

IMPROVING

GEORGIA'S ENERGY SECURITY THROUGH NATURAL GAS EXPORTS FROM IRAN

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MEJORA DE LA SEGURIDAD ENERGÉTICA DE GEORGIA MEDIANTE LAS EXPORTACIONES DE GAS NATU-RAL DE IRÁN

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ABSTRACT

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Georgia's energy security is increasingly vulnerable due to its reliance on Russian and Azerbaijani natural gas, exposing it to supply disruptions and geopolitical pressures. Iran, with the world's second-largest natural gas reserves, offers a viable alternative to diversify Georgia's energy mix. Despite U.S. and international sanctions on Iran's energy sector, historical precedents—such as Iran's emergency gas supply to Georgia in 2006-and innovative gas swap contracts, like the 2024 Turkmenistan deal, highlight the potential for energy cooperation. This article examines the strategic, economic, and diplomatic opportunities for Iran-Georgia collaboration, drawing on global examples of sanctions exemptions and academic literature to propose a framework for Georgia to secure Iranian gas imports legally. By leveraging regional infrastructure, diplomatic engagement, and creative trade mechanisms, Georgia can enhance its energy security, reduce dependence on dominant suppliers, and strengthen bilateral ties with Iran, contributing to regional stability in the South Caucasus.

Keywords:

Gas, security, region, energy, stability.

La seguridad energética de Georgia es cada vez más vulnerable debido a su dependencia del gas natural ruso y azerbaiyano, lo que la expone a interrupciones del suministro y presiones geopolíticas. Irán, con las segundas mayores reservas de gas natural del mundo, ofrece una alternativa viable para diversificar la matriz energética de Georgia. A pesar de las sanciones estadounidenses e internacionales impuestas al sector energético iraní, precedentes históricos -como el suministro de gas de emergencia de Irán a Georgia en 2006- y contratos innovadores de intercambio de gas, como el acuerdo con Turkmenistán de 2024, resaltan el potencial de la cooperación energética. Este artículo examina las oportunidades estratégicas, económicas y diplomáticas para la colaboración entre Irán y Georgia, basándose en ejemplos globales de exenciones de sanciones y literatura académica para proponer un marco que permita a Georgia asegurar legalmente las importaciones de gas iraní. Al aprovechar la infraestructura regional, la colaboración diplomática y mecanismos comerciales creativos, Georgia puede mejorar su seguridad energética, reducir la dependencia de los proveedores dominantes y fortalecer los lazos bilaterales con Irán, contribuyendo así a la estabilidad regional en el Cáucaso Sur.

Palabras clave:

Gas, seguridad, región, energía, estabilidad.

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INTRODUCTION

Energy security is a critical pillar of national sovereignty, particularly for import-dependent nations like Georgia, strategically located at the crossroads of Europe and Asia. In 2022, natural gas accounted for 50.4% of Georgia's total energy supply, with imports primarily from Azerbaijan (80%) and Russia (20%), totaling approximately 2.5 billion cubic meters (bcm) in 2023 (International Energy Agency, 2022). This dependence exposes Georgia to supply disruptions, as demonstrated during the 2008 Russo-Georgian War when Russia halted gas exports. Azerbaijan's dominance, while more stable, raises concerns about over-reliance on a single supplier.

Iran, holding 1,200 trillion cubic feet (Tcf) of proven natural gas reserves and producing 8.4 Tcf annually, is a potential alternative supplier (International Energy Agency, 2024a). Despite U.S. and EU sanctions targeting Iran's energy sector, Georgia's imports of Iranian gas surged by 600% in 2023, albeit from a low base, signaling growing interest in this partnership (Caucasus Watch, 2024). Iran's innovative gas swap contracts, such as the 2024 agreement with Turkmenistan, and its history of supporting Georgia during energy crises demonstrate its reliability and adaptability.

This article explores the potential for Iran to supply natural gas to Georgia, diversifying its energy sources and fostering diplomatic ties. Drawing on academic literature and case studies of sanctions exemptions, it proposes mechanisms for Georgia to navigate the sanctions regime.

METHODOLOGY

During the research process of this paper, we applied the following theoretical approaches:

Richard Cohen's Theory of Cooperative Security – According to this theory, issues related to security can be resolved through cooperation between international institutions. The theory emphasizes that collaboration among states and institutions plays a crucial role in maintaining international peace and resolving conflicts.

Balance of Power Theory – This theory is associated with political realism. It posits that each state's primary objective is to ensure its survival and establish its position in the international system, which drives the pursuit of security. To maintain security, states often act collectively to confront threats. As a result, the international system is divided into several groups of states with relatively equal power. The balance of power among them serves as a guarantee of peace and order and is a key condition for stability in the international system.

The Concept of Securitization – This concept is related to the Copenhagen School of security studies. It highlights the role of society in the security process. Securitization refers to the process by which a particular issue is presented as an existential threat, thereby legitimizing extraordinary measures to address it. Through this process, society becomes an active participant in shaping the security agenda.

During the course of this paper, qualitative research methods were employed. The methods used include: the historical-descriptive method, the narrative analysis method and the comparative analysis method.

DEVELOPMENT

Energy security, defined as the uninterrupted availability of energy at affordable prices, is a critical component of national security (Yergin, 2006). For import-dependent states like Georgia, energy security involves diversifying suppliers, securing stable supply chains, and mitigating geopolitical risks. The geopolitics of energy in the South Caucasus is shaped by competition among regional powers—Russia, Turkey, and Iran—and their influence over pipeline routes and markets (Klare, 2009).

Academic literature underscores energy's role as a diplomatic tool. Energy cooperation can foster interdependence and reduce conflict, as seen in the EU's partnerships with North African states (Goldthau & Sitter 2015). For Georgia, diversifying away from Russia aligns with its Euro-Atlantic aspirations, but engaging with Iran requires navigating sanctions and balancing relations with Western allies. Iran's use of gas exports to gain regional influence suggests that cooperation with Georgia could serve mutual strategic interests, enhance Iran's soft power while securing Georgia's energy needs.

Georgia's energy sector is heavily reliant on imported natural gas, which accounted for 50.4% of its total energy supply in 2022 (International Energy Agency, 2022). In 2023, Georgia imported 2.5 bcm of gas, primarily from Azerbaijan's Shah Deniz field via the South Caucasus Pipeline (SCP) and, to a lesser extent, from Russia through transit pipelines. This dependence creates multiple vulnerabilities:

Geopolitical Leverage: Russia has used energy as a tool of coercion, notably cutting gas supplies during the 2006 winter and the 2008 Russo-Georgian War. In January 2006, Russia halted gas deliveries, citing technical issues but widely perceived as geopolitical retaliation. Iran stepped in, providing emergency gas through the Armenia-Iran pipeline, rerouted to Georgia, and accepted long-term payment installments due to Georgia's financial constraints, with repayments ongoing as of 2025 (Civil Georgia, 2006). This intervention alleviated Georgia's crisis prevented widespread energy shortages during a harsh winter, and demonstrated Iran's reliability as a supplier capable of responding swiftly to regional partners' needs.

Over-Reliance on Azerbaijan: Azerbaijan's dominance raises concerns about supply security, particularly as global demand for Caspian gas grows (Karimli, 2025). Azerbaijan's prioritization of European markets could strain supplies to Georgia. Limited Domestic Resources: Georgia's hydropower generates most of its electricity, but gas is critical for heating and industry. Domestic gas production is negligible, necessitating imports (Taktakishvili, 2025).

Georgia's role as a transit hub for Caspian energy to Europe, via the SCP and Baku-Tbilisi-Ceyhan (BTC) pipelines, enhances its geopolitical significance but does not address its import dependence (Bhaduli, 2021). Diversification is a priority, as outlined in Georgia's 2020 Energy Strategy, which emphasizes reducing Russian influence and exploring regional alternatives.

Iran holds 1,200 Tcf of proven natural gas reserves, second only to Russia, and produced 8.4 Tcf in 2019. The South Pars/North Dome field, the world's largest gas reservoir, has the potential to produce 9.49 Tcf annually at full capacity (International Energy Agency, 2024b). Sanctions have limited Iran's export infrastructure, with current pipeline capacity at 34.4 bcm per year, serving Turkey, Iraq, Armenia, and Azerbaijan.

High domestic consumption, driven by subsidized prices, and underinvestment in extraction and export facilities due to sanctions—have constrained Iran's export potential. However, Iran's proximity to Georgia, via Armenia or Azerbaijan, makes it a feasible supplier. The Armenia-Iran pipeline, with a capacity of 2.3 bcm annually, could be extended to Georgia, while gas swaps through Azerbaijan could leverage existing infrastructure (Kosolapova, 2016). Iran's competitive pricing, as seen in its discounted exports to Iraq, could make its gas economically attractive.

Since the 1979 Iranian Revolution, the U.S. has imposed comprehensive sanctions on Iran, targeting its energy sector under executive orders such as E.O. 13846 (2018) and E.O. 13902 (2020). These measures prohibit U.S. entities from engaging in transactions involving Iranian petroleum, natural gas, or petrochemicals and impose secondary sanctions on foreign entities facilitating such trade. The EU has enforced similar restrictions since 2012, banning imports of Iranian crude oil and natural gas and restricting technology transfers.

Sanctions have reduced Iran's energy export revenues by an estimated \$50 billion annually, constraining LNG development and pipeline expansion. Iran has adapted through barter systems, gas swaps, and informal trade networks (Shaffer, 2020). For Georgia, engaging with Iran's energy sector risks secondary sanctions, requiring compliance with U.S. and EU regulations.

The U.S. provides exemptions to sanctions under specific conditions. The Office of Foreign Assets Control (OFAC) issues general licenses for transactions involving humanitarian goods and specific licenses for case-by-case exemptions, including energy imports. The Comprehensive Iran Sanctions, Accountability, and Divestment Act (CISADA) of 2010 and the National Defense Authorization Act (NDAA) of 2012 allow "significant reduction exceptions"

for countries reducing reliance on Iranian energy, granting temporary waivers for 90–180 days (Nadarashvili, 2023).

Exemptions are granted to prevent economic destabilization or ensure energy security in strategically important countries. The U.S. evaluates waiver requests based on energy needs, alternative supply options, and alignment with U.S. foreign policy. Georgia's pro-Western orientation and limited energy options position it as a strong candidate for exemptions (Civil Georgia, 2006).

Importing Iranian gas would reduce Georgia's reliance on Russia and Azerbaijan, mitigating risks of supply disruptions. Supplier diversification enhances energy security by reducing exposure to single-point failures. The Armenia-Iran pipeline could deliver 1–2 bcm annually to Georgia, covering a significant portion of its needs. Gas swaps through Azerbaijan could provide a low-cost solution.

Iran's gas is often sold at discounted rates, as seen in its exports to Iraq at 20% below market prices. Lower energy costs could boost Georgia's economic competitiveness. Iran's willingness to offer flexible payment terms, as demonstrated in 2006, aligns with Georgia's fiscal constraints.

Energy cooperation could foster trade in agriculture, tourism, and infrastructure. Iran's interest in countering Turkish and Russian influence aligns with Georgia's need for alternative partners. Cooperation could enhance regional stability by integrating Iran into South Caucasian energy networks.

Iran's 2024 gas swap agreement with Turkmenistan, under which Turkmenistan delivers gas to Iran's northern regions and Iran supplies equivalent volumes to third countries, offers a sanctions-compliant model (Putz, 2025). A similar swap with Azerbaijan could enable Georgia to receive Iranian gas via the SCP, minimizing financial transactions and infrastructure costs.

Closer ties with Iran could strain Georgia's relations with the U.S. and EU, critical for its Euro-Atlantic integration. Balancing these relationships is essential.

Azerbaijan may resist facilitating Iranian gas exports to protect its market share. Turkey could view Iran's expansion as a threat.

Georgia relies on natural gas for 50.4% of its energy supply, which poses risks related to Russian and Azerbaijani dominance. Georgia's lack of alternative suppliers should be reduced, which would increase its role, both with Western partners and in the South Caucasus. This is consistent with US interests in countering Russian influence. Additionally, Georgia should commit to gradual diversification, such as exploring LNG imports, to demonstrate compliance with U.S. waiver conditions, as Turkey did in 2012. Georgia should explore gas swap agreements with Iran and Azerbaijan, drawing on Iran's successful 2024 swap deal with Turkmenistan, which facilitates regional energy trade (Putz, 2025). Under such an arrangement, Azerbaijan could deliver Iranian gas to Georgia via the South Caucasus Pipeline, with Iran receiving equivalent volumes from Turkmenistan or another supplier elsewhere. This mechanism leverages existing infrastructure, reducing the need for costly new pipelines, and minimizes direct financial transactions with Iran, thereby mitigating exposure to U.S. secondary sanctions. To implement this, Georgia should negotiate trilateral agreements with Iran and Azerbaijan. Azerbaijan's participation may require diplomatic assurances to protect its market interests, potentially through joint energy projects or trade concessions.

To circumvent sanctions-related financial restrictions, Georgia should adopt a barter-based trade model, similar to Armenia's gas-for-electricity arrangement with Iran. Georgia could exchange agricultural products, such as wine or citrus, or electricity generated from its hydropower resources for Iranian gas. This approach reduces the need for monetary transactions, which are subject to U.S. sanctions enforcement, and aligns with Georgia's economic strengths in agriculture and renewable energy. Georgia should establish a bilateral trade commission with Iran to negotiate terms, ensure equitable exchange rates, and monitor compliance with international trade norms. This mechanism not only addresses sanctions constraints but also fosters broader economic ties, potentially expanding into other sectors like tourism or manufacturing.

Georgia should leverage the goodwill established during Iran's 2006 emergency gas supply, when Iran provided critical support during a Russian cutoff and accepted long-term payment installments, with repayments ongoing as of 2025. This historical precedent demonstrates Iran's reliability and flexibility, offering a foundation for negotiating favorable terms for future gas imports. Georgia should propose similar long-term payment structures or discounted pricing, to align with its fiscal constraints, given its public debt of 40% of GDP. Diplomatic engagements should highlight this shared history to build trust, potentially through high-level visits or energy-focused summits. Academic studies on energy diplomacy underscore the importance of historical ties in fostering resilient partnerships, particularly in geopolitically sensitive regions like the South Caucasus.

Georgia must strengthen diplomatic coordination with regional actors—Armenia, Azerbaijan, and Turkey—to facilitate Iranian gas imports. Armenia's existing pipeline infrastructure could be extended to Georgia, requiring technical and political cooperation. Georgia should convene a regional energy dialogue, potentially under the auspices of the Organization of the Black Sea Economic Cooperation, to align interests and address concerns. This approach aligns with academic arguments for regional cooperation as a stabilizer in energy markets.

Georgia should seek support from international organizations, such as the European Union and the International Energy Agency, to legitimize its energy partnership with Iran as a contribution to regional stability. The EU, which has prioritized Georgia's energy security in its Eastern Partnership framework, could provide technical assistance or diplomatic cover to navigate sanctions. The IEA could offer expertise on integrating Iranian gas into Georgia's energy mix while maintaining compliance with global norms.^85 Georgia should present its case at international forums, framing the partnership as a means to reduce Russian influence and enhance South Caucasian energy resilience. This strategy draws on academic insights that international organizations can mediate geopolitical tensions in energy trade..

To ensure the viability of Iranian gas imports, Georgia should commission comprehensive feasibility studies to assess the technical and economic aspects of pipeline extensions and gas swap mechanisms. Funding could be sought from neutral institutions, such as the Asian Development Bank, to avoid sanctions-related restrictions, given Georgia's fiscal constraints. The studies should also analyze long-term economic benefits, such as reduced energy costs and increased industrial competitiveness, drawing on Iran's discounted pricing model.

In 2004, trade exchange between Georgia and Iran reached 50 million USD. Although this figure appeared impressive at the time, it was still considered relatively low. Iran's then Vice President, Dr. Aref, stated that both countries should strive to elevate their trade and economic relations to a level that matches their political ties.

That same year, Georgian President Mikheil Saakashvili paid an official visit to Tehran, where he held successful talks with Iranian President Seyyed Mohammad Khatami. Later, at the end of April, an Iranian delegation led by the Vice President visited Tbilisi. During the visit, several important agreements were signed, laying the foundation for the expansion of bilateral relations and strengthening the legal framework necessary for economic cooperation.

As part of the visit, a Georgia-Iran Business Forum was held through the joint initiative of the Chambers of Commerce and Industry of both countries and the Union of Iranian Businessmen. The forum brought together major Iranian entrepreneurs, who came to explore investment opportunities in Georgia. Key sectors that attracted interest included pharmaceuticals, construction, tourism, machinery manufacturing, and banking.

Particularly noteworthy was the interest of Iranian businessmen in making large-scale investments in the energy sector. Specifically, they expressed readiness to invest tens of millions of dollars in the construction of hydroelectric power plants. During the same visit, the presidents of the Chambers of Commerce and Industry of Iran and Georgia signed a cooperation agreement, which led to the establishment of the Georgia-Iran Business Council.

Additional meetings were held with business representatives in the Adjara region, and Iranian delegates visited the port of Batumi. Although much attention was given to tourism, Iranian entrepreneurs identified the transport sector as the most profitable and strategically important area for bilateral cooperation. They believed that development in this field would bring significant benefits to investors and capital flows from both countries.

Iran took tangible steps in the transportation sector by deciding to join the TRACECA (Transport Corridor Europe– Caucasus–Asia) initiative and to strengthen cooperation with its member states. It was expected that relations between Iran and Georgia in the transportation sector would significantly deepen in the near future.

One of the most important areas of bilateral cooperation, with the potential to deepen relations and play a vital role in enhancing regional security, is the expansion of collaboration in various energy sectors. The construction of a pipeline for transporting Iranian gas to Europe would be only one aspect of this cooperation—not the only one. The practical implementation of this idea and the achievement of success in the energy field require serious efforts from both countries, as well as from other states in the region.

The two sides discussed prospects for cooperation in the energy sector (Iran expressed interest in gas supply), including issues such as the construction of a pipeline, rehabilitation of hydroelectric power plants, and upgrades to power transmission lines.

The Georgian market is already familiar with Iranian products—several hundred Iranian companies have been and continue to operate in Georgia. However, the same cannot be said about Georgian companies, which were virtually absent from the Iranian market, including in 2004. The Iranian International Development Bank expressed readiness to provide Georgia with a \$20 million loan, intended for the rehabilitation of Georgia's energy system.

On December 24, 2023, Georgia, Russia, Iran, and Armenia established an Energy Union, under which these countries would be connected by new 400 kV transmission lines. The project was initially scheduled for completion in 2018. Upon its completion, Iran would be able to import electricity not only from Armenia but also from Georgia and Russia in exchange for gas. Georgia's then-Minister of Energy, Kakha Kaladze, stated that with the new lines, Georgia would be able to export its electricity to Iran. He noted that demand on the Iranian market is very high, and this would allow Georgia to export electricity not only to Turkey but also to Iran via Armenia.

In April 2019, a meeting of representatives from Georgia, Armenia, Russia, and Iran was held in Tehran to discuss

cooperation in the gas sector. Prior to this, Vladimir Karapetyan, spokesperson for Armenia's Prime Minister, announced that Armenia had received Iran's agreement to establish both trilateral (with Georgia for gas) and quadrilateral (with Georgia and Russia for electricity) transit cooperation formats.

Earlier that year, on February 27, Armenian Prime Minister Nikol Pashinyan met with Iranian President Hassan Rouhani in Tehran. During the talks, Rouhani expressed readiness to increase the volume of gas supplied to Armenia and also to begin gas exports to Georgia via Armenian territory. Pashinyan also confirmed Armenia's willingness to support this transit cooperation.

Goar Iskandaryan, an Armenian Iran expert, suggested that the issue of transiting Iranian gas to Georgia through Armenia had already been discussed with both Tbilisi and Moscow. She noted that Armenian diplomacy faced the task of working closely with the Iranian, Georgian, and Russian sides to implement the project and enhance regional cooperation, which is crucial for Armenia's full integration into regional processes.

From a pragmatic perspective, Georgia has always acted in line with its national interests. Iran is a close neighbor, and there are no serious disagreements between the two countries. Therefore, there is no major risk associated with deepening economic ties with Iran—such as dependency. Georgia's former Minister of Energy, David Mirtskhulava, was convinced of the need to diversify the country's gas supply sources, and under favorable pricing and conditions, he supported the idea of importing gas from Iran via Armenia. He also considered it possible to import Iranian gas via Azerbaijan, stating that the origin of the gas is less important than ensuring a healthy and competitive energy market.

Iran–Georgia Energy Cooperation Amid Regional and Global Shifts (Post-2022 Developments)

Following the 2022 gas crisis in Europe, Iran sought to re-enter the European energy market. However, due to sanctions and political barriers, this effort did not materialize in practice. Nevertheless, Iran expanded its energy cooperation with China and has been working to diversify its long-term natural gas export routes. The country aims to increase gas production and broaden its export markets, although sanctions and global geopolitical obstacles continue to hinder these ambitions.

Iran has particularly prioritized strengthening ties with China and other non-Western countries. Notably, in 2021, Iran signed a 25-year strategic partnership agreement with China, which includes significant energy cooperation components.

In February 2024, Iran and Georgia reached a major agreement on energy cooperation. Both sides expressed willingness to establish a system for natural gas and electricity supply and exchange, which holds strategic and economic importance for both countries. The agreement includes a seasonal energy exchange model, exploration of new gas transit routes, and discussions on energy infrastructure development.

One key aspect under consideration is the transit of Iranian gas to Georgia via Armenia, utilizing existing Iran– Armenia energy infrastructure. This route offers Georgia the opportunity to diversify its energy sources and reduce dependence on a single supplier. Iran, on the other hand, is interested in expanding northward via Armenia and Georgia, with the goal of exporting energy toward the Black Sea region and European markets.

The two countries also explored ways to modernize and strengthen energy infrastructure, which would involve investments and deeper technological cooperation.

This agreement carries significant geopolitical implications. Iran's integration into the South Caucasus energy system opens new opportunities, particularly in terms of enhancing energy security in the Black Sea region. For Georgia, it presents a chance to increase its energy independence and bolster its role as a transit hub. For Iran, it serves as a strategic pathway toward Western energy markets.

The agreement signed in February 2024 between Iran and Georgia represents a strategic step that promotes energy stability, regional cooperation, and the strengthening of both countries' geopolitical positions. Although still in its developmental stage, the implementation of this agreement is expected to significantly reshape the energy dynamics in the South Caucasus.

CONCLUSIONS

Iran's vast gas reserves, historical reliability, and innovative swap contracts position it as a strategic partner for Georgia's energy diversification. By securing exemptions, leveraging regional infrastructure, and adopting barter or swap mechanisms, Georgia can reduce reliance on Russia and Azerbaijan, lower energy costs, and strengthen ties with Iran. This partnership could reshape Georgia's energy landscape and foster regional stability.

Natural gas is one of the main energy resources in today's world, playing a critical role both in the economy and geopolitics. Iran, as one of the richest countries in the world in terms of natural gas reserves, has long sought to maximize the use of its energy resources for national economic development and to expand its regional influence.

Iran possesses one of the largest natural gas reserves worldwide. The country's energy policy heavily relies on natural gas for both domestic consumption and export purposes. Iran ranks second globally in proven natural gas reserves, which grants it significant geopolitical importance. These resources are utilized not only to meet internal demand but also for export, including to the South Caucasus region, specifically Georgia.

REFERENCES

- Bhaduli, P. (2021). Pipeline politics in south Caucasus: security implications for Russia. International Journal of Education and Science Research Review, 8(5). <u>https:// ijesrr.org/publication/75/312.%20august%202021%20</u> ijesrr.pdf
- Caucasus Watch. (2024). Russia and Iran Up, Azerbaijan Down in Georgia's 2023 Gas Import Charts. <u>https://</u> <u>caucasuswatch.de/en/news/russia-and-iran-up-azer-</u> <u>baijan-down-in-georgias-2023-gas-import-charts.html</u>
- Civil Georgia. (2006). Iranian Gas Flows to Georgia. <u>ht-</u> <u>tps://civil.ge/archives/109709</u>
- Goldthau, A., & Sitter, N. (2015). A Liberal Actor in a Realist World: The European Union and Global Energy Governance. Oxford University Press.
- International Energy Agency. (2022). Georgia: Natural Gas. <u>https://www.iea.org/countries/georgia/natural-gas</u>
- International Energy Agency. (2024a). Iran's energy overview, 2022. <u>https://www.eia.gov/international/analysis/</u> <u>country/IRN</u>
- International Energy Agency. (2024b). Iran 2023 primary energy data in quadrillion Btu. <u>https://www.eia.gov/in-</u> ternational/overview/country/IRN

Karimli, I. (2025). More Azerbaijani Gas to Reach Europe Amidst Increasing Demand: President Aliyev. https://caspiannews.com/news-detail/more-azerbaijani-gas-to-reach-europe-amidst-increasing-demand-president-aliyev-2025-1-8-0/

- Klare, M. (2009). Rising Powers, Shrinking Planet: The New Geopolitics of Energy. MacMillan.
- Kosolapova, E. (2016). Iran can supply gas to Georgia in swap scheme. <u>https://en.trend.az/scaucasus/georgia/2496295.html</u>
- Nadarashvili, G. (2023). Iran and Energy Security in the Region. Analytical Center. Public Policy Institute.
- Putz, C. (2025). Turkmenistan settles gas swap deal with Turkiye, Iran. <u>https://thediplomat.com/2025/02/turkmenistan-settles-gas-swap-deal-with-turkiye-iran</u>
- Shaffer, B. (2020). U.S. Sanctions on Iran: Is Natural Gas Next? <u>https://www.fdd.org/analysis/2020/05/11/us-iran-</u> sanctions-natural-gas-next/
- Taktakishvili, N. (2025). Share of renewable energy in Georgia's power generation made up 80.3%. <u>https://bm.ge/en/news/the-share-of-renewable-energy-in-georgias-power-generation-made-up-803-omnia</u>
- Yergin. D. (2006). Ensuring Energy Security. <u>https://www.</u> <u>foreignaffairs.com/articles/2006-03-01/ensuring-ener-</u> <u>gy-security</u>