



RECENT DEVELOPMENTS ON THE ALBANIAN ENERGY SECTOR TOWARDS REGIONAL INTEGRATION AND ACHIVEMENT OF EUROPEAN TARGETS

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Main Pillars of Albania's Energy Policy

- **“National Energy strategy for the period 2018 -2030”**

(Approved by the Albanian Council of Ministers Decision - DCM no. 480, dated 31.07.2018)

- **Enhanced energy supply security.**

- Domestic resources

- Sustainable

- Environmentally friendly

- Competitive

- Reliable

- Efficient

- Cost effective

- **Function as a regional energy center**

- **Contributed on the development of a safe and secure energy network in the South East Europe**

- Gasification to diversify and to increase energy security of supply

- TAP project contribution as a part of Southern Gas Corridor

Albania as a Contracting Party of the Energy Community and one of the signatories of the Energy Charter.

A.-. We consider that the establishment of the Energy Community through signing of its Treaty in 2005, as a regional organization under the frame of the EU, has been of a great importance for the developing of the Energy Sector in the contracting parties (mainly Balkan countries) and integration of this sector in the EU level.

- B.-. Meanwhile Albania is one of the signatories of the Energy Charter, and during 2018- 2019 Albania has had the chairmanship of this organisation.

C.-. Albania is one of the signatories on July 2015, in Dubrovnik Croatia, of the Memorandum of understanding on a Joint approach to address the natural gas diversification and security of supply challenges as part of the Central and South-Eastern European Gas Connectivity (CESEC) initiative,

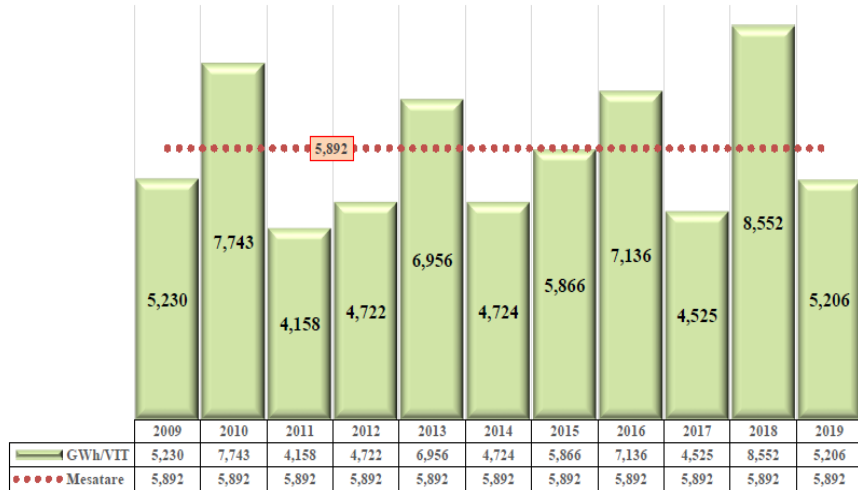
I.-What is the energy situation in Albania?

Key data for the electricity sector:

- (i) During 2019, a total of **36 power plants were added**, with a total installed capacity of 74.3 MW and a total production of 83,158 MWh;
- (ii) **The total production of the country has been at the level of 5.2 TWh**, with a decrease of about 40% compared to 2018. While the import of electricity has been at the values of 2.4 TWh;
- (iii) **Nearly 57% of this output was generated by the Public Generation Company**, the remaining 43% was generated by private concession plants or not;
- (iv) **During 2019, there has also been an increase in electricity production from photovoltaic plants - 23,000 MWh**. This year, 8 photovoltaic power plants have produced electricity, with a total installed capacity of about 15 MW.
- (v) **The demand for electricity in 2019 reached the value of 7,612 GWh.**, with a slight decrease in electricity consumption in the country by 26,767 MWh compared to the demand for 2018

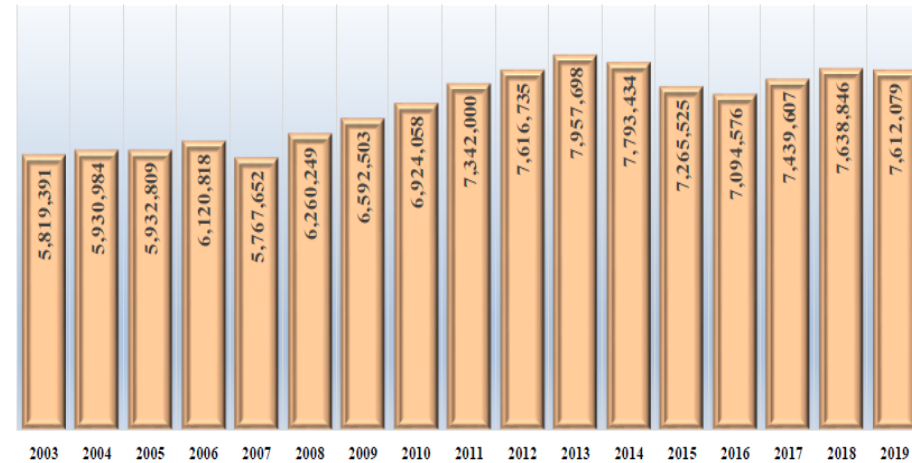
I.-What is the energy situation in Albania?

HISTORIKU I PRODHIMIT VENDAS 2009-2019 (GWh)



Net historical domestic production for the period 2009-2019

KONSUMI TOTAL I ENERJISE ELEKTRIKE NE SHQIPERI 2003-2019 (MWh)
(konsumi mesatar vjetor 2003-2019 = 6 888 763 MWh)



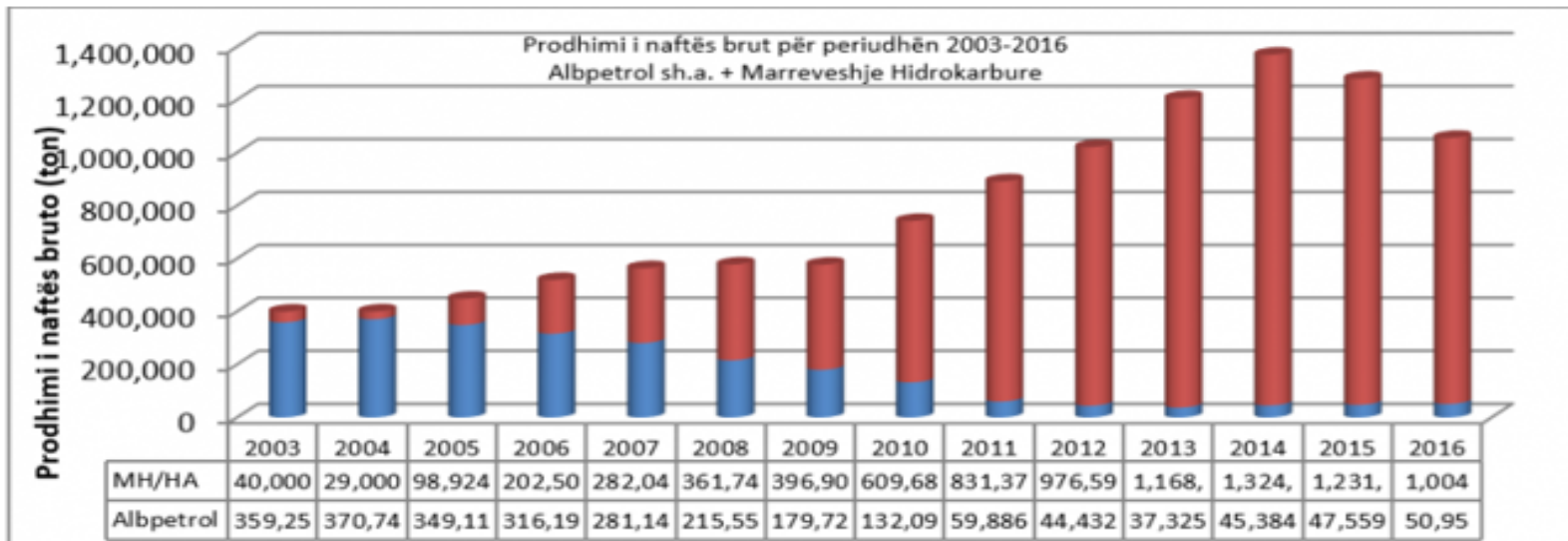
Total electricity consumption in Albania for the period 2009-2019 (MWh)

I.-What is the energy situation in Albania?

Total crude oil production in Albania for the period 2003-2016 (ton)
Albpetrol & Petroleum Agreements

Tabela 2

Prodhimi i naftës bruto për 2003-2016. (Albpetrol/Marrëveshjet Hidrokarbure)



I.- What is the energy situation in Albania?

New petroleum explorations

Albania: Compelling Initial Well Test Results at Shpirag-2

Energy Inc.

- Three day test (duration restricted due to limited fluid handling capacity/tankage)
- Well flowed at rates of 1,500 to 2,200 boe/day
- 800 to 1,300 bpd of 35 to 37 degree API oil and 2 to 5 mmcf of gas
- Gas to oil ratio in the range of 2,500 to 2,800 scf/bbl
- Lower than expected levels of hydrogen sulfide (0.5%)
- Calculated oil column > 800 m
- Test results confirm ability to flow light oil from fractured reservoir
- Well was shut in with recorders; data retrieved and analyzed
- Oil flow validates the potential of Blocks 2-3



On 20.12.2019 was signed in Tirana, the Production Sharing Contract for oil and gas exploration in the Dumre Block onshore. The Dumrea block has an area of 587 km², is located about 40 km south of Tirana and is evaluated with perspective for the exploration of hydrocarbons **by the Italian company Eni.** Eni in this agreement will own 100% of the interests and will also exercise the right of the Operator.

(Approval by the Decision of the Council of Ministers, No. 187, dated 26.2.2020)



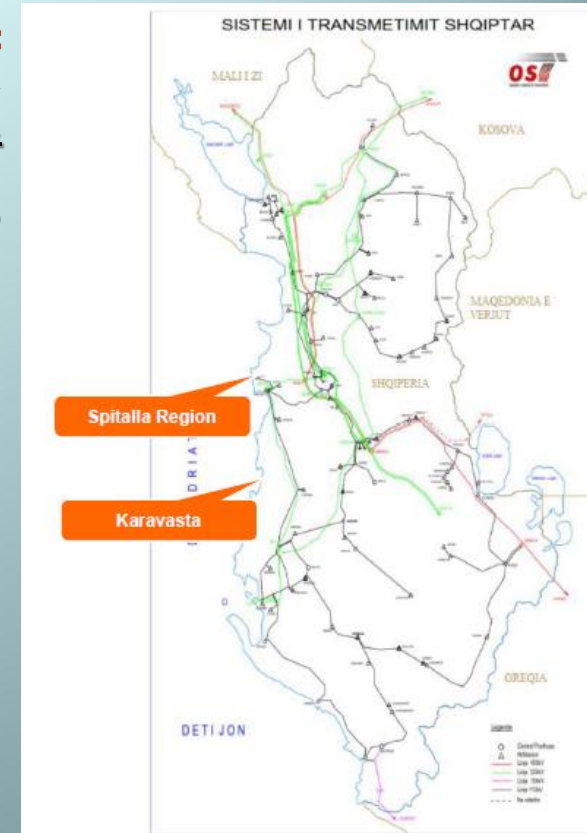
SHELL Int. & Petromanas new discovery 2014.
Shpiragu-2 well, Blocks 2-3, ALBANIA (Test: oil 220-330 ton/day; Gas 80000 -100000 cm/day)

II.-Recent developments on the energy sector in Albania

- The signing in Tirana of **the Memorandum of Economic Cooperation between Albania and the USA, on 03 10 2020, which paves the way for the construction of the Skavica HPP**, which turns Albania from a country rich in hydropower resources, but dependent on continuity from the weather and from imports, to a sovereign country in terms of energy production.

- **On 31.07.2020 the agreement was signed between the Albanian Government and the French company Voltalia for the construction of the Karavasta Photovoltaic Park the largest solar energy park in the Balkans**. The company Voltalia was declared the winner in the international auction held, offering the record price of 24.89 euros per MW. (the highest bid ceiling was 55 euros). Capacity **140 MW** : 70 MW at a predicted price, and 70 MW to trade in the free market.

- **On 19.11.2020** the Ministry of Infrastructure and Energy officially announced **the opening of the auction for the construction of the Photovoltaic Park of the Spitalla. 100 MW.**



II.-Recent developments on the energy sector in Albania

- Referring to **the objectives of the National Energy Strategy for the period 2018-2030**

- Albanian economy and society **to achieve a level of energy savings** related the total consumption by 15% in 2030;

- **Target of renewable energies** related the total consumption to reach 42% in 2030;

- **Reduction of GHG emissions** related the total to reach 11.5% in 2030;

(In accordance with EU "Green Deal")

- With the support of IFC, a member of the World Bank Group, the Albanian Government has **established the Albanian Stock Exchange and Electricity Market Operator, ALPEX,** which marks a further step towards the country's integration into the pan-European energy market and contributes improving the investment climate in the country and attracting foreign investment in the energy sector. **ALPEX was founded on October 23, 2020.**

III.-Gas Master Plan of Albania &Project Identification Plan.

Main goals for Gasification of Albania

Referring to the objectives of the National Energy Strategy for the period 2018–2030

- Linking Albania with the international gas network according to the best option (Eurasia Gas Corridor and Energy Community Gas Ring)
- Preparation of the necessary Albanian legislation for the gas sector in compliance with European legal framework (Regulatory and Investment framework reliability)
- Development of national gas resources and national gas infrastructure
- Restructuring the existing pipeline system for gas transmission in Albania
- Management of the Albanian gas market
- Use of natural gas as an alternative energy source and for the production of electrical energy with gas fired thermal power stations-
- Development of underground gas storage reservoirs and LNG Terminals projects.

III.- Recent developments on gasification of Albania.

TAP a priority project for Albania, the Western Balkan countries , Italy and EU:



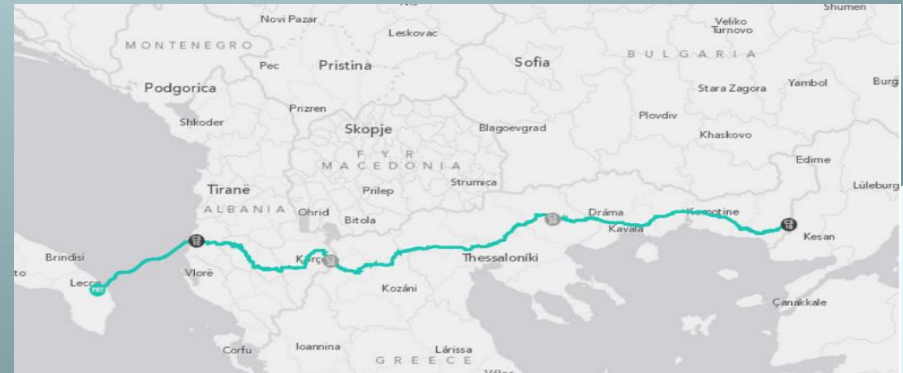
On November 2020 TAP starts its operation for transporting the natural gas from the Shah Deniz Gasfield towards Italy and Western Europe.

TAP will be approximately 870 kilometres in length (Greece 545 km; Albania 211 km; Adriatic Sea 105 km; Italy 8 km).

Its highest point will be 1,800 metres in Albania's mountains, while its lowest will be 820 metres beneath the sea.

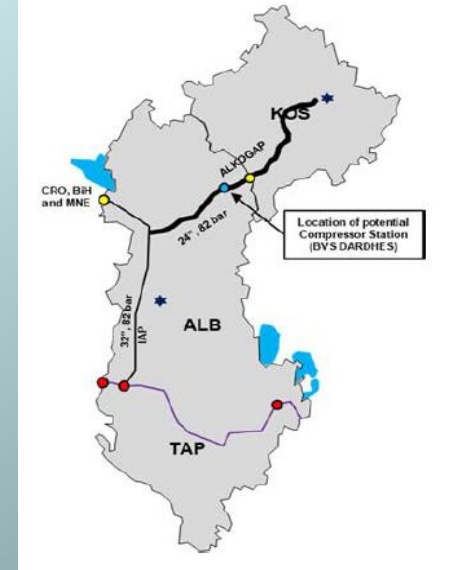
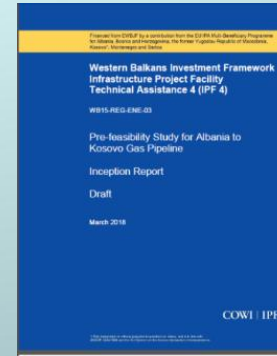
The TAP project will increase its regional role in the case of the option of developing the **gas storage facilities (UGS) in the Dumre region in central Albania, using underground salt formations.**

TAP is part of Southern Gas Corridor



III.- Recent developments on gasification of Albania.

Ionian Adriatic Pipeline Project (IAP Project) Albania - Kosovo Gas Pipeline Project (ALKOGAP Project)



In 2018 has started the preparation of the study: **“Preliminary technical design for the IAP project in the territory of Albania and Montenegro (AL - MN)”**, which is preparing by the Consultant SUEZ IPF 6.

For the study of the preliminary technical design for the IAP project. WBIIF is giving a grant of EUR 2.5 million.

During 2018 has been prepared by the Consultant COWI-IPF 4 the **“Pre-feasibility Study for Albania to Kosovo Gas Pipeline (ALKOGAP)”**. (Founding 0,3 million Euro as grant by WBIIF).

III.- Recent developments on gasification of Albania.

Transmission pipeline from TAP CP1 to TPP Vlora & Dumre Underground Gas Storage Project (UGS Dumrea)

Total gas Consumption by
2040: 252mcm

Total CAPEX: 16.2 Milion EUR

On the frame of 20-th WBIF Round on December 2018 is approved a grant 1,1 Million Euro to prepare **the Detailed Design of the gas pipeline from TAP to Vlora TPP.** This project is under preparation by **HILL International-IPF 7 Consortium**



This UGS project, of about 1 bcm capacity, would improve the preconditions for the further development of the natural gas markets in Albania. a and other countries with Caspian or Middle East gas.

On the frame of 20-th WBIF Round on December 2018 is approved a grant 1 Million Euro to prepare **the Feasibility Study and ESIA for UGS Dumrea project** This project is under preparation by **EGIS-IPF9 Consortium**

IV.- Albania, a possible route for the Caucasian and East Mediterranean gas to Europe

Gas interconnection Lines.

The Gas Master Plan foresees the gasification of Albania and the development of the gas network in Albania.

The three gas interconnectors that are being planned are assessed as the main pillars for the development of the gas sector in Albania:

- **Trans Adriatic Pipeline, (TAP Project,** completed the construction (In operation since November 2020)

- **Ionian Adriatic Pipeline, (IAP Project,** under development)

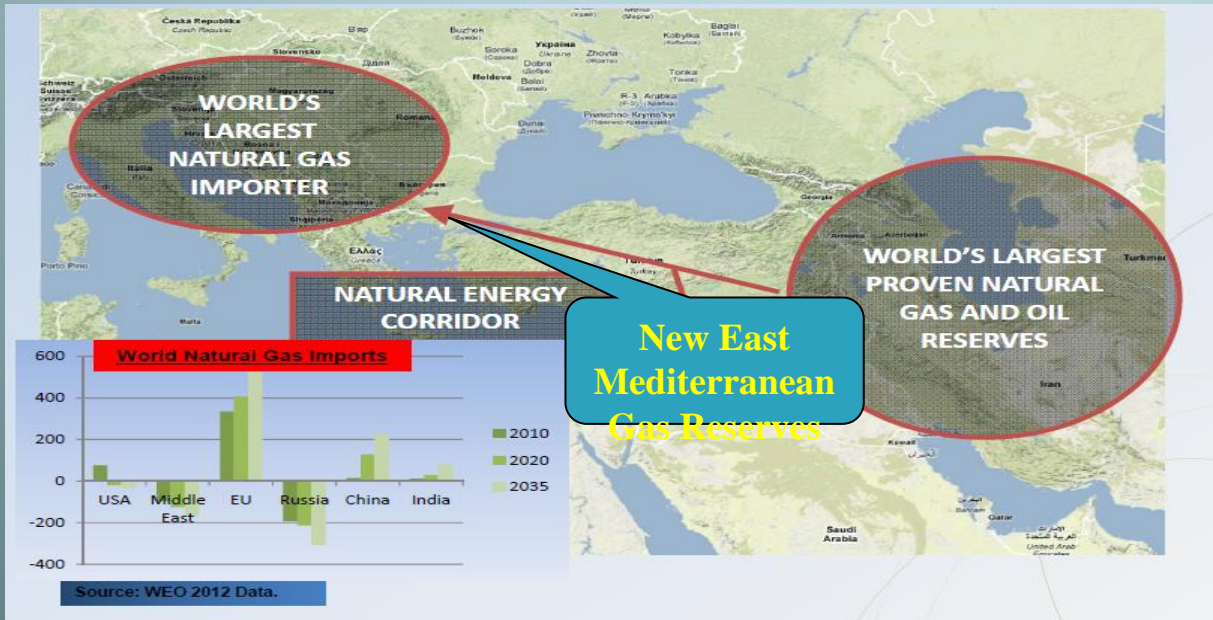
and

- **Albania Kosovo Pipeline, (ALKOGAP Project,** under development).



IV.- Albania, a possible route for the Caucasian and East Mediterranean gas to Europe

The vision for the integration and development of European gas networks, where Albania can contribute to the interconnection progress with the goal of free gas flow in Europe not only in the East West but also South-North direction, to make a real connection between the Adriatic Sea, The Black Sea, the Eastern Mediterranean Sea and the Baltic Sea.

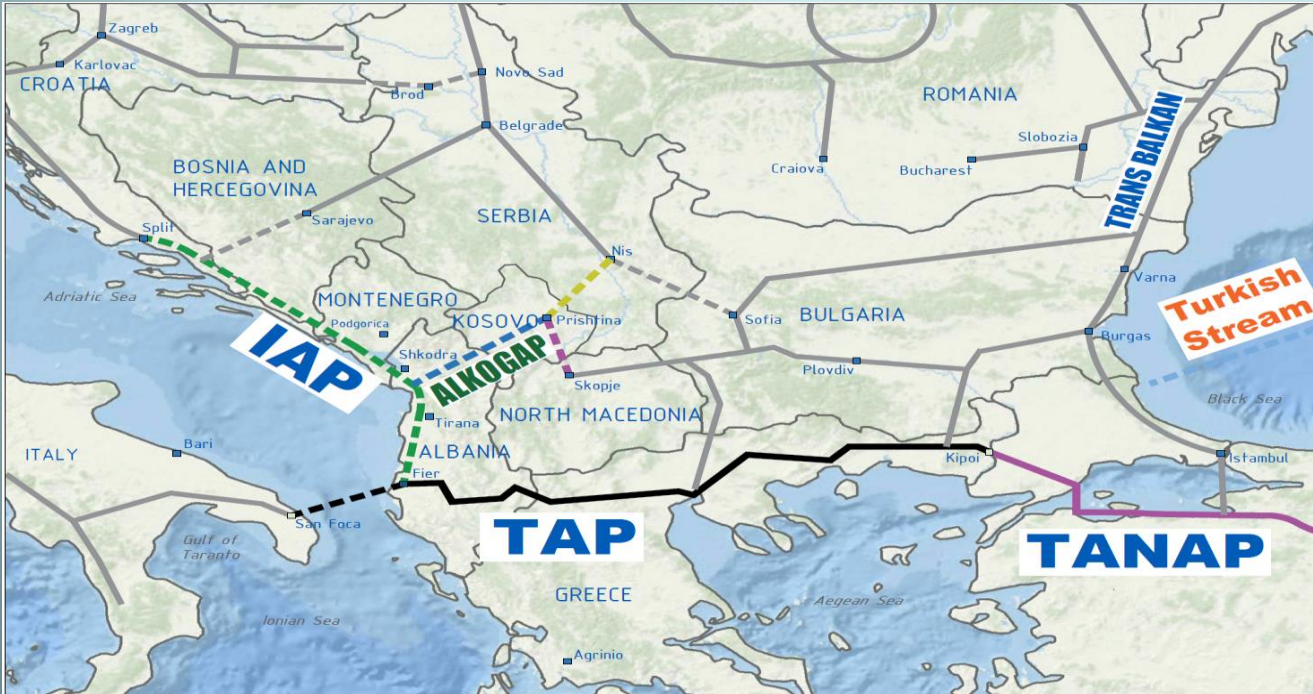


World's largest proven natural gas and oil reserves:; Middle East, Caspian Sea and Eastern Mediterranean regions.

Europe is the world's largest natural gas importer.

The "Wide" Southern Gas Corridor is the NATURAL ENERGY CORRIDOR TO EUROPE

IV.- Developing of the Western Balkan Gas Networks



-Main regional gas projects in the Western Balkan passing through Albania:

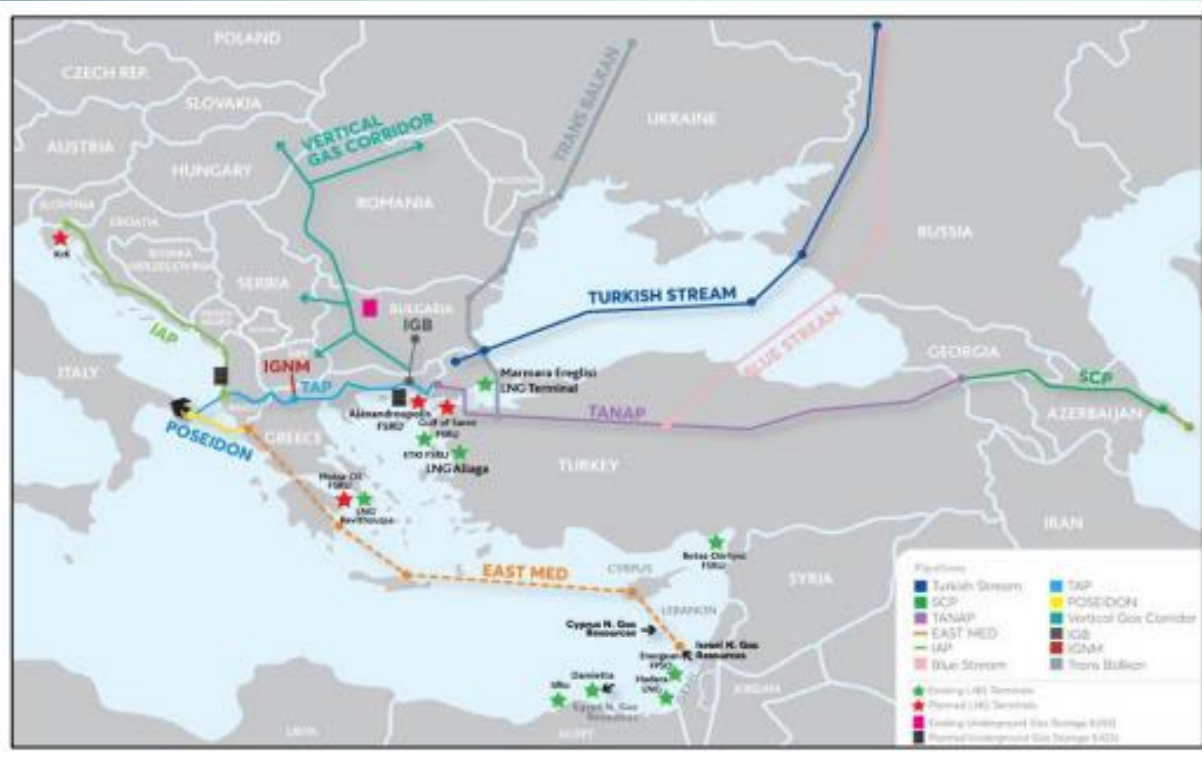
- **TAP Project**- connection with Greek and Italian gas networks,

- **IAP Project** – connection with Croatian and Central European gas networks

- **ALKOGAP Project** – connection with Serbian and North Macedonian gas networks.

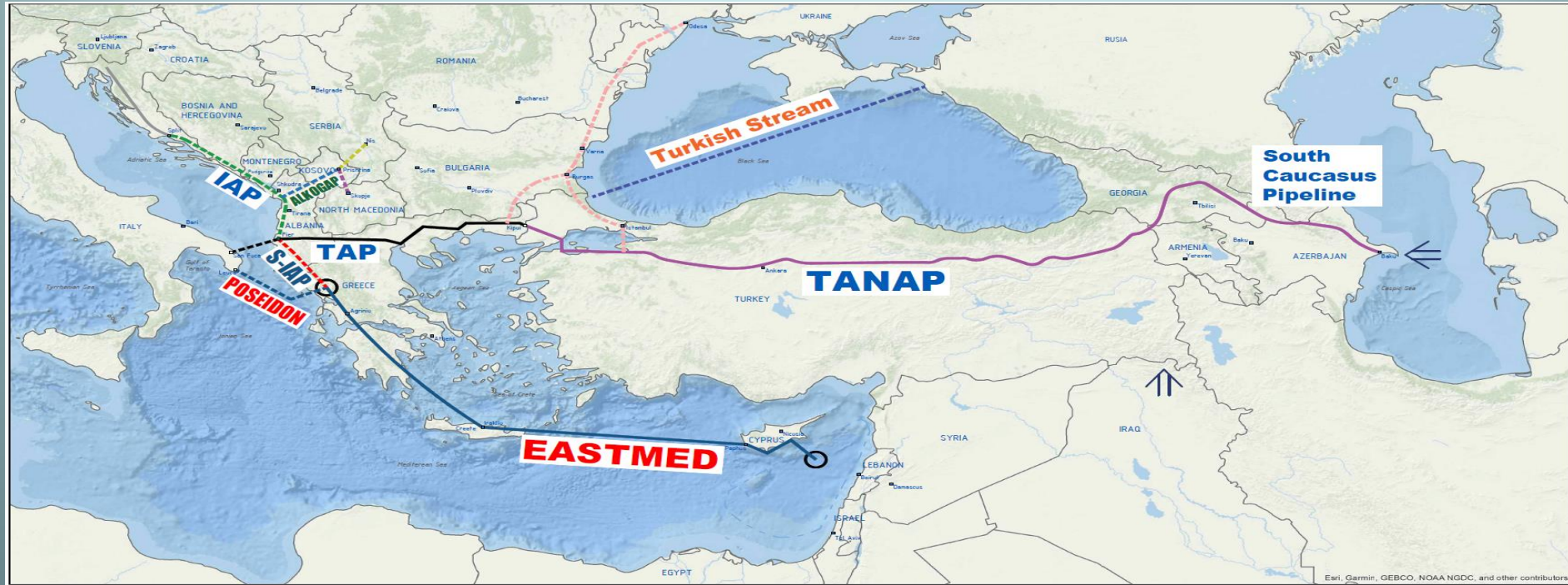
- **Albania, Kosovo and Montenegro are the three last European countries that yet hasn't a gas sector and aren't connected to the European gas network.**

IV.- Albania, a possible route for the Caucasian and East Mediterranean gas to Europe



Referring to “Background Paper”, South Corridor is expected to strengthen the security of energy routes. The TANAP-TAP gas pipeline system is the foundation of the South Corridor. A number of alternative plans for channeling this gas to SEE countries, especially Greece, Bulgaria and Albania, are now being implemented with gas to be used for domestic consumption.

IV.- “Wide” - Southern Gas Corridor (SGC and EASTMED) to Europe



IV.- Albania, a possible route for the Caucasian and East Mediterranean gas to Europe

- ◆ There is a concrete possibility to have **real synergy instead of competition** between the new gas routes of the Caspian and East Mediterranean Gas to Europe.
 - Why is Albania an Eastern Mediterranean gas route to Europe, this refers to the success and the particular contribution to the realization of the TAP project, where Albania has played and continue to play a decisive role.
 - Concrete proposal on the use of Albania and the Western Balkans as a way to Italy, but also towards Central Europe of the Eastern Mediterranean gas (the giant gas fields of the area between Cyprus, Israel and Egypt, but also Lebanon), **expanding northward Western Balkan the project of the EastMed pipeline**

Thank you !

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