## DOI https://doi.org/10.30525/2592-8813-2024-4-25

## AZERBAIJAN'S ENERGY SECURITY POLICY IN THE CONTEXT OF RELATIONS WITH THE EUROPEAN UNION

## Khanim Asadova,

Lecturer at the Department of Social Sciences, Azerbaijan State Agrarian University (Ganja, Azerbaijan) ORCID ID: 0009-0009-7476-3354 xanim.as@mail.ru

Abstract. After regaining its state independence in 1991, the Republic of Azerbaijan began to realize its sovereign rights in the economic field and conduct an independent policy. The main directions of this policy were the economic system created on the basis of different forms of ownership, the transition to the market economy and integration into the world economy. In the first years of independence, energy policy was one of the most important directions of Azerbaijan's foreign policy. There are several directions of Azerbaijan's energy policy, of which two more important ones can be specially mentioned. The first one was about ensuring Azerbaijan's own internal energy security, and the second one was about the contribution that other countries can make to ensuring energy security. From this point of view, it is of great importance to investigate the issue of creating new opportunities related to both the production of Azerbaijan's energy resources and the ways to export these resources to international markets. The scientific novelty of the research is in the deep investigation and evaluation of the energy security policy within the framework of relations with the EU, in putting forward serious proposals for the achievement of real goals of this policy, and in presenting the results based on rich facts. Azerbaijan is a reliable partner for Europe. Our approach to the issue of energy security is that energy resources should unite countries and peoples, not divide them. Energy resources should serve regional and international cooperation, not competition or conflict. The interests of suppliers, transit countries and consumers should align and lead to greater predictability and mutual benefit. This is the energy philosophy of our country.

Key words: Azerbaijan, Energy diplomacy, energy security policy, EU.

**Introduction.** Azerbaijan has undergone a significant economic transformation since its independence in 1991, with its large oil and gas reserves propelling strong growth in the 1990s and 2000s. However, heavy reliance on extractive industries has left Azerbaijan vulnerable to the adverse effects of oil price volatility. Gross domestic product (GDP) growth averaged 1.4% per year between 2013 and 2017, down from 5.5% in 2008 and 2012. (IEA, 2023, p. 4) The country's hydrocarbon sector was responsible for much of the decline, as it contributes roughly one-third of GDP and more than 90% of total exports. The decline in global oil prices in 2014 and the subsequent decline in oil production fueled this contraction. In addition, the decline in oil prices has led to a decline in payments from Azerbaijan's hydrocarbon-rich trading partners. These revenues, which largely support the country's rural population, have fallen by one-third. In 2017, Azerbaijan's GDP showed almost no growth, but in 2018 it increased by 1.4 percent (USA, 2023).

According to the statement made by the State Statistics Committee of Azerbaijan in 2022, Azerbaijan's GDP data covering the January-September period of 2022 increased by 5.6% compared to the same period of the previous year and amounted to 98.1 billion manat (57.7 billion dollars). GDP per capita was 9,748.9 manat (5,734.6 dollars). Oil and gas account for more than 90% of Azerbaijan's exports. Following the discovery of the Shah Deniz natural gas field in the 2000s, oil and gas production increased significantly, reaching record levels in 2010, and the rehabilitation and modernization of gas and electricity networks increased the reliability and security of supply (IEA, 2023, p. 5). Azerbaijan has a strong potential for renewable energy development. The

country has excellent solar and wind resources and significant prospects for biomass, geothermal and hydropower. However, practical deployment remains limited when compared to the scale of the country's existing resources and long-term ambitions. Renewables also offer the most obvious low-carbon solution to meet Azerbaijan's climate goals. The country has committed to reducing its greenhouse gas (GHG) emissions by 35% by 2030, as measured by the 1990 base year of its nationally determined contribution (NDC) under the Paris Agreement, which emphasizes the use of alternative and renewable energy sources. Despite the widespread privatization of the economy since the country gained independence, the energy sector in Azerbaijan remains predominantly state-owned, with a few small hydropower plants privately owned, accounting for less than 1% of electricity production (IEA, 2023, p. 6).

**The purpose of the research.** There are several directions of Azerbaijan's energy policy, of which two more important ones can be specially mentioned.

Analysis of the latest relevant research and publications. This study is based on sources written by various authors, such as "European Energy Policy and The EU-Azerbaijan Energy Cooperation" by Azimov A., "The Relationship Between Energy Supply Security and National Security" by Ediger V., "Second Strategic energy Review: An EU Energy Security and Solidarity Action Plan", "EU steps up renewable energy cooperation with Azerbaijan", "Energy Strategy of Azerbaijan" by Almammadov V., "Azerbaijan is now a major contributor to Europe's energy security" by Huseynov V., "Azerbaijan Energy Profile Report", "Relations between Azerbaijan and European Union", "The European Union and the South Caucasus in the New Global System: On the Axis of Enlargement and Neighborhood Policy" by Shahbazov, R. and others have been studied.

**Results of the research.** When we examine Azerbaijan-European Union relations, we see that the energy factor has a very important place. So much so that, while creating the Action Plan between Azerbaijan and the European Union, one of the most important strategic goals of the cooperation was to strengthen regional cooperation in the field of energy and transportation. The first step towards developing relations in the field of energy was taken by signing the Memorandum of Agreement on Strategic Partnership in the Field of Energy between the European Union and Azerbaijan in 2006. The Memorandum signed between the parties determined some goals for the development of cooperation in the field of energy. These goals can be listed as follows:

- To create a program for the harmonization of existing Azerbaijani laws in the field of energy with the EU acquis.

- To strengthen the export of energy resources from Azerbaijan and the Caspian basin to the EU and the security and safety of transportation routes.

- To create an energy demand management policy in Azerbaijan based on the Kyoto Protocol, including energy saving, renewable energy and climate change measures.

- To develop cooperation in the field of technology and to create expert exchange programs for the recruitment of specialized staff in that field to the country.

These goals continue to be achieved today within the framework of Azerbaijan-European Union cooperation in the field of energy (Azimov, 2021, p. 72).

When we make a historical review, we see that the issue of energy security is not new for the EU. This issue first emerged for the EU (then the European Community) with the oil crises in the 1970s. When we evaluate energy security from the perspective of the European Union, the free and uninterrupted delivery of energy to European and international markets, in the required quantities, from reliable and diverse suppliers and at affordable prices, as well as access to clean energy sources, ensuring high efficiency in energy use, diversifying resources in energy use, researching domestic energy production opportunities and, in connection with all these, protecting the environment are of great strategic importance for the EU in terms of energy security. Today, the EU is the world's largest energy importer (EU, 2023).

The EU meets its need for these energy resources from North Africa, the Middle East, the Caspian Basin, Russia and the North Sea. The EU transports the energy resources it imports to its continent via oil and natural gas pipelines and tankers from overseas countries. The security and stability of both these energy reserves and energy transfer routes are of great importance in terms of ensuring energy supply security. An important source country for meeting the EU's oil and natural gas needs is Norway via the North Sea. The EU imports 28.2% of its natural gas and approximately 15% of its oil from Norway. Although there is no problem with oil and natural gas imports from Norway, which is a part of the European continental system but not a member of the union, experts' estimates that the North Sea energy resources will start to run out in the 2030s further increase the interest of EU member states in alternative energy resources (Ediger, 2017, p. 171).

The EU has also turned to the Caspian Basin to meet its energy needs. One of the countries located in the Caspian Basin that has the most important strategic position in meeting the EU's energy needs and ensuring energy security is Azerbaijan. It would be correct to say that Azerbaijan is a key state with geopolitical importance for the EU in terms of the production of oil and natural gas resources in the Caspian Sea and their transportation to Europe. For many years, Azerbaijan has played an important role in ensuring the EU's energy security, and the foundation of this was laid with the "Treaty of the Century" signed on September 20, 1994 (Shahbazov, 2015, p. 123). Thus, Azerbaijan began to transport the oil and natural gas it produced within the scope of the international oil and natural gas agreements it signed to Europe via the BTC oil pipeline and the BTE natural gas pipeline, thus assuming an important strategic role in ensuring Europe's energy security. When we examine EU-Azerbaijan relations, we see that the most important dimension of mutual cooperation is energy. In fact, in all documents signed by the EU with Azerbaijan and in all programs in which Azerbaijan participated, the energy issue was addressed under a separate heading. On the other hand, between 2006 and 2007, Azerbaijan participated in three important events related to Europe's energy security, and the fourth one was organized by Azerbaijan and started in Baku in November 2008. As a result of these events, Azerbaijan's participation in the "Southern Corridor" energy project, which was put forward to ensure Europe's energy security, was envisaged (Huseynov, 2024).

In the document titled Europe's Energy Security Strategy published by the EU on May 28, 2014, the objectives of developing relations with existing suppliers and finding new resources were particularly stated. In this context, the implementation of the TANAP natural gas pipeline within the framework of the "Southern Corridor" energy project is an important factor in ensuring Europe's energy security. The TANAP natural gas pipeline aims to transport natural gas extracted from the Shah Deniz-2 line to Europe via Turkey via Georgia. The first natural gas flow from the pipeline, which is planned to be completed in 2018, is planned to be 16 billion m<sup>3</sup> in 2020. At the same time, it is aimed to realize 23 billion m<sup>3</sup> natural gas flow in 2023 and 31 billion m<sup>3</sup> natural gas flow in 2026. With the implementation of the TANAP project, Azerbaijan's role in terms of Europe's energy security will increase even more (Almammadov, 2023, p. 37). Azerbaijan has improved its electricity supply security over the last decade with major investments aimed at modernizing production and strengthening the east-west transmission system. The construction of gas-fired generation capacity has reduced the previously widespread power outages. Security of electricity supply depends on using the country's abundant natural gas as the default energy source and building sufficient national generation capacity. In 2019, Azerbaijan had 7.6 GW of capacity, 6.4 GW of which was gas-fired, while peak demand was around 4 GW (Statistical Committee, 2020). At the same time, more network infrastructure needs to be modernized, and governance and operational security protocols and measures for electricity security in the country continue to be lacking. Outdated technologies and equipment reduce the reliability and efficiency of power system operations, while the lack of electricity supply reliability has been one of the government's main energy security concerns. The nationwide power outage in July 2018 particularly highlighted the urgent need to improve the power system's ability to maintain reliability and respond to emergencies (EU steps up, 2024).

After this power outage, the President of the Republic of Azerbaijan set new priorities for Azerenergy to restore the power system's generating capacity, modernize transformer substations, and increase the load capacity of the transmission system. In 2018, the Ministry of Energy and the German company VPC launched a broad program to achieve these goals, and by the end of 2019, 485 MW of lost power had been restored through power plant rehabilitation. and Azerenergy, which is implementing the program (finished in 2021), aims to restore 1000 MW of lost power capacity. Pending electricity market reforms also aim to increase supply security by improving the financial viability and investment capacity of the energy sector. Globally, the concept of electricity security is being expanded to address three emerging challenges: the transition to clean energy, cybersecurity, and climate change (Huseynov, 2024). Technological advances and climate change mitigation efforts are driving the electricity supply transition from centralized, vertically integrated systems of relatively few large, distributed thermal power plants to more diversified capacity types and sizes, particularly including variable solar and wind power. While cybersecurity concerns are linked to the increasing digitalization of electricity supply systems, the need for demand-side measures is also increasing as connected devices, electric vehicles, and behind-the-meter distributed energy resources become more common. Finally, increasing evidence suggests that electricity system infrastructure needs to be better adapted to climate change impacts, such as heat waves and droughts, and the associated reductions in water availability. These emerging electricity security concerns are likely to become increasingly important for Azerbaijan (IEA, 2023, pp. 82-83).

Suggestions. The Azerbaijani government should:

- Prepare for potential large fluctuations in fossil fuel revenues and long-term declines in oil and gas revenues by actively pursuing efforts to diversify the economy and the range of goods and services exported.

- Manage the costs of new developments to keep the sector internationally competitive, focusing on developing local talent, particularly in digital technologies, as well as collaborative access to resources and contracting strategies.

- Work closely with world-leading companies operating in Azerbaijan's oil and gas sector to reduce sectoral emissions to help Azerbaijan meet its 2030 climate goals.

- Consider a gradual transition to liberalized local markets for oil and gas, which would help encourage new gas development investments.

– Ensure the independence of the regulator in terms of transparency and empower it to issue gas market rules and network codes.

-Gradually shift the burden of social support and subsidies away from SOCAR, allowing it to focus on its corporate role, and instead provide state support directly to low-income and vulnerable consumers.

- Accelerate the replacement of aging oil and gas pipelines to reduce losses and improve their performance to international standards.

- Accelerate the Montenegro integrated OGPC project to ensure the closure of existing facilities near urban centers.

- Promote effective unbundling and develop competitive electricity wholesale and retail markets to ensure non-discriminatory third-party access to the grid, supervised by an independent regulatory body with clear mandates and appropriate powers, and to help attract private sector investment.

- Assess the privatization of elements of the country's generation capacity and the development of public-private partnerships to promote competition and operational efficiency.

- Develop a transparent electricity tariff setting methodology to encourage efficient electricity sector development and investment in R&D.

- Differentiate tariffs according to voltage level and duration of use.

- Develop and implement a framework for short- and long-term generation, transmission, distribution and supply security, supported by targets and indicators to measure progress.

- Prepare a plan to develop ancillary services, including storage and demand-side response, to maintain network stability and security.

- Accelerate the adoption of a network code for the electricity system, including rules and standards for variable renewable energy integration.

**Conclusions.** Today, strategic energy resources have become one of the factors affecting the global geopolitical situation. As a natural result, countries with rich energy resources are in a key position in terms of economy and geopolitics. With its wealth of natural energy resources, the Republic of Azerbaijan effectively uses this factor to preserve and strengthen its independence and develop its national interests. The world's developed power centers (USA, European Union countries, etc.) have begun to develop reliable export routes in order to access energy resources and ensure their own energy security. In such an environment, one of the main goals for Azerbaijan, which has newly gained independence, has been to exploit energy resources and deliver hydrocarbon reserves to the world market in accordance with the interests of the country.

If we make a general assessment, we see that energy is a significant factor in Azerbaijan-EU relations. Because one of the most important factors affecting Azerbaijan's foreign policy after independence is the economic dimension. In this context, Azerbaijan is trying to use the energy sector effectively to protect its independence, eliminate security threats and ensure the development of the country's economy. As a result, if we make a general assessment, Azerbaijan's strategic role in the energy security system of the EU and the countries in the region is increasing day by day. The realization of the Southern Gas Corridor and the fact that Azerbaijan will assume the role of a transit country in the transportation of Turkmenistan and Iranian natural gas to Europe in the coming period have once again proven this country's geostrategic key country position in ensuring European energy security.

## **References:**

- 1. Azimov A. (2021). "European Energy Policy and The EU-Azerbaijan Energy Cooperation". Journal of Comparative Politics, C. 14, S. 1, p. 71–90.
- 2. Ediger V. (2017). The Relationship Between Energy Supply Security and National Security. Energy Supply Security Symposium. Ankara.
- 3. EU. (2023). Second Strategic energy Review: An EU Energy Security and Solidarity Action Plan. Brüksel: Commission of the European Communities.
- 4. EU steps up renewable energy cooperation with Azerbaijan, (2024) https://neighbourhood-enlargement.ec.europa.eu/news/eu-steps-renewable-energy-cooperation-azerbaijan-2024-03-04\_en
- 5. Almammadov V. (2019). Energy Strategy of Azerbaijan. Journal of Social Science Research, 8(3), 40–5.
- 6. Huseynov V. (2024) Azerbaijan is now a major contributor to Europe's energy security. https://www. commonspace.eu/opinion/opinion-azerbaijan-now-major-contributor-europes-energy-security
- 7. IEA. (2023). Azerbaijan Energy Profile Report, pp. 4–135.
- 8. Relations between Azerbaijan and European Union, https://mfa.gov.az/en/category/ regional-organisations/relations-between-azerbaijan-and-european-union
- 9. Shahbazov, R. (2015). The European Union and the South Caucasus in the New Global System: On the Axis of Enlargement and Neighborhood Policy. EkoAvrasiya Publications, Ankara, 134.
- 10. The State Statistical Committee of the Republic of Azerbaijan http://www.stat.gov.az/
- 11. USA (2023), Asian Devlopment Bank, Azerbaijan country profile, www.adb.org