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ENERGY REGIONALISM IN WIDER EUROPE: SUB-REGIONAL ENERGY DYNAMICS AND THE EU'S EASTERN PARTNERSHIP

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Research Article

Abstract

In recent years, the European Union (EU) has taken concrete steps to enhance its energy security and reduce its dependence on Russia. Russia's invasion of Ukraine has further highlighted the critical dimension of the energy crisis between Russia and the EU. This study emphasizes the vital role of sub-regional energy dynamics in regional policy formulation and criticizes the EU's regional approach by assessing the EU's Eastern Partnership through the Caucasus Eastern Partnership countries (Armenia, Azerbaijan, Georgia) and the Northeast Europe Eastern Partnership countries (Ukraine, Moldova, Belarus). In this realm, countries' recent initiatives will be investigated to demonstrate how they cope with energy security issues. In the end, the article underlines the necessity for the EU to adopt tailor-made sub-regional energy policies. For Northeast Europe Eastern Partnership countries, the EU needs to support energy market liberalization and stability, invest in critical infrastructural developments, foster effective dispute resolution mechanisms, and maintain transparent transit conditions. For Caucasus Eastern Partnership countries, the EU needs to facilitate multilateral energy cooperation and dialogue, promote energy market liberalization, and facilitate energy interconnection. In short, strong political leadership and continuous efforts to foster collaboration and interconnectivity in wider Europe are necessary to enhance energy security.

Keywords: *Energy security, Natural gas, Regionalism, European Union, Eastern Partnership*

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Geniş Avrupa'da Enerji Bölgeciliği: Alt Bölgesel Enerji Dinamikleri ve AB'nin Doğu Ortaklığı

Öz

Bu makale hem bölge dışı hem de bölge içi zorlukları inceleyerek geniş Avrupa'da enerji bölgeselciliğini araştırmaktadır. Son yıllarda Avrupa Birliği (AB) enerji güvenliğini arttırmak ve Rusya'ya olan bağımlılığını azaltmak için somut adımlar atmıştır. Rusya'nın Ukrayna'yı işgali, Rusya ile AB arasındaki enerji krizinin kritik boyutunu daha da vurgulamıştır. Bu çalışma, bölgesel politika oluşturmada alt-bölgesel enerji dinamiklerinin hayati rolünü vurgulamakta ve AB'nin bölgesel yaklaşımını eleştirmektedir. Bu çerçevede makale, AB'nin Doğu Ortaklığı'nı Kafkasya Doğu Ortaklığı ülkeleri (Ermenistan, Azerbaycan, Gürcistan) ve Kuzeydoğu Avrupa Doğu Ortaklığı ülkeleri (Ukrayna, Moldova, Belarus) üzerinden değerlendirmektedir. Böylece, ülkelerin enerji güvenliği meseleleriyle nasıl başa çıktıklarını göstermek için son dönemdeki girişimleri incelenecektir. Makalenin sonunda, AB tarafından özelleştirilmiş alt-bölgesel enerji politikalarının benimsenmesi gerekliliğinin altı çizilmektedir. Kuzeydoğu Avrupa Doğu Ortaklığı ülkeleri için AB'nin enerji piyasasının liberalleşmesini ve istikrarını desteklemesi, kritik altyapı gelişmelerine yatırım yapması, etkili anlaşmazlık çözüm mekanizmalarını teşvik etmesi ve şeffaf transit koşullarını sürdürmesi gerekmektedir. Kafkasya Doğu Ortaklığı ülkeleri için AB'nin çok taraflı enerji iş birliği ve diyaloğunu desteklemesi, enerji piyasasının serbestleşmesini teşvik etmesi ve enerji bağlantılarının kolaylaştırılması gerekmektedir. Kısacası, enerji güvenliğini arttırmak için güçlü bir siyasi liderlik ve Avrupa çapında iş birliğini ve karşılıklı bağlantıyı teşvik etmeye yönelik aralıksız gayret gereklidir.

Anahtar Kelimeler*: Enerji güvenliği, Doğal gaz, Bölgeselcilik, Avrupa Birliği, Doğu Ortaklığı*

Introduction

This article explores the extra-regional and intra-regional challenges of energy regionalism in wider Europe. This topic has gained more importance recently as the European Union (EU) has developed EU-wide and regional energy policies to enhance regional energy and reduce energy import dependency on Russia. The significance of this topic has increased recently after the Russian invasion of Ukraine as the war deepened the energy crisis between Russia and the EU. Russia's invasion of Ukraine and the Western sanctions on Russia on various issues, including energy trade, motivated the European countries to deepen their intra-regional energy cooperation to reduce their dependence on Russia and other non-reliable external energy suppliers.

The article focuses on the natural gas dependency of specific countries from two sub-regions of the EU's Eastern Partnership countries: the Caucasus Eastern Partnership countries (Armenia, Azerbaijan, Georgia) and Northeast Europe Eastern Partnership countries (Ukraine, Moldova, Belarus). In this regard, the research aims to evaluate the effectiveness of the EU's regionalist approach through Eastern Partnership and recent initiatives of Eastern Partnership countries to demonstrate how these countries have managed energy security issues. In this regard, the research sheds light on sub-regions significance in shaping and implementing tailor-made energy policies within the wider European context. Even though much literature is available on regionalism, sub-regionalism has become a vital concept in recent years. One of the most important pioneer scholars of sub-regionalism, Glenn Hook and Ian Kearns, argue that globalization and regionalization gave rise to sub-regionalism to distinguish cases from regionalism after the Cold War.[1]

Looking at the regions from a one-dimensional and wider perspective neglects sub-regional actors and diversity. Even though it is hard to distinguish between sub-regions, a group of countries creates their own dynamics that can differ from regional dynamics. In this case, top-down approaches in policymaking mostly end up in failure. For this reason, sub-regional categorization is necessary for addressing the challenges and the needs of the sub-regions. Hence, bottom-up approaches will likely be more successful considering sub-regional dynamics since policies will be tailor-made to each sub-region. The issue is even more vital in the energy sector due to the vulnerability in energy supply security. Our article focuses on two sub-regions in wider Europe to reveal how the EU's regionalist approach neglects sub-regional dynamics.

The academic literature has various perspectives regarding the EU-Russia energy relations. For example, James Henderson and Kong Chyong examined the significance of Russian gas deliveries to the EU. According to the authors, after the Ukrainian war and sanctions, it is not very likely for Russia to export gas to Europe in volumes at pre-war levels due to diversification initiatives and the low-carbon transition efforts of the Union.[2] In their research, Per Högselius and Arne Kaijser argue that there are multiple

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1 Glenn D. Hook and Ian Kearns, eds. *Subregionalism and World Order*. (London: Macmillan Press LTD, 1999), pp.4-6.

2 James Henderson and Kong Chyong. "Do Future Russian Gas Pipeline Exports to Europe Matter Anymore?" *The Oxford Institute for Energy Studies* 131 (2023), p.24.

ways of reducing energy dependence. These are developing domestic resources, diversifying energy imports, constructing power plants that can use a variety of fuels, promoting relationships based on trust with exporting countries and companies, and encouraging mutual cooperation with other importing countries to consolidate leverage in negotiations.[3]

Some scholars focus on the impact of broader geopolitical dynamics on the EU's energy policies. For example, Aad Correlje and Coby Van Der Linde argue that the effectiveness of the EU policy instruments does not only depend on infrastructural investments, domestic energy production, energy import facilities, and access to various oil and gas supplies but also depends on geopolitical setting that these policies are carried out. Therefore, the energy policy of the EU needs to be reformulated in line with political-strategic issues.[4] For Elena Kropatcheva, geopolitical games undermine economic profits for all actors, leading to the construction of new and expensive pipelines.[5] On the contrary, Tom Casier asserts that energy relations have moved from market logic to geopolitical logic. Even though geopolitical considerations are essential in EU-Russia energy relations, the author believes that the initial concern of the actors is economic, such as low energy prices and lucrative contracts.[6]

Moreover, the recent Liquified Natural Gas (LNG) developments have been considered a significant game-changer for European energy security. For example, Philipp M. Richter and Franziska Holz believe that LNG can replace Russian gas. However, EU LNG facilities are not fully connected to other energy markets, and their capacity is not entirely used. Other than LNG, they argue that the number of reverse flows needs to be increased in Eastern Europe to reduce energy security threats, and the EU needs to utilize more from the Southern Gas Corridor (SGC) to allow diversification of suppliers.[7] Similarly,

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[3] Per Högselius and Arne Kaijser. "Energy Dependence in Historical Perspective: The Geopolitics of Smaller Nations". *Energy Policy* 127 (2019), pp. 440-443.

[4] Aad Correlje and Coby Van der Linde. "Energy Supply Security and Geopolitics: A European Perspective" *Energy Policy* 34, no.5 (2006), p.542.

[5] Elena Kropatcheva. "Playing Both Ends Against the Middle: Russia's Geopolitical Energy Games with the EU and Ukraine" *Geopolitics* 16, no.3 (2011), p.567.

[6] Tom Casier. "Russia's Energy Leverage over the EU: Myth or Reality?" *Perspectives on European Politics and Society* 12, no.4 (2011), p.506.

[7] Philipp M. Richter and Franziska Holz. "All Quiet on The Eastern Front? Disruption Scenarios of Russian Natural Gas Supply to Europe" *Energy Policy* 80 (2015), pp.187-188.

Marco Siddi argues that developed energy interconnections and market integration, especially in Central and Eastern European countries, decrease the vulnerability to gas supply interruptions.[8]

Relying on the contributions of the above-mentioned academic literature, our article seeks to make a humble contribution to EU-Russia energy dependency literature from the regional and sub-regional perspective since it is a largely neglected issue in the EU energy policy studies. By investigating the sub-regional dynamics, the article seeks to uncover the unique energy challenges and opportunities faced by countries within the Caucasus Eastern Partnership and Northeast Europe Eastern Partnership sub-regions. This approach allows moving beyond a generalized perspective and provides a more detailed examination of the factors influencing energy cooperation and security.

Accordingly, the article is going to elaborate on the state of natural gas security and the natural gas dependency dimension of six countries with a group of two sub-regions. These are Caucasus Eastern Partnership countries (Armenia, Azerbaijan, Georgia) and Northeast Europe Eastern Partnership countries (Ukraine, Moldova, Belarus). Thus, countries' recent initiatives and policies will be shown to reveal how they cope with their gas import dependency and manage sub-regional energy relations. The article is going to test the following two questions: First, to what extent is the EU's regional approach effective in reducing European energy dependence on Russia? Second, to what extent do the EU's regional energy policies contribute to the energy security of the sub-regions?

The analysis in the article reveals that sub-regions have their own dynamics, and the EU's regional energy policies neglect sub-regional energy dynamics in Eastern Partnership countries. Therefore, besides developing regional policies such as the Eastern Partnership or a single energy policy such as the Energy Union, there is a necessity for the EU policymakers to develop more effective energy policies towards these sub-regions in the Eastern Partnership area to enhance their energy security and energy independence from Russia.

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[8] Marco Siddi. "The EU's Gas Relationship with Russia: Solving Current Disputes and Strengthening Energy Security" *Asia Europe Journal* 15 (2017), p.116.

I. Theoretical Framework and Methodology

The theoretical framework of this paper is developed through a critical review of existing theories of regionalism and sub-regionalism. According to Joseph S. Nye, regionalism is "The formation of interstate associations or groupings based on regions.[9] For John Ravenhill, it is "Intergovernmental collaboration on a geographically restricted basis."[10] and for Amitav Acharya, regionalism is "Purposive interaction, formal or informal, among state and non-state actors of a given area in pursuit of shared external, domestic, and transnational goals".[11] The commonality of these definitions is that regionalism is about interaction at the regional level. The Energy Union and Energy Community of the EU can be shown as examples of regional energy groupings in the energy field. In Central Asia, there was an initiative to unite energy producers, consumers, and transit member countries of the Shanghai Cooperation Organization (SCO). However, the initiative failed since countries have perceived dependency on neighbors as a threat to national security. Besides, although these countries, except India and Pakistan, have integrated energy infrastructures from the Soviet era, a weak institutional framework prevented energy regionalism.[12]

For Barry Buzan, Ole Waever, Jaap de Wilde, and Andrew Cottey, sub-regionalism is about being a part of a specific region that includes more than one state but fewer than all the states in the region or having a transnational composition.[13] For William Tow, it is "A group of geographically contiguous states united by their mutual susceptibility to a specific threat, a common interest in neutralizing that threat in ways beneficial to their national

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[9] Shintaro Hamanaka. "What is Subregionalism? Analytical Framework and Two Case Studies from Asia". *Pacific Focus* 30, no.3 (2015), p.392.

[10] John Ravenhill. "East Asian Regionalism: Much Ado About Nothing?" *Review of International Studies* 35, no. S1 (2009), p.216.

[11] Amitav Acharya. "Comparative Regionalism: A Field Whose Time Has Come?" *The International Spectator* 47, no.1 (2012), p.3.

[12] Anatole Boute. *Energy Security Along the New Silk Road: Energy Law and Geopolitics in Central Asia*. (Cambridge: Cambridge University Press, 2019), pp.95-96.

[13] Barry Buzan, Ole Wæver, and Jaap De Wilde. *Security: A New Framework for Analysis* (Colorado: Lynne Rienner Publishers, 1998), pp.18-19; Andrew Cottey. "Sub-regional Cooperation in Europe: An Assessment". *EU International Relations and Diplomacy Studies* (2009), p.5.

securities, and a means of collaboration to reduce individual and collective vulnerabilities to future threats."[14]

From these definitions, it is observed that most scholars tend to attract attention to the level of geographical coverage when they mention sub-regionalism and focus on the relationship between larger and smaller regions. For instance, in his research, Nicola Phillips focuses on the relationship between small and large regions by focusing on the Americas. He tries to elaborate on integration at the broader regional scale and whether to strengthen or weaken integration at the narrower regional scale.[15]

In Asia, sub-regionalism is approached through growth triangles, transnational economic zones, and economic territories.[16] The study of Srivastava and Misra demonstrates that it is easy for Bangladesh, Bhutan, Nepal, and India to form sub-regional energy cooperation due to geographical proximity, availability of energy resources, and expertise in energy. However, the cooperation has been limited to bilateral relations, such as between India and Nepal, India and Bangladesh, and India and Bangladesh.[17]

One of the EU's regional policies in Europe is the Eastern Partnership, developed in 2009 to increase cooperation and create a coherent policy framework for its Eastern neighbors.[18] The policy aims to strengthen the economy, governance, connectivity, and societal relationships among the EU and six partner countries. The cooperation takes place both at the bilateral level and at the regional level.[19] In addition, the EU4Energy initiative, funded by the EU, has been collaborating with Eastern Partnership countries since 2016. Its objective is to enhance the accuracy of data and statistics and reinforce evidence-based decision-making in the energy sector. The EU, the International Energy Agency, the Energy Charter, and the Energy Community

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[14] William T. Tow. *Subregional Security Cooperation in the Third World* (Boulder and London: Lynne Rienner Publishers, 1990), p.4.

[15] Nicola Phillips. "Hemispheric Integration and Subregionalism in the Americas" *International Affairs* 79, no.2 (2003), pp.327-329.

[16] Chia Siow Yue. "Regionalism and Subregionalism in ASEAN: The Free Trade Area and Growth Triangle Models". *Regionalism versus Multilateral Trade Arrangements* 6 (1997), p.298.

[17] Leena Srivastava and Neha Misra. "Promoting Regional Energy Co-Operation in South Asia" *Energy Policy* 35, no.6 (2007), pp.3363-3365.

[18] "Eastern Partnership". European Council of the European Union (2020). Retrieved from https://www.consilium.europa.eu/en/policies/eastern-partnership/

[19] "Eastern Partnership".

Secretariat have cooperated to achieve significant progress in policymaking, legislation, and statistics. These efforts have established the groundwork for enhancing energy security, promoting sustainable energy, and developing robust energy markets in Eastern Partnership countries.[20]

The Energy Community is the EU's other regional initiative that facilitates the integration of the EU and its neighboring countries into a unified energy market across Europe. The organization was founded in 2006. The primary aim of the Energy Community is to expand the regulations and principles of the EU's internal energy market to nations in Southeast Europe, the Black Sea region, and other areas through a legally enforceable framework. The Energy Community comprises Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Georgia, Moldova, Montenegro, Serbia, and Ukraine. In addition, Armenia, Norway, and Türkiye participate as observers.[21]

As shown in the European case, regionalism prevails. As Martin Dangerfield argues, the EU categorizes Eastern European countries under one or more regional groupings. These are the Adriatic and Ionian regions, the Baltic regions, and the Danube regions.[22] With this classification, the EU neglects sub-regional dynamics. Despite advancements in the EU's relations with the Eastern Partnership countries since 2009, the Union has not fully reached the desired policy objectives. Hence, sub-regional consideration is crucial for the EU to cope with Russia's influence, the conflicts, and the countries' institutional and infrastructural deficiencies.[23]

Both sub-regions have a historical connection with the Soviet Union. Except for Belarus, all countries in the Eastern Partnership experienced conflicts in the post-Soviet era. These conflicts involved Transnistria, Abkhazia, South Ossetia, Nagorno-Karabakh, and Donbas. The disputes mainly arose because of boundary adjustments implemented during the Soviet

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[20] "EU4ENERGY in the Eastern Partnership". International Energy Agency (2020). Retrieved from https://iea.blob.core.windows.net/assets/8fd253e9-de9b-4dea-b75a-2dcf264079de/Regional-Combined.pdf , p.1.

[21] "Who We Are". Energy Community (2020). Retrieved from https://www.energy-community.org/aboutus/whoweare.html

[22] Stefan Gänzle and Kristine Kern, eds. A 'Macro-Regional' *Europe in the Making: Theoretical Approaches and Empirical Evidence* (London: Palgrave Macmillan, 2016), p.25.

[23] Michèle Knodt and Jörg Kemmerzell, eds. *Handbook of Energy Governance in Europe*. (Cham: Springer Nature Switzerland, 2022), p.309.

era, which fueled separatist movements. Consequently, these countries have a significant population of Russians and Russian speakers, which enables Russia to exert its influence in these countries and becomes a justification for Russian intervention in the domestic matters of Eastern Partnership countries.[24]

Apart from the Soviet legacy, geographical distinctions between sub-regions give rise to diverse necessities for energy and pose unique infrastructural challenges. Considering the EU's dependence on external energy imports, these variations influence the free flow of energy to the EU and thus affect the EU's energy security. Considering these realities, the sub-regional examination is crucial for understanding the potential and challenges of sub-regions, understanding the unique circumstances of each sub-region, and emphasizing the importance of formulating and executing tailor-made energy initiatives within the broader European context.

Northeast Europe Eastern Partnership countries are vital for transmitting Russian gas to Europe, whereas Caucasus Eastern Partnership countries, except Armenia, play a pivotal role in diversifying Russian gas. Besides, Northeast Europe Eastern Partnership countries largely rely on Russian gas, while Azeri gas ensures Azerbaijan's and Georgia's energy security in the Caucasus. Hence, sub-regional differences increase the necessity of developing tailor-made sub-regional policies. For this reason, the EU's regional approach to all these countries makes an insignificant contribution to the EU's energy relations with these countries regarding energy security. This demonstrates that each country has different views and dependencies on Russia, and sub-regional dynamics matter for ensuring energy security in wider Europe.

Methodologically, the paper focuses on case studies of six individual states, and they are grouped under two different sub-regions. A case study can compromise cross-case analysis. The method allows researchers to depict a clear picture of various factors that can contribute to the outcome, and it enables researchers to explain why one case is the same or different from others.[25] As a result, it makes unique findings more meaningful. For this

[24] Agnieszka Legucka and Agata Włodkowska. "The Eastern Partnership as a Contested Neighbourhood: The Role of External Actors-The EU and Russia" *Studia Europejskie-Studies in European Affairs* 25, no:4 (2021), pp.41-42.

[25] Samia Khan and Robert Van Wynsberghe. "Cultivating the Under-Mined: Cross-Case Analysis as Knowledge Mobilization" Forum: Qualitative Social Research 9, no.1 (2008), p.1.

reason, there is a chance to gather vital evidence to create or modify policies, and the connection between cases makes up meaningful relations.[26] The nature of the method is suitable for this research since the article focuses on two different sub-regions and modifies policies according to them.

In this paper, the energy dependency of the Eastern Partnership countries on Russia is elaborated based on the sub-regional energy relations framework. A deep analysis of these countries is vital for inferring outcomes regarding their energy dependencies on Russia, their relations with the EU, and sub-regional energy cooperation. Hence, we divide countries into sub-regions by considering their geographical location to reveal similarities and differences in sub-regional dynamics. Also, the level of cooperation in the sub-regions is considered critical for determining sub-regional energy cooperation.

The statistical data are collected from the International Energy Agency (IEA), European External Action Service (EEAS), Gazprom report, and Eurostat. The method is applied in research by demonstrating similarities and differences between sub-regions and why EU policymakers should not neglect sub-regions. Ultimately, the method allows researchers to demonstrate why EU policymakers modify their regional policies. Moreover, in this research, we employ purposive sampling since we argue that six Eastern Partnership countries are more vulnerable to Russian gas supply disruptions compared to Western European countries. Besides, rather than grouping countries under one policy framework, we believe that sub-regional dynamics matter for energy cooperation and energy supply security in wider Europe.

II. Energy Relationship of the EU and Eastern Partnership Countries with Russia

The enlargement of the EU has changed the energy dynamics of the Union in the way that the EU has imported more and more hydrocarbon resources. Most members who joined the EU after 2000 have low energy production and high energy import dependency. Therefore, this situation has increased the EU's energy import dependency and energy security vulnerability. Gas import dependency and the use of gas for energy production are also significant among most Eastern Partnership countries. Besides, weak energy interconnectivity with neighboring countries and insufficient energy infrastructure in most Eastern Partnership countries make import dependency

[26] Khan and Van Wynsberghe, p.1.

disastrous since these countries become vulnerable to energy supply disruptions and thus affect the EU's energy security.

Moreover, weak energy governance among Eastern Partnership countries further increases external dependence. The operation of single or few state-owned energy companies in national energy markets both hinders competition and provides suitable conditions for external manipulation. An example is the gas transmission, distribution, and storage controlled mainly by Russian energy companies, enabling Russia to influence these countries. Therefore, these countries need to diversify energy sources and energy market reforms to increase energy security.

In addition to weak energy governance, natural gas connectivity and energy production are low in Eastern Partnership countries. Therefore, Russia is the greatest gas supplier to most of the Eastern Partnership countries, making them dependent on Russian gas and thus enabling Russia to use its gas for political ends.[27] Russia's use of its energy resources as a weapon is visible in multiple crises, such as the 2006, 2009, and 2013 Ukrainian crises in which Russia ceased gas supplies to Ukraine and Europe. The problem in this region is not relying on Russian energy resources but on accessibility to alternative energy supplies. In this realm, the EU encourages competition, interconnectivity, and diversification of energy resources through its financial resources and promoting legal and regulatory frameworks.

Several legal documents are adopted at the EU level to enhance energy security. In 2009, the Third Energy Package was entered into force. It covers decentralization, independent authorities, an entity for energy regulatory coordination, transnational cooperation, and free and equitable markets.[28] The package intends to regulate the energy markets of member states by promoting transparency, competition, and the continuous flow of energy. The EU presented this package for its members and expected Eastern Partnership countries to align with the third package for greater integrity between these countries and the EU member states. In 2015, the Union adopted the Energy Union, which formulated five dimensions: "Energy security, solidarity, and

[27] Martin Jirušek, Tomáš Vlček, and James Henderson. "Russia's Energy Relations in Southeastern Europe: An Analysis of Motives in Bulgaria and Greece". *Post-Soviet Affairs* 33, no.5 (2017), pp.336-337.

[28] "Third Energy Package". European Commission (2020). Retrieved from https://energy.ec.europa.eu/topics/markets-and-consumers/market-legislation/third-energy-package_en

trust, a fully integrated internal energy market, energy efficiency contributing to moderation of demand, decarbonizing the economy and research, innovation, and competitiveness."[29]

These initiatives are vital for securing energy supplies and increasing energy connectivity between countries. Since most Eastern Partnership countries are dependent on gas imports and vulnerable to gas supply disruptions, energy governance and sustainable energy policymaking are vital for these countries. In this realm, cooperation with the EU can help these countries to strengthen their energy security. In the framework of EU-Russia energy relations, the article is going to compare the energy security and dependency dimension of Eastern Partnership countries. In the analysis, recent initiatives of Eastern Partnership countries are going to be elaborated on so that how these countries manage and strengthen their energy vulnerability can be seen.

Table I: Level of Sub-Regional Energy Cooperation Between Eastern Partnership Countries

Sub-Regions	Natural Gas Imports by 2020 (bcm)	Natural Gas Imports from Russia by 2020 (bcm)	Sub-Regional Energy Cooperation
Caucasus Eastern Partnership Countries			**Medium**
Armenia	2,8	2,1	
Azerbaijan	2,0	0	
Georgia	2,8	0,2	
Northeast Europe Eastern Partnership Countries			**Low**
Ukraine	8,1	0	
Moldova	3,9	3,1	
Belarus	19,9	18,4	

Source: Gazprom Annual Report 2020 and International Energy Agency

[29] "What Are the European Green Deal and the Energy Union About?". European Commission (2020). Retrieved from https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-1.html

III. Northeast Europe Eastern Partnership Countries

Northeast Europe Eastern Partnership countries, having been exposed to Russian influence for decades, have also played the role of transit countries for Russian gas. Despite this historical context, various parameters have significantly influenced the level of sub-regional energy cooperation. The complexities of regional cooperation within this context can be better understood by examining key parameters. These include initiatives that have shaped the regional landscape and contemporary policy frameworks to foster collaboration. Political will and commitment are crucial aspects that either promote or impede regional cooperation, influencing the success or failure of joint initiatives. Moreover, the state of energy infrastructure and interconnectivity is a vital parameter impacting the feasibility and effectiveness of collaborative efforts. These parameters provide a more comprehensive analysis of the factors considered for the low sub-regional energy cooperation in Northeast Europe Eastern Partnership countries.

A. Ukraine

Ukraine is the biggest transit country for Europe since most gas pipelines cross over the territories of Ukraine and reach Europe. Since the EU is dependent on Russian gas, continuous gas supplies coming from Ukraine used to have a crucial role. The Russian-Ukrainian crises in 2006, 2009, and 2014 demonstrated that Russian gas diversification is necessary for the EU and Ukraine.[30] The Russian occupation of Ukraine in 2022 further complicated energy dynamics and trade in the region. Ukraine's energy supply comes from coal, natural gas, nuclear power, and oil. Since 2010, the portion of natural gas in the country's energy mix has been decreasing. In 2020, Ukraine imported 8,1 billion cubic meters (bcm) of gas, and no gas was supplied by Russia. In 2021, the share of energy production from gas accounted for 34% while the share of renewables accounted for %11.1, demonstrating the country's continuing reliance on fossil fuels in the energy sector.[31] However, it is worth noting that the share of renewables has been steadily increasing over the years, indicating Ukraine's efforts to diversify its energy sources.

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[30] Luka De Bruyckere. "The Ukrainian Crisis and its Impact on European Energy Debates". *Journal of International Relations* 16, no:1 (2018), p.95.

[31] "Gazprom Annual Report 2020". Gazprom (2021). Retrieved from https://www.annualreports.com/HostedData/AnnualReports/PDF/LSE_OGZD_2020.pdf, p.126; "Ukraine Key Energy Statistics 2022". International Energy Agency (2023). Retrieved from https://www.iea.org/countries/ukraine

After several crises with Russia, Ukraine committed itself to integration with the EU's energy network. Ukraine passed the Law on the Natural Gas Market, the Electricity Market Law, the Law on Energy Efficiency in Buildings, the Law on Commercial Metering of Utility Services, and the Law on the Energy Efficiency Fund. These laws enabled the country to enhance competitiveness, diversify energy sources, and enhance self-sufficiency. This represents a significant advancement in restructuring Ukraine's gas market and the implementation of the laws outlined in the EU's Third Energy Package.[32]

The EU supported the unbundling of Ukraine's gas transmission infrastructure by providing regulatory assistance through the EU4Energy initiative. Ukraine also developed a National Energy Efficiency Action Plan (NEEAP) in 2015 with technical assistance from the EU4Energy initiative. The NEEAP establishes energy efficiency approaches to achieve energy savings and decrease energy consumption.[33] Moreover, influenced by the European Green Deal, the Ukrainian government adopted the Energy Strategy of Ukraine to 2035 in 2017. The strategy aims to increase the shares of biofuels, nuclear power, and renewables while reducing coal and oil products in the country's energy mix. A slight rise in the share of gas is also envisaged.[34]

Besides regulatory developments, Ukraine has made significant efforts to decrease its reliance on energy imports and diversify the sources and methods for its energy needs. The government has implemented several steps to decrease energy consumption and expand reverse-gas flow import capacities from Slovakia, Poland, and Hungary. In addition, Ukraine experienced a remarkable investment in renewables. Between 2019-2022, the capacity of solar power increased by 2126 megawatts (MW), wind power by 503 MW, hydropower by 337 MW, and bioenergy by 95 MW, demonstrating Ukraine's desire to reduce its reliance on fossil fuels.[35]

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[32] "Ukraine Energy Profile". International Energy Agency. (2020). Retrieved from https://iea.blob.core.windows.net/assets/ac51678f-5069-4495-9551-87040cb0c99d/UkraineEnergyProfile.pdf, pp.30-32.

[33] "Ukraine Energy Profile", p.12; "EU4ENERGY in Ukraine". International Energy Agency (2020). Retrieved from https://iea.blob.core.windows.net/assets/03ae6618-bb77-40ee-a9ce-89d37ed7e273/Ukraine-Combined.pdf, pp.1-2.

[34] Simon Pirani. "Ukraine's Energy Policy and Prospects for the Gas Sector". *The Oxford Institute for Energy Studies* 106 (2021), p.6.

[35] "Ukraine Energy Profile", pp.15-36; Pirani, p.5; "Renewable Energy Statistics 2023". International Renewable Energy Agency (2023). Retrieved from https://mc-cd8320d4-36a1-40ac-83cc-3389-cdn-endpoint.azureedge.net/-

In reaction to Ukraine's energy diversification efforts and European alignment, Russia designed Nord Stream 2 and Turk Stream pipelines to bypass Ukraine transit. However, the Western countries' sanctions on Russia and the Ukrainian war delayed the realization of the Nord Stream 2 pipeline. Despite Russian bypassing efforts, Russia still uses Ukrainian transit at low levels. At the end of 2019, two countries signed a five-year transit contract. Starting in 2020, gas flows to Ukraine will be reduced gradually to 40 bcm up to 2024.[36] However, the Ukrainian war significantly reduced the gas exports of Russia to Europe.

Between January and May 2023, only 8.5 bcm of Russian gas were exported to Europe. This contrasts with 40 bcm in 2022 and 59 bcm in 2021 over the same time period, indicating decreases of 79% and 86%, respectively. If present rates continue, exports of Russia via pipeline to Europe will be around 22 bcm in 2023, down from 63 bcm in 2022 and 142 bcm in 2021.[37] In addition to decreasing gas imports of the EU from Russia, the Energy Community established the Ukraine Energy Support Fund to support Ukraine in response to the Russian assaults on Ukraine's vital energy infrastructure. The Fund aims to deliver financial assistance to the Ukrainian energy sector to repair the damage caused by these attacks and ensure its functioning. The total pledges by donors to the Fund reached €405 million.[38] Ultimately, these policies, efforts, and assistance contributed to Ukraine's solidarity with the EU and integration into the European energy network.

Overall, severe crises and the outbreak of war between Russia and Ukraine have increased hostility on the two sides. Ukraine used to be an important transit country for bringing Russian gas to Europe. After several crises, Russia has developed alternative routes to bypass Ukraine, and Ukraine has increased its alignment with the EU, focusing on market reforms and renewables to enhance its energy security.

/media/Files/IRENA/Agency/Publication/2023/Jul/IRENA_Renewable_energy_statistics_2023.pdf?rev=7b2f44c294b84cad9a27fc24949d2134, pp.12-60.

[36] Simon Pirani and Jack Sharples. "The Russia-Ukraine Gas Transit Deal: Opening A New Chapter". *The Oxford Institute for Energy Studies* 64 (2020), p.1.

[37] Henderson and Chyong, p.1.

[38] "Ukraine Energy Support Fund". Energy Community (2023). Retrieved from https://www.energy-community.org/Ukraine/Fund.html

B. Moldova

Similar to Ukraine, Moldova has also worked intensively to approximate its energy regulations with the EU's Third Energy Package. In this effort, EU4Energy provided technical assistance and regulatory recommendations to Moldova.[39] The country's energy supply is composed primarily of natural gas, oil, and biofuels, of which natural gas has the greatest share.[40] Despite the EU support, Moldova is highly dependent on Russian gas. In 2020, Moldova imported 3,9 bcm of gas, and Russia sold 3,1 bcm of gas to the country. In this realm, the country is vulnerable to gas supply disruptions and has low energy security due to its reliance on gas for energy production. In 2021, the share of gas in power generation was 92.9%, while the share of renewables was 5.5%, demonstrating the country's high dependence on gas.[41]

With the expiration of the gas contract between Moldova and Russia, the two sides signed a new five-year gas supply contract in November 2021 after several weeks of negotiations. During these negotiations, the newly elected pro-EU government at that time was threatened by gas supply shortages. Hence, the government diversified its gas supplies by importing technical gas from Romania, Poland, and Ukraine. Since December 2021, the EU has provided Moldova with €185 million to improve its energy security, mitigate the adverse effects of Russia's war against Ukraine, and support the transition to cleaner energy sources. In November 2022, the EU committed to providing an additional energy assistance package of €200 million to assist the country in fulfilling its gas supply necessities.[42] Therefore, the EU's support for enhancing Moldova's energy security demonstrates close relations and solidarity between the EU and Moldova against Russia.

To create a competitive and free energy market, Moldova amended and adopted several laws, including the Law on Heating and Cogeneration Promotion, the Natural Gas Law, the Electricity Law, the Law on Promoting

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[39] "EU4ENERGY in the Republic of Moldova". International Energy Agency (2020). Retrieved from https://iea.blob.core.windows.net/assets/e9b94275-7c50-438e-96a9-424abdd7d0ff/Moldova-Combined.pdf, pp.1-2.

[40] "Moldova Key Energy Statistics 2022". International Energy Agency (2023). Retrieved from https://www.iea.org/countries/republic-of-moldova

[41] "Gazprom Annual Report 2020", p.126; "Moldova Key Energy Statistics 2022"

[42] "Moldova". European Commission (2023). Retrieved from https://neighbourhood-enlargement.ec.europa.eu/european-neighbourhood-policy/countries-region/moldova_en

the Use of Energy from Renewable Sources, the Energy Law, the Law on Energy Efficiency, the Petroleum Products Market Law, and the Law on Energy Performance of Buildings. Hence, the country incorporated the EU Third Energy Package in its regulations. Despite efforts to diversify energy sources and routes and legislative progress, the country's dependency on the supply and ownership monopoly of Gazprom remains a significant hurdle.[43]

In reaction to the Russian threat, Moldova developed alternatives to increase its energy security since Russia declared it would reduce gas supplies over Ukraine. The solution for Moldova is to develop reverse gas flow in the Trans-Balkan pipeline, reverse gas flow from Slovakia, and interconnector between Moldova and Romania.[44] In addition, with the Energy Strategy of Moldova for 2030, the country aims to promote the security of energy supply, promote the development of competitive markets while ensuring both regional and European integration, and prioritize the sustainability of the energy sector and combat climate change.[45]

Renewable energy, particularly wind and solar, is not being utilized at its full potential. Due to the country's vast agricultural activity, biomass is considered a significant and widely available renewable source of energy generation. The country has recently invested in wind and solar power plants to diversify its energy sources and enhance its energy security. Between 2019 and 2022, wind power capacity increased by 80 MW, solar power by 55 MW, and bioenergy by 9 MW, while hydropower capacity remained the same. These capacity enhancements show the country’s focus on alternative energy resources.[46]

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[43] International Energy Agency. “Moldova 2022” (2022). Retrieved from https://iea.blob.core.windows.net/assets/dc881e93-9f82-4072-b8b4-a0d00a487f59/Moldova2022.pdf, pp.33-154.

[44] “Natural Gas Supply-Demand Balance of the European Union in 2023”. International Energy Agency (2023). Retrieved https://iea.blob.core.windows.net/assets/227fc286-a3a7-41ef-9843-1352a1b0c979/Naturalgassupply-demandbalanceoftheEuropeanUnionin2023.pdf, p.22.

[45] “Energy Strategy of the Republic of Moldova to the Year 2030”. The Republic of Moldova (2012). Retrieved from https://www.serviciilocale.md/public/files/Energy_Strategy_2030_Final.pdf, p.19.

[46] International Energy Agency. “Republic of Moldova Energy Profile” (2020). Retrieved from https://iea.blob.core.windows.net/assets/a6dd7ac3-8955-41f9-8971-d7c09ccff6d9/MoldovaEnergyProfile.pdf, p.11; “Renewable Energy Statistics 2023”, pp.12-60.

Ultimately, in Moldova, Russia dominates gas transmission and distribution networks. At the same time, Moldova has made considerable progress in approximating EU legislation and energy market reforms to enhance its energy security. Despite these efforts and the EU assistance, the country still depends on Gazprom, which in turn lowers sub-regional collaboration.

C. Belarus

Belarus has been Russia's key ally and energy partner for many years. The country has served as a transit country for Russian gas. However, Russia's aggressive foreign policy and economic decline led Belarus to normalize its relations with the West. Since 2013, the interaction and trade between Belarus and the EU have grown significantly.[47] The EU's financial assistance to Belarus between 2014-2020 totaled €170 million to enhance the rule of law, respect for human rights, increase energy connectivity, and promote a stable economy.[48] Despite cooperation between the EU and Belarus, with the suspicious presidential elections in the country, the EU imposed sanctions on Belarus in 2020. In addition, the EU imposed sanctions due to the involvement of Belarus in Russia's invasion of Ukraine. As of June 2021, the country suspended its participation in the Eastern Partnership.[49]

The country's energy mix is chiefly composed of natural gas and crude oil.[50] In terms of natural gas, in 2020, the country imported 19,9 bcm of gas, and 18,4 bcm of gas was supplied by Russia. Belarus's gas dependency is visible since 81.9% of the energy was produced from gas, and only 8.6% was produced from renewable sources in 2021.[51] However, in recent years, the government of Belarus has decided to break its overdependence on Russia. Even though Russia has not been explicitly mentioned as a threat, high

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[47] Ryhor Astapenia and Dzmitry Balkunets. "Belarus-Russia Relations After the Ukraine Conflict" Ostrogorski Centre and Belarus Digest: Minsk and London (2016), p.14.

[48] "Facts and Figures About EU-Belarus Relations". The Eastern Partnership (2021). Retrieved from https://www.consilium.europa.eu/media/44399/685-annex-5-c-belarus-factsheet.pdf, pp.1-3.

[49] "EU Relations with Belarus". The European Council (2021). Retrieved from https://www.consilium.europa.eu/en/policies/eastern-partnership/belarus/

[50] "Belarus Key Energy Statistics 2022". International Energy Agency (2023). Retrieved from https://www.iea.org/countries/belarus

[51] "Gazprom Annual Report 2020", p.126; "Belarus Key Energy Statistics 2022"

dependence on energy imports, increases in gas prices, and the possibility of supply disruptions are underlined as significant energy security issues for the government.[52]

In late 2015, the Belarusian government adopted the Concept of Energy Security in Belarus. The document sets specific targets to decrease the country's dependence on imported energy. To reduce gas imports, the government decided to increase its reliance on nuclear and renewable energy resources.[53] Besides, with the Government Program "Energy Saving" for 2016-2020, the government targeted reducing energy intensity by at least %2, increasing the share of domestic energy resources by at least %16 in the total energy mix, increasing the share of renewable energy resources at least %6 in the total energy mix and implementing energy-saving measures.[54] Accordingly, between 2019 and 2022, solar power capacity increased by 119 MW, bioenergy by 86 MW, wind power by 8 MW, and hydropower by 1 MW.[55]

Despite these initiatives, Belarus's energy market is not competitive. Due to that, technical advice on the energy market reform was provided by EU4Energy, taking into account EU and global best practices.[56] However, the country has made low progress in legal and policy reforms to free its energy market. As a result, the country chooses to strengthen its control of the energy market rather than favor the free-market economy.[57] For this reason, cheap Russian energy and the significant role of gas in energy production in Belarus are hardening the country's diversification efforts. In addition, Belarus'

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52 Aliaksandr Novikau. "Conceptualizing and Achieving Energy Security: The Case of Belarus" Energy Strategy Reviews 26 (2019), p.5.

53 Sonja Simon, Ivan Filiutsich and Nastassia Bekish. "Energy Revolution: A Sustainable Belarus Energy Outlook". Heinrich Boell Foundation (2018), p.45.

54 "The Best Practices in Sustainable Energy in Belarus, on Gaps in Implementing Sustainable Energy Practices, Challenges for Their Implementation". The United Nations Economic Commission for Europe (UNECE) (2018). Retrieved from https://unece.org/fileadmin/DAM/project-monitoring/unda/16_17X/A2.1_Implement_Natl_CS/Belarus_SE4All.pdf, p.17.

55 "Renewable Energy Statistics 2023", pp.12-60.

56 "EU4ENERGY in Belarus". International Energy Agency (2020). Retrieved from https://iea.blob.core.windows.net/assets/82f350e9-9d68-4bc1-8a76-14b0903f8e73/Belarus-Combined.pdf, pp.1-2.

57 Rauf Mammadov. "Belarus's Role in East European Energy Geopolitics". The Jamestown Foundation, January 31, 2020. Retrieved from https://jamestown.org/program/belaruss-role-in-east-european-energy-geopolitics/

political and economic linkages with Russia and the war in Ukraine reduce the likelihood of sub-regional energy collaboration.

Overall, Belarus, Moldova, and Ukraine are key transit states for Russian energy. These countries have varying levels of interaction with both Russia and the EU, resulting in cautious approaches when building sub-regional energy cooperation. Despite varying relations with the EU, sub-regional energy cooperation is low due to political alignment, several crises and wars, low energy interconnectivity and infrastructure, lack of competitive energy market structure, and lack of sub-regional initiatives for cooperation.

V. Caucasus Eastern Partnership Countries

The Caucasus Eastern Partnership countries, consisting of three small former Soviet republics, Armenia, Azerbaijan, and Georgia, demonstrate varying levels of dependency on and relations with Russia. The sub-regional energy cooperation within this context is considered a medium, primarily revolving around collaborative efforts between Georgia and Azerbaijan. Understanding the nuances of this cooperation requires a closer look at the different levels of dependency on Russia within each country. Historical factors have played a crucial role in shaping the current landscape of sub-regional energy dynamics in that sub-region. Challenges and opportunities unique to each country contribute to the medium level of cooperation, with geopolitical tensions, economic considerations, and energy infrastructure influencing the collaborative efforts. Notably, bilateral agreements and joint projects between Georgia and Azerbaijan are key contributors to the medium level of sub-regional cooperation.

A. Armenia

The main energy supply of Armenia comes from hydropower plants, nuclear power plants, natural gas, oil products, biofuels, and waste. Among them, natural gas and nuclear power comprise the country's main energy supply.[58] The country is highly reliant on Russia in terms of energy. Russia fully owns Armenia’s national gas company. Therefore, Russia controls Armenia's gas transmission and distribution networks. The country is totally dependent on imports of hydrocarbon resources, and it imports its gas from

[58] “Armenia Key Energy Statistics 2022”. International Energy Agency (2023). Retrieved from https://www.iea.org/countries/armenia

Russia and Iran.[59] In 2020, the country imported 2,8 bcm of gas, and 2,1 bcm of gas was supplied by Russia. The share of power generation from gas accounted for 43%, while the share of renewables accounted for 31.7% in 2021, demonstrating the significant role of gas in energy production in Armenia.[60]

Despite dependence on Russia, the Armenian government also maintains a partnership with the EU. In 2021, the EU-Armenia Comprehensive and Enhanced Partnership Agreement (CEPA) was entered into force. The agreement includes strengthening democracy, the rule of law, education, and improving energy security. Since the EU is Armenia's crucial reform partner, it provides around €65 million annually for its reform agenda.[61] In addition, EU4Energy provided technical support to the country by examining energy policy, making policy recommendations, and organizing policymaking events.[62]

Despite its energy partnership with the EU, the country has only gas pipelines with Georgia and Iran, and it is isolated from the gas pipeline projects of the EU's SGC, such as the South Caucasus Pipeline (SCP) and Trans Anatolian Pipeline (TANAP) due to historical hostility between Armenia-Turkey and Armenia-Azerbaijan. Therefore, Armenia's energy import dependency on Russia causes Russia to use its dominant position in Armenia, which reduces sub-regional energy cooperation. The tension between Armenia and Russia became visible in 2019 when Gazprom announced an increase in gas prices in Armenia. In the same year, the Armenian government tried negotiating with Iran to build the Iran-Armenia-Georgia gas pipeline. However, it failed to realize it due to infrastructural and commercial constraints and Gazprom's total control of the Armenian energy sector.[63] As a result, Armenia tries to break its overdependence on Russia but

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59 "In-Depth Review of the Investment Climate and Market Structure in the Energy Sector of the Republic of Armenia" Energy Charter Secretariat (2015). Retrieved from https://www.energycharter.org/fileadmin/DocumentsMedia/ICMS/ICMS-Armenia_2015_en.pdf, p.50.

60 "Gazprom Annual Report 2020", p.126; "Armenia Key Energy Statistics 2022".

61 "The European Union and Armenia". Eastern Partnership (2021). Retrieved from https://eeas.europa.eu/sites/default/files/armenia_factograph_0.pdf

62 "EU4ENERGY in Armenia". International Energy Agency (2020). Retrieved from https://iea.blob.core.windows.net/assets/8ab6733c-65b4-4fa8-b173-2bb6a18860bd/Armenia-Combined.pdf, pp.1-2.

63 Natalia Konarzewska. "Armenia's Gas Dispute with Russia". The Central Asia-Caucasus Analyst, April 29, 2019. Retrieved from https://www.cacianalyst.org/

fails to do so due to its isolation in the region. The outbreak of the Nagorno-Karabakh war between Azerbaijan and Armenia in 2020 further increased the economic and energy dependency of Armenia on Russia, at the same time complicating sub-regional energy cooperation in the Caucasus.

In 2020, the Armenian government adopted the Energy Sector Development Strategic Program for 2040. According to the program, the government prioritizes increasing renewable energy and energy efficiency, increasing the lifetime of nuclear power plants, and liberalizing the energy market.[64] Hence, Armenia is working to diversify its energy mix by focusing on developing renewable resources. In this regard, between 2019 and 2022, solar power capacity increased by 214 MW, hydropower by 5 MW, while wind power capacity remained the same.[65] The country is also working towards achieving full energy market liberalization in line with the EU regulations. The current initiatives towards liberalization comprise modifications in electricity trading regulations, the preparation of the Electricity Law, enhancements in the effectiveness of the tariff policy, and the adoption of revisions in energy efficiency and renewable energy regulations.[66]

Despite having various energy sources, including nuclear, hydroelectric, and thermal power, Armenia depends on gas for energy production, nearly all of which comes from Russia. In addition, Armenia relies entirely on Russia for its nuclear fuel supplies. Consequently, Armenia heavily depends on fuel imports from Russia to generate almost 70% of its power, which raises concerns over energy security and reduces sub-regional energy collaboration.[67]

publications/analytical-articles/item/13570-armenias-gas-dispute-with-russia.html

64 "Republic of Armenia Energy Sector Development Strategic Program to 2040". Republic of Armenia (2020). Retrieved from http://www.mtad.am/u_files/file/energy/Energy%20Strategy_%20Jan%2014%202021_English.pdf, pp.3-5.

65 "Renewable Energy Statistics 2023", pp.12-42.

66 "Republic of Armenia Energy Sector Development Strategic Program to 2040", pp.11-12.

67 "Armenia 2022". International Energy Agency (2022). Retrieved from https://iea.blob.core.windows.net/assets/8328cc7c-e65e-4df1-a96f-514fdd0ac31e/Armenia2022EnergyPolicyReview.pdf, p.70.

B. Azerbaijan

Azerbaijan is an energy-rich country in the South Caucasus, and the country's main energy supply comes from oil and gas resources. In 2020, the country imported 2 bcm of gas, and no gas was supplied from Russia. The country's fossil fuel production is evident since the share of power generation from gas accounted for 92.9% while the share of renewables accounted for 4.8% in 2021.[68] Besides, the country is an important energy partner for the EU and its SGC for diversifying energy sources and routes. With the realization of the South Caucasus Pipeline and TANAP, Azerbaijan provides gas for the EU, Georgia, and Turkey. Azeri gas is essential for enhancing competition and decreasing Russian dominance in the European gas market. After Russia's occupation of Ukraine, Azerbaijan's importance and role in ensuring the EU's energy security has increased even more.

At this point, one of the most critical challenges for Azerbaijan is the security of energy pipelines and ensuring a continuous supply of energy. This stems from the fact that pipelines were laid close to conflictual territories.[69] In order to support Azerbaijan, the EU provides financial assistance to its important partner to deepen its relations. In 2019, the EU provided €27 million to Azerbaijan under the Partnership Priorities Facility to increase energy efficiency, and environmental protection, strengthen good governance, and encourage the mobility of people.[70]

Moreover, the Azeri government adopted the State Program for the Development of the Fuel and Energy Sector for 2005-2015. Since the country is a net energy exporter, its state program mainly focuses on increasing energy production and storage, promoting environmental protection, increasing investments in the energy sector, and exploring and developing new energy

[68] "Gazprom Annual Report 2020", p.126; "Azerbaijan Key Energy Statistics 2022". International Energy Agency (2023). Retrieved from https://www.iea.org/countries/azerbaijan

[69] Rovshan Jamalov and Tahmasib Alizada. "Energy Security and Energy Union Perspectives for Azerbaijan" (2015). Retrieved from https://cesd.az/new/wp-content/uploads/2015/11/Energy_security_and_Energy_union_perspectives_for_Azerbaijan_CESD_Policy_Paper.pdf, p.4.

[70] "Commission Implementing Decision on the Multiannual Action Programme in Favour of the Republic of Azerbaijan for 2019-2020". European Commission (2019). Retrieved from https://neighbourhood-enlargement.ec.europa.eu/system/files/2019-10/c_2019_7528_f1_commission_implementing_decision_en_v3_p1_1042777.pdf, p.3.

fields.[71] Furthermore, the presidential order in 2019 proposed reforms in encouraging renewable energy resources, increasing energy efficiency, preparing energy sector strategy, and reforming the energy sector.[72]

In the way of energy market liberalization, a new electricity legislation was prepared in accordance with the EU's Third Energy Package, and the Energy Regulatory Agency was created in 2017. In addition, the presidential decree issued in 2019 led to the development of draft legislation for establishing a regulatory body for the energy sector and utility services. Furthermore, EU4Energy provided technical assistance and guidance to the country by organizing policy events for policymaking and capacity building.[73]

Despite Azerbaijan's significant reliance on oil and natural gas for its energy supply, there has been increased attention towards using renewable energy sources. The government acknowledges that increasing the utilization of renewable energy can help the country diversify its energy resources, divert natural gas away from power generation, and assist the country in achieving its climate targets outlined in the Paris Agreement. Concerning this issue, between 2019 and 2022, hydropower capacity increased by 32 MW and solar power by 18 MW, while wind and bioenergy capacities remained the same.[74]

Consequently, Azerbaijan maintains relatively decent relationships with Russia and develops a partnership with the EU. Some challenges for Azerbaijan affect its relations with the EU. Firstly, the Nagorno-Karabakh war is one of the barriers to Azerbaijan since it constitutes a risk to energy security. Besides, the EU's unbalanced position and ineffectiveness against Russian

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[71] "National Sustainable Energy Action Plan of Azerbaijan". The United Nations Economic Commission for Europe (UNECE) (2018). Retrieved from https://unece.org/fileadmin/DAM/project-monitoring/unda/16_17X/E2_A2.3/Action_Plan_of_Azerbaijan-new-03.12.2019.pdf, p.35.

[72] "Azerbaijan 2021: Energy Policy Review". International Energy Agency (2021). Retrieved from https://iea.blob.core.windows.net/assets/49662c46-575f-4561-a541-5541f5342b07/Azerbaijan2021EnergyPolicyReview.pdf

[73] "Azerbaijan 2021". International Energy Agency (2021). Retrieved from https://iea.blob.core.windows.net/assets/49662c46-575f-4561-a541-5541f5342b07/Azerbaijan2021EnergyPolicyReview.pdf, p.31; "EU4ENERGY in Azerbaijan". International Energy Agency. (2020). Retrieved from https://iea.blob.core.windows.net/assets/474623c0-1b5b-4957-865e-82a96cb91351/Azerbaijan-Combined.pdf, pp.1-2.

[74] "Renewable Energy Statistics 2023", pp.12-60.

aggression made Azerbaijan cautious about participating actively in the Eastern Partnership. Secondly, since the Azeri government tries to balance the two sides, the country is not actively participating in the Eastern Partnership. Ultimately, there is a medium level of sub-regional cooperation due to the cooperative projects and bilateral agreements between Azerbaijan and Georgia.

C. Georgia

Georgia is another key partner of the EU since it is a transit country for SGC. Major oil and gas pipelines, such as the Baku-Tbilisi-Ceyhan and the South Caucasus pipelines, cross over Georgia's territories. For natural gas, the country imports most of its gas from Azerbaijan. In 2020, Georgia imported 2,8 bcm of gas, and only 0,2 bcm was supplied by Russia. The rest was supplied by Azerbaijan. The country's energy supply comes mainly from natural gas, crude oil, and hydropower. The share of gas in energy production accounted for 18.8%, while renewables accounted for 81.2% in 2021, showing the country's reliance on renewables.[75] However, Russian threats greatly risk Georgia's energy security. In this regard, the cooperation between the EU and Georgia has increased, especially after 2008, when Russia initiated military operations against Georgia.[76] Eventually, the country was included in regional EU programs related to climate change, energy security, renewable energy, and the environment.

The Multiannual Indicative Programme for Georgia, covering 2021–2027, was approved by the European Commission with five priority areas. These are a robust, sustainable, and interconnected economy, institutional accountability, the rule of law and security, climate and environmental adaptability, effective digitization, and a resilient, equitable, gender-neutral, and inclusive society. The Union allocated €340 million to execute the Programme between 2021 and 2024.[77] Furthermore, EU4Energy delivered

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[75] "Gazprom Annual Report 2020", p.126; "Georgia Key Energy Statistics 2022". International Energy Agency (2023). Retrieved from https://www.iea.org/countries/georgia

[76] Leila Alieva and Natalia Shapovalova, eds. "Energy Security in the South Caucasus: Views from the Region". *FRIDE Working Paper* (2015), pp.18-19.

[77] "Multi-Annual Indicative Programme (2021-2027)". European Commission (2022). Retrieved from https://neighbourhood-enlargement.ec.europa.eu/system/files/2022-08/C_2022_5658_F1_ANNEX_EN_V2_P1_2019350.PDF, p.24.

technical support and suggested policy recommendations for the preparation of the nation's long-term energy strategy and contributed to the formulation of legislation covering the gas market, energy, water supply, energy efficiency, and reforms in the electricity market.[78]

In 2019, the country adopted the Energy Strategy of Georgia 2020-2030, intending to increase the share of renewable resources, expand energy trade with neighboring nations, effectively use existing energy resources, improve energy efficiency, promote sustainable forest management, implement market-based systems in line with EU regulations, and enhancing air quality.[79] Starting in 2017, Georgia adopted the task of complying with many EU directives and regulations concerning electricity, natural gas, energy efficiency, and renewable energy. These regulatory modifications comprise the Law on Electricity and Natural Gas, modifications to the Electricity Network Code, implementation of the Natural Gas Network Rules, and the implementation of the Service Quality Rules.[80]

In addition, the government has developed and adopted several draft laws, strategy papers, and legislation about the liberalization of the energy sector. These legislations consist of a new Law on Energy and Water Supply, a draft of the Law on Energy Efficiency, a draft of the Law on Energy Performance of Buildings, a Law concerning Energy Labelling, a Law aimed at promoting the production and utilization of energy generated by renewable sources, the Electricity Market Intermediary Concept Design, and the Law on Public-Private Partnerships.[81] These significant developments highlight the government's dedication to harmonizing Georgia's energy sector with EU laws and liberalizing its energy market.

Apart from market reforms, Georgia has dedicated itself to developing renewable energy resources. In this realm, between 2019 and 2022, hydropower capacity increased by 497 MW, solar power by 20 MW, and wind power by 8 MW.[82] As a result, the growing role of Azerbaijan as a supplier

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[78] "EU4ENERGY in Georgia". International Energy Agency (2020). Retrieved from https://iea.blob.core.windows.net/assets/de14cda3-1c4b-49bf-9501-88d41a3166d4/Georgia-Combined.pdf

[79] "Georgia 2020". International Energy Agency (2020). Retrieved from https://iea.blob.core.windows.net/assets/24da4104-6971-4cde-99d3-630f455ae2c3/Georgia_2020_Energy_Policy_Review.pdf ,pp.15-108.

[80] "Georgia 2020", pp.28-29.

[81] "Georgia 2020", p.29.

[82] "Renewable Energy Statistics 2023", pp.12-42.

and Georgia as a transit country for Europe's energy security and the integration of these countries with the EU is less desirable for Russia. Insecurity in the occupied territories of Georgia, Abkhazia, and South Ossetia and possible military intervention of Russia create pressure on Georgia and push the country more on the EU side.[83] In addition, despite its low dependency on Russian gas, the country aimed to increase low-carbon initiatives to lower its fossil fuel dependency. In the end, despite approximation to the EU laws and efforts for low-carbon transition to increase energy security, sub-regional cooperation cannot go beyond the bilateral relations between Georgia and Azerbaijan.

All in all, Armenia's energy sector is dominated by Russia. Even though Armenia has tried to diversify Russian gas due to the recent crisis between the two countries, political isolation and domination of Gazprom have hindered diversification efforts. In Georgia, gas imports from Azerbaijan and Georgia's transit role for Azeri gas enhanced the country's energy security. Compared to Armenia and Georgia, Azerbaijan has better relations with Russia, and the country does not have an energy dependency on that country. At the same time, the country develops energy partnerships with the EU. Consequently, cooperation in the sub-region is limited with Azerbaijan and Georgia. In this regard, the sub-regional energy cooperation within this context is considered a medium.

Conclusion

To sum up, a sub-regional analysis of Eastern Partnership countries, categorized into Northeast Europe (Ukraine, Moldova, Belarus) and Caucasus (Armenia, Azerbaijan, Georgia), reveals the efforts of these countries to address their energy dependency on Russia, energy market liberalization and energy diversification efforts for managing energy security challenges. In their efforts, the EU provided financial and technical assistance to these countries.

Despite varying levels of efforts and advancements in these issues, wars, relations of these countries with the EU and Russia, uncompetitive energy markets, low energy interconnectivity, and the lack of sub-regional initiatives remain some of the significant barriers to achieving effective sub-regional cooperation. In the end, sub-regional energy cooperation in the Caucasus

[83] Sergi Kapanadze. "Georgia's Vulnerability to Russian Pressure Points". European Council on Foreign Relations 106 (2014), pp.6-7.

Eastern Partnership countries is considered a medium level centered on collaboration between Georgia and Azerbaijan. On the other hand, sub-regional energy cooperation in Northeast Europe Eastern Partnership countries is considered low due to limited cooperation between countries in the sub-region.

Our findings emphasize the necessity for tailored sub-regional energy policies within the broader framework of the EU's regional energy policies. While a unified approach has its merits, it may not fully account for the unique necessities and disparities within sub-regions. Hence, promoting energy solidarity, interconnection, and cooperation at the sub-regional level is essential. This approach strengthens the sub-regions' resilience and contributes to the overarching goal of a cohesive and resilient European energy ecosystem. Embracing this nuanced perspective reinforces the EU's responsiveness in the face of evolving energy dynamics, ultimately fortifying the collective energy security in wider Europe.

For Northeast Europe Eastern Partnership countries, the EU must ensure the uninterrupted flow of gas supplies from transit nations to enhance energy security. EU policymakers need to continue to support energy market liberalization and stability, invest in critical infrastructural developments, foster effective dispute-resolution mechanisms, and maintain transparent transit conditions for all stakeholders while encouraging collaboration and solidarity among these countries. In the case of Caucasus Eastern Partnership countries, the EU has a chance to facilitate multilateral energy cooperation and dialogue among sub-regional countries. Encouraging the establishment of sub-regional energy forums, promoting energy market liberalization, and facilitating energy interconnection are vital steps to secure the free flow of gas supplies and reduce dependency on Russian energy.

To conclude, the research suggests that the success of the EU's regional energy policies in the context of EU-Russia energy dependency depends on how these policies are adapted to meet the unique challenges and opportunities of specific sub-regions. The EU's ability to recognize and address the distinct dynamics within these sub-regions will be crucial in enhancing energy security, reducing dependency on Russian energy supplies, and reducing Russian influence on Eastern Partnership countries. In short, enhancing energy security in wider Europe requires strong political leadership and sustained efforts to promote cooperation and interconnection in the energy sector.

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