



TOPCHUBASHOV
center



APRIL 2024

AZERBAIJAN'S ENERGY SIGNIFICANCE: NEW CONNECTIONS WITH EUROPE AND CENTRAL ASIA

JOSEP ERREA

About the author

Josep Errea is a researcher on geopolitics and international relations, being interested in the South Caucasus, Türkiye and the European Union. He's studying Political Science at the University of Granada, having completed part of his studies at the University of Bologna. He collaborates with Topchubashov Center and is doing his internship with the Spanish Consulate in Istanbul.

About the Topchubashov Center

The Topchubashov Center is an independent non-profit think tank based in Baku, Azerbaijan. It covers the spheres of international affairs, geopolitics, security and energy with the focus on Central and Eastern Europe, Caucasus, Central Asia and Middle East. The Center aims to establish the standards of high-quality impartial research and create an international network of authors sharing similar values and worldview.

© Topchubashov Center 2024. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without full attribution.

Summary

Since the declaration of independence by the republics of the South Caucasus, Azerbaijan, Georgia and Armenia, in 1991, these countries, especially Azerbaijan and Georgia, have acquired a remarkable geopolitical importance as independent entities, as they serve as bridges between Europe and Asia. The region has become a go-to area for overland trade from Iran and Türkiye to Russia and vice versa. Azerbaijan, the country to be explored in this report, has the greatest geopolitical weight in the region. Baku not only plays an important role as a bridge between Europe and Asia, but also has a major importance for international energy matters.

Azerbaijan has one of the largest gas reserves in the world, without leaving behind its large oil reserves, which, in both cases, has made Azerbaijan the twentieth country with the largest reserves in the world. These prominent energy reserves lie on the shores of the Caspian Sea, one of the most important hydrocarbon extraction points in the world which has other major producers- Kazakhstan and Turkmenistan. The existence of this condominium only accentuates the geopolitical importance of Azerbaijan, since it becomes a fundamental bridge for the countries of Central Asia to export their hydrocarbons to the West with greater ease and without depending on Russia.

These facts make hydrocarbons a fundamental pillar of the Azerbaijani economy. Since the 18th century, the port of Baku was already endowed with a certain degree of importance as a maritime commercial reference point in the Caspian, although initially it had not been directly associated with oil: at that time, few crude oil wells that existed were dug manually and their use was limited to little more than fuel for lighting. It was not until the middle of the 19th century, specifically in 1847, that the first large-scale well was drilled. From that moment on, the city underwent a great growth, caused by the explosive growth of the oil business, both in its extraction, refining and commercialization. The growth resulted in an unprecedented demographic boom, which, combined with the prosperity of the chemical industry, led to economic and cultural development, the foundations of today's Baku - the center of gravity in the South Caucasus.

Azerbaijan's excellent location, together with its large energy reserves, has recently put the territory on the radar of a number of countries as a possible supplier of fossil fuels and crucial logistical hub. Since the beginning of the Russian offensive in Ukraine in 2022, countries that had a high degree of energy dependence on Russia have decided to diversify their gas and oil

suppliers, so Azerbaijan made a move. The European Union has established a strategic partnership with Baku to acquire gas.

In order to carry out a complete analysis of Azerbaijan's energy and geopolitical role, the new connections that the country has recently established will be analyzed. Although a global analysis will be carried out, it is worth highlighting four actors: Türkiye, the European Union and Balkan Countries (with special mention to some other countries). It is important to talk about Türkiye, not only from the energy point of view, but at all levels, since, for historical reasons, it is one of Azerbaijan's major partners. New joint energy projects can further strengthen the strategic alliance between Ankara and Baku. Furthermore, it is worth mentioning the vital role that Türkiye plays in connecting Azerbaijan with Europe, not only for the sale of fossil products but also as a commercial bridge and, within the framework of the BRI, as an obligatory passage of the Middle Corridor, which extends through both countries.

Since the Russian-Ukrainian war, the European Union and individual actors in the continent have seen in Azerbaijan a new energy partner to diversify their imports and do away with their once-severe dependence on Russia. Moreover, the possibility of Baku exporting hydrocarbons to the Balkans is being viewed very favorably by Brussels, since in addition to improving regional energy security, it also means a reduction in dependence on Moscow and, therefore, the westernization of the Balkans. The consolidation of this energy trade could be a great opportunity for Azerbaijan, not only from the energy point of view, but also economically and politically as a way to gain bigger value for Europe in general. Therefore, this report intends to analyze the energy relations that Azerbaijan has with other countries, both the existing ones and those that may arise in the future, as well as the challenges that the connections face. The analysis in question is given by the fact that it can be expected that the importance of Azerbaijani hydrocarbons in the regions in question will only increase, being vital to understand the prospects of Baku's energy relations.

CHAPTER 1: Current hydrocarbons situation in Azerbaijan

In terms of its hydrocarbon reserves, both oil and gas, Azerbaijan is among the top 20 countries of the world. In 2020, the South Caucasian country had proven gas reserves of 2.5 trillion cubic meters (bp, 2021a), making it the twelfth country in the world with the largest proven natural gas reserves (Gas Reserves, n.d.). In relation to private oil reserves, the country, in 2020, had proven reserves of 7 billion barrels (bp, 2021b), being the twentieth country in the world in terms of proven oil reserves (the GlobalEconomy, n.d.).

The current period is considered the fifth stage of Azerbaijan's oil and gas history, which spans from 1991 to the present day. It began on October 18, 1991, following the country's independence from the former USSR. In the year in question, after gaining independence Azerbaijan's GDP collapsed, with the economy contracting by 60% between 1990 and 1995 (Rzayeva, 2015). To bring about economic improvement, Azerbaijan opted for an energy strategy, which was based on seeking foreign investment in the territory and turning the country into the main regional exporter.

Thanks to the efforts of the then-president of Azerbaijan Heydar Aliyev, the so-called "Contract of the Century" was signed in 1994. It was signed by 11 companies from 7 different countries, the aim of which was the development of the "Azeri-Chirag-Guneshli" (AGC) group of fields (Ciarreta, 2011). In addition, the contract envisaged that as of 2017 the net profits from the export of the oil would be 75% for Azerbaijan and 25% for the International Oil Companies (IOCs), which are also taxed 20% on their profits (SOCAR, 2023b). In order to implement the contract, the Azerbaijan International Operating Company (AIOC) was established, which works closely with Azerbaijan's state oil company, SOCAR. This contract marked a turning point in the country's history, as it gave momentum to the nascent economy, defining its development for decades to come.

Oil has been Azerbaijan's hydrocarbon par excellence, having ushered in a new era for the country. In addition to the above-mentioned field, there are other important fields, where SOCAR has stakes, for oil production, which also produce gas, including Neft Dashlari, Bulla-Deniz and Bahar. The Azeri-Chirag-Guneshli (AGC) field is the largest of the Azerbaijani oilfields in the Caspian Sea. This group of fields has estimated oil and gas reserves of about 1,072 million tons (SOCAR, 2023b). In 1994, within the framework of the Contract of the Century, as many as 11 international companies; Amoco, BP, McDermott, UNOCAL, SOCAR,

LUKOIL, Statoil, TPAO, Pennzoil, Ramco and Delta signed the agreement for production and development of the field in question (SOCAR, 2023b). Currently, SOCAR has 25% of the rights over the field, in addition to owning 75% of the profits (SOCAR, 2023b).

The Neft Dashlari field plays a specific role in the country's history, mostly not for its production but also because, in addition to producing oil, it is a strategic center for communication between the energy fields and mainland Azerbaijan. Specifically, up to 70% of the oil and gas produced by SOCAR is transferred to the coast from Neft Dashlari, thus becoming a major production center (SOCAR, 2023i). The base in question produces, on average, 2,762 tons of oil daily, which is far from its best record, which was in 1967, when it produced 7.6 million tons of oil, equivalent to 4.5% of the country's total (SOCAR, 2023i).

Another major oilfield is Bulla-Deniz which is already past its peak production but still has significant resources left. During the field's test period, its average daily production constituted 200 tons of condensate and 1 million cubic meters of gas (SOCAR, 2023f). As of today Bulla-Deniz has 11 gas wells and 1 oil well operational, having produced 62 bcm of gas and 12 million oil tonnes and gas condensate since 1975 (Reuters, 2019).

Another offshore field is Bahar, of which SOCAR holds 20% of the rights, with the remaining 80% held by Greenfields Petroleum (Greenfields Petroleum Corporation, 2021). The field in question, since its opening, has produced 130.9 billion m³ of gas, 6.2 million tons of oil and 10.7 million tons of condensate (SOCAR, 23d). Gas production there peaked in 1986, when it produced 6.7 billion m³ of gas, while its maximum oil and condensate production record was in 1975, with a production of 896,000 tons. (SOCAR, 23d).

In addition to the fields present in the Caspian Sea, it is also worth noting the existence of several fields in mainland Azerbaijan, of which Mishovdag-Kelameddin and Jafarli are worth mentioning. The Mishovdag-Kelameddin field is located north of the Mughan-Salyan region and is divided between three major owners: NK RussNeft (43%), SOCAR (15%) and others (43%) (Global Data, 2023). 88.18% of the field's reserves have been exploited, peaking in 2009, so the field is expected to reach its limit in 2041 (Global Data, 2023). It is estimated that 98.2% of the field's remaining reserves are oil and condensate, amounting to approximately 3.27 Mm bbl in total (Global Data, 2023). The Jafarli field is located in the Imishli region and, although it is at an early stage of production, 500 thousand tons of oil have been extracted from

the field (SOCAR, 2023h). Currently, the field in question, along with the Muradkhanly field, together with 25 wells, produce, on a daily basis, about 35 tons of oil (Shehnaz, 2023).

When it comes to gas, the primary production hub is obviously the famous Shakh Deniz field, whose life span can be separated into two phases: Phase 1 and Phase 2. Phase 1 was launched in 1999, when Shah Deniz gas field was discovered about 70 km from Baku at a depth of 600m (Rzayeva, 2015). Thanks to the discovery of this major field, Azerbaijan gained a remarkable reputation not only as an oil producer, but as a gas exporter as well. Thanks to the development of the Shah Deniz Phase 1 (SD1) field, the Caucasian country began to export its first gas, namely to Georgia and Türkiye. To exploit the field, The State Oil Company of the Azerbaijan Republic (SOCAR), the Azerbaijani national company, entered into a production sharing agreement (PSA) in 1996 for SD1 with different companies from around the globe: BP Exploration (Azerbaijan) Limited (BP), Statoil Azerbaijan AS (Statoil), Elf Petroleum Azerbaijan BV (Elf), LukOil International Ltd (LUKoil), Oil Industries Engineering and Construction (OIES), Socar Commercial Affiliate (SCA) and Turkish Petroleum Overseas Company Limited (TPAO).

Subsequently, the Exploration and Production Company "Shah Deniz" (The State Oil Company of the Azerbaijan Republic, 1996) was established to carry out the exploration and development of the well. The shares of the different conglomerates in the gas field were divided in the following way: BP (25.5%), Statoil (25.5%), Elf (10%), LUKoil (10%), OIES (10%), SCA (10%) and TPAO (9%) (The State Oil Company of the Azerbaijan Republic, 1996). The contract in question is valid for 30 years, i.e. until 2027, with the possibility of being extended for another 5 years (The State Oil Company of the Azerbaijan Republic, 1996).

The second stage of Shah Deniz (SD2) started in 2013, with the agreement between the investors for the development of "Stage 2". Despite this, full commissioning of the second stage would not come until 2018 (bp, n.d.-b). During the first stage of the Shah Deniz field annual production equaled 10 bcm, but thanks to SD2 the capacity was expanded by another 16 bcm/a, i.e. up to a total of 26 bcm/a of gas and 100,000 barrels of condensate a day are extracted from the Shah Deniz field (bp, n.d.-b). With the second stage of Shah Deniz (SD2) exports increased significantly, not only to Türkiye (the main buyer of Azerbaijan's gas), but Caucasian gas would start to reach Europe. Recently, there have been movements in the rights to the field, as LUKOIL acquired the rights from Petronas, leaving the distribution of shares as follows: BP,

as operator (29.99%), SOCAR (14.35%), LUKOIL (19.99%), NICO (10%), TPAO (19%) and SGC (6.67%) (Cavcic, 2022).

The wealth brought to the country by the aforementioned energy fields has led the Azerbaijani state to continue investing in the drilling of new wells in the aforementioned fields, in addition to investing in the search for new fields throughout the country, but especially in the Caspian Sea. The state-owned energy company, SOCAR, has made discoveries of various fields, which have either just been discovered or are in the development phase. This investment by the Azerbaijani government only strengthens Baku's position not only as the current regional leader, but also as the leader of the Caucasus for the coming decades. Some of the fields that have been discovered are the Umid, Absheron and Shafaq-Asiman fields (Ciarreta, 2010).

The Umid field was the first one found solely by SOCAR after Azerbaijan declared its independence. It possesses reserves of 200 million m³ of gas and about 470 tons of condensate across its 4 wells (SOCAR, 2023k). The state-owned company owns 80% of the well, although the field is operated by the Umid-Babek Operating Company (UBOC) (SOCAR, 2023k). The field in question is still under analysis, so development has not yet started. In the case of the Absheron field, SOCAR, thanks to the 2009 agreement, holds 50% of the rights over the exploitation of the field (SOCAR, 2023a). Moreover, the mineral reserves of this field are estimated at around 350 billion m³ of gas and 45 million tons of condensate (SOCAR, 2023a). It is still in its development phase, so preparations are already underway to be able to start producing.

Another significant gas field is Shafaq-Asiman, whereby SOCAR has been sharing equally the exploitation rights with BP since 2010 (bp, 2023). The Shafaq-Asiman field has projected reserves of 500 billion, which puts it in the list of the largest ones in the country (AzerFocus, 2021). This fact makes its development one of the most important priorities for the Azerbaijani government.

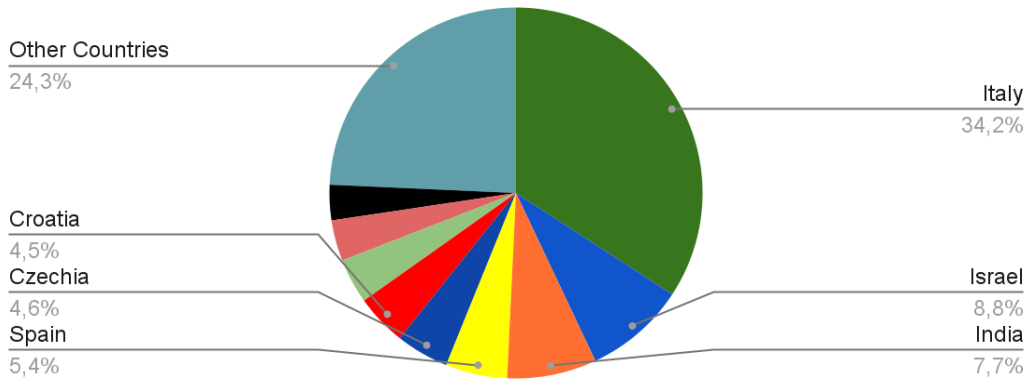
The country's energy abundance, accompanied by the state's heavy investment in the sector, with its corresponding dividends, has resulted in a boom in the industry, which has brought about an unprecedented economic and social boost in the country's history. In 1995, just one year after the signing of the "Contract of the Century", Azerbaijan exported \$116 million worth of goods, with cotton being the biggest item, accounting for 36.6% of exports (OEC, n.d.-h). However, looking at the relevant data from 2021 helps to understand how much the economy

of Azerbaijan has changed thanks to the start of energy exploitation; in 2021 goods worth \$22.8 billion were exported, with crude oil being the most exported good, as 59.1% of the country's production went for export (OEC, n.d.-e). If we look at the country's GDP, we will also find evidence of the great economic weight that oil has had in the region, since in 1995 the country's GDP equaled USD 2.42 billion, while in 2021 it reached USD 54.83 billion (World Bank, n.d.-a). In other words, Azerbaijan, since it began to tap into its offshore wealth, has seen its GDP increase by 2165%. This economic bonanza not only served to increase the value of exports and wealth creation in Azerbaijan, but also boosted the country's GDP per capita, which went from \$314.6 in 1995 to \$5,408 in 2021, an increase of 1619% in just 26 years (The World Bank, n.d.). Therefore, it is worth noting that, thanks to the country's prominent gas reserves, Azerbaijan has not only managed to boost its economy and society, but has also had the possibility to be something that very few countries are capable of: energy self-sufficiency.

According to the 2021 data, Azerbaijan consumed 12.7 billion cubic meters of natural gas (bp, 2022), while its oil consumption equaled 95 thousand barrels per day (bp, 2021). These figures are far below the country's annual energy production, as the country in 2021 produced 31.8 trillion cubic meters of natural gas (bp, 2022) and 707 thousand barrels per day of oil (bp, 2022). Much of the gas extracted off the Caspian coast is exported to other countries such as Georgia, Türkiye or Italy, making gas imports, especially from Iran, necessary to cover local demand. Azerbaijan exports crude petroleum primarily to Italy, Israel, India and Spain. In 2022, Italy imported 8,902.2 thousand tons of oil worth \$6,640 million, being the destination of 34.21% of Azerbaijani oil (The State Statistical Committee of the Republic of Azerbaijan, 2023). With less than double the number of tons we have Israel, which imported 2,289.4 tons for \$1,672 million, while India imported 2,016.8 tons for \$1,625 million the last of those mentioned is Spain which imported 1.393,1 tons for \$998 million (The State Statistical Committee of the Republic of Azerbaijan, 2023). It should be noted that historically, Italy, Israel and India have always been among the top five oil importing countries, but this is not the case of Spain. Although exports to Germany have fallen in recent years, it is still ranked among the 10 biggest buyers of Azerbaijani oil.

Major petroleum buyers by tons

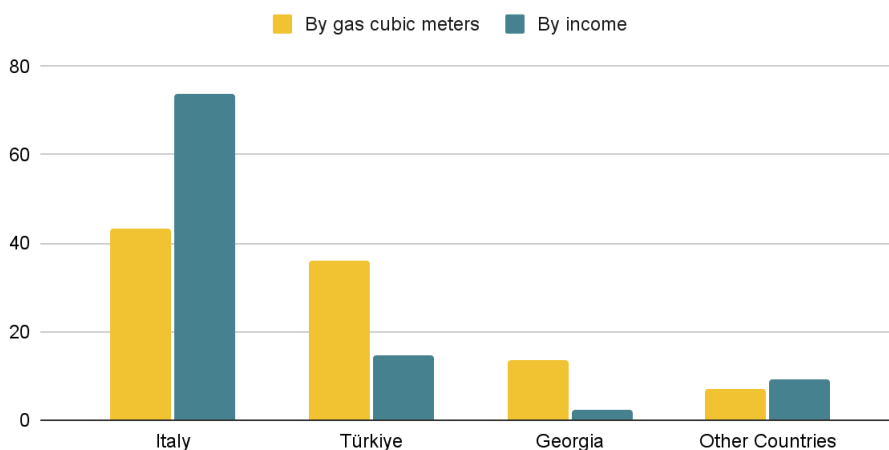
Source: The State Statistical Committee of the Republic of Azerbaijan



In the case of gas, two countries stand out above the rest, namely Italy and Türkiye. In 2022, Italy was the largest buyer of Azerbaijani gas, purchasing a total of 8.210,7 million cubic meters (mcm) of gas, worth \$11,045 million, accounting for 73.69% of the total gas trade (The State Statistical Committee of the Republic of Azerbaijan, 2023). The second place is held by Türkiye, which imported 6.853,7 mcm of gas worth \$2,208 million, accounting for 14.73% of the trade volume (The State Statistical Committee of the Republic of Azerbaijan, 2023). Georgia, which imported 2,581 mcm of gas, representing a revenue of \$349.7 million, or 2,33% of gas revenues, takes the third place (The State Statistical Committee of the Republic of Azerbaijan, 2023). The rest of the countries imported 1,319.6 million cubic meters of gas in total, generating revenues of \$1,386 million, or 9,25% of the total income (The State Statistical Committee of the Republic of Azerbaijan, 2023).

Importance of countries by gas imports (%)

Source: The State Statistical Committee of the Republic of Azerbaijan



As we have seen, Azerbaijani hydrocarbons have a particular importance for Israel and Italy. In the case of Israel, the country has a close commercial and security-based relationship with Azerbaijan, with Baku being the second largest importer of Israeli-produced weapons in the world. On the other hand, since the beginning of the Ukrainian War, Israel covers 40% of its energy needs from Azerbaijani imports (Muradov & Guliyev, 2023). The oil that Baku exports on a massive scale to Israel is the bulwark on which Azerbaijan's exports to Israel are sustained: in 2021, \$887.5 million worth of oil was exported to the Mediterranean country (The State Statistical Committee of the Republic of Azerbaijan, 2023), with \$898.3 million being the total value of exports, whereby oil exports accounted for 98.8% of the total (OEC, n.d.-c). This oil is carried by sea via the port of Jeykhan, with the port of Ashkelon being the final destination (Azemedia, 2023). This pattern has been recently disrupted due to the escalation of the Israeli-Palestinian conflict, so at least one ship with Azerbaijani oil has been redirected to the port of Eilat, located in the far south of the country, a much longer route (Avraham, 2023).

This energy cooperation is only increasing, expanding Azerbaijan's role in the region. On October 30, Israel's Energy Minister announced that the conglomerate formed by BP, SOCAR and NewMed Energy had won a tender to explore Israel's potential offshore fields for natural gas in the area north of the Leviathan field, one of the most important in the region (Rabinovitch & Scheer, 2023). Thus, the Israeli government has authorized SOCAR to conduct offshore search for the next 3 years, with the option to extend up to seven years, bolstering Azerbaijan's standing in this energy partnership (Rabinovitch & Scheer, 2023).

The other case to highlight is that of Italy, the country that imports the most Azerbaijani hydrocarbons, being the leader in both gas and oil. Both countries, for more than obvious reasons, have very close relations, which date back to 1997, when Rome opened its embassy in Baku, the first one in the South Caucasus. In 1999, Italy already became the major import destination of Azerbaijani crude, with 41.1% of the total share (OEC, n.d.-d). This figure grew steadily until 2004, when it reached 57.1% (OEC, n.d.-d). The foundations of the magnificent relationship between the two countries were laid by the participation of the Italian oil major ENI in the Contract of the Century. ENI owned 5% of the total shares of the agreement, and was also involved in the construction of the Baku-Tbilisi-Ceyhan (BTC) oil pipeline, which will be explained in detail later.

After a little more than a decade since the beginning of this close relationship and following ENI's investment in Azerbaijan, in 2013 it was decided to build the Trans-Adriatic Pipeline

(TAP), a gas pipeline whose purpose is to export Azerbaijani gas to Europe, Italy being its final destination. This pipeline is a project of vital importance for Azerbaijan, since its construction implied the possibility of reducing the import of Russian gas, which in 2013 was 37.3% of the total, being the country from which it was imported the most (OEC, n.d.-f). The construction of the pipeline started in 2016 and it began operating in 2020, although it was not until 2022 that TAP reached its current gas transportation capacity; 10 bcm per year. In 2021, Italy was the second largest gas importer from Azerbaijan, with a total of 6.1 bcm of gas exported worth \$3 billion, being second only to Türkiye (The State Statistical Committee of the Republic of Azerbaijan, 2023). In 2022 gas exports increased to 8.2 bcm, worth \$11 billion (The State Statistical Committee of the Republic of Azerbaijan, 2023). The price of gas between 2021 and 2022 had undergone a very significant increase due to the outbreak of the Ukrainian war and the subsequent gas supply cut-off from Russia, which came to put Western governments in check, causing European countries to be forced to pay a price much higher than the market price to import gas.

The events of 2022 highlighted the importance of the move that Italy began in 2013 to diversify its gas import sources. In this sense, Rome was able to withstand the crisis with relative ease, avoiding too steep increases in gas bills in Italian cities. Energy relations with Baku enable Italy to further reduce its energy imports from Russia, giving Azerbaijan an increasingly important role in the region. In addition, Azerbaijan and Italy are seeking not only to maintain relations, but to improve them, as evidenced by the agreement reached in February between the two countries, whereby Rome will sell four gas turbines to Baku (Reuters, 2023).

Another country of note is Georgia, which holds significance for Azerbaijan both as the third largest importer of natural gas and a crucial transit country, as all Westward pipelines built during the independence this far are passing through the Caucasian country. As there is no option for gas and oil pipelines to pass through other bordering countries, Armenia and Iran being unfeasible alternatives, they are all destined to pass through Tbilisi. The confidence granted to Georgia stems from its robustly positive bilateral relationship with Azerbaijan, as both countries collaborate in several projects such as the Middle Corridor, one of the routes of the Belt and Road Initiative, a project led by China to establish a new silk road, which aims to connect the Chinese market with Europe. In this regard, Georgia occupies a key position at the energy table in Baku, as the passage of its hydrocarbons through Tbilisi to Türkiye is part of the development of energy exports in the recent decades. The gas passage agreements also bring great benefits to Georgia, since apart from obtaining a direct economic benefit from

transit rights, it also has the right to purchase up to 5% of the total gas volume passing through the pipeline at a preferential price, this condition being valid until 2068 (Energy Community, 2021).

Beyond the economic or energy benefits provided to Georgia by its role as a transit hub, the fact is that it has also given the country a new political status, having turned into an important player in the region. The obligatory passage of Azerbaijani hydrocarbons through the country makes it important not only for Azerbaijan, but also for European energy security, since Europe is the final destination of the majority of hydrocarbons that pass through its territory. Moreover, this importance could be accentuated if the Turkmen gas and Kazakhstan's oil were to be connected to Azerbaijan, as Georgia's responsibility as the transit hub for a larger quantity of hydrocarbons will only rise.

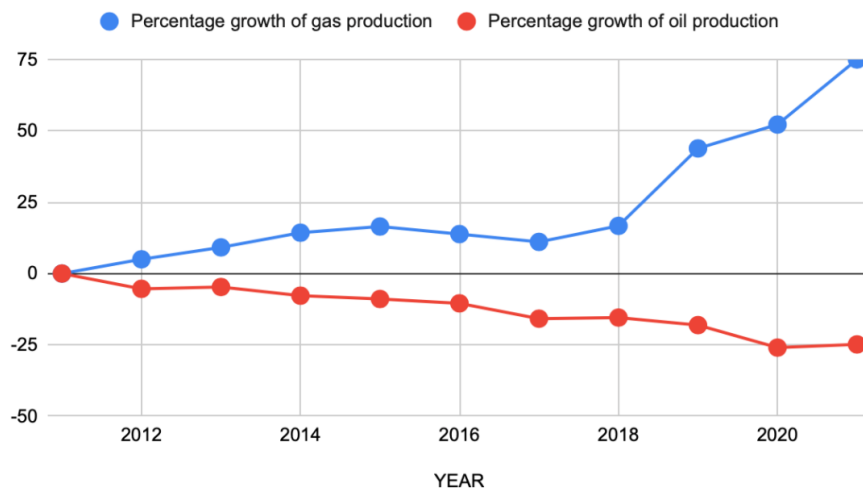
To carry out these export and import operations, the country has a large infrastructure of pipelines. The pipelines in the country are spread in all directions, some of them extend only within the national territory, such as the Neft Dashlari-Bahar Gas Pipeline and the Bahar-Hovsan-Surakhani Gas Pipeline, there are also those that carry gas from Baku to neighboring regional powers such as the Baku-Novorossiysk Oil Pipeline and the Hajigabul-Shirvanovka-Mozdok pipeline, which connect with Russia, or the Hajiqabul-Astara-Abadan gas pipeline that connects the country with Iran up to the Iraqi border. But without a doubt, the most important infrastructures are those that connect the country with Georgia, the bridge to the West and Türkiye. The infrastructures that fulfill this function are the Baku-Tbilisi-Ceyhan oil pipeline, better known as BTC, South Caucasus Gas Pipeline and the Hajigabul-Gazakh-Saguramo Pipeline. These infrastructures, in conjunction with others, are responsible for carrying Azerbaijan's energy resources to the energy-buying ports, and are the basis of the economic boost that the country has experienced in recent years. In addition, it is also worth mentioning the plan to carry out the construction of two gas pipelines: the Trans-Caspian Gas Pipeline that aims to connect Baku with Turkmenistan in order to export Central Asian gas through Azerbaijan, and the Azerbaijan-Georgia-Romania Gas Interconnector Pipeline (AGRI), which aims to carry Azerbaijani gas to the port of Poti, later to reach Romania through the Black Sea.

In addition to having gas and oil pipelines to transport hydrocarbons, the Sangachal LNG terminal is also worth mentioning. This terminal is responsible for receiving, processing, storing and exporting oil and gas coming from the Caspian, especially from the Shah Deniz field, to the Azerbaijani territory. The oil is pumped from the site to the BTC pipeline. This

terminal has the capacity to process 1.2 million barrels of crude oil and 100 million cubic meters of gas per day (bp, n.d.-a). During 2022, the base exported more than 232 million barrels of oil, of which 225 million passed through the BTC (bp, n.d.-a). In addition to serving as a processing and feeding point for the BTC, the terminal's function as an energy hub is no less important, as it also receives oil from Kazakhstan and Turkmenistan, which arrives via the Caspian Sea, to be exported to other countries (bp, n.d.-a).

Paradoxically, in spite of being a country that has evolved and become rich thanks to the export of oil, it is true that in the last few years, Azerbaijan's prominence as an oil supplier has been declining relative to its status on the gas market. More and more gas is being extracted, the opposite being the case for oil, causing a shift in Azerbaijani energy policy (see graph). Specifically, from 2011 to 2021 gas production had been increasing by 7.1% on average year-on-year, a figure that is practically unmatched globally, only Australia (10.5% increase) and "Other Middle East" (a 15.5% increase) are able to surpass the figure of the Caucasian country (bp, 2022). In the case of oil, over the last decade Azerbaijan has not only been unable to maintain peak production levels, but has reduced it by 22.53% (bp, 2022).

Oil and gas production % growth between 2011 and 2021



These changes in oil and gas production trends are due to a number of reasons, and the increase in the geostrategic importance of gas is undoubtedly among them. Since the last century, oil has acquired a fundamental role in society, being used in all areas of it, from industry to the mobility of citizens, which added to the fact that its large-scale production is concentrated in a few places, makes it a commodity sought after by all countries and hence a geopolitical issue. However, since the oil trade has become globalized, as oil transport is fast and affordable from

almost any point on the globe, gas has emerged as the new geopolitical weapon. Gas can only be transported by pipeline or by converting it into Liquefied Natural Gas (LNG). The option of transporting gas by converting it into LNG is not always available, since transporting it requires an LNG station at both the port of departure and the port of arrival and, in addition, converting natural gas to LNG is very expensive. Therefore, most of the gas is still exported via pipelines, so there is a geographical factor in choosing the country from which to import. Moreover, if a country is a gas producer but, at the same time, neighboring countries do not allow gas pipelines to pass through their territory to reach third parties, it may easily get isolated from global markets.

Consequently, gas production boom in Azerbaijan endows it with a geopolitical advantage, since it can be exported to Europe from Türkiye, passing through Georgia, being a great solution for the search for diversity of suppliers that the West is looking for after the consequences in the deterioration of relations between the West and Russia due to the war in Ukraine. In addition, positions are being approached with the countries of Central Asia and infrastructures are being built from there to Azerbaijan so that they can export gas to Europe through Baku, making the country not only an exporter of hydrocarbons but also a major energy hub in the region.

Bibliography

1. Avraham, R. (2023). How Azerbaijan is helping Israel's war effort. *Israel National News*. <https://www.israelnationalnews.com/news/379644>
2. Azemedia. (2023). A million barrels of Azerbaijani oil are headed to Israel. *aze.media*. <https://aze.media/a-million-barrels-of-azerbaijani-oil-are-headed-to-israel/>
3. AzerFocus. (2021, March 25). Gas Condensate Reserves Discovered at Shafag-Asiman Field. *Azerbaijan in Focus*. <https://azerfocus.com/gas-condensate-reserves-discovered-at-shafag-asiman-field/>
4. Banco Mundial. (n.d.). *PIB (US\$ a precios actuales)- Azerbaijan*. World Bank Open Data. <https://datos.bancomundial.org/indicador/NY.GDP.MKTP.CD?locations=AZ>
5. bp. (n.d.-a). *Sangachal terminal*. bp.com. https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/terminals/sangachal_terminal.html
6. bp. (n.d.-b). *Shah Deniz Stage 2*. bp.com. https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/shahdeniz/shah-deniz-stage-2.html
7. bp. (2021a). *Statistical Review of World Energy 2021*. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-natural-gas.pdf>
8. bp. (2021b). *Statistical Review of World Energy 2021*. bp.com. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-oil.pdf>
9. bp. (2022). *Statistical Review of World Energy 2022*. In *bp.com*. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-full-report.pdf>
10. bp. (2023). *Shafag-Asiman*. bp.com. https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/shafag-asiman.html
11. Cavcic, M. (2022). *Lukoil increases stake in BP's Shah Deniz after closing Petronas deal*. offshore-energy.biz. <https://www.offshore-energy.biz/lukoil-increases-stake-in-bps-shah-deniz-after-closing-petronas-deal/>
12. CEIC. (2018a). *Azerbaijan Crude Oil: Production*. www.ceicdata.com. <https://www.ceicdata.com/en/indicator/azerbaijan/crude-oil-production>
13. CEIC. (2018b). *Azerbaijan Oil Consumption*. www.ceicdata.com. <https://www.ceicdata.com/en/indicator/azerbaijan/oil-consumpti>
14. CEIC. (2022). *Azerbaijan Energy Production: Natural Gas*. Ciecdata-com. <https://www.ceicdata.com/en/azerbaijan/energy-production/energy-production-natural-gas>
15. Ciarreta, A. (2010). Analysis of Azerbaijan Oil and Gas Sector. In *investment-hr*. http://www.investment-hr.com/oil_gas_docs/azerbaijan%20oil&%20gas%20sector%20report.pdf
16. Ciarreta, A. (2011). Development trends in the Azerbaijan oil and gas sector: Achievements and challenge. *sciencedirectassets.com*. <https://www.sciencedirect.com/science/article/abs/pii/S0301421511007865>

17. *Gas reserves*. (n.d.). Our World in Data. <https://ourworldindata.org/grapher/natural-gas-proved-reserves?tab=table>
18. Global Data. (2023, April 27). *Oil & gas field profile: Mishovdag and Kelameddin Conventional Oil Field, Azerbaijan*. Offshore Technology. <https://www.offshore-technology.com/marketdata/oil-gas-field-profile-mishovdag-and-kelameddin-conventional-oil-field-azerbaijan/>
19. Greenfields Petroleum Corporation. (2021). *Where We Operate*. Greenfields Petroleum. <https://web.archive.org/web/20210726230230/http://www.greenfields-petroleum.com/about-us/where-we-operate>
20. iea. (2021). Azerbaijan energy profile. In *iea.org*. <https://iea.blob.core.windows.net/assets/c33c86e0-58ed-4465-954a-f6291b401ced/AzerbaijanEnergyProfile1.pdf>
21. Index Mundi. (n.d.). *Azerbaiyán - Gas natural consumo*. indexmundi.com. <https://www.indexmundi.com/g/g.aspx?c=aj&v=137&l=es>
22. Muradov, M., & Gulivey, I. (2023). Azerbaijan-Israel Relations Shifting the Geopolitics of the Middle East. *Geopolitical Monitor*. <https://www.geopoliticalmonitor.com/azerbaijan-israel-relations-reach-a-new-level/>
23. OEC. (n.d.-a). *Azerbaijan Yearly Trade Exports 1999*. oec.world. <https://oec.world/en/profile/country/aze?yearSelector1=1999>
24. OEC. (n.d.-b). *Azerbaijan Yearly Trade Exports 2004*. oec.world. <https://oec.world/en/profile/country/aze?yearSelector1=2004>
25. OEC. (n.d.-c). *Azerbaiyán Israel Comercio Bilateral por productos* [Dataset]. <https://oec.world/es/profile/bilateral-country/aze/partner/isr>
26. OEC. (n.d.-d). *Crude Petroleum in Azerbaijan / OEC*. OEC - the Observatory of Economic Complexity. <https://oec.world/en/profile/bilateral-product/crude-petroleum/reporter/aze>
27. OEC. (n.d.-e). *Historical data year 2021* [Dataset; Oec.world]. <https://oec.world/en/profile/country/aze?tradeScaleSelectorLatestTrends=tradeScale2&compareExportsLatestTrends=comparisonOption3>
28. OEC. (n.d.-f). *Italy Yearly Trade Imports 2013*. In *oec.world*. <https://oec.world/en/profile/country/ita?latestTrendsFlowSelectorNonSubnat=flow1&yearlyTradeFlowSelector=flow1&yearSelector1=2013>
29. OEC. (n.d.-g). *Petroleum Gas in Azerbaijan / OEC*. OEC - the Observatory of Economic Complexity. <https://oec.world/en/profile/bilateral-product/petroleum-gas/reporter/aze>
30. OEC. (n.d.-h). *Yearly Trade 1995* [Dataset; Oec.world]. <https://oec.world/en/profile/country/aze?compareExportsLatestTrends=comparisonOption3&tradeScaleSelectorLatestTrends=tradeScale2&yearSelector1=1995>
31. Rabinovitch, A., & Scheer, S. (2023). Israel awards gas exploration licenses to End, BP and four others. *REUTERS*. <https://www.reuters.com/business/energy/israel-awards-gas-exploration-licences-eni-bp-four-others-2023-10-29/>
32. Reuters. (2019). Factbox: Los principales yacimientos de gas de Azerbaiyán. *web.archive.org*. <https://web.archive.org/web/20210610032455/https://www.reuters.com/article/us-azerbaijan-gas-factbox/factbox-azerbaijans-main-gas-fields-idUSKBN1630SG>

33. Reuters. (2023). Italy to sign gas turbines contract with Azerbaijan. *Reuters.com*. <https://www.reuters.com/business/energy/italy-sign-gas-turbines-contract-with-azerbaijan-2023-02-11/>
34. Rzayeva, G. (2015). The Outlook for Azerbaijani Gas Supplies to Europe: Challenges and Perspectives. In *OIES*. OIES.
35. Senderov, S. M., Yusifbeyli, N. A., Rabchuk, V. I., Huseynov, A. M., Nasibov, V. K., Guliyev, G. B., Vorobev, S. V., & Smirnova, E. M. (2018). Modern Problems of energy security of the Caspian regions of Russia and Azerbaijan. *E3S Web of Conferences, Green Energy and Smart Grids 2018*. <https://doi.org/10.1051/e3sconf/20186901014>
36. Shehnaz, M. (2023). SOCAR getting ready motion plan to renew operation of oil discipline onshore Azerbaijan. *Businesslend*. <https://www.businesslend.com/news/socar-preparing-action-plan-to-resume-operation-of-oil-field-onshore-azerbaijan/>
37. SOCAR. (2023a). *Absheron*. socar.az. <https://www.socar.az/en/page/absheron>
38. SOCAR. (2023b). *Azeri-Chirag-Gunashli*. socar.az. <https://www.socar.az/en/page/azeri-chirag-gunashli>
39. SOCAR. (2023c). *Azeri-Chirag-Gunashli*. socar.az. <https://www.socar.az/en/page/azeri-chirag-gunashli>
40. SOCAR. (2023d). *Bahar*. socar.az. <https://www.socar.az/en/page/bahar>
41. SOCAR. (2023e). *Bahar*. socar.az. <https://socar.az/en/page/bahar>
42. SOCAR. (2023f). *Bulla Deniz*. socar.az. <https://www.socar.az/en/page/bulla-deniz>
43. SOCAR. (2023g). *Jafarli*. socar.az. <https://www.socar.az/en/page/jafarli>
44. SOCAR. (2023h). *Jafarli*. socar.az. <https://socar.az/en/page/jafarli>
45. SOCAR. (2023i). *Neft Daslari*. socar.az. <https://socar.az/az/page/neft-daslari>
46. SOCAR. (2023j). *Neft Daşları*. socar.az. <https://socar.az/az/page/neft-daslari>
47. SOCAR. (2023k). *Umid*. socar.az. <https://www.socar.az/en/page/umid>
48. The State Statistical Committee of the Republic of Azerbaijan. (2023). The foreign trade of Azerbaijan [Dataset]. In *Exports of Main Commodities in 2022 (by countries)*. <https://www.stat.gov.az/source/trade/?lang=en>
49. The World Bank. (n.d.). *World Bank Open Data*. World Bank Open Data. <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=AZ>
50. theGlobalEconomy. (n.d.). *Oil reserves- Country Ranking*. TheGlobalEconomy.com. https://www.theglobaleconomy.com/rankings/oil_reserves/on

CHAPTER 2. Türkiye: major customer and gateway to Europe

Since Azerbaijan's independence from the Soviet Union, it has been the object of interest of quite a few regional powers, in their eagerness to occupy the space left by Moscow. In this context, Türkiye, the country that shares many cultural and historical elements with Azerbaijan, has a special significance for Baku, not only due to their historical ties, but also because of Azerbaijan's energy and connectivity potential. In addition, the bilateral relations between Ankara and Baku also provide a great benefit to Azerbaijan, as Türkiye has established itself not only as the most important buyer of Azerbaijani gas but also as a bridge for Caspian gas to reach Europe.

1. A historical relationship

Soon after the restoration of the Azerbaijani independence, Türkiye emerged as its closest partner and ally, these relations having been characterized by Azerbaijani leader Heydar Aliyev as “one nation, two states”. Türkiye's support for the conflict was also demonstrated in 2020, during the Second Nagorno-Karabakh War. During the conflict in question, Türkiye did not hesitate to work closely with Baku, in what is seen as a move to expand its influence in the country. Be that as it may, Ankara actively assisted Baku, as it did in the First Nagorno-Karabakh War, although it did so without intervening directly. Turkish President Erdogan had the pleasure of attending the Victory Parade in Baku, held in the Azerbaijani capital days after the military victory. During the parade, Erdogan stood next to Aliyev the whole time, with a background full of Azerbaijani and Turkish flags. Finally, in June 2021 the two countries signed the Shusha Declaration which established grounds for their formal military alliance and became a milestone in Turkish history, standing for its dramatically boosted presence as an actor in the South Caucasus. According to the document, the parties recognize the vitality of Türkiye's assistance in the two wars in Nagorno-Karabakh, as well as their mutual commitment to assist each other in case one of them suffers a threat or attack on its territorial integrity or state of independence by a third country. In addition, the eventual opening of the Zangezur Corridor, which connects the two countries, as well as of the Nakhichevan-Kars railroad, was also agreed upon. Additionally, Erdogan declared Ankara's intention to open a consulate general in the city of Shusha. This treaty is nothing more than the documentation of the dynamics followed by the relations between the two countries in recent times: a relationship that is moving forward together.

2. Türkiye as customer: Shah Deniz Product Sharing Agreement and the Baku-Tbilisi- Ceyhan pipeline.

Beyond the military and political aspect, the great relationship between Ankara and Baku can be seen in another fundamental aspect: hydrocarbons. Türkiye is the largest buyer of Azerbaijani energy, making their collaboration in the energy aspect more than remarkable.

An example of the good relations between the two countries, especially, as mentioned above, in the energy field, is the Production Sharing Agreement (PSA) signed by both countries. The PSA signed by both parties, among others, was the well-known Contract of the Century, by which, as has been explained above, eleven companies from all over the globe signed a joint production agreement in the Shah Deniz fields. The agreement covers the area of almost 900km², so it was decided to create a company to explore and manage the production, the Shah Deniz Exploration and Production Operating Company. SOCAR, the Azerbaijani state-owned company, held 10% of the exploitation rights, while the Turkish energy company obtained 9%, which changed in 2014, when TPAO bought the 10% that belonged to Total Energies, so it now holds 19% of the rights (Total Energies, 2014). The contract signed by the parties has a term of 30 years, i.e. until 2027, with an option to extend it for a further 5 years.

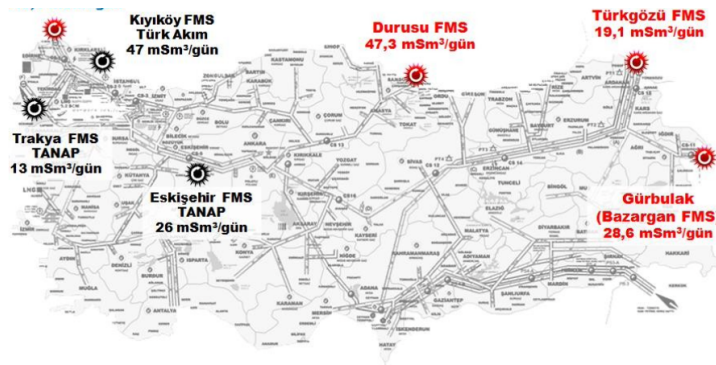
Another significant step in bilateral energy relations was the signing of the Intergovernmental Agreement (IGA). After the exploration of the gas fields, as well as the respective signing of the different treaties, Phase 1 of the Shah Deniz gas production started in 2001. This phase is characterized by the fact that only three countries were entitled to obtain the gas obtained during the phase: Azerbaijan, Georgia and Türkiye. During this first stage, it was planned to export 6.6 bcm/a of gas was planned to be exported through BOTAS, the Turkish state company in charge of the pipelines for both gas and oil, as well as the company in charge of the Turkish trade, although it was not until 2007 that the first gas from SD1 was exported to Türkiye (Rzayeva, 2015).

The agreement to export the 6.6 bcm/a Türkiye expired in 2021, although despite the agreed figure, the flow of gas arriving annually to Anatolia is less than contracted (Rzayeva, 2015). This is due to the fact that BOTAS, does not have the capacity to manage the contracted 6.6 bcm/a, its transmission system being its Achilles heel, with the lack of compression capacity being the particular problem (Rzayeva, 2015). Since exports began in 2007, until 2014, only

30 bcm of gas could be exported, which translates into an average of 4.2 bcm/a, a figure far short of the contracted 6.6 bcm/a (Rzayeva, 2015). The solution to the Turkish infrastructure problem was relatively easy to find, as since the start of massive gas exports from Baku, several compression plant projects were completed in different cities such as Hank (2009), Sivas (2009), Kırşehir/Mucur (2013), Erzincan (2013) and Eskişehir (renovated in 2015) (BOTAS, n.d.). In addition to that, according to the contract signed by the parties, the fact that Türkiye does not take all the contracted volume means an increase in gas prices, as a penalty is paid for the volume of gas that is annually not taken, resulting in a system that benefits taking all the contracted gas, which was far from being the case for Türkiye.

The contract on the Shah Deniz field entered its second phase (SD2) in 2022. During this second stage, Türkiye owns 6 bcm/year of the total produced from the Azerbaijani field, which will be delivered to Eskişehir, a plant that was renovated in 2018 to have capacity for 16.4 mcm/d (Rzayeva, 2018). In addition to the intake in question, also playing an important role is the Trakya entry point, which will be responsible for supplying a maximum of 8.4 mcm/d from SD2 (Rzayeva, 2018).

Map 1: BOTAS gas transmission system entry point capacity, mcm/day



Source: Rzayeva (2018, p.6.)

The biggest problem facing the Shah Deniz field is the fact that it reached its maximum production level in 2010, and it is predicted that between 2024 and 2025 the well will enter its tail phase, i.e. a phase in which the annual well production is expected to drop by, approximately, about 2 bcm/year, depending on the productivity of the wells.

Because of this fact, one of the biggest doubts was whether, once the second phase of the project began, Baku would be able to supply the average bcm/a of the first phase annually, plus

the additional 6 bcm/a of the second phase. In fact, several experts went so far as to assert that perhaps the SD2 output would simply substitute the gas from SD1 quantities, implying not only no increase in gas received by Baku, but a decrease of 6 bcm/year. However, the issue was resolved in 2021, when the two governments signed an agreement whereby from 2023 Azerbaijan would export to Türkiye 3.5 bcm/year of SD1 (BM.GE, 2023). According to the contract, the new gas quantities agreed under SD1 have no connection whatsoever with what was agreed under SD2, so it will be an additional volume to the 6 bcm/year of SD2 (Reuters, 2021).

The other major project developed between the two countries, in collaboration with Georgia, was the Baku-Tbilisi-Ceyhan (BTC) pipeline, which is intended to carry Azerbaijani oil to Türkiye. The BTC pipeline runs from the Azeri-Chirag-Guneshli field to Ceyhan, southeast Mediterranean of Türkiye (bp, n.d.). Apart from the fact that the oil exported through the pipeline is mostly Azerbaijani, it is worth noting that a small part of Turkmenistan's oil, as well as a certain amount of oil extracted in the Tengiz field in Kazakhstan, is also exported via BTC (bp, n.d.). The pipeline in question is the second longest in the world, behind only the Druzhba pipeline, which was built during the Soviet Union to supply Russian gas to Eastern Europe.

The first document for the construction of the pipeline was signed in 1993 between Azerbaijan and Türkiye in Ankara. In the choice of the intermediate country, both alternatives of using Armenia and Georgia transit site were considered, but, in the end, for obvious reasons, and despite being a much longer and more expensive route, the Georgian option was chosen. Construction of the pipeline began in 2003, despite the fact that the intergovernmental agreement was signed in 1998, and was completed barely two years later, in 2005. The construction was undertaken by different companies depending on the country of passage; in the case of Baku, the Greece-registered Consolidated Contractors Company was the chosen one, while Tbilisi selected the French company AMEC and Petrofact International from the United States. Türkiye share of the project was completed exclusively by its national company BOTAS. As for the operating rights of the pipeline, it should be noted that, just like its manufacture, the operator changes depending on the country we are talking about. In the South Caucasus, Georgia and Azerbaijan, the pipeline is operated by BP, while in Türkiye it is operated by the state-owned company BOTAS, (bp, n.d.). The pipeline has been at its standard capacity level since 2009, transporting 1.2 million barrels of oil per day, increasing the mark it initially held between 2006 and 2009 of 1 million barrels per day (bp, n.d.).

Despite BP's operation rights over the pipeline, its ownership belongs to a consortium, with the British company being its majority stakeholder with a share of 30.1% (bp, n.d.). The second player with the most shares is the Azerbaijani state-owned hydrocarbon company SOCAR, which has 25% of the shares (bp, n.d.). Following in the list are several international companies, namely Molgroup (8,90%), Equinor (8,71%), TP (6,53), Eni (5%), Total Energies (5%), Itochu (3,40%), Inpex (2,50%), ExxonMobil (2,50%) and ONGC Videsh (2,36%) (bp, n.d.).

The construction of the BTC has not only provided a new outlet for Azerbaijani oil, but also exemplified Azerbaijani foreign policy strategy. With this project Baku has managed to diversify its hydrocarbon export routes, getting rid of its previous dependence on Russia as the only available option. For this reason, the construction of an alternative route meant an improvement in Baku's situation, as it has managed to diversify its customers, making Türkiye its greatest asset. Another huge gain for Azerbaijan from the implementation of this project has also been the support it received from major outside actors- primarily the United States and Britain. In its turn, the construction of the BTC produced conditions conducive to a political and economic rapprochement between Baku and the West.

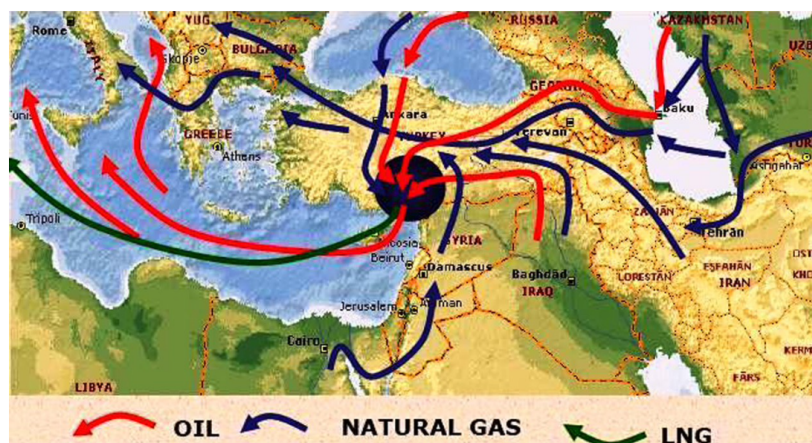
Therefore, we can conclude that both the construction of the pipeline and the PSA have served Azerbaijan to promote its great bilateral relationship with Türkiye, pushing for projects that benefit both parties, one to reduce its dependence on Russia and find in Türkiye its great ally and the other to increase its regional importance, as well as having an ally to help meet domestic demand for hydrocarbons. In addition, this project serves to create a solid base to try to integrate the country's economy with the West, representing another step towards leaving behind the times of economic dependence on Russia.

3. Türkiye, the bridge to Europe

Azerbaijan's role in energy security is growing considerably, and Baku's goal is undoubtedly to continue growing in importance in this area, not only at the regional level, but also in bringing Azerbaijani hydrocarbons to Europe. This arduous task is one of the main concerns of the Azerbaijani government, but it would be certainly impossible without external assistance. Specifically, the role of Türkiye in this equation is fundamental, since due to its geographical location, as well as its magnificent relationship with Azerbaijan, it is the perfect bridge to bring the Caspian hydrocarbons to Europe. Türkiye's role for Azerbaijani energy sector much exceeds that of a mere customer: Baku has found in Ankara the optimal partner to

bring its hydrocarbons to Europe without having to go through Russia, with Türkiye now occupying the role that used to be executed from Moscow. To begin with, it should be noted that Ankara is carrying out a series of measures and diplomatic moves calculated to turn the country into an energy corridor of global reference. Türkiye wants to establish itself as the regional energy corridor, and is not only focusing on serving as a bridge for Azerbaijani oil and gas, but also intends to be the gateway to Europe for Russian gas, Iraqi oil, Iranian gas and even Egyptian gas (Bilgin, 2007).

Map 2. Oil and gas transportation through WECT.



Source: Bilgin (2007, p.6384)

Southern Gas Corridor (SGC), which connects Baku with Europe through Türkiye, is more than 3,500 km long and consists of several major projects: the "Shah Deniz-II", already mentioned above, the aforementioned BTC, responsible for exporting oil, and the set of gas pipelines that carry gas from Azerbaijan to Europe, the Baku-Tbilisi-Erzurum (BTE), the Trans Anatolian and Trans Adriatic pipelines. It also extends through seven countries: Azerbaijan, Georgia, Türkiye, Bulgaria, Greece, Albania and Italy. For the most part, the course of the BTE, also known as the South Caucasus Pipeline, is the same as that of the BTC, except that the latter terminates at Erzurum, instead of Ceyhan. This pipeline, in addition to serving as a bridge to Europe, also allows Türkiye and Georgia to obtain Azerbaijani gas. Specifically, according to the contract signed by the parties, Türkiye is entitled to 610 mmcf/day, while Georgia has the right to acquire 77 mmcf/day (Bilgin, 2007).

All the gas transported through the BTE can be transported directly to Europe, since when it reaches Erzurum, it connects with the Trans-Anatolian pipeline, which, as the name indicates,

crosses Anatolia to reach an area near the Maritsa river, where, in turn, it connects with the Trans Adriatic gas pipeline to definitively supply gas to Europe. In addition, clear evidence of the success of the mega project is the cancellation of another one: the Nabucco pipeline, which intended to bring gas through Türkiye to Europe: in the end it was decided that the Trans Anatolian and Trans Adriatic pipelines were better options. The competitive advantages offered by the GSC in relation to Azerbaijan are not few, one of them being the price at which natural gas can be sold. For Türkiye, gas imported by the BTE from Shah Deniz (\$1.027/MBTU) is cheaper than Russian gas, which arrives through the Blue Stream at a price of \$1.58/MBTU (Bilgin, 2007). With its cost almost one-third lower, Azerbaijan's gas represents a market opportunity not only for Türkiye, but also for the rest of Europe, as they can buy a larger quantity at a lower price.

Beyond the very important role of gas in this equation, it is also worth noting that of oil which is not much less significant. Although it has been pointed out that the role of the BTC is mainly to export oil to Türkiye, it should also be noted that part of the oil that reaches Turkish shores is taken to Europe. Specifically, in the first half of 2023, 114 million barrels (more than 15 million tons) of crude oil exported by BTC reached Ceyhan, where they were loaded onto 158 tankers for both movement within the country, especially to the Bosphorus, and for export to third parties (bp, n.d.).

The Southern Gas Corridor is a key project for Baku's aspirations; the Caucasian country yearns to be a world energy reference, and Türkiye holds the key to the entrance to Europe, making the relationship between the two countries necessary for both countries. Moreover, Türkiye has a number of advantages stemming from its geographical location, since Azerbaijan is not the only regional player interested in having its hydrocarbons pass through Turkish territory. Be that as it may, the relationship between the two countries is, to say the least, beneficial for both parties, and they are only improving, consolidating Türkiye as a customer and a bridge for energy produced in the Caucasian country.

4. Georgia's role

Finally, to close the chapter dedicated to Türkiye as an important player for Azerbaijan's energy interests, it is worth highlighting, more briefly, the role played by Georgia in this equation. Georgia is the country of obligatory passage for hydrocarbons on their way to the Anatolian

peninsula, so its role is absolutely crucial for Baku. The case of Armenia stands alone, as it had been waging an open military conflict with Azerbaijan over the Nagorno-Karabakh region ever since the two countries gained independence. Due to this conflict, it was impossible for Azerbaijan to accept any kind of relationship with Armenia, and no less so in the field of energy. Moreover, relations between Türkiye and Armenia are also non-existing, due to the fact that Ankara has actively supported Azerbaijan in the Nagorno-Karabakh conflict and that the Turkish government has never condemned the so-called Armenian genocide that Yerevan claims to have been committed by the Ottoman Empire in 1915.

Azerbaijan's relations with Iran, though not reaching the full-fledged hostility level, have been consistently marked by significant controversies. The main reason for the tension between the two countries is the existence of historical Azerbaijani provinces in Iran, which are predominantly inhabited by Azerbaijanis, the largest (up to the 25% of the population) minority in the country. Obviously, the existence of this majority in certain territories is not a problem per se, but the feeling of marginalization that exists on the part of this ethnic group in the face of the policies of the Iranian central government, which certainly has strong reverberations in Baku. Moreover, Azerbaijan for a long time has been sustaining friendly relations with Israel, which is definitely not to Tehran's liking. The imposition of sanctions by the West, led by the United States, on Iran has had a very negative impact on Ankara, since Tehran had been its major trading partner. The sanctions became an insurmountable stumbling block for Iran in its aspirations to be part of the Europe-oriented energy projects (Herdem, 2023). All these limitations meant that Georgia became the only option for an Azerbaijani-Turkish tandem, the fact that triggered the development of a crucial regional triangle.

Energy relations between the two countries started off as early as they gained independence. In fact, in 1996 81% of Baku's exports to Tbilisi already consisted of oil (OEC (n.d.-a), a figure that had gradually decreased to 18.7% in 2021 (OEC, n.d.-b). However, it was not until 2002 that Azerbaijan began to export gas to the neighboring country, after a document was signed in 2001 that would change the history of diplomatic relations between the two countries: the Agreement on Transit, Transportation and Sale of Natural Gas In and Beyond the Territories of Georgia and Azerbaijan Through the South Caucasus Pipeline System (bp, 2001). In this document both countries agreed on the conditions of passage and sale of Azerbaijani gas to Georgian lands, establishing a maximum shipment through Tbilisi of 30 bcm per year (bp,

2001). Since then, Azerbaijan's energy importance for Georgia grew exponentially to the point that in 2021, 50.8% of Baku's exports to the neighboring country were gas (OEC, n.d.-b).

This fact only highlights one of the major problems of the Georgian economy, a country that lacks natural resources, which forces it to import the hydrocarbons needed to cover domestic demand. In addition, the country has a weak agricultural sector, which has forced it to look for alternatives to revitalize its economy. To make matters worse, the industrial sector in the country is rather limited, lacking the production of high-tech industrial products (Iqbal & Shah, 2015). These facts have caused Georgia to look for economic alternatives, finding in hydrocarbon transportation the source of income needed to revitalize the country's economic pulse.

Although the BTC project is, together with the BTE, the most important hydrocarbon transportation project in the country, it is certainly not the only one. Georgia currently has two other maritime terminals from which it transports Caspian oil to the rest of the world. Specifically, one of them is located in Supsa, and has a capacity of 200,000 barrels/day, while the other is in the important port of Batumi, also with the capacity of 200,000 barrels per day (Papava, n.d.). Even being an important source of revenue for Georgia, it is certain that both stations have a rather low ceiling, as they are projects in which Türkiye does not participate and, therefore, the Bosphorus route will always be the preferable path for hydrocarbons.

In addition, Georgia's role as a transit point for hydrocarbons to Europe has only increased thanks to the implementation of the aforementioned projects (BTC and BTE), which has had a very positive impact on the Caucasian country's economy. Specifically, tariffs for transporting oil through the territory have risen from \$0.89 per ton to \$1.86 (Eradze et al., 2002). This large increase of more than 100% has resulted in very large revenues, which are guaranteed until 2024 (Papava, n.d.). Moreover, forecasts state that during the next few years the Georgian national budget will be filled by \$2.5 billion, averaging 62.5 million per year (Eradze et al., 2002).

In addition to the absent domestic oil production, which it imports thanks to the BTC, Georgia, as mentioned above, also has a major gas demand issue, since it also has to import all its gas. For much of the post-Soviet period, Georgia was importing gas from Moscow, which was both a form of payment in kind by Russia for Georgian transit of Russian gas in the Armenian direction, as well as a direct economic investment by Tbilisi to Moscow (Pirani, 2018). This

paradigm has changed dramatically since 2006, when Georgia started importing most of the gas from Azerbaijan, due to the opening of the South Caucasus gas pipeline. This shift occurred for obvious political and strategic reasons, especially in view of the Russia-Georgia war of 2008, and, as a result, a series of actions were taken to reduce dependence on Russia and, subsequently, to try to westernize the country economically. Along these lines, the Georgian government agreed with Gazprom in 2018 to abolish Russia's payment in kind to Georgia for gas transportation services, reducing the deal to Georgia having to pay the full amount for the gas if it wished to do so (Pirani, 2018). Since then the country has considerably reduced its gas imports from Russia, specifically in 2021, Georgia imported 78.80% of its gas from Azerbaijan, while it imports 20.90% of its gas from Russia (OEC, n.d.-c).

Moreover, the consumption of Azerbaijani gas in Georgia will continue to increase. This is due to the fact that Gazprom sells gas at approximately \$185/mcm, while the price offered by Greenfields Petroleum, which operates with Socar, provides gas at \$94.99/mcm (Pirani, 2018). For this reason, we can understand that for Georgia, due to the large price differential between Russian and Azerbaijani gas and obvious political circumstances, it will always be preferable to purchase Azerbaijani gas, rather than Russian gas, which, in the long run, may mean a gradual increase in demand for Azerbaijani gas by Georgia to the detriment of Russian gas. However, there have been some attempts by senior Georgian officials to increase trade with Moscow. Specifically, during 2015 the Georgian government began negotiations with Gazprom, a Russian energy company, to increase gas trade between the two countries. The talks were initially secret, but the details soon leaked into the public sphere, being published by the Russian media, which reported on a meeting in Brussels between the Georgian Minister of Energy, Kakha Kaladze, and the CEO of Gazprom, Alexey Miller (Bakradze, 2022). Once it was made public, Georgian Energy Minister Kakha Kaladze claimed that the decision to negotiate with Gazprom was taken due to Azerbaijan's alleged inability to secure all the necessary gas supplies, as Georgia had increased its gas consumption by 27% in the last five years (Civil, 2015). In response to this claim, SOCAR was quick to flatly deny the minister's assertions, stating that Baku has the capacity to meet Tbilisi's gas needs (Gurbanov, 2016). During that year, Iham Aliyev visited Georgia, where he underlined Baku's capacity to supply gas, stating that it not only had the capacity to supply gas to Georgia, but to the whole of Europe (Gurbanov, 2016). The small bilateral crisis was finally closed with the visit of the Georgian president to Azerbaijan, during which both countries signed a Joint Declaration, in which both reaffirmed their trust and desire to continue cooperating (Report, 2015)

In this regard, it should be noted that Georgia's distancing from Russia in the energy sector is not based on irrational fear, but is a consequence of the coercive policies carried out by Russia against Georgia. Specifically, it is worth highlighting the events that took place between 2006 and 2008. In 2006, Russia decided to sabotage the pipeline that transported Russian gas to Georgia and the main electricity transmission line to Tbilisi, thus interrupting the flow of Russian gas and leaving the country in the dark. For obvious reasons, this caused an interruption that lasted for two weeks, leaving Georgia in a precarious situation in the middle of winter (Margvelashvili & Mukhigulishvili, n.d.).

In 2008, Russia sabotaged the BTC pipeline as it passed through Türkiye. Initially, the sabotage was seen as an isolated event in the context of growing tensions between Russia and Georgia. However, this thinking changed just three days later when war broke out between Russia and Georgia, linking the event to the start of the war between the two countries. Although, in the first instance the Kurdish PKK claimed responsibility for the attack, the truth is that later evidence began to be found that pointed to hypotheses that pointed to an attack by Moscow (Kucera, 2014).

Both situations have a common denominator: Azerbaijan's role as Georgia's energy backup in crisis situations. In neither of the situations mentioned, Georgia suffered major repercussions due to Baku's role as a supplier of hydrocarbons. In fact, in the contracts signed after the fact between the two countries, clauses have been added to provide Georgia with hydrocarbons in case of a sabotage by third countries (Margvelashvili & Mukhigulishvili, n.d.). In this regard, it is worth noting the geopolitical importance of Azerbaijan for Georgia, since increasing relations with Baku has meant for Tbilisi a necessary diversification of energy suppliers, thus increasing its energy security. Moreover, the fact that Russia has constantly sought to sabotage Georgia only serves to highlight the recent geopolitical role that Tbilisi has acquired, as a country that plays a fundamental role in ensuring that hydrocarbons from the Caspian reach Western Europe.

Finally, it should be noted that beyond the economic repercussions that these projects may have had for Georgia, what is clear is that, by choosing to join the BTC and BTE projects, it became part, together with Türkiye and Azerbaijan, of a group of countries that base their activity on the support of the United States and Western Europe. It is in the interest of both actors, but especially of the United States, that these countries take the decision to "westernize", since carrying out such a move implies, more or less directly, isolating Iran, as well as weakening

Russia's influence in the region, mostly to the detriment of Türkiye, which is the great regional power that is currently striving to expand its power.

Bibliography

1. Bakradze, N. (2022). Georgia buys more Russian gas as Azerbaijan imports fall. *eurasianet.org*. <https://eurasianet.org/georgia-buys-more-russian-gas-as-azerbaijan-imports-fall>
2. Bilgin, M. (2007). New prospects in the political economy of inner-Caspian hydrocarbons and western energy corridor through Turkey. In *Elservier*.
3. BM.GE. (2023). Azerbaijan to Ramp Up Natural Gas Exports to Turkey. *bm.ge*. <https://bm.ge/en/news/azerbaijan-to-ramp-up-natural-gas-exports-to-turkey/93285>
4. BOTAŞ. (n.d.). *Completed important projects / BOTAŞ - Boru hatları ile petrol taşıma anonim şirketi*. botas.gov. <https://www.botas.gov.tr/pages/completed-important-projects/507>
5. bp. (n.d.). *Baku-Tbilisi-Ceyhan pipeline / Who we are / Home*. bp.com. https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/pipelines/btc.html
6. bp. (2001). AGREEMENT Between Georgia and Azerbaijan Republic. In *bp.com*. https://www.bp.com/content/dam/bp/country-sites/en_ge/georgia/home/legalagreements/shaintergovazgeo.pdf
7. Civil. (2015). Georgian Energy Minister Meets Gazprom CEO in Milan. *civil.ge*. <https://civil.ge/archives/125023>
8. Eradze, G., Hudson, M., & Jinjolia, D. (2002). *Georgian Economics Trends*.
9. Gurbanov, I. (2016). GEORGIA'S ENDEAVOURS FOR ALTERNATIVE GAS SUPPLY: IMPLICATIONS FOR THE REGIONAL ENERGY MAP. *Naturalgasworld*. <https://www.naturalgasworld.com/georgia-alternative-gas-supply-implications-regional-energy-map-30216>
10. Herdem. (2023, June). Updated Sanctions Issued In May 2023 For Iran And Its Impact On Turkey. *mondaq.com*. <https://www.mondaq.com/turkey/export-controls--trade--investment-sanctions/1330580/updated-sanctions-issued-in-may-2023-for-iran-and-its-impact-on-turkey>
11. Hydrocarbons Technology. (2017, September 27). *Baku-Tbilisi-Ceyhan (BTC) Caspian Pipeline - Hydrocarbons Technology*. <https://www.hydrocarbons-technology.com/projects/bp/>
12. Iqbal, M. Z., & Shah, N. (2015). The Baku-Tbilisi-Ceyhan Pipeline: Political and Economic Impacts for the Region. In *Pakistan Institute of International Affairs*. Pakistan Institute of International Affairs.
13. Jafarova, E. (2020). Azerbaijani gas in Turkish market, perspectives for partnership. *EURACTIV*. <https://www.euractiv.com/section/energy/opinion/azerbaijani-gas-in-turkish-market-perspectives-for-partnership/>
14. Kardas, S. (2011). Turkish–Azerbaijani Energy Cooperation and Nabucco: Testing the Limits of the New Turkish Foreign Policy Rhetoric. *Turkish Studies*, 12(1), 55–77. <https://doi.org/10.1080/14683849.2011.563503>

15. Kucera, J. (2014). U.S. Intelligence: Russia Sabotaged BTC Pipeline Ahead Of 2008 Georgia War. *eurasianet.org*. <https://eurasianet.org/us-intelligence-russia-sabotaged-btc-pipeline-ahead-of-2008-georgia-war>
16. Margvelashvili, M., & Mukhigulishvili, G. (n.d.). Energy Security Georgian Perspective. In *weg.ge*. http://weg.ge/sites/default/files/energy_security_georgia_perspective.pdf
17. Murinson, A. (2008). AZERBAIJAN-TURKEY-ISRAEL RELATIONS: THE ENERGY FACTOR. In *Middle East Review of International Affairs* (Vol. 12, Issue 3).
18. OEC. (n.d.-a). *Exports from Azerbaijan to Georgia (1996)*. oec.world. <https://oec.world/en/profile/bilateral-country/aze/partner/geo?dynamicBilateralTradeSelector=year1996>
19. OEC. (n.d.-b). *Exports from Azerbaijan to Georgia (2021)*. oec.world. <https://oec.world/en/profile/bilateral-country/aze/partner/geo?dynamicBilateralTradeSelector=year2021>
20. OEC. (n.d.-c). *Georgia Imports (2021)*. oec.world. <https://oec.world/en/profile/country/geo?yearlyTradeFlowSelector=flow1>
21. Olikier, O., & Szayna, T. (2003). *Faultlines of Conflict in Central Asia and the South Caucasus. Implications for the U.S. Army*.
22. Papava, V. (n.d.). *5. The Baku-Tbilisi-Ceyhan Pipeline: Implications for Georgia*.
23. Pirani, S. (2018). Let's not exaggerate: Southern Gas Corridor prospects to 2030. In *ora.ox.ac.uk*. https://ora.ox.ac.uk/objects/uuid:a7a07716-6a6e-4255-b6cc-59c4eb37c9d6/download_file?file_format=application%2Fpdf&safe_filename=Lets-not-exaggerate-Southern-Gas-Corridor-prospects-to-2030-NG-135.pdf&type_of_work=Working+paper
24. Report. (2015). Azerbaijani and Georgian presidents signed a Joint Declaration. *Report.az*. <https://report.az/en/foreign-politics/azerbaijani-and-georgian-presidents-signed-a-joint-declaration/>
25. Reuters. (2021, October 14). Azerbaijan has signed new gas deal with Turkey, energy minister says. *reuters.com*. <https://www.reuters.com/article/azerbaijan-turkey-gas-idUKL1N2RA0S7>
26. Rzayeva, G. (2015). The Outlook for Azerbaijani Gas Supplies to Europe: Challenges and Perspectives. In *OIES*. OIES.
27. Rzayeva, G. (2018). Gas Supply Changes in Turkey. In *The Oxford Institute for Energy Studies*.
28. Schaefer, L. (2006). The BTC Pipeline: a beacon of Hope or Suffering for the people? In *Covalence*. <https://www.covalence.ch/docs/BTCpipeline.pdf>
29. Total Energies. (2014). Azerbaijan: Total sells its 10% stake in Shah Deniz to TPAO. In *totalenergies.com*. <https://totalenergies.com/media/news/press-releases/azerbaidjan-total-vend-sa-participation-de-10-dans-shah-deniz-tpao>

CHAPTER 3: Azerbaijan's energy strategy in the Balkans

1. Balkan-Azerbaijan Relationship

Soon after establishing its presence in the regional energy markets, Azerbaijan has started to aim at expanding its hydrocarbon exports to European countries. This strategy gained a new momentum after the outbreak of the war in Ukraine, when many countries of the old continent began to look for energy alternatives to reduce their dependence on Russia. In this context, the Balkans are emerging as potential buyers due to their relative geographical proximity, especially when compared to countries such as France, and also because of the existence of the Southern Gas Corridor, which greatly facilitates exports to the region.

To this fact, it should be added that the Balkans are at a crossroads; on one hand, as indicated above, they are seeking to reduce their dependence on Moscow, seeking a diversification of gas suppliers and, on the other hand, they are under pressure from the other European countries to change their energy model, since non-renewable energies, but especially coal, occupy a very important place in the energy supply of certain countries in the region.

The Balkan countries have rather limited reserves of fossil fuels, so historically they have always had to make use of their abundant coal deposits, as well as their many water resources. However, there are some exceptions in the region, such as Romania and Croatia, which rely heavily on local oil and gas production. In addition, there are three nuclear power plants in the region, namely in Bulgaria, Romania and Slovenia, which helps the region to somewhat strengthen their energy security. Beyond the aforementioned countries, there are also some with a high dependence on coal, notably Serbia and Macedonia, where it represents more than 50% of the energy supply (Global Energy Monitor, 2021) or, of Bosnia, where the respective figure amounts to even a more worrying 67.9%, according to the 2020 data (Ibraković, 2022). To the energy issues of the region, it is also worth adding the case of Montenegro and Kosovo, countries that lack gas networks and, moreover, are not connected to any external gas network.

In this context, a few countries are currently seeking to expand their links, or even create them, with Baku, since the energy offer that Azerbaijan is putting on the table is difficult for the Balkan countries to refuse, due to the quantities produced by the Caspian country and the reliability it offers as a supplier.

2. Southern Gas Corridor

Due to all of the above, it is not surprising that the Balkan countries' relations with Baku are growing exponentially, being still in an incipient phase and possessing significant untapped potential. In this framework, the Southern Gas Corridor is fundamental, since it provides a solid foundation for the development of mutually beneficial energy cooperation.

As explained above, TANAP is a gas pipeline that crosses Türkiye to supply Azerbaijani gas to European customers, previously taken from the Shah Deniz gas field and taking it to Eskisehir and Trakya, passing through Georgia via the BTE. The final stop for the gas coming from Baku is at the Turkish border with Greece. This is crucial for energy relations between Azerbaijan and Europe, as the entire infrastructure base is in place, meaning that only a small section of the new pipeline needs to be laid for the Azerbaijani gas to reach the destination. Beyond that, some of the gas that reaches Türkiye is already exported to certain European locations in the region thanks to a project directly connected with TANAP: the Trans Adriatic Pipeline.

The TAP project was presented in the past decade, and was chosen by the parties over the then-cancelled "Nabucco". In 2013, various parties chose the construction of the TAP so that Azerbaijani gas could for the first time reach European markets. The TAP has a length of 877 km, of which 772 km run over land, while the other 105 km run over sea (Trans Adriatic Pipeline, n.d.-c). The pipeline, which became operational in 2020, has a capacity of 20 bcm/y at its maximum capacity, being an important supply channel, although its current operational capacity is 10 bcm (Trans Adriatic Pipeline, n.d.-a). It runs from Türkiye to Italy, passing on its way through Greece and Albania, which also benefit from the project.

The ownership of the pipeline is also divided, with BP, SOCAR and Snam Rete Gas S.p.A. being the majority owners, with a 20% share each (Rubino, 2020). In this regard, it is worth mentioning the role of SOCAR, the Azerbaijani state-owned company, which, thanks to its investments in energy, has a very positive impact on the country's economy. The list of owners is completed by Fluxys (19%), Enagas (16%) and Axpo Trading (5%) (Rubino, 2020).

Taking into account the structure of the present research, it is convenient to make a distinction between the countries that enjoy TAP, as well as certain relations with Azerbaijan. On the one hand we have Italy, a case that will be analyzed in the Western Europe section, while on the other hand there are Albania and Greece to be addressed below.

Before going fully into the Greek role in the TAP, it is worth noting that there was an earlier project that already connected Azerbaijani gas to Greece: the Türkiye-Greece Interconnector (ITG). This interconnector was inaugurated in 2007 by Prime Ministers Erdogan and Karamanlis, and was intended to transfer 750 million cubic meters of gas from Shah Deniz Phase 1 (Livianos, 2015). This project, initially, had not been formally intended to establish a direct contact between Baku and Athens, but rather an indirect connection, since, formally, Greece was buying Azerbaijani gas from Türkiye, obviously, for a higher price than the one Baku had envisaged for Ankara. This changed in 2011, when Azerbaijan and Türkiye agreed on a transit tariff, so that Azerbaijani gas could flow directly to Europe (Government of the Republic of Turkey & Government of the Republic of Azerbaijan, 2011).

The ITG, hand in hand with the agreement between Azerbaijan and Türkiye, paved the way for the planning of the TAP. The signing of an agreement between Greece, Italy and Albania in Athens in 2012 gave TAP a legally binding character. This agreement, although not definitive, was the officialisation of a common proposal by the European countries to carry out the project. Even so, a key point was still missing to carry out the construction of the pipeline; the Shah Deniz consortium had to choose between the TAP or the Nabucco plans. The final answer came in 2013, when the Shah Deniz consortium selected TAP as a preferred pipeline to connect to TANAP at the Turkish-Greek border.

Hand in hand with the selection of TAP for the Southern Gas Corridor project, there were more events that paved the way for the Greek-Azerbaijani cooperation. The first of these was the acquisition of DESFA by SOCAR. DESFA was the Greek state-owned company operating natural gas transportation in the country, which, as a consequence of the international bailouts of Greece, had to be privatized. In this context, SOCAR reached an agreement to acquire 66% of the company, although, due to the EU-imposed conditions for competition, it had to reduce its share to 49% (Staff, 2016). Another noteworthy event was the offer Greece made to Azerbaijan, of access to the Mediterranean Sea through its LNG terminal located in Revithousa, which is operated by DESFA. Thanks to TAP, Greece has benefited from direct investment of \$2 billion, in addition to the creation of some 8,000 temporary jobs and 2,000 permanent jobs (Tsurkov, 2016).

Although TAP has had quite a few positive effects in Greece, including diversification of gas sources, job creation, increased foreign investment etc, it was facing significant resistance, including from farmers in the country (something that would also happen in Albania)

(Lihtenvalner et al., 2018). When farmers learned that the route of the pipeline was going to pass over some fertile lands, protests were not long in coming. Some farmers, such as those in the city of Kavala, were offered compensation, but felt that the sums offered were not sufficient (Ram & Shoraka, 2017). Greek farmers began to stage protests across the country, but especially in the northeastern part. On some occasions, groups of farmers even attempted to block the pipeline, although their initiative was unsuccessful (Lihtenvalner et al., 2018).

Within the framework of the TAP project, it is also worth mentioning the Albanian case, which, although it is not as far-reaching as the Greek one, is still relevant. Undoubtedly, the TAP project has been one of the most important ones in the country's history, since, despite having some crude oil production, Albania mostly covers its consumption demands through importing significant quantities of gas. Beyond that, as the Prime Minister of Albania Edi Rama rightly pointed out, the TAP represents a strategic project and an important milestone for the future of the country (see 1). The construction of the pipeline has meant an increase in the geopolitical status of the country, as TAP for the first time has put Albania on the map of international gas routes. In addition, TAP enabled Albania to gain political credibility in order to be a participant in the European Union's Energy Security Strategy.

As in the Greek case, TAP has also meant an economic improvement for the country, since the project entailed an investment of more than \$1.12 billion, which gave a boost to the Balkan economy, as well as setting a positive precedent for foreign investment. But, undoubtedly, one of the great consequences of the construction of the TAP on Albanian lands has been the opening of the door for the possible construction of the Ionian Adriatic Pipeline (IAP), which, as planned, will connect the Albanian city of Fier with Split (Croatia), turning Albania into a relevant energy player for the region (IAP - Three Seas, 2022).

As we can see, the benefits offered by the construction of the TAP for Albania are rather geopolitical and economic. This is because Albania is a country with very large hybrid resources, being the second country in Europe in terms of reserves per capita. Currently, more than 95% of Albania's energy use comes from hydroelectric power plants, making the country part of an exclusive group: that of countries that produce and consume energy mainly from clean sources. However, it is worth noting that the country exploits only one third of its hydropower potential. In line with the discussion on hydropower, one of the most important projects in the country is the Devoll River hydropower plants, which were built and are operated by Statkraft, the largest European producer of renewable energy (Roca, 2020). The

project has three hydropower plants in the Devoll Valley, with a capacity of 243 MW (Roca, 2020). Once the plants are operating at full capacity, they will produce about 700 GWh per year, increasing the country's production by almost 17% (Roca, 2020). Another of the country's energy projects is the new 97 MW thermal power plant, which has a budget of \$112,66 million and has the capacity to convert oil to natural gas, which although it has been built, is not yet operational. (The Inspection Panel, 2007).

As previously mentioned, Albania stands out for having some oil production, as the country is home to the Patos-Marina oil field, the largest onshore oil field in Europe. It is estimated that the field has reserves of 5.2 billion barrels of oil, with an average production of 21,000 barrels per day, which makes oil one of the most exported raw materials by the country (Lani, 2015). Specifically, in 2021 oil was the fourth most exported product with a 5.85% share, just slightly behind electricity (5.86%) (OEC, n.d.). In this regard, it is worth noting the role of Bankers Petroleum, a Chinese-owned Canadian company, which contributes 40% of the country's total Foreign Direct Investment, having invested billions of dollars in the last decade (Tirana Times, 2015). As can be seen, unlike the Azerbaijani case, the dominant company in the hydrocarbon sector in the country is not national, which explains the fact that the Albanian government has considered privatizing or restructuring the state oil company, Albpetrol.

At the gas level, the country does not have large gas reserves; in fact, according to the U.S. International Trade Administration, the country's proven gas reserves are about 5.7 bcm (International Trade Administration, 2021). In addition, the internal distribution network is rather scarce, since it is limited to connecting the extraction points in the south of the country with domestic consumers: thermal plants, fertilizer producers, steel plants (Lani, 2015).

However, the country wishes to improve the national gas connection through a renovation of the system, as well as to become a relevant player in the regional energy field, as demonstrated by the IAP. Therefore, the construction of the TAP and the intensification of relations with Azerbaijan are of particular interest to the country. In line with this idea, the President of Albania, Bujar Nishani, stated in 2012: "The Trans-Adriatic gas pipeline is very important for Albania. Albania will offer the maximum commitment. In Albania, TAP will find a safe place and a very good environment to carry out this project" (ACM, 2012). The TAP spans Albanian lands over 209 km on land and 60km on the Albanian section of the Adriatic, from Bilisht Qendër in the Korça region and up to the northern coastal area of Fier (Trans Adriatic Pipeline, n.d.-d).

The mere construction of the TAP, just as it happened in the case of Greece, already helped Albania to generate, through direct, indirect and induced effects, 408 million dollars (Oxford Economics, n.d.). In addition, during the construction of the pipeline, approximately 9,900 jobs were created or supported annually (Oxford Economics, n.d.). Moreover, indirectly, the construction of the TAP has created jobs in communications, transportation, utilities etc. In addition to the figures presented, it is also expected that during the 50-year lifetime of the project, TAP will generate \$872 million to contribute to the Albanian GDP (Papadopoulou et al., 2015). Beyond its indirect and direct benefits already obtained, TAP is intended to be the cornerstone for the comprehensive gasification of the country. As indicated above, the Albanian network for gas distribution is very underdeveloped, as it hasn't historically relied much on gas consumption. For their daily energy needs Albanians mostly rely on electricity, as it is used in all areas, including for cooking and heating in the cold Tirana winter. For these reasons, TAP has not only meant a great improvement in the country's economy, but has also been the first step towards its gasification.

Albania, although a small market, is an important transit corridor, which has the potential to be a regional energy hub. In fact, Albania is lobbying, together with Croatia, for the construction of the Ionian Adriatic Pipeline (IAP). Consequently, the entry into action of the TAP has meant an exponential improvement in the country's energy security, since it has allowed the country to reduce its dependence on hydroelectric power plants. Another important benefit that the relationship between the two countries may bring to both of them, is SOCAR's rapprochement with Albania. Specifically, the two governments have reached an agreement for SOCAR to carry out works to provide the country with gas infrastructure, since, as mentioned above, the Balkan country's structure was meager to say the least (AzerFocus, 2023). In addition, as mentioned above, the project has given Tirana a geopolitical importance never seen before, increasing its strategic leverage in regional affairs.

The other major project carried out in the Balkans by Azerbaijan is the Greece-Bulgaria Gas Interconnector. The project in question is intended to supply the Bulgarian market with gas from the Shah Deniz via Greece. The starting point of the pipeline, which is reflected in the Bulgargaz Gas Sales Agreement (GSA), is the town of Komotini, in northern Greece, being a point close to the Bulgarian border, making its way to Malko Kadievo, near Stara Zagora. The company managing the gas transport is Bulgaria's Bulgargaz, which is responsible for the transit, as well as having been in charge of carrying out the construction of the necessary infrastructure.

The project has been fundamental for Bulgaria to diversify its gas imports, as prior to its existence Russia had a monopoly on gas exports to the Balkan country. Plevneliev, the Bulgarian president during the construction of the IGB, was clear about this vision, as evidenced by the following statements: "The Southern Gas Corridor will be the end of a long-standing dependency. This project will also be important from the point of view of competitiveness and will offer a fair price" (Mikayilov, 2014). In this sense Heydarov, the SOCAR representative, stated that "Bulgaria is one of the key participants in the Southern Gas Corridor and a reliable partner in the realization of alternative gas deliveries to Europe from the Shah Deniz field in Azerbaijan and potentially from the other fields as well as from the other producing countries (such as Romania, Serbia and other countries in Europe)" (Bulgartransgaz, n.d.).

Highlighting this last aspect, it is worth mentioning that Bulgaria has already started to take advantage of its potential to distribute Azerbaijani gas to neighboring countries, such as Serbia. Officially, the Serbia-Bulgaria Interconnector has been inaugurated, being a project whose purpose is to bring Azerbaijani gas to the city of Niš in Serbia. The pipeline in question ends in the aforementioned city, connected at its beginning to the Bulgarian system, from which it imports Azerbaijani gas. The pipeline in question has the capacity to transport 1.8 bcm of Azerbaijani gas per year, which is equivalent to 60% of the total Serbian consumption (EU Delegation to the Republic of Serbia, n.d.). Before Azerbaijani gas reached Belgrade, the country had had only two supply routes; the Serbian-Hungarian gas pipeline and the Balkan Stream Pipeline, both of them carrying Russian gas to Belgrade. In this sense, the Serbia-Bulgaria interconnector has been perceived as an opportunity to diversify Serbia's gas sources, bringing about a "westernization" of gas sources. For this reason, the EU has been more than actively involved in bringing the project to fruition, by supporting it not only politically but financially as well. Specifically, the interconnector has received a grant of EUR 49.5 million from the European Union, while the European Investment Bank (EIB) has made a loan of EUR 25 million euros with favorable conditions (WBIF, n.d.). Therefore, it is possible to state that the project in question has been of great interest to the EU, since it has allowed it to increase its influence in the Balkan country, as well as being advantageous for Bulgaria, which is beginning to benefit from its gas connection with Baku, and for Azerbaijan in terms of increasing its energy influence in the region.

Back to the Greece-Bulgaria Gas Interconnector, as a project designed, in part, to reduce the countries' energy dependence on Russia, the EU did not hesitate to support it from the outset.

In a gesture of confirming political will, Brussels earmarked EUR 84 million to finance the project, the total cost being \$240 million, so the EU took over 35% of the cost. This endowment was made possible by the inclusion of the connector in the European Commission's list of Projects of Common Interest, reaffirming its huge geopolitical importance. In addition to the direct contribution from the EU, it should be noted that a further EUR 110 million was provided in the form of a loan from the European Investment Bank. Although the project was scheduled for completion in 2020, due to certain technical problems it took until October 2022 for the connector to start operating (Reuters, 2022).

The TAP consortium committed to supply Bulgaria with 1 billion cubic meters (bcm) of gas, with 3.3 bcm being consumed by the country in total in 2021, so Azerbaijani gas accounts for approximately 30.3% of annual gas consumption (International Trade Administration, n.d.). The number in question is far below the IGB's export potential, as it has the capacity to export up to 3 bcm per year, which, if that were not enough, is expandable up to 5 bcm per year. Beyond the business around the IGB and Azerbaijani gas, SOCAR and Bulgartransgaz have also held talks about the possible expansion of the gas storage facility in Chiren, the only one in the country. These talks caused Moscow's anger, as, prior to the IGB's operability, Bulgaria's lack of gas storage capacity made the country totally dependent on uninterrupted supplies of Russian gas.

The IGB interconnector perfectly represents Baku's efforts to establish itself as the energy benchmark in the Balkans, seeking to gasify countries that still lack their own gas infrastructure, or to help improve the energy security of those that are, or were, overly dependent on Russia. In addition, such moves are viewed with great favor by the European Union, as they represent steps forward in the loss of Russia's geopolitical weight, to the detriment of the West and its allies, a list which Azerbaijan has recently joined.

3. New connections

In addition to the projects already in operation, it is certain that both Azerbaijan and the Balkan countries have an interest in continuing to work closely together to bring the Caspian gas to European territory, thus helping to improve Western energy security. This strategy finds its expression in the Ionian Adriatic Pipeline (IAP)- the project that aims to bring Azerbaijani gas to Croatia, Montenegro and Bosnia-Herzegovina through the Southern Gas Corridor; the city of Fier, Albania, is set to be the destination port for the gas, with Split, Croatia, envisaged as the final destination of the pipeline. The IAP would run some 515 km through the

aforementioned countries, and, once it reached Split, it would connect with the Croatian gas pipeline network, while a branch would take part of the gas to Bosnia-Herzegovina. It should be noted that the IAP is actively supported by the TAP consortium, the governments of the countries involved and the state-owned companies of Croatia and Bosnia-Herzegovina (Plinacro and BH-Gas). These bodies have signed several declarations, memoranda of understanding and agreements of intent over the last decade, the ultimate aim of which is to promote the project.

Moreover, the IAP's geopolitical importance is not specifically limited to the increase of Azerbaijan's influence in the region through a new gas pipeline system aimed at transporting Azerbaijani gas to the Balkans; this pipeline opens the door to the possibility of facilitating the creation of the Western Balkans Gas Ring, a project aimed at aligning the energy interests of the Western Balkans by creating a gas distribution system between the countries involved, thus guaranteeing them power generation and gas supply. The IAP falls under the Ionian-Adriatic initiative, which aims to materialize the desire to have structural interconnectivity in Southeastern Europe, in what is known as SEE. Obviously, the countries most interested in seeing the IAP and the other structures belonging to the SEE come to fruition are those directly involved in the project, but, nevertheless, there are others that are closely watching its progress. This is the case of the Central European countries, although in general there is a desire on the part of most EU countries for the project to be carried out. The interest in the project is due to the fact that, if the project materializes, it would establish the shortest gas transport route between Eurasia and Central Europe. Specifically, the countries that are pushing hardest for IAP to happen are those located on the shores of the Ionian and Adriatic Seas, as well as Greece and Italy, which would also derive significant benefits from the infrastructure.

The IAP intends to connect the TAP in Albania with Croatia via Montenegro, bringing gas from Shah Deniz II. The project would have the capacity to transport 5 bcm of gas (Plinacro, n.d.). It would be distributed as follows: 1 bcm/y for Albania, 0.5 bcm/y for Montenegro, 1 bcm/y for Bosnia and Herzegovina and 2.5 bcm/y for Croatia (Plinacro, n.d.). Another country for which the completion of this pipeline would be very important is Bosnia-Herzegovina, which is being targeted by the EU because of its extreme dependence on coal, which clashes head-on with European pollution reduction targets. For this reason, Sarajevo needs the construction of the IAP, as it is the only possible way to carry out the gasification of the country. In fact, the Ionian-Adriatic Gas Pipeline Feasibility Study establishes the IAP as the only option for the gasification of Bosnia, as other projects have been considered problematic due to their

inescapable passage through the territory of Serbia, being the case of the already canceled South Stream.

In addition to this, Bosnia's domestic political complexity should not be discarded: it is divided between the Federation of Bosnia and Herzegovina and the Republika Srpska. Each entity has a very different strategy in terms of energy security and there is no indication that this will change in the short term. The Federation of Bosnia and Herzegovina, as mentioned above, has a clear preference for the TAP and IAP projects, while the Republic of Srpska initially supported the now canceled South Stream project. Once the cancellation of the South Stream was announced in 2014 (Korsunskaya, 2014), the Serbian republic became more favorable towards the TAP and IAP projects, although the move in question, for obvious reasons, was not made just out of goodwill.

Beyond the different opinions within Bosnia and Herzegovina, what is certain is that the government in Sarajevo, representing both sides, is in favor of joining the Croatian pipeline at Slavonski Brod. This move is based on the fact that it would be much more in the country's interest to depend on Croatia than on Serbia. Despite the fact that the presidents of Republika Srpska have often opposed the idea, the country's intention to join the project is more than evident, so it is interesting for Azerbaijan to be in charge of gasification in a country heavily dependent on coal, as it would further increase its influence in the Balkans.

Another actor for which the project is of interest is Montenegro, given its status as a transit country. Although Montenegro lacks oil and gas reserves, it has coal deposits, mainly in the Pljevlja region (184,5 million tons) and the Berane basin (158m tons, of which only 18.5m tons are exploitable), which can satisfy domestic demand (Ministry for Economic Development of Montenegro, 2007). Still, the country is totally dependent on imports of petroleum products, most of which come from Greece through the port of Bar. To make matters worse, the country has no oil-refining facilities, so it does not import crude oil. Renewable energy also plays a major role for the country, with biofuels and hydropower covering more than 30% of the country's total energy demand. The country's largest hydroelectric power plants are Martin, with a capacity of 342 MW, and Perucica, with a capacity of 307 MW. In this regard, it is worth noting that Montenegro, since 2010, given favourable weather conditions, has no need to import electricity (Bankwatch, 2023).

As to natural gas, Montenegro lacks a gas market and infrastructure for its import, so gasification could be a great option to diversify its energy mix, which, as mentioned above, is

composed of coal and oil (European Commission, 2015). In this sense, Montenegro has a great opportunity to gasify with the possible passage of the Southern Gas Corridor. The gasification of the country would allow adding a new figure to the energy mix, reducing its dependence on coal and oil, which, in addition, are pollutants, so it is not surprising that the European Union is also enthusiastic about the idea.

The opportunity to gasify the country has led Baku to consider Montenegro one of the most promising markets for Azerbaijani investments. In addition, Azerbaijan hopes to take advantage of the energy cooperation between the two countries to make other types of investments in the country, as the growth of the tourism sector in the warm European country represents a great opportunity for Azerbaijani companies. In fact, by 2020 Azerbaijan had been the largest investor in the Montenegrin economy, having injected EUR 700 million, with SOCAR being the main investor (MD Reality, 2020).

The last IAP destination is Croatia, the largest gas user and the second largest oil consumer in the Balkans. The importance of gas for Croatia is amply supported by the fact that the country has approximately 24,9 bcm of proven natural gas reserves (Index Mundi, 2008). The country's largest fields are located near the town of Molve in the north of the country, where about 70% of Croatian gas is produced (INA, n.d.). Despite having relatively large reserves, the annual production is 0.78 bcm, which allows 30% of the total domestic demand (2,7 bcm) to be covered (Total Croatia News, 2023). Hence, Croatia needs IAP to cover its domestic gas demand, as it obtains just a small part of the total consumption from domestic production, while the remaining percentage is obtained thanks to imports from other European countries, with Italy having the most weight in the matter. The primary reason why Zagreb is seeking to implement the project is that it would strengthen its role in the European Union, as well as contribute to Zagreb's goal of becoming a regional energy hub. Consequently, the IAP will also have an impact on the country's energy development, as the pipeline would provide Croatia with a reliable supply of gas to meet domestic demand, in turn bringing down prices. In addition, it is worth noting the importance of the Southern Gas Corridor in partially replacing Russian gas with Azerbaijani gas, improving the country's energy security.

Although the IAP is the Croatian government's most ambitious project to become a regional benchmark, it is not the only one in which Zagreb is involved. In addition to that project, the government of the Adriatic country has carried out the construction of the Hrvatska LNG station, located on the island of Krk. The station in question was completed in 2021, with a

maximum annual capacity of 2.6 million cubic meters (mcm) of gas, which will be used both to supply the Croatian network and for export to other countries such as Hungary, Slovenia, Italy, Serbia and Montenegro (European Commission, 2021).

Croatia represents a significant interest for Azerbaijan as a good opportunity for its gas to reach one more EU country. In addition, Croatia's position on the map represents a geopolitical advantage, as it is an optimal geographical position for gas exports to other Central European countries. Baku's interests in the region are not limited to energy, as the country's long coastline is perceived as a potential investment location for Azerbaijani companies (Azertac, 2014). The project in question is deeply linked to the TAP, the same being an important part for the energy security of the region. In this sense, the TAP consortium has already signed Memorandums of Understanding and Cooperation with the energy companies in charge of managing the project in each country being the same: Plinacro in Croatia, BH-Gas in Bosnia-Herzegovina and Montenegro Bonus, and the top leaders of the places in question (Global Energy Monitor, 2022). It is also worth noting that in 2013, the leaders of the four countries in question signed an agreement to carry out the construction of the TAP and the IAP, the former being already a reality (Natural Gas World, 2013).

The predisposition shown by the different countries continues to be translated into action. In 2016 a Ministerial Memorandum of Understanding and Cooperation was signed between the countries involved, this being a document that includes the creation of the Project Management Unit (PMU). The PMU is formed by the different ministers of each of the countries, in addition to the representatives of SOCAR (Three Seas, n.d.). One of the most relevant meetings of that group was in 2018, when a Letter of Intent was signed to establish an IAP Project Company. Currently, the project is still stuck the feasibility study phase, which were submitted back in 2014, the most important being the one carried out by the Western Balkans Investment Framework, called "Regional Project Ionic Adriatic Pipeline", in which the project is declared as viable and an important pillar for the gasification of the Balkans (WBIF, 2016). In this sense, Montenegro and Albania have yet to submit their final design studies (Energy Community, n.d.). In this aspect, we can highlight that Croatia has already submitted its Detailed Plan for sections 1 and 2 of the project, while the one for section 3 has not yet been submitted, while in the case of Montenegro and Albania, none of the three plans have been submitted (Energy Community, n.d.). In the aspect of the necessary licenses to carry out the project, Croatia has managed to obtain the licenses for the three sections of the pipeline, representing a big difference with Montenegro and Albania that have not yet obtained the necessary permits

(Energy Community, n.d.). Although it may seem that the project will suffer significant delays, according to current projections, the pipeline is expected to be operational by 2025 or 2026 (Three Seas, n.d.).

The IAP project, if it comes to fruition, will be extremely beneficial for all parties. From the Azerbaijani point of view, the pipeline would mean a considerable increase in gas exports to Europe, increasing Baku's area of influence. Moreover, Azerbaijan would be in charge of building the necessary networks to gasify Balkan countries, not to mention that they would have a large share in gas imports from those countries. From the point of view of the Balkan countries, they would gain a solid framework for gasification, something extremely necessary to improve their energy security, besides being something very well seen by the EU, since it would help to reduce pollution. Therefore, all parties are extremely interested in the project to be carried out.

Bibliography:

1. ACM. (2012). CoE Chair, Albanian President Nishani to EuroFora : Trans-Adriatic Pipeline important for EU+. *Euro Fora*.
<http://www.eurofora.net/newsflashes/news/albanianpresidentonpipeline.html>
2. AzerFocus. (2023, July 10). *SOCAR is assigned a crucial role in the gasification of Albania*. Azerbaijan in Focus. <https://azerfocus.com/socar-is-assigned-a-crucial-role-in-the-gasification-of-albania/>
3. Azertac. (2014). *Croatia and Azerbaijan intensify bilateral cooperation*. AZERTAC.
https://azertag.az/en/xeber/croatia_and_azerbaijan_intensify_bilateral_cooperation-90098
4. Bankwatch. (2023, January 24). *The energy sector in Montenegro*.
<https://bankwatch.org/beyond-fossil-fuels/the-energy-sector-in-montenegro>
5. Bulgartransgaz. (n.d.). “Bulgartransgaz” EAD and SOCAR signed a Memorandum of Understanding. *Bulgartransgaz.bg*. <https://www.bulgartransgaz.bg/en/news/cdp-317.html>
6. Energy Community. (n.d.). Gas_16 / Ionian Adriatic Pipeline (Fier, AL - Split, HR). In *energy-community.org*. <https://www.energy-community.org/regionalinitiatives/infrastructure/PLIMA/Gas16.html>
7. EU Delegation to the Republic of Serbia. (n.d.). *Gas Interconnector Serbia-Bulgaria*. europa.rs. <https://europa.rs/gas-interconnector-serbia-bulgaria/?lang=en>
8. European Commission. (2015). Montenegro 2015 Report. In *European Commission*.
https://neighbourhood-enlargement.ec.europa.eu/system/files/2018-12/20151110_report_montenegro.pdf
9. European Commission. (2021). First Croatian LNG terminal officially inaugurated in Krk island. *Wayback*. <https://wayback.archive-it.org/12090/20221222160612/https://ec.europa.eu/inea/en/news-events/newsroom/first-croatian-lng-terminal-officially-inaugurated-krk-island>
10. Global Energy Monitor. (2021). *Serbia and Coal*. gem.wiki.
https://www.gem.wiki/Serbia_and_coal
11. Global Energy Monitor. (2022). Ionian Adriatic Gas Pipeline - Global Energy Monitor. *Global Energy Monitor*. https://www.gem.wiki/Ionian_Adriatic_Gas_Pipeline#cite_note-declaration-16
12. Government of the Republic of Turkey & Government of the Republic of Azerbaijan. (2011). INTERGOVERNMENTAL AGREEMENT THE TRANS ANATOLIAN NATURAL GAS PIPELINE SYSTEM. In *Policy.Asiapacificenergy*.
<https://policy.asiapacificenergy.org/sites/default/files/Trans%20Anatolian%20Natural%20Gas%20Pipeline%20System%20Intergovernmental%20Agreement.pdf>
13. *IAP - Three Seas*. (2022). <https://projects.3seas.eu/projects/iap-ionic-adriatic-pipeline>
14. -Ibraković, M. (2022). *Bosnia and Herzegovina: dismantling monopolies in the green transition*. eu.boell.org. <https://eu.boell.org/en/2022/03/07/bosnia-and-herzegovina-dismantling-monopolies-green-transition>
15. INA. (n.d.). *Molve Plant*.
<https://web.archive.org/web/20101006095108/http://ina.hr/default.aspx?id=478>
16. Index Mundi. (2008). *Croatia Natural gas - proved reserves*. indexmundi.com.
https://www.indexmundi.com/croatia/natural_gas_proved_reserves.html

17. International Trade Administration. (n.d.). *Bulgaria - Oil and gas*. Trade.gov. <https://www.trade.gov/energy-resource-guide-bulgaria-oil-and-gas#:~:text=The%20domestic%20consumption%20of%20natural,a%20coastal%20terminal%20in%20Greece.>
18. International Trade Administration. (2021). Albania- Country Commercial Guide. *trade.gov*. <https://www.trade.gov/country-commercial-guides/albania-oil-and-gas>
19. Korsunskaya, D. (2014, December 1). Putin drops South Stream gas pipeline to EU, courts Turkey. *Reuters*. <https://www.reuters.com/article/us-russia-gas-gazprom-pipeline-idUSKCN0JF30A20141201>
20. Lani, R. (2015). Albania and Azerbaijan: New Partnership, New Possibilities. In *Azerbaijan and the New Energy Geopolitics of Southeastern Europe* (pp. 233–272). The Jamestown Foundation.
21. Lihtenvalner, K., Mejdini, F., & Birn. (2018, October 29). Greek, Albanian Farmers Unite Against Adriatic Pipeline. *Balkan Insight*. <https://balkaninsight.com/2018/03/28/greek-albanian-farmers-unite-against-adriatic-pipeline-03-16-2018/>
22. Livianos, A. (2015). The Shale Gas Revolution and US Strategy on the Southern Gas Corridor: The Strategic Cooperation of Azerbaijan and Greece. In *Azerbaijan and the new energy geopolitics of southeastern Europe* (pp. 203–233). The Jamestown Foundation.
23. MD Realty. (2020, December 31). Companies from Azerbaijan rank first in terms of investments in Montenegro | MD Realty. *MD Realty*. <https://en.mdrealty.me/2020/12/31/kompanii-iz-azerbajdzhana-na-pervom-meste-po-investicijam-v-chernogoriju/>
24. Mikayiloglu, R. (2014). Bulgarian President: Azerbaijan demonstrates itself as a reliable partner. *Apa.az*. <https://en.apa.az/news/216632>
25. Ministry for Economic Development of Montenegro. (2007). ENERGY DEVELOPMENT STRATEGY OF MONTENEGRO BY 2025. In *wapi.gov.me*. <https://wapi.gov.me/download-preview/04984c44-4299-4bf8-8ced-98e984758f94?version=1.0>
26. Natural Gas World. (2013, May 28). *Goodwill On TAP, IAP, Signed in Tirana*. <https://www.naturalgasworld.com/goodwill-tap-iap-albania-greece-pipelines>
27. OEC. (n.d.). *Albania Exportaciones (2021)*. oec.world. <https://oec.world/es/profile/country/alb>
28. Oxford Economics. (n.d.). The Economic Impact of the Trans-Adriatic Pipeline on Albania A report TAP AG A report for TAP AG. In *invest-in-albania.org*. <https://invest-in-albania.org/wp-content/uploads/The-Economic-Impact-of-the-Trans-Adriatic-Pipeline-on-Albania-Oxford-Economics.pdf>
29. Papadopoulou, D., Tourkolias, C. N., & Mirasgedis, S. (2015). Assessing the macroeconomic effect of gas pipeline projects: the case of Trans-Adriatic Pipeline on Greece. In *Econstor*. <https://www.econstor.eu/bitstream/10419/169173/1/853494533.pdf>
30. Plinacro. (n.d.). Ionian-Adriatic Pipeline (IAP). *plinacro.hr*. <https://www.plinacro.hr/default.aspx?id=1228>
31. Ram, J., & Shoraka, S. (2017). “If the company wants the pipeline to pass through our region, it will first have to pass over our bodies.” *openDemocracy*. <https://www.opendemocracy.net/en/can-europe-make-it/greek-pipeline-tap/>

32. Reuters. (2022, October 1). Greece-Bulgaria pipeline starts operations to boost non-Russian gas flows. *Reuters*. <https://www.reuters.com/business/energy/greece-bulgaria-pipeline-starts-operations-boost-non-russian-gas-flows-2022-10-01/>
33. Roca, J. A. (2020, July 2). *La noruega Statkraft inicia las operaciones de la central hidroeléctrica Moglice en Albania*. El Periódico De La Energía. <https://elperiodicodelaenergia.com/la-noruega-statkraft-inicia-las-operaciones-de-la-central-hidroelectrica-moglice-en-albania/>
34. Rubino, L. (2020). *TAP, conclusi i lavori del gasdotto che sbarca sulle spiagge della Puglia*. energycue.it. <https://energycue.it/tap-conclusi-lavori-gasdotto-sbarca-spiagge-puglia/19105/>
35. Staff, R. (2016, September 27). UPDATE 1-Azerbaijan's SOCAR to extend DESFA purchase guarantee - Greece. *Reuters*. <https://www.reuters.com/article/greece-azerbaijan-socar-idUKL8N1C348V>
36. The Inspection Panel. (2007). ALBANIA: Power Sector Generation and Restructuring Project (IDA Credit No. 3872-ALB). In *The Inspection Panel*. <https://www.inspectionpanel.org/sites/www.inspectionpanel.org/files/ip/PanelCases/46-Eligibility%20Report%20%28English%29.pdf>
37. Three Seas. (n.d.). IAP. In *3seas*. <https://projects.3seas.eu/projects/iap-ionic-adriatic-pipeline>
38. Tirana Times. (2015). Bankers Petroleum announces sharp cut in 2016 investments, production. *Tirana Times*. <https://www.tiranatimes.com/?p=125332>
39. Total Croatia News. (2023). CROATIA TO INCREASE GAS PRODUCTION FROM SIX NEW WELLS. *total-croata.news*. <https://total-croatia-news.com/news/business/croatia-to-increase-gas-production-from-six-new-wells/#:~:text=According%20to%20the%20Croatian%20Hydrocarbon,to%202.7%20billion%20cubic%20metres.>
40. Trans Adriatic Pipeline. (n.d.-a). *How TAP operates*. tap-ag.com. <https://www.tap-ag.com/infrastructure-operation/how-tap-operates>
41. Trans Adriatic Pipeline. (n.d.-b). *Pipeline construction*. Tap-ag. <https://www.tap-ag.com/infrastructure-operation/pipeline-construction>
42. Trans Adriatic Pipeline. (n.d.-c). *Pipeline facts and figures*. Tap-ag. <https://www.tap-ag.com/infrastructure-operation/pipeline-facts-and-figures>
43. Trans Adriatic Pipeline. (n.d.-d). *Trans Adriatic Pipeline*. <https://www.tap-ag.com>
44. Tsurkov, M. (2016, June 24). Greece to get over 2B euros in investment within TAP project. *Trend.Az*. <https://en.trend.az/business/energy/2549745.html>
45. WBIF. (n.d.). *Start of works on the EU-supported Serbia - Bulgaria gas interconnector*. wbif.eu. <https://www.wbif.eu/news-details/start-works-eu-supported-serbia-bulgaria-gas-interconnector>
46. - WBIF. (2016). Evaluation of Western Balkans Investment Framework (WBIF) Final Evaluation Report. In *neighbourhood-enlargement.ec.europa.eu*. https://neighbourhood-enlargement.ec.europa.eu/system/files/2021-08/2014_352812_1_final_evaluation_report.pdf

CHAPTER 4. The Diversification Opportunity for Europe

1. Growing interest in Azerbaijani hydrocarbons

The European Union is the second largest gas consumer in the world, so it always aspires to get quality gas in an uninterrupted manner and at the lowest possible price. Historically, Russia has been the perfect partner for the EU; a major gas producer willing to export large quantities to the West, although since the war in Ukraine the picture has changed drastically. For decades, the 27 had been relying for their gas supply on Moscow, reaching a point whereby the part of the EU started to significantly depend on Russia. Within the European Union there has always been a certain degree of concern about this situation, although Russia had been classified as a "strategic partner". In 2021, the year prior to the beginning of the conflict, Gazprom exported 175 bcm of natural gas to European countries not belonging to the Commonwealth of Independent States (CIS), being the largest gas supplier for the region (Statista, 2023b).

This paradigm changed completely in February 2022, with the start of the Russian invasion. Brussels quickly sided with Ukraine, introducing sanctions against Russia, as well as tightening the rules for immigration. In addition, the UN also made its position clear, with a resolution passed by 141 out of 193 of the organization's members calling on Moscow to end military operations (UN, 2022).

In 2021, gas accounted for 20.48% of the energy mix consumed, being the second most important source only behind oil (27.57%) (bp, 2022). Moreover, this number has been growing annually, as the increased importance of gas is framed by the EU policies as a necessary step to reduce CO₂ emissions, eliminating or reducing the usage of coal and oil. Although the EU's ultimate goal is for renewables to have the greatest weight in the energy mix, at present this is rather impossible, so the greenest possible bet in the short term is gas. As mentioned above, Russia has always been of great importance in the European gas market, being the country from which most gas was imported. Specifically in 2020, 167.7 bcm of natural gas was imported from Russia, strongly above the second biggest supplier, Norway, with 106.9 bcm (bp, 2022). Imports from Moscow accounted for 37.51% of the total (bp, 2022).

All of the above helps to understand the importance of Russia for the continent's energy security, something that will change radically in September 2022. During the last third of 2022, Russia, in response to the sanctions imposed by Brussels and its military and economic aid to Ukraine, began to reduce gas exports to Europe. Specifically, Russia indefinitely cut off Nord

Stream, the most important gas pipeline connecting the EU with Russia. In June last year, Russia reduced gas shipments through the pipeline by 75%, from delivering 170 bcm of gas to just 40 (BBC News, 2022). In July, Moscow shut down the pipeline for 10 days claiming that it required maintenance, which cut off the supply completely, having been restored only after the work was completed, but then only sending 20 cubic meters per day of gas (BBC News, 2022). The final blow came at the end of August, when Russia shut down Nord Stream, citing technical problems. To make matters worse, in September Nord Stream and Nord Stream II were damaged in an explosion of unknown origin, with four leaks in the two pipelines. Although no gas was flowing in the pipelines at the time of the incident, there was a certain amount inside, which eventually leaked. Nord Stream supplied about 35% of Russian gas to the European Union, being a critical infrastructure for the continent's energy security (BBC News, 2022).

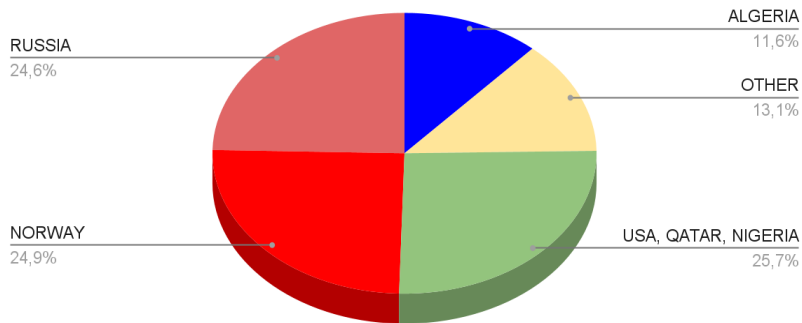
These events had major consequences for Europe, as in a short period of time much of the necessary gas supply was lost. The gas supply cut-off created a deep sense of uncertainty in Europe, as there were not enough gas reserves to get through the winter. Policies to reduce gas consumption were implemented in several European Union countries, with Spain, for example, limiting the use of lighting and heating in public buildings and businesses throughout the country. The energy use reduction policies were aimed at reducing gas consumption by 15%, thus trying to mitigate the adverse effects of gas shortages. Despite the uncertainty, the citizens of the EU-27 had no problems with gas supplies in their homes during the colder months, but there were, however, major changes in the European gas market. Gas prices rose to record highs, causing not only household energy bills to rise sharply, but also the cost of living, as production costs rose sharply due to higher energy bills.

In this context, the European Union, both out of necessity and to improve the continent's energy security, began to explore new gas suppliers or to strengthen ties with existing suppliers. The United States and Qatar, as well as Nigeria to a lesser extent, have gained importance in this sense since the start of the Russian offensive, both being suppliers of Liquefied Natural Gas (LNG). In addition, Brussels scaled up its efforts for developing relevant infrastructure, as evidenced by the various LNG stations being built in northern Europe. Both producers are exporting the most of their gas in the form of LNG, currently having a more than notable weight in the European energy mix. In the period between January and November 2022, USA, Qatar and Nigeria were the countries that exported the most gas to the EU, closely followed by

Norway and Russia, with a decrease in their importance being expected in the 2023 records (European Council, 2023).

Countries of origin of gas imports

Source: European Council

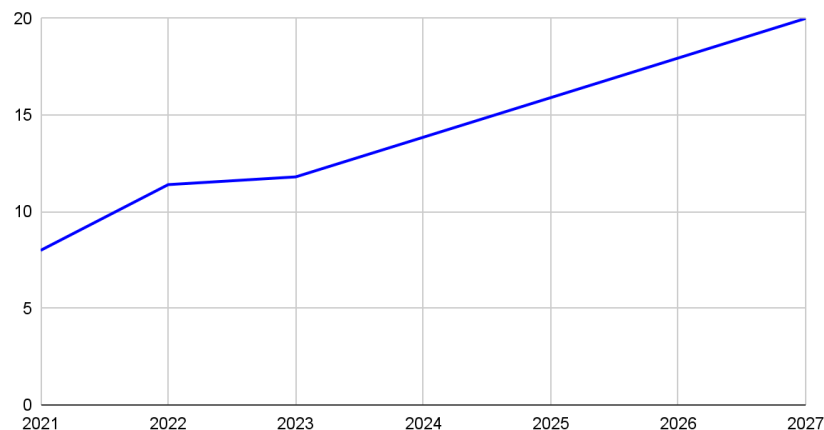


Quite logically, Azerbaijan also turned out among the countries envisioned in Europe to substitute for the decoupling from Russian gas supplies. Hence, it makes sense first to review the history of European-Azerbaijani energy relations. The first steps in the relationship between the EU and Azerbaijan were made in 1995 within the framework of the INOGATE, an international energy cooperation program launched by Brussels to establish partnership the former Soviet countries of Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Türkiye (as an observer member), Ukraine and Uzbekistan (INOGATE, n.d.). The objective of the program was to improve energy security, carry out sustainable energy development and attract investments into projects of common and regional interest (INOGATE, n.d.).

Relations between Baku and Brussels have grown stronger over the past decade, as infrastructure began to be built for the import of the Caspian gas, the Southern Gas Corridor being the jewel in the crown. The SGC runs from Baku to Türkiye's border with the Balkans, whence it continues to run towards Southern Europe. The development of this infrastructure led to increased cooperation between the two countries, one anxious to diversify its gas suppliers and the other to increase its area of energy influence. In this regard, it should be noted that the EU's interest in Azerbaijan being a gas supplier to Europe is not exclusively focused on the Azerbaijani gas, but takes into account the opportunities that creating a relationship and an infrastructure to import Caspian gas may establish for importing gas from Kazakhstan and, perhaps in the future, from Turkmenistan, a country with very significant gas reserves.

All the gestures of rapprochement between the EU and Azerbaijan since 1995 were consummated in mid-2022, when Baku emerged as one of the pillars on which to support the new European energy policy. The first of the moves to strengthen the relationship over the past year took place on July 18 of 2022, when Ursula von Der Leyen and Energy Commissioner Kadri Simson met in Baku with President Ilham Aliyev and Energy Minister Parviz Shahbazov. During the visit, Von der Leyen and Aliyev signed a new Memorandum of Understanding on a Strategic Partnership in the Field of Energy, an important step in strengthening their already existing cooperation (European Commission, 2022). The agreement was a victory for both actors, being not only a lifesaver for the EU, but the beginning of a relationship that could be long-lasting and extremely important for Brussels' energy security. In line with this, Von der Leyen stated: "Today, with this new Memorandum of Understanding, we open a new chapter in our energy cooperation with Azerbaijan, a key partner in our efforts to move away from Russian fossil fuels. Not only do we intend to strengthen the existing partnership, which ensures a stable and reliable gas supply to the Union through the Southern Gas Corridor, but we are also laying the groundwork for a long-term partnership on energy efficiency and clean energy, as we both pursue the goals of the Paris Agreement" (European Commission, 2022). In addition, the memorandum envisages doubling Azerbaijani gas imports to 20 bcm of gas by 2027 (Martin, 2023). The European Union started buying Azerbaijani gas in 2021, when 8 bcm was purchased (Soldatkin, 2022). In subsequent years, the figure has been increasing, standing at 11.4 bcm in 2022 and 11.8 bcm in 2023, which, according to 2022 records, is equivalent to 3.38% of total imported gas, so it is to be expected that Azerbaijan's share in total EU imports will have increased in 2023 (Kpler, 2023).

Azerbaijan's gas exports to Europe in BCM



More recently, in April 2023, Azerbaijan signed a pact with Bulgaria, Romania, Hungary and Slovakia to boost exports from Baku to the countries in question (Ilie & Szakacs, 2022). The aim of the agreement is to strengthen Azerbaijan's role as an energy supplier to the different countries, showing itself as a reliable, steady and long-term alternative for European gas needs. Europe's interest in Azerbaijani hydrocarbons is something quite new, since it was in December 2021 when the starting signal was given for imports of Azerbaijani gas by Western Europe, namely Italy, which had made a strategic bet on Azerbaijan as a supplier of natural gas by agreeing to the construction of the TAP. Since then, Baku's weight in the European energy mix has been gradually increasing, being, at present, the country from which between 4% and 5% of the total gas consumed in Europe is imported.

Although the move by Brussels may have seemed positive for both Europe and Azerbaijan, there was some reluctance within the European community about buying Azerbaijani gas, which is a divisive issue. In this sense, part of the European community has been wary of dealing with Baku citing the country's "militaristic foreign policy" and since, according to the advocates of cutting ties with Azerbaijan, "the country blatantly violates international law and international commitments, and has an alarming human rights record" (European Parliament, 2023). The last of the occasions in which this group called for cutting relations with Baku was in October 2023, when, after Azerbaijan regained sovereignty over Nagorno-Karabakh, some MEPs called for sanctions against Azerbaijani officials, as well as the reduction of the purchase of hydrocarbons from Baku, in addition to calling for the suspension of the Memorandum of Understanding on a Strategic Partnership in the Field of Energy (European Parliament, 2023). In spite of this communiqué, at no time was the possibility of carrying out such actions put on the table from the high-level leadership of the EU, but they are evidence of the existence of an internal division regarding trade with Azerbaijan.

Certainly, it does not seem that the European Union really has any intention of cutting ties with Baku, since it is approaching the bilateral link as a long-term project, having positioned itself as one of the partners with the greatest strategic projection of the European Union, both in terms of oil and gas. Moreover, Baku's increased weight in the Balkans also gives another great advantage to Brussels. As a region, the Balkans have long been susceptible to Russian influence, a clear example being the Serbian case, therefore, the increase of Baku's weight in the region also implies a reduction in the dependence of these countries on Moscow. In this sense, there is another strong source of interest in Baku for the EU, and that is that closer ties with Azerbaijan not only implies becoming strong in the Caucasus, but also establishing the

basis to start trading with Central Asia through the South Caucasus, since the former region is abundant in hydrocarbons.

The two Central Asian countries with the greatest potential to export hydrocarbons to Europe are Kazakhstan, which already exports oil to Europe through the Baku-Tbilisi-Ceyhan pipeline, and Turkmenistan. Turkmenistan stands out for having one of the world's largest gas reserves, which, for various reasons, it has not yet been able to exploit globally. For years, Turkmen gas trade has been almost exclusively limited to China, which has accounted for 97% of its exports (oec, n.d.-b). Therefore, the possibility of being able to export gas to Europe represents a unique opportunity for Ashgabat, as it could reduce its dependence on China and enhance its international leverage. In addition to being a great opportunity for Turkmenistan, it is also one for the European Union, since it would have the chance to import gas in large quantities, in addition to doing so together with Azerbaijani gas, which would give both countries a greater weight in the European energy mix.

Beyond the geostrategic advantage for Brussels of establishing links with Ashgabat, this perspective also promises many advantages in terms of infrastructure creation. When it comes to gas trade, it is difficult to find new suppliers because not all gas producers are likely to be able to export the product to a given country, either because of political inconveniences or due to infrastructural difficulties. Gas, if exported in its original form, must be transported through a network of pipelines which require a large investment and many years of construction, so establishing a gas trade line from scratch comes at a high cost and takes long-term planning. In this sense, exporting Turkmen gas would represent an opportunity, since only one pipeline would have to be built to transport the gas from Turkmenistan to Azerbaijan, as it would then reach Europe through the already existing Southern Gas Corridor system.

In this regard, the possibility of building an interconnector between the Banka Livanova gas field (Petronas Global), in Turkmenistan, and the Azeri Chirag Guneshli field (BP), in Azerbaijan, has been raised (Trans Caspian Resources, n.d.). According to the estimate made by Trans Caspian Resources, the project could transport between 10 and 12 bcm of Turkmen gas to Europe, having an estimated price tag of \$400 million and could be implemented in just 24 months (Business Turkmenistan, 2022). This interconnector would have a dual purpose, as it would represent a new major source of gas for the European Union, importing 24 bcm of Azerbaijani and Turkmen gas, and would also serve to lay the foundations and gain confidence

for the construction of a Trans Caspian pipeline, a project that would have much more capacity than the interconnector.

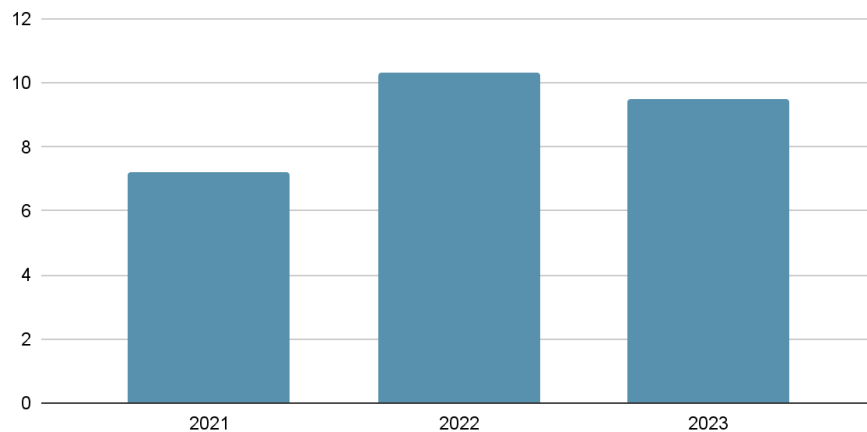
2. New supply lines and expansion of others

In order to carry out the imports necessary to safeguard European energy security, a whole series of gas pipelines connecting Azerbaijan with the different European countries is being used. In addition, there are a number of projects aimed at increasing imports from Azerbaijan which attest to both actors' intention to continue collaborating in the long term. The role of the Trans Adriatic Pipeline (TAP), Türkiye-Greece-Italy (ITGI), and the White Stream should therefore be analyzed. The pipeline transports the Shah Deniz gas from Greece, after passing through Türkiye, to Italy, passing through Albania, the final port being the only one that has not been previously discussed.

The Italian section is the shortest of all the sections of the pipeline, as it only runs 8 km deep into Italian territory, with its end point at Torre dell'Orso, near Lecce. Although the project was announced in 2003, it was not until 2012 that Albania, Greece and Italy confirmed their support by signing a memorandum of understanding (Agayev, 2012). Its commissioning did not come until November 2020, when Offshore Magazine reported that TAP's "commercial operations have begun" (Offshore, 2020). The gas pipeline has the capacity to transport 10 bcm/y, besides having the possibility of increasing the capacity up to 20 bcm/y by making some investments, such as increasing the capacity of the compression stations. Actually, the major decisive factor for its expansion will be the sociopolitical context of the moment: in case the price of gas in the market is very high and demand increases, necessary steps to increase its capacity will have to be carried out. Thanks to the pipeline, Italy received \$3.2 billion worth of natural gas in 2021, ranking as the country that imports the most Azerbaijani gas and accounting for 56.1% of its natural gas exports (OEC, n.d.-a). Italy's huge importance in the TAP project has led to intensifying cooperation between Baku and Rome. In fact, since Azerbaijani gas started to be imported to Italy in 2021, Baku's contribution has been gaining importance, standing at 7.21 bcm in 2021, 10.32 bcm in 2022 and, being 4.9 bcm in the first half of 2023, leading to a projection of 9.5 bcm in the whole year (Statista, 2023a). In this sense, Azerbaijan is the third biggest exporter of gas to Italy, only behind Norway and Algeria (Statista, 2023a).

Italy's gas imports from Azerbaijan (in BCM)

Source: Statista

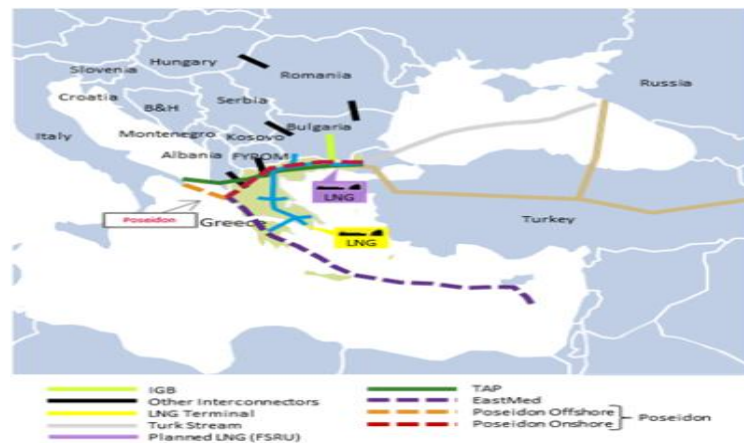


Italy is endowed with a geographically privileged position, so it should come as no surprise that Italy's intention is not only to obtain Azerbaijani gas, but also to distribute it to different European countries. The project gives Rome the possibility of exporting gas from the pipeline to other countries. The TAP is connected to the country's natural gas network, from where it can reach all gas outlets. The idea of not only consuming the gas, but also exporting it through its infrastructure comes from the National Investment Strategy, which aims to turn Italy into a transit country and an energy hub of reference in southern Europe. Specifically, Italy has the capacity to export Azerbaijani gas to Austria through the Trans Austrian Gas Pipeline (TAG), to Germany through the Trans Europa Naturgas Pipeline (TENP), and to Switzerland and France through the Transitgas pipeline (Global Energy Monitor, 2020).

The arrival of TAP in Italy means bringing the Southern Gas Corridor, which will supply European Union countries with more than 20 bcm of gas until 2027, to its final stop. In this sense, the project is a clear contribution to the diversification objectives of the REPowerEU Plan, helping Europe to mitigate the effects of the energy collapse of the region in the wake of the war in Ukraine. Moreover, with the outbreak of the Ukrainian war, the TAP company said that the pipeline could be expanded, doubling its capacity within 45 to 65 months, thus diversifying the European energy mix in the short or medium term (Offshore, 2022). The July 2022 agreement gave shape to this improved status of Azerbaijan. Specifically, Von der Leyen undertook to give more importance to the GSC, doubling the amount of gas that will reach the old continent from Baku. In addition, she took the opportunity to say that Azerbaijan is a reliable energy partner (Von Der Leyen, 2022). Baku increased gas supplies to Europe by 40% in 2022, which helped to alleviate the effects of the war (The Energy Newspaper, 2023).

The second project intended to connect Azerbaijani gas to Western Europe is the Türkiye-Greece-Italy Interconnector (ITGI), a gas pipeline that had been calculated to constitute part of the Southern Gas Corridor. It was intended to carry Azerbaijani gas from Türkiye to Greece and Italy, from where it would be exported to other European countries. Currently, it is partially constructed, as the part of the pipeline connecting Türkiye with Greece is completed, which is not the case with the Greece-Italy section. In 2003 the two countries signed an intergovernmental agreement to carry out the construction of the pipeline, following an agreement between the Turkish gas company BOTAŞ and the Greek company DEPA, reached in 2002. The pipeline was inaugurated in 2007; it extends for 210 kilometers along the length of Türkiye, while it enters only 86 kilometers into Greece. Currently the pipeline has a capacity of 7 bcm/y (Trend, 2009). The part of IGTI that was to connect Greece with Italy was named “Poseidon gas pipeline”. The project in question will cross most of Greece until it reaches Apulia in Italy.

The project is intended to bring Azerbaijani gas to Italy, and it has two sections. The first one goes from Kipi, near the border between Greece and Türkiye to Tesprotia, on the Greek coast, having an extension of 760 kilometers (DEPA, 2020). The other section goes from Thesprotia to the town of Otranto in Puglia, with an extension of 210 kilometers, mostly at sea (DEPA, 2020).



The project has been included in the European Commission's list of Projects of Common Interest (PCI), which makes it eligible for EU funding. This is in line with the European Union's strong interest in Italy assuming a regional hub role in the south of the continent, thus distributing Azerbaijani gas throughout Europe. In the first phase of the project, it aims to transport 12 bcm/y between the two countries, increasing to 20 bcm/y in the second phase (European Commission, 2023). The project, for various political and economic reasons, has

not yet been launched, but it is expected that in 2024 or 2025 it will start to be developed. The combined structure of the Poseidon Pipeline and ITGI will bring more gas from Azerbaijan to the Italian shores, confirming their status as the gateway for Azerbaijani gas to Europe. It merely mimics the function of the TAP, albeit on a much smaller scale. Even so, once the project is completed it will be extremely useful for the European Union, as it will allow it to increase gas supplies from Shah Deniz, being another alternative to Russian gas.

The third project that aims to bring gas from Azerbaijan to the European Union countries is the so-called White Stream. Also known as the Georgia-Ukraine-EU pipeline, it is a project that aims to bring gas from Baku to Europe through the Black Sea, leaving Georgia and arriving in Romania. White Stream was presented in 2010 and sold as “an EU priority project and an integral component of the Southern Gas Corridor” (Vashakmadze, 2010). It plans to bring Azerbaijani gas to Europe, but could be merged with the Trans-Caspian pipeline should it be implemented, importing gas from Turkmenistan as well.

White Stream is part of the Trans-Caspian Pipeline, so it has been categorized as a Project of Common Interest and a Priority Project, which, as noted above, makes it eligible for grants from the European Union. In this regard, a Connecting Europe Facility grant of EUR 1,871,753 was allocated back in 2017 for the reconnaissance and economic evaluation of the project (Kostov, 2019). The idea of the project is that gas from Turkmenistan would travel through the Caspian Sea to Azerbaijan, where it would continue its way, together with Azerbaijani gas, to the Black Sea coast of Georgia via the South Caucasus pipeline. Once on the Black Sea shore, the gas would circulate inside the White Stream pipeline underwater, being received by the EU in Romania, more specifically at the Constanta LNG terminal. The objective would be that once in Romania, the gas would be distributed to the different countries of Central and Northern Europe.

In the first instance, the project was to start operating in 2018, having the capacity to transport 8 bcm/y, while, over the course of different phases, its capacity would be expanded to 16 bcm/y, rising to 32 bcm/y as soon as the Trans-Caspian was completed. Although the construction of the pipeline in question may seem far off, the agreement signed in 2021 between Azerbaijan and Turkmenistan to jointly develop the Caspian field called "Kepez" or "Sardar", which had been in conflict for years, "Dostluk" being its new name. In this sense, the pipeline is also of significant benefit to Turkmenistan, as the Caspian country is extremely rich in gas, but currently has no easy way to get its hydrocarbons to Europe. There is currently no pipeline

connecting to Azerbaijan across the Caspian, so the only possible routes to Europe pass through Iran and Russia, countries that are not interested in letting Turkmen gas pass through unless they pay high transit rates to say the least. Therefore, the creation of the Trans Caspian pipeline would facilitate Turkmen gas exports to Europe, thus promoting not only greater energy security for the old continent, but also significant social and economic development for Turkmenistan. However, the project is stalled for various political, economic and social reasons, not to mention the war in Ukraine. Undoubtedly, in case it gets finally carried out, we could see how Azerbaijani gas reaches even more European countries, increasing its influence in the area. In addition, Baku would benefit from the construction of such a pipeline, as currently all the gas it exports to Europe passes through Türkiye, making it a great opportunity to diversify its export routes.

3. Export gas to Europe: a huge chance to improve relations with Turkmenistan and Kazakhstan

In the Turkmenistani energy policy, there has always been a place for diplomacy with Azerbaijan and other actors west of Ashgabat, although Baku's role for the Central Asian country is of particular importance. As part of the 180-degree turn in Turkmen trade and energy policy, it began to give a priority treatment to China, as we have already mentioned, putting it in the first place for gas exports, but, despite this, Beijing was not the only one to gain more importance to the detriment of Russia. Specifically, Ashgabat's diplomacy began to seek agreements in the Caucasus, thus increasing its energy power.

In order to turn the Trans-Caspian into a real opportunity, two major stumbling blocks had to be surpassed: the resolution of the Caspian Sea status problem and the Azerbaijani-Turkmen agreement. The first concerns the regulation of the status of the Caspian Sea, whose main problem is the origin of the new riparian countries. Before the disintegration of the Soviet Union the Caspian had been by only 2 independent countries: USSR and Iran. As Azerbaijan, Turkmenistan and Kazakhstan became independent, the number of riparian countries along the Caspian shores rose to five. This fact led to the search for an agreement among the five parties to regulate their disputes over the Caspian, as well as to regulate the use of natural resources. Therefore, after 22 years of negotiations, the five countries involved signed the Convention on the Legal Status of the Caspian Sea in August 2018 (Ministry of Foreign Affairs of the Republic of Kazakhstan, 2019). According to the convention, each state would have exclusive control over an area of 15 nautical miles of the Caspian for the control of mineral and energy resources,

raising the figure to 25 miles in the case of fisheries (Ministry of Foreign Affairs of the Republic of Kazakhstan, 2019).

In the aforementioned agreement, it is also stated that in order to build a pipeline, it will only be necessary for the countries through which the pipeline runs to reach an agreement, regardless of the interest of the remaining Caspian countries. This condition opened the door wide to build a trans-Caspian gas pipeline, which would cross from Turkmenistan to Azerbaijan, being one of the most important projects for both countries. This project, which had been desired beforehand, had not been possible due to Russia's and Iran's alleged environmental concerns about it, although it is clear that in reality they were of a geostrategic and economic rather than environmental nature. Thus, according to the new Caspian Sea Statute, one of the major impediments to carrying out the construction of the pipeline disappeared. The project in question could transport 30 bcm between the Eastern and Western shores of the sea. The pipeline in question is a further pillar of Ashgabat's new energy policy, as it would allow greater diversification of its customers, since it would enable Turkmen gas to reach Europe through the same pipeline system that Azerbaijan uses to bring its resources to the old continent (European Commission, n.d.).

As to a possible agreement between Ashgabat and Baku, it seems quite distant, due to the political and financing problems that the project is going through. In spite of this, there are many advances that attest to a great predisposition on both sides to carry out the project. Specifically, one of the biggest events in the relations between the two countries occurred in 2021, when a memorandum of understanding was signed on the development of the Dostluk field, formerly called Kepez in Azerbaijan and Serdar in Turkmenistan (Khalivov, 2021). The field in question has proven reserves of 1.4 billion barrels of oil, an important asset for both countries. The agreement between the two countries followed years of disagreements over the ownership of three Caspian fields, which Ashgabat calls Omer, Osman and Serdar (Khalivov, 2021). Activities in the fields in question by Azerbaijan, which began extraction in the Chirag field in 1997 and in the Azeri field in 2002, led to a major diplomatic crisis, which reached its most critical moment in 2001, when both countries recalled their ambassadors (Gaziyeva, 2001). Afterwards, relations gradually improved until 2008, when both countries reassigned ambassadors. This understanding followed a commitment by both countries to refrain from activities in the Kepez/Serdar field until a consensus is reached. The agreement in question came in 2021, when both countries finalised negotiations on the aforementioned field, giving

it a new name- Dostluk, a word that means “friendship” (Jalivov, 2021). In addition, as a sign of progress in relations between the two countries, SOCAR agreed to periodically purchase 30,000-40,000 tons of oil from the Okarem field in Turkmenistan, operated by ENI (Nebit-Gaz, 2020). Another event of superlative importance took place on November 28, 2023, when SOCAR, the Azerbaijani state energy company, opened its first office in Ashgabat within the framework of the visit of Azerbaijani Minister of Economy Mikayil Jabbarov (Interfax, 2023b).

The last official talks about the possible implementation of the project date back to December 2022, when the top leaders of Azerbaijan, Türkiye and Turkmenistan met, although that meeting did not make much progress (News Central Asia, 2022). In this sense, Türkiye has not been the only external actor involved in the project, as the EU has also been taking efforts to bring it to fruition. From Brussels, the agreement with Baku to import 20 bcm of natural gas by 2027 is perceived as an opportunity to build ties with Ashgabat, which would help to significantly improve Western Europe's energy security (European Commission, 2022).

The Turkmen side has also taken initiatives that show its predisposition to carry out the project. Thus, on July 25, 2023 the Turkmenistani MFA issued a statement showing its willingness and support to build a gas pipeline across the Caspian Sea to establish a connection with Azerbaijan (News Central Asia, 2023). There, it claimed that trilateral mechanisms with Baku and Brussels were being activated from Ashgabat, in addition to affirming that Turkmenistan perceives the project "as an important component of the diversification of energy flows as a key condition for global energy security and sustainability" (News Central Asia, 2023).

As mentioned above, although there is political support, the project was for a long time facing a lack of funding. However, during the Global Gateway Investors Forum for EU-Central Asia Transport Connectivity at the beginning of February 2024, it was announced that 10 billion euros will be invested to develop the Trans-Caspian Transport Corridor (Karimli, 2024). Although the funding is not only aimed at energy projects, the Trans Caspian pipeline could also benefit, with the possibility of a partial financing of the project. This announcement followed the statements of Ilham Aliyev, who confirmed in May 2023 that he would be happy for Turkmen gas to pass through Azerbaijan to Europe, but that despite this, Baku will undertake financing of the project on its own, so he urged companies already working in Turkmenistan in the gas sector, global investors and gas buyers in Europe to take a stake in the matter (O'Byrne, 2023b). At the same time, Kazakhstan is also seeking to strengthen its energy relations with Azerbaijan. The Central Asian giant, while being among the countries in the

world with the largest hydrocarbon reserves, has been suffering from infrastructure limitations, so its hydrocarbon trade is currently mostly limited to Russia, its major partner, and China. Hence, Astana is interested in making moves to diversify to some extent the customers for its oil and gas. In this equation, given its unbeatable location, Azerbaijan has a key role to play.

One of the best options Kazakhstan has found for exporting gas to Europe and territories to the west is the Baku-Tbilisi-Ceyhan (BTC) pipeline. The pipeline in question is mainly used to carry Azerbaijani oil to Türkiye, where it is either used or continues on its way to Europe. Since October 2013, part of the oil produced in the Tengiz fields, Kazakhstan, has been shipped through the BTC (bp, n.d). In addition to shipping small quantities since 2013, during this year the Kazakh state hydrocarbon company KazMunayGas (KMG) has started shipping oil from the port of Aktau in the west of the country to the Sangachal terminal via ships in the Caspian Sea (Nelly, Potter, 2023). Once the oil reaches Azerbaijani shores, it is itself distributed through the BTC. According to some sources, this operation started last March, when some 10,000 tons of oil were loaded onto ships bound for Baku (Nelly, Potter, 2023). Most of the oil shipped from Kazakhstan comes from the large Tengiz field, and shipments are expected to increase gradually, as the agreement between SOCAR and KazMunayGas is aimed at bringing 1.5 tons of Kazakh oil through the BTC per year (Onyango, 2023).

In addition to the agreement between the entities to export Kazakh oil to Türkiye and Europe, a new rapprochement between Astana and Baku is also noteworthy: the Memorandum of Understanding signed on April 10th of 2023. During the meetings between President of Azerbaijan Ilham Aliyev and President of Kazakhstan Kassym-Khomart Tokayev, which were held in Astana, a number of agreements were signed between the two countries to further boost bilateral relations. These agreements include "Protocol on the establishment of the Supreme Interstate Council of the Republic of Azerbaijan and the Republic of Kazakhstan", "Memorandum on scientific and cultural cooperation between the Baku International Multiculturalism Center and the Institute of Applied Ethnopolitical Studies of Kazakhstan", "Memorandum of Understanding between the Agency for Development of Small and Medium Enterprises of the Republic of Azerbaijan and the Chamber of Commerce" or "Memorandum of Understanding on cooperation in the field of science", among others (president.az, 2023). In addition, during a visit of Kazakh Prime Minister Alikhan Smailov to Baku in June 2023, a number of other memoranda were signed, including the Memorandum on Strategic

Cooperation between SOCAR and KazMunayGas, which is expected to increase the shipment of Kazakh oil through the territory of Azerbaijan (Interfax, 2023).

These agreements showcase a further rapprochement between the countries: although symbolic, they denote the mutual willingness to cooperate in order to exploit their resources and gain weight on the world political stage. In addition, it is clear that Kazakhstan is very interested in diversifying its oil exports, as they are currently mostly limited to Russia and China, and, therefore, Azerbaijan is a great option to get Kazakh oil to new destinations impossible to reach in another way.

4. Green Corridor for the delivery of green energy to Europe through the Black Sea

In July 2022, Azerbaijan, Georgia, Hungary and Romania reached an agreement by signing a memorandum of understanding on the establishment of a joint venture to carry out the project. Known as the Green Corridor, or the Caspian Sea - European Union Green Energy Corridor, it is a project that aims to supply Europe with green energy produced in Azerbaijan and export it to the old continent through the Caspian Sea. It was formally launched in December 2022, when the aforementioned countries signed the Strategic Partnership Agreement, which provides for the construction of an energy bridge. The meeting was also attended by the representatives of Bulgaria and the European Commission, who also gave their endorsement for the project. If it materializes, Azerbaijani energy would go to Romania through a submarine power cable, which would have a capacity of 1,000 MW, with a length of 1,195 kilometers.

Azerbaijan, along with possessing significant hydrocarbon reserves, disposes of great potential for renewable energy generation as well. The country already has solid hydropower production, with most of the facilities along the Kura River and its branches, but the production of wind and solar energy is yet at a nascent stage. Specifically, in 2022, out of 26,179.5 million kWh generated in the country, only 144.2 million kWh were achieved thanks to photovoltaic plants or wind farms (being 60.9 million kWh and 83.3 million kWh respectively) (The State Statistical Committee of the Republic of Azerbaijan [Stat Gov], 2023). The Caspian country, due to its geographical position, has a great potential to improve its solar and wind energy production. In this sense, the International Renewable Energy Agency (IRENA) issued a report evaluating the country's potential in the field of renewable energies.

Azerbaijan has between 2,400 and 3,200 hours of sunshine per year, with an energy potential of 23,040 MW. In addition, the country already has four solar photovoltaic installations, with

the Nakhchivan solar power plant having the largest capacity with 22 MW, and there are plans to build another five plants with a capacity of 2.8 MW, in addition to another with a capacity of 4 MW (IRENA, 2019). In the field of wind energy, the country is also endowed with excellent potential, especially in the coastal areas of the Caspian Sea. To exploit the area in question Azerbaijan is developing several projects such as the creation of the Absheron wind farm and the Yeni Yashma wind farm which has already been commissioned (IRENA, 2019).

The political part of the project is at an advanced stage, as was well demonstrated in December 2022 when Ilham Aliyev, President of Azerbaijan, Irakli Garibashvili, Prime Minister of Georgia, Nicolae Ciucă, Prime Minister of Romania, and Viktor Orbán, Prime Minister of Hungary signed a Strategic Partnership Agreement obliging them to work together on the project (O'Byrne, 2023a). The plan to carry out the construction of the submarine cable seems to be clearly supported by all parties involved, being a great option for Europe to diversify its energy imports, as well as being clean energy, which, in accordance with the Union's roadmap, is more than welcomed by Brussels. The project will also help Baku to increase its weight in the European energy mix, as well as allowing the Caspian country to boost its renewable energy sector.

Although there is a strong commitment on all sides to carry out the project, it still faces a few challenges that need to be overcome. In the first instance, all the feasibility studies carried out this far, date from before the war between Russia and Ukraine, so for obvious reasons, there is all the more reason to believe that the project is currently unfeasible. Although since the beginning of the war the EU has been looking for new energy suppliers, the war has had a detrimental impact on the safety of shipping in the Black Sea, including floating mines in the Black Sea. While Brussels has a strong interest in the project, the war is an obstacle for its funding by the EU: a submarine cable could be an easy target for Russia to sabotage in order to exert more pressure on Europe. It therefore remains to be seen whether the 27 are willing to invest into infrastructure which may end up under a significant threat.

Bibliography

1. Agayev, Z. (2012, September 28). TAP gas pipeline project gains support of Italy, Greece, Albania. *Bloomberg.com*. <https://www.bloomberg.com/news/articles/2012-09-28/tap-gas-pipeline-project-gains-support-of-italy-greece-albania?leadSource=uverify%20wall>
2. Alhajji, A. (2023). EU Gas Imports in 203 and Outlook for 2024. *anasalhajjieoa.substack.com*. <https://anasalhajjieoa.substack.com/p/eu-gas-imports-in-2023-and-outlook>
3. BBC News. (2022, September 29). Nord Stream 1: How Russia is cutting gas supplies to Europe. *BBC News*. <https://www.bbc.com/news/world-europe-60131520>
4. Bedi, M., & Davies, M. (2022). Fitch, Moody's slash Russia's sovereign rating to junk. *Reuters*. <https://www.reuters.com/markets/europe/fitch-downgrades-russias-sovereign-rating-b-2022-03-02/>
5. bp. (n.d.). *Baku-Tbilisi-Ceyhan pipeline / Who we are / Home*. Azerbaijan. https://www.bp.com/en_az/azerbaijan/home/who-we-are/operationsprojects/pipelines/btc.html
6. bp. (2022). bp Statistical Review of World Energy 2022. In *BP*. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>
7. Business Turkmenistan. (2022). Construction of Trans-Caspian Interconnector's Main Part Requires \$400 Million. *business.com.tm*. <https://business.com.tm/post/8428/construction-of-transcaspian-interconnectors-main-part-requires-400-million>
8. Consejo Europeo. (2023). Infografía - ¿De dónde procede el gas de la UE? In *Consilium Europa*. <https://www.consilium.europa.eu/es/infographics/eu-gas-supply/>
9. DEPA. (2020). *The Poseidon Pipeline – DEPA INTERNATIONAL PROJECTS*. Depa. <https://depa-int.gr/en/poseidon-pipeline/>
10. El Periódico de la Energía. (2023). Azerbaiyán incrementó en un 40 % el suministro de gas a Europa en 2022. *El Periódico De La Energía*. <https://elperiodicodelaenergia.com/azerbaiyan-incremento-40-suministro-gas-europa-2022/>
11. European Commission. (n.d.). Gas pipeline to the EU from Turkmenistan and Azerbaijan, via Georgia and Turkey, [currently known as the combination of “Trans-Caspian Gas Pipeline” (TCP), “South-Caucasus Pipeline Future Expansion” (SCPFEX) and “Trans Anatolian Natural Gas Pipeline” (TANAP)]. In *ec.europa.eu*. https://ec.europa.eu/energy/maps/pci_fiches/PciFiche_7.1.1.pdf
12. European Commission. (2022). *EU and Azerbaijan enhance bilateral relations, including energy cooperation* [Press release]. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_4550
13. European Commission. (2023). Offshore gas pipeline connecting Greece and Italy (currently known as “Poseidon Pipeline”). In *Ec Europa*. https://ec.europa.eu/energy/maps/pci_fiches/PciFiche_7.3.3.pdf

14. European Parliament. (2023). *Nagorno-Karabakh: MEPs demand review of EU relations with Azerbaijan* [Press release]. <https://www.europarl.europa.eu/news/en/press-room/20230929IPR06132/nagorno-karabakh-meps-demand-review-of-eu-relations-with-azerbaijan>
15. Gaziyeva, S. (2001, June 5). *Azerbaijan Report: June 5, 2001*. RadioFreeEurope/RadioLiberty. <https://www.rferl.org/a/1340870.html>
16. Global Energy Monitor. (2020, December 24). *Tracker Map - Global Energy Monitor*. <https://globalenergymonitor.org/projects/europe-gas-tracker/tracker-map/>
17. Google Finance. (n.d.). De Rublo ruso a Dólar estadounidense [Dataset; Google Finance]. In *Google Finance*. <https://www.google.com/finance/quote/RUB-USD?sa=X&ved=2ahUKewiIpMbUxomCAxVmVaQEhc7cDoAQmY0JegQIARAn&window=5Y>
18. Ilie, L., & Szakacs, G. (2022). Four leaders sign agreement to bring green Azeri energy to Europe. *reuters.com*. <https://www.reuters.com/business/energy/four-leaders-sign-agreement-bring-green-azeri-energy-europe-2022-12-18/>
19. INOGATE. (n.d.). *INOGATE*. <http://www.inogate.org/>
20. Interfax. (2023a). SOCAR and KazMunayGas sign memorandum on transit of Kazakh oil through Azerbaijan. *interfax.com*. <https://interfax.com/newsroom/top-stories/91743/>
21. Interfax. (2023b). SOCAR opens representative office in Turkmenistan. *interfax.com*. <https://interfax.com/newsroom/top-stories/97012/>
22. IRENA. (2019). Renewables Readiness Assessment Republic of Azerbaijan. In *IRENA*. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Dec/IRENA_RRA_Azerbaijan_2019.PDF
23. Jalivov, O. (2021). *Azerbaijan, Turkmenistan sign Memorandum on Joint Exploration and Development of oil field*. *caspiannews.com*. <https://caspiannews.com/news-detail/azerbaijan-turkmenistan-sign-memorandum-on-joint-exploration-and-development-of-oil-field-2021-1-23-0/>
24. Karimli, I. (2024). EU, Central Asia Investors Commit €10 Billion to Trans-Caspian Transport Corridor. *caspiannews.com*. <https://caspiannews.com/news-detail/eu-central-asia-investors-commit-10-billion-to-trans-caspian-transport-corridor-2024-2-1-36/>
25. Kostov, P. (2019, September 26). *7.1.1-0007-ELAZ-S-M-17 - Innovation and Networks Executive Agency - European Commission*. Innovation and Networks Executive Agency - European Commission. <https://wayback.archive-it.org/12090/20190927170845/https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy/7.1.1-0007-elaz-s-m-17>
26. Kpler. (2023). Global LNG represents 39% of EU gas imports in 2022. *kpler.com*. <https://www.kpler.com/blog/global-lng-represents-39-of-eu-gas-imports-in-2022>
27. Martin, S. (2023). Europa firma un acuerdo con Azerbaiyán para impulsar el envío de gas natural. *es.euronews.com*. <https://es.euronews.com/2023/04/25/europa-firma-un-acuerdo-con-azerbaiyan-para-impulsar-el-envio-de-gas-natural>
28. Ministry of Foreign Affairs of the Republic of Kazakhstan. (2019). Legal status of the - Caspian Sea. In *gov.kz*. <https://www.gov.kz/memleket/entities/mfa/press/article/details/591?lang=en>

29. Nebit-Gaz. (2020). *SOCAR Trading won the tender for the purchase of Turkmen oil Eni*. oilgas.gov.tm. <https://www.oilgas.gov.tm/en/posts/news/1298/socar-trading-won-the-tender-for-the-purchase-of-turkmen-oil-eni>
30. Nelly, & Potter. (2023, March 23). *UPDATE 1-Kazakhstan's KMG starts shipping oil via Caspian Sea to BTC pipeline -sources*. U.S. <https://www.reuters.com/article/kazakhstan-azerbaijan-oil-idUSL1N35V0RV>
31. News Central Asia. (2022). Meetings of the Ministers of Energy, Foreign Affairs and Transport of Turkmenistan, Türkiye and Azerbaijan held in Avaza. *newscentralasia.net*. <https://www.newscentralasia.net/2022/12/14/meetings-of-the-ministers-of-energy-foreign-affairs-and-transport-of-turkmenistan-turkiye-and-azerbaijan-held-in-avaza/>
32. News Central Asia. (2023). Breaking News: Foreign Office of Turkmenistan clarifies position on Trans-Caspian gas pipeline issues. *newscentralasia.net*. <https://www.newscentralasia.net/2023/07/24/breaking-news-foreign-office-of-turkmenistan-clarifies-position-on-trans-caspian-gas-pipeline-issues/>
33. O'Byrne, D. (2023a). Azerbaijan positioning itself as green energy exporter. *eurasianet.org*. <https://eurasianet.org/azerbaijan-positioning-itself-as-green-energy-exporter>
34. O'Byrne, D. (2023b). Turkmenistan signals major change in energy-export stance. *eurasianet.org*. <https://eurasianet.org/turkmenistan-signals-major-change-in-energy-export-stance>
35. OEC. (n.d.-a). *Gas natural en estado gaseoso en Azerbaiyán / OEC*. OEC - the Observatory of Economic Complexity. <https://oec.world/es/profile/bilateral-product/natural-gas-in-gaseous-state/reporter/aze?yearExportSelector=exportYear1>
36. OEC. (n.d.-b). *Turkmenistán Exportaciones 2021*. oec.world. <https://oec.world/es/profile/country/tkm#:~:text=Exportaciones%20Anuales&text=En%202021%2C%20Turkmenistán%20exportó%20un,a%20%247%2C2MM%20en%202021.>
37. Offshore. (2020). *First gas flows through Trans Adriatic Pipeline*. <https://www.offshore-mag.com/pipelines/article/14187531/first-gas-flows-through-trans-adriatic-pipeline>
38. Offshore. (2022). *TAP pipeline owners could speed up gas capacity auctions*. <https://www.offshore-mag.com/pipelines/article/14248428/tap-pipeline-owners-could-speed-up-gas-capacity-auctions>
39. Onyango, D. (2023, April 26). *Kazakhstan's First Batch of Oil through BTC Pipeline Shipped from Turkey's Ceyhan Port*. Pipeline Technology Journal. <https://www.pipeline-journal.net/news/kazakhstans-first-batch-oil-through-btc-pipeline-shipped-turkeys-ceyhan-port>
40. president.az. (2023). Azerbaijan, Kazakhstan signed documents. In *president.az*. <https://president.az/en/articles/view/59357>
41. -Soldatkin, V. (2022). Azerbaijan sees gas exports to Europe edging up in 2023, Interfax reports. *Reuters.com*. <https://www.reuters.com/business/energy/azerbaijan-sees-gas-exports-europe-edging-up-2023-interfax-2022-12-17/>
42. Statista. (2023a). *Imports and production of natural gas in Italy from 1st half 2021 to 1st half 2023, by country of origin, pipeline, and entry point*. <https://www.statista.com/statistics/1325804/natural-gas-supply-in-italy-by-origin/>

43. Statista. (2023b, September 4). *Gazprom natural gas exports to European non-CIS countries 1973-2021*. <https://www.statista.com/statistics/1024392/gazprom-exports-europe/>
44. Stonestreet, J. (2022). Putin bans forex transfers to outside Russia from March 1. *Reuters*. <https://www.reuters.com/world/europe/putin-bans-forex-transfers-outside-russia-march-1-2022-02-28/>
45. *The Poseidon Pipeline – DEPA INTERNATIONAL PROJECTS*. (n.d.). <https://depa-int.gr/en/poseidon-pipeline/>
46. The State Statistical Committee of the Republic of Azerbaijan [Stat Gov]. (2023). *Energy / The State Statistical Committee of the Republic of Azerbaijan*. The State Statistical Committee of the Republic of Azerbaijan. https://www.stat.gov.az/source/balance_fuel/?lang=en
47. Trans Caspian Resources. (n.d.). *Trans Caspian Resources, Inc (TCRI) About*. [transcaspianresources.us. https://transcaspianresources.us/about](https://transcaspianresources.us/about)
48. Trend. (2009, July 14). *Bulgaria, Greece agree to link pipelines for delivery of Azerbaijan gas*. Trend.Az. <https://en.trend.az/business/energy/1505048.html>
49. UN. (2022, March 2). *General Assembly overwhelmingly adopts resolution demanding Russian Federation immediately end illegal use of force in Ukraine, withdraw all troops / UN Press*. United Nations. <https://press.un.org/en/2022/ga12407.doc.htm>
50. Vashakmadze, G. (2010). White Stream. In *White Stream TM*.
51. Von Der Leyen, U. (2022). *The EU is turning to more reliable energy suppliers. Today I'm in Azerbaijan to sign a new agreement. Our goal: double the gas delivery from Azerbaijan to the EU in a few years. 🇦🇿 will be a crucial partner for our security of supply and on our way to climate neutrality*. X. <https://twitter.com/vonderleyen/status/1548981194578182145>

Conclusion

Throughout its more than 30 years of independence, Azerbaijan has turned into a significant player in the global energy market. It holds major importance at a geopolitical level, not only being a relevant actor at a regional level, but also becoming a relevant actor at a global level.

Although its oil production is in decline, the reality is that Baku made a strong bet on betting heavily on the production and export of gas, something that is relatively new given the country's traditional past linked to oil. In this sense, it is constantly investing in research to try to find new hydrocarbon deposits, as well as in infrastructure to try to maximize exports to new parts of the world. In all this equation, SOCAR, the Azerbaijani state energy company, is playing a fundamental role, since its direct involvement in each strategic and every one of the projects means that a greater percentage share of the income from hydrocarbon exports stays within Azerbaijani territory, which is ultimately beneficial for the citizens, since it considerably increases the purchasing power, as well as the quality of life, of the Azerbaijanis.

In this sense, it is worth mentioning how Baku has become the most important energy player in the Caucasus, being, in fact, the only country with significant oil or gas reserves. In this sense, Tbilisi has adopted a more than notable geopolitical role - , as it has become- a place of obligatory passage for the Azerbaijani hydrocarbons coming from Baku to reach Western countries, and Georgia has become a fundamental part of regional energy security. In this sense, Türkiye plays a similar role, as it has established itself as a transit hub not only for hydrocarbons from Azerbaijan, but also from several countries seeking to export gas to Western Europe. In this sense, Türkiye fulfills a double function for Baku, as it stands as the gateway to Western Europe, as well as being one of Azerbaijan's closest strategic ally partners, Ankara became for Baku a partner of paramount importance.

The logistical pattern of Azerbaijani gas export has turned the Balkans into another region of strategic significance for Azerbaijani geoeconomics, where Baku has increased its presence in recent years. Since more than a decade ago, Azerbaijan has been exponentially increasing its presence in the Balkan countries, which also have a strong reciprocal interest due to since the countries of this geographical demarcation are characterized by their poor energy reserves and low level of gasification. This fact makes it a market to be fully exploited, which Baku is taking advantage of to increase its influence in Europe. As an example of Azerbaijan's progress in the region, it is worth mentioning the number of new projects that are being inaugurated in the

region, the Bulgaria-Serbia interconnector being the most recent example, as well as the number of projects proposed for the region, such as the as could be the case of White Stream. The Balkans-Azerbaijan rapprochement is not only advantageous for both parties, but the European Union is also in favor of increasing Baku's importance in the region. This is based on the fact that several countries in the region receive large quantities of Russian gas, due to the lack of alternatives, so the appearance of Azerbaijan in the equation means a decrease in dependence on Russia and, therefore, a loss of Moscow's influence in the region to the detriment of the West.

Finally, following its course, part of the gas reaches Western Europe, the specific case being Italy. Azerbaijan started to transport its gas there in 2021, upon the completion of the construction of the Southern Gas Corridor. This fact has gained importance with the passage of time, since after the beginning of the Ukrainian War last February 2022, European countries have been forced to diversify their gas imports, which had been highly dependent on Russia. Since then, a few players have gained additional importance, including Algeria, the United States and Azerbaijan. Brussels is now considering Baku one of the fundamental pillars to reduce its dependence on Moscow, having signed agreements to increase the importance of Azerbaijani gas for the European Union, being a supply thought to increase gradually until 2030. Moreover, for the EU, relations with Baku not only represent the appearance of a new source of gas imports, but also open the door to the possibility that, if the necessary steps are taken, the European Union could buy hydrocarbons from Kazakhstan and Turkmenistan, Central Asian countries with which Brussels could get closer thanks to Baku, taking advantage of the system of gas pipelines connecting Azerbaijan with Italy. Therefore, the European Union is aware that its relations with Baku, in the future, could provide it with the key to Central Asia.

In view of the above, it is possible to state that Baku is playing a key role in the global energy scene, becoming one of the countries offering the most attractive energy possibilities at the global level. Moreover, the new projects that Baku is proposing both inside and outside the country make the country's energy scene even more attractive, gaining greater importance at regional and global levels, which will push more countries interested in establishing, or strengthening, bilateral relations with Baku.

