

An Assessment of the Potential of EU-Azerbaijan Energy Cooperation and its Impact on EU Gas Dependence on Russia

Gubad Ibadoghlu

Senior Visiting Fellow at the London School of Economics and Political Science

Ibad Bayramov

Analyst at Morgan Stanley

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Abstract: According to the Memorandum of Understanding (MoU) on a strategic partnership in the field of energy between the European Commission and Azerbaijan, the latter will double its current supply of natural gas to Europe until 2027. That being said, does Azerbaijan have the capacity to produce and transport this increased volume – and what role will cooperation with Azerbaijan play in reducing EU gas dependence on Russia? In this paper, the authors explore the country's energy production and transport capacity, assess its potential, and define future challenges.

Keywords: Azerbaijan, EU, natural gas, crude oil, green energy

Introduction

Azerbaijan has a 25-year history in energy cooperation with Europe, which can be divided into three stages: past (oil), current (gas), and prospective (green energy).

The past stage consists of crude oil export to Europe, which started in 1994 and is still ongoing. In 1994, the Government of Azerbaijan signed a Production Sharing Agreement (PSA) on the Joint Development of

the Deep-Water Reserves of Azeri, Chirag, and Gunashli (ACG) with 13 international energy giants, mainly Western companies (BP, Amoco, Unocal, LUKoil, Statoil, Exxon, TPAO, Pennzoil, McDermott, Ramco, and Delta Nimir). After signing the PSA, Azerbaijan first sent crude oil to the British market through the Novorossiysk seaport in the Black Sea in 1998 (Shaban, 2019). Azerbaijan extracted more than 607 million tonnes of oil from Azeri-Chirag-Gunashli and Shah Deniz between 1994 and 2023, more than 605 million tonnes of which were exported to various European countries and Israel (Ministry of Energy of Azerbaijan, 2023).

Azerbaijan has three crude oil export pipelines, all of them serving the Western market. The country has exported most of its oil to the European market through the Baku-Tbilisi-Ceyhan (BTC) pipeline since 2006. In 2017, Azerbaijan and the shareholders in the ACG venture, i.e. BP (Operator, 30.37%), SOCAR (25.00%), Chevron (9.57%), INPEX (9.31%), Statoil (7.27%), ExxonMobil (6.79%), TPAO (5.73%), and ONGC Videsh Limited (2.31%) signed an amended and revised agreement for the Joint Development of the ACG fields in the Azerbaijani Sector of the Caspian Sea (BP, 2017), in which the exploitation of the ACG field was expanded until 2050.

Since 2011, there has been a natural decrease in oil production in Azerbaijan, both on land and in the Caspian Sea. Onshore deposits have been developed for a long time, and most are already obsolete. The situation is better offshore; however, the main volume of oil is provided by the ACG block, which has been developed since 1997, and production is decreasing year by year. In 2022, production in Azerbaijan was 32.6 million tonnes, 0.88 % less than in 2021 and 2.35 % less than in 2020. According to the government's forecasts for 2023-2026, domestic oil production should total around 31.222 million tonnes in 2023, nearly 30.65 million tonnes in 2024, about 30.695 million tonnes in 2025, and around 30.274 million tonnes in 2026. The latter would be 3% below the figure forecast for the current year (Interfax, 2023).

The current stage of Azerbaijan's energy cooperation with Europe covers gas export cooperation between the European Union (EU) and Azerbaijan while reducing oil production in the country. During this stage, Azerbaijan extracted approximately 203.4 bcm of gas from the ACG and more than 182.8 bcm of gas from Shah Deniz between the establishment of the ACG and Shah Deniz until 2023.

The task of increasing and diversifying Europe's energy supply by bringing gas resources from the Caspian Sea is implemented within the framework of the Southern Gas Corridor (SGC) project. The foundation of the SGC project was laid in 2014, where the SGC project was an initiative of the European Commission (EC) for a natural gas supply route from the Caspian and Middle Eastern regions to Europe. The purpose of the SGC project is to ensure the export of natural gas to Türkiye and from there to Southern Europe. The main elements of the SGC project include a full-scale development of the Shah Deniz gas condensate field; the expansion of the South Caucasus Pipeline (SCPX); the Trans Anatolian Natural Gas Pipeline (TANAP) project, and the Trans-Adriatic Pipeline (TAP) project. With three interconnected pipelines (SCPX, TANAP, and TAP) traversing seven countries (Azerbaijan, Georgia, Turkey, Bulgaria, Greece, Albania, and Italy) the SGC is a project unlike any other (BP, 2021).

Supplying Azerbaijani natural gas to the European market through TAP started in 2020. Since the day TAP was commissioned, 18.5 bcm gas has been transported through the pipeline, of which about 16 bcm has been sent to Italy. Thus, Azerbaijan supplies more than 14% of Italy's demand for natural gas. In 2021, Azerbaijan supplied 8.15 bcm of gas to the European market via the TAP pipeline, of which 6.8 bcm was sent to Italy and about 1.2 bcm to Greece and Bulgaria. In 2022, Azerbaijan supplied 11.3 bcm of gas to the European market, of which 9.8 bcm gas was transported to Italy and 1.5 bcm to Greece and Bulgaria.

As a part of the SGC project, the Shah Deniz natural gas-condensate field operates in two stages, Shah Deniz 1 and 2. Stage 1 covers about 10 billion cubic metres of gas per year. The output in the Shah Deniz-1 field is decreasing, but the Shah Deniz Stage 2 field has the potential to produce 16 billion cubic metres of gas.

In 2022, President of the EC Ursula von der Leyen visited Baku and signed a new agreement with Azerbaijan aimed at increasing the country's gas exports to the EU. The new agreement envisages a substantial increase in the annual volume of gas exported from Azerbaijan to Europe over the next four years. Under the new agreement, the country is expected to increase its gas exports to the EU within the framework of the SGC project to 11.6 bcm by 2023, and 20 bcm by 2027.

The prospective stage of cooperation covers renewable energy. Azerbaijan has a rich renewable energy potential, as it is possible to implement solar energy projects in almost the entire territory of the country. In terms of wind energy, the Caspian Sea area, the Absheron peninsula, Baku, and the Khizi region are considered favourable. The solar energy potential is high in the Karabakh region, including the liberated territories.

Thus, solar energy has high potential in the Kalbajar, Lachin, Gubadli, Zangilan, Jabrayil, and Fuzuli regions, while wind energy is more highly valued in the Lachin and Kalbajar regions. The average annual wind speed in the mountainous areas of the Kalbajar region is 7-8 m/s, which is favourable for the production of wind energy. Considering that 25 percent of the local water resources in Azerbaijan is located in Karabakh, electricity production from the main rivers, such as Tartar, Bazarchay, and Hekari, and their tributaries is considered favourable.

The Caspian Sea also has excellent potential in terms of offshore wind energy. According to preliminary estimates, the Caspian Sea is considered to have 157,000 megawatts of energy in the Azerbaijani sector alone. This is twenty times more than Azerbaijan's current capacity of power plants.

Azerbaijan is starting to become an exporter of electricity and green energy to European markets, and transitioning from alternative energy to renewable energy sources is an essential task for the country. Azerbaijan, Georgia, Romania, and Hungary signed an agreement in 2022 on the construction of an electric cable running under the Black Sea to carry green Azeri energy from the planned Caspian Sea wind parks to Europe. According to the document, the agreement involves a 1,100 km (685 mile), 1,000 MW cable running from Azerbaijan to Romania as part of wider EU efforts to diversify energy resources away from Russia amid the Ukraine war. The project looks viable in the context of the EU's Green Deal and specific EU emission reduction targets for 2030. However, it requires further development of renewable energy sources in Azerbaijan, as the country's green energy sector is still nascent, and the numerous memoranda and partnerships regarding future investment opportunities in the country have yet to materialize (Kubiak, 2023).

By supporting green energy, Azerbaijan will balance the use of natural gas and renewables in electricity production, which will increase the country's potential for electricity production and export. Europe also aims to speed up the green energy transition to support sustainable development by saving energy and diversifying energy supplies. So far, the Black Sea submarine electricity cable project shows that regional cooperation is vital for implementing strategic projects.

Hence, the aims of Azerbaijan and the EU overlap through an increasing reliance on green and renewable energy, especially in the shadow of the war in Ukraine and the energy crisis. Regarding the potential in this field, "although the price of equipment operating based on renewable energy technologies has decreased many times in the world market in the last ten years, this equipment is still expensive for households in Azerbaijan. Therefore, in these conditions, suddenly abandoning traditional energy carriers can lead to an increase in prices and an energy crisis; hence, the process of transition to „green energy” sources in Azerbaijan should be carried out thoughtfully, with the application of a comprehensive approach to environmental, economic, and energy security issues" (Ibadoghlu, 2022).

A retrospective analysis of the energy sector in Azerbaijan

President Ilham Aliyev has presented Azerbaijan as a hydrocarbon-rich country on various platforms. In a 2023 interview to local television channels he stated that "Azerbaijan's confirmed reserves are well known. I have stated the figure many times - 2.6 trillion cubic meters, but I am sure it will be much more. Azerbaijan's fields will supply gas to international markets for at least another 100 years, i.e. as technologies develop, production opportunities will increase" (Aliyev, 2023). However, according to the Annual Statistical Bulletin of the Gas Exporting Countries Forum, the confirmed gas reserves of Azerbaijan amounted to 1.917 trillion cubic meters at the end of 2021, which is 12.86 % less than at the end of 2020 (Gas Exporting Countries Forum, 2021). To assess the potential of the energy sector

of Azerbaijan, a retrospective analysis is necessary to explore its reserves, along with indicators of production, domestic demand, and export potential. For this, the government of Azerbaijan should first improve and unify its national energy statistics, especially the actual and forecast indicators of production.

On the whole, there are problems in ensuring the availability of detailed statistical data on the energy sector in Azerbaijan, as well as in the presentation of statistical data on the leading performance indicators of government bodies that produce and export energy. The national energy statistics are not perfect, and several government bodies publish different indicators for the same activities in the energy sector. In particular, there are significant differences between the indicators of natural gas losses, electricity transmission, and distribution losses, which play an essential role in the evaluation of the efficiency of energy use. The reason for this is that the recommendations put forward in the In-depth Review of the Energy Efficiency Policy of the Republic of Azerbaijan prepared in 2019 have not been implemented yet, and the information base does not use a unified methodology for national energy statistics. Currently, the State Statistical Committee (SSC), the Ministry of Energy (MoE), the State Oil Company of the Republic of Azerbaijan (SOCAR), and the State Customs Committee (SCC) release data on energy statistics, but sometimes the statistics released by the President of Azerbaijan raise questions because there is no agreement between them. Therefore, independent experts prefer to apply a mirror customs statistics methodology to support the data on import and export operations, using data and statistics from IEA, EBRD, WB, OECD, and various energy companies.

According to information from the SSC, gas and oil retained a leading position in the final consumption of energy products in Azerbaijan until 2022, and a deterioration in the dynamics of energy dependence and energy self-sufficiency indicators was recorded. At the same time, during the five-year period of 2017-2021, the specific weight of electricity received from renewable energy sources in total electricity production also decreased.

Table 1.
Final consumption of energy products, in %

	Gas	Oil	Electricity	Thermal	Renewable
2021	45.1	37.2	14.6	2.8	0.3
2020	46.3	36.2	14.5	2.7	0.3
2019	42.3	40.4	14.1	2.8	0.4
2018	36.2	45.1	15.5	2.8	0.4
2017	39.2	43.2	15.7	1.5	0.4

Source: State Statistical Committee, 2023

As can be seen from Table 1, compared to 2017, the share of gas in the final consumption of energy products in 2021 increased from 39.2 % to 45.1 %, the share of oil decreased from 43.3 % to 37.2 %, the share of electricity decreased from 15.7 % to 14.6 %, and the share of thermal energy increased from 1.5 % to 2.8 %. During the five years between 2017-2021, the share of renewable energy decreased from 0.4 % to 0.3 %, and the share of gas and thermal energy in the final consumption of energy products increased in Azerbaijan, while the share of oil, electricity, and renewable energy decreased. During this period, the specific weight of electricity received from renewable energy sources in the total electricity production decreased from 8.1 % to 5.8 %. The main source of the final consumption of energy products in Azerbaijan is traditional energy sources, among which the share of the depleted oil and gas resources is more than 80 %, which indicates a high potential for a transition to renewable energy and that there is much work to be done.

As can be seen, although the number of Azerbaijan's energy transition initiatives is increasing, to mobilize the existing and prospective potential in this field, new and innovative technologies, and skilled personnel

with modern knowledge is required, as is the investment of billions of dollars. All this should begin after thorough studies and calculations on the efficiency of the investments.

Finally, the structural analysis indicates that traditional energy sources dominate final consumption, and the trend analysis shows that the role of renewable and alternative energy sources in ensuring final consumption is noticeable and requires a lot of time. In addition, during the last five years, the role of gas in final consumption has increased, the special weight of oil has decreased, and the share of electricity, thermal, and renewable energy sources has remained the same. The increase in the role of gas in the final consumption can be explained by the level of industrialisation in the gas-chemical sector (e.g. the fact that some industrial enterprises under SOCAR such as “SOCAR Methanol” and “SOCAR Carbamide” have started to operate, where natural gas is used as a raw material, as well as replacing fuel oil with gas in the energy supply of power plants, and increasing the level of gasification in the population).

Table 2.
The specific weight of electricity from renewable energy sources in total electricity production, in %

Years	The specific weight of electricity from renewable energy sources in total electricity production, in %
2021	5.8
2020	5.5
2019	7.3
2018	8.1
2017	8.1

Source: State Statistical Committee, 2023

As can be seen from Table 2, the specific weight of electricity received from renewable energy sources in the total electricity production in Azerbaijan during 2017-2021 reached a maximum level of 8.1 % in 2017, while it was 3 percentage points lower in 2021. This can be explained

by the increase in investments in thermal and hydroelectric power plants and the increase in production. However, the Strategy of Socio-Economic Development of the Republic of Azerbaijan for 2022-2026 aims to increase the share of renewable energy sources in the installed power of electricity production to 30% by 2030.

Table 3.
Gas production in Azerbaijan, in bcm, 2023

Years	Natural gas - total (in bcm)
2021	43,867
for commodity	32,578
2020	37,140
for commodity	26,487
2019	35,610
for commodity	24,514
2018	30,490
for commodity	19,207
2017	28,596
for commodity	18,186

Source: State Statistical Committee, 2023

Table 4 presents the indicators of gas export from Azerbaijan for the period of 2017-2021, based on information determined by the SCC on the basis of meter readings.

Table 4.
Gas export of Azerbaijan, in bcm

	2017	2018	2019	2020	2021
Natural gas, bcm	7,543	7,900	12,537	12,424	20,046

Source: State Customs Committee, 2023

The export of Azerbaijani gas to Europe through TAP began on 31 December, 2020. Current buyers of Azerbaijani gas in the EU are Italy, Greece, Bulgaria, and Romania. In 2022, Azerbaijan increased its gas export by 18 % to 22.3 bcm. Azerbaijani gas exports to Europe amounted to 11.4 bcm in 2021, or 51 % of all supplies from Azerbaijan. Azerbaijan plans to export 24 bcm of gas in 2023 in total, of which Europe will receive approximately 11.6 bcm. The rest of the export goes to Turkey and Georgia. In 2021, the export to Turkey was 8.4 bcm, while the export to Georgia was 2.5 bcm. Azerbaijan will increase its gas supply to Turkey by 19 percent to 10 billion cubic meters in 2023.

Table 5.
Energy dependence and self-sufficiency, in %

	Energy dependence	Self-sufficiency
2021	-267.6	376.9
2020	-253.8	363.3
2019	-253.0	361.3
2018	-268.1	372.9
2017	-259.3	367.8

Source: State Statistical Committee, 2023

As seen in Table 5, Azerbaijan's energy self-sufficiency rate¹ was 376.9 % higher in 2021 compared to 2017. A similar trend can be observed in the dynamics of the energy dependence indicator over the analysed five-year period. As it can be observed, the peak level of Azerbaijan's independence and energy self-sufficiency was recorded in 2018. The main factor determining the change in this situation is the high growth rate of domestic demand for energy compared to production during the period.

1 The energy self-sufficiency rate is the ratio between national primary energy output and the consumption of primary energy each year. A rate of over 100% indicates a national production surplus in relation to domestic demand and therefore net exports.

A perspective analysis of the energy sector in Azerbaijan

MoE, SCC, and SOCAR publish statistics on gas production and consumption in Azerbaijan. The indicator on the export of natural gas is issued based on customs declarations, with the declaration on the executed gas not submitted during its pipeline transportation but after its actual sale. SSC does not publish a ranking of the countries where Azerbaijan exports gas. Table 6 summarizes these indicators.

Table 6.
Gas production, consumption, and export in Azerbaijan, in bcm

	2017	2018	2019	2020	2021	2022	2023*
Commodity gas production	18.2	19.2	24.5	26.5	32.6	35.0	36.2
Consumption	10.5	10.8	11.8	12.5	13.0	13.5	14.0
Export	8.6	9.6	11.7	13.5	18.9	22.3	24.5
Turkey	6.5	7.5	9.2	11.5	8.8	8.4	10.0
Georgia	2.3	2.4	2.4	2.3	2.3	2.5	2.9
Europe	-	-	-	-	8.2	11.4	11.6
including Italy					6.8	10.2	-
Greece					1.4	0.6	-
Bulgaria					-	0.6	-

Source: Ministry of Energy and the Annual Statistical Bulletin of the Gas Exporting Countries Forum (GECF), 2023 (Note: The figures for 2023 are forecast indicators.)

As seen from the data in Table 6, gas production, consumption, and export in Azerbaijan display a positive trend. One main point that draws attention here is regular consumption and production growth. Thus, domestic consumption in 2021 was 13 bcm, 8.4 % more than in 2020. Domestic gas consumption in Azerbaijan increased by 6.27 % in 2020 compared to 2019 and reached 12.53 bcm. Azerbaijan’s natural gas export to the EU market in 2021 was 43.15 % of the total gas export or 8.2 bcm. In 2022, it was 50.67 % or 11.3 bcm. These indicators are expected to be 47.34 % or 11.6 bcm in the current year. In 2023, the total volume of natural gas to be exported from Azerbaijan will be 24.5 bcm, of which 11.6 bcm will be delivered to Europe (Ilham Aliyev, 2023).

Table 7.
Forecast indicators for the production of commercial natural gas in Azerbaijan covering the years 2023-2031

Indicators	2023	2024	2025	2026	2027	2028	2029	2030	2031
Commodity gas production, in bcm	36.2	36.6	36.6	36.5	36.4	36.2	36.0	36.4	37.3
In comparison with the previous year, in %	2.0	1.0	0.0	-0.3	-0.3	-0.5	-0.5	1.0	2.5

Source: Fitch Ratings international rating agency, 2023

As we can see from Table 7, the forecast of Fitch Ratings international rating agency for natural gas production in Azerbaijan until 2032 shows that gas production in the country is expected to change in a wavelike manner (Fitch Ratings international rating agency, 2023). Thus, in the interval between 2023 and 2025, gas production will increase, beginning

to decrease in 2026, and returning to growth from 2030. According to the forecast, between 2023 and 2031, the highest indicator of gas production (37.3 bcm), will be recorded in 2031, and the lowest indicator (36.2 bcm) will be recorded in 2023 and 2028.

Challenges ahead

Although gas production and export in Azerbaijan show a positive trend, an analysis of the actual and forecasting data show that Azerbaijan cannot meet the volume requested by the Memorandum of Understanding between the EC and Azerbaijan in the energy field (Memo, 2022).

The first challenge is related to the volume of gas production and consumption. In addition to the Shah Deniz gas field, the largest gas field in Azerbaijan, there are three other gas fields that are of particular importance, namely the Absheron, Shafaq-Asiman, and Umid-Babek gas fields. Ilham Shaban, head of the Oil Research Center, has told RFE/RL that Azerbaijan currently has three potential gas-related projects: “The first is a gas field in the deep layer of the ACG block. It can be developed and put on the market by 2025 at the earliest. It is possible to launch the Absheron-2 project by 2028 at the earliest. The third project is Umid and Babek. We extracted 1.5 bcm of gas from Umid last year, and it is planned to extract 3 bcm from there in the next five years” (Shaban, 2023). Thus, according to local energy expert estimation and Fitch forecasting, a slight increase in commodity gas production is expected in Azerbaijan until 2027.

This indicates that Azerbaijan’s ability to export more gas to European markets will lead to significant changes at the end of this decade, but it does not change the current situation substantially. Alongside this slowly increasing gas production, there is also a steadily growing gas demand from Azerbaijan’s population and the country’s growing economy. Launching new production capacities in the industry creates additional demand for gas, and population growth and the restoration of territorial integrity are also expected to increase the demand for gas (Ibadoghlu, 2023).

Thus, both gas production and the demand for gas in the country's industry and the population is expected to keep increasing in Azerbaijan until 2027. Although there is a policy to improve energy efficiency to reduce the growth rate of domestic demand, the indicators confirm that no significant results have been achieved in this direction. Therefore, one of means in this field is to increase the share of renewable energy sources in the energy balance and reduce the losses in gas delivery in order to reduce domestic gas consumption.

The current trends suggest that domestic consumption will hit 14 bcm in 2023 and around 15 bcm in 2026. In this case, the volume of natural gas in Azerbaijan will increase by 3-4 million barrels compared to the current level of export to the European market. Considering domestic consumption, exports can be increased by an additional 2.5-3.0 bcm by 2026. This means Azerbaijan's EU exports can be increased to around 15 bcm by 2027. As there will likely be no significant increase in production in Azerbaijan before the end of the current decade, Azerbaijan needs more time to be able to export 20 bcm to Europe. Plans to increase the gas supply to Europe will likely be undermined by Azerbaijan's growing domestic demand (extra gas for industrial needs and the gasification of residential areas) and slow gas production. Indeed, the only viable way for the country to fulfil its obligations to Europe by 2027 would be to purchase additional gas from Russia and Turkmenistan. This would be entirely counterproductive given the political rationale of the EU-Azerbaijan energy memorandum. As for the export of green energy, significant changes in this field require a large amount of investment and an extended period of time.

The second challenge is related to the capacity of gas transportation. The capacity of the TAP pipeline can be expanded from 11 to 20 bcm, while TANAP's annual capacity can be increased from 16 bcm to 24 bcm and then to 31 bcm. At the same time, European gas buyers must make legal and commercial commitments to Azerbaijani gas producers. These changes will also take time and financial resources.

Finally, whether tangible results can be achieved will depend not only on the decisions made by the Azerbaijani government but also on the positions taken by transit countries and the companies that own the associated gas fields and pipelines. Reconciling these competing interests will require considerable time and financial resources. All

of this will likely make the goal of substituting Russian gas imports with gas from Azerbaijan something of a pipe dream in the near term. Natural gas supplied by Azerbaijan to the EU market last year was 2.35 % of its consumed volume and 7.35 % of the Russian gas imported to the European market in 2021.

Future expectations for Central and Southeast Europe

Around 15 bcm is undersized for the European market, covering a tiny part of demand in the EU markets. However, Azerbaijan can make a difference in individual countries in Central and Southeast Europe, such as Greece and Bulgaria, where it now supplies one-third, and Italy, where it supplies 14 % of annual gas consumed. This will also likely be the case in Serbia, Croatia, Albania, Hungary, Bosnia and Herzegovina, and Slovakia in the future.

According to Baku-based energy research organisation Caspian Barrel, during the first quarter of 2023, the Greek gas transmission system DESFA reported that Azerbaijani gas transported via the TAP pipeline covered 21.6% of Greek gas imports, followed by Russian gas imports at 19%. This comes after Greece reduced Russian gas imports by 56% during the first quarter of 2023 (Caspian Barrel, 2023).

Romania's natural gas producers ROMGAZ and SOCAR TRADING, a subsidiary of Azerbaijan's State Oil Company, have signed the first individual contract for gas deliveries from Azerbaijan to Romania. The individual contract allows gas deliveries through the Southern Corridor, using the transportation capacities of TAP, the Interconnector Greece-Bulgaria (IGB), and the Bulgarian and Romanian transmission systems. SOCAR will supply Romanian state oil and gas producer Romgaz between 1 April, 2023 and 31 March, 2024.

Bulgaria and Serbia are also looking to Azerbaijan for diversifying their gas supply. Bulgaria has finished an interconnector with Greece, so now it has the technical conditions to increase imports, while Serbia is building a pipeline with Bulgaria for such an option. Serbia is currently negotiating gas from Azerbaijan, and supply through a gas interconnector

with Bulgaria could begin next year. Additionally, Romania, Azerbaijan, Turkey, Bulgaria, Hungary, and Slovakia as a member of the “Solidarity Ring” initiative, signed a new agreement on the import of Azerbaijani gas at the 25-26 April conference in Sofia. Plans will be implemented to expand gas infrastructure from Azerbaijan to Central Europe through Bulgaria (Energynomics, 2023).

At this meeting, President Ilham Aliyev said that Azerbaijan plans to start gas supplies to Hungary and Slovakia at the end of 2023. “Today, Azerbaijani gas is exported to Georgia, Turkey, Greece, Bulgaria, Italy, and from this year to Romania. By the end of this year, subject to the availability of all necessary interconnectors, we plan to start gas supplies to Hungary and Slovakia”. According to him, Azerbaijan also continues negotiations with Albania on the construction of a local gas distribution system, as well as with Slovakia, as a member of the “Solidarity Ring.” (Interfax a, 2023)

Azerbaijan-Hungary relations have additional development prospects in a bilateral and multilateral format (within the framework of the Turkic States). Thus, in the 2000s, Hungary was an interested party in the Nabucco project through MOL. In 2009, Hungary hosted a Nabucco Conference in Budapest, with Ilham Aliyev as a special guest. The oldest practical aspect of energy cooperation between the two countries is the AGRI gas project, launched in 2010. A project company was set up with a 25 % share of each participant (the energy companies of Azerbaijan, Georgia, Romania, and Hungary), with Hungary’s share belonging to MVM. The project has been mothballed since the mid-2010s, but the project company still exists.

In early 2020, Hungarian oil company MOL purchased 9.57 % of ACG concession share from Chevron. The deal also included the purchase of an 8.9 % share in the BTC oil pipeline. MOL is currently looking for investment opportunities in producing Azerbaijani onshore gas fields, and a SOCAR delegation has visited the MOL office on this topic. Although commercial talks have been going on between state-owned gas wholesaler MVM CEEnergy and SOCAR since early 2020, these talks have gained momentum in 2023. As for natural gas, a political agreement was made in 2023 about future long-term gas supply from Azerbaijan to Hungary, and during President Ilham Aliyev’s visit, an MOU was signed about cooperation in the field of natural gas supply between the two countries.

The EU supports a green energy corridor from Azerbaijan to Georgia, the Black Sea, and Romania to Hungary. The energy would come from various Azerbaijani renewables, such as future Caspian wind parks. A viability study is expected to be ordered soon for this project. For Azerbaijan to meet the energy demand of the countries of Central and Southeast Europe, however, billions in new investments and patience will be required.

References

- APA Economics. (2023, January 12). *In 2031, the production of commercial gas in Azerbaijan will reach 37 bln. will exceed cubic meters*. <https://apa.az/az/senaye-ve-energetika/azerbaycanda-2031-ci-ilde-emteelik-qazin-hasilati-37-mlrd-kubmetri-otecek-proqnoz-741874>
- BP. (2018, February 18). *2017 full year results*. https://www.bp.com/en_az/azerbaijan/home/news/business-updates/2017_full_year_results1.html#accordion_1
- BP. (2021, January 29). *Southern Gas Corridor – Project of the century*. <https://www.bp.com/en/global/corporate/news-and-insights/reimagining-energy/southern-gas-corridor-special-feature.html>
- Energyconomics. (2023, April 13). *Romania and other SEE countries to sign new Azeri gas agreement in Sofia, on April 25-26*. <https://www.energyconomics.ro/en/romania-and-other-see-countries-to-sign-new-azeri-gas-agreement-in-sofia-on-april-25-26/>
- European Commission. (2022, July 18). *Statement by President von der Leyen with Azerbaijani President Aliyev*. https://ec.europa.eu/commission/presscorner/detail/en/statement_22_4583
- Gas Exporting Countries Forum. (2022). *GECF Annual Statistical Bulletin 2022*. https://www.gecf.org/_resources/files/flipbook/gecfasb2022/
- Ibadoghlu, Gubad. (2022). *Problems and Prospects of Transition to Alternative Energy in Azerbaijan*. *Social Science Research Network*. <https://ssrn.com/abstract=4249068>
- Ibadoghlu, Gubad. (2023). *Why EU plans to increase gas imports from Azerbaijan are unrealistic*. *EUROPP*. <https://blogs.lse.ac.uk/europpblog/2023/01/10/why-eu-plans-to-increase-gas-imports-from-azerbaijan-are-unrealistic/>
- Interfax. (2023, January 9). *Azerbaijan expects domestic oil output to dip below 30.3 mln tonnes/year by 2027*. <https://interfax.com/newsroom/top-stories/86723/>
- Interfax. (2023, April 25). *Azerbaijan wants to add 10 countries to its gas delivery geography*. <https://interfax.com/newsroom/top-stories/89993/>
- International Energy Charter. (2019). *Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects PEERA. In-depth Review of the Energy Efficiency Policy of the Republic of Azerbaijan*. https://www.energycharter.org/fileadmin/DocumentsMedia/IDEER/IDEER-Azerbaijan_2020.pdf

- Kubiak, M. (2023, January 5). Azerbaijan set to become a green energy supplier to the EU. *Eurasia Daily Monitor*, 20(3). <https://jamestown.org/program/azerbaijan-set-to-become-a-green-energy-supplier-to-the-eu/>
- President of the Republic of Azerbaijan. (2023, January 10). *Ilham Aliyev interview to local television channels*. <https://president.az/az/articles/view/58555>
- Radio Liberty. (2023, February 3). *The president talks about 100 years of gas, but the prices*. <https://www.azadliq.org/a/avropa-qaz/32254170.html>
- Shaban, I. (2023). *For the first time, Azerbaijani gas exceeded Russia's share in the Greek market*. Caspian Barrel. <http://caspianbarrel.org/en/2023/04/for-the-first-time-azerbaijani-gas-exceeded-russia-s-share-in-the-greek-market/>
- State Statistical Committee. (2023, February 28). *Energy of Azerbaijan - statistical review for 2022*. https://stat.gov.az/source/balance_fuel/
- The Ministry of Energy of the Republic of Azerbaijan. (2023, January 13). *In 2022, 46.7 billion cubic meters of natural gas and 32.6 million tons of oil were produced*. <https://minenergy.gov.az/en/xeberler-arxivi/2022-ci-ilde-467-milyard-kubmetr-tebii-qaz-326-milyon-ton-neft-hasil-edilib>