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**Assessment of the economic relations between
Azerbaijan and the European Union in the context of
the Russian-Ukrainian war**

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Abstract

The research paper is devoted to the impact of the Ukraine War on the development of economic relations between the European Union and Azerbaijan. In this regard, one of the main concerns of the EU and its Member States, energy security, and Azerbaijan's significance as an energy exporter is discussed. Employing a combination of qualitative and quantitative methods, the study aims to identify how the conflict in Ukraine has influenced economic cooperation between the abovementioned parties. The primary research objective is to evaluate the hypothesis, the war in Ukraine has emerged as a primary driving force behind the intensified economic cooperation between Azerbaijan and the EU. Thus, the following questions will be asked: To what extent was the EU dependent on the Russian exports? Why did the need for diversification of energy imports become evident? What is the role and significance of Azerbaijan in achieving this objective? How should the EU-Azerbaijani relations be assessed in the context of the Ukraine War? What is the most plausible future trajectory of EU-Azerbaijan relations? The study concludes by verifying the hypothesis positively based on the answers to these questions. Taking into account the increased necessity of diversification of energy in the aftermath of the Ukraine War for the EU and Azerbaijan's need to diversify its economy, shared interests will likely foster enhanced cooperation in the economic sphere.

Key words

Azerbaijan, Diversification, Energy, European Union, Renewables, Russia, Southern Gas Corridor, Ukraine

Introduction

The relations on all grounds between Azerbaijan and the European Union (EU) were established with the signing of the Partnership and Cooperation Agreement between the former and the European Communities (EC) and their Member States¹ in 1999. This agreement formalized political, economic and social ties between contracting parties. In this regard, the EC committed to support Azerbaijan in its efforts to develop its economy and complete the transition into a market economy.² The EU-Azerbaijan relations are mainly based on cooperation in the field of energy. In accordance with the report published by the European Commission regarding its trade relations with Azerbaijan, mineral fuels, lubricants, and related materials constituted 99% of the revenue generated from imports.³⁴ Thus, it could be argued that Azerbaijan's developed oil and gas sector and its high potential for exporting renewable energy are the pivotal matters that facilitate cooperation between aforementioned parties.

Although diversification was already a topic of discussion, this matter gained more attention following the EU's response to the Ukraine War. As some of the Member States were substantially reliant on Russian energy sources, the necessity to find alternative sources became evident. On the other hand, in order to decrease the threat of depletion of oil and gas sources and to improve other sectors of economy, Azerbaijan had to pursue economic diversification. Therefore, further cooperation in the energy sector served the shared interests of both parties. The hypothesis formulated in the paper is that the war in Ukraine has emerged as a primary driving force behind the intensified economic cooperation between Azerbaijan and the EU. The second Memorandum of Understanding in the field of energy signed in Azerbaijan by the President of European Commission, Ursula von der Leyen, and the President of Azerbaijan, Ilham Aliyev, with goals of increasing supply to the EU and supporting the renewable energy sector in Azerbaijan, is the main indicator of this matter. In order to ascertain the validity of the hypothesis, the questions regarding the extent of the EU's dependency on the Russian exports, the emergence of the need for diversification in energy imports of the EU, the role and significance of Azerbaijan in achieving this objective, the assessment of EU-Azerbaijani relations in the context of the Ukraine War and what the most plausible future trajectory of EU-Azerbaijan relations will be addressed.

For the purpose of conducting such an analysis, the paper is divided into four chapters. Chapter 1 provides a historical overview of EU-Azerbaijan economic relations starting from the signature of the Partnership and Cooperation Agreement of 1999. In this regard, main agreements concluded between parties to strengthen and expand the economic cooperation and the significance of the Azerbaijani energy sources in this matter is highlighted. Chapter 2 examines the EU's energy diversification policies and their implications for EU-Azerbaijan energy relations before the

¹ The term 'Member States' will be used to refer the Member States of the European Union throughout the paper.

² *Partnership and Cooperation Agreement between the European Communities and their Member States, of the one part, and the Republic of Azerbaijan, of the other part - Protocol on mutual assistance between authorities in customs matters - Final Act - Joint Declarations - Exchange of Letters in relation to the establishment of companies - Declaration of the French Government* (1999a) *EUR-Lex*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A21999A0917%2801%29> (Accessed: 23 November 2023).

³ *European Union, trade in goods with Azerbaijan* (2023) *European Commission*. Available at: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_azerbaijan_en.pdf (Accessed: 29 November 2023).

⁴ The value of the imports from Azerbaijan amounted to 31,107 million euros, with 30,814 million originating from mineral fuels, lubricants and related materials.

Ukraine War. It emphasizes some of the Member State's heavy reliance on Russian energy supplies and their vulnerabilities resulting from this dependence. Although it has went through a rather a gradual process, the Southern Gas Corridor (SGC) project is discussed as a key initiative bringing Azerbaijani authorities and the European policymakers together. Furthermore, the role of renewable energy sources in Azerbaijan's diversification efforts is explored, analyzing their potential to expand economic cooperation between the EU and Azerbaijan. Chapter 3 gives an insight on the EU sanctions on Russia and its impact on EU's energy security landscape after the Ukraine War. As this matter accelerated energy diversification efforts, particularly through the Southern Gas Corridor project, which has facilitated Azerbaijani gas exports to Europe. Furthermore, growing significance of renewable energy sources and high potential of Azerbaijan in this sense has been discussed in the chapter. The analysis aims to evaluate its effects on the EU-Azerbaijan relations. Lastly, chapter 4 examines the future trajectory of the economic relations between the EU and Azerbaijan centered around the energy trade.

Accordingly, European-Azerbaijani economic relations since 1999 will be analyzed. Such an analysis will provide deeper insight into the development of cooperation between parties and the influence of the conflicts in Ukraine on this issue.

Literature Review

The energy dependence of the EU on the Russian sources and its consequences before and after the Ukraine War have been extensively discussed. Moreover, Azerbaijan's capacity to provide the EU with required volumes of both gas-oil and renewable energy resources and has been subject to research with a rich academic literature addressing this matter.

Due to its less diversified economy, Azerbaijan is vulnerable to changes in the oil market. Thus, implementation of economic reforms to promote diversified economy became necessary. Vugar Bayramov and Gulnara Abbas, in their research paper titled "Oil shock in the Caspian Basin: Diversification policy and subsidized economies" analyzed the consequences of the oil price slump in the second half of 2014 in Azerbaijan, Kazakhstan and Russia. In accordance with the paper, Azerbaijan is the most dependent on mineral resources in its exports out of aforementioned countries, with the Herfindahl-Hirschman index (HHI) exceeding 0.8 during the period from Global Financial Crisis to the recent oil shock. This high HHI indicates a high degree of dependence on mineral resources and a lack of economic diversification in the country. This study highlights the significance of diversification of economy and development of non-oil sector.⁵

It should be noted that current shortage of energy resources in the EU has also posed a challenge during the annexation of Crimea. The EU responded to the invasion with economic sanctions on Russian exports. In this regard, Marcin Szczepański has provided a briefing titled "Economic impact on the EU of sanctions over Ukraine conflict". This analysis mainly assesses how European exports to Russia were affected by the sanctions. Szczepański argues that mostly agri-food sector was affected by the sanctions. However, the Member States were able to mitigate the ramifications by redirecting exports to markets either within the EU or beyond. Crucial aspect of this analysis is that, since the EU's failed to enhance its energy diversification policy and some

⁵ Bayramov, V. and Abbas, G. (2017) 'Oil shock in the Caspian Basin: Diversification policy and subsidized economies', *Resources Policy*, 54, pp. 149–156. doi:10.1016/j.resourpol.2017.10.006.

of the Member States highly depended on the Russian energy sources, minerals, specifically gas was exempted from sanction.⁶

However, the EU's position following the outbreak of the war in 2022 was rather firm. Unlike 2014, the EU imposed sanctions on the energy exports of Russia. Although the objective behind this policy was to weaken the Russian economy and prevent the escalation of a broader crisis in the region, increased energy prices and shortage of energy in the EU signaled the potential commencement of a Europe-wide crisis. Nicholas Griffin, in his analysis, "The Southern Gas Corridor and European Energy" discussed this matter with a focus on the Southern Gas Corridor project as a means to accelerate diversification of the European energy imports. Griffin argued that the economic sanctions imposed on the energy imports of Russia made the energy resources from Central Asia and the SGC project more appealing to the EU.⁷

The war in Ukraine placed Azerbaijan in a situation where the country had to balance its relations with the EU and Russia. Anar Valiyev, Ahmad Alili and Fidan Namazova explored this issue in their article titled "Azerbaijan Amid the Ukrainian Crisis: Perceptions, Implications and Expectations." In accordance with the article, Azerbaijan emerged as a reliable energy supplier and connectivity hub after sanctions on Russian energy products and railways. It's predicted that the middle corridor, which passes through Azerbaijan, has the potential to redirect a portion of cargo away from the northern route that traverses Russia and Belarus. However, it will be challenging for Azerbaijan to continue its silent diplomacy as the situation between the EU and Russia continues to deteriorate.⁸

As Europe is facing a third energy crisis, 2nd Phase of the Southern Gas Corridor developed. In this regard, Azerbaijan, its Shah Deniz field in particular, was regarded as the initial source of diversification. Marika Karagianni discussed the significance of Azerbaijan and its energy resources subsequent to the energy crisis in Europe in her policy paper titled "The 2nd Phase of the EU Southern Gas Corridor: Which role for Azerbaijan?". Karagianni argues the Caspian natural gas and liquefied natural gas (LNG) from the United States represent the first realistic alternatives to Russian natural gas. She suggests that, although Russia will remain as the primary source of energy for the EU, new gas distribution system to supply the South Eastern Europe will effectively diminish Russian dominance.⁹

In line with the Memorandum of Understanding (MoU) on a strategic partnership in the field of energy signed between the EU and Azerbaijan, the parties to the agreement will work closely to enhance the role of renewables in energy consumption. Feyruz Mustafayev, Przemyslaw Kulawczuk and Christian Orobello, in their article titled "Renewable Energy Status in Azerbaijan: Solar and Wind Potentials for Future Development," analyze the potential of the country to

⁶ Szczepański, M. (2015) *Economic impact on the EU of sanctions over Ukraine conflict*, European Parliament. Available at:

[https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/569020/EPRS_BRI\(2015\)569020_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/569020/EPRS_BRI(2015)569020_EN.pdf)

(Accessed: 22 November 2023).

⁷ Griffin, N. (2022) *The Southern Gas Corridor and European energy*, ACE. Available at: <https://ace-usa.org/blog/research/research-foreignpolicy/the-southern-gas-corridor-and-european-energy/> (Accessed: 22 November 2023).

⁸ Valiyev, A., Alili, A., & Namazova, F. (2022). Azerbaijan Amid the Ukrainian Crisis: Perceptions, Implications and Expectations. *Caucasus Analytical Digest*, 130, 16-20. <https://doi.org/10.3929/ethz-b-000579582>

⁹ Karagianni, M. (2022) *The 2nd Phase of the EU Southern Gas Corridor: Which role for Azerbaijan?*, ELIAMEP. Available at: <https://www.eliamep.gr/wp-content/uploads/2022/03/Policy-paper-98-Karagianni-EN.pdf> (Accessed: 22 November 2023).

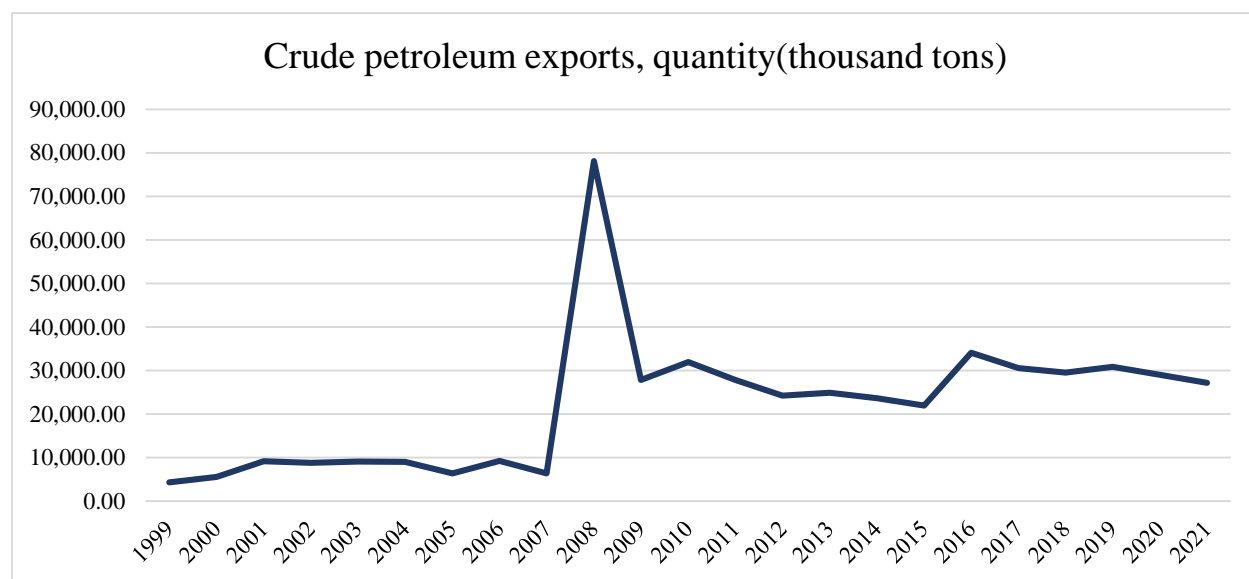
develop and explore its solar and wind resources. They assess the readiness of the country to transition towards green energy. Their conclusion in that regard is that Azerbaijan could achieve its goals regarding transition to renewables by addressing the technical issues and analyzing the balance of supply and demand, creating storage capacity and establishing legal framework.¹⁰

¹⁰ Mustafayev, F., Kulawczuk, P. and Orobello, C. (2022) 'Renewable energy status in Azerbaijan: Solar and wind potentials for future development', *Energies*, 15(2), p. 401. doi:10.3390/en15020401.

1. Historical Overview of the EU-Azerbaijan Economic Relations

Following the establishment of the Republic of Azerbaijan, the primary agreement that laid the foundation for initial economic, political and social relations between respective parties was the Partnership and Cooperation Agreement of 1999 between the EU and Azerbaijan. As highlighted in the Cooperation Agreement, the partnership is aimed at boosting economic and social development, support for enterprises, agriculture and food, energy, transport, tourism, environmental protection, regional cooperation and monetary policy.¹¹ Figure 1 illustrates crude petroleum exports to the EU since the conclusion of the agreement to provide an example of how the aforementioned treaty has influenced economic relations between the EU and Azerbaijan.

Figure 1. Graph 1. Crude petroleum exports between 1999-2021



Source: stat.gov.az

Azerbaijan offers an access to energy products and plays the role of a transit country between the EU and Central Asian states, notably Turkmenistan. As mentioned in the Action Fiche for Framework program in support of EU-Azerbaijan Agreements, the share of oil and gas sector accounts for 95% of total export and over 50% of GDP.¹² Moreover, in 2022, imports of the EU from Azerbaijan amounted to 31.107 million euros, with 30.814 million euros of which was from imports of minerals fuels, lubricants and related materials.¹³ Thus, it could be argued that the EU-Azerbaijan economic partnership is built on the energy cooperation. Although greater part of this cooperation is based on the energy delivery and consumption, modernization and restructuring of

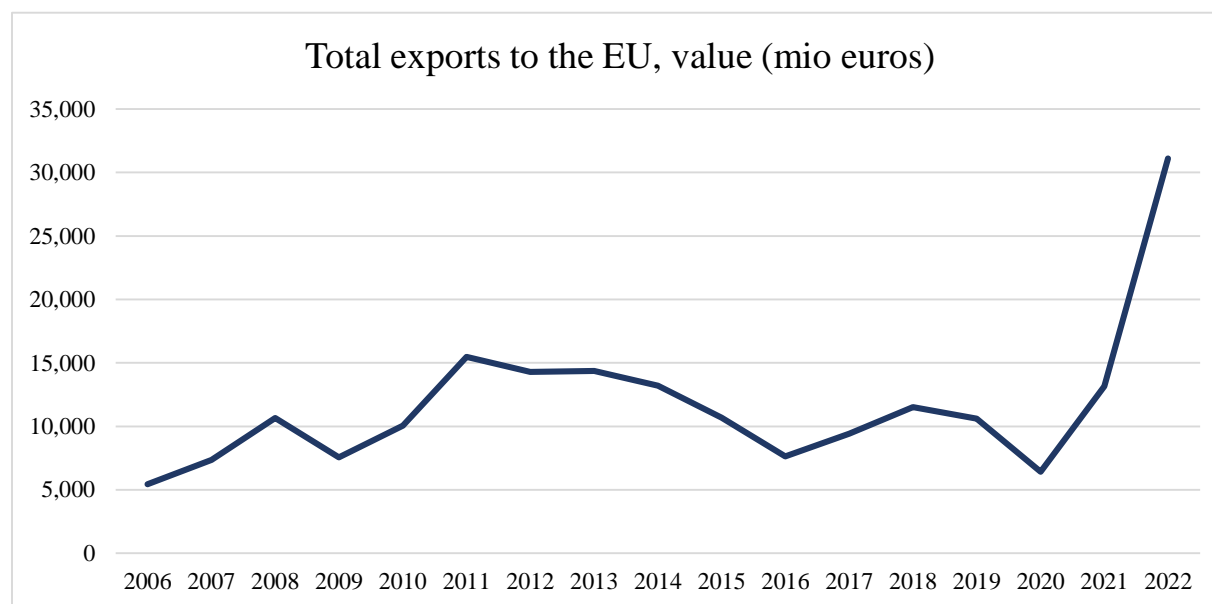
¹¹ PARTNERSHIP AND COOPERATION AGREEMENT between the European Communities and their Member States, of the one part, and the Republic of Azerbaijan, of the other part (1999) EUR-Lex. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:51504229-9952-4e18-80e7-489c110a1991.0017.02/DOC_1&format=PDF (Accessed: 02 October 2023).

¹² Action Fiche for Framework program in support of EU-Azerbaijan Agreements (2012) European Neighborhood Policy. Available at: https://neighbourhood-enlargement.ec.europa.eu/system/files/2017-03/enpi_2013_c2013_5197_annual_action_programme_for_azerbaijan_framework_programme_in_support_of_eu-azerbaijan_agreements.pdf (Accessed: 12 October 2023).

¹³ European Union, trade in goods with Azerbaijan (2023) European Commission. Available at: https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_azerbaijan_en.pdf (Accessed: 10 October 2023).

agriculture, development of domestic and foreign markets for Azerbaijani products in this regard is also taken into account.¹⁴ Furthermore, Article 56 of the aforementioned agreement emphasizes the significance of the environmental cooperation. In this regard, European and Azerbaijani efforts of transition to the renewable energy should be analyzed. It should be noted that Azerbaijan has substantial renewable energy potential. Solar energy generation is highly viable in the Karabakh region, including the liberated territories and wind energy has significant potential in the Caspian Sea area, the Absheron peninsula, Baku and the Khizi region.¹⁵ Gubadli, Zangilan, Jabrayil, Fuzuli, Kalbajar and Lachin regions has a potential to generate solar energy. On the other hand, wind energy is highly valued in Lachin and Kalbajar regions.¹⁶

Figure 2. Graph 2.Total revenue from Azerbaijani exports to the EU between the period 2006-2022



Source: European Commission, Eurostat

As known, the 2004 enlargement of the EU marked a crucial moment in the fate of whole Europe, as the Eastern and Central European states formally became part of the Western Bloc. The significant political, economic and social shift within the Union had a notable impact on the dynamics of EU-Azerbaijani relations, reinforcing interdependence between aforementioned actors.¹⁷ In this regard, EU-Azerbaijan Action Plan introduced in 2004 established new objectives for the respective parties to the agreement, with the aim of assessing the potential for a closer economic and political cooperation following the 2004 enlargement. Polity areas presented in the Action Plan regarding economic cooperation between the EU and Azerbaijan cover customs

¹⁴ Article 54 of the Partnership and Cooperation Agreement between the European Communities and their Member States, of the one part, and the Republic of Azerbaijan, of the other part (1999), p.15.

¹⁵ *Green Energy Zone (GEZ) in the Liberated Territories* (no date) Azerbaijan Renewable Energy Agency under the Ministry of Energy of the Republic of Azerbaijan. Available at: <https://area.gov.az/en/page/layiheler/yasil-enerji-zonasi/yasil> (Accessed: 08 December 2023).

¹⁶ Ibid.

¹⁷ *EU-Azerbaijan Action Plan (2004) EEAS*. Available at: https://www.eeas.europa.eu/sites/default/files/azerbaijan_enp_ap_final_en.pdf (Accessed: 03 October 2023).

improvement, economic development, convergence of economic legislation, energy cooperation, border management, and regional cooperation.¹⁸

By implementing the Action Plan, the first Energy Ministerial Conference involving the EU Member States, Caspian Littoral States (Azerbaijan, Iran, Kazakhstan, and the Russian Federation), and neighboring countries (Armenia, Georgia, Kyrgyzstan, Moldova, Turkey, Ukraine, and Uzbekistan) took place in Baku during the same year. As indicated in the 2004 Action Plan, accession of ten new Member States brought EU closer to the Black Sea region and the Caspian Littoral States. This proximity enhanced cooperation in the energy sector among respective parties joined the Ministerial Conference on Energy Cooperation in Baku.¹⁹

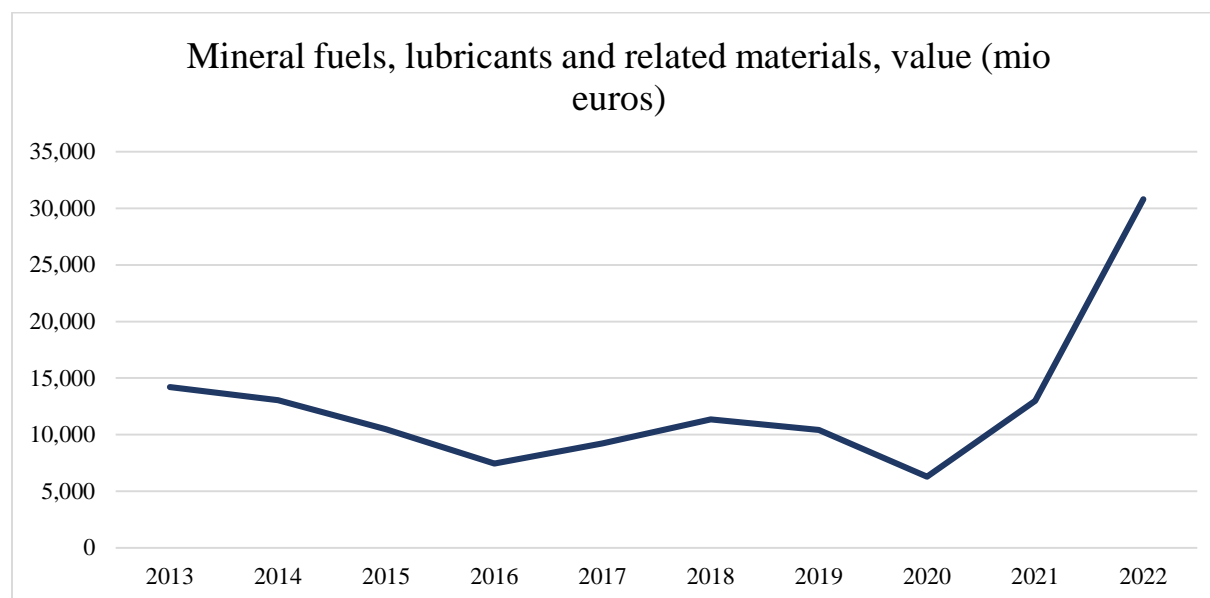
The Action Plan, adopted in 2006, paved the way for further collaboration and integration between the EU Member States and Azerbaijan. Thus, in 2006 Memorandum of Understanding on a Strategic Partnership between the European Union and the Republic of Azerbaijan in the Field of Energy was signed between respective parties, strengthening their commitment to cooperation in the energy sector. The document emphasizes the significance of ensuring sovereignty, territorial integrity and inviolability of internationally recognized borders of the agreement's signatories.²⁰ This measure is thought to eliminate threats and risks in strengthening the European energy security, since Azerbaijan's pivotal role as a transit country and its exports of natural oil and gas are crucial in the EU's energy diversification project. It could be argued that following the aforementioned agreement regarding the export of Azerbaijani mineral products to the EU, the quantity of products exported to the EU by Azerbaijan increased significantly. In the graph below total European imports from Azerbaijan between the period of 2006-2022 in euros is depicted. It should be noted that, as calculated, notable percentage of the Azerbaijani exports to the EU consists of mineral fuels, lubricants and related materials. To demonstrate, it could be observed that in 2013, 98.87% of revenue derived from exports to the EU arose from mineral products. This percentage experienced an increase in the subsequent years. Thus, since Azerbaijani exports to the EU heavily consists of its hydrocarbon reserves, enhancing cooperation in this sector strengthened economic ties between respective parties. In this regard, the graph depicting the increase in the quantity of crude oil exports by Azerbaijan to the EU (Figure 1) provides an evidence for the aforementioned argument.

¹⁸ Ibid, 6-10.

¹⁹ *Baku Initiative* (2004) *INOGATE*. Available at: http://www.inogate.org/policy_documents?lang=en (Accessed: 03 October 2023).

²⁰ *Memorandum of Understanding on a Strategic Partnership between the European Union and the Republic of Azerbaijan in the Field of Energy* (2006) *European Parliament*. Available at: https://www.europarl.europa.eu/meetdocs/2009_2014/documents/dsca/dv/dsca_20130321_14/dsca_20130321_14en.pdf (Accessed: 06 October 2023).

Figure 3. Graph 3. Revenues from exports of mineral fuels, lubricants and related materials to the EU between 2013-2022



Source: European Commission, Eurostat

Next significant event that developed EU-Azerbaijani economic relations and influenced the EU's geopolitical position in the Caucasus and beyond was the signing of a Joint Declaration between the President of the European Commission and the President of Azerbaijan concerning gas delivery. This agreement played a vital role in the establishment of the Southern Gas Corridor, designed to enhance European energy supply diversification by providing access to the Caspian Basin, as stated by the then Commission President, Barroso.²¹ The Southern Gas Corridor comprises Shah Deniz natural gas-condensate field and its full-field development (SD1, SD2), South Caucasus Pipeline and its Expansion (SCP, SCPX), Trans-Anatolian Natural Gas Pipeline (TANAP) and Trans Adriatic Pipeline (TAP).²² In addition to exploiting Caspian resources, it represents the initial step toward the EU gaining entry to the gas reserves of Central Asia. Thus, Southern Gas Corridor could be regarded as the new chapter in the European diversification policy, which will be discussed in the next chapter to analyze the Azerbaijan's significance in the EU's energy diversification strategy. Following the start of the SGC project, a deepening economic cooperation between the EU and Azerbaijan resulted in an enhanced political and social relationship. In this regard, Azerbaijan's desire to participate in several Union programs were accepted by the EU and the Protocol to the Partnership and Cooperation Agreement between the parties was signed.²³ Thus, by taking into account the aforementioned agreements established between the EU and Azerbaijan, it is evident that the relations between the respective parties are primarily built on and strengthened by the trade of energy sources and the strategic geographical

²¹ Commission and Azerbaijan sign strategic gas deal (2011) European Commission . Available at:

https://ec.europa.eu/commission/presscorner/detail/en/IP_11_30 (Accessed: 12 October 2023).

²² What is Southern Gas Corridor? (no date) SGC. Available at: <https://www.sgc.az/en> (Accessed: 12 October 2023).

²³ Protocol to the Partnership and Cooperation Agreement between the European Communities and their Member States, of the one part, and the Republic of Azerbaijan, of the other part, on a Framework Agreement between the European Union and the Republic of Azerbaijan on the general principles for the participation of the Republic of Azerbaijan in Union programmes (2015) EUR-Lex. Available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22015A0124\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22015A0124(01)) (Accessed: 13 October 2023).

location of the latter. Therefore, it is imperative to further focus on how the EU's need for diversification of its energy sources both before and after the Ukraine war influences its economic and, consequently, political relations with Azerbaijan.

2. Energy Diversification Policies in the EU: Implications for EU-Azerbaijan Energy Relations Pre-Ukraine War

Although the EU has been trying to decrease its energy dependency on single providers by initiating energy diversification projects throughout its duration, the Member States have heavily been dependent on Russian energy supplies. As emphasized in the 2004 directive concerning measures to safeguard security of natural gas supply, ensuring the security of gas supply is a crucial matter. According to the directive, any difficulty that results in a reduction of gas supply could potentially lead to significant disturbances in the economic activity and overall energy security.²⁴ Hence, by taking into account the growing dependence of the EU on Russian exports over the past two decades, despite the efforts of the Union, it could be assumed that the EU is in need of a new reliable energy sources. This is essential to reduce the vulnerability of its economy and enhance energy security. Therefore, in order to decrease Russian influence on the European energy market and to generate greener and renewable energy sources, the EU has initiated several energy diversification projects. Such projects not only affect dynamics and energy consumption within the continent but also diversify its partners. As known, such projects have increased economic collaboration between the EU and Azerbaijan and encouraged further cooperation in the respective field. Thus, it is crucial to analyze the initiative undertaken by the EU and its Member States aimed at reducing energy reliance on Russia and their search for new sources to comprehend the foundations EU-Azerbaijan relations built on and their prospective trajectory.

2.1. Overview of EU Energy Dependency on Russia

Based on data presented in 2015, Russia was considered the EU's third largest trading partner, representing 8.4% of total trade.²⁵ Russian exports to the EU primarily consist of mineral fuels, particularly natural gas and crude oil. In accordance with the statistics of 2020, the EU relied on Russia for 24.4% of all its total energy requirements. Russia maintained its dominant position as the main supplier to the EU of all the main primary energy sources, encompassing natural gas, crude oil and hard coal.²⁶ Eurostat data reveals that natural gas is the fuel with the highest import rates from Russia, as over the last decade reliance on Russian gas increased and reached 41.1% of gross energy derived from natural gas in 2020. Furthermore, crude oil and petroleum products are considered to comprise the largest share in the EU's energy mix, accounting for roughly 34.5%.²⁷ In 2020, 25.7% of the crude oil products imported into the EU were from Russia. Given the geopolitical rivalry between the EU and Russia, such high dependence on Russian energy exports were seen as a potential threat. EU Member States were concerned that this reliance could be exploited to extract political concessions. By comparing Graph number 4 and 5, it becomes evident that a substantial portion of the EU's imports from Russia consists of mineral fuels, lubricants and

²⁴ *COUNCIL DIRECTIVE 2004/67/EC of 26 April 2004 concerning measures to safeguard security of natural gas supply* (2004) *EUR-Lex*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004L0067> (Accessed: 22 September 2023).

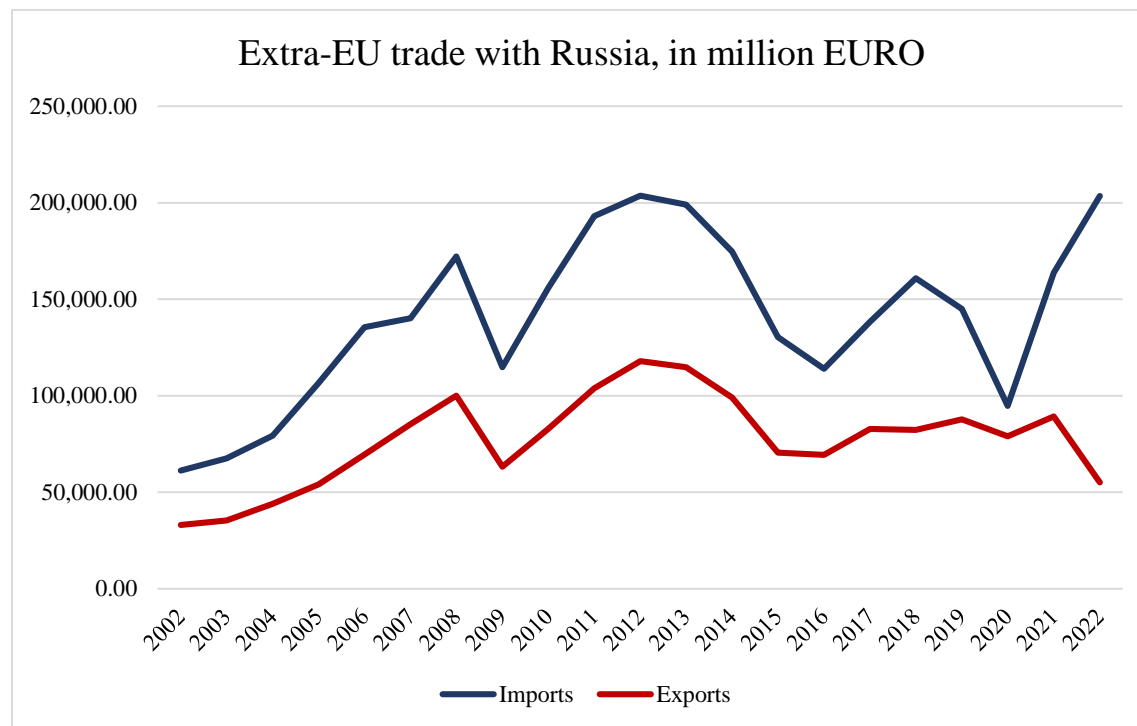
²⁵ *Economic impact of sanctions on the European Union* (2015) *European Parliament*. Available at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/569020/EPRS_BRI\(2015\)569020_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/569020/EPRS_BRI(2015)569020_EN.pdf) (Accessed: 25 September 2023).

²⁶ *Archive:EU Energy Mix and import dependency* (2022) *Eurostat - Statistics Explained*. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive%3AEU_energy_mix_and_import_dependency#EU_energy_dependency_on_Russia (Accessed: 21 September 2023).

²⁷ *Ibid.*

related materials. Furthermore, as the significant percentage of the EU's energy imports originating from Russia, the absence of this critical resource could have dire economic consequences for EU Member States heavily dependent on such imports.

Figure 4. Graph 4. Extra-EU trade with Russia between 2002-2022



Source: Eurostat

As previously emphasized, the reliance of the EU on Russian energy sources, and the potential risks associated with the absence of these sources, have been identified as vulnerabilities in the economic well-being of the Union. This dependence has also raised concerns about the Union's political independence, as it was thought that such reliance contributes to Russia's geopolitical influence on the continent. Hence, the case of the EU's response to the annexation of Crimea will be briefly discussed to highlight the Union's significant reliance on Russian energy exports and the associated vulnerabilities. Additionally, this analysis emphasizes the critical role of alternative energy sources, such as those from Azerbaijan, in mitigating these inherent risks.

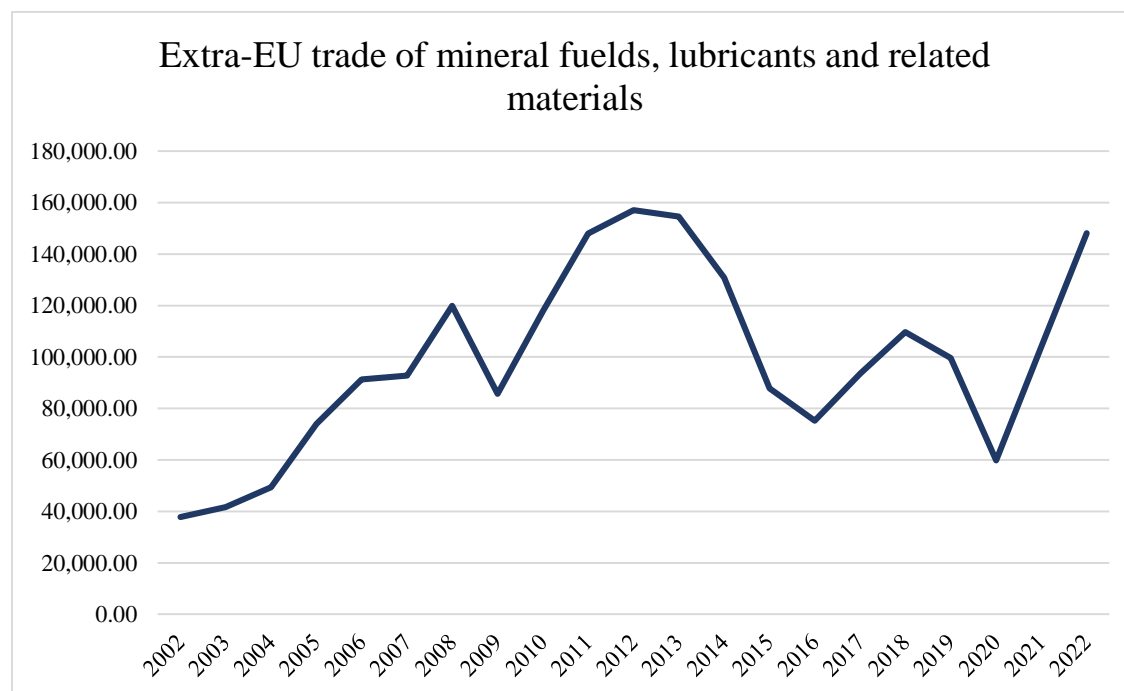
Sanctions are commonly imposed on a state to avoid an outbreak of a violent conflict by weakening the country's economy and reducing its access to international markets.²⁸ In this regard, countries that maintain interdependent economic relations often refrain from imposing sanctions, as doing so would contradict the economic self-interest of the sanctioning entity. However, in the case of the EU response to the Crimean War in 2014, despite the potential adverse economic consequences, the EU imposed gradually extended sanctions on Russia one day after the Crimean referendum, which resulted in a decision to join the Russian Federation.²⁹ The EU limited Russian

²⁸ Silva, P.M. and Selden, Z. (2019) 'Economic interdependence and economic sanctions: a case study of European Union sanctions on Russia', *Cambridge Review of International Affairs*, 33(2), pp. 229–251. doi:10.1080/09557571.2019.1660857.

²⁹ Barron, K. (2022) 'The Annexation of Crimea and EU Sanctions: An Ineffective Response', *The Arbutus Review*, 13(1). doi:10.18357/tar131202220760.

oil and gas companies' access to advanced production technologies and imposed embargo on commodities used for deep-water oil exploration and production and the halting of energy investments in Crimea.³⁰ However, European dependence on Russian exports became evident in this matter. Due to the heavy reliance of some of the Member States, Russian gas was exempted from sanctions.³¹ In response, Russia sought out China for new oil and gas technologies and deepwater oil exploration products, which nurtured the cooperation between two countries. Moreover, EU subsidiaries of blacklisted Russian banks operating in at least seven Member States and financial activities under pre-existing contracts were exempt from sanctions.³²

Figure 5. Graph 5. Extra-EU trade of mineral fuels, lubricants and related materials between 2002-2022



Source: Eurostat

As illustrated in the Graph 5, despite the sharp decline in the natural gas imports by the EU from Russia following the imposition of sanctions in 2014, the imports increased significantly in the following years, reaching up to three times their previous levels. Such an increase underscores the significant dependence of the EU on Russian energy exports. This vulnerability limits the EU's capacity to act independently defending its interests, as its reliance on Russian energy sources potentially constrains its response to regional and global political changes.

In accordance with the research conducted by the Austrian Institute of Economic Research to assess the economic consequences for the EU and Switzerland, macroeconomic effects of the trade loss amounted to 34 billion euros in value added in the short run and 92 billion euros in the long run alongside unemployment effects of 0.9 million people.³³ Moreover, not only oil sector

³⁰ Ibid, 123.

³¹ *Economic impact of sanctions on the European Union* (2015) European Parliament, 3. Available at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/569020/EPRS_BRI\(2015\)569020_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/569020/EPRS_BRI(2015)569020_EN.pdf) (Accessed: 25 September 2023).

³² Ibid.

³³ *Disrupted Trade Relations Between the EU and Russia: The Potential Economic Consequences for the EU and Switzerland* (2015) ÖSTERREICHISCHES INSTITUT FÜR WIRTSCHAFTSFORSCHUNG/ AUSTRIAN

but also agriculture and manufacturers of food products, the metal product industry, the manufacturing of machinery, equipment and motor vehicles, plus manufacturing related services were affected by the sanctions in the short run.³⁴ Despite predictions that during the respective year the growing trend of EU economies would follow, the annexation of Ukraine disrupted the pattern, causing GDP growth to struggle to gather momentum.³⁵ To sum up, economic dependence of the EU and its Member States on Russian imports and exports constrained the EU's actions and influenced its position concerning geopolitical developments along its borders.

2.2. The role of Azerbaijan in the EU diversification policy

In order to achieve economic independency and decrease European reliance on Russian exports in this regard, diversifying their imports became essential for the EU and its Member States since the establishment of the Union. As highlighted in the Article 176 A of the Treaty of Lisbon amending the Treaty Establishing the European Union and the Treaty Establishing the European Community, in order to establish and function internal market and preserve and improve environment, the EU should ensure the functioning of the energy market, ensure security of energy supply in the Union and promote energy efficiency and energy saving and the development of new and renewable forms of energy and lastly promote the interconnection of energy networks.³⁶ Thus, the objective of the EU and its Member States concerning this matter is not only achieving greener energy sources but also diversifying its energy supply and reducing reliance on Russian energy exports. In this regard, within this subchapter, the European energy diversification policy in both the oil and non-oil sector will be concisely discussed. This will facilitate an understanding of how the EU handled this matter until the outbreak of the Ukraine war and importance of Azerbaijani sources in achieving diversification goals.

Increasing import dependency, limited diversification, growing global energy demand and security risks in producing and transit countries became vital issues for the EU that could have led to an economic and thus political crisis.³⁷ Approximately, six EU Member States depend solely on a single external supplier for their entire gas imports.³⁸ This situation leaves the EU vulnerable to geopolitical changes that could result in supply disruptions. Therefore, European Energy and Climate Change Policy, European Strategic Energy Technology plan, Energy Efficiency plan were initiated within EU.³⁹ The 2015 Energy Union framework, is one of such initiatives aimed at developing the union by establishing a structure for secure, sustainable, competitive and affordable

INSTITUTE OF ECONOMIC RESEARCH, 1. Available at:

https://www.wifo.ac.at/jart/prj3/wifo/resources/person_dokument/person_dokument.jart?publikationsid=58220&mime_type=application/pdf (Accessed: 26 September 2023).

³⁴ Ibid, p.3.

³⁵ *European Economic Forecast| Autumn 2014* (2014) *European Commission*. Available at:

https://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee7_en.pdf (Accessed: 26 September 2023).

³⁶ *Treaty of Lisbon* (2009) *EUR-Lex*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A12007L%2FTXT#d1e8466-1-1>

(Accessed: 19 September 2023).

³⁷ Ciucci, M. (2023) *Energy policy: General principles: Fact sheets on the European Union, European Parliament*.

Available at: <https://www.europarl.europa.eu/factsheets/en/sheet/68/energy-policy-general-principles> (Accessed: 27 September 2023).

³⁸ *Energy Union Package: A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy* (2015) *EUR-Lex*. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC_1&format=PDF (Accessed: 27 September 2023).

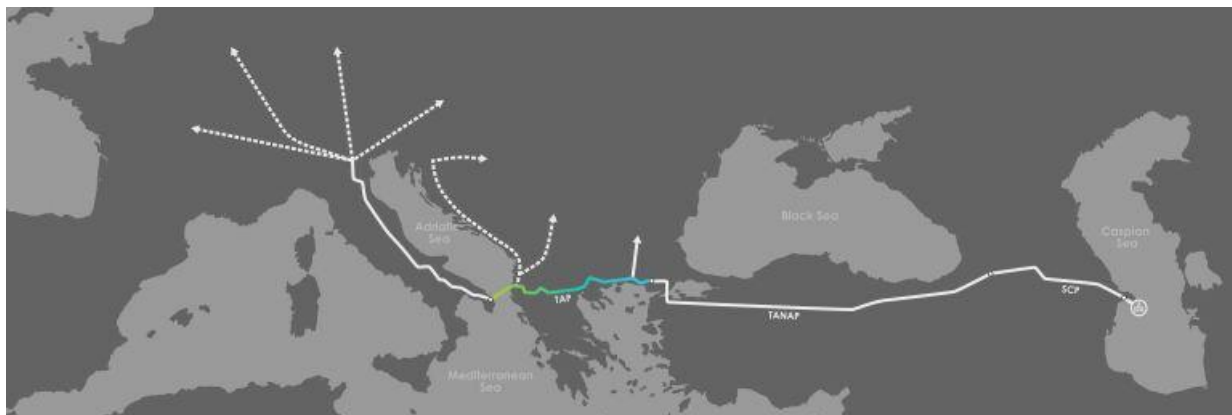
³⁹ da Graça Carvalho, M. (2012) 'EU energy and climate change strategy', *Energy*, 40(1), pp. 19–22. doi:10.1016/j.energy.2012.01.012.

energy. These projects served as the primary objectives of the EU's energy strategy. In addition to internal reforms, such as increasing energy efficiency, promoting the use of renewable energy sources, external matters such as developing access to alternative supplies is a significant goal for the EU.⁴⁰

2.2.1. The Southern Gas Corridor

In accordance with the European Commission, although it is expected that energy efficiency policies will lead to a reduction in heat demand, natural gas will remain as a crucial source for heating. It's predicted that the EU's energy diversification goals were driven not only by a market logic but also by geopolitical objectives. As previously mentioned, following the depletion of North Sea fields, reduction in the domestic gas production was observed which resulted in a significant rise in the EU's energy imports.⁴¹ Consequently, this situation increased Europe's reliance on the Russian imports, prompting European institutions to initiate projects aimed at establishing new corridors bypassing other key actors in the region such as Russia. As gas has lower pollution levels compared to the rest of the energy resources that consumed the most by the EU, it is considered a replacement for dirtier fossil fuels. Thus, the import of natural gas aligns with the EU's efforts to transition towards a low-carbon economy.⁴²

Figure 6. Map 1. The Southern Gas Corridor route



Source: <https://www.tap-ag.com/about-tap/the-big-picture/the-southern-gas-corridor>

In order to diversify and secure its energy imports, EU is interested in gas reserves not only in Azerbaijan but also in Central Asia.⁴³ Therefore, apart from exporting natural gas to the EU, Azerbaijan is planned to play the key role of being a transit country.⁴⁴ In this regard, it is essential to analyze the Southern Gas Corridor (SGC), a fundamental EU project aimed at securing its energy resources. This project marked an important milestone in the economic relations between Azerbaijan and the EU, simultaneously strengthening political relations and reshaping the geopolitical dynamics of the region.

⁴⁰ *Energy Union Package: A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy* (2015) *EUR-Lex*, 19. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC_1&format=PDF (Accessed: 27 September 2023).

⁴¹ Siddi, M. (2017) 'The EU's Botched Geopolitical Approach to External Energy Policy: The Case of the Southern Gas Corridor', *Geopolitics*, 24(1), pp. 124–144. doi:10.1080/14650045.2017.1416606.

⁴² *Ibid.*

⁴³ *Central Asia: Fact sheets on the European Union* (no date) *European Parliament*. Available at: <https://www.europarl.europa.eu/factsheets/en/sheet/178/central-asia> (Accessed: 29 November 2023).

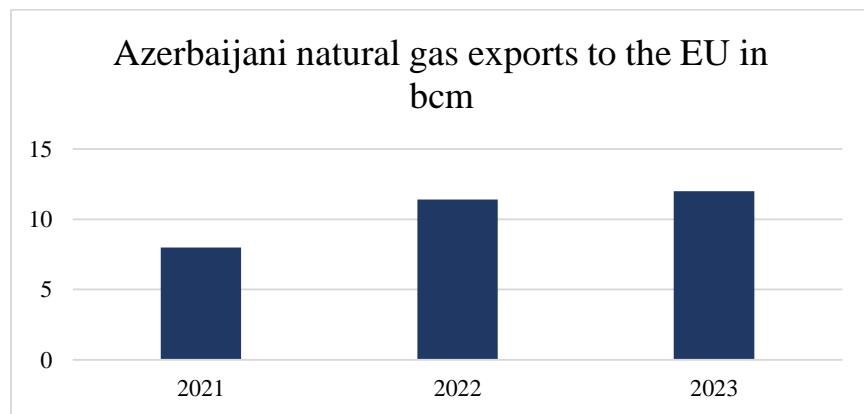
⁴⁴ Turkmenistan here can be considered as the main target of the EU.

Although the foundation of the project was laid in 2014, the first phase of the SGC was completed in 2020. Following year, Azerbaijani gas started to be delivered to Europe. As mentioned earlier and displayed in Map 1 depicted above, the Southern Gas Corridor consists of South Caucasus Pipeline Expansion (SCPX), Trans-Anatolian Natural Gas Pipeline (TANAP) and Trans-Adriatic Pipeline (TAP) segments. The SGC brings Azerbaijani gas to Italy via Georgia, Türkiye, and Greece. Additionally, following the successful implementation of the project, possible interconnectors, Greece-Bulgaria-Romania and Ionic-Adriatic are considered for future construction. Southern Caucasus Pipeline Expansion, SCPX in short, is an expansion to the transportation of Shah Deniz gas to the Georgia-Türkiye border. Following the expansion, the annual capacity of SCPX increased from 7.41 to 31 bln m³.⁴⁵ Next, TANAP transports Azerbaijani gas delivered to Georgia to Greece. Lastly, TAP offers transportation of natural gas from the Caspian Basin to its final destination, Italy. In this regards, pipeline crosses Northern Greece, Albania and the Adriatic Sea.⁴⁶ Although currently the SGC primarily serves the purpose of exporting natural gas to Italy within the EU, it is predicted that the corridor has the potential to provide natural gas to countries such as Kosovo, Albania, and Montenegro.⁴⁷ Additionally, in the future trade routes depicted in the Map 1 could also be developed and established.

2.2.1.1. The Southern Gas Corridor’s Role in EU Energy Diversification

As known, the EU imports more than half of its energy consumption. The import dependency of the EU is significantly high concerning crude oil and natural gas with 90% and 66% respectively. Since the EU heavily relied on Russian exports for provision of these essential supplies, the outbreak of a potential conflict between parties could threaten the EU’s energy security. The main pipeline supplying Russian gas to the EU, “Brotherhood”, is located in the Ukraine-Slovakia border. Thus, tensions between Ukraine and Russia leaves the energy imports of the EU in a vulnerable position. The EU Member States located in the Baltics, Central and Eastern Europe are known to suffer from the substantial dependence on Russian exports.

Figure 7. Graph 6. Azerbaijani natural gas exports to the EU in bcm



Source: CESD

Consequently, protection of the energy security, which has taken a prominent position on the EU agenda, could be regarded as the one of the most pressing priorities in these territories. In

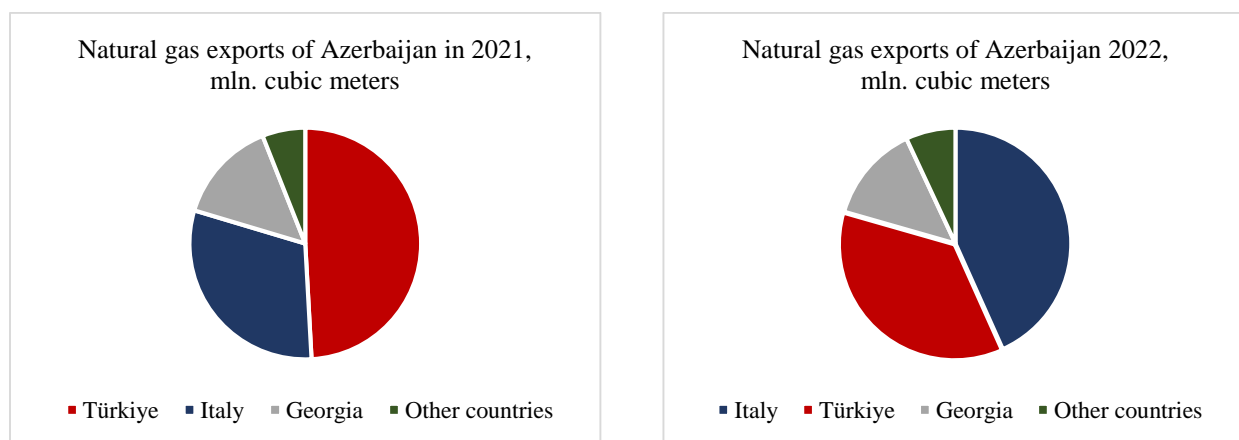
⁴⁵ *Southern Gas Corridor* (no date) SOCAR. Available at: <https://socar.az/en/page/southern-gas-corridor> (Accessed: 18 October 2023).

⁴⁶ *The Southern Gas Corridor* (no date) Trans Adriatic Pipeline (TAP). Available at: <https://www.tap-ag.com/about-tap/the-big-picture/the-southern-gas-corridor> (Accessed: 18 October 2023).

⁴⁷ Ibid.

this regard, the Southern Gas Corridor is regarded not only as an opportunity for the EU gas diversification but also as an alternative source and relief for the aforementioned countries.⁴⁸ The Graph 6 illustrates the fluctuations in the imported natural gas value from Azerbaijan. As seen, following the onset of the war in Ukraine in 2022 and onwards, there has been a noticeable upward trajectory in the volume of natural gas imports. This has increased share of Azerbaijani energy sources within the energy market of the EU. The share of mineral fuels, lubricants and related materials imported from Azerbaijan has increased from 2.8% in 2020 of total energy balance to 3.7% in 2022.⁴⁹ It should be noted that the selection of Italy as a final destination for the SGC creates new opportunities for further expansion and development of the project. In this regard, there exists a distinct possibility to transport gas from the Mediterranean to the North Sea and to countries located along the pipeline route.⁵⁰

Figure 8. Graph 7 and 8. Natural gas exports of Azerbaijan in 2021 and 2022



Source: stat.gov.az.

In the graphs presented above (Graph 7 and 8), the percentage change in Azerbaijani exports since the start of the functioning of the TAP is illustrated. It is noteworthy that the export of Azerbaijani gas to Türkiye via Southern Caucasian Gas Pipeline (Baku-Tbilisi-Erzurum) started in 2015 and until the 2022, Türkiye has been the leading importer of Azerbaijani natural gas. Based on statistics provided by the State Statistical Committee of the Republic of Azerbaijan, following the completion of construction, first flow of gas reached Italy in 2021. Between 2021 and 2022, the volume of gas exported to Italy increased by 2.996,1 million cubic meters, marking Italy as the primary importer in this period. This steady increase in the quantity of exports to the EU is regarded as a positive step towards the diversification of European energy imports. To summarize, it could be argued that the SGC and the continued expansion of this project substantially challenge the dominance of Russia in the natural gas market in Southeast Europe and the Balkans.

⁴⁸ CHURCHELAURI, I. (2016) 'The significance of Southern Gas Corridor for european energy security - myth or reality?', *Journal of Social Sciences*, 5(2), pp. 18. doi:10.31578/jss.v5i2.109.

⁴⁹ *Extra-EU trade of mineral fuels, lubricants and related materials (SITC 3) by partner (2023) Eurostat*. Available at: https://ec.europa.eu/eurostat/databrowser/view/ext_lt_mainmine_custom_7825891/default/table?lang=en (Accessed: 20 December 2023).

⁵⁰ Ibid.

2.2.2. Renewable Energy Sources

Azerbaijan's exports are heavily dependent on its mineral fuels. High dependence on a single sector left the country vulnerable to price changes in the oil and gas market. For instance, in year 2014, mineral fuels, lubricants and related materials accounted for the largest share in total exports of country. The rest of the product groups fell under 5%.⁵¹ The decline in oil prices during the same year resulted in currency devaluation and a noticeable drop in GDP growth in the country due to its significant reliance on mineral fuels. Thus, taking into account the necessity for diversification of economy, renewable energy is regarded as a significant alternative in Azerbaijan. Azerbaijan is considered as a country with high potential for generating renewable energy, specifically through sources such as wind, solar, bioenergy and mountain rivers. According to the calculations provided in the State Program on Use of Alternative and Renewable Energy Sources in the Republic of Azerbaijan, the country has about 800 MW of annual wind power capacity, which is equivalent to generating 2.4 billion kWh of electricity. In comparison to many other countries, as the annual number of sunshine hours in Azerbaijan ranging from 2400 to 3200, the country benefits from significantly higher quantities of solar radiation, averaging between 1500-2000 kWh/m².⁵² Hydropower resources in Azerbaijan amount to 40 billion kWh. Thus, it could be argued that rich renewable energy sources of Azerbaijan serve as an asset for enhancing economic relations between the EU and Azerbaijan, in line with the EU's energy diversification policy.

Renewable energy resources not only could contribute to the economic diversification of the country, but also intensify economic cooperation between the EU and Azerbaijan. Considering the substantial water and wind resources in the liberated territories, following the victory in the Second Karabakh War, Azerbaijan's renewable energy resources increased significantly.⁵³ As highlighted in the Article 55 of the 1994 Partnership and Cooperation Agreement between the EU and Azerbaijan, the cooperation of the respective parties in the energy field include development of hydro-electric and other renewable energy resources.

One of the initial steps taken by the Republic of Azerbaijan in this regard is the State Program on Use of Alternative and Renewable Energy Sources in 2004. The aim of the program was to encourage the generation of power from renewable and environmentally sustainable sources and to ensure the efficient utilization of hydrocarbon energy sources.⁵⁴ In order to achieve this objective, the State Program aims to assess renewable energy potential, improve energy efficiency, ensure the creation of jobs by establishing new energy production facilities, and increase

⁵¹ Bayramov, V. and Abbas, G. (2017) 'Oil shock in the Caspian Basin: Diversification policy and subsidized economies', *Resources Policy*, 54, pp. 149. doi:10.1016/j.resourpol.2017.10.006.

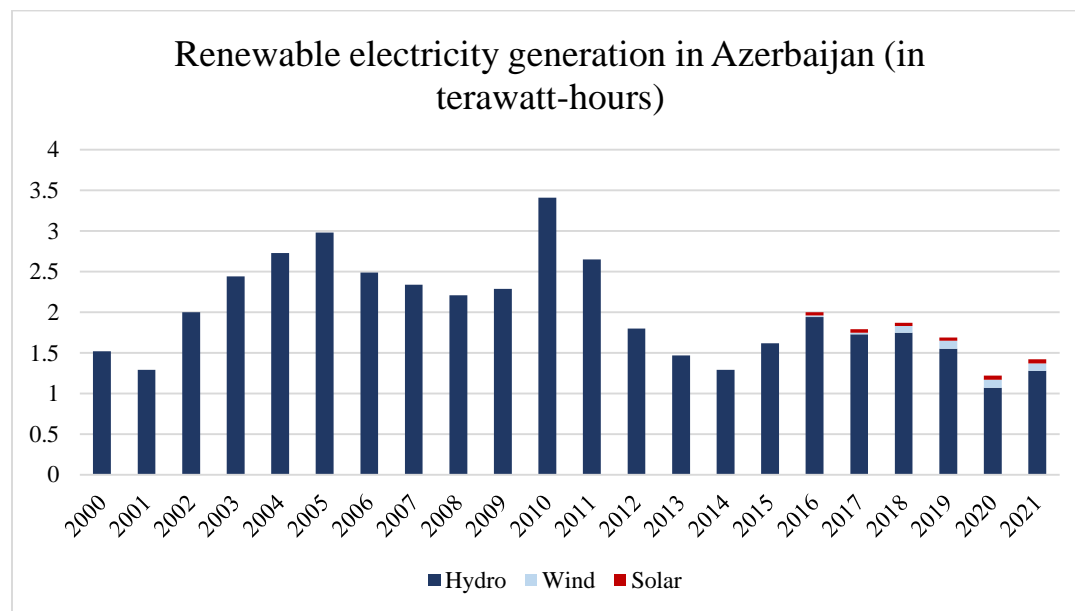
⁵² *The State Program on Use of Alternative and Renewable Energy Sources in Azerbaijan Republic* (2004) INOGATE. Available at: http://www.inogate.org/documents/AZ_2004_10_21_State_Program_on_Renewable_Energy_of_Azerbaijan_Republic.pdf (Accessed: 23 October 2023).

⁵³ *Potential of RE* (no date) Azerbaijan Renewable Energy Agency under the Ministry of Energy of the Republic of Azerbaijan. Available at: <https://area.gov.az/en/page/yasil-texnologiyalar/boem-potensial> (Accessed: 19 October 2023).

⁵⁴ *The State Program on Use of Alternative and Renewable Energy Sources in Azerbaijan Republic* (2004) INOGATE. Available at: http://www.inogate.org/documents/AZ_2004_10_21_State_Program_on_Renewable_Energy_of_Azerbaijan_Republic.pdf (Accessed: 23 October 2023).

alternative energy capacity to enhance energy security.⁵⁵ Furthermore, Renewables Readiness Assessment, published by International Renewable Energy Agency (IRENA) in 2019, conducts in-depth analysis of Azerbaijan’s renewable energy resources and identifies a trajectory for efficient utilization of them. Additionally, the report presents nine recommendations, namely, adopting a new renewable energy law, streamline permitting procedures for renewable energy, enhancing the procurement of renewable energy, setting up dedicated financing mechanism to address off-taker risk, adopting a standard power purchasing agreement (PPA), developing long-term energy scenarios, adopting a long-term renewable energy target, developing and implementing a grid connection code with standards for variable renewable energy integration, raise awareness and develop a capacity building strategy.⁵⁶ In order to meet the targets set by the government regarding increasing the use of renewable resources and decreasing GHG emissions⁵⁷, the Azerbaijan Renewable Energy Agency under the Ministry of Energy of the Republic of Azerbaijan was established in 2020.⁵⁸ The aim of the agency is to organize, regulate and coordinate activities in the field of renewable energy sources and ensure their effective use.⁵⁹ Apart from this, as recommended by the IRENA report, law on the Use of Renewable Energy Sources in the Production of Electricity was adopted by Azerbaijan in 2021. This document addresses essential aspects related the production, consumption and incorporation of renewable energy into the country’s electricity production.

Figure 9. Graph 9. Renewable electricity generation in Azerbaijan between 2000-2021



Source: <https://www.statista.com/statistics/1406721/renewable-power-generation-by-source-azerbaijan/>

⁵⁵ Ibid, 2.

⁵⁶ *Renewable Readiness Assessment - Republic of Azerbaijan (2019) IRENA, p.8-10*. Available at: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Dec/IRENA_RRA_Azerbaijan_2019.PDF?rev=3047e0cd1d1345eb982648892bf8ae6d (Accessed: 24 October 2023).

⁵⁷ Azerbaijan has committed to reduce its GHG emissions by 35% by 2030, base year is 1990. Moreover, target regarding increasing the capacity of renewable energy to 420 MW by 2020 was set by the government.

⁵⁸ Ibid.

⁵⁹ (No date) *Azerbaijan Renewable Energy Agency under the Ministry of Energy of the Republic of Azerbaijan*. Available at: <https://area.gov.az/en/page/haqqimizda> (Accessed: 24 October 2023).

As depicted in Graph 8, up until 2016, renewable energy was exclusively derived from hydropower. However, during the subsequent years, utilization of wind and solar energy have witnessed an increasing trend. In this regard, following the liberation of territories in the Western Azerbaijan in 2020, projects regarding the production and consumption of renewables, specifically, wind power has been a priority for the government. In the following year, the Order No.2620 was introduced with the aim of establishing a green energy zone in the liberated territories. In accordance with the aforementioned document, the installation of renewable energy electricity generators was planned and the objective of establishing a net zero emission zone in the liberated territories was defined.⁶⁰ Although the graph indicates that the utilization of renewable energy sources has declined, the production of renewable energy has been a prominent issue on the agenda of the Azerbaijani government. Thus, it is essential to analyze the role of renewable energy in the economic relations between Azerbaijan and the EU following the outbreak of the Ukraine War, the period in which energy diversification policy assumed the utmost significance.

⁶⁰ *Green Energy Zone (GEZ) in the Liberated Territories (2021) Azerbaijan Renewable Energy Agency under the Ministry of Energy of the Republic of Azerbaijan.* Available at: <https://area.gov.az/en/page/layiheler/yasil-enerji-zonasi/yasil> (Accessed: 25 October 2023).

3. Energy Diversification Policies in the EU: Implications for EU-Azerbaijan Energy Relations Post-Ukraine War

Following the start of the Russian offensive on Ukraine, the Western allies of the latter imposed heavy sanctions on Russia and its top officials. Since most of the EU Member States relied on the Russian energy sources, such a policy resulted in increased gas prices by 36%.⁶¹ Moreover, as it was asked by the President of Russia to make payments in Russian rubles, gas prices increased even further. Despite the ongoing efforts to diversify its energy imports, the EU faced challenges regarding finding alternatives. As demand of Russia was not met, the country stopped the flow of natural gas to states like Bulgaria, Poland and Finland. Europe withdrew 49.5 bcm of gas from underground facilities. It's reported that, just a few months later the launch of the invasion, only 27% of gas remained in European underground storage.⁶² To replace these volumes in Europe's storage facilities by next winter, significant gas volumes had to be produced. It's expected to affect the gas prices in Europe substantially. In this regard, Azerbaijan is far better placed from point of view geography and available volumes to supply South-Eastern Europe with gas. Although, Azerbaijani gas reserves are not sufficient to match Russia's supply to the EU, and Azerbaijani exports do not offer a permanent solution, they are considered as the start of the diversification process and represents the symbolic-diversification away from Russian gas.⁶³ Since the war accelerated the process of negotiations between respective parties, in 2022 new Memorandum of Understanding on a Strategic Partnership in the Field of Energy was signed. This agreement marked a new beginning in the economic relations of the EU and Azerbaijan by further expanding the cooperation. Therefore, the situation in the EU after the outbreak of the Ukraine War and its impact on energy security are crucial matters, as they have resulted in increased demand to the Azerbaijani resources.

3.1. The impact of sanctions on EU Energy Diversification

The alarming situation in the EU regarding energy security and its consumption emerged as a result of the war in Ukraine highlighted the necessity of diversification to an unprecedented extent. In this sense, strengthening the Southern Gas Corridor was seen one of the crucial steps to be taken to meet the energy demand of the Member States. Therefore, Azerbaijan, as a country rich with mineral and renewable energy resources and as a transit country to Central Asian natural gas resources plays a significant role in the energy diversification objective of the EU.

The graph below displays EU energy imports for the year 2021, prior to the outbreak of the Ukraine War. In accordance with the data presented by the REPowerEU plan, the EU depended on imports for 90% of its gas consumption, with 45,30% of these were imported from Russia in the year 2021. REPowerEU was developed with the objective of reducing dependency of the EU on Russian gas by diversifying supply sources, accelerating the green transition and reducing the demand of energy. The report prepared by the European Commission highlights the consequences of sanctions such as high energy prices and their role in the reduction of GDP growth and increased

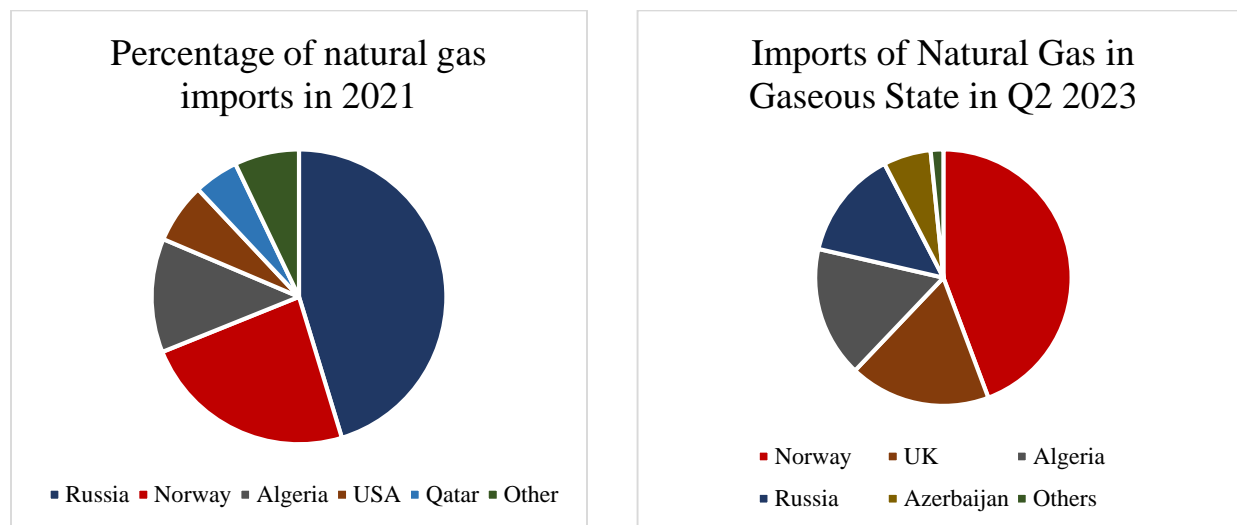
⁶¹ Griffin, N. (2022) *The Southern Gas Corridor and European energy*, ACE. Available at: <https://ace-usa.org/blog/research/research-foreignpolicy/the-southern-gas-corridor-and-european-energy/> (Accessed: 01 November 2023).

⁶² Karagianni, M. (2022) *The 2 nd Phase of the EU Southern Gas Corridor: Which role for Azerbaijan?*, ELIAMEP, p.3-4. Available at: <https://www.eliamep.gr/wp-content/uploads/2022/03/Policy-paper-98-Karagianni-EN.pdf> (Accessed: 14 November 2023).

⁶³ Ibid.

poverty.⁶⁴ In order to diversify gas supplies, the EU increased LNG supplies by strengthening partnerships with the United States, Norway and Canada, and intensified cooperation with Azerbaijan in the development of the Southern Gas Corridor. Furthermore, the Union set forth objectives of enhancing coordination with other gas importers such as Japan, China and Korea, as well as exploring export potential in sub-Saharan African countries.⁶⁵

Figure 10. Graph 10 and 11. Natural Gas Imports of the EU in 2021 and 2023



Source: Eurostat

As the Graph 10 depicts, the percentage of Russian natural gas imports decreased significantly in the second quarter of 2023. The EU planned to import 50 bcm more of liquefied natural gas (LNG) from countries including Qatar, USA, Egypt and West Africa. Additionally, diversification of pipe sources from Azerbaijan, Algeria and Norway has the potential to deliver another 10 bcm of natural gas.⁶⁶

Secondly, the EU set an objective of reducing dependence on fossil fuels. In this regard, Fit for 55 proposal was introduced, with the goal of lowering gas consumption by 30%, equivalent to 100 bcm, by 2030. In order to achieve and double this goal, the EU aims to increase the production of biomethane up to 35 billion cubic meters per year by 2030.⁶⁷ Furthermore, it is estimated by the European Commission that an additional 15 million tons of renewable hydrogen have the potential of replacing 25-50 bcm of natural gas imported from Russia annually by the year 2030. Lastly, the EU relies on the solar, wind and heat pumps as an alternative to the Russian energy supplies. According to the calculations, by doubling the planned annual rate of heat pump deployment in first half of this period, the EU could achieve the installation of 10 million heat pumps in

⁶⁴ REPowerEU: Joint European Action for more affordable, secure and sustainable energy (2022) EUR-Lex, p.1. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:71767319-9f0a-11ec-83e1-01aa75ed71a1.0001.02/DOC_1&format=PDF (Accessed: 07 December 2023).

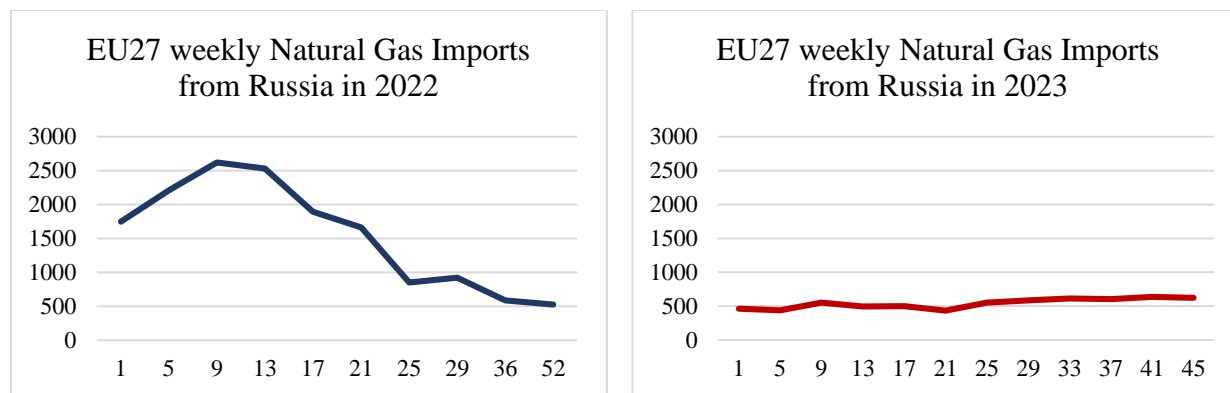
⁶⁵ Sarno, G.S. and Colantoni, L. (2023) *A Changing Energy Diplomacy: The External Dimension of the REPowerEU Plan*, Istituto Affari Internazionali. Available at: <https://www.iai.it/sites/default/files/9788893682855.pdf> (Accessed: 07 December 2023).

⁶⁶ REPowerEU: Joint European Action for more affordable, secure and sustainable energy (2022) EUR-Lex, p.7. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:71767319-9f0a-11ec-83e1-01aa75ed71a1.0001.02/DOC_1&format=PDF (Accessed: 07 December 2023).

⁶⁷ Ibid, p.7.

households in the next five years. The enactment of this objective would result in saving 12 bcm of energy.⁶⁸

Figure 11. Graph 12 and 13. EU27 Natural Gas Imports from Russia in million cubic meters



Source: bruegel.org

The graphs above illustrate the weekly natural gas imports of the EU from Russia for the years 2022 and 2023. It is worth noting that although the imports from Russia were higher in December 2023 compared to 2022, overall, the natural gas imports of the EU has decreased substantially. The successful implementation of the REPowerEU plan would further decrease the EU’s heavy reliance on Russian energy supplies in the long run. Thus, it could be argued that enhanced cooperation between the EU and Azerbaijan, not only in natural gas sector but also renewables as an alternative energy source, plays a crucial role in achieving the diversification objectives of the Union.

3.2. Azerbaijani Natural Gas: Enhancing EU Energy Diversification Post-Ukraine War

The Southern Gas Corridor, as mentioned earlier, is a decade-long project initiated with the aim of establishing a route connecting the EU with the Caucasus thereby giving the EU an access to the Caspian basin.⁶⁹ Shortly before the outbreak of the war in Ukraine, the Declaration on allied interaction between the Republic of Azerbaijan and the Russian Federation was signed between the respective parties. In accordance with this declaration, parties agreed to continue cooperation on the basis of allied interaction alongside non-interference in each other’s internal affairs.⁷⁰ The Republic of Azerbaijan and the Russian Federation concurred to enhance cooperation in political, economic, military and socio-cultural spheres. Furthermore, it’s noteworthy to highlight the 31st article of the Declaration, wherein the contracting parties agree on ensuring energy security and expanding cooperation in the areas of the renewable energy sources and the development of oil and gas fields. By taking into account the substantial domestic consumption of Azerbaijani gas, arrangement of swap transactions with Russia and Turkmenistan aligns with the

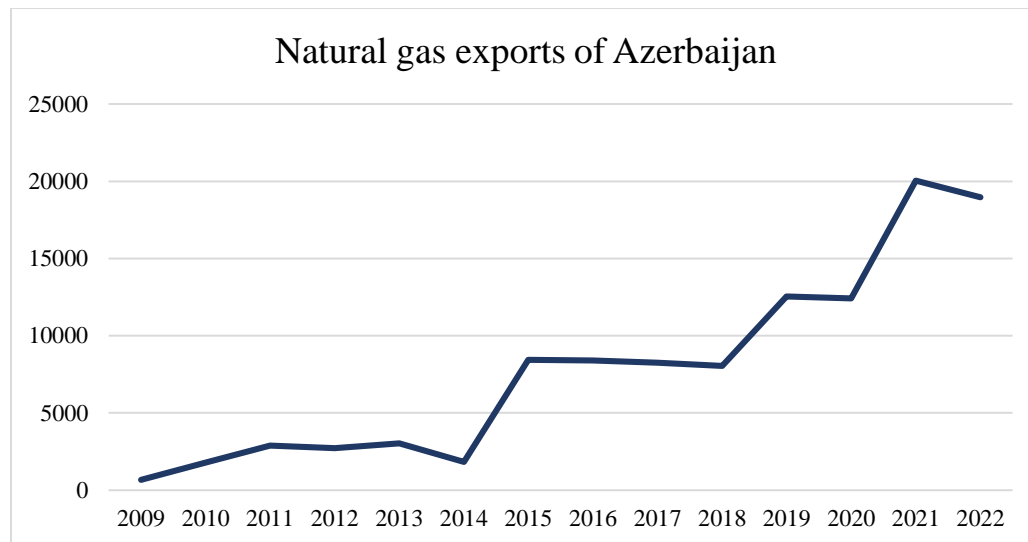
⁶⁸ Ibid, p.8.

⁶⁹ Valiyev, A., Alili, A., & Namazova, F. (2022). Azerbaijan Amid the Ukrainian Crisis: Perceptions, Implications and Expectations. *Caucasus Analytical Digest*, 130, 16-20. <https://doi.org/10.3929/ethz-b-000579582>

⁷⁰ *Declaration on allied interaction between the Republic of Azerbaijan and the Russian Federation* (2023) *Declaration on allied interaction between the Republic of Azerbaijan and the Russian Federation " Official web-site of President of Azerbaijan Republic*. Available at: <https://president.az/en/articles/view/55498> (Accessed: 03 November 2023).

interests of the Republic of Azerbaijan. Such a move would increase the country's potential to export natural gas to the EU.

Figure 12. Graph 14. Natural gas exports of Azerbaijan between 2009-2022



Source: *stat.gov.az*

After the outbreak of the war in Ukraine and abolishment of Russian energy resources by most of the Member States, the EU and Azerbaijan signed a new Memorandum of Understanding in the field of energy, further strengthening the ties between parties. The President of the European Commission, Ursula von der Leyen has given a speech during her visit to Azerbaijan in which she emphasized three crucial points of the agreement. The first and foremost matter highlighted in the agreement and thus speech is the expansion of the SGC. Up until 2022, the route delivered more than 8 billion cubic meters of gas per year. In the graph presented below, the natural gas exports of Azerbaijan to the EU between the period of 2009-2022 are illustrated. Notably, the effects of the Southern Gas Corridor is evident, as Azerbaijan significantly increased its export to Türkiye following the commencement of the project. Furthermore, last year, Italy emerged as the primary importer of the Azerbaijani gas. In accordance with the statistics provided by the State Statistical Committee of the Republic of Azerbaijan, in 2021 Italy received 6,111.7 mln cubic meters of the Azerbaijani natural gas. This number increased, reaching 8.210,7 mln cubic meters and marking as the top importer of Azerbaijani gas.

Although Azerbaijani natural gas exports decreased in amount from 2021 to 2022, its exports to Europe, namely Italy in this regard, increased significantly. It is agreed to double the supply of gas and reach 12 billion cubic meters by the contracting parties. In the long-run it is expected to increase the amount of supplies 20 billion cubic meters. Expected growth in the EU's natural gas imports from Azerbaijan is to serve as an asset in compensating reductions in Russian energy supplies.⁷¹

To sum up, the existing project, the Southern Gas Corridor gained a pivotal role in the EU's diversification policy due to the emergence of the energy crisis in the EU following the sanctions

⁷¹ *Statement by President von der Leyen with Azerbaijani President Aliyev (2022) European Commission*. Available at: https://ec.europa.eu/commission/presscorner/detail/en/statement_22_4583 (Accessed: 02 November 2023).

on Russia. These evolving dynamics in the EU also affected Azerbaijan's energy diplomacy. Alongside enabling the country to diversify its economy, Azerbaijan strengthened its ties both with Russia and the EU. The expansion and work of the Southern Gas Corridor had led to a significant increase in the natural gas exports of Azerbaijan to Europe. Considering the current state of war in Ukraine, it could be predicted that this trend will continue with plans to double and potentially triple gas supplies to the EU. As developing geopolitical dynamics suggest, Azerbaijan's geographical location as a transit country and its strategic position as an energy supplier increase the significance of the country and pave the way for further economic integration between the EU and Azerbaijan.

3.3. The role of Renewable Energy in EU-Azerbaijan Trade Post-Ukraine War

The second Memorandum of Understanding in the field of energy signed between the EU and Azerbaijan after the outbreak of the Ukraine War highlights the potential of Azerbaijan to explore renewable energy sources. As mentioned earlier in this chapter, due to the increased demand for energy diversification in the EU following the sanctioning of the Russian exports, the union intensified the negotiations regarding the flow of Azerbaijani energy resources to the Member States. In her speech during her visit to Azerbaijan, the President of the European Commission, Ursula von der Leyen stated that the country is considered as the long-term and reliable partner for the EU.⁷² She gives an insight on the newly signed agreement highlighting the second point which is the renewables. In accordance with the agreement, the EU and Azerbaijan laid the ground for cooperation in that area, as well. It is noteworthy that such a cooperation not only contributes to the diversification of Azerbaijan's economy but also explores its potential to generate and export renewable energy, marking a new phase in the country's energy sector.

Azerbaijan, Georgia, Hungary and Romania signed an agreement regarding the transmission and development of green energy at the end of 2022. Alongside the leading policymakers of the aforementioned countries, the President of the European Commission participated in the signing ceremony.⁷³ In accordance with the agreement, four countries will be working together to develop 1,195 kilometer submarine power cable under the Black Sea. This project will create a renewable energy transmission corridor from Azerbaijan, via Georgia, to Romania and subsequently to Hungary. The cable will have the capacity of 1 gigawatt (8.8 terawatt hours per year) which represents 15 percent of Romania's overall annual electricity consumption.⁷⁴ It should be noted that although this project aligns with the objectives of the EU regarding energy diversification policy and the transition to green energy, the approximate cost of the endeavor is 2.3 billion.⁷⁵ The plan is expected to be funded by the EU. Following year, during the 4th Ministerial Meeting in Bucharest, another EU Member State, Bulgaria also joined the project.⁷⁶

⁷² Ibid.

⁷³ *Governments of Azerbaijan, Georgia, Romania and Hungary signed Agreement on Strategic Partnership in the field of green energy in Bucharest (2023) President of the Republic of Azerbaijan*. Available at: <https://president.az/en/articles/view/58222> (Accessed: 15 November 2023).

⁷⁴ *A Világon Egyedülálló beruházás AZ Azerbajdzsánból Románián Keresztül Magyarországra áramot Szállító Vezeték (2023) Orbán Viktor*. Available at: <https://miniszterelnok.hu/a-vilagon-egyedulallo-beruhazas-az-azerbajdzsanbol-romanian-keresztul-magyarorszagra-aramot-szallito-vezetek/> (Accessed: 15 November 2023).

⁷⁵ Kubiak, M. (2023) *Azerbaijan set to become a green energy supplier to the EU, Jamestown*. Available at: <https://jamestown.org/program/azerbaijan-set-to-become-a-green-energy-supplier-to-the-eu/> (Accessed: 15 November 2023).

⁷⁶ *Azerbaijan, Georgia, Romania and Hungary to form JV for green electricity transmission to Europe (2023) Interfax*. Available at: <https://interfax.com/newsroom/top-stories/92960/> (Accessed: 15 November 2023).

Despite there is no binding investment decision at present and the project is still being developed, initiation of such a project is considered as a crucial step towards transitioning to green energy and boosting the production of renewable energy in Azerbaijan. Analyses regarding the import of Azerbaijani renewable energy sources to the EU also suggest that the Ukraine War has increased the urgency of the EU's interest in securing new sources of energy. As a result, it is highly likely that Brussels would see any initiatives regarding production and transmission of green power beneficial and would thus accept such deliveries from Azerbaijan.⁷⁷

Although it seems that the construction and the production of renewable energy will be costly and require significant investment, the project and the potential of Azerbaijan to export green energy is beneficial both for the country and the EU. It should be noted that the transition to renewable energy resources in Azerbaijan would decrease the domestic consumption of natural gas, consequently, increase Azerbaijan's capacity to export these resources. This would further strengthen the country's position as a reliable and long-term partner for the EU. Since the war in Ukraine accelerated this process, it could be claimed that the current geopolitical developments in that region has substantial influence on the progression of the EU-Azerbaijan relations.

⁷⁷ O'Byrne, D. (2023) *Azerbaijan positioning itself as green energy exporter*, *Eurasianet*. Available at: <https://eurasianet.org/azerbaijan-positioning-itself-as-green-energy-exporter> (Accessed: 16 November 2023).

4. Prospective Economic Relations Between the European Union and Azerbaijan in Light of Contemporary Energy Dynamics

Considering the current geopolitical developments, as discussed throughout the paper, increased cooperation in the field of energy will be beneficial for both Azerbaijan and the European Union. Azerbaijan emerged as the reliable partner of the EU in terms of energy security. In 2022, 65.6% of Azerbaijani exports went to the EU market, and 52% of Azerbaijan's foreign trade was with the EU. The Head of the European Union Delegation to Azerbaijan, Peter Michalko, mentioned this information, stating that the trade between parties has reached its highest level ever.⁷⁸ Moreover, in accordance with the data published by the Greek gas transmission system DESFA, for the first time, Azerbaijani gas supplied to Greece via the TAP pipeline exceeded the share of the Russian gas.⁷⁹ This development highlights the significance of Azerbaijani exports in the diversification policy of the EU. Additionally, the geographical location of the country portrays it as strategically significant energy source and a transit country from Europe to the Central Asia. Considering the recent Memorandum of Understanding signed between aforementioned parties, relations between Azerbaijan and the European Union have experienced a significant improvement. The agreement resulted in circumstances that increased interdependence between the parties, thereby facilitating new opportunities for economic cooperation.

Furthermore, the number of both EU and non-EU European states initiating cooperation with Azerbaijan in trade of natural gas has increased. Recently, with the participation of the President of Azerbaijan the opening ceremony of the Serbia-Bulgaria Gas Interconnector was held in Nis, Serbia.⁸⁰ This interconnector links the Serbian Nis city Bulgarian town of Novi Iskar, thus enabling Serbia to access gas from Azerbaijan and increasing the number of European states receiving Azerbaijani gas to seven. Funded by the European Commission, the European Investment Bank and Serbian Government, the Serbia-Bulgaria Gas Interconnector is expected to operate since early 2024.⁸¹ However, certain challenges have arisen that must also be taken into consideration to analyze the future dynamics.

Firstly, as mentioned earlier, Azerbaijan agreed to provide the EU with increased amount of natural gas. In accordance with the Memorandum of Understanding signed by the respective parties, the volume of natural gas exported to the EU will be doubled, reaching 20 bcm by 2027.⁸² This objectives aligns with the goal set by REPowerEU which is to end the EU's dependency on Russian gas by 2030. Although natural gas production in Azerbaijan has shown a positive trend,

⁷⁸ *EU-Azerbaijan trade reaches highest level in 2022* (2023) *EU Neighbours East*. Available at: <https://euneighbourseast.eu/news/latest-news/eu-azerbaijan-trade-reaches-highest-level-in-2022/> (Accessed: 24 November 2023).

⁷⁹ Shaban, I. (2023) *For the first time, Azerbaijani gas exceeded Russia's share in the Greek market, Caspian Barrel*. Available at: <https://caspianbarrel.org/en/2023/04/for-the-first-time-azerbaijani-gas-exceeded-russia-s-share-in-the-greek-market/> (Accessed: 08 December 2023).

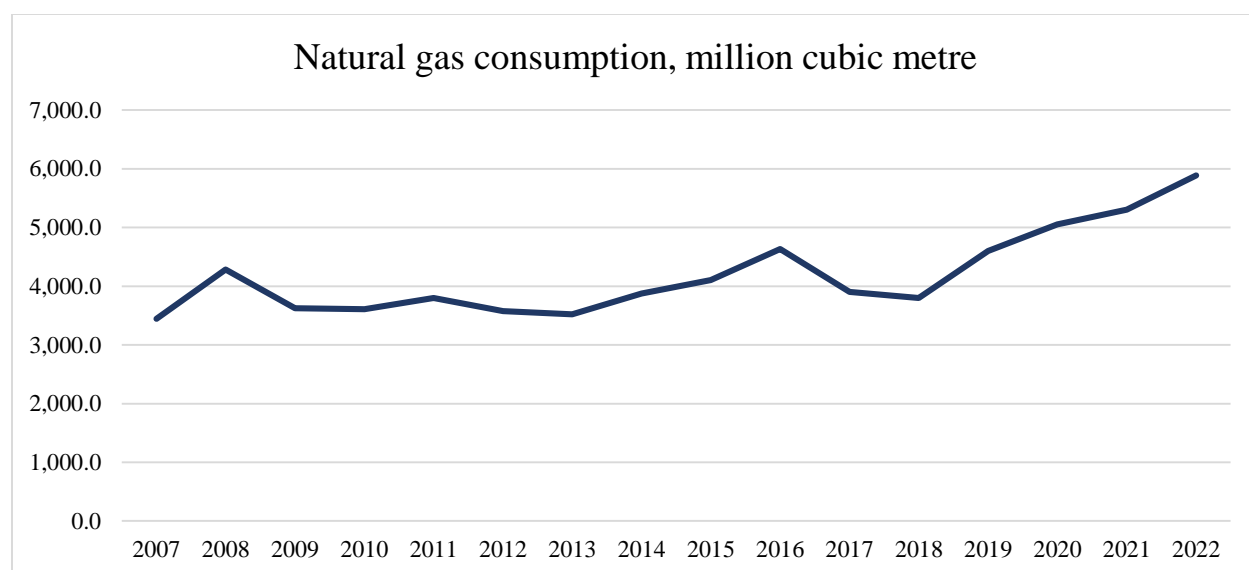
⁸⁰ Ashirov, Q. (2023) *Launch of Serbia-Bulgaria Gas Interconnector turns Azerbaijan to trustworthy partner worldwide, Azernews*. Available at: https://www.azernews.az/oil_and_gas/218930.html (Accessed: 20 December 2023).

⁸¹ *Ibid.*

⁸² Bedini, G. and Mcphie, T. (2022) *EU and Azerbaijan enhance bilateral relations, including energy cooperation, European Commission*. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_4550 (Accessed: 12 December 2023).

it is anticipated that, due to the high volume of domestic consumption and economic growth, additional investments and time will be required to provide the requested amount by 2027.

Figure 13. Graph 15. Natural Gas Consumption of Azerbaijan between 2007-2022



Source: stat.gov.az

In 2022, out of 1365361,8 terajoule of natural gas produced (46,7 billion cubic meters), 884.119,2 terajoule was exported.⁸³ As illustrated in the graph below, the quantity of natural gas allocated for domestic consumption has increased over the past years. Moreover, it is predicted that Azerbaijan’s goal to become a high-income country after 2025 will increase demand for natural gas, and its usage by households will likely increase.⁸⁴ Such high rates of domestic consumption limits Azerbaijan’s capacity to increase its exports to the EU. Therefore, shifting power generation away from gas-fired power plants is regarded as a reasonable policy to increase exports and ensure energy security.⁸⁵ Taking into account country’s high potential, one of alternative energy options is the utilization of renewable sources.

The second objective of the Memorandum of Understanding in the field of energy is the renewables. The renewable energy not only offers Azerbaijan an environmentally friendly source of energy but also has the potential to reduce the country’s high domestic consumption of natural gas. Using renewable energy for domestic purposes would decrease the high demand for natural gas, thereby accelerating the process of exporting the requested volumes to the EU. The country’s tremendous potential in renewable energy and the necessity for diversification of its economy away from oil and gas sector could be viewed as the driving force behind Azerbaijan’s efforts to expand projects in that regard. Therefore, investing on the renewable energy and fostering cooperation is beneficial for both sides to the agreement. Statistics suggest that the energy derived from renewables decreased during the period of 2017-2021 from 0.4% of overall energy sources

⁸³ Samadov, A.S. (2023) *Energy balance by products in 2022, The State Statistical Committee of the Republic of Azerbaijan*. Available at: https://www.stat.gov.az/source/balance_fuel/?lang=en (Accessed: 11 December 2023).

⁸⁴ Gurbanov, S. *et al.* (2023) ‘The price and income elasticities of Natural Gas Demand in Azerbaijan: Is there room to export more?’, *Humanities and Social Sciences Communications*, 10(1), pp. 9. doi:10.1057/s41599-023-01987-2.

⁸⁵ Ibid.

to 0.3%.⁸⁶ However, the necessity to provide the EU with energy sources following the outbreak of war in Ukraine and the limited availability of natural gas for export attracted the country to further explore its renewable energy resources. As highlighted in the preceding chapter, the Caspian Sea-European Union Green Energy Corridor is one of the significant achievements of the parties. Agreement on supplying the some of the Eastern and Central European states with energy positions Azerbaijan as a renewable energy exporter and increases cooperation between the EU and the country, thereby facilitating economic integration. However, construction of energy fields and their production is also costly and time-consuming matter. Therefore, it is crucial to analyze the challenges to assess the potential of Azerbaijan emerging as a renewable energy exporter to the EU.

The cable that will transmit Azerbaijani energy sources to Romania and Hungary will be the world's longest, as it should be constructed across the Black Sea. Indeed, taking into account the distance, time and investment required to complete the project, it is worth noting that the project is not particularly cost-effective in the short-run. Although the EU will provide funds for the construction, Azerbaijan needs further investment and guidance on building and improving its power plants. In this regard, the European Bank for Reconstruction and Development (EBRD) syndicated loan worth 186.9 million euros for the construction of 240-megawatt wind power plant in eastern Azerbaijan.⁸⁷ This wind power plant will be the first utility-scale wind power project in the country.

It is worth noting that Azerbaijan is the country in the region with the largest potential for renewable energy and is actively leading the way in the exploration of a transition to green energy. In this regard, Abu Dhabi Future Energy Company (Masdar) and State Oil Company of Azerbaijan Republic (SOCAR) have recently signed a Memorandum of Understanding (MoU) aimed at the development of 500 MW of renewable energy projects in Nakhchivan Autonomous Republic of the Republic of Azerbaijan.⁸⁸ One of the objectives of the agreement is to increase the share of renewable energy in the country's energy mix by boosting closer cooperation. Such an enhanced collaboration between aforementioned parties resulted in development of the 230 MW Garadagh solar plant, ongoing development of a 240 MW wind power plant, and investment value of 286 million dollars.⁸⁹ Furthermore, the parties to the MoU agreed on the expansion of the overall capacity for renewable energy projects to 10 GW, encompassing various technologies. Thus, taking into account the increased investment and interest in the renewable energy of Azerbaijan not only ensures country's energy security but also increases its ability to export higher amounts of natural gas to its European partners.

In order to accelerate the process of transition to renewables and achieve a greener economy National Priority number 5, Clean Environment and Green Growth Country was set as a part of Social-Economic Development Strategy of the Republic of Azerbaijan for 2022-2026. The main objectives includes Green Energy Hub which is planned to be achieved through improvement

⁸⁶ Samadov, A. (no date) *The State Statistical Committee of the Republic of Azerbaijan, Azərbaycan Respublikasının Dövlət Statistika Komitəsi*. Available at: <https://www.stat.gov.az/> (Accessed: 08 December 2023).

⁸⁷ *EBRD finances first utility-scale wind power plant in Azerbaijan* (2023) *Eu Neighbours East*. Available at: <https://euneighbourseast.eu/news/latest-news/ebd-finances-first-utility-scale-wind-power-plant-in-azerbaijan/> (Accessed: 21 November 2023).

⁸⁸ *ACWA power, Masdar and SOCAR team up for 500MW Renewable Energy Projects in Azerbaijan* (2023) *Masdar*. Available at: <https://masdar.ae/en/news/newsroom/masdar-and-socar-building-500mw-projects-in-azerbaijan> (Accessed: 20 December 2023).

⁸⁹ *Ibid*.

of the regulatory environment in the energy sector and necessary liberalization, increasing the efficiency of gas and heating supply systems in the country, and reliable payment of consumers' demand and ensuring energy efficiency.⁹⁰

Promoting the utilization of renewable energy could also be achieved through extensive education on the necessity of transitioning to renewables. This transition would serve to decrease domestic consumption of natural gas and to meet with Azerbaijan's climate commitments under the Paris Agreement and the 2040 Agenda for Sustainable Development. Building human capital by developing education and research programs could effectively address the challenges related to the utilization and generation of renewable energy, while also contributing to the diversification of Azerbaijan's economy.⁹¹ In order to enhance the transition, transparency of the information is required to gain more investments from the European Institutions. In order to attain this objective, it is advised to improve the process of obtaining permissions and licenses, clarify requirements for contract acquisition and ensure that statistics and information regarding it are made publicly available.⁹²

Such closer cooperation between the EU and Azerbaijan could further enhance economic diversification of Azerbaijan. As known, Azerbaijan's vulnerability to changing of oil prices due to its heavy reliance on its fossil fuels has posed significant challenges to the country's economic growth and stability. In order to diversify its economy, promotion of non-oil foreign investments could be regarded as a favorable step.⁹³ In this regard, attracting investments to the renewable energy sector in Azerbaijan will benefit the capacity-building of the local manufacturing sectors.

⁹⁰ *Azərbaycan Respublikasının 2022–2026-cı illərdə sosial-iqtisadi inkişaf Strategiyası* (2022) *president.az*, p.72-83. Available at:

https://static.president.az/upload/Files/2022/07/22/5478ed13955fb35f0715325d7f76a8ea_3699216.pdf

(Accessed: 24 November 2023).

⁹¹ Bayramov, V. and Orujova, L. (2017) 'Volatility, Diversification and Oil Shock in Resource-Rich Turkic Countries: Avenues for Recovery', *Bilig*, 83, pp. 324.

⁹² Mustafayev, F., Kulawczuk, P. and Orobello, C. (2022) 'Renewable energy status in Azerbaijan: Solar and wind potentials for future development', *Energies*, 15(2), p. 401. doi:10.3390/en15020401.

⁹³ Bayramov, V. and Orujova, L. (2017) 'Volatility, Diversification and Oil Shock in Resource-Rich Turkic Countries: Avenues for Recovery', *Bilig*, 83, pp. 324.

Conclusion

The fundamental matter boosting the economic and consequently, political relations between the EU and Azerbaijan is energy. By taking into account the significance of the energy in the Azerbaijani market and the EU's need for diversification of its energy sources, one could argue that energy trade has been the driving force since the establishment of economic partnership between aforementioned parties. Thus, through an analysis of the evolution of economic relations between Azerbaijan and the EU, with a focus on impact of the conflicts in Ukraine, it could be acknowledged that the disputes in the region has brought the aforementioned parties closer and facilitated an enhanced cooperation in this field. Although the diversification of energy imports and ensuring energy security were already important considerations, following the outbreak of war in 2022 they became pivotal matter in the EU's agenda. Azerbaijan, a country rich in oil and gas resources, was seen as a potential source of alternative energy. Thus, cooperation in the energy sector intensified as a result of sanctioning Russian exports. Azerbaijan is considered as the largest trade partner of the EU in the region and therefore could also be seen as a main spot of EU investments.

The energy diversification policy has been a critical concern for the EU not only in terms of reducing the energy reliance of the Member States on Russia but also the potential threats regarding the independent policymaking without substantial consequences in the long-term. As the EU addressed the Russian invasion of Ukraine with heavy sanctions and restricted the Russian exports, the Member States heavily reliant on the Russian gas suffered severe consequences of the war. Initiatives like the Southern Gas Corridor is aimed at decreasing the dependence of the Eastern and Balkan states on Russian energy exports by supplying those countries with Azerbaijani gas. Thus, the Azerbaijani resources play a vital role in the energy security efforts of the EU and carry great geopolitical importance since the SGC facilitates access the Central Asia to the EU.

The Ukraine War and the measures taken by the EU to weaken Russia has had a substantial impact on the EU's energy security. Although the energy diversification has been on the agenda of the EU since its establishment and Azerbaijan has been one of the partners of the EU in that regard, the war in Ukraine has significant influence on the energy dynamics between the EU and Azerbaijan. Following these events, the Southern Gas Corridor, a decade-long project, has given a result as Azerbaijani gas has found its way to Italy. Furthermore, the aforementioned parties have agreed on doubling the volume of natural gas exports to the EU. Alongside the SGC, the high potential of renewable energy plays a pivotal role in the EU's diversification policy. Although the cost and the production of these sources are considered as significant challenges, they are viewed as essential steps to fulfill the EU's goals in accordance with the Green Deal and Azerbaijan's aim to diversify its economy. These developments signal a deepening economic integration between the EU and Azerbaijan.

It is essential to acknowledge that the recent change in the political dynamics between the EU and Russia has significantly influenced the economic relations between the EU and Azerbaijan. To continue energy diversification policy successfully and ensure energy security, it is crucial for the EU to be more active in terms of investment. This policy not only aligns with the economic and energy objectives of the EU but also marks the foundation of enhanced economic cooperation in various fields between the involved parties. On the other hand, an increased level of transparency within Azerbaijan's government is crucial in terms of sharing of transparent information to attract investment from institutions such as Azerbaijan International Operating

Company (AIOC) and the EBRD. Furthermore, the utilization of renewable energy as an alternative for natural gas to reduce domestic consumption could be considered as more secure approach and aligns with the shared interests of parties, as opposed to the importation of natural gas from neighboring states. In the short-run, it would align with both of the parties' interest, if Azerbaijan would intensify negotiations with Turkmenistan, Kazakhstan, and Iran to explore the possibility of importing natural gas from these countries. In the long-run, with the necessary investment and continued support from its partners, Azerbaijan has the potential to export extended volumes of energy and supply the EU, contributing to its diversification policy. However, it should be noted that one of the crucial points contributing to the development of the project is signing contracts with individual EU Member States on natural gas trade. These measures would accelerate the process by attracting more investments towards the production and infrastructure development in Azerbaijan, consequently enhancing the capacity to export higher volumes of natural gas to Europe. Overall, considering the recent turn in the European political and economic affairs, the EU and Azerbaijan has achieved an enhanced economic cooperation. If this trend will be followed in the future, further economic integration could be observed which would be beneficial for both parties involved.

To sum up, based on the assessment of dynamics of economic relations and evolution of cooperation between the EU and Azerbaijan, it could be stated that the hypothesis given in the Introduction has been verified positively. The war in Ukraine has emerged as a primary driving force behind the intensified economic cooperation between Azerbaijan and the EU.

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