

The Role of “Southern” Gas Corridor in Energy Security of Europe

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Abstract: The article analyzed the role of the Southern Gas Corridor in Europe's energy security. Before talking about the current situation, the author has recalled the historical progress of the Azerbaijan's energy policy and its cooperation with Europe's energy policy since the signing of “Contract of the Century”. Then the paper justifies the importance of Southern Gas Corridor in the energy security of the Europe by highlighting the capacity, competitors and other comparables of the project. As a result of the research, the author has scientifically justified the role of diversification of the energy corridor in the economic security of Europe and the region, and made a number of scientifically sound proposals for the sustainability of energy security in Europe and the region.

Key words: energy security; oil strategy; economic security; energy strategy; sustainable economic development

JEL codes: Q400

1. Introduction

Azerbaijan is one of the countries in the Caucasus region with the largest amount of natural gas resource. Recently, the development of the partnership between Azerbaijan and EU, mutual economic interests has made the export of the natural gas to western countries essential. On the one hand, this partnership will contribute EU's energy security, on the other hand this will maintain the capital inflow to Azerbaijan which will lead to economic growth. Azerbaijan's natural gas export to EU requires construction of the appropriate pipelines. Therefore, this paper will analysis the optimal route for the natural gas pipelines and their economic efficiency. The project which aims to export Azerbaijan's gas resources to EU is comprised of three phases: TAP (Trans Adriatic Pipeline-Greece, Albania, Italy), TANAP (Trans Anatolian Pipeline-Turkey) and SCP (South Caucasus pipeline-Azerbaijan, Georgia).

In the article, comprehensive information about each of these pipelines are given including their efficiencies, safeties and capacities. Also, the article investigates the different views and approaches to the issue from several scholars and economists, justifies the role of Southern gas corridor's role in Europe's energy safety through scientific approach.

2. Literature Review

There are several literatures on Europe's energy security sustainability. Davidovic in his paper, analyzed the role of Turkey in European Union's energy security through TANAP project (2009). Although he emphasized the

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vitality of the project, he didn't analyze the ways of the implementation. Also, he didn't analyze the role of Southern Gas Corridor entirely. Dr. Stefan in his paper analyses the geopolitical issues of the Southern Gas Corridor regarding its role in Europe's energy security, but not the economic problems (2014). Another group of scholars investigated the ways of increasing the diversification of natural gas pipelines and reducing the dependence on Russia's energy resources (Chyong, Slakova & Tcherneva, 2015). Although, in these papers energy security of the EU analyzed comprehensively, they didn't review the economic and geopolitical significance of the Southern Gas Corridor. Also, these papers haven't covered the role of Azerbaijan in EU's energy security. Therefore, our paper will try fill this gap in the literature.

3. Analysis and Discussion

A few days ago laid the foundation of another strategic project thanks to the strong position of Azerbaijan which has become one of the most important countries in providing Europe, pursuing the energy diplomacy that meets the requirements of the modern period and based on national interests, with natural gas. Laying the foundation of the “Southern gas corridor” in Baku on September 20, 2014 shows that the new oil strategy, founded with the “Contract of the Century” is successfully continued at this stage and Azerbaijan's role in the energy security of Europe is significantly strengthened. As a result of implementation of the project, diversification opportunities in transportation of our country's rich natural gas resources will slightly expand.

The economic projects of various levels, implemented in our country, paved the way for gradually deepening of international cooperation and allowed Azerbaijan to take its place in the global market. By taking the economic and strategic steps, Azerbaijan has become an important transit country not only in the region, but also in the Eurasian area. The energy policy, implemented by Azerbaijan which is known for its own place and weight in the world's energy map, is the basis of the national and economic security of our country.

In the last 25 years, the national energy doctrine allowed Azerbaijan to follow a completely independent policy in the international arena by strengthening the economic independence of this country. Azerbaijan signed a historic beginning with the “Contract of the Century” on September 20, 1994. This contract strengthened Azerbaijan's role in the European energy security. After the “Contract of the Century” diversification of the transportation of hydrocarbon resources was the priority for Azerbaijan.

Azerbaijan's success in realization of global projects such as TANAP (Trans Anatolian Pipeline), TAP (Trans Adriatic Pipeline), Baku-Tbilisi-Erzurum gas pipelines which are parts of “Southern Gas Corridor” project, strengthened its participation as one of the main cooperators in world energy policy, begun to draw attention in energy market by increasing geo-political power in recent years. The national energy policy of our country consists of building the harmonic relationships mutually with countries and based on close contacts. This policy begun to new stage in the second decade of XXI century and provided diversification, changed the volume and structure of transportation, and created new geo-economic environments.

The energy policy of Azerbaijan started to assume the new content for quality as a logical continuation of new oil strategy. Our republic started to get great economic dividends on the account of transportation of hydrocarbon resources. The increase of volume of natural gas reserves produced for West countries aside with oil approves the great fuel supplier position of our country. Gradually taking the head of natural gas factor in diversification of hydrocarbon reserves affects to the structure of energy routes.

The diversification of the energy supplies to European countries is the main point for energy security in EU’s gas supply. Figure 1 precisely shows that Russia was the largest supplier of natural gas to the EU in 2016 and 2017. EU wants to minimize the risk of natural gas supply through diversification (Baran, 2007).

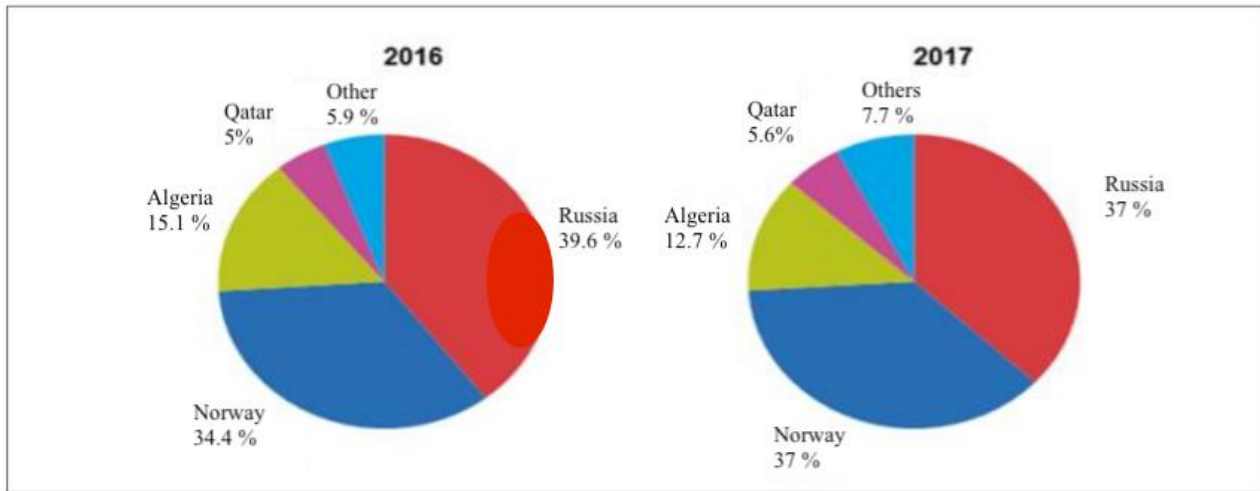


Figure 1 EU Imports of Natural Gas 2016-2017 (Eurostat 2017)

The position of Azerbaijan, as a country pursuing independent economic policy, is to create network of oil and gas pipelines in our Republic. The diversification of pipelines in transportation of rich oil and gas reserves of Azerbaijan to Western countries, establishing the alternatives as much as possible is an important issue. From this point of view, it is important to determine which route is available from the political, commercial, economic, ecological and security aspect. This is strategically important issue for our Republic for integrating to the world economy. Today, Azerbaijan oil is exported by Baku-Tbilisi-Ceyhan, Baku-Supsa, Baku-Novorossiysk oil pipelines, also, Azerbaijan gas is transported by Baku-Tbilisi-Erzurum, TAP, TANAP pipelines.

The “Memorandum of Understanding aimed at strategic partnership in the field on energy signed between EU and Azerbaijan” in November 07, 2006 in Brussels, also, Joint Declaration on Southern Gas Corridor signed in January 13, 2011 in Baku has great importance for the energy security of the territory of Europe.

However, the main factor making Azerbaijan an important energy supplier for Europe undoubtedly related to effective implementation of the rich hydrocarbon reserves of our Republic.

Since 2006, Azerbaijan Republic, importing the gas from Russia avoided this dependence and turned into a gas exporting state (Stefan, 2014). This is a logical result of energy policy of our country. One of the most successful steps in this direction was production of gas on “Shahdaniz-1” gas deposit discovered in 1999. The exploitation of this field since 2006 has given an opportunity to Azerbaijan to fully meet its internal requirement of natural gas and expand the export. Azerbaijan already launched the first part of “Southern Gas Corridor” in 2007. The agreement about construction of TAP was reached in 2012. Especially, after the agreement of TANAP Project, the realization of “Southern Gas Corridor” started. The selection of TAP in 2013 as a main export route, has a great importance.

After completion, this corridor will pass 2000 kilometers distance crossing from Caucasus to Turkey, from the Greece and Albania areas and will join the Caspian Sea with the center of European Union. Turkey plays a key role in Southern Gas Corridor project and will contribute to the Europe’s energy security (Davidovic, 2009).

To safely transport its giant natural gas resources to European countries, Azerbaijan interested in formation of the new natural gas transportation routes. Yet in 2010, because of the discovery of the big gas-condensate field in Azerbaijan “Umid” field, the energy strategy of our Republic started to the new stage.

“Umid” field caused the acceleration of other economic processes related to gas industry of the country. The discovery of new fields and their involvement to producing lead to change prognosis related to volume of gas reserves of Azerbaijan, created the deep basis for durability of cooperative relations of republic with other countries of the world.

The prognosticated volume of gas reserves in our Republic approved to be 2 trillion cubic meters. Taking into consideration the resources in “Umid”, “Babak”, also, “Inam”, “Alov”, “Shard” fields to be 2 trillion cubic meters, the volume of gas reserves of our country was prognosticated to be more than 2 times than this. All these factors encourage the European, American and Asian countries to make deep the cooperation with Azerbaijan in the sphere of energy.

In September 9, 2011, the field with 250 billion cubic meters gas reserve was discovered in “Absheron” peninsula, so, the energy potential of Republic was strengthened. In 2009, the second contract was signed between “Total” Company and Azerbaijan State Oil Company on “Absheron” field. This will give us opportunity to develop our gas strategy, to introduce Azerbaijan in the world as a gas reporting country.

Generally, the new stage of Azerbaijan energy strategy in recent years (Discovery of “Absheron” and “Umid” gas fields, signing the trans-energy agreements), also, transport of hydrocarbon reserves will provide the expansion of the geography of region. The increasing volume of gas reserves, discovery of the new fields, the acceleration of works related to producing actualized in a high degree the diversification issues. Our Republic strictly took into consideration the economic efficiency factors, also, economic security factors as always.

At this time the geo-economic interests of Azerbaijan, Georgia, European Union and Turkey cooperating in energy sector took as a basis. One of the important steps in this direction was signing of agreement on sale and transport of natural gas between Azerbaijan and Turkey in June, 2010. In October 25, 2011, the sale of natural gas to Turkey Republic and agreement on construction of independent pipeline to transportation of natural gas from Azerbaijan Republic through the area of Turkey are very important for expanding the energy partnership and economic relations of countries (Press Associated, 2018).

This decision also, established the base for a new stage of construction of TANAP and the project got a world project status. TANAP is appreciated not only as energy security of the regional countries, but also as a communication network that has strategic importance for all Europe and West. This pipeline should transport Azerbaijan gas from East border of Turkey to West border and constant transit should be provided in the country. The capacity of the pipeline will be 16 billion cubic meters per year in 2020, 23 billion cube meters per year in 2023, 31 billion cubic meters in 2026. The 16 billion cubic meters gas of Azerbaijan will be sold to Europe in the capacity of 10 billion cubic meters and 6 billion cubic meters to Turkey by transporting TANAP pipeline for the first period. Gas considered for Europe will be delivered in Turkey-Bulgaria or Turkey-Greece border.

The 70 percent share of SOCAR in TANAP proves the strategic importance of project for our country. The project established new opportunities to realization of Trans-Caspian Gas Pipeline. So, Azerbaijan will be important transit country in gas transport if Kazakhstan and Turkmenistan joins to this project in the future. Generally, due to TANAP Project the role of Azerbaijan will increase in formation of East-Western energy corridor. TANAP project opens broad opportunities for cooperation of each Caspian Sea countries.

In 2011, Energy memorandum signed between European Union and Azerbaijan paves the way to construct

the Trans-Adriatic Pipeline (TAP) that is important part of West energy corridors. In June 28, 2013 “Shahdaniz” consortium declared that it selected TAP as project that will transport the gas of Azerbaijan to Europe. The TAP project being was the continuation of Southern Caucasus Pipeline (Baku-Tbilisi-Erzurum) and TANAP, it considers the transportation of gas in “Shahdaniz-2” field through Greece and Albania to Adriatic Sea then to the south part of Italy then to the Western Europe . Gas transportation, by this pipeline is prognosticated to be 10 billion cubic meters per year in first stage, then approximately 20 billion cubic meters per year (BP, 2018).

The realization of TAP means the establishment of wide communication infrastructure that will give the opportunity to transport natural gas to Europe produced from “Shahdaniz”, “Umid”, “Absheron”, “Alov”, “Inam” and other rich fields of Azerbaijan. The project creates great opportunities for energy cooperation of participating countries.

In December 17th, 2013 Azerbaijan signed final investment agreement on second stage of “Shahdaniz” project. This agreement varied for its strategic role and place in energy map of the modern world. Also, it paves the way to realization of other important trans-energy network (M. Drofa, 2003). The second stage of implementation project of “Shahdaniz” field is appreciated as the most important component of “Contract of Century” for its geo-economics importance and its capacity in world energy environment. The project will serve to expanding Southern Caucasus pipeline through the areas of Azerbaijan and Georgia will stimulate the implementation of plans related to construction of Trans-Anadolu and Trans-Adriatic pipelines and also new gas corridor will be opened to the Europe.

TAP pipeline will be 870 km in length. It is considered to transport the gas to Bulgaria from Greece by other communication infrastructure, also, Bosnia, Herzegovina, Croatia, Serbia, and Montenegro by several network systems from Adriatic Sea. Generally, the countries of Eastern-Western European region will be provided with gas by TAP.

In recent years, the providing of energy security strengthened the economic independence of Azerbaijan gives an opportunity to pursue full independent policy in international arena.

Azerbaijan is a reliable energy industry center for Euro-Atlantic region. Our country gives an importance to strategic interests in energy cooperation with partners by considering the national energy policy as a main component of economic security. The realization of Southern Gas Corridor with full capacity (Table 1) will be important for economic and political security of Europe, also, for sustainable economic development of Azerbaijan.

Table 1 Pipeline Projects for Gas Supply to EU. BP, 2018

Pipeline and Consortium	Capacity in billion cubic meters	Costs in billion euro
Southern Stream	63	20
TANAP	16	5
TAP	10	1.5

Azerbaijan’s predicted gas reserves are 3.4 trillion cubic meters and proven gas reserves are 2.6 trillion cubic meters. Azerbaijan ranks fifteenth in the world for proven gas reserves. Apparently, Azerbaijan has a large amount of gas and has the potential to provide sustainable gas supplies to the EU countries for a long time.

The “Southern Gas Corridor” was originally considered to transport gas reserves from Azerbaijan’s “Shahdeniz” field to Europe. However, the “Southern Gas Corridor” will also supply Turkmenistan and Kazakhstan gas to the EU countries if needed. Turkmenistan’s “Galkhanish” gas reserves are 21.2 trillion cubic

meters (BP, 2018). Turkmenistan ranks fourth in terms of natural gas reserves.

The proven natural gas reserves of Kazakhstan are 3.9 trillion cubic meters.

These facts show that the prospects for the “Southern Gas Corridor” are very high. The “Southern Gas Corridor” is designed so that it can be doubled to its initial transmission capacity to provide additional gas capacity in the future.

As you can see, the Southern Gas Corridor will play a key role in ensuring the European Union’s energy security. The United States fully supports the implementation of the Southern Gas Corridor project, confirming that the project is an effective project, showing that it is in the interest of Western countries.

The role of Southern Gas Corridor in energy security of Europe was analyzed comprehensively.

The role of diversification of energy corridor in economic security of Europe and region is substantiated by scientific aspect in the result of the study.

The proposals substantiated by scientific aspect for sustainability of energy security of Europe and region.

Thus, the studies once again demonstrate the importance of the Southern Gas Corridor. The implementation of this project has the following importance:

- The project will contribute to EU energy security.
- The project will lead to lower prices for energy carriers by increasing competition in the EU energy market.
- It will provide European countries with an environmentally friendly type of energy.
- It will contribute to accelerating the economic development of all participating countries.
- The project is a significant contribution to the diversification of energy supply in the European Union.
- The project will increase the economic integration of the participating countries.

References

- Baran Z. (2007). “EU energy security: Time to end Russian leverage”, *The Washington Quarterly*, pp. 131-144, available online at: https://www.hudson.org/content/researchattachments/attachment/616/07autumn_baran.pdf.
- BP Statistical Review of World Energy 2018.
- Chyong C., Slakova L. and Tcherneva V. (2015) “Europe’s alternative to Russian gas”, European Council on Foreign Relations.
- Davidovic S. (2009). “Turkey is key to Europe’s energy diversification”, available online at: <http://www.eurodialogue.org/energy-security/Turkey-Is-Key-To-Europe-s-EnergyDiversification>.
- “EU and Turkey strengthen energy ties”, January 28, 2016, available online at: <https://ec.europa.eu/energy/en/news/eu-and-turkey-strengthen-energy-ties>.
- Eastern partnership: Platform 3, Energy Security and Eastern Partnership; Angela Gramada, p. 100.
- Energy transit and security imbalance in South Caucasus: The road between Russia and European Union; Tamar Pataraiia.
- Energy Union Package, Brussels, 25.2.2015 COM (2015) 80 final.
- “Gas from Azerbaijan to Europe: Southern gas corridor”, available online at: <http://socar.de/2016/03/erdgas-aus-aserbajdschan-fuer-europa-suedlicher-gaskorridor-implan/#>.
- Market Observatory for Energy, DG Energy (2015). “Quarterly report on european gas markets”, European Commission, available online at: https://ec.europa.eu/energy/sites/ener/files/documents/quarterly_report_on_european_gas_markets_q1_2015.pdf.
- Momerandum of Understanding on a Strategic Partnership Between the European Union and the Republic of Azerbaijan in the Field of Energy
- NATO Parliamentary Assembly document 157 CDS 08 E rev 1 - Energy Security: Cooperating to Enhance the Protection of Critical Energy Infrastructures, 2008.
- Seminar “What r/Is Azerbaijan’s Role in the Geopolitics of Energy”, 26 November 2014, The State Statistical Committee of the Republic of Azerbaijan, available online at: <http://www.stat.gov.az>.
- Stefan M. (2014). “Energy security in the South Caucasus: The southern gas corridor in its geopolitical environment”.

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“2014 annual report of Ministry of Industry and Energy”, available online at:
http://www.minenergy.gov.az/db/Hesabat/Ilirik_Hesabat_2014.pdf.

U.S Energy Information Administration, available online at: <http://www.eia.gov>.

Vladislav Vorotnikov (2015). “Azerbaijan focuses on alternative energy development to increase fossil fuel exports”, *Renewable Energy World*, April.

“Why TANAP” (n.d.), available online at: <http://www.tanap.com/tanap-project/why-tanap>.