

Recent Developments on the Energy Sector in Albania on the framework of regional and global geopolitical and energy crises

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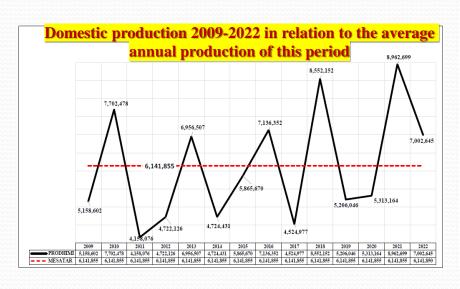
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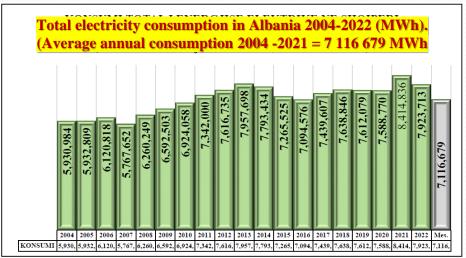


Situation in the Development of the Albanian Energy Sector (Energy production and consumption)

Net domestic historic production and consumption of electricity for the period up to 2022

From the historical analysis of electricity production registered in the country, it results that 2022 with the quantity generated of 7,002.645 GWh, is over the electricity average production for 2009 – 2022 period. The electricity average production for 2009 – 2022 period resulted 6,076 GWh.





As it can be seen in the graphic presentation, the electricity consumption in 2022 reaction of 7,924 GWh, meanwhile the highest electricity consumption is recorded in 2021 with

(The electricity average consumption for 2009 – 2022 period resulted 7,116.679 GWh



Situation in the Development of the Albanian Energy Sector (Energy production and consumption)

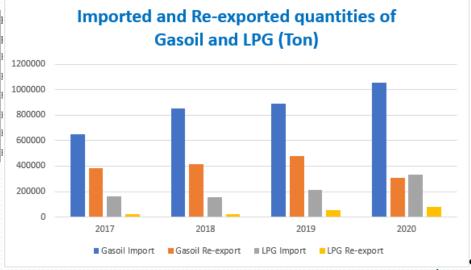
The import of oil by-products for 2020 reaches the value of 1486744 ktoe, meanwhile for 2021 the amounts of imports were around these levels.

Gasoil, gasoline and liquefied petroleum gas (LPG) continue to dominate the import of petroleum products, but also the re-export of a significant amount of these by-products.

¶ No.¤	¶ Period/By- products¤	Quantities · of · imported · oil · by - products · (Ton) ×									
		Gasoil¤	Gasoline¤	Jet-Oil-¤	Diesel- Marine¤	Lubricants¤	Bitumen¤	LPG¤	Total¤		
1¤	2017¤	648607¤	91523¤	13785¤	O¤	7454¤	315¤	162228¤	923912¤		
2¤	2018¤	851751¤	75182¤	15903¤	О¤	9171¤	452¤	153010¤	1105449¤		
3¤	2019¤	889715¤	117487¤	29343¤	O¤	7716¤	77¤	п	1259955¤		
4¤	2020¤	1053625¤	79583¤	11343¤	O¤	8497¤	2733¤	п	1486744¤		
5¤	2021¤	1035037¤	90657¤	15453¤	Oμ	10036¤	n	п	Ħ		

Ħ	9	$Imported \cdot and \cdot Re-exported \cdot Quantities \cdot of \cdot by-products \cdot (Ton) \c x$						
	Period/Byproducts#	G	iasoil¤	Liquified-Petroleum-Gas-(LPG)¤				
		Import∙¤	Re-export¤	Import¤	Re-export¤			
1¤	2017¤	648607¤	386417¤	162228¤	20948¤			
2¤	2018¤	851751¤	417219¤	153010¤	19635¤			
3¤	2019¤	889715¤	480979¤	215204¤	52951¤			
4¤	2020¤	1053625¤	310023¤	330953¤	79806¤			
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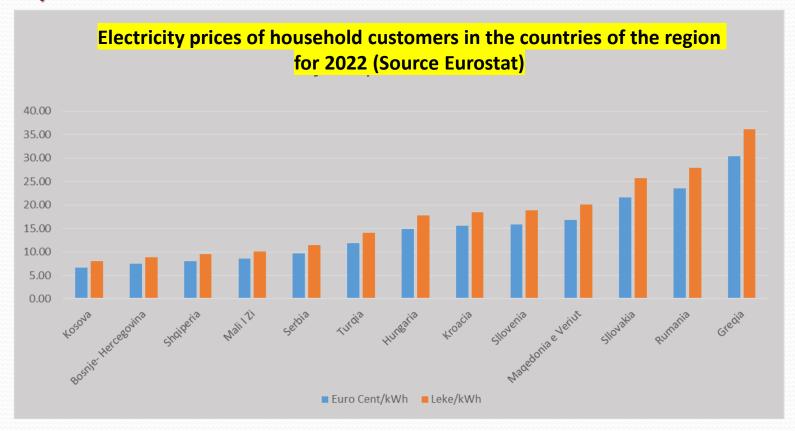
Quantities of oil by-products re-exported, period 2017-2020





Situation in the Development of the Albanian Energy Sector (Energy prices)

The graph below shows the prices of electricity in Eurocents/kWh and Lek/kWh before tax (VAT) for household customers for 2022. According to data published by EuroStat, the average price of electricity for household customers for the countries of the region for 2022 resulted in 17.45 ALL/kWh. (14.64 Euro cent/kWh). Albania 9.5 ALL/kWh (8 Euro cent/kWh)



Electricity prices of household customers in the countries of the region for 2022 (Source Eurostat)



Situation in the Development of the Albanian Energy Sector (Albanian Electricity Exchange)

On April 11, 2023, the Albanian Energy Exchange ALPEX started operating, through the first auction of the day's advance market, realizing one of the priorities of the Government of Albania for the energy sector.

The Electricity Exchange (ALPEX) created by the Decision of the Council of Ministers no. 322, dated 15.05.2019, "On the establishment and determination of the legal form of the ownership structure of the share capital of the Market Operator" and VKM 609 11.09.2019 "On the determination of criteria and procedures for the selection of participants in the share capital of the Market Operator Tregut" which was founded in October 2020, during 2022 there were important developments.

On September 29, 2022, ALPEX was licensed by ERE for the activity of Electricity Market Operator with License No. 525, Series 022, for a 5-year term.

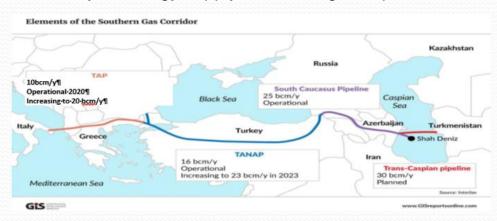
In October 2022, ALPEX organized a workshop with several second-tier banks and the Bank of Albania regarding the clearing and settlement model to be applied.

ALPEX is the second operational exchange in the six countries of the Western Balkans and comes as a necessity to guarantee transparency, competition and efficient use of capacities, which are increasing and will increase more and more, thanks to a series of new investments or others in the following.

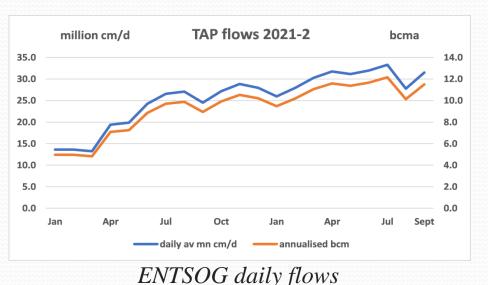


The role of the Trans Adriatic Pipeline (TAP) in the regional diversification of energy supply sources

TAP is the European part of the Southern Gas Corridor, a value chain that improves the security and diversity of energy supply, connecting European markets with new natural gas sources in the Caspian Sea.



On November 15, 2020 TAP started commercial operation. From November 15 onwards, TAP has started capacity reservation auctions on the PRISMA Capacity Reservation Platform. On December 31, 2020 TAP started the first gas transportation to Italy and Greece. The transport capacity of TAP at the current stage is 10 bcm, but there is a possibility of increase up to 20 bcm, which requires the construction of two compressor stations (one in Greece and one in Albania).



TAP a strategic project for Albania and South-Eastern Europe

TAP is the European part and the main part of the Southern Gas Corridor, a strategically and economically important project for the EU and the Energy Community.

For 2022, TAP has transmitted about 12 billion m³ of gas/year. This creates the opportunity for our country to have available sufficient amounts of gas through the points in Fier and Kuçova.

Azerbaijani exports will be up too, roughly unchanged to Turkey but up for Trans Adriatic Pipeline (TAP) markets Italy, Greece, and Bulgarja.



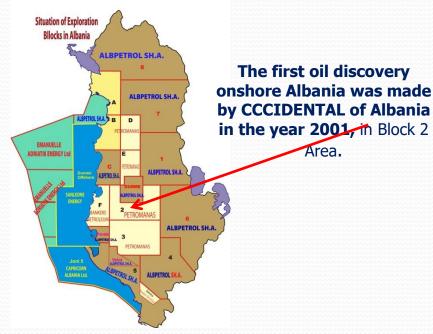
During the last 3 decades the petroleum explorations are being carried out in compliance with the provisions of law no. 7746, dated 28.07.1993, "Petroleum law (Exploration and Production)", as amended.

The company SHELL Upstream Albania has discovered a new oil and gas field in the structure of Shpiragu (Shpiragu 2 well, 2014), in Blocks 2 and 3 and is currently in the evaluation phase of this discovery. After the successful Shpiragu-4 well (thousends of light oil barrels per day), during 2022 -2023 the Shpiragu 5 well is drilling.

Albanian Prime Minister stated that:

"If the next year will bring us the news that the oil and gas discovered in Shpirag are commercial, then we will talk about another Albania, an economic power in this region, but this is still uncertain. The quantity of oil and gas has been found, the quality is higher worldwide, the problem is its commercialization".







Diversification on the Import-export of oil, gas and their by-products

A very important development in the diversification of energy supply sources was the construction and putting in operation of two Coastal Oil Terminals, which, in addition to increasing the security of the country's energy supply, also influenced the improvement of the supply of hydrocarbon products of neighboring countries, meanwhile, has re-dimensioned the geo-economic and geo-political role of Albania in the region and beyond.

-. Petroleum ports of "Porto Romano" and «MBM» in the area of Energy and Industrial Zone of Porto Romano, Durres, and -. Petroleum port of "Vlora-1" in the Vlora Bay,

On January 19, 2023, the project of the new Commercial Port in Porto Romano, Durrës, was officially presented, which will offer modern facilities with much larger capacities. The first phase of development in Porto Romano will last 3 years and will have an investment value of around 390 million euros.

Two logistics terminals are also part of the project of the new Commercial Port in Porto Romano. An important component of Porto Romano and an integral part of the investment are the two logistics terminals, the dry ports in Struga and Pristina. In terms of intermodal logistics by rail, i.e. shipping from a sea route to a rail route.



THE "PORTO ROMANO" AND "MBM PETROLEUM PORT

THE "VLORA-1" PETROLEUM PORT





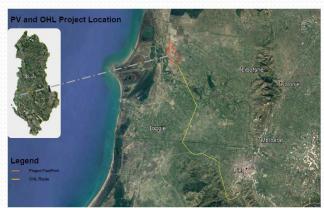
Projects of Photovoltaic Parks and Wind Farms

On 31.07.2022, the agreement between the Albanian Government and the French company Voltalia was signed, paving the way for the start of works for the construction of the Karavasta Photovoltaic Park. The company Voltalia was declared the winner in the international auction held, offering the record price of 24.89 EUR/MWh.

On July 1, 2022, the Photovoltaic Park of Karavasta began to be built in the area of Divjaka and Fier. It will have an installed capacity of 140 MW, divided according to a scheme where 70 megawatts will be at a fixed price and 70 megawatts will be traded on the free market.

On 25.03.2021, the auction for the construction of the Spitalla photovoltaic park is finalized, a park with a capacity of 100 Megawatts, of which 30 MW will be traded on the free market and 70 MW will be purchased by OSSHEE. The park will be built on an area of 120 hectares. The French company Voltalia has won the competition to build the Spitalla photovoltaic park, with a bid of 29.89 EUR/MWh.

Location of Karavasta PV Park and Transmission Line



Location of Spitalla PV Park and Transmission Line



<u>In July 2022, the auction for the wind farms was organized,</u> which was organized with the assistance of the EBRD, with specialists who helped in the whole process, but also with a support from the Swiss SECO.

These wind farms will be the first farms in Albania of a significant amount, from 10 megawatts to 75 MWh. **The total amount of these parks is between 100 and 150 MWh.** For 100 megawatts in total which will be purchased by the Republic of Albania for consumption and normally this price will be 75 euro ceiling per megawatt.

In view of the main objective of increasing energy security, these projects are Albania's best opportunity for diversifying energy production sources.



Interconnection of the Albanian energy sector with the Regional and European energy networks

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

The impact of the "Wide Southern Gas Corridor" on the Europe gas security of supply architecture.

- The historical evolution of the Southern Gas Corridor to an "Wide" one, clearly exemplifies how the original idea of a multilateral and large-scale project based on a variety of gas supply sources, turned out to be a multilateral and medium-scale project with more than one supply sources, Caspian, Meddle East and East Mediterranean regions.
- In this framework, part of the gas arriving from TAP and IAP, as well, (part of "Wide" Southern Gas Corridor) could well be evacuated also to Central and North-West European markets, notably Austria, Germany, Switzerland, France and the United Kingdom (UK).
- This eventuality is reinforced by the fact that the TAP design (together with IAP Project) offers various connection options to a number of existing and proposed pipelines along its route. This would enable the possible delivery of Caspian, Meddle East and East Mediterranean gas to those destination.





Situation on the Development of the legal framework on the Energy Sector in Albania

The developments related to the improvement of the legal and regulatory framework in the energy sector were also evaluated with great importance, such as:

- Approval of law no. 24/2023, dated 23.3.2023, "On promoting the use of energy from renewable sources", This new law transposes the European directive (partially approximating it) (EU) 2018/2001. This law repeals the existing law no. 7/2017, "On promoting the use of energy from renewable sources", amended. Through a well-studied strategy, it is intended that in 2029, new additional production capacities with 4 TW from today's production will be created. Making Albania a net exporting country and not an importing country as it is today.
- ➤ Draft law "On the production, transportation and trading of biofuels and other renewable fuels for transportation", which will repeals the current law no. 9876, dated 14.02.2008 "On the production, transportation and trading of biofuels and other renewable fuels for transportation"

For Albania, transport is the largest contributor of carbon dioxide and, at the size of the country, affects climate change. The purpose of the law is to create incentive policies for the cultivation of energy plants in Albania, to protect the environment through compliance with sustainability criteria for the production of biofuels, bioliquids and biogases" - the report states.

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Instead of Conclusions

Regional cooperation on the framework of geopolitical development

Cooperation between the Ministry of Infrastructure and Energy of Albania and the Ministry of Energy and Environment of Greece.



On 13.05.2022, a meeting took place in Tirana between the Minister of Infrastructure and Energy of Albania, Mrs. Belinda Balluku and the Minister of Energy and Environment of Greece, Mr. Kostas Skrekas,

One of the most important issues that was discussed was the new electric interconnection line between the two countries, for which both transmission operators have started work immediately after the meeting that the two ministers had in January of this year in Athens.

It is intended that within 2030 the new transmission line between Albania and Greece will be operational

Discussions have also been held about the decision of both countries to invest in gasification in the next 10 years, given that both countries, both Greece with the LNG terminal of Alexandropol, and Albania with the LNG terminal of Vlora create concrete opportunities. Experience was discussed and exchanged regarding all the plans that Albania has for gas distribution or even the construction of the new gas line of the Ionain-Adriatic line (IAP Project) where a part of it is expected to be built through the gasification project of the terminal of Vlora thus building an appline which will be 30 kilometers which will connect the port terminal of Vlora with the Exitpoint of Fier.

It was discussed about all the developments that the TAP consortium will have in the future, the investment opportunities in this project or even the gas pipeline capacities that the Republic of Albania will need in the future.

Instead of Conclusions



Albania to issue call for 300 MW solar power auction by June April 19, 2023

In the first of the forthcoming three solar power auctions, Albania is offering power purchase agreements and contracts for difference for 300 MW in total capacity. The call is planned to be issued by June.

Albania intends to add 1 GW in solar power capacity through three competitive procedures, the Ministry of Infrastructure and Energy said in a notice and revealed that it plans to issue a call for investors by June for 300 MW in total. French company Voltalia won at the last two auctions and last year it started to build its Karavasta photovoltaic facility of 140 MW in peak capacity.

The tenders for Karavasta and Spitalle were held after the locations were determined. This time the participants will need to propose the sites within areas marked by the ministry as potentially suitable.

Each developer can bid for up to 100 MW in total capacity

The deadline for the proposals is expected to be in October, the announcement reads. Successful bidders will sign a 15-year support agreement consisting of a power purchase agreement or PPA for period 1 and a contract for difference (CfD) for period 2, the ministry pointed out.

In a separate competitive procedure, the ministry is set to open the bids next month for wind farms of 100 MW to 150 MW in total capacity. Six firms and consortiums made it to the second and final phase.



THANK YOU!

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