

Activities and policies to attract foreign investments in Albania



AGJENCIA KOMBETARE E BURIMEVE NATYRORE
NATIONAL AGENCY OF NATURAL RESOURCES



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AKBN's vision

The main institutional obligation of the entire activity pursued by the agency is to protect and well administrate the interests of Albania in hydrocarbon, mining and energy field.

AKBN's mission

AKBN has as its main object of activity the development, supervision and rational exploitation of natural resources based in governmental politics and the monitor of their post-exploitation in mining, hydrocarbon and energetic sector. It serves as a specialized entity for the Minister of Economy, Trade and Energy for the strategy and politic issues in the above mentioned fields.

National Agency of Natural Resources covers issues on:

- **HYDROCARBON**
- **MINING**
- **HYDROPOWER**
- **RENEWABLE ENERGY**

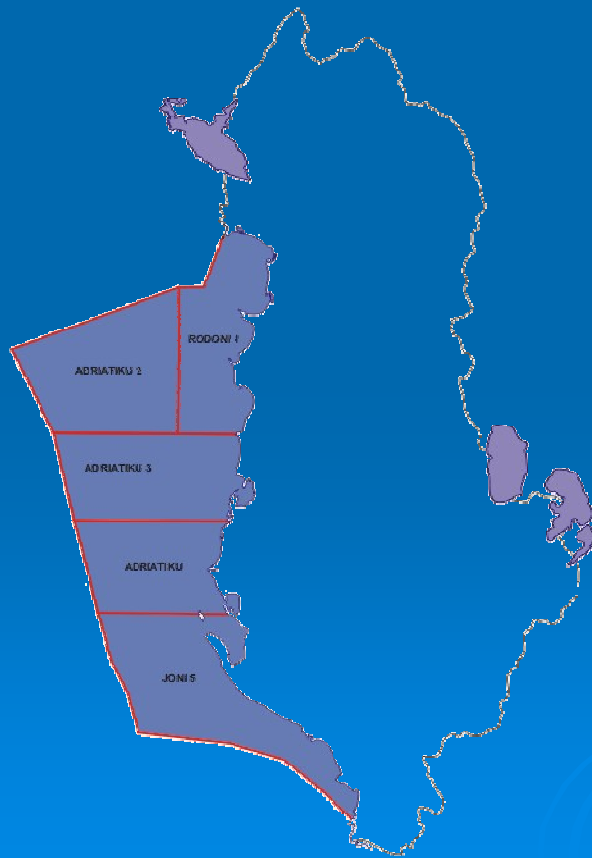


HYDROCARBON SECTOR

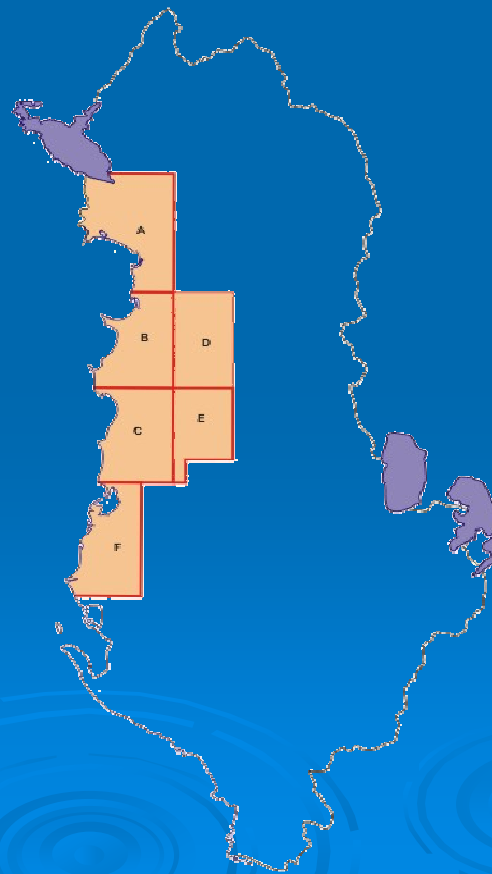
- ❖ Petroleum has been produced in Albania since early 1900, by foreign companies from Italy, France, Britani.
- ❖ From 1991 to the present, the crude oil and gas production is being increased, due to significant investments undertaken by foreign companies(offshore-Deminex, OMV, Agip, Occidental Petroleum, etc onshore-Shell,OMV, Coparex, DWM Petroleum AG, Ina Naftalin, etc.

Licensing Rounds Organized after 1990

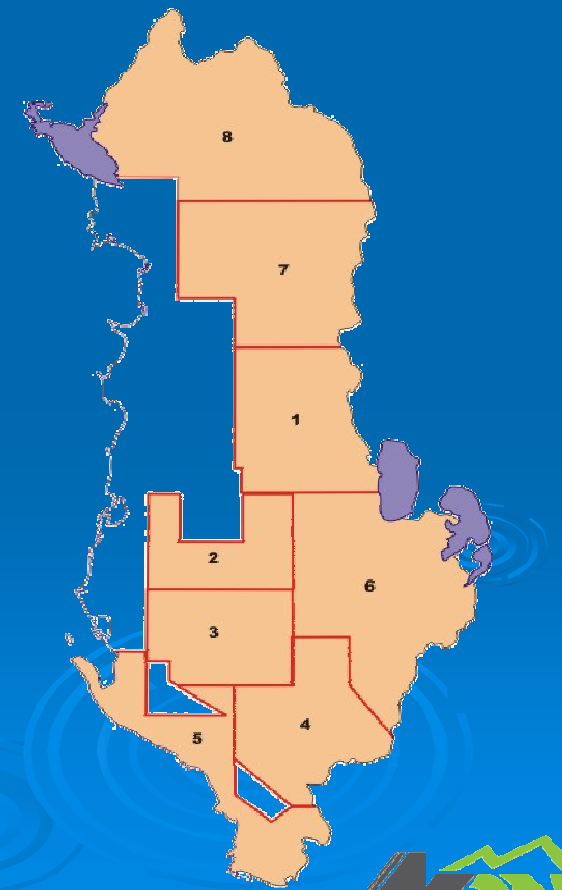
Offshore Licensing Round



First Onshore Licensing Round



Second Onshore Licensing Round



LICENCES

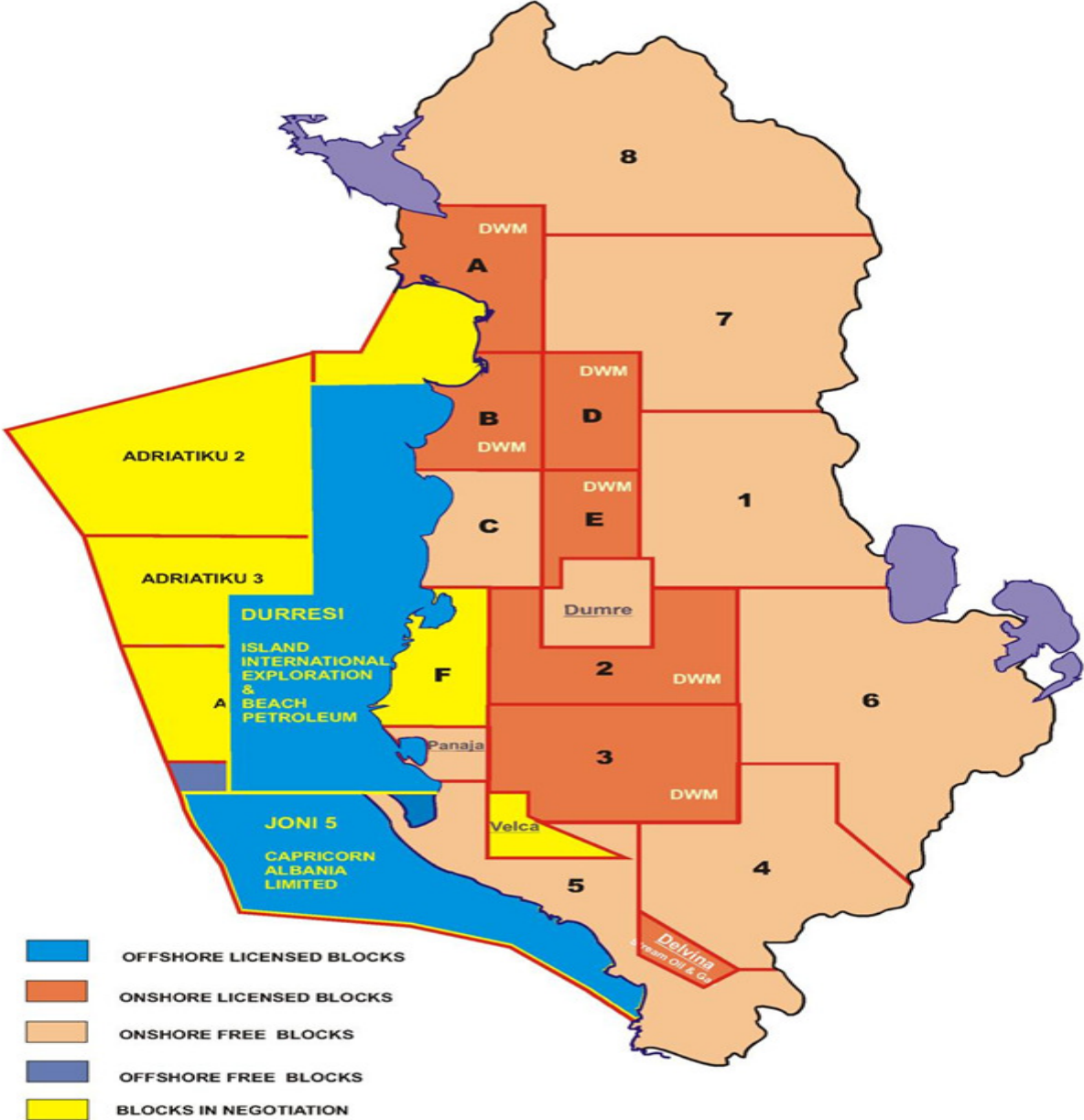
Since 1990, three more licensing rounds have been in place: the first onshore, the existing oil and gas field and the second onshore licensing round.

After 1996 the Albanian Government is applying the “open door policy”. The free areas are being promoted and applications are being accepted and negotiated. The type of contract more frequently used is “**the production sharing contract**”, signed between METE represented by NANR and the Contractor.



ALBANIA

Licensed Exploration Areas



AGJENTIA SHQIPTARE E PETROLIT DHE ENERGJISË

Crude Oil Production

ton

Year	Albpetrol	Foreign Companies	Total	Export
2005	336 118	97 882	434 000	3 450
2006	271 576	202 424	474 000	67 100
2007	282 045	282 565	564 610	153 265
2008	215 777	362 203	577 980	180 700
2009	178 663	398 067	576 730	319 010
2010 (forecast)	152 000	722 000	874 000	600 000
2011 (forecast)	100 000	878 000	978 000	750 000
2012 (forecast)	100 000	1000 000	1100 000	850 000

Gas Production

000Nm³

Year	Alp petrol	Foreign Companies	Total
2007	1 857	3 835	5 692
2008	3 387	2 668	6 055
2009	2 663	1 317	3 980
2010 (forecast)	2 500	2 200	4 700
2011 (forecast)	2 000	5 000	7 000
2012 (forecast)	1 500	8 000	9 500

Remaining Potential

- Based on geological studies, it appears that Albania still has a very good potential
- on existing oil and gas field
- is very promising area for further exploration in both onshore and offshore

LEGISLATION

The petroleum activity is governed by the “Petroleum Law (Exploration and Production)” No.7811, April 12,1994, and the Law No.9975, July 28,2008 “On the National Taxes”.

The petroleum companies involved in petroleum operations based on petroleum agreements have to pay a tax on profit 50% and a Royalty is 10% of sales revenues. Companies are exempted from custom duties, VAT and other taxes.

All international oil industry investments are fully protected by Law No.7764, November 22,1993, “On Foreign Investments”



ORGANISATION

The Ministry of Economy, Trade and Energy is in charge of petroleum activities in Albania.

The NANR has been established and one of its duties is to represent the Ministry on petroleum activity, promotion of the free areas, negotiations on the petroleum agreements and the supervision of their implementation.

Albpetrol, the national petroleum company that has exclusive rights on all existing oil and gas fields, it can enter in petroleum agreements with foreign companies for the developments of these fields, based on a License Agreement given by Ministry.

CURRENT SITUATION

5 existing production sharing agreements for explorations between the METE and foreign companies:

- With Island International Exploration and Beach Energy for Durresti block, offshore;
- With Capricorn Albania Limited and Dyas BV for Joni 5 block offshore;
- With Manas Adriatic GmbH for blocks A – B, onshore;
- With Manas Adriatic GmbH for blocks D – E, onshore;
- With Manas Adriatic GmbH for blocks 2 – 3, onshore;



CURRENT SITUATION

Two other agreements in negotiation process:

- **With Bankers Petroleum Albania for block F, onshore;**
- **With Pelagian Oil for Rodoni North Block, offshore.**

Albpetrol has entered in petroleum agreement for the development of the existing oilfields :

- **With Bankers Petroleum Albania for Patos - Marinza;**
- **With Stream Oil & Gas for Ballsh – Hekal; Cakran – Mollaj; Gorisht - Koculi; and for Delvina;**

- There are free exploration block like Adriatiku 2, part of Adriatiku 3 and 4, offshore and C, 1, 4, 5, 6 onshore.

MINING ACTIVITIES

Brief history of mining activity and its restructuring process

- Privatization process (1994 in continuity);
- Restructured of state enterprises in the chromium and copper sector (1994-1998);
- Administration and legal framework based on Albanian Mining Law 1994;
- Concession on the assets of mining industry (1995);
- The closure of the non-effective mines and conservation the potential mines (1993 in continuity).

LICENCING SITUATION

Up to November 1st 2011, there were issued 752 mining permits out of which were 673 exploitation permits, mostly in Bulqiza, Kruja, Berat, Tirana and Librazhdi districts.

211 permits for chrome ore;

231 permits for limestone;

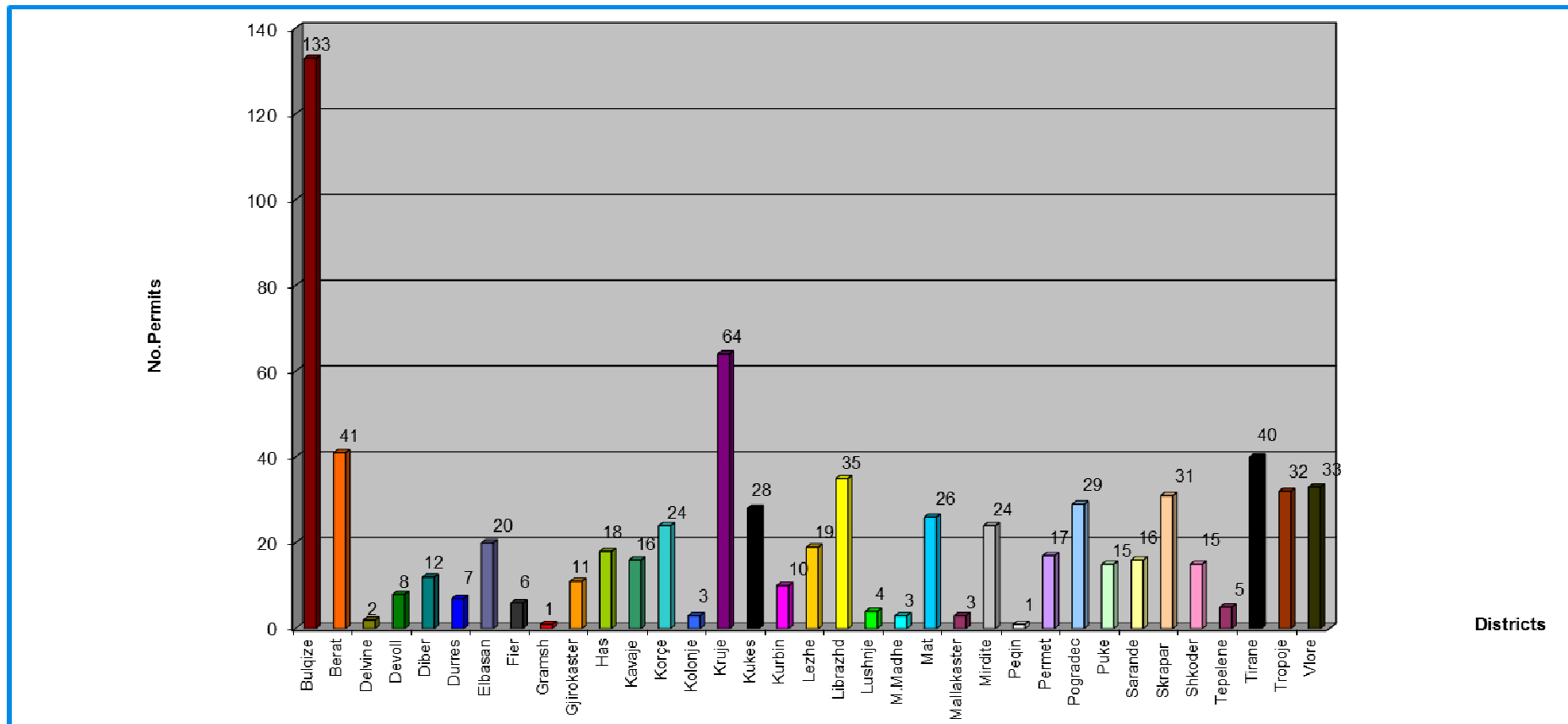
32 permits for clay;

34 permits for iron-nickel and nickel-silicate;

43 permits for tabulated limestone;

30 permits for massive and flaglic sandstone.

Mining permits according to the districts



CONCESSIONS

- Bulqiza Massif, to the Italian Company “DARFO”.
- The Polymetallic Massif of Munella, to the Turkish Company “BER-ALB”.
- Bitumen Mine of Selenica, in the 2001, to the French Company Bitumi Selenica sh.a.

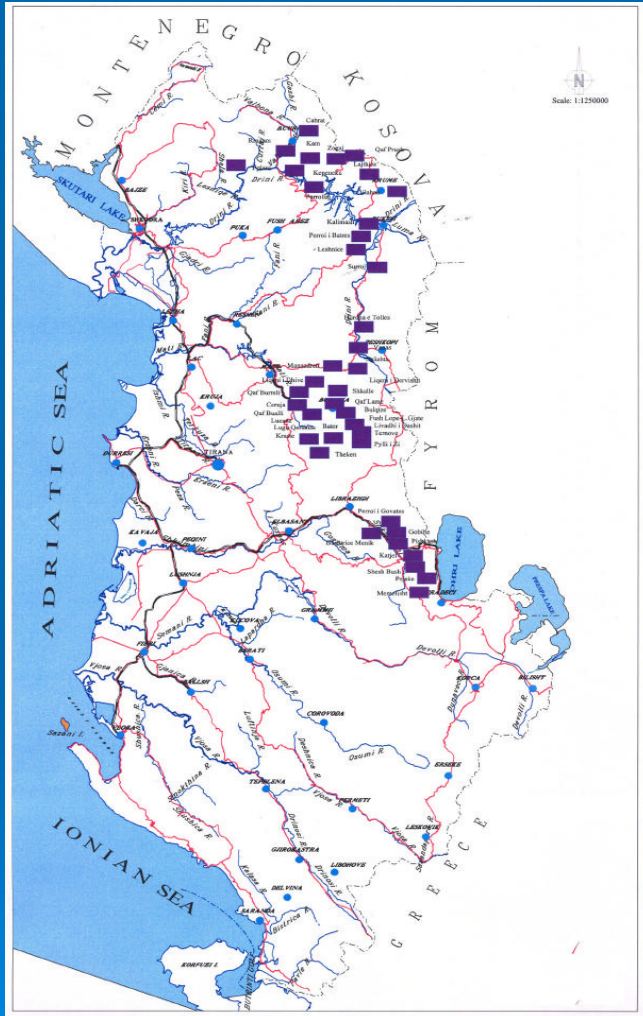
LEGISLATION

- ❖ **National Licensing Center (NLC)** the only responsible authority for licensing and permitting procedures.

Referring to some particular licenses such as hydrocarbons and minerals, the procedure consists in the collaboration between **NLC, METE and AKBN** that causes delays in the licensing process.

- ❖ In order to improve the quality of the licensing process, it is proposed the establishment a **National Applications Centre of Mining and Hydrocarbons**, which will be a one stop shop centre.

Chrome



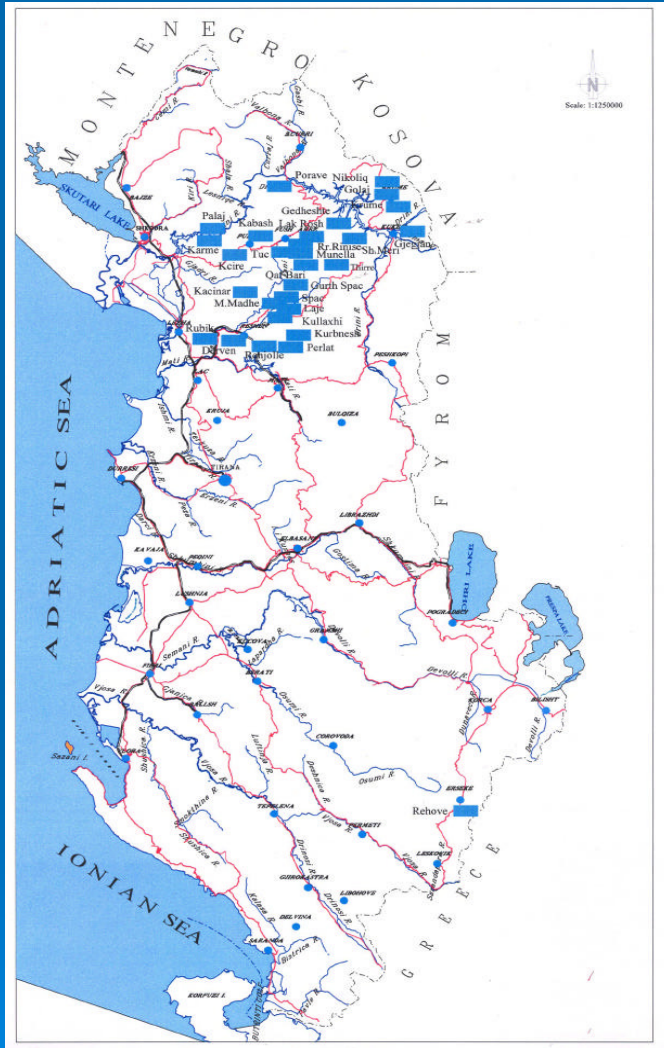
There are four regions of Ultrabasic Massifs of chrome in Albania: Tropoja, Kuksi, Bulqiza, Shebenik-Pogradec.

Present Geologic Reserves of chrome in these regions are:

- Category $B+C_1$ 21.8 million tons
- Category C_2 : 15.1 million tons
- Total: $B+C_1+C_2$: 36.9 million tons

Chrome's deposits

Copper

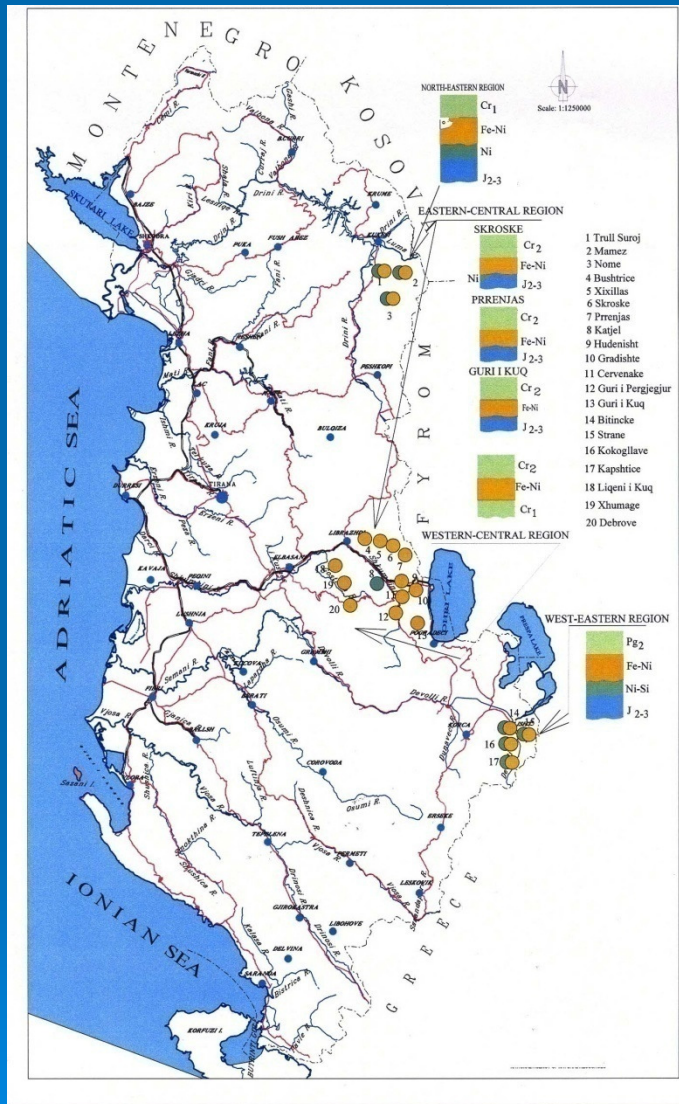


Four main types of copper deposits:

- Hydrothermal-Methasomatic and Volcanogenic-Sedimentary deposits.
- Volcanogenic-Hydrothermal-Methasomatic deposits.
- Volcanogene-Sedimentary Deposits,.
- Metasomatic Sulphide Massif deposits.

Copper's deposits

Fe-Ni and Ni-Si



The mineral of Fe-Ni and Ni-Si in Albania is located mainly in three regions:

- Devolli.
- Pogradec-Librazhd,
- Kukes,

The nickel ore is in form of iron-nickel.

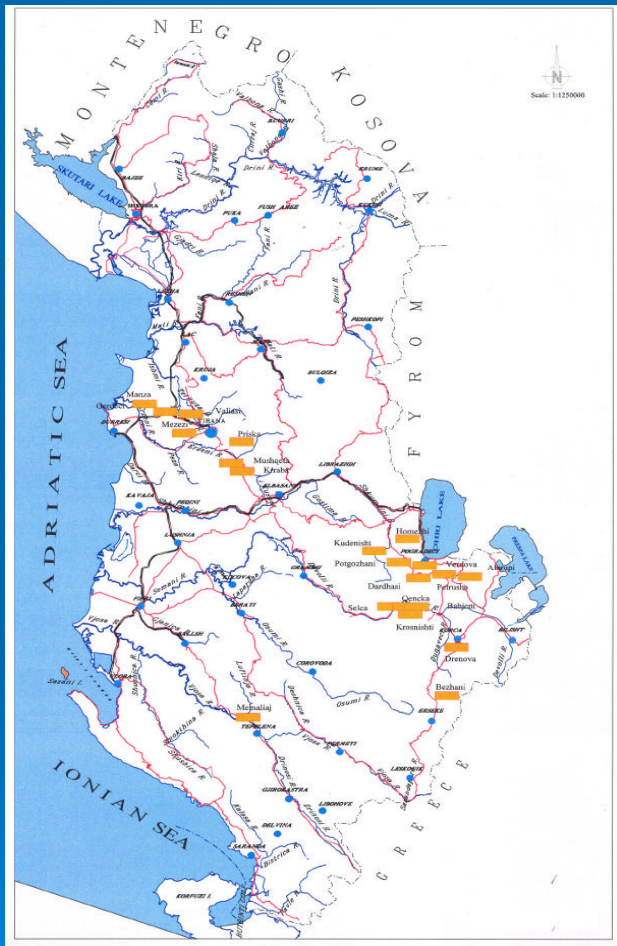
Deposits of Fe-Ni and Ni-Si

Coal and Peats

In our country the coal reserves are about 794 million tons, in the three main areas:

- In Tirana, about 86% of reserves
- In Korça-Pogradec, 10% of reserves
- In Memaliaj, 4% of reserves

Our coals, in general, are of lignite type with calorific analytical value of 2000-5600 kcal/kg (averagely 3200-3300).



Deposits of Coal and Peats

Coals are of lignite type with low calorific values, high content of sulphur, humidity and ashes

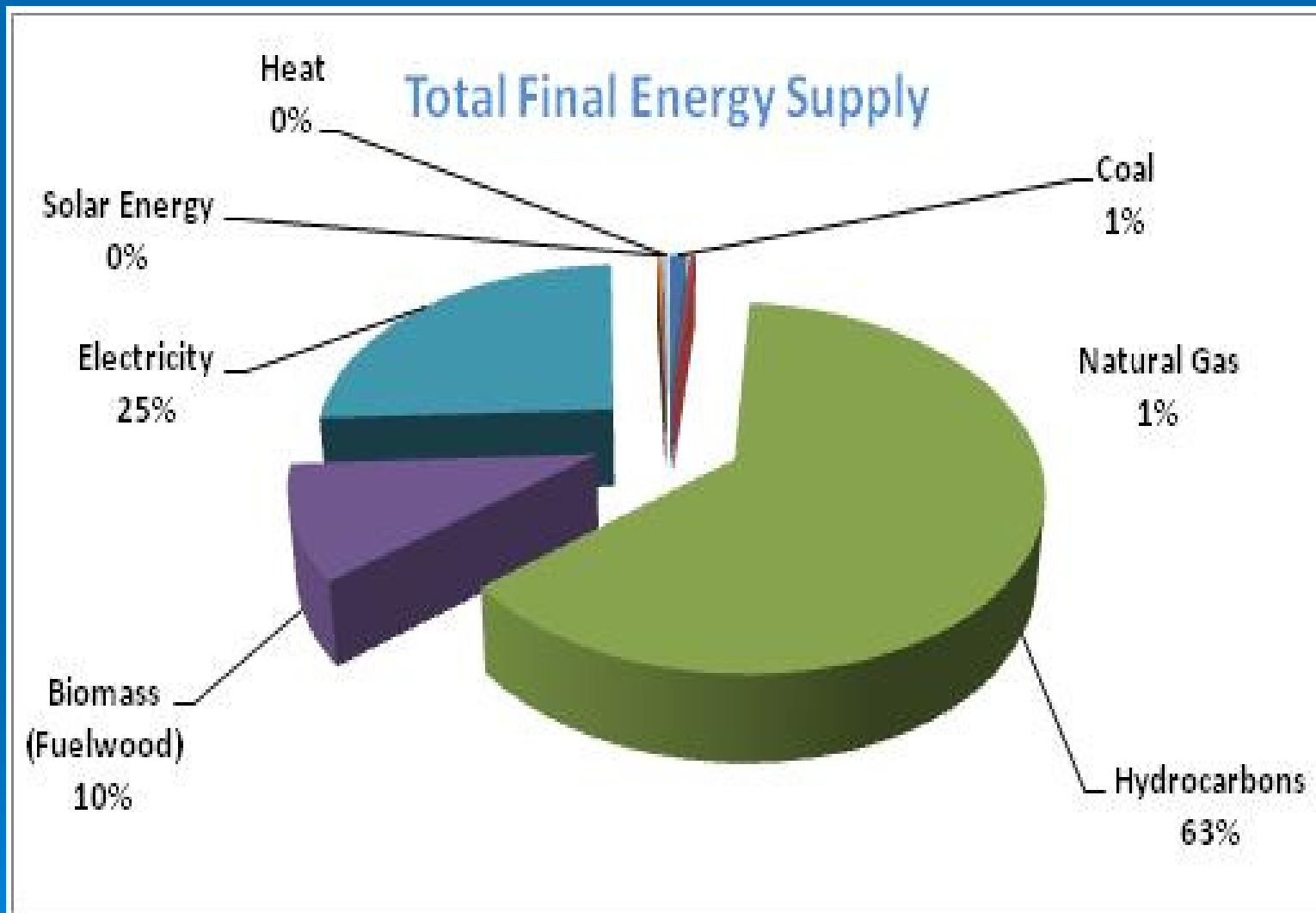
ALBANIAN ENERGY SOURCES

Energy sources: **hydroenergy, hydrocarbons, fuelwood, natural gas, and a little solar energy.**

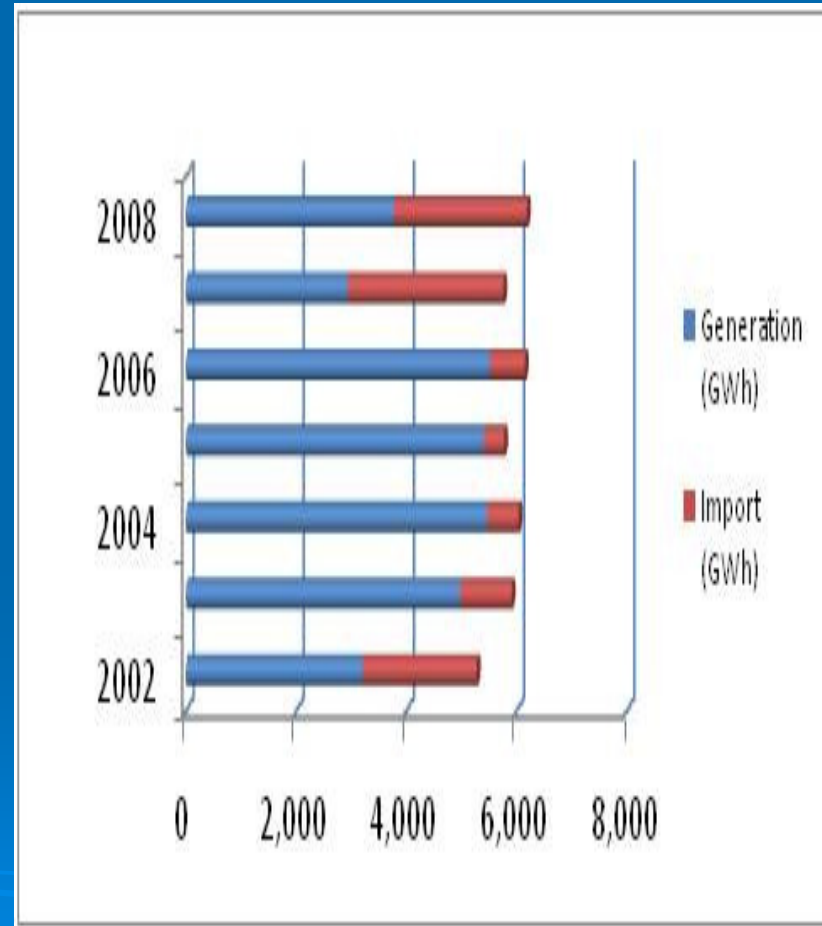
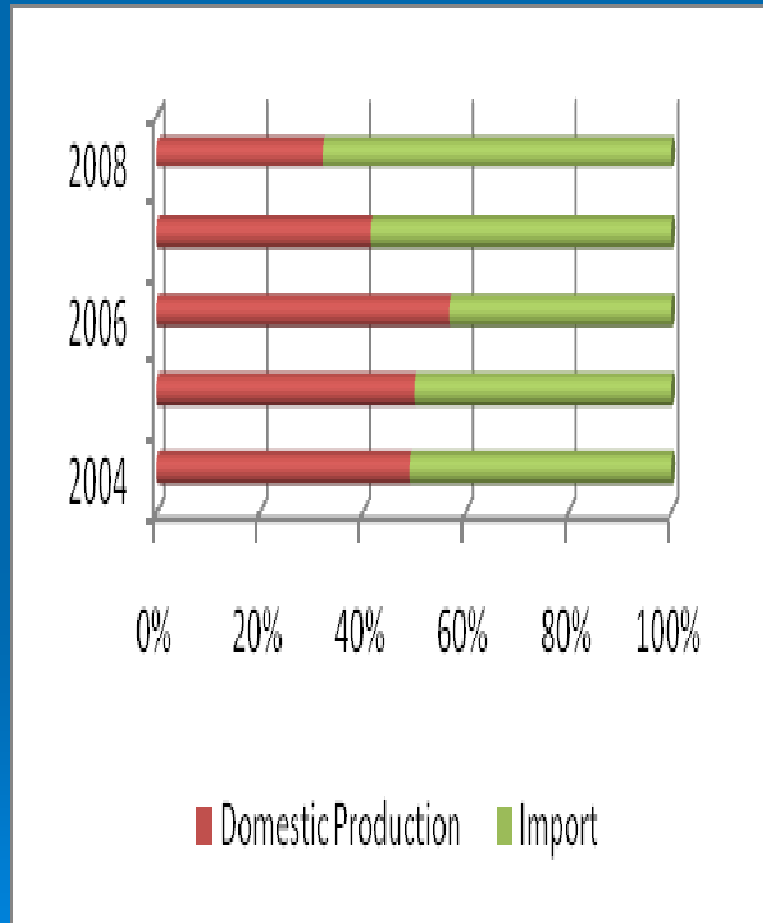
Total Primary Energy Supply for 2008: **2118,6 Ktoe.**

Energy sources share (ktoe and %):

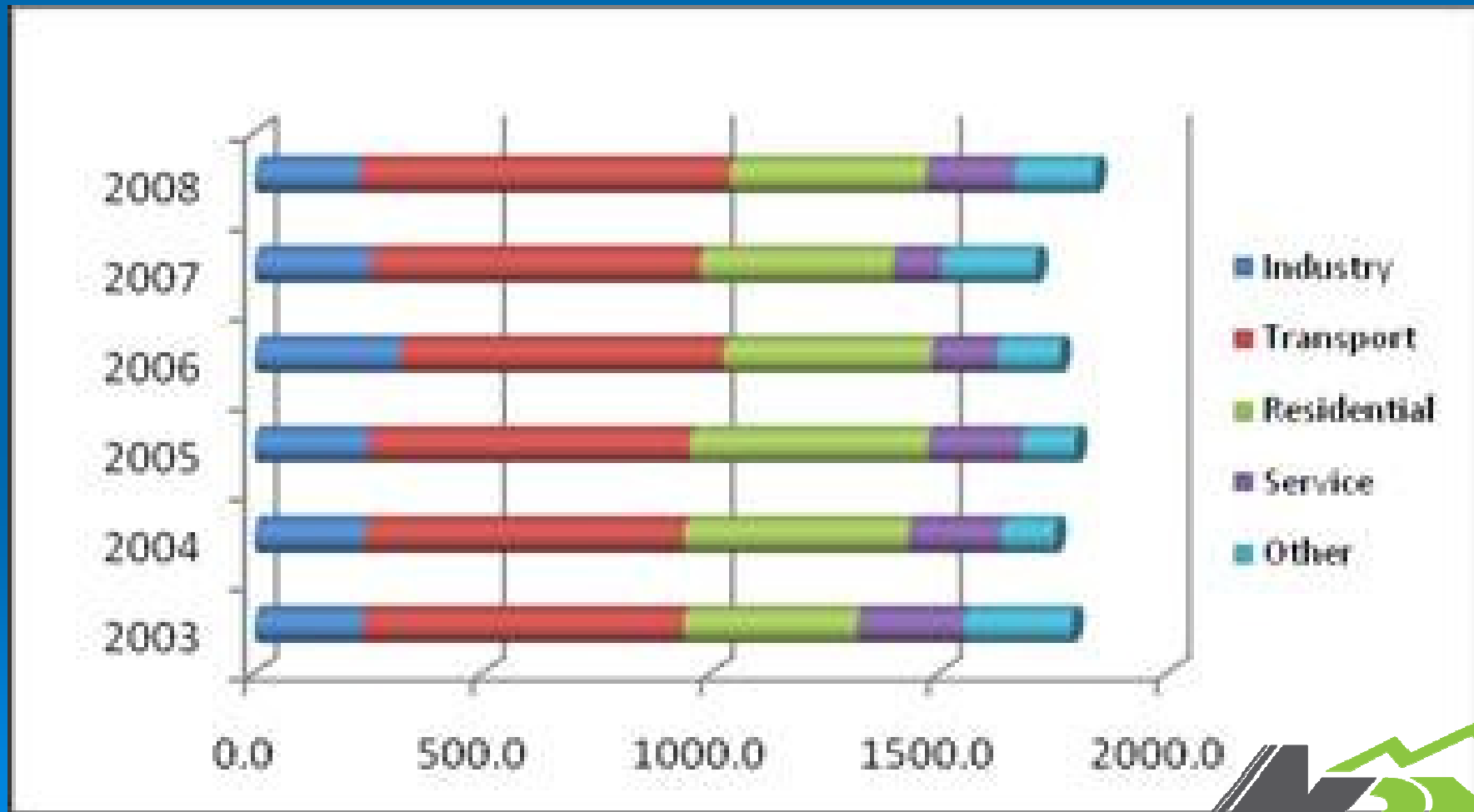
Coal	23	1.09
Natural Gas	8	0.38
Oil and Oil by products	324.8	62.53
Fuelwood	215	10.15
Electricity	535.8	25.3
Others	12	0.56
Totali	2118.60	100.00



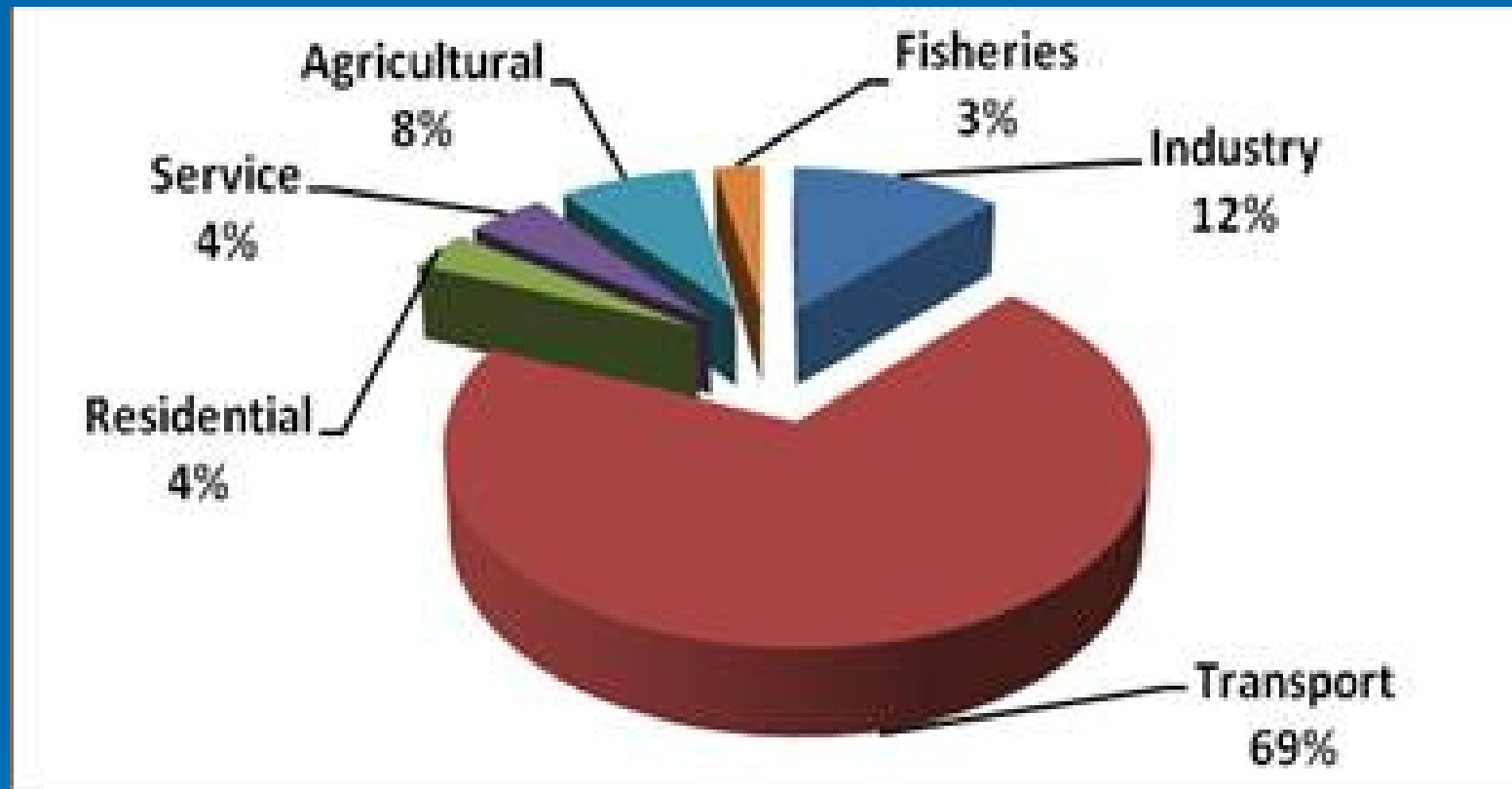
IMPORT DEPENDENCE (ENERGY SOURCES AND ELECTRICITY)



FINAL ENERGY CONSUMPTION



HYDROCARBON CONSUMPTION



- For 2008, hydrocarbon consumption has been a level of 1167.9 Ktoe of which 78% is imported.
- The main consumer remains transport sector at 69%

NATURAL GAS AND LPG

- A minimum production of natural gas, about 8 million Nm³, only serves to supply the refineries.
- Albania is not linked with international network of gas.
- LPG has significantly increased its presence in the domestic market, as an alternative energy source reaching a total consumption of 83 ktoe.

INTERNATIONAL GAS NETWORK (potential)

- **The Ionian Adriatic Gas Pipeline -IAP Project**

Development of the gas pipeline network of the Western Balkans, from Croatia towards Bosnia & Herzegovina, Montenegro and Albania. This project is planned as a ring system.

- **“Trans Adriatic Pipeline” (TAP Project)**

Project TAP (Trans Adriatic Pipeline) shall be part of a new corridor “The Fourth Corridor” East-West, which shall bring to Europe the gas from Middle Eastern and Caspian countries.

- **LNG Terminal of the Trans European Energy BV sh.c on the Fieri District seaside.**

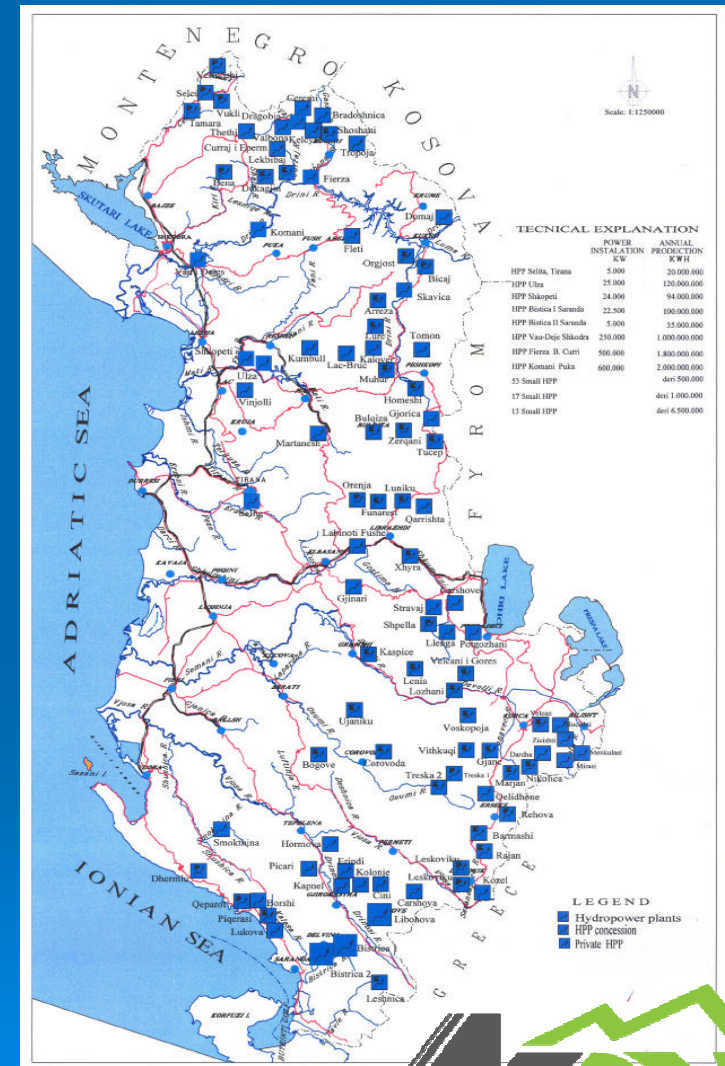
The projects consist of the construction of the deposits and re-gasification plants for LNG in the coastal zone of the Fieri District and of the construction of the underwater gas pipeline to Southern Italy.

OIL PIPELINE PROJECTS

On the project of the Trans Balkan Oil Pipeline (AMBO Project):
The Memorandum of Understanding between the Governments of Albania, Macedonia, Bulgaria and the AMBO company was signed on December 28 2004, in Sofia (Bulgaria).

HYDRO ENERGY

- The hydrographic territory of Albania has a surface of 44,000 km² or 57% more than the national area of our country.
- The average height of the hydrographic territory of Albania is very large, about 700 m above sea level.
- All our rivers (more than 152) running to the sea about 40 billion water cubic meter/ year, average flow is 1235m³/sec



Distribution of





Albanian hydro situation





HYDROENERGY IN ALBANIA

IN ALBANIA THERE ARE 7 BIG HYDROPOWER PLANTS AND 38 SMALL ONES CURRENTLY IN OPERATION

ALBANIA COUNTS 70 SMALL EXISTING HYDROPOWER PLANTS WITH A RANGING CAPACITY FROM 20 KW TO 9200 KW. ONLY 38 OUT OF THIS TOTAL ARE CURRENTLY OPERATIONAL, WHEREAS THE REST ARE OUT OF FUNCTION

Big Hydropower Plants

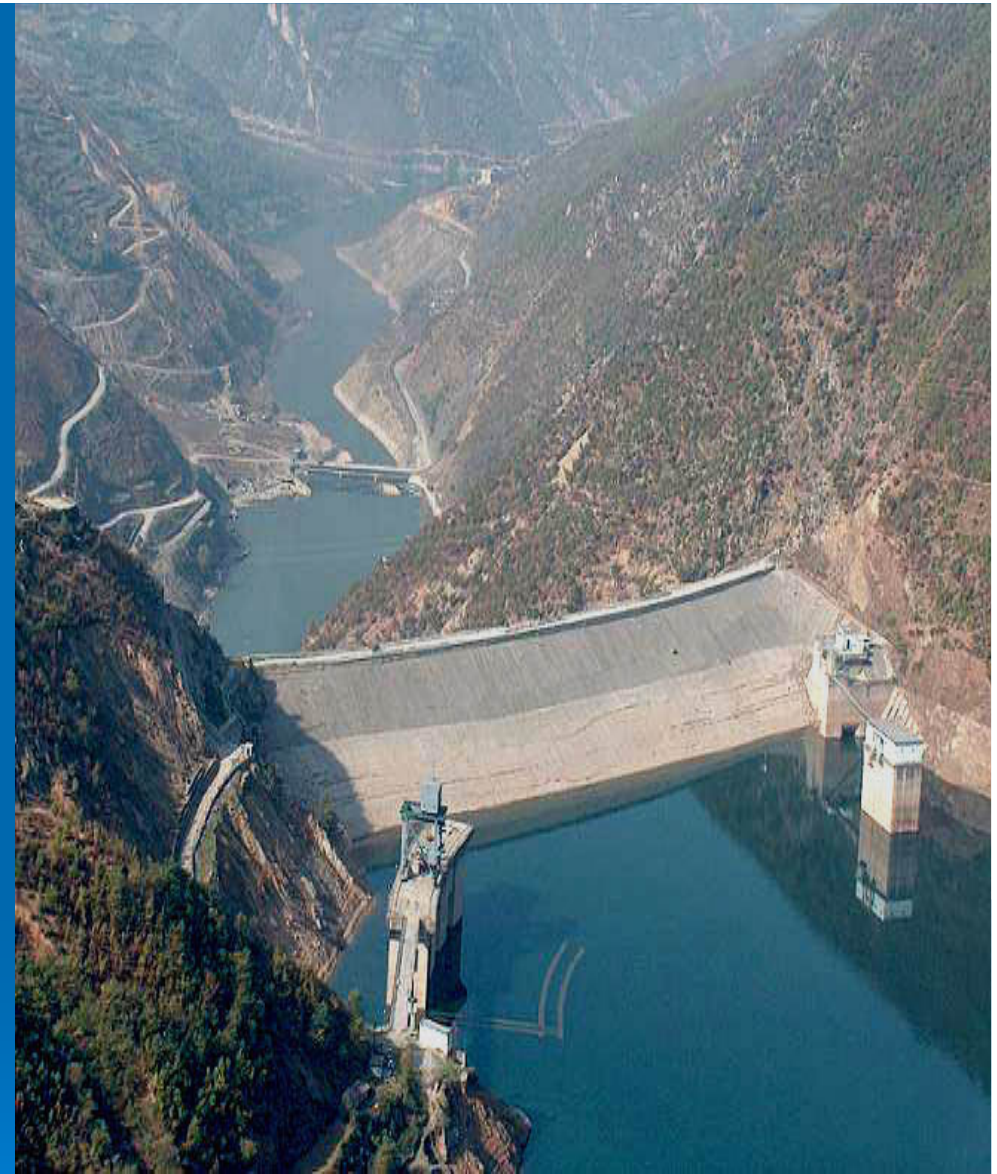
Nr.	Nomination of HPPs	Installed Capacity(kW)	Annual Generation Capacity(kWh)
1.	Ulza HPP (Mat)	25 000	120 000 000
2.	Shkopetit (Mat)	24 000	94 000 000
3.	Bistrica I HPP (Saranda)	22 500	100 000 000
4.	Vau Dejes HPP (Shkodra)	250 000	1 000 000 000
5.	Fierza HPP (Tropoja)	500 000	1 800 000 000
6.	Komanit HPP (Puke)	600 000	2 000 000 000
	Total	1 421 500	5 114 000 000



Bistrica HPP



Vau i Dejes HPP



Fierza HPP

NEW CAPACITIES UNDER CONSTRUCTION OR COMMITTED BY ALBANIAN GOVT.

Hydro Power Plants

- (i) Ashta HPP (48 MW) on Drin River – 2009-2012 (160 MEuro - private fund) by concession, Austrian Company;
- (ii) Kalivaci HPP (93 MW) on Vjosa River - 2008-2012 (120 MEuro - private fund) by concession, “Kalivac Green Energy” Company;
- (iii) Devolli River Cascade with three hydro power plants (3x15+2x20 +2x80 MW) in Devoll River - 2009 – 2015 (930 MEuro) by concession, “EVN AG”



Free areas for investments

- On Drin River (Skavica HPP construction with installed capacity of 350 MW);
- On Osum River (based on French Company studies “Sogreah” four HPP’s with a total capacity of 94 MW);
- On Vjosa River (based on French Company studies “Sogreah” a capacity of 428 MW can be generated)
- On Erzen River

RENEWABLE ENERGY SOURCES

- **Hydro energy**
- **Biomass**
- **Wind energy**
- **Solar energy**
- **Geothermal energy**

Renewable energy sources potential

Hydro energy sources

- Albania is a country with considerable water reserves.
- So far only 35,4 % of the hydro power potential of the country has been used.
- The existing installed hydro energy capacity is 1466 MW and marks an average hydropower production 5283 GWh.
- The total reserves of the hydro power make possible the installation of a capacity of about 4500 MW with an annual potential of production may amount to 16-18 TWh. There are 107 concessio





Small HPP's situation

32 HPP-s operate on concessionary contracts, with an installed capacity of 24,4 MW

16 HPP-s have been privatized and operate with an installed capacity of 2,047 MW

22 HPP-s are owned by the State with an installed capacity of 11,0 MW

SMALL HPP

- ❖ SHPPs with an installed capacity less than 15 MW can sign a long-term PPA with the Public Supplier for up to 15 years at a guaranteed feed-in tariff. The tariff is regulated and approved annually by ERE.
- ❖ These producers have a priority access for their connection to the power network.
- ❖ **The potential is almost at 350-400 MW.** (Vjosa river is a great potential for small HPP)

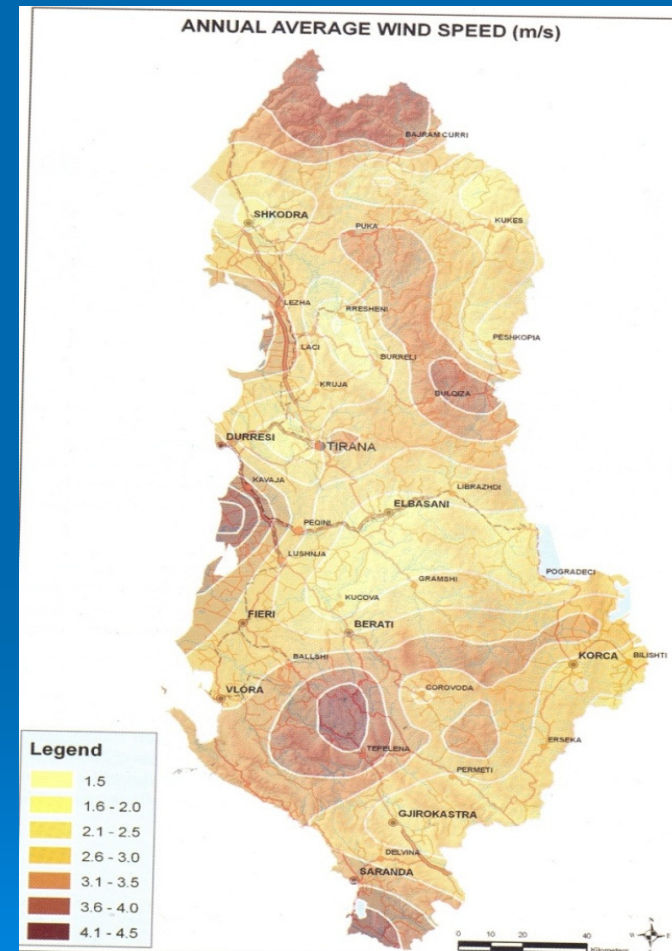
WIND ENERGY

An evaluation of the potential of exploitation of wind energy in Albania was performed

Wind speed is around 6 m/s and 8-9 m/s in some areas.

A number of interesting areas, have been identified:

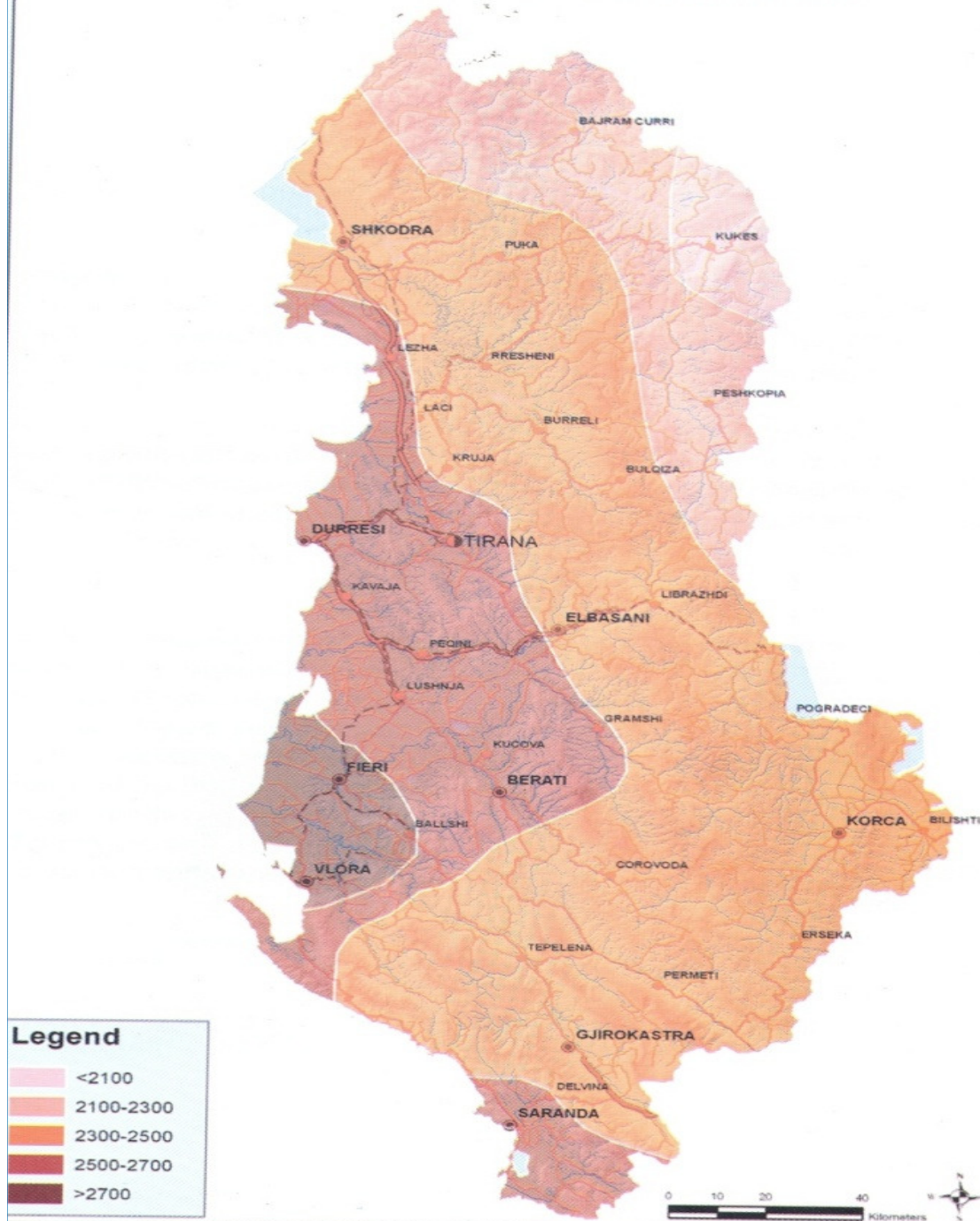
Shkodër, Lezhë, Durrës, Kavaja, Fier, Vlorë, Tepelenë, Saranda, Korca.



The average wind velocity (m/s)

Name of Company	Location	Installed Capacity, MW	Point of connection to the transmission Grid	Annual production GWh	Investment (K Euro)	Commissioning Deadline	License granted in
HERA shpk	Bilisht Kapshtice	150	N/st Zemblak 400/110 kV	330	229,037	2014	Nov 2007
Alb Wind Energy shpk	Grykderdhja e Shkumbinit Terpan	225	220 kV Rrashbull – Fier, 110 kV Tempan – Uznove	484	454,127	2013	Jan 2008
Enpower Albania shpk	Karaburun Llogara	500	N/st 110 kV Kavaje	1,369	700,000	2015	Oct 2008
Ers-08 shpk	Kryevidh Kavaje	40	N/st 110 kV Kavaje	68	43,582	2013	June 2008
Biopower Green Energy shpk	Shengjin Kodrat e Rencit Lezhe	230	N/st 400/220/30 kV	450	250,000	2013	Aug 2008
Unione Eolika Albania shpk	Kryevidh Kavaje	150	220 kV Rrashbull- Fier	300	149,100	2012	Aug 2008
E-Vento Albania shpk	Butrint Markat	72	N/st 150 kV Bistrice	65	93,000	2012	Jul 2008
TOTAL		1367		3,066	1,918,846		

AVERAGE QUANTITY OF SUNSHINE HOURS



Solar potential

Albania has the average 240-260 sunny days/year. Solar radiation is from 1200 to 1600 kWh/m²/year.

In 2010, a total of 10,700 m² solar panels were installed (60% by services, 40% by households), bringing total installation to 52.000 m² equivalent to 70 GWh/y.

UNDP is supporting a program (2011-2015) to install 50.000 m² of solar panels, based on grants and fiscal incentives.



Biomass Energy

- Woods or wood residues from various wood processing industries;
- Vegetation residues (stems, seeds etc.) after completion of their production cycle, which are not used in other production sectors;
- Energetic plants (woods) cultivated to be burned as biomass, and;
- Animal residues (bones, skins, dung), which are not used in other economic sect.

Biomass Energy

Actually Wood contributes by 215 Ktoe.

Forests cover a large part of Albania's territory (36 percent) with proven reserves of fuel wood estimated at 125 to 250 million m³ or 6 Mtoe.

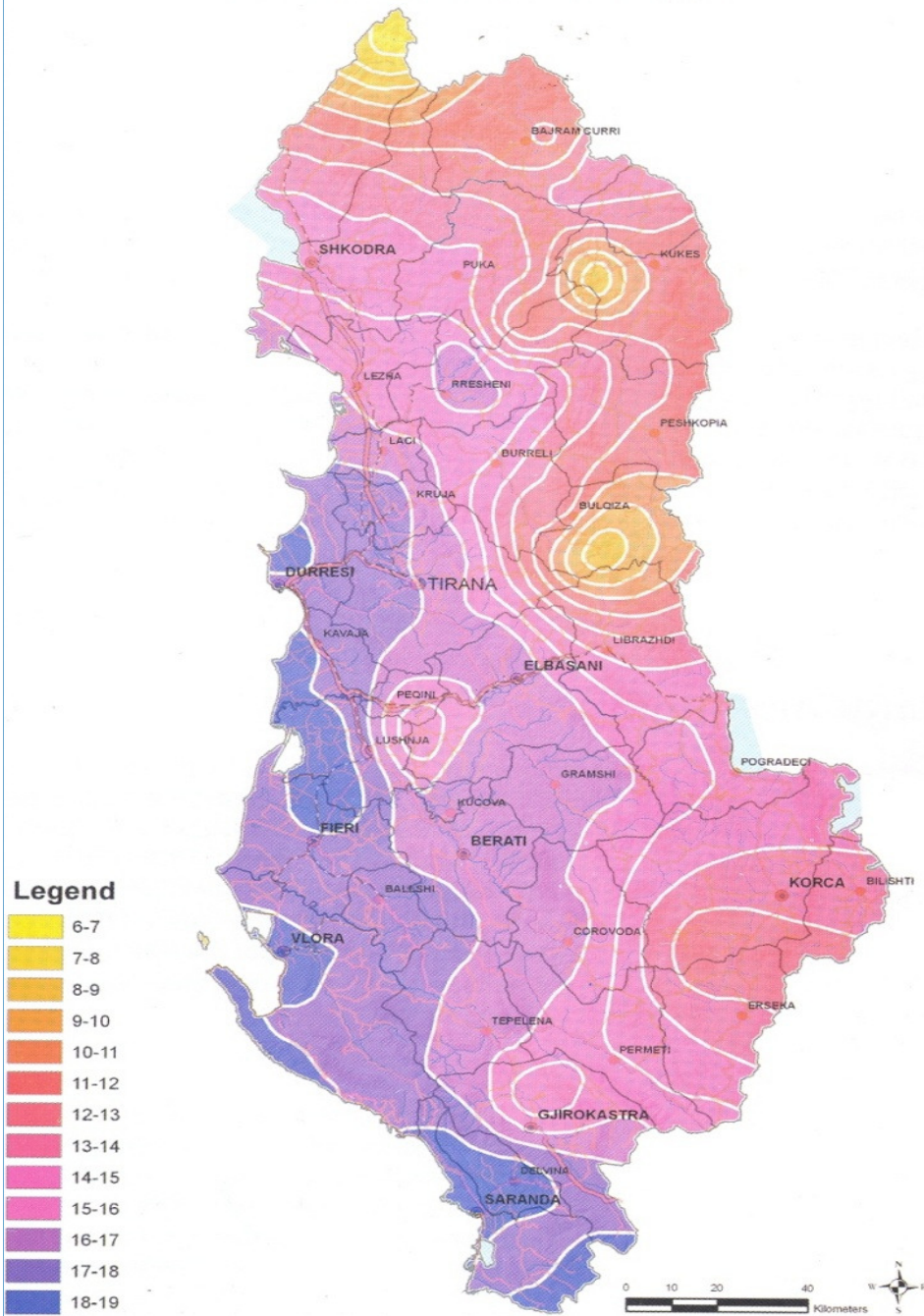
Biomass market in Albania

**Lezha Biomass (palm oil) TPP (140 MW);
Private fund).**

Pellets production, in Elbasan, capacity 600 kg/h, price 250 Euro/ton ;

Pellets production, in Pogradec, capacity 1ton/h, price 130 Euro/ton (export to Italy and Macedonia 85%);

TEMPERATURE AT DEPTH OF 100 m



Geothermal potential in Albania

Geothermal energy resources in Albania are estimated as warm water sources of the underground soil, which have a sufficient temperature to be used as energy source.

- Thermal sources with low enthalpy and max temp 80°C
- Deep vertical wells (oil and abandoned gas wells)
- High potential areas are : Kruja, Ardenica, Peshkopia.



LEGISLATION

- Law No. 9663, dated 18/12/2006 “On Concession”.
- MCD No. 27, dated 19/1/2007 “On approval of rules for evaluation and concession procedures”.
- Law No. 8987, dated 24.12.2002 “ On facilitating conditions establishment for new power generation resources construction”.
- Law No.7962, dated 13.07.1995 “On Power sector”.
- Law No.7970, dated 20.07.1995 “On Arrangement of Electricity Sector”, changed with Law No.9072, dated 22.05.2003.
- Law No. 7764, dated 2.11.1993 “On foreign investments”.

Important Draft Laws

- Draft three key laws: for power sector, for renewable, and for energy efficiency have been drafted by the Government and will be proposed to the Albanian Parliament for final approval.
- Those laws intend to liberalize the electricity market, increase competition, promote efficiency, boost renewable development, and attract foreign investment in energy sector.

THANK YOU
GRAZIE

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