

ENERGY SECURITY IN THE CASPIAN BASIN: GEOPOLITICAL RIVALRIES AND REGIONAL SECURITY CHALLENGES

Gül Sevda YILMAZ*

Abstract

The Caspian Basin holds strategic importance for global energy security due to its rich oil and natural gas reserves. The main hypothesis of this study is that although the Caspian Basin's energy resources have the potential to strengthen global energy security, geopolitical competition and security issues in the region limit this potential. This study aims to reveal the role of the Caspian Basin's energy resources in the global supply, examine the competition between regional actors, and assess the impact of this competition on energy security. Findings show that Russia's quest for regional dominance and ongoing conflicts, such as the Nagorno-Karabakh issue, have made the energy supply fragile. On the other hand, multilateral pipeline projects, such as the Baku-Tbilisi-Ceyhan (BTC) pipeline and the Trans Anatolian Pipeline (TANAP), offer significant opportunities to diversify Europe's energy sources. Ultimately, the Caspian Basin's ability to effectively contribute to global energy security depends on developing regional cooperation, increasing international support, and strengthening legal and political stability.

Keywords: Caspian Basin, Global energy security, geopolitical rivalry, regional stability.

Hazar Havzasında Enerji Güvenliği: Jeopolitik Rekabetler ve Bölgesel Güvenlik Sorunları

Özet

Hazar Havzası, zengin petrol ve doğal gaz rezervleri nedeniyle küresel enerji güvenliği açısından stratejik öneme sahiptir. Bu çalışmanın ana hipotezi, Hazar Havzasının enerji kaynaklarının küresel enerji güvenliğini güçlendirme potansiyeline sahip olmasına rağmen, bölgedeki jeopolitik rekabet ve güvenlik sorunlarının bu potansiyeli sınırladığıdır. Bu çalışma, Hazar Havzasının enerji kaynaklarının küresel arzda oynadığı rolü ortaya koymayı, bölgesel aktörler arasındaki rekabeti incelemeyi ve bu rekabetin enerji güvenliği üzerindeki etkisini değerlendirmeyi amaçlamaktadır. Bulgular, Rusya'nın bölgesel hakimiyet arayışı ve Dağlık Karabağ sorunu gibi devam eden çatışmaların enerji arzını kırılgan hale getirdiğini göstermektedir. Öte yandan, Bakü-Tiflis-Ceyhan (BTC) boru hattı ve Trans Anadolu Boru Hattı (TANAP) gibi çok taraflı boru hattı projeleri, Avrupa'nın enerji kaynaklarını çeşitlendirmek için önemli fırsatlar sunmaktadır. Sonuç olarak, Hazar Havzasının küresel enerji güvenliğine etkili bir şekilde katkıda bulunma kabiliyeti, bölgesel işbirliğinin geliştirilmesine, uluslararası desteği artırılmasına ve hukuki ve siyasi istikrarın güçlendirilmesine bağlıdır.

* Karadeniz Teknik Üniversitesi Yüksek Lisans Öğrencisi, gulsevdayilmaztr@gmail.com, ORCID: 0009-0002-2538-2984

Anahtar Kelimeler: *Hazar Havzası, küresel enerji güvenliği, geopolitik rekabet, bölgesel istikrar.*

Introduction

Ensuring global energy security is a crucial component of national security and economic prosperity. It refers to a nation or region's uninterrupted access to affordable energy sources capable of meeting its current and future needs. However, numerous obstacles, including geopolitical challenges such as the concentration of energy resources in a few regions like the Middle East and the Caspian Sea, impede global energy security. This situation leaves the energy system vulnerable to disruptions caused by political instability, conflict, and natural disasters. Furthermore, energy demand, particularly from developing countries, is constantly increasing as their populations grow and their economies industrialise. Meeting these energy needs places significant pressure on global energy resources, hindering access for all countries and stakeholders.

The Caspian region offers an idiosyncratic perspective for understanding the obstacles and opportunities in ensuring global energy security. The region, which includes many countries such as Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan, has vast oil and gas reserves, making it a crucial energy source for Europe and Asia. However, political instability, regional disputes and geopolitical complexity are challenging the region's energy landscape. Despite these challenges, the Caspian region remains a key focus for global energy security, and the ability to effectively overcome these obstacles has a profound impact on economic development, political stability and environmental sustainability. Therefore, understanding the intricacies of global energy security is essential to achieving a stable energy supply and mitigating the far-reaching consequences of supply chain disruptions.

Today, energy has become a fundamental factor in both International Relations and inter-state relations. Global economic growth, industrialisation, and technological advances have increased energy demand, deepening dependence on energy sources. However, the geographical concentration of energy resources in limited areas presents the international community with various challenges. Energy resources in strategic regions such as the Middle East and the Caspian Sea can threaten global energy security by causing geopolitical escalation and competition. In this context, the Caspian Region, with its energy resources, has a decisive impact not only on regional but also on global energy security (Ghasemi, Miandoabchi, & Soroushnia, 2021).

This study makes an original contribution to the literature on three main fronts. First, it addresses the existing gap by providing a comprehensive analysis of energy dynamics after the recent geopolitical shifts in the region (2020 and beyond), particularly focusing on the post-conflict reality of Nagorno-Karabakh and its direct security implications for existing and planned pipeline infrastructure. Second, it goes beyond traditional state-centric analyses by specifically modeling Türkiye's role not just as a transport route, but as a critical NATO-linked "risk management corridor" for Europe's diversification efforts. Finally, the research updates the regional

energy narrative in the context of the global “green transition” pressures, evaluating the long-term viability and strategic importance of Caspian resources as a critical source of flexibility for global energy security.

This research employs a qualitative and analytical methodology grounded in geopolitical inquiry and an extensive examination of strategic literature. It synthesizes and critically evaluates existing academic studies, official publications issued by major international energy institutions (such as the EIA and the European Commission), and policy documents related to the energy dynamics and security framework of the Caspian Basin. Instead of generating new empirical data, the study aims to conduct a critical assessment of the interrelated political, economic, and security dimensions shaping the region. In particular, it examines the implications of post-2020 geopolitical transformations, most notably the outcomes of the Nagorno-Karabakh conflict, on regional stability, while also analyzing the long-term strategic sustainability of both existing and planned energy infrastructure initiatives.

This study is organized into three main sections to provide a clear and comprehensive analysis of the Caspian Region’s role in global energy security. Each section focuses on a different but connected aspect of the region’s strategic importance, helping to build a complete picture of its current challenges and opportunities.

The first section, “The Caspian Basin in Global Energy Security: Resources and Strategic Role,” explains why the region is so important to the global energy system. It describes the Caspian Basin’s rich energy reserves and explains how these resources contribute to meeting both present and future energy demand worldwide. In addition, this section highlights the region’s growing role as an energy hub, especially as it begins to invest in renewable energy. By doing so, the Caspian Basin supports global efforts to diversify energy supply and promote sustainability.

The second section, “The Caspian Basin’s Strategic Role for Europe and Asia,” examines how the region serves as a vital energy corridor between the two continents. It discusses how Caspian energy resources have become an important alternative for Europe’s energy security, especially after recent geopolitical events such as the Russia–Ukraine war. At the same time, it shows how Asian countries, particularly China, have increased their investments and long-term energy agreements in the region. These developments demonstrate that the Caspian Basin plays a crucial balancing role in the global energy market.

The third section, “Geopolitical Rivalries, Regional Conflicts, and Energy Security Challenges in the Caspian Basin,” focuses on the region’s ongoing and emerging security problems. It analyzes the effects of regional power rivalries, mainly Russia’s influence, and explores how long-lasting conflicts have affected existing and planned pipeline projects. Moreover, it pays special attention to the post-2020 situation of the Nagorno-Karabakh conflict and its consequences for regional stability. Importantly, this section also discusses Türkiye’s rising role, not only as a transit country but also as a NATO-linked “risk management corridor,” which is increasingly vital for Europe’s energy diversification strategy.

By combining these three perspectives, the study aims to provide an updated and well-rounded understanding of both the challenges and opportunities that the Caspian Basin presents for achieving long-term, stable, and secure global energy systems.

1. The Caspian Basin in Global Energy Security: Resources and Strategic Role

Global energy security refers to the measures taken to ensure the safe production, distribution, and consumption of energy resources worldwide. Energy security aims to ensure the continuity and stability of energy supply (Chen, Gong, Li, & Guo, 2024). This includes factors such as diversifying energy sources, securing energy supply chains, protecting energy infrastructure, and implementing stable energy policies. Global energy security is important because energy is vital to the functioning of modern societies. Ensuring secure access to energy resources supports economic growth, stabilises energy prices and ensures uninterrupted energy supply. Furthermore, energy security also involves the sustainable use of energy resources and the reduction of environmental impacts (Szargut, 2002).

Regarding the energy security of the Caspian Basin, although Middle Eastern oil was known until the First World War, Soviet oil was considered more advantageous in terms of affordability and transportability. Following the collapse of the Soviet Union, the Caspian Basin's significant energy resources remained in Azerbaijan, Turkmenistan, and Kazakhstan. This event led other countries around the world to take an interest in the region including the US and the European Union (Turan, 2010). The Caspian region is generally surrounded by Russia, Azerbaijan, Iran, Turkmenistan, and Kazakhstan. This region also includes Armenia, Georgia, and Uzbekistan, which do not have direct coastlines on the Caspian Sea but are affected by the marketing of Caspian Sea oil. It is a fact that the countries in the Caspian Sea region are surrounded by countries that use nuclear energy. Another neighbouring country, Türkiye, has secured its place in this competitive environment due to its NATO membership and its historical and cultural ties with the countries in the region. The United States' entry into Afghanistan under the pretext of its fight against terrorism has, in a way, brought the US into competition with neighbouring countries (Big-Alabo, 2019). This growing competition further complicates the security architecture of the Caspian Basin, making long-term energy planning highly fragile.

The Caspian Basin is of geostrategic and geoeconomic importance, and its oil and natural gas resources attract the attention of global and regional powers. Global actors seeking influence in the region want to extract energy resources, transport them to global markets, and control energy. While the Caspian Sea itself possesses abundant offshore oil and gas deposits, onshore fields in neighbouring countries also contribute to the region's energy wealth. Kazakhstan and Azerbaijan stand out as leading oil producers, with reserves exceeding 30 billion and 7 billion barrels, respectively. Turkmenistan contributes to the region's wealth with its estimated 400 trillion cubic metres (Tcf) of natural gas reserves, the largest in the region, while Azerbaijan and Iran also possess significant gas reserves (EIA, 2025). This concentration of energy resources positions the Caspian region as a strategic hub and attracts the interest of major international

players. The European Union, heavily dependent on imported energy, views the Caspian as a potential alternative to its dependence on Russia. At the same time, Asia, particularly China, is increasingly looking to the region to secure its growing energy needs.

Pipelines are the preferred method for transporting energy resources such as oil and natural gas from where they are extracted to where they are processed and consumed. Pipeline transport is the safest, most economical, and a less environmentally problematic means of transport (Akdemir & Kuşçu, 2013). Consequently, pipeline projects developed in the Caspian Basin (such as BTC, BTE and TANAP) have been important steps towards diversifying the region's energy supply routes. Furthermore, Caspian gas has become attractive as a clean energy source with low carbon emissions, as it is compatible with Europe's ambitious climate targets. Consistent with the objectives of the EU's REPowerEU plan (European Commission, 2022), the region has begun to prioritize renewable energy development. Azerbaijan's target of exceeding 19 GW of clean power capacity by 2037 reflects this broader transition (EIA, 2025). In line with the EU's REPowerEU initiative, the region is also exploring its significant renewable potential, with countries like Azerbaijan planning to add over 19 GW of clean energy capacity by 2037 (EIA, 2025). This energy potential in the region creates an opportunity for world economies and contributes to energy supply security.

Beyond being traded commodities, these energy resources are also of great importance in terms of enabling states to assert control over strategically important regions such as the Caspian Basin. These energy resources help the countries in the region to increase their economic development and political influence. Furthermore, they play an important role in ensuring regional security and stability. This is clearly evident in the Caspian Basin, which is located at the heart of Eurasia and is a region of strategic competition due to its natural resources. The Caspian Basin occupies a highly important geopolitical position. The region is located on a transit route between Europe, Asia and the Middle East. This makes the region an important target for global powers. With approximately 38 billion barrels of oil and 610 trillion cubic feet (Tcf) of natural gas reserves, the region possesses one of the world's most important energy resources (EIA, 2025). These reserves provide the countries in the region with significant economic power and the opportunity to have a say in global energy markets.

Regional cooperation initiatives such as the Nabucco Project also potentially envisage the marketing of Caspian Basin resources through alternative routes, transforming the region into an energy hub offering opportunities to benefit from various sources. Delivering Caspian resources to the West via pipelines and new energy corridors reduces energy dependence on Russia and increases stability in global energy markets. At the same time, competition over the region's energy potential encourages cooperative steps towards diversifying energy sources. However, the successful implementation of projects in the Caspian Basin must be supported by multilateral diplomacy and the resolution of legal uncertainties. In this context, the stable continuation of energy projects in the region will contribute to maintaining the global energy balance.

The Caspian Sea's energy policies directly affect global energy security in various ways. The Caspian Sea's energy policies also significantly affect the functioning of global energy markets. The development and marketing of energy resources in the region can cause significant fluctuations in global energy prices. Firstly, the region's energy reserves contribute to the diversification of the global energy mix, reducing dependence on traditional Middle East and non-suppliers. This is considered an important security factor, particularly for European countries. Secondly, the development of alternative transportation routes, such as the Baku-Tbilisi-Ceyhan pipeline, increases the resilience of the global energy infrastructure, reducing risks associated with geopolitical tensions or disruptions in key transit areas. This contributes significantly to ensuring global energy security. Furthermore, the Caspian Sea's potential as an energy hub encourages competition, promoting market-oriented practices that could lead to more stable and predictable energy prices. This will contribute to the fairer and more sustainable functioning of the global energy market.

In conclusion, the Caspian Sea's energy policies are of great importance for global energy security. The region contributes to a more balanced and secure global energy market by providing alternative routes and sources. This clearly demonstrates the Caspian Basin's geostrategic role and its impact on the global energy supply chain.

2. The Caspian Basin's Strategic Role for Europe and Asia

The Caspian region, which encompasses many countries such as Azerbaijan, Kazakhstan, Turkmenistan and Iran, possesses important energy resources that have become invaluable in meeting the ever-increasing energy demands of Europe and Asia. Estimated to hold 10% and 5% of global reserves respectively, the region's vast oil and natural gas reserves make it a critical supplier for Europe and Asia, whose energy demands are constantly increasing (EIA, 2025). However, despite its immense potential, the region faces various obstacles in ensuring global energy security, raising concerns about the stability of future energy supplies. Compounded by the foreign policies pursued by international actors in pursuit of their own objectives, the Caspian Basin is confronted with turbulent and unresolved issues.

The importance of the Caspian region cannot be discussed without considering its vast oil and natural gas reserves. The collapse of the Soviet Union in 1991 further increased the region's importance as the newly independent states sought to exploit their hydrocarbon resources, cementing the region's status as one of the richest resource areas globally (Oral, 2022). These reserves have attracted the attention of energy-hungry nations, particularly in Europe and Asia, which are actively seeking alternative sources to reduce their dependence on traditional suppliers (Turan, 2010).

Recent geopolitical turmoil, such as the Russia-Ukraine war, has exposed Europe's vulnerability stemming from its dependence on single-source energy imports (European Commission, 2022). This situation has triggered a search for alternatives, with the Caspian Basin emerging

as an attractive option. Pipelines such as the Southern Gas Corridor have reduced dependence on Russia by delivering Caspian gas to European markets and contributed to stability by diversifying energy supply (EIA, 2025). Caspian gas enhances energy security by diversifying supply and strengthening geopolitical stability by reducing dependence on a single supplier. Furthermore, encouraging competition for access to new sources has created a competitive market that could mean lower energy prices for European consumers. Gas transferred from the region to Europe also offers a lower-carbon energy alternative, aligning with Europe's climate goals.

As Europe continues its quest to diversify its energy sources, Asia's ever-increasing energy demand presents a lucrative market for Caspian Basin resources. China, in particular, is making significant investments in the Caspian energy infrastructure and is emerging as a major player by signing long-term gas supply contracts. This partnership helps China achieve stable access to Caspian gas, contributing to its growing economy, while also reducing its dependence on coal and helping it meet its environmental goals. At the same time, China's investments provide significant capital to the Caspian Basin countries, meeting the needs for infrastructure development and resource extraction and strengthening regional economies.

The energy potential of the Caspian Basin is not limited to fossil fuels. The region also possesses significant renewable resources such as wind and solar energy. Countries such as Azerbaijan, in particular, are making major investments in renewable energy projects, aiming to position themselves as future clean energy suppliers for both Europe and Asia. These efforts demonstrate that the Caspian Basin's energy resources play an important role not only for energy security and economic growth, but also for environmental sustainability.

Despite its vast resources, the Caspian Basin faces various challenges. Geopolitical tensions, environmental concerns related to resource extraction, and the need for further infrastructure development are some of the obstacles that need to be addressed. However, these challenges also present opportunities for cooperation and innovation. Effective cooperation between the Caspian countries, European and Asian consumers, and international organisations will unlock the region's full potential. Joint efforts focused on sustainable resource management, supporting infrastructure investments, and technological innovation will lay the foundation for a secure and prosperous energy future for all stakeholders.

In conclusion, the Caspian Basin is strategically located at the crossroads of Europe and Asia, making it a significant geopolitical and economic hub (Şentürk, 2024). The region's oil, gas and renewable energy potential offers important guidance for diversity, security and environmental progress. By working together with consumer countries and partners, the countries of the region can transform the Caspian Basin into a sustainable energy hub and make important contributions to the energy future of both Europe and Asia. This demonstrates that the Caspian Basin's energy resources play a critical role not only for energy security and economic growth, but also for environmental sustainability.

3. Geopolitical Rivalries, Regional Conflicts, and Energy Security Challenges in the Caspian Basin

The main factor causing disagreements in global policies regarding the Caspian Basin is its large oil and natural gas reserves. At the same time, uncertainty over the legal status of the Caspian Sea also contributes to these disagreements (Shammas & Nagata, 2000). Ongoing disputes over the status and boundaries of the Caspian Sea raise complex issues in terms of international norms and sovereignty claims. In fact, the main reason for this problem is Russia's desire to be the dominant power in the region and, in this regard, its forcing multinational oil companies out of the region (Brzezinski, 2007, p. 115). This situation fuels disputes in the Caspian region and weakens energy security. Russia's dominance in the region increases tensions among other coastal states and leads to regional instability.

Moreover, energy competition goes beyond the economic level and turns into comprehensive geopolitical rivalries. Russia, a historical hegemon actor and a major energy exporter, views the Caspian as its traditional sphere of influence. Russia's involvement in the Nagorno-Karabakh conflict and its close relations with Armenia have the potential to directly affect the security of pipelines and projects transporting energy to Europe via Türkiye (Turan, 2010). Similarly, Iran's nuclear programme and strategic ambitions in the region also heighten concerns about potential disruptions to energy flows. These external dynamics trigger internal conflicts and risks, further complicating the security environment for Caspian energy projects.

Unfortunately, the Caspian region is no stranger to conflict. Long-standing disputes, such as the unresolved Nagorno-Karabakh issue and the Syrian civil war, pose serious threats to energy security. The Nagorno-Karabakh conflict, in particular, directly affects energy infrastructure, as the pipelines connecting Azerbaijan to Türkiye pass through disputed territories (Oral, 2022). The resumption of hostilities has the potential to disrupt these vital channels, jeopardising energy supplies to European markets seeking alternatives to Russian gas. Similarly, the civil war in Syria poses a risk to pipelines crossing its territory and could potentially create bottlenecks and price fluctuations in global energy markets.

Beyond immediate disruptions, regional conflicts cast a shadow over long-term stability. Uncertain security environments discourage international investment in vital infrastructure projects, hindering the development of alternative energy sources and the diversification of energy supply routes. This dependence on existing infrastructure, often concentrated in conflict zones, creates vulnerabilities and perpetuates a cycle of insecurity and energy insecurity.

The Baku-Tbilisi-Ceyhan natural gas pipeline project was developed to transport Azerbaijan's vast oil resources to European markets via Türkiye (Akdemir & Kuşçu, 2013). In fact, the plan was to first send Azerbaijani oil to Türkiye via Armenia and then on to European markets via Türkiye. However, after Armenia's occupation of Nagorno-Karabakh, the Georgia option emerged. One of the main elements of Georgia's foreign policy after independence was the development of relations with Western countries, which led to Georgia's very warm approach to this project.

Economic and geopolitical interests were another factor that increased the importance of the BTC project for Georgia.

Following the successful completion of the BTC Pipeline, the discovery of the Shah Deniz II natural gas reserve, which could operate in Baku, brought the Erzurum-originating BTE Natural Gas Pipeline Project to the agenda, running parallel to the BTC Oil Pipeline (Akdemir & Kuşçu, 2013). The BTE Pipeline is considered not only to meet Türkiye's gas needs but also to be part of the Nabucco Project, which is supported by European countries.

The Nabucco project aims to transport natural gas from the Caspian Sea Basin, as well as natural gas from the Middle East, to Europe via Türkiye (Akdemir & Kuşçu, 2013). This project, which is a continuation of the BTE Pipeline, aims to integrate into the European gas system by connecting to the major pipeline network in Austria, passing through Türkiye, Bulgaria, Romania and Hungary, starting from Erzurum. The Nabucco pipeline aims to transport not only gas from the BTE pipeline but also gas from countries such as Egypt, Iraq, Iran, Turkmenistan and Qatar to Europe. Russia has entered into long-term energy agreements with countries likely to participate in the project in order to reduce the feasibility of the Nabucco Project (Turan, 2010). Furthermore, Russia has developed the North and South Stream Projects to supply energy to Europe, the target market of Nabucco (Turan, 2010). Although Russia's actions have slowed the development of the Nabucco Project, it is thought that they will not prevent the project from being realised in the medium to long term.

One of the pipelines in Russia's extensive gas distribution network, which passes through Ukraine, was used to transport gas to Europe after the Cold War. However, gas price disputes with Ukraine in 2006 and 2009 led Russia to halt gas shipments to Europe (Akdemir & Kuşçu, 2013). This situation damaged the Russian economy and its credibility. To avoid similar experiences, Russia developed the Nord Stream and South Stream Projects, aiming to bypass Ukraine. However, the South Stream project was cancelled in 2014 and was largely replaced by the TurkStream pipeline (EIA, 2025). Meanwhile, the Nord Stream 1 and 2 pipelines were constructed in the Baltic Sea to transport gas to Germany, but three of the four lines were rendered inoperable following sabotage in September 2022. Furthermore, Russia has sought to purchase gas from Azerbaijan by leveraging Türkiye's negotiations with Armenia. Türkiye has also been involved in these projects by developing the Trans-Anatolian Pipeline project together with Azerbaijan. TANAP and the Trans-Adriatic Pipeline (TAP) superseded the cancelled Nabucco project and collectively form the Southern Gas Corridor (EIA, 2025). TANAP currently transports Azerbaijani natural gas to Türkiye via Georgia with an estimated capacity of 0.6 Tcf per year (Tcf/y) (EIA, 2025). In subsequent stages, the pipeline is extended to Greece and Bulgaria and then to other European countries (Akdemir & Kuşçu, 2013). However, the Trans-Caspian Pipeline (TCGP) project, which was planned to transport natural gas and oil from the countries on the eastern shore of the Caspian Sea to Azerbaijan, has not yet been realized and remains at the proposal stage (EIA, 2025).

The Caspian Basin has become a significant focal point in global politics due to its rich energy

resources and legal uncertainties. Russia's efforts to establish hegemony in the region and geopolitical rivalries have negative effects on energy security and stability. Long-term conflicts in the region have a deterrent effect on energy infrastructure projects and international investments. The Nagorno-Karabakh conflict, in particular, directly affects energy infrastructure, and the potential resumption of hostilities could jeopardise energy supplies. This situation discourages international investment, hinders the development of alternative energy sources, and perpetuates the cycle of energy insecurity. Projects such as the Baku-Tbilisi-Ceyhan and BTE natural gas pipelines have been important steps towards diversifying the region's energy supply routes. However, the threats to energy security posed by conflicts and political uncertainty in the region cannot be ignored.

Although international cooperation projects such as the Nabucco Project offer the region the potential to benefit from various energy sources, Russia's competition with alternative projects and the impact of regional rivalries highlight the challenges facing these efforts. Ultimately, ensuring energy security and stability in the Caspian Basin depends on the commitment of all stakeholders in the region to cooperation and diplomatic solutions. The effective participation of non-regional actors in the process and the peaceful resolution of regional conflicts are critical to fully capitalising on the economic and strategic opportunities offered by the Caspian Basin. In this way, the Caspian Basin can become a centre of cooperation in energy and make positive contributions to the stability of both regional and global energy markets.

Conclusion

The Caspian Region plays a truly vital role in global energy security. Its substantial oil and natural gas reserves represent a critical resource, particularly for supplying the rapidly increasing energy demands of both Europe and Asia. Nevertheless, the region's political instability, enduring regional disputes, and complex geopolitical structure impose considerable stress on its energy landscape. Despite these significant hurdles, the Caspian Region remains an essential focal point for international energy security.

This article first examines the fundamental function of the Caspian Region within the context of global energy security, emphasizing the international significance of its energy assets. It then addresses the strategic importance of the Caspian Basin for Europe and Asia by scrutinizing the region's core geopolitical dynamics. Finally, it analyzes how the interplay of energy competition and active regional conflicts influences the Caspian energy environment, offering a thorough evaluation of the region's security challenges.

The Caspian Basin possesses a distinct strategic advantage in meeting European and Asian energy needs, primarily due to its favorable geographical location. The region's energy resources effectively strengthen the energy supply chain, linking these two major continents. However, fierce internal energy competition and persistent geopolitical tensions are chief obstacles that undermine this strategic positioning. Specifically, multilateral pipeline projects like the Baku-Tbilisi-Ceyhan and the Trans-Anatolian Pipeline have been crucial in diversifying supply, solidifying Türkiye's role as a critical link in the energy security corridor for Europe.

This analysis highlights how ongoing conflicts, particularly the post-2020 reality of the Nagorno-Karabakh issue, directly increase the fragility of the energy supply lines, discouraging essential international investment in critical infrastructure. Competition over energy resources, coupled with regional conflicts, severely compromises the Caspian Region's energy security. Clashes of interest among regional nations frequently trigger tensions concerning the equitable distribution of these resources, negatively affecting International Relations. Therefore, forging effective solutions to the region's security concerns is paramount, it is vital both for establishing enduring local stability and for boosting overall global energy security.

In conclusion, the energy security of the Caspian Region stands as a critical determinant of the global energy balance. The most crucial steps required to secure this balance involve the adept management of regional energy resources, the establishment of lasting political stability, and the deepening of international collaboration. For this potential to be fully realized, strengthening legal certainty regarding the Caspian Sea's status and increasing international support for regional cooperation initiatives remain essential prerequisites. Against this backdrop, the continuation of international efforts targeting the region is essential, alongside the urgent need to identify and implement common solutions to address security challenges.

References

Akdemir, İ., & Kuşçu, V. (2013). Küresel enerji eksenleri ve Türkiye'nin coğrafi konumu. *Marmara Coğrafya Dergisi*, 26, 82-107.

Big-Alabo, T. (2019). State terrorism and security challenges: The United States in Afghanistan. *Journal of International Relations and Security Studies*, 2(1), 1-17.

Brzezinski, Z. (2007). *Büyük satranç tahtası: Amerika'nın küresel üstünlüğü ve bunun jeostratejik gereklilikleri* (Y. Türedi, Trans.). İnkılap Kitabevi. (Original work published 1997)

Chen, Y., Gong, W., Li, S., & Guo, S. (2024). A novel conformable fractional-order accumulation grey model and its applications in forecasting energy consumption of China. *Scientific Reports*, 14, 31028. <https://doi.org/10.1038/s41598-024-82128-w>

European Commission. (2022). *REPowerEU Plan*. Publications Office of the European Union. https://energy.ec.europa.eu/repowereu-plan_en

Oral, F. (2022). Role of the Caspian Region within the Scope of Energy Security. *Bölgesel Araştırmalar Dergisi*, 6(2), 419-439.

Ghasemi, A., Miandoabchi, E., & Soroushnia, S. (2021). The attractiveness of seaport-based transport corridors: An integrated approach based on scenario planning and gravity models. *Maritime Economics & Logistics*, 23, 522-547. <https://doi.org/10.1057/s41278-020-00175-2>

Shammas, P., & Nagata, K. (2000). Profiles of the petroleum sectors in Caspian region countries and the potential for a new Caspian to Middle East Gulf export line through Iran. *Energy Exploration & Exploitation*, 18(5), 473-568. <https://doi.org/10.1260/0144598001492373>

Szargut, J. (2002). Application of exergy for the determination of the pro-ecological tax replacing the actual personal taxes. *Energy*, 27(4), 379-389. [https://doi.org/10.1016/S0360-5442\(01\)00092-5](https://doi.org/10.1016/S0360-5442(01)00092-5)

Şentürk, S. (2024). Politics of youth in Azerbaijan (2003–2018) [Doctoral dissertation, Orta Doğu Teknik Üniversitesi]. YÖK Ulusal Tez Merkezi. https://tez.yok.gov.tr/UlusulTezMerkezi/tezDetay.jsp?id=FzbfH03x9BmOtol2CtQACw&no=d_dleeFiXdMxtypqVfNJHA

Turan, A. P. (2010). Hazar havzası'nda enerji diploması. *Bilge Strateji*, 2(2), 43–72.

U.S. Energy Information Administration (EIA). (2025, February 6). Caspian Sea. U.S. Department of Energy . Retrieved August 20, 2025, from https://www.eia.gov/international/analysis/regions-of-interest/Caspian_Sea

Hakem Değerlendirmesi: Dış Bağımsız

Yazar Katkısı: Gül Sevda Yılmaz %100

Destek ve Teşekkür Beyanı: Çalışma için destek alınmamıştır.

Etik Onay: Bu çalışma etik onay gerektiren herhangi bir insan veya hayvan araştırması içermektedir.

Çıkar Çatışması Beyanı: Çalışma ile ilgili herhangi bir kurum veya kişi ile çıkar çatışması bulunmamaktadır.

Peer Review: Independent double-blind

Author Contributions: Gül Sevda Yılmaz 100%

Funding and Acknowledgement: No support was received for the study.

Ethics Approval: This study does not contain any human or animal research that requires ethical approval.

Conflict of Interest: There is no conflict of interest with any institution or person related to the study