine's claims; it is still important to highlight that the EU has been open to find a compromise in the dispute and the false declaration and desire to solve the issue from Moscow prevented the uncover of the real Russian interests. Lastly, from the Covid pandemic to the War declaration, markets and positions are aligned and consistent to ensure energy supply to all the members states.

CHAPTER 5: CONCLUSION

Coming to conclusion, in my thesis I first analyzed the critical role that energy plays in modern society as the driving force behind all human activities; it powers houses, businesses, transportation, and industrial production, making it crucial for economic growth and political stability. With high energy demand and limited domestic production, the European Union faces challenges in ensuring a stable and diverse energy supply for all EU member states. For these reasons, energy is important in international relations, as countries rely on energy partnerships to maintain a stable economic system and high living standards and therefore it will be very important that both the governments of the member states and the European Union remain united to tackle a threat such as the lack of energy in Europe and the world.

Natural gas is still one of the main resources for energy production and has been at the center of EU-Russia relation over the past 15 years. However, this energy relation has suffered the escalation of political happenings in this timeframe because it has been used by Russia as leverage to cow EU opposition rather than a resource to build a stable and lasting economic and political relationship.

Since the 2009 Gas dispute, the EU has tried to secure energy supply from Russia, sometimes behaving incoherently with the political position. As explained in the last chapter, trends show that the energy partnership between the two sides has been economically very advantageous for both sides, even if the political visions were not aligned.

The results show that Russia's international behavior influenced the energy partnership, but only when the issues concerned the European continent and the pipeline routes, in particular the Ukrainian situation. In fact, various world events had no impact on the energy trade, such as the Syrian Civil war, and even if the EU was directly involved, Georgian conflicts regarding its future EU and NATO membership or cyberattacks targeting the election of EU members, for instance France in 2017.

The events that changed the relations are the disruption of Gas supply in 2009, the invasion of Crimea in 2014 and the declaration of war in 2022. While the 2009 event was perceived by the EU as an economic dispute, the only effect that it had was to ruin Russia's trustworthiness as a supplier; from a policy perspective, the EU has enacted many solutions, such as the Energy Third Pack, however there are no alignments between the implemented policies and the analyzed trends data: the Russian position has not really been impacted by EU policies and strategies as shown in Chapter 4.

The events of Crimea also show no alignment between the political position and the markets: the partnership between the two actors was not strongly sanctioned, resulting in growth. On the contrary, the 2022 war declaration had a different impact on both sectors, which aligned to reduce Russia's importance and influence in politics and gas exports.

Many scholars' perspectives have been expressed so far and, after the enormous number of sources analyzed, my thesis confirms and confutes some of them. While many scholars, like Keppler, believed that the perceived role of the energy resource has been misinterpreted by the EU, as it has been argued here, the 2009 gas dispute had a huge impact on the role of energy resources supply: since 2009, the "*Quarterly Report on the European Gas Market"* started to focus on different approaches to supplying member states with other resources or forms (such as LNG) and lately, after the invasion of Crimea, more precisely from the Q4 of 2019, the Quarterly report started to add sections on policies. This kind of declarations and new studies demonstrate the impact of events on markets, the supply chain, and the perceived role in international relations of the energy in the EU, even if implicitly.

Another observation is Baran's belief of mismanagement of the diversification strategy: EU members have tried to diversify partners, with an increasing role of Algeria and Norway; nevertheless, the European Union political position is risky, because other partners in the Mediterranean Sea are not reliable, such as Libya or Egypt, or in the middle of disputes, like Cyprus. One of the main strategies to decrease this dependence and align industry to desire of EU citizens (climate change issue and green transition) has been the "Green deal" and the electrification. The EU's climate goals direct it to encourage the development of renewable energy sources. The countries best able to fulfil both short-term needs and long-term ambitions are Norway and the US, which have stable supplies of gas and are making progress in clean energy.

My research shows that after the gas dispute in 2009, the political and gas partnership improved, eventually reaching the peak in 2013. The mistake was the trust pinned on the false declaration after the invasion of Crimea, with the Union side hoping for a resolution and a growing role of the energy partnership for the cooperation. The desire to reach an agreement, the false propaganda about the situation and the Moscow's official declaration of the West's interests blinded the EU.

Events have an impact on politics and markets, with the former adapting its rhetoric to events, in order to position itself on the global stage; the latter can be affected in several ways: the prices, the volumes, the consumptions and even the perception on the reliability, in fact, people's perceived risks influence trends. Politics and economics are different doctrines, they aim at different outcomes and, in general, are driven by different actors with diverging ideas; nevertheless, I believe, they are deeply interconnected by the interest of reaching ever better outcomes, to keep growing and allowing people to improve their living conditions. This means that a dialogue between the two is necessary, in order to align their strategies to achieve the most important outcome: collective well-being.

Geopolitical events will always influence the economy because at least one economic factor (such as price or volume) will suffer changes due to the events. The data analyzed reveal a misalignment between political actions and strategic industries such as "energy sector" that needs to be understood.

Understanding the reasons for this inconsistency between political condemnation and market behavior is sometimes essential to keep the system functioning.

European countries are still divided since each member state has a single national strategy and vision, so the strategy/policy is still inoperative due to the absence of common policy on the energy issue exactly like it was before: so how do you deal with an issue like this with a fragmentation of views and divisions? This question leaves the door open to the solution yet to come.

To avoid this kind of inconsistency, nowadays the European institutions need to initiate a restructuring of the energy supply chain to meet the standard requirements: security, environment, and competitiveness. The Green Deal is the EU's main current and future strategy to take a big step forward from Russia and meet all three requirements. However, while the outcome for the environment is certain, for security and competitiveness it is not; in fact, the transition will require huge investments and changes in the economies of member states, putting competitiveness at risk. But if the goal of energy security is to ensure reliable supplies at reasonable prices so as not to affect national values and goals, are we sure that the Green Deal does that?

On the security front, I suppose the risk is that of shifting dependence to another actor, namely China; indeed, the resources necessary for the transition (REEs) are mostly mined and refined by Chinese firms, making this actor a potential threat for the EU's energy security, and not resolving the issue but simply shifting dependence from one actor to another.

This thesis manages to demonstrate, first of all, the role that energy played in the relationship between the parties, thus bringing the two partners closer both economically and politically. The weakness of the European Union in the Russia-Ukraine dispute, during the period under consideration, underscores the inconsistency of the political and mediation actions taken, whose purpose was to reactivate the flow of gas instead of resolving the international crisis.

The EU's political propaganda did not always reflect the actual events expressed in the trends, and thus this thesis, with data in hand, shows that geopolitical events had an impact on the market only at three distinct moments: 2009, 2014, 2022. Subsequently, the trends show the inconsistency of the EU, which instead of resolving the Russian-Ukrainian crisis with lasting and effective action, undermined the recovery of a reliable source of gas.

My paper can be a reliable starting point for a future in-depth examination of strategic interests on the European continent, which include actors that should be investigated separately, such as the United States and China, and which have played an important role on the European continent for the last 15 years. Last but not least, I have focused exclusively on certain aspects, leaving out important topics other than economics, politics, and history, such as the humanitarian consequences of war, which are in the foreground today. Furthermore, Russia and Ukraine are exporters of agricultural products to third world nations, the conflict between the two countries not only has an impact on

energy resources but has several negative socio-economic repercussions at the international level that could worsen global food security in particular. Cooperation that goes beyond mere private interests is needed if we are to survive and face the challenge of climate and hunger.

Finally, I find that EU-Russia energy relation between 2008 and 2022 were not only a lever for international cooperation nor a threat to EU's security but were sides of the same coin. Overall, the truth about politics and trades is never objective, with many interests, actors, and perspectives on the chessboard. My attempt has been to approach and explain these topics through the lenses gained over these last years of economic, political, and historical studies, reviewing the literature positions with a multidisciplinary analysis, and keeping abreast of current events. One must be open-minded and learn from past experiences so as not to make the same mistakes: the arrogance of our own perspectives in the power game is no joke: *in medio stat virtus.*

Words count: 21254.

BIBLIOGRAPHY

Primary sources

European Commission. "*EU Energy in Figures*." Luxembourg: European Commission, 2021. https://op.europa.eu/en/publication-detail/-/publication/41488d59-2032-11ec-bd8e-01aa75ed71a1/language-en.

European Commission, "*EU-Russia Summit: Joint Statement, Samara, 18 May 2007*." Press release, Brussels, 16 May 2007, https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_07_682/IP_07_682_EN.pdf.

European Commission, *"EU Neighborhood-South", Energy*, consultation on 26 June 2023, https://energy.ec.europa.eu/topics/international-cooperation/key-partner-countries-and-regions/neighbourhood-south_en.

Communication and Information Resource Center for Administrations, Businesses and Citizens (CIRCABC), " Gas market report 2008-2020," European Commission, accessed on July 1st, 2023. https://circabc.europa.eu/ui/group/3ef9355f-1ffe-4c82-ba19-f60a3ed2f652/library/295bae48-18a2-4901-afbe-edc7dcd40dee?p=1&n=10&sort=modified_DESC.

European Commission, "*Quarterly report On European gas markets*", Volume 1 (4), 2008.

European Commission, "*Quarterly report On European gas markets*", Volume 2 (1), 2009.

European Commission, "*Quarterly report On European gas markets*", Volume 2 (2), 2009.

European Commission, "*Quarterly report On European gas markets*", Volume 2 (3), 2009.

European Commission, "*Quarterly report On European gas markets*", Volume 2 (4), 2009.

European Commission, "*Quarterly report On European gas markets*", Volume 3 (1), 2010.

European Commission, "*Quarterly report On European gas markets*", Volume 3 (2), 2010.

European Commission, "*Quarterly report On European gas markets*", Volume 3 (3), 2010.

European Commission, "*Quarterly report On European gas markets*", Volume 3 (4), 2010.

European Commission, "*Quarterly report On European gas markets*", Volume 4 (1), 2011.

European Commission, "*Quarterly report On European gas markets*", Volume 4 (2), 2011.

European Commission, "*Quarterly report On European gas markets*", Volume 4 (3), 2011.

European Commission, "*Quarterly report On European gas markets*", Volume 4 (4), 2011.

European Commission, "*Quarterly report On European gas markets*", Volume 5 (1), 2012.

European Commission, "*Quarterly report On European gas markets*", Volume 5 (2), 2012.

European Commission, "*Quarterly report On European gas markets*", Volume 5 (3), 2012.
European Commission, "*Quarterly report On European gas markets*", Volume 5 (4), 2012.
European Commission, "*Quarterly report On European gas markets*", Volume 6 (1), 2013.
European Commission, "*Quarterly report On European gas markets*", Volume 6 (2), 2013.
European Commission, "*Quarterly report On European gas markets*", Volume 6 (3), 2013.
European Commission, "*Quarterly report On European gas markets*", Volume 6 (4), 2013.
European Commission, "*Quarterly report On European gas markets*", Volume 7 (1), 2014.
European Commission, "*Quarterly report On European gas markets*", Volume 7 (2), 2014.
European Commission, "*Quarterly report On European gas markets*", Volume 7 (3), 2014.
European Commission, "*Quarterly report On European gas markets*", Volume 7 (4), 2014.
European Commission, "*Quarterly report On European gas markets*", Volume 8 (1), 2015.
European Commission, "*Quarterly report On European gas markets*", Volume 8 (2), 2015.
European Commission, "*Quarterly report On European gas markets*", Volume 8 (3), 2015.
European Commission, "*Quarterly report On European gas markets*", Volume 8 (4), 2015.
European Commission, "*Quarterly report On European gas markets*", Volume 9 (1), 2016.
European Commission, "*Quarterly report On European gas markets*", Volume 9 (2), 2016.
European Commission, "*Quarterly report On European gas markets*", Volume 9 (3), 2016.
European Commission, "*Quarterly report On European gas markets*", Volume 9 (4), 2016.
European Commission, "*Quarterly report On European gas markets*", Volume 10 (1), 2017.
European Commission, "*Quarterly report On European gas markets*", Volume 10 (2), 2017.
European Commission, "*Quarterly report On European gas markets*", Volume 10 (3), 2017.
European Commission, "*Quarterly report On European gas markets*", Volume 10 (4), 2017.
European Commission, "*Quarterly report On European gas markets*", Volume 11 (1), 2018.
European Commission, "*Quarterly report On European gas markets*", Volume 11 (2), 2018.
European Commission, "*Quarterly report On European gas markets*", Volume 11 (3), 2018.
European Commission, "*Quarterly report On European gas markets*", Volume 11 (4), 2018.
European Commission, "*Quarterly report On European gas markets*", Volume 12 (1), 2019.
European Commission, "*Quarterly report On European gas markets*", Volume 12 (2), 2019.
European Commission, "*Quarterly report On European gas markets*", Volume 12 (3), 2019.
European Commission, "*Quarterly report On European gas markets*", Volume 12 (4), 2019.
European Commission, "*Quarterly report On European gas markets*", Volume 13 (1), 2020.
European Commission, "*Quarterly report On European gas markets*", Volume 13 (2), 2020.
European Commission, "*Quarterly report On European gas markets*", Volume 13 (3), 2020.
European Commission, "*Quarterly report On European gas markets*", Volume 13 (4), 2020.

European Commission, "*Quarterly report On European gas markets*", Volume 14 (1), 2021. https://energy.ec.europa.eu/document/download/aa8fa1b1-5750-4b7a-9ee1-fdad2d88440e_en?filename=quarterly_report_on_european_gas_markets_q1_2021_final.pdf

European Commission, "*Quarterly report On European gas markets*", Volume 14 (2), 2021. https://energy.ec.europa.eu/document/download/63691844-c3de-4081-9889-46427c6c9e33_en?filename=quarterly_report_on_european_gas_markets_q2_2021_final.pdf

European Commission, "*Quarterly report On European gas markets*", Volume 14 (3), 2021. https://energy.ec.europa.eu/document/download/2719c0d0-a1c4-4d46-b9ff-18a3b4b85e87_en?filename=Quarterly%20report%20on%20European%20gas%20markets%20Q3_2021_FINAL.pdf

European Commission, "*Quarterly report On European gas markets*", Volume 14 (4), 2021. https://energy.ec.europa.eu/document/download/d99eef32-84db-4eb0-99b9-a61cc0cd1419_en?filename=Quarterly%20report%20on%20European%20gas%20markets_Q4%202021.pdf

European Commission, "*Quarterly report On European gas markets*", Volume 15 (1), 2022. https://energy.ec.europa.eu/document/download/0e69ba99-07e9-4aed-8c34-dbfa3ae0add7_en?filename=Quarterly%20report%20on%20European%20gas%20markets%20Q1_2022.pdf

European Commission, "*Quarterly report On European gas markets*", Volume 15 (2), 2022. https://energy.ec.europa.eu/document/download/22f0fd31-b84c-4c6a-8ebc-98f3b1cc36e0_en?filename=Quarterly%20report%20on%20European%20gas%20markets%20Q2_2022_FINAL.pdf

Communication and Information Resource Center for Administrations, Businesses and Citizens (CIRCABC), " Electricity market report 2008-2020," European Commission, accessed on July 1st, 2023. https://circabc.europa.eu/ui/group/3ef9355f-1ffe-4c82-ba19-f60a3ed2f652/library/8c97e9f3-4a06-487b-8579-6c1b3d550656?p=1&n=10&sort=modified_DESC.

European Commission, "*Quarterly report On European electricity markets*", Volume 1 (3), 2008.

European Commission, "*Quarterly report On European electricity markets*," Volume 2 (1), 2009.

European Commission, "*Quarterly report On European electricity markets*," Volume 2 (2), 2009.

European Commission, "*Quarterly report On European electricity markets*," Volume 2 (3), 2009.

European Commission, "*Quarterly report On European electricity markets*," Volume 2 (4), 2009.

European Commission, "*Quarterly report On European electricity markets*," Volume 3 (1), 2010.

European Commission, "*Quarterly report On European electricity markets*," Volume 3 (2), 2010.
European Commission, "*Quarterly report On European electricity markets*," Volume 3 (3), 2010.
European Commission, "*Quarterly report On European electricity markets*," Volume 3 (4), 2010.
European Commission, "*Quarterly report On European electricity markets*," Volume 4 (1), 2011.
European Commission, "*Quarterly report On European electricity markets*," Volume 4 (2), 2011.
European Commission, "*Quarterly report On European electricity markets*," Volume 4 (3), 2011.
European Commission, "*Quarterly report On European electricity markets*," Volume 4 (4), 2011.
European Commission, "*Quarterly report On European electricity markets*," Volume 5 (1), 2012.
European Commission, "*Quarterly report On European electricity markets*," Volume 5 (2), 2012.
European Commission, "*Quarterly report On European electricity markets*," Volume 5 (3), 2012.
European Commission, "*Quarterly report On European electricity markets*," Volume 5 (4), 2012.
European Commission, "*Quarterly report On European electricity markets*," Volume 6 (1), 2013.
European Commission, "*Quarterly report On European electricity markets*," Volume 6 (2), 2013.
European Commission, "*Quarterly report On European electricity markets*," Volume 6 (3), 2013.
European Commission, "*Quarterly report On European electricity markets*," Volume 6 (4), 2013.
European Commission, "*Quarterly report On European electricity markets*," Volume 7 (1), 2014.
European Commission, "*Quarterly report On European electricity markets*," Volume 7 (2), 2014.
European Commission, "*Quarterly report On European electricity markets*," Volume 7 (3), 2014.
European Commission, "*Quarterly report On European electricity markets*," Volume 7 (4), 2014.
European Commission, "*Quarterly report On European electricity markets*," Volume 8 (1), 2015.
European Commission, "*Quarterly report On European electricity markets*," Volume 8 (2), 2015.
European Commission, "*Quarterly report On European electricity markets*," Volume 8 (3), 2015.
European Commission, *"Quarterly report On European electricity markets*," Volume 8 (4), 2015.
European Commission, "*Quarterly report On European electricity markets*," Volume 9 (1), 2016.
European Commission, "*Quarterly report On European electricity markets*," Volume 9 (2), 2016.
European Commission, "*Quarterly report On European electricity markets*," Volume 9 (3), 2016.
European Commission, "*Quarterly report On European electricity markets*," Volume 9 (4), 2016.
European Commission, "*Quarterly report On European electricity markets*," Volume 10 (1), 2017.
European Commission, "*Quarterly report On European electricity markets*," Volume 10 (2), 2017.
European Commission, "*Quarterly report On European electricity markets*," Volume 10 (3), 2017.
European Commission, "*Quarterly report On European electricity markets*," Volume 10 (4), 2017.
European Commission, "*Quarterly report On European electricity markets*," Volume 11 (1), 2018.
European Commission, "*Quarterly report On European electricity markets*," Volume 11 (2), 2018.
European Commission, "*Quarterly report On European electricity markets,"* Volume 11 (3), 2018.
European Commission, "*Quarterly report On European electricity markets*," Volume 11 (4), 2018.

European Commission, "*Quarterly report On European electricity markets*," Volume 12 (1), 2019.
European Commission, "*Quarterly report On European electricity markets*," Volume 12 (2), 2019.
European Commission, "*Quarterly report On European electricity markets*," Volume 12 (3), 2019.
European Commission, "*Quarterly report On European electricity markets*," Volume 12 (4), 2019.
European Commission, "*Quarterly report On European electricity markets*," Volume 13 (1), 2020.
European Commission, *"Quarterly report On European electricity markets*," Volume 13 (2), 2020.
European Commission, "*Quarterly report On European electricity markets*," Volume 13 (3), 2020.
European Commission, "*Quarterly report On European electricity markets*," Volume 13 (4), 2020.
European Commission, "*Quarterly report On European electricity markets*," Volume 14 (1), 2021. https://energy.ec.europa.eu/document/download/26430efc-2d63-41fc-855e-9abe55ea3ffe_en?filename=quarterly_report_on_european_electricity_markets_q1_2021_final.pdf.
European Commission, "*Quarterly report On European electricity markets*," Volume 14 (2), 2021. https://energy.ec.europa.eu/document/download/675fca8c-ac7d-4938-bd46-1dcb19106415_en?filename=quarterly_report_on_european_electricity_markets_q2_2021_final.pdf.
European Commission, "*Quarterly report On European electricity markets*," Volume 14 (3), 2021. https://energy.ec.europa.eu/document/download/a3c4cb0b-1fb8-4be8-a3ea-9ad5d12ed0ec_en?filename=Quarterly%20Report%20on%20European%20Electricity%20markets%20Q3%202021_v1.2_1.pdf.
European Commission, "*Quarterly report On European electricity markets*," Volume 14 (4), 2021. https://energy.ec.europa.eu/document/download/522654bd-a71f-4cff-a2a6-3a3e75083b0c_en?filename=Quarterly%20report%20on%20European%20electricity%20markets_Q4%202021.pdf.
European Commission, "*Quarterly report On European electricity markets*," Volume 15 (1), 2022. https://energy.ec.europa.eu/document/download/f7526405-abf5-4510-a6c1-74e1cdc19d7a_en?filename=Quarterly%20Report%20on%20European%20Electricity%20markets%20Q1%202022.pdf.
European Commission, "*Quarterly report On European electricity markets*," Volume 15 (2), 2022. https://energy.ec.europa.eu/document/download/1cebf422-751a-4297-82f3-d6743b7ebaa7_en?filename=Quarterly%20Report%20on%20European%20Electricity%20markets%20Q2%202022_FINAL.pdf.
European Commission, "*REPowerEU: Affordable, Secure and Sustainable Energy for Europe*", European Commission, 22 May 2022, https://commission.europa.eu/strategy-and-

policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en.

European Commission, "*2006. White Paper: A European Strategy for Sustainable, Competitive, and Secure Energy*." Brussels: European Commission. https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:317E:0876:0889:EN:PDF.

European Commission, "*EU-Russia Energy Dialogue Thematic Group on Energy Efficiency*," Report 2010, (2010), accessed May 9, 2023, https://energy.ec.europa.eu/system/files/2014-10/2010_energy_efficiency_report_0.pdf.

European Commission, "*Diversification of Gas Supply Sources and Routes*", Energy, consultation on 26 June 2023, https://energy.ec.europa.eu/topics/energy-security/diversification-gas-supply-sources-and-routes_en#developing-the-mediterranean-hub.

European Council, " *EU restrictive measures against Russia over Ukraine (since 2014),*" last modified March 2022, https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/#economic.

European Council, "*Council conclusions on Ukraine*," press release, Brussels, August 15, 2014, accessed May 10, 2023, https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/144314.pdf.

European Council, "*Russia: EU renews economic sanctions over Russia's military aggression against Ukraine for further six months,"* press release, July 26, 2022, https://www.consilium.europa.eu/en/press/press-releases/2022/07/26/Russia-eu-renews-economic-sanctions-over-russia-s-military-aggression-against-ukraine-for-further-six-months/

European Council, "*Declaration by the High Representative on behalf of the EU on the situation in eastern Ukraine and the Russian military build-up*," press release, February 19, 2022, accessed May 12, 2023, https://www.consilium.europa.eu/en/press/press-releases/2022/02/19/declaration-by-the-high-representative-on-behalf-of-the-eu-on-the-situation-in-eastern-ukraine-and-the-russian-military-build-up/pdf.

European Council, "*Energy Prices and Security of Supply*," accessed May 12, 2023, https://www.consilium.europa.eu/en/policies/energy-prices-and-security-of-supply/.

European Council, "*Joint Statement on the Partnership for Modernization, EU-Russia Summit, 31 May-1 June 2010*," Rostov-on-Don, 1 June 2010, 10546/10, PRESSE 154. https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/er/114747.pdf.

European Council, "*Timeline: EU Response to Ukraine Invasion*," accessed May 12, 2023, https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/timeline-eu-response-ukraine-invasion/.

European Environment Agency, "*EU Energy Mix*," Signals 2022, accessed April 29, 2023, https://www.eea.europa.eu/signals/signals-2022/infographics/eu-energy-mix/view.

European External Action Service. "EU Diplomatic Outreach in the Context of Security Challenges with Russia." *EEAS – European External Action Service*, 14 May 2021, https://www.eeas.europa.eu/eeas/eu-diplomatic-outreach-context-security-challenges-russia_en.

European Parliament and Council of the European Union. 2009. "*Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC.*" Accessed May 8, 2023. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0073&from=EN.

European Parliament Think Tank. "*Human Development in Putin's Russia: What the Data Tell Us.*" Briefing, April 21, 2022. Accessed May 2, 2023. https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)729375, P.P. 3-7

European Parliament. "*Russia: Agreements in force.*" Last modified June 2021. Accessed May 3, 2023. https://www.europarl.europa.eu/factsheets/en/sheet/177/Russia.

European Parliament. "*Energy Policy: General Principles*". Fact Sheets on the European Union, April 2023. https://www.europarl.europa.eu/factsheets/en/sheet/68/energy-policy-general-principles.

Eurostat, *"Industry relied mostly on natural gas & electricity*," Eurostat (12 May 2023), https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230512-1.

Eurostat, "*Energy consumption in households - Statistics Explained*," last modified January 22, 2021, accessed April 29, 2023, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_consumption_in_households.

Eurostat. *"Imports of Natural Gas by Partner Country*". Eurostat- European Commission, 26 January 2023. https://ec.europa.eu/eurostat/databrowser/view/nrg_ti_gas/default/table?lang=en.

Pavel Zarubin, "The President Vladimir Putin answered questions: the topic were the issues between West and Russia on the Ukraine issue," *Rossiya TV channel*, November 13, 2021, accessed May 12, 2023, http://www.en.kremlin.ru/events/president/transcripts/67100.

Secondary sources

Aalto, Pami. "European Perspectives for Managing Dependence." In *Russian Energy Power and Foreign Relations: Implications for Conflict and Cooperation*, edited by Jeronim Perovic, Robert W. Orttung, and Andreas Wenger, 157-180. Routledge, 2009. https://doi.org/10.4324/9780203880098.

Alex Wickham, Daryna Krasnolutska, Natalia Drozdiak, "Russia Is Trying to ‘Erase’ Ukrainian Identity in Captured Territories, European Officials Allege," *Time*, May 9, 2023, accessed May 10, 2023, https://time.com/6278148/russia-erase-ukrainian-identity/.

Andrew E. Kramer, "French Leader Urges End to Sanctions Against Russia Over Ukraine," *The New York Times*, January 5, 2015, accessed May 10, 2023, https://www.nytimes.com/2015/01/06/world/europe/francois-hollande-says-destabilizing-sanctions-on-russia-must-stop-now.html.

Andrew Gardner, "The EU-Ukraine association agreement: a potted history," *Politico*, September 17, 2014, https://www.politico.eu/article/the-eu-ukraine-association-agreement-a-potted-history/.

Anna Shiryaevskaya, "Russian Gas Pivot Toward China Will Ease Europe's Energy Crunch," *Bloomberg*, July 29, 2022, accessed April 30, 2023, https://www.bloomberg.com/news/articles/2022-07-29/russian-gas-pivot-toward-china-will-ease-europe-s-energy-crunch#xj4y7vzkg.

Baldwin, Richard, e Philippe Martin. *Two Waves of Globalization: Superficial Similarities, Fundamental Differences*. Cambridge: National Bureau of Economic Research, 1999. https://www.researchgate.net/publication/5194879_Two_Waves_of_Globalisation_Superficial_Similarities_Fundamental_Differences.

Baran, Zeyno. "EU Energy Security: Time to End Russian Leverage". *Washington Quarterly 30, n. 4, Autumn* 2007, 131–44. https://doi.org/10.1162/wash.2007.30.4.131. P. 131

Barysch, Katinka. "*Europe and the Georgia-Russia conflict*." Centre for European Reform. 30 September 2008. https://www.cer.eu/in-the-press/europe-and-georgia-russia-conflict.

BBC News, "Russia aid convoy halted near Ukraine border," *BBC News*, August 22, 2014, accessed May 10, 2023, https://www.bbc.com/news/world-europe-28817347.

BBC News, "The conflict in Ukraine: A timeline." *BBC News*, February 19th, 2017, accessed on May 11th, 2023, https://www.bbc.com/news/world-europe-39018429.

BBC News. "Ukraine 'stealing Europe's gas'." *BBC*, January 2, 2006, http://news.bbc.co.uk/2/hi/europe/4574630.stm.

Bradshaw, Michael J., and Richard Connolly. "*Russia’s Natural Resources in the World Economy: History, Review and Reassessment*." Eurasian Geography and Economics (2016), 700-726, https://doi.org/10.1080/15387216.2016.1254055. P. P. 13-17

Bridget Kendall, "Crimea crisis: Russian President Putin's speech annotated," *BBC News*, March 19, 2014, accessed May 16, 2023, https://www.bbc.com/news/world-europe-26622558.

Casier, Tom. "Russia's Energy Leverage Over the EU: Myth or Reality?" *Perspectives on European Politics and Society 12, n. 4* (December 2011): 493–508. https://doi.org/10.1080/15705854.2011.62296

Chris Lo, "Power Plays: The Role of Energy in Modern Geopolitics", *Power Technology*, 26 April 2018, https://www.power-technology.com/features/power-plays-role-energy-modern-geopolitics/.

Christopher Miller, "Explainer: What Is the Steinmeier Formula and Did Zelenskiy Just Capitulate to Moscow?", *Radio Free Europe/Radio Liberty (RFE/RL)*, October 2, 2019, accessed May 11th, 2023, https://www.rferl.org/a/what-is-the-steinmeier-formula-and-did-zelenskiy-just-capitulate-to-moscow-/30195593.html.

CNBC, "Russia masses military vehicles as aid convoy waits near Ukraine border," *CNBC*, August 15, 2014, https://www.cnbc.com/2014/08/15/russia-masses-military-vehicles-as-aid-convoy-waits-near-ukraine-border.html.

Connolly, Daniel, e Jae-Seung Lee. "Pipeline Politics Between Europe and Russia: A Historical Review from the Cold War to the Post-Cold War". *Korean Journal of International Studies* 14, n. 1 (30 aprile 2016): 105. https://doi.org/10.14731/kjis.2016.4.14.1.105.

Corbeau, Anne-Sophie. "How Deep is Europe's Dependence on Russian Oil?" *Columbia Climate School News*. March 14, 2022. https://news.climate.columbia.edu/2022/03/14/qa-how-deep-is-europes-dependence-on-russian-oil/.

Ellen Mitchell, "Russia sends troops to Belarus for war games," *The Hill*, January 18, 2022, accessed May 12, 2023, https://thehill.com/policy/defense/590270-russia-sends-troops-to-belarus-for-war-games/.

Fabiana Luca, "L'indipendenza energetica dell'Unione europea passa anche per l'uranio russo", *EU News*, 19 April 2022, https://www.eunews.it/2022/04/19/lindipendenza-energetica-dellunione-europea-passa-per-uranio-russo/.

Fox, Benjamin. "*Russia to File WTO Lawsuit Against EU Energy Laws*." Euobserver, May 1, 2014, Brussels. https://euobserver.com/news/123984.

Georgij Tadtaev and Alexander Atasuntsev, "The FSB reported that a shell hit the border checkpoint on the border with the DPR," *RBK Daily*, February 21, 2022, accessed May 12, 2023, https://www.rbc.ru/politics/21/02/2022/621360d79a79470fcd422edd.

Gielen, Dolf, e Martina Lyons. "*Critical Materials for the Energy Transition: Rare Earth Elements*." May 2022. https://www.researchgate.net/profile/Dolf-Gielen-2/publication/361276473_CRITICAL_MATERIALS_FOR_THE_ENERGY_TRANSITION_RARE_EARTH_ELEMENTS/links/62a849e4c660ab61f87c61f9/CRITICAL-

MATERIALS-FOR-THE-ENERGY-TRANSITION-RARE-EARTH-ELEMENTS.pdf. P. P. 35- 38.

Griffiths, Steven. "*Energy Diplomacy in a Time of Energy Transition*". Energy Strategy Reviews 26 (November 2019): 100386. https://doi.org/10.1016/j.esr.2019.100386.

Guriev, Sergey. "20 Years of Vladimir Putin: The Transformation of the Economy." *The Moscow Times*, August 16, 2019. https://www.themoscowtimes.com/2019/08/16/20-years-of-vladimir-putin-the-transformation-of-the-economy-a66854.

Harding, Luke, and Ian Traynor. "EU-Russia Summit in Danger of Unravelling." *The Guardian*, May 17, 2007, https://www.theguardian.com/world/2007/may/17/eu.russia.

Hatipoglu, Emre, Saleh Al Muhanna e Brian Efird. "Renewables and the Future of Geopolitics: Revisiting Main Concepts of International Relations from the Lens of Renewables". *Russian Journal of Economics 6* (14 December 2020): 358–73. https://doi.org/10.32609/j.ruje.6.55450. P. 358.

Hill, Fiona, and Florence Fee. "Fueling the Future: The Prospects for Russian Oil and Gas." *Demokratizatsiya 10, no. 4 (Fall 2002):* 462-487.

Hill, Fiona. "*Energy Empire: Oil, Gas and Russia's Revival*." Foreign Policy Centre, 2004. P.P. 1-57.

International Crisis Group, "*Visualizing the Dynamics of Combat and Negotiations in Donbas*," International Crisis Group, August 3, 2021, accessed May 11, 2023, https://www.crisisgroup.org/europe-central-asia/eastern-europe/ukraine/visualising-dynamics-combat-and-negotiations-donbas.

International Energy Agency, "*World Energy Outlook 2021*," accessed April 28, 2023, https://www.iea.org/reports/world-energy-outlook-2021; European Commission, "Energy Union," accessed April 28, 2023, https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/energy-union_en.

Race, Michael. "EU Divided Over How to Step Away from Russian Energy". *BBC News*, 2 May 2022. https://www.bbc.com/news/business-61298791.

Jason Mitchell, "*China's Stranglehold of the Rare Earths Supply Chain Will Last Another Decade*", Mining Technology, 22 April 2022, https://www.mining-technology.com/analysis/china-rare-earths-dominance-mining/.

Kaczmarski, Marcin. "The Ukraine Crisis and EU-Russia Relations: Strategic Consequences for the European Union." *Journal of Contemporary European Studies 24, no. 4* (2016): 471-86. doi:10.1080/14782804.2016.1213467. p.478.

Keppler, Jan Horst. "*International Relations and Security of Energy Supply: Risks to Continuity and Geopolitical Risks*." Brussels, Belgium: European Parliament Directorate-General for External Policies of the Union Policy Department, February 2007.

https://ketlib.lib.unipi.gr/xmlui/bitstream/handle/ket/476/EP.pdf?sequence=2&isAllowed=y. P.6

Leonard, Mark, Jean Pisani-Ferry, Jeremy Shapiro, Simone Tagliapietra e Guntram B. Wolff. "*The Geopolitics of the European Green Deal*". Econstor Bruegel Policy Contribution, No. 04/2021 (2021). https://www.econstor.eu/handle/10419/237660. P. 1

Louis Charbonneau. "Russia, China resist U.N. Syria sanctions push: envoys." *Reuters*, August 26, 2011. Accessed on May 8, 2023. https://www.reuters.com/article/us-syria-un-idUSTRE77P4X920110826

Malik, Charles. "The Relations of East and West." *Proceedings of the American Philosophical Society 97, no. 1 (1953)*: 1–7. http://www.jstor.org/stable/3143724.

Mark Hosenball, "Russian intelligence attempted to hack French election: cyber experts," *Reuters*, May 6, 2017, https://www.reuters.com/article/france-election-russia-idINKBN1852KG.

Mark Trevelyan, "Fact box: What are the Minsk agreements on the Ukraine conflict?" *Reuters*, December 6, 2021, accessed May 10, 2023, https://www.reuters.com/world/europe/what-are-minsk-agreements-ukraine-conflict-2021-12-06/.

Martin Russell, "*The EU and Russia Locked into Confrontation*," EPRS | European Parliamentary Research Service, July 2020, https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/652030/EPRS_BRI%282020%29652030_EN.pdf.

Melvyn P. Leffler and Odd Arne Westad, eds., "*The Cambridge History of the Cold War*", Volume 2 (Cambridge: Cambridge University Press, 2010), P. 283.

Michael McGovern, Sophie Heald e Jamie Pirie, "*Oil Dependency in the EU*", Cambridge Econometrics, May 2020, https://www.transportenvironment.org/wp-content/uploads/2021/07/2020_CE_Oil_Dependency_in_EU_report.pdf. pp.16-17

Michael R. Gordon, Alison Smale, and Steven Erlanger, "Divisions on Display over Western Response to Ukraine at Security Conference," *The New York Times*, February 7, 2015, accessed May 10, 2023, https://www.nytimes.com/2015/02/08/world/europe/divisions-on-display-over-western-response-to-ukraine-at-security-conference.html.

Open Society Foundations, "*Understanding Ukraine's Euromaidan Protests*," last modified May 2019, https://www.opensocietyfoundations.org/explainers/understanding-ukraines-euromaidan-protests.

Perović, Jeronim, and Dunja Krempin. "'The Key Is in Our Hands:' Soviet Energy Strategy during Détente and the Global Oil Crises of the 1970s." *Historical Social Research / Historische Sozialforschung 39, no. 4 (150)* (2014): 113–44. Accessed May 1, 2023. http://www.jstor.org/stable/24145530. P.P. 128-131.

Pigliucci, Michele. "Russo-Ukrainian Gas War: The Lack of a Common Strategy Jeopardizes European Unity." *Advances in Economics and Business 4, no. 3 (2016)*: 124-131. doi:10.13189/aeb.2016.040302. P. 127- 128.

Pirani, S., Stern, J., & Yafimava, K. "*The Russo-Ukrainian Gas Dispute of January 2009: A Comprehensive Assessment*." Oxford Institute for Energy Studies, 2009, P. 6.

Rasoulinezhad, Ehsan, Farhad Taghizadeh-Hesary, Jinsok Sung, and Nisit Panthamit. 2020. "*Geopolitical Risk and Energy Transition in Russia: Evidence from ARDL Bounds Testing Method*" Sustainability 12, no. 7: 2689. https://www.mdpi.com/2071-1050/12/7/2689.

Ray, M. "*Ukraine crisis*." Encyclopedia Britannica, May 6, 2023. https://www.britannica.com/topic/Ukraine-crisis.

Ray, M. "*Ukraine crisis*." Encyclopedia Britannica, May 6, 2023. https://www.britannica.com/topic/Ukraine-crisis.

Shane Harris and Paul Sonne, "Russia planning massive military offensive against Ukraine involving 175,000 troops, U.S. intelligence warns," *The Washington Post*, December 3, 2021, accessed May 12, 2023, https://www.washingtonpost.com/national-security/russia-ukraine-invasion/2021/12/03/98a3760e-546b-11ec-8769-2f4ecdf7a2ad_story.html.

Siddi, M. (2020). EU-Russia Energy Relations. In: Knodt, M., Kemmerzell, J. (eds) *Handbook of Energy Governance in Europe.* Springer, Cham. https://doi.org/10.1007/978-3-319-73526-9_54-1. P.2

Simon Shuster, "The Untold Story of the Ukraine Crisis," *TIME*, February 2, 2022, accessed May 12, 2023, https://time.com/6144109/russia-ukraine-vladimir-putin-viktor-medvedchuk/.

Smil, Vaclav. Energy and Civilization: A History. Cambridge, *MA: MIT Press*, 2018, p. 3-5.

Szulecki, Kacper. "*Energy Security in Europe: Divergent Perceptions and Policy Challenges*." Palgrave Macmillan, 2017. P.P. 1-4

TASS, "*Russian servicemen killed five saboteurs from Ukraine while violating the border*," TASS, February 21, 2022, accessed May 12, 2023, https://en.wikipedia.org/wiki/Prelude_to_the_Russian_invasion_of_Ukraine#cite_ref-326.

Thomas A. Brooks, "*Turkey, the Montreux Convention, and Russian Navy Transits of the Turkish Straits*," U.S. Naval Institute, proceedings 148, no. 3 (March 2022): accessed May 12, 2023, https://www.usni.org/magazines/proceedings/2022/march/turkey-montreux-convention-and-russian-navy-transits-turkish.

Tim Lister, Tara John, and Paul P. Murphy, "Here's what we know about how Russia's invasion of Ukraine unfolded," *CNN*, February 24, 2022, accessed May 12, 2023, https://edition.cnn.com/2022/02/24/europe/ukraine-russia-attack-timeline-intl/index.html.

Ungari, Andrea. "*Tra Est e Ovest del mondo, un incontro/scontro di lunga durata*". Open Society Off, September 26, 2019. https://open.luiss.it/2019/09/26/tra-est-e-ovest-del-mondo-un-incontroscontro-di-lunga-durata/.

United Nations Industrial Development Organization, "*Industrial Development Report 2016: The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development*" (Vienna: United Nations Industrial Development Organization, 2016), p. 194-196.

Urs Meister e Michel Grandjean, *Energie für Wirtschaft und Wohlstand* (Zurich: Avenir Suisse, 2009). pp 2-10

Vladimir Isachenkov, "Russia-Ukraine tensions rise amid waning cease-fire hopes," *AP News*, April 22, 2021, accessed May 12, 2023, https://apnews.com/article/world-news-russia-government-and-politics-crimea-ukraine-e6e8d6c0792517f753fc774713d1fe44.

Yergin, Daniel. "*Energy Security in the 1990s*". Foreign Affairs 67, n. 1 (1988): 110. https://doi.org/10.2307/20043677. Yergin, Daniel. "Ensuring Energy Security," Foreign Affairs 85, no. 2 (2006): 69–82.

Yhiah Information Agency, "*Russia hysterical about Ukraine's Donbas law, says Kyiv 'preparing for new war'*," Yhiah Information Agency, January 18, 2018, accessed May 10, 2023, https://www.unian.info/politics/2353903-mfa-russia-hysterical-about-ukraines-new-donbas-de-occupation-law-says-kyiv-preparing-for-new-war.html.

Image sources

Figure 4 Total final energy consumption by industrial sector: Eurostat, "Industry relied mostly on natural gas & electricity," Eurostat (12 May 2023), accessed on 26/06/2023, https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230512-1.

Figure 5 Final energy consumption in the industry sector by energy product: Eurostat, "Industry relied mostly on natural gas & electricity," Eurostat (12 May 2023), accessed on 26/06/2023, https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20230512-1.

Figure 6 EU Energy Mix in 2022: European Environment Agency, "EU Energy Mix," Signals 2022, accessed April 29, 2023, https://www.eea.europa.eu/signals/signals-2022/infographics/eu-energy-mix/view.

Figure 4 Total imports of NG by the EU: Eurostat, "Imports of natural gas by partner country," accessed July 3rd, 2023, https://ec.europa.eu/eurostat/databrowser/view/nrg_ti_gas/default/table?lang=en.

Figure 5 Russian imports of NG by the EU: Eurostat, "Imports of natural gas by partner country," accessed July 3rd, 2023, https://ec.europa.eu/eurostat/databrowser/view/nrg_ti_gas/default/table?lang=en.

Figure 6 Russia' pipeline system into Europe: Di Fraia, Paola. "The Ukrainian Conflict and the Long Story of Energy Pipelines". Aspenia Online, April 1st, 2022. https://aspeniaonline.it/the-ukrainian-conflict-and-the-long-story-of-energy-pipelines/.