DIVERSIFICATION OF THE EU GAS SUPPLIES: THE ROLE OF THE SOUTHERN GAS CORRIDOR

CENTER OF ANALYSIS OF INTERNATIONAL RELATIONS
BEYNƏLXALQ MÜNASİBƏTLƏRİN TƏHLİLİ MƏRKƏZİ

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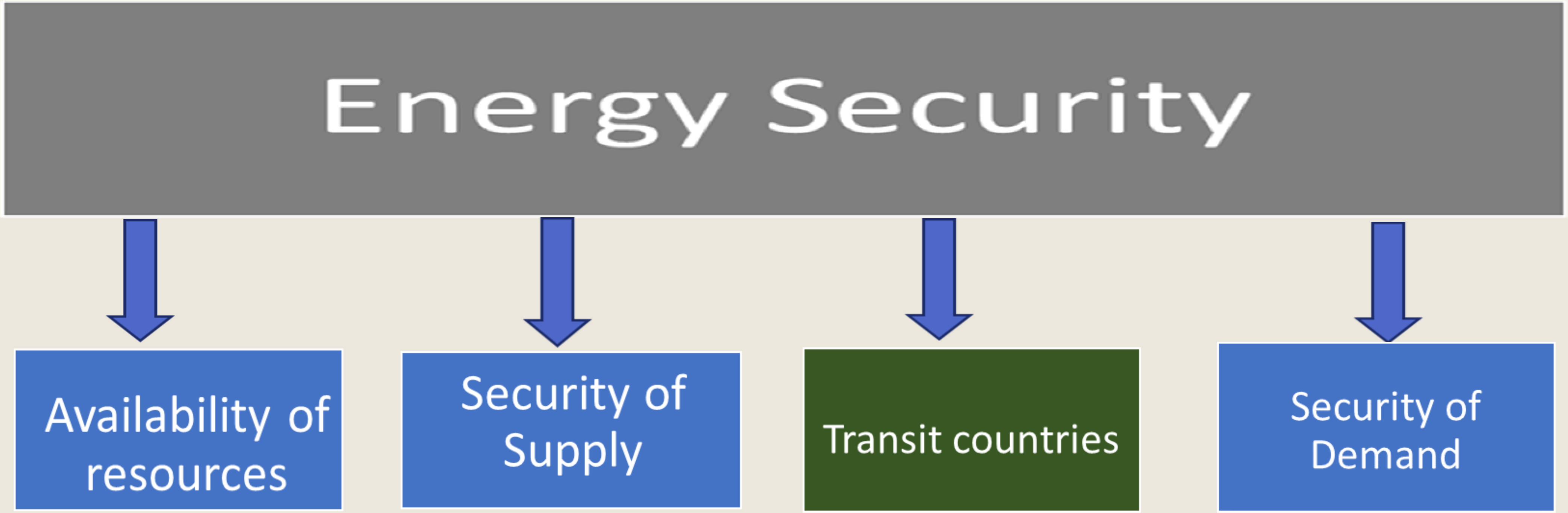
Introduction

- *In the 21st-century energy resources are one of the key factors for economic growth, and political and social stability. Diversifying energy supplies, securing access to energy-rich regions as well as ensuring the safe export of energy resources to the global energy markets are one of the most important objectives of energy producers and consumers. Violation of the stability of the world order can also affect energy security. The most vulnerable are countries with limited natural resources of oil, gas or coal and dependent on external supplies. These countries include Member states of the European Union.*

Introduction

- The International Energy Agency designates energy security as the uninterrupted availability of energy sources at an affordable price.
- Energy security can be defined as an adequate and reliable supply of energy resources at a reasonable price (Toman, 1993; Bohi and Toman, 1996; Bielecki, 2002).



EU Limited Resources

**Due to the lack of own resources, the states of the European Union are forced to import large quantities of raw materials. Russia supplies 27% of the EU's imported oil and 41% of its natural gas. No sanctions on Russian gas supplies to the EU, although Russia's controversial Nord Stream 2 gas pipeline has been frozen.*

EU imports resources from:

- *Azerbaijan,*
- *Countries of the Middle East,*
- *Africa,*
- *Russia,*
- *Kazakhstan,*

European Gas Market Overview

- In 2021, inland demand of natural gas in the EU increased by 4.3 %;
- EU natural gas production decreased by 7.6 % in 2021;
- In 2021, the EU's natural gas import dependency rate was 83 %;
- LNG supplies accounting for around 20% of imports in 2021. United States (28%), followed by Qatar and Russia (both around 20%), Nigeria (14%) and Algeria (11%).

EU main pipeline gas sources:

- *Russia (41%)*
- *Norway (24%)*
- *Algeria (11%)*
- *Azerbaijan (2%)*

The Gas Crisis between Russia and EU

- *The threat to security of supplies to Europe was manifested as a result of natural gas crises in relations between Russia and Ukraine;*
- *Alternative gas pipeline projects bypassing Ukraine;*
- *Nord Stream 1 and Nord Stream 2 pipelines;*
- *Gas payments to Russia in rubles.*

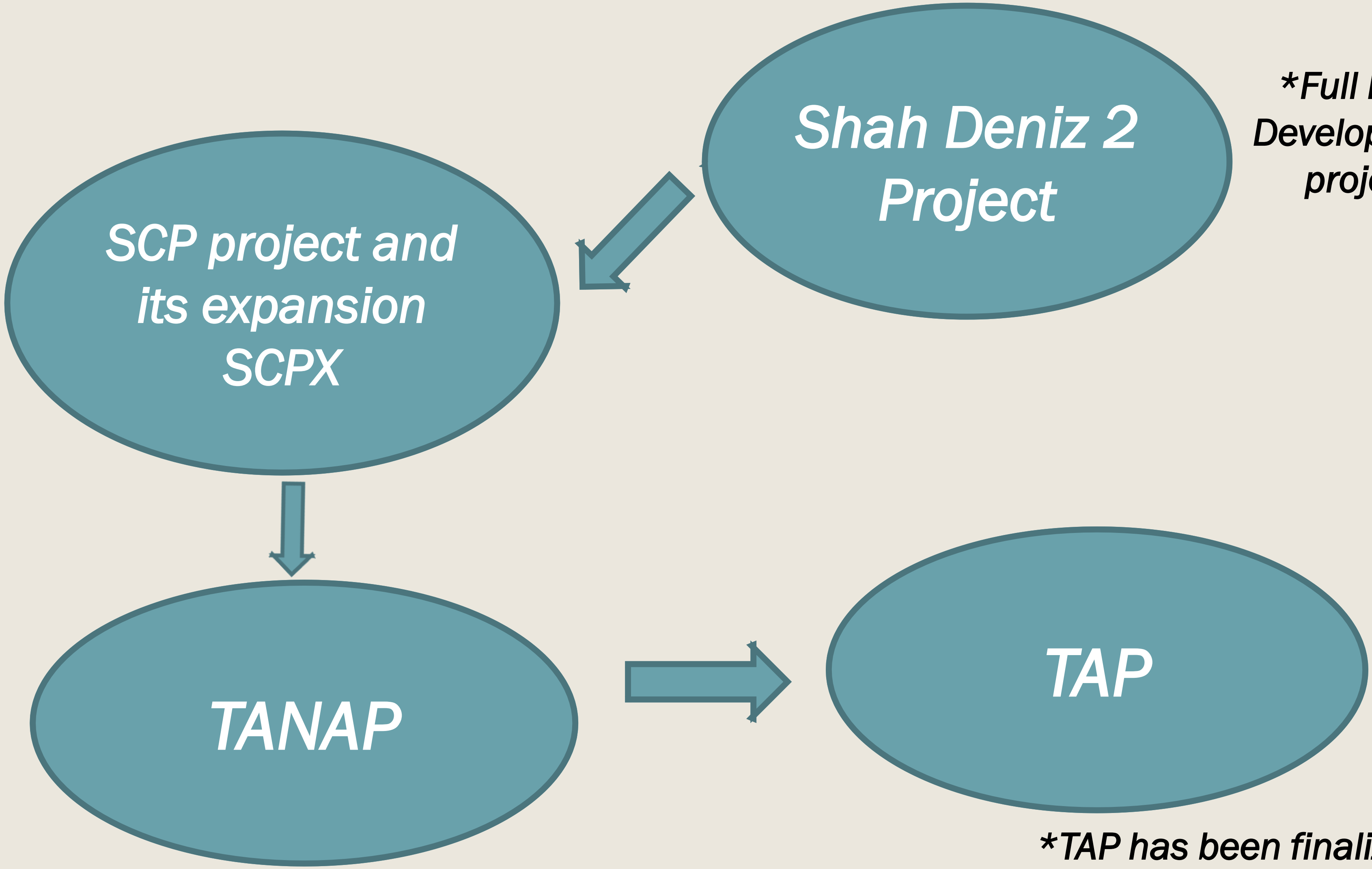
Azerbaijan's Energy Strategy

- Azerbaijan's proved crude oil reserves were estimated at 7 billion barrels in January 2021 (Oil & Gas Journal);
- Azerbaijan's proved natural gas reserves were estimated at about 60 trillion cubic feet (Tcf) in January 2021 (Oil & Gas Journal);
- Increase the production of energy resources;
- Export its energy resources to global energy markets;
- Significant presence in the European gas market as all segments of SGC have been already finalized;
- Access to multiple consumers (regional and non regional);
- SOCAR's role in upstream, midstream and downstream activities;
- Increase the share of alternative energy resources, optimize the energy sector and provide a reliable energy supply system.

Azerbaijan's Natural Gas Production & Export

- Azerbaijan's gas production was around 43.9 bcm in 2021, and plan to increase up to 50 bcm per year by 2026;
- The Azeri-Chirag-Guneshli and Shah Deniz fields are among the most promising fields of the country. Absheron, Babak and Umid gas fields will increase production capacity. Since the commissioning till 1 February 2022, more than 191 bcm gas was extracted from "Azeri-Chirag-Gunashli", 160 bcm from "Shah Deniz";
- Azerbaijan has exported 18.9 bcm of gas in 2021. Turkiye and Italy purchased 8.5 bcm and 7 bcm of gas respectively, while the rest was exported to Georgia, Greece, and Bulgaria;
- Azerbaijan, Iran, and Turkmenistan Gas Swap Deal;

The SGC as important source for diversification



*Full Field Development project

*Gas pipeline from Azerbaijan through Georgia and Turkey to the Greek border, where the TANAP is being connected with TAP. The project was fully completed in June 2019.

*TAP has been finalized in December 2020, and Azerbaijan has been sending natural gas via the TAP to the European gas markets since December 31, 2020.

The South Caucasus Pipeline (SCP)

- The SCP was built to export Shah Deniz gas from Azerbaijan to Georgia and Turkiye;
- The pipeline has been operational since late 2006 transporting gas to Azerbaijan and Georgia, and starting from July 2007 to Turkiye from Shah Deniz Stage 1.
- SCP’s daily average throughput was 48.5 million cubic metres of gas per day during 2021;

Source: BP

Trans Anatolian Natural Gas Pipeline (TANAP)

- Bring natural gas produced from Shah Deniz-2 gas field, and other areas of the Caspian Sea, primarily to Turkey, but also on to Europe;
- The shareholders of TANAP are the Southern Gas Corridor Company (SGC) (51%), BOTAŞ (30%), BP Pipelines (TANAP) Limited (12%) and SOCAR Turkey Enerji A.Ş. (7%);
- Diversification and security of supply for the energy consumers;
- Additional gas source for Turkiye. In 2021, 5.6 bcm of gas was exported via TANAP to Turkiye.

Source: www.tanap.com

The Trans Adriatic Pipeline (TAP)

- Securing future energy supply for the EU energy consumers;
- Shareholders are bp (20 percent), SOCAR (20 percent), Snam (20 percent), Fluxys (19 percent), Enagás (16 percent) and Axpo (5 percent);
- Expansion of the Italian gas transmission network, and possibilities for further connection to gas networks in South Eastern, Central and Western Europe;
- Currently, TAP delivers gas to Greece, Bulgaria and Italy;
- According to TAP AG, TAP has transported 10 bcm of gas from Azerbaijan to Europe, 8.5 bcm of which went to Italy;

Source: TAP

TAP advantages

- Supports gas storages which ensure the security of energy supply for Europe, and the South Eastern European region in particular;
- It will provide increased flexibility to deal with supply disruptions or seasonal variations in energy consumption. Additionally, gas prices expected to be lower than Russian;
- In future, increased gas supplies to more European countries, including some Western Balkan countries such as Montenegro, North Macedonia, Bosnia and Herzegovina, and Croatia so that it will boost the South Eastern European gas-to-power market;
- Gasification and possibility of developing an underground natural gas storage facility in Albania;
- TAP creates also favorable conditions for countries to support energy security by developing gas interconnectors. Gas Interconnector Greece – Bulgaria (IGB) connects Greece to Bulgaria. For south-east Europe, TAP can provide an exit point to the planned Ionian Adriatic Pipeline (IAP) to link to the markets in Croatia, Albania, Montenegro, and Bosnia and Herzegovina.

Some Challenges for SGC

- TAP offers three scenarios for expansion: 4.4 bcm per year, 7.1 bcm per year and 10 bcm per year, and around 45-65 months will be needed to double TAP capacity;
- In order to increase capacity, Azerbaijan needs additional gas, which the country plans to get from Absheron and other fields, as well as swap gas agreements with Turkmenistan;
- SGC will need additional investment and time to reach maximum capacity, and first of all, Azerbaijan should increase production to secure additional supplies;
- It is important for Azerbaijan to receive guarantees for gas purchase and binding offers from EU countries in order to invest in gas exploration and production;
- It is also important for Azerbaijan to develop renewables and energy efficiency in the country to decrease domestic gas consumption. In 2021 domestic consumption was around 13 bcm;
- From geo-political point of view, Azerbaijani gas is not competitor to the Russian gas in Europe, however, if there is ultimate threat to the Russian energy interests in Europe then situation may change;

Conclusion

- Further escalations between the West and Russia could hit even harder global energy markets, and the market price of natural gas will play crucial role in the EU gas markets;
- The SGC widened economic, political and security in the region;
- All segments of the SGC are significant energy infrastructure projects, which open new opportunities not only for Azerbaijan, but also for the Caspian region to export natural gas to the European energy markets;
- SGC demonstrated cooperation and integration between all involved countries, and established strong relationships with European partners;
- Export and transit potential of Azerbaijan will be increased as additional gas supplies from Turkmenistan could feed up SGC;
- From a geopolitical standpoint, TAP is the first pipeline supplying Caspian gas to Europe, and TAP will double its export capacity up to 20 bcm;
- For Europe, SGC is a diversification of gas sources and supply routes. Azerbaijani gas supplies will reach South Eastern, Central and Western Europe, and those regions have high gas dependence on a few suppliers;