

PETROLEUM EXPLORATION & PRODUCTION ACTIVITIES IN ALBANIA

3 rd SE Europe Hydrocarbons Upstream Workshop
Athens, October 30-31, 2018
Athens

Agenda

I. GENERAL INFORMATION & ENERGY BALANCE OF ALBANIA

LEGAL AND INSTITUTIONAL FRAMEWORK IN PETROLEUM ACTIVITIES.

CURRENT SITUATION IN PETROLEUM INDUSTRY IN ALBANIA

THE POSSIBILITIES TO INVEST IN PETROLEUM SECTOR IN ALBANIA

I.1 REGIONAL SETTING

Albania is located on the west side of the Balkans in the Southeast of Europe

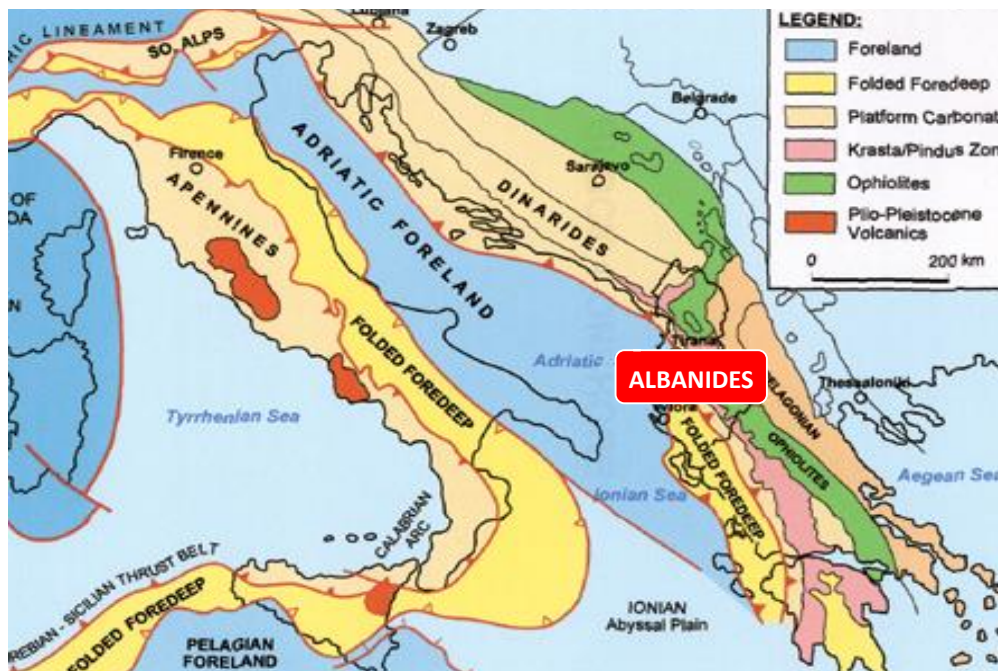


Capital: **TIRANA**
Currency: **Albanian lek (ALL)**
language: **Albanian**
Government: **Parliamentary Republic**
Population: **2,821,977**
Area: **28,748 km²**

Albania, by land, is bordered by **Monte Negro** in the North, **Kosovo** and **"Former Republic of Macedonia"** in northeast and east, and by **Greece** in the Southeast and South, whereas in the West it is bordered by the **Adriatic and Ionian** Seas.

I.2 REGIONAL GEOLOGICAL SETTING

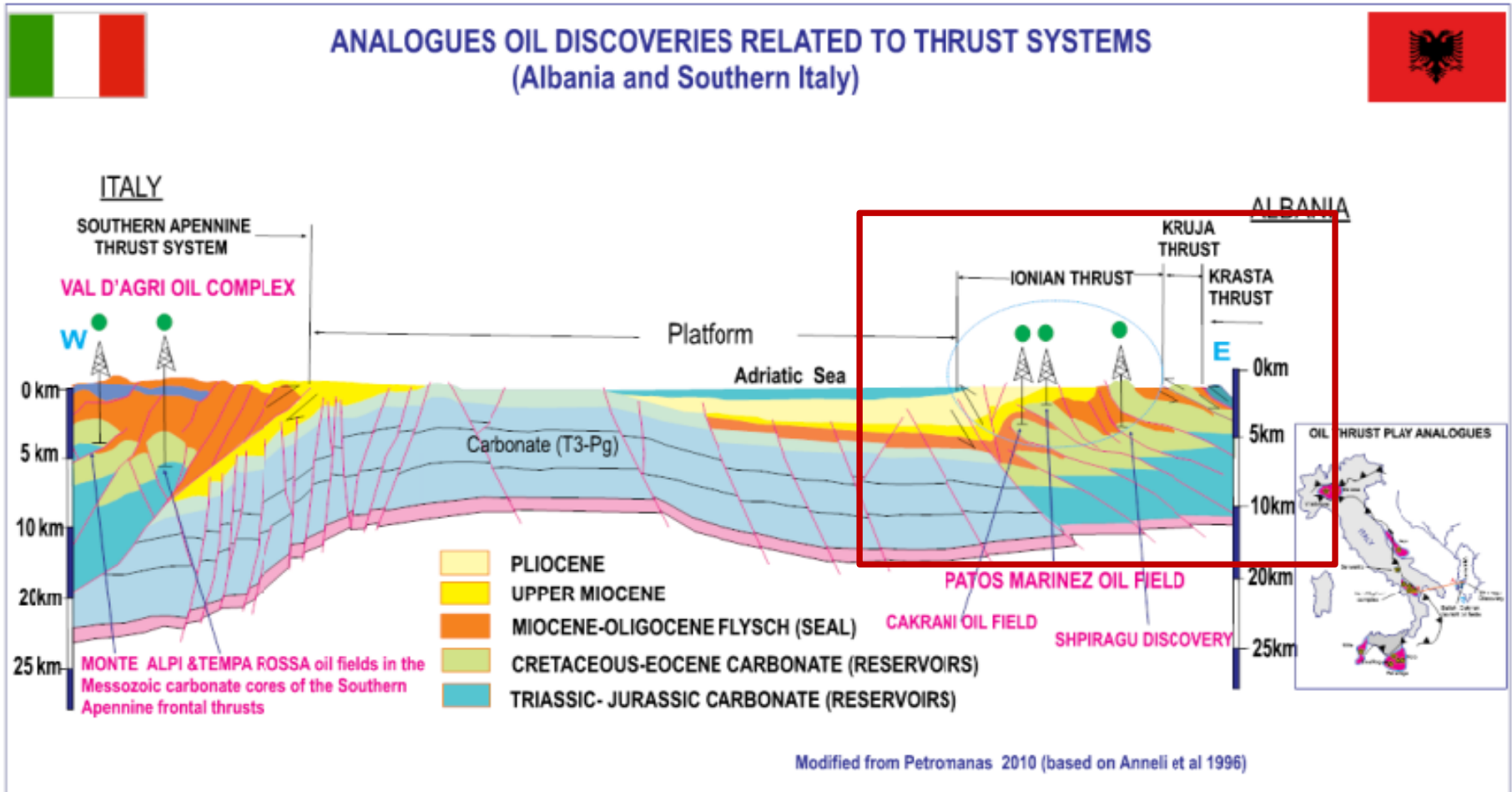
From the geological point of view, **Albania is part of the Mediterranean Alpine Folded Belt** and fits in the Dinaric-Hellenic range, between the Dinarides in the North and Hellenides in the South



- The geological structure constituting **Albania is called the Albanides**, a term widely used at home and abroad.
- The Albanides are divided into:
 - **INTERNAL ALBANIDES.** (east part of country)
 - **EXTERNAL ALBANIDES.** (west part of country)

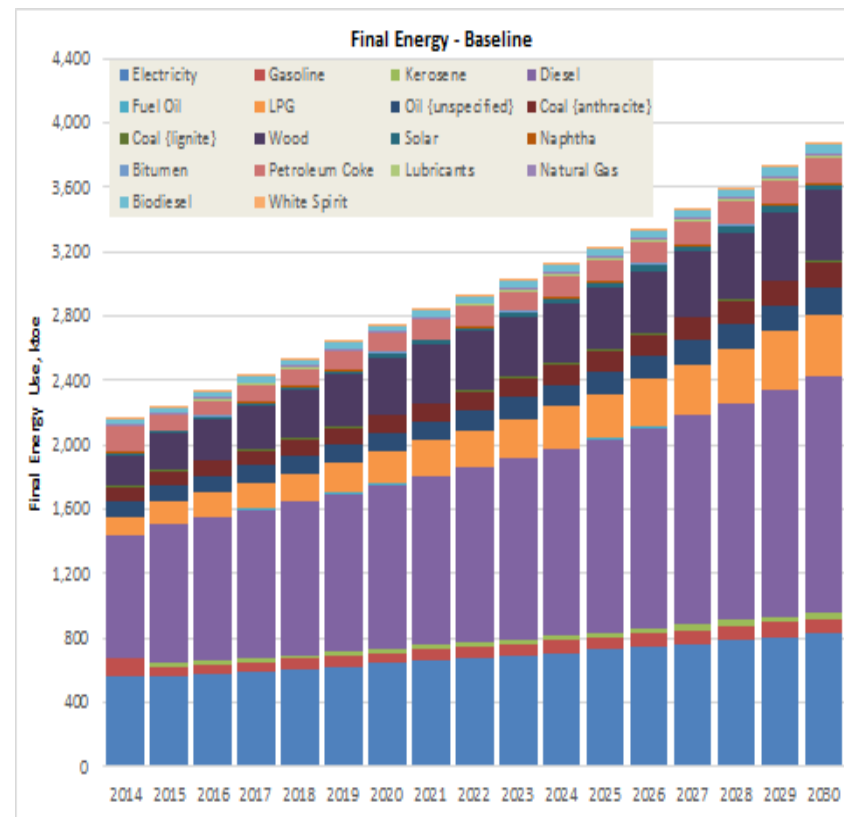
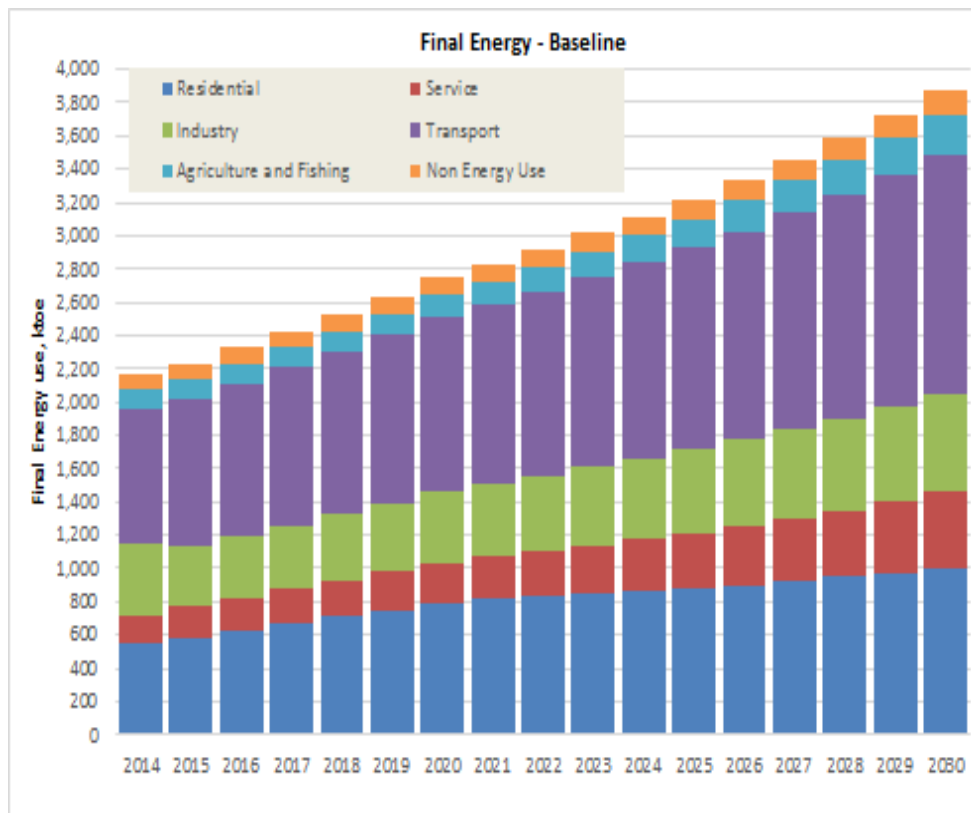
Here are located the oil and gas fields

GEOLOGICAL CROSS SECTION ITALY-ALBANIA



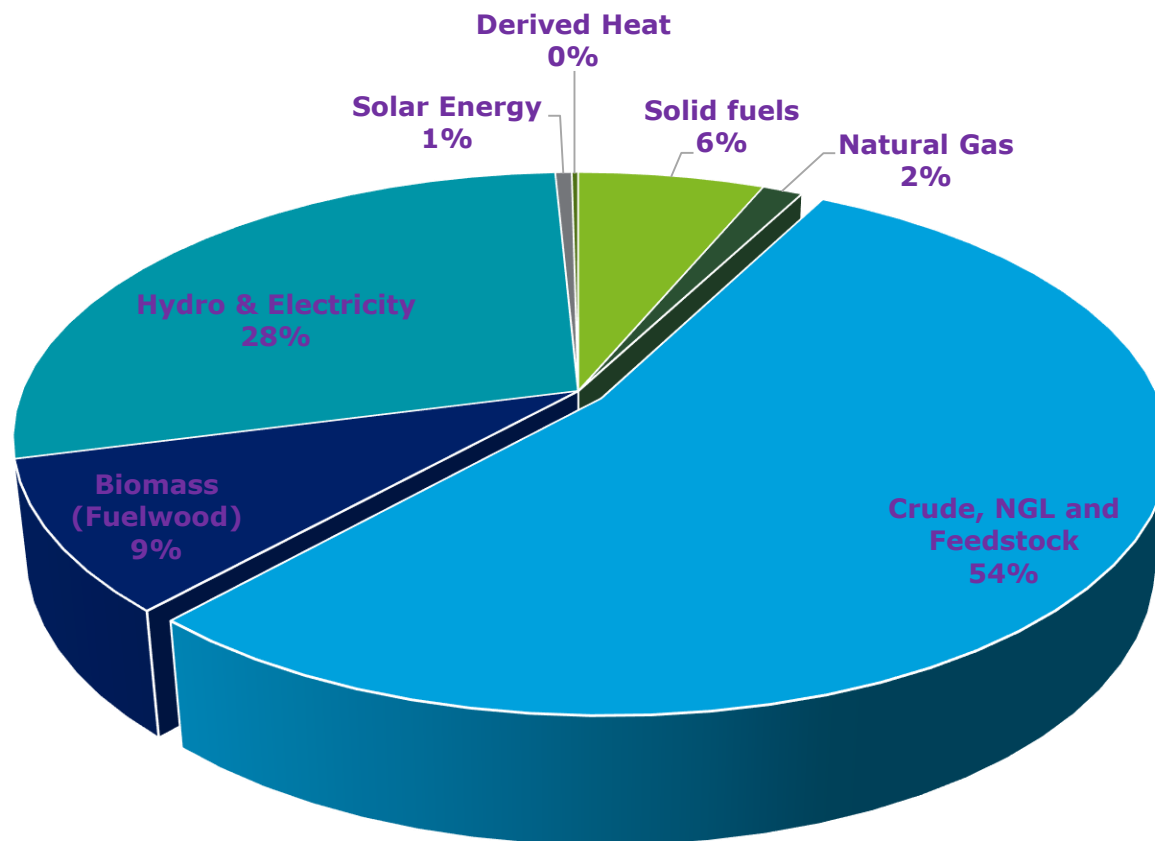
1.3 Baseline Final Energy Demand Forecast

- the final energy demand in the transport sector from 816 ktoe in 2014 to 1431 ktoe in 2030 (the contribution of the transport sector in the total energy demand will remain almost constant from 37.78% in 2014 to 37.54% in 2030,)
- the absolute consumption will increase almost about 60%.



This will happen because today in Albania has 12 cars per 100 residents far from EU situation. The number of cars increased by an average of 25,000 per years, which shows that Albania is a growing market for oil products according to national energy strategy.

Year 2015	TOTAL	Solid fuels	Natural Gas	Crude, NGL and Feedstock	Biomass (Fuelwood)	Hydro & Electricity	Solar Energy	Derived Heat
Primary production	2116,84	69	30,4	1279,22	214	507,00	12,38	4,8
Recovered products	0,00			0,0				
Imports (Pet Prod+ Electricity)	1507,83	71,48		1232,40	1,390	202,56		
Stock change	127,48			127,48				
Exports	1250,89	0,05		1157,57	11,060	82,21		
Bunkers	27,53			27,53				
	2218,77	140,43	30,4	1199,04	204,33	627,35	12,38	4,80



**Albania's Gross Inland Energy Consumption – 2015
in KTOE**

According **to the National Energy Strategy**, is intended to achieve the following results:

- Reduced energy imports and **increased energy domestic production** to meet the future energy demands of the country;
- **Penetration of natural gas in the Albanian energy sector** through carrying out selected infrastructure investments.
- Development of mechanisms **to encourage foreign direct investment in the exploration** for additional sources of domestic oil and gas reserves.
- Improved energy efficiency in the household, services and industrial sectors;
- Increased utilization of RES technologies (especially small HPP), based on least cost planning and environmental protection principles.
- Increased competition in the energy market.
- Improved alignment and integration of the Albanian energy sector legal framework with the EU's energy acquis with the regional and EU energy markets.
- Development of a more consumer-oriented and decentralized future Albanian energy system.

Implementation of this Energy Strategy will increase the security of energy supply for the Albanian consumers and continue the progress towards greater integration of the Albanian energy market into the regional and European markets. In addition, it is designed to create equal conditions for all energy companies engaged in the Albanian energy market, minimize the energy supply costs for Albanian citizens and economy, and minimize adverse impacts on the environment.

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GENERAL INFORMATION OF ALBANIA

II. LEGAL AND INSTITUTIONAL FRAMEWORK IN PETROLEUM ACTIVITIES.

CURRENT SITUATION IN PETROLEUM INDUSTRY IN ALBANIA

THE POSSIBILITIES TO INVEST IN PETROLEUM SECTOR IN ALBANIA

II.1 LEGAL AND INSTITUTIONAL FRAMEWORK IN PETROLEUM ACTIVITIES.

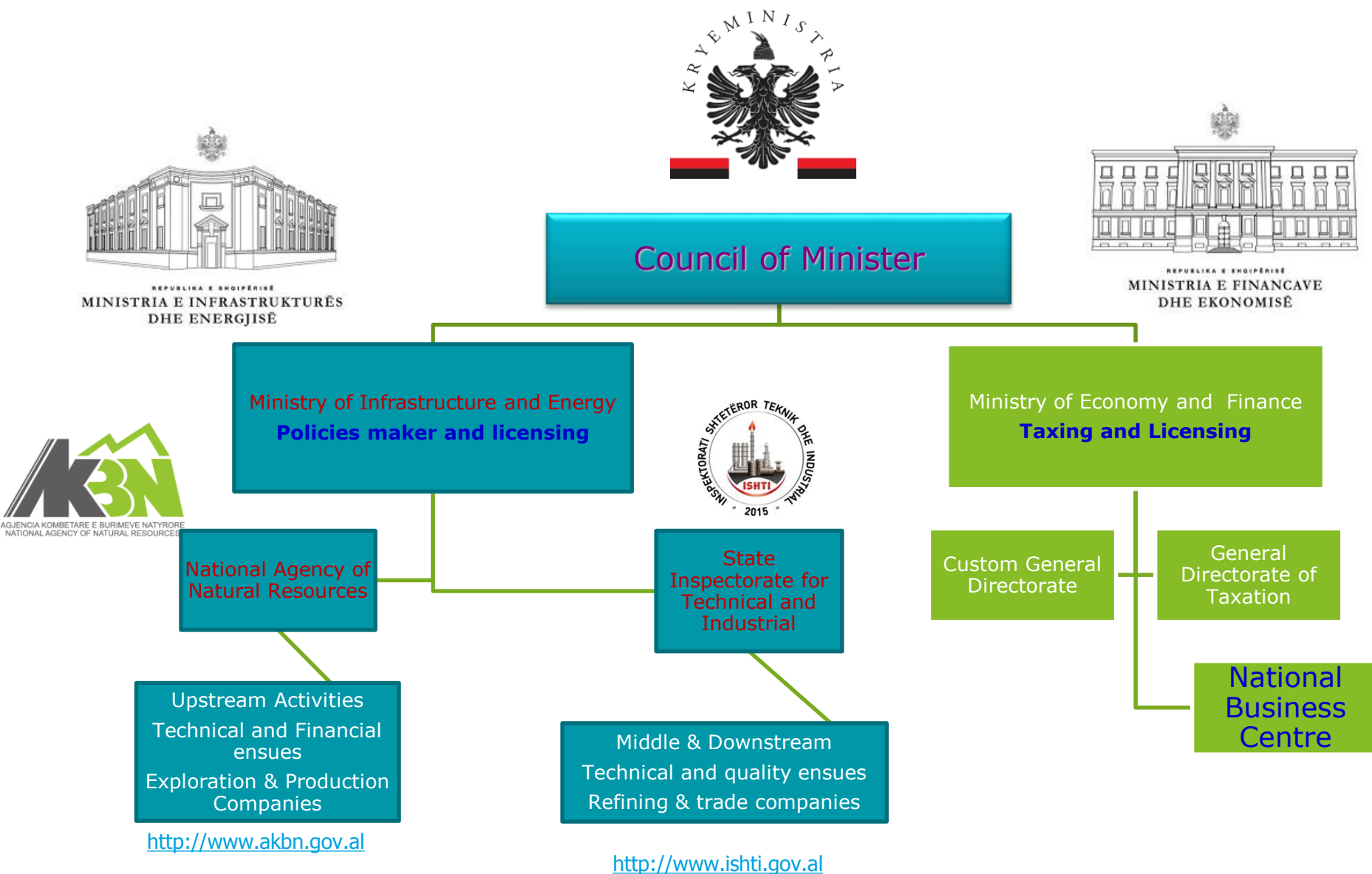
The development and regulation of the petroleum sector is based on these three main laws:

- **Law no.7746/1993 “The Petroleum Law (Exploration and Production)”**, as amended, which is harmonized with the Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorizations for the exploration and production of hydrocarbons.
- **Law no.8450/1999 “On refining, transportation and trading of oil, gas and their by-products”**, as amended. The provision of this law does not refer to a specific directive but is based on the legislation enforced in some countries of EU (e.g. Greece) and in some directives as well.
- **Law 102/2015 “On natural gas sector”**. This law is fully in compliance with Directive 2009/73/EC of the European Parliament and of The Council of 13 July 2009 concerning common rules for the internal market in natural gas.

Specific legal acts and secondary legislation regulate the activities in petroleum sector, such as:

- **Technical norms and standards for facilities and installations in the petroleum sector according to international standard on exploration for oil and gas**
- **Fiscal policies,**
- **Production and trade of biofuels,**
- **Regulating the relations for the construction and operation of relevant infrastructure,**
- **Environmental issues**
- **Etc.**

II. 2 The institutional framework dealing with the petroleum sector in Albania is composed of the following institutions:



II.3 LEGAL AND INSTITUTIONAL FRAMEWORK ON UPSTREAM

(exploration and production)

Law no.7746/1993 "On Petroleum (Exploration and Production)", as amended, created space and a higher security for foreign investors in the petroleum exploration and production.

- The law recognizes that all petroleum reserves in their natural condition, in strata lying, are **the exclusive property of the Albanian State**.
- The Petroleum law expressly permits the Ministry of Energy to enter into Petroleum Agreement with any company which has the **technical and financial capacity to** explore and produce petroleum. The Petroleum Agreement has to be approved **by the Council of Ministers**. These procedures are conducted accordingly **to the EU Directive 94/22/EC**.
- Existing Petroleum Agreement are **"Production Sharing Agreement"**, for the exploration phase as well as for exploitation phase

Contractors are granted exclusive rights for:

- **The exploration period**, up to 5 years and can be prolonged up to 7 years,
- **The Appraisal Period**, up to 3 years, only If the Contractor declares discovery during the exploration period,
- **The exploitation (production) period**, up to twenty-five years, which can be prolonged, If the Contractor declares a commercial discovery during the appraisal period.

This law provides so called "stability clause" which guarantees the contractors that any *new provisions or changes or amendments to Albanian laws or regulations* **should not negatively impact the economical terms of the Petroleum Agreement.** The stability clause are limited in time up to 12 years after the first year of production. There are some limitations to this clause such as national security and international obligation of the Republic of Albania, to name a few.

The Petroleum law contains other important provisions for protecting the environment and social rights of the communities in the area where an exploration and production activity is authorized.

The main Fiscal Terms of Petroleum Agreement

(exploration and production)

- The Contractor is subject **to tax on profit**, according to the Law No.7811/1994, "On approval of Decree No.782, date 22.2.1994 "On the fiscal system in the hydrocarbons sector (Exploration-Production)". **This tax is at the rate of 50% of the realized profit.**
- **The Royalty** according to the Law No. 9975/2008 "On the National Taxes". **This tax is at the rate of 10% of petroleum sales revenues.**
- The supply of goods and services performed by contractors and subcontractors, certified by the National Agency of Natural Resources, are **exempted from all taxes** for petroleum operation during **explorations period** only.
- **Albania production share** it depends on every Petroleum Agreement and is managed by so called R factor. R" Factor (the ratio of CONTRACTOR's cumulative revenue from the Effective Date until the end of the preceding Calendar Year to the CONTRACTOR's cumulative expenditures).
- **Cost Recovery limit** of the available petroleum, it depends on every Petroleum Agreement
- **Signature Bonus** depends on every Petroleum Agreement
- **Training Bonus** depends on every Petroleum Agreement.

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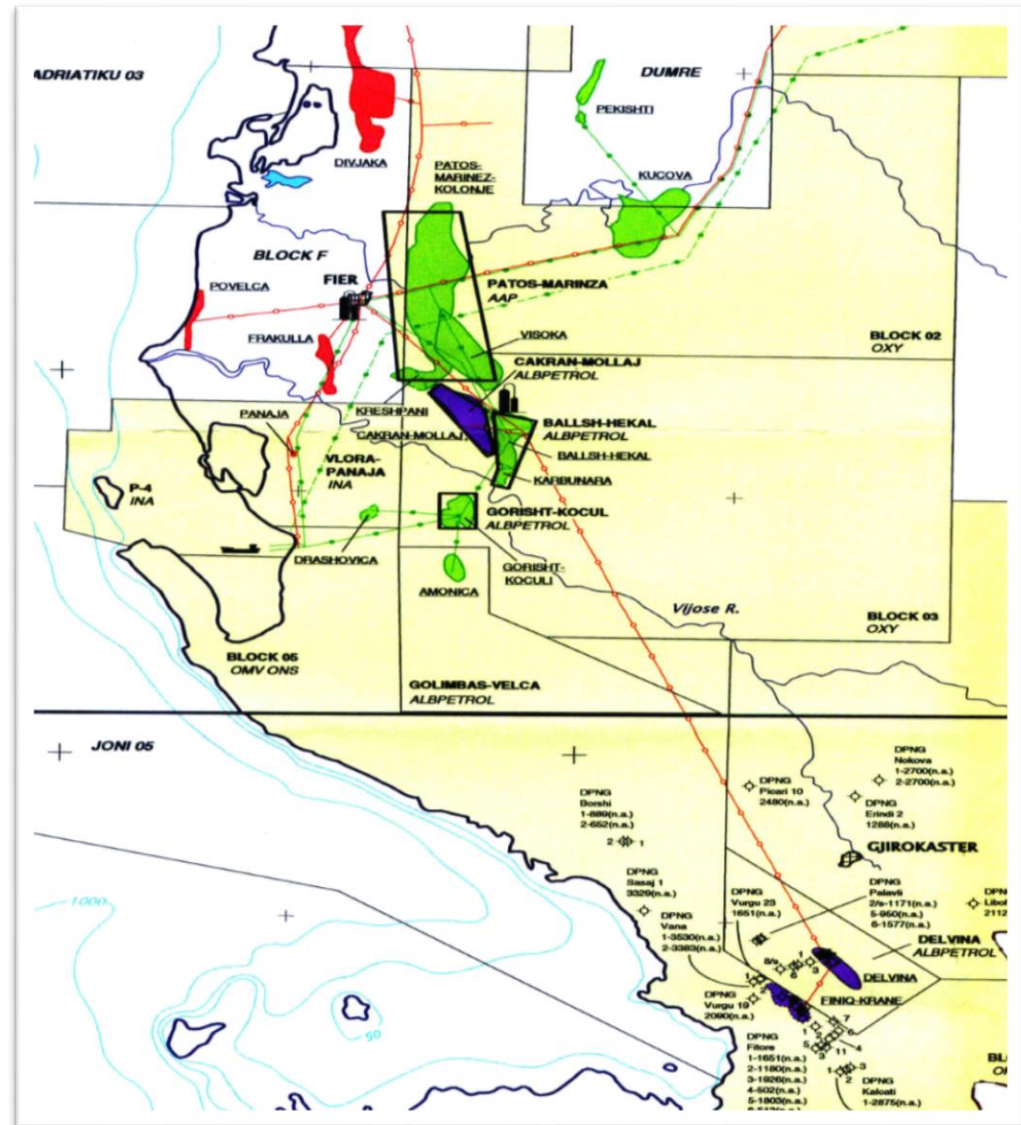
LEGAL AND INSTITUTIONAL FRAMEWORK IN PETROLEUM ACTIVITIES.

III. CURRENT SITUATION IN PETROLEUM INDUSTRY IN ALBANIA

THE POSSIBILITIES TO INVEST IN PETROLEUM SECTOR IN ALBANIA

III.1 Existing Oil and Gas Fields In Albania

The location of main oil and gas fields in Albania



Existing Oil and Gas Fields In Albania

A summary of the Exploration History in Albania

FIELD	DISCOVER Y YEAR	RESERVOIR TYPE	RESERVOIR DEPTH (m)	O/G GRAVITY (API)	SULPHUR CONTENT (%)
Drashovica	1918	Oligoc.flysch	100-200	Oil <10°	?
Patos	1927	Mess-clastics	Surf. To 1200	Oil (12-24°API)	2.5-6
Kucova	1928	Mess-clastics	Surf. To 1500	Oil (13-16°API)	4
Marinza	1957	Mess-clastics	1200-1800	Oil (12-35°API)	4-6
Visoka	1963	Cret/Eoc.Carb	800-1000	Oil (5-16°API)	5-6
Gorisht-Kocul	1965	Cret/Eoc.Carb	1000-2500	Oil (17°API)	6
Ballsh-Hekal	1966	Cret/Eoc.Carb	1000-3000	Oil (12-24°API)	5.7-8.4
Cakrran-Mollaj	1977	Cret/Eoc.Carb	3000-4500	Oil (14-37°API) Cond, 52 °API	0.9
Finiq-Krane	1973	Cret/Eoc.Carb	800-2000	Oil (<10°API)	3.7-4.3
Delvina	1989	Cret/Eoc.Carb	2800-3400	Oil (31°API) Cond, 53 °API	0.7
Divjaka	1963	Tort/clastics	2400-3000	Gas & Condens	Na
Ballaj-Kryevidh	1983	Plioc/clastics	300-1700	Gas	Na
Frakulla	1965	Mess/clastics	300-2500	Gas	Na
Povelca	1987	Mess/clastics	1800-3500	Gas & condens	Na
Panaja	1988	Mess/clastics	2500	Gas	Na
Ad-4 (offshore)	1994	Mess/clastics	2500-3100	Biogenic Gas & Cond, 54.3 °API	Na
Sqepuri	2001	Cret/Eoc.Carb	4950	Oil (37°API)	2,3

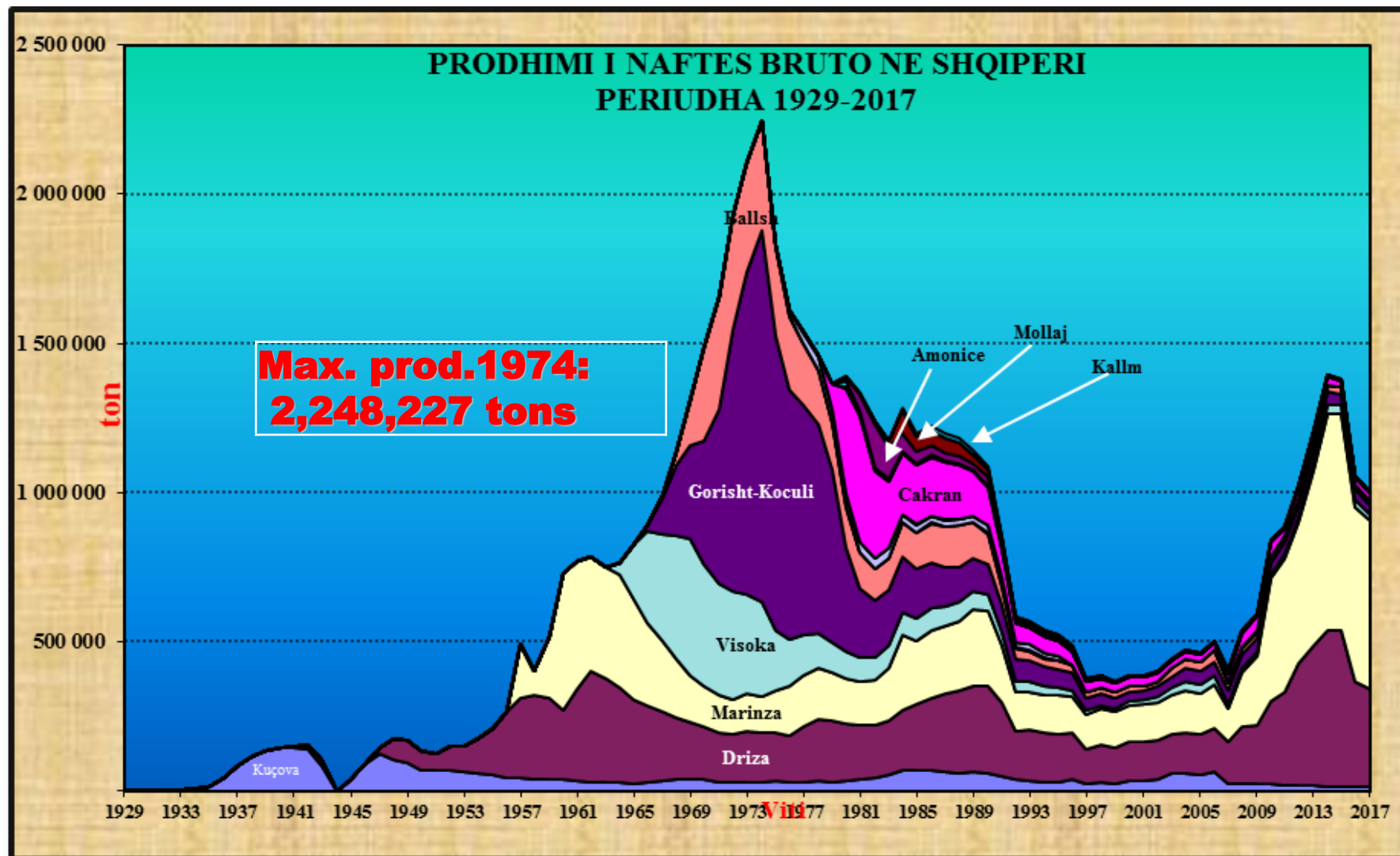
Existing Oil and Gas Fields In Albania

The existing oil and gas fields are in operation by Albpetrol or through the Petroleum Agreement, with Albpetrol (currently state company).

According to the Petroleum Agreements the development and production in these oil and gas fields are performed 100% by the following companies:

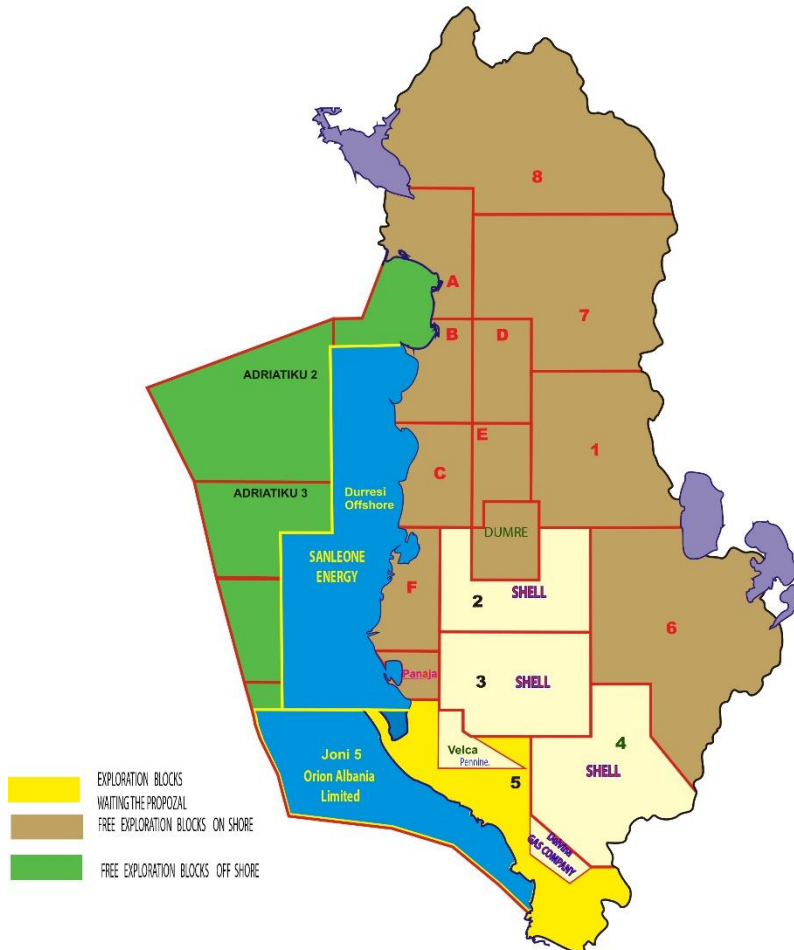
- **Bankers-Petroleum ALBANIA.** On the Patos- Marinza oilfield.
- **Anio Oil and Gas limestone oilfield** Ballsh-Hekal.
- **Delvina Gas Company.** On limestone gas condensate field Delvinë.
- **Sherwood International Petroleum Inc.** On the Kucove oilfield.
- **Transoil Inc.** On the Visoke oilfield.
- **Fit Pek** On the oilfields Finiq-Krane, Pekisht-Murris
- The others, **Gorisht-Kocul, Cakran-Mollaj and Amonica** oil fields are operating by Albpetrol Sh.A. and all Gas fields

DOMESTIC CRUDE OIL PRODUCTION
for 2017 the production was 861,682 Tons



III.2 EXPLORATION BLOCKS IN ALBANIA

SITUATION OF EXPLORATION BLOCKS IN ALBANIA
OCTOBER 2018



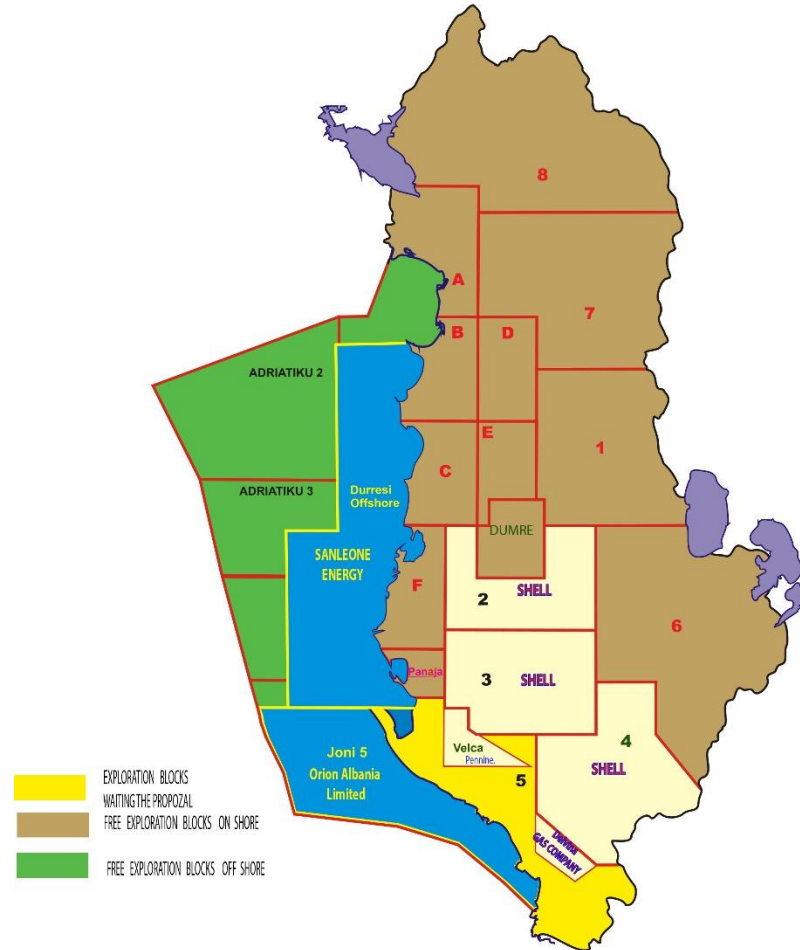
Under operation for the exploration of oil and gas are the following Petroleum Agreements:

- **Blocks 2-3** onshore, with the company SHELL. It is in appraisal period.
- **Durrresi block** offshore, with the company San Leon Energy.
- **Joni 5 block** offshore, with the company Orion Albania Limited.

EXPLORATION BLOCKS IN ALBANIA

- Immediately after the amendment of the Petroleum Law and Agreement of Albpetrol, MEI started on 12 May 2015 the competitive procedures for awarding the 13 free blocks according to Directive 94/22/EC of the European Parliament (see the map).
- On August 2015, MEI announced the winning companies for **Blocks 4 (SHELL) and Dumre (Navitas – Delek)**.
- The process for block Dumre is cancel.
- The Petroleum Agreement with SHELL for the **Block 4 (SHELL)** is signed and it is approved by the Council Of Minister.
- MIE announced on December 2016 the winning company for **Block “Velca” (Pennine Petroleum Corporation)**, which is administration by Albpetrol. The Petroleum Agreement is signed and it is approved by the Council Of Ministers.
- The free **Block 5** is announced by the ministry for competitive procedures, according to the petroleum law, up 06.11.2018
- The free Blocks will be announced by the ministry very soon for competitive procedures, according to the petroleum law.

SITUATION OF EXPLORATION BLOCKS IN ALBANIA OCTOBER 2018



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IV. THE POSSIBILITIES TO INVEST IN PETROLEUM SECTOR IN ALBANIA

IV.1 THE POSSIBILITIES TO INVEST IN PETROLEUM EXPLORATION IN ALBANIA

- The development of petroleum operations becomes possible as a result of specific and highly effective legal framework in upstream. Procedures are open, transparent and competitive.
- After the 1990s several licensing rounds for exploration, development and production of hydrocarbons have been conducted and a number of petroleum agreements with foreign companies have been consolidated. So there is experience in the country.
- During this period a large number of petroleum activities were carried out and a lot of data was collected, which are used for ongoing work.
- Oil content of the Albanian territory is proven, our country's prospect is high, as the deep objects under the big shrinkage are still uncontrolled. Discovering Shpirag is just the beginning of discovering a new exploration perspective.
- In-depth exploration will shed some light on some new laws that will dictate the extent of exploration beyond the Ionic tectonic area, in which all the petroleum reserves have been discovered to date.

IV.2 THE POSSIBILITIES TO INVEST IN PETROLEUM SECTOR IN ALBANIA.

THE STRATEGY FOR OIL ACTIVITIES IN ALBANIA will FOCUS ON:

- **Diversification** of petroleum energy sources
- Increase crude oil production to over **2 million tons** the next years by:
 - **Efficient exploitation** of existing crude oil reserves
 - Use of **modern technologies** to increase of crude oil reserves
- **Auction** of free oil & gas blocks, based on competitive procedures.
- Find the possible scenario for privatization / restructuration of Albpetrol company.
- Establish the **SCIENTIFIC INSTITUTE OF HYDROCARBONS**
- Increase of **refining capacities**, since most of crude oil is exported.
- Increase **the storage capacity** and restructuring **the petrol station**.
- **Became the Energy hub**, due to proximity with Kosovo, Macedonia and Montenegro

IV.3 OTHERS POSSIBILITY TO INVEST IN PETROLEUM SECTOR IN ALBANIA

THE STRATEGY FOR GAS ACTIVITIES IN ALBANIA

The GoA plan for the development of gas sector and market in the country addresses several aspects including legal, regulatory and institutional related to the construction operation and regulation of the gas infrastructure and gas supply of the country.

- Successful implementation of **TAP project** in Albania
- **Construction permit** approved in 2014 – First phase started in July 2015
- Finalizing the **Gas Master Plan** in June 2016 financed by WBIF grant
- Potential **interconnection** with neighboring countries
- **Gas to Power** - Supply of TPP Vlore
- Supply of **big industrial customers**
- Construction of **downstream gas infrastructure**
- Construction of **Ionian Adriatic Pipeline (IAP)**
- Feasibility Study of **the Albania – Kosovo Gas Pipeline(ALKOGAP)**
- Development of **underground gas storage**

THANK YOU FOR YOUR ATTENTION !

For any further information you are welcome to visit
www.infrastruktura.gov.al

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