



The situation in Coal Mining aerea in Albania

**AGJENCIA KOMBETARE
E BURIMEVE NATYRORE**

NATIONAL AGENCY OF NATURAL RESOURCES

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- Energjitë e rinovueshme
- Hidrokarburet
- Minierat
- Hidroenergjetika

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Historical data of mining industry in Albania

Albania is considered a country with significant mineral wealth:

Various geological studies and works, mining, and processing of different minerals have represented and represent an important economic activity for the country.

Mining activity in Albania has developed in three main phases and each of them has been accompanied by some important events

THE FIRST PHASE, before 1944 :

- In 1922, the geological map of Albania was compiled which was the first of its kind in the Balkans
- In 1929, the mining law of the Albanian Kingdom was drafted and approved by the parliament. This law enabled the beginning of the process of research, discovery and exploitation of minerals and the presence in Albania of foreign companies, mainly Italian and Austrian.

THE SECOND STAGE, 1944 - 1994:

1. The mining industry was completely state property organized on the basis of regional enterprises, mining sectors. The products were mainly intended for the domestic market and the needs of the domestic economy (the exception is chrome ore which was sent for export).

2. Coal has been used as energetic raw material for:

- Heating
- Steam production
- Electricity generation (TPP)
- The metallurgy (Copper smelter)
- Exchange with clearing in the framework of the Warsaw Treaty

3. All The geological reports on the detailed research discovery of the coal deposits were prepared by the authors of the former state geological enterprises.

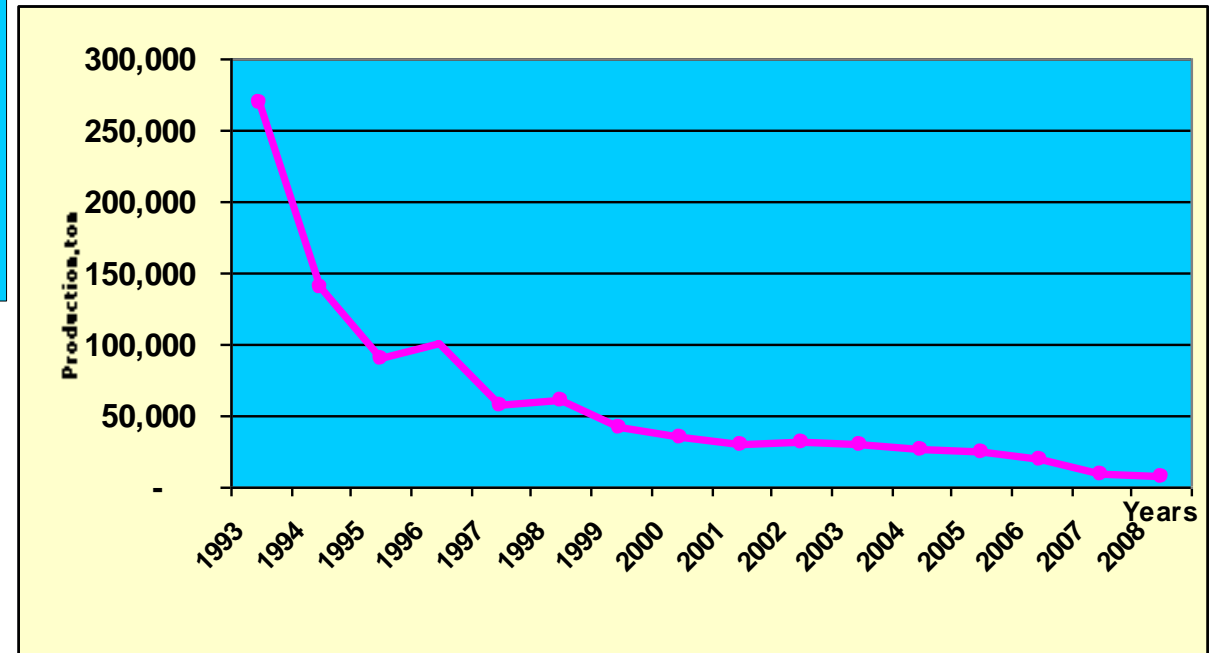
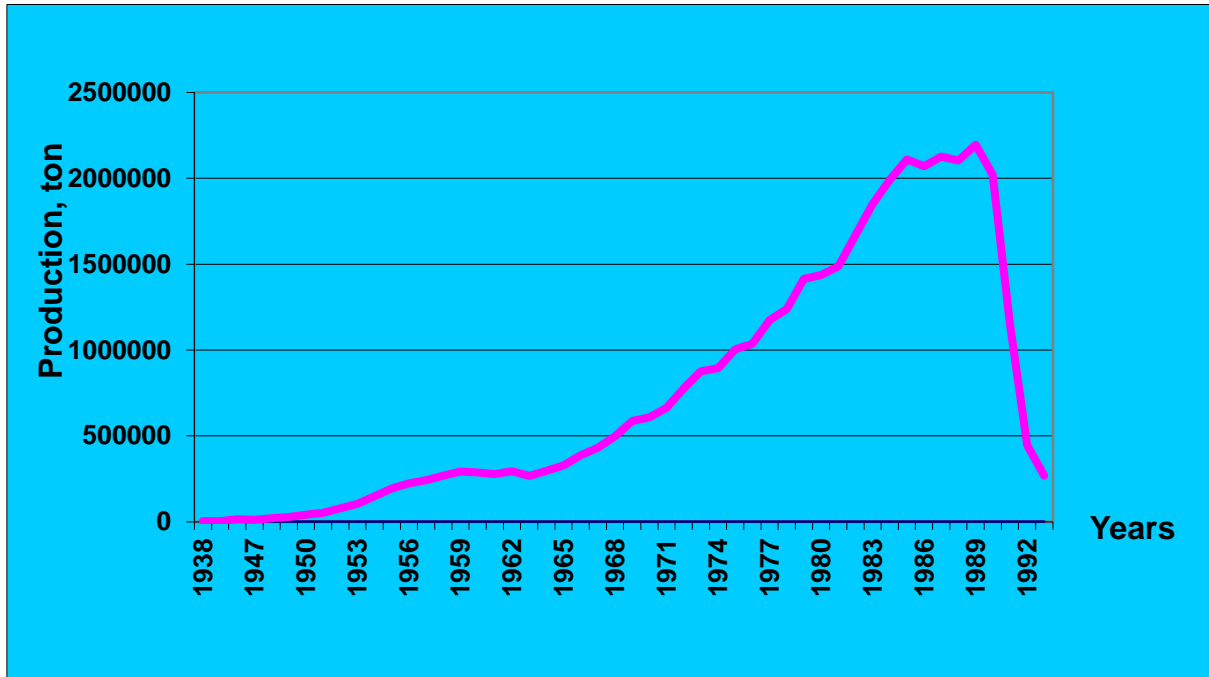
4 During this phase, based on the geological report, by the specialists of the former Mining Institute, the projects for the mine development and exploitation of coal mines were drawn up.

THE SECOND STAGE, 1944 - 1994:

During this period, they were active:

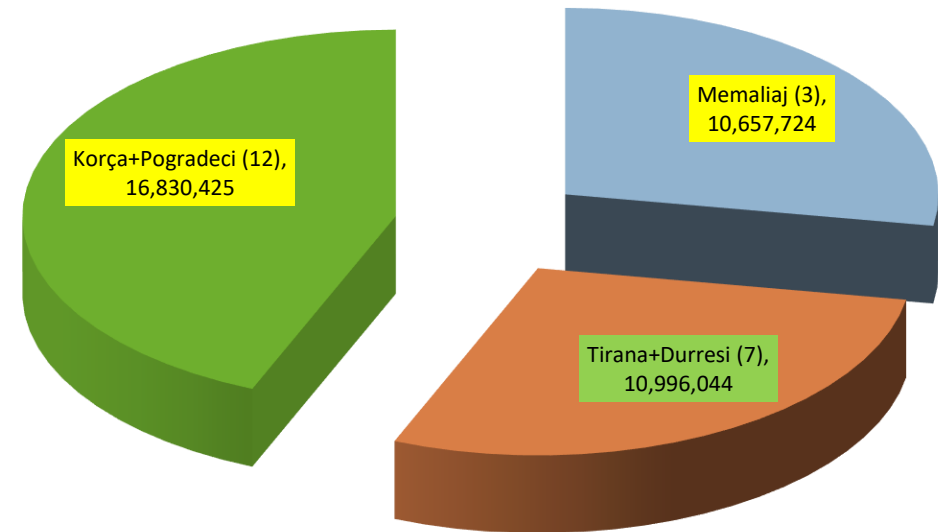
- 4 State Enterprise of Geological Survey
- 1 State coal mine construction enterprise (with 4 main branches)
- 3 Coal beneficiation plant
- More than 22 coal mines and sectors have been active
- During this period of mining activity more than 39 million tons of coal has been mined
- More than 31 shafts were sunk, 17 of which in the Tirana and Durrësi region
- More than 150 km of galleries, traverses, slopes, and other vertical mine workings have been constructed

COAL PRODUCTION IN YEARS



No	Deposit	Production Start year	Production tons	Calorific power Kj/kg
1	Memaliaj	1916	10,657,724	16377
2	Myshqeta	1968	2,263,426	10300
3	Valias	1978	3,514,808	9175
4	Krrabe	1938	1,658,240	14521
5	Alarup	1959	1,255,297	12540
6	Mb-Drenove	1938	8,657,619	9196
7	Bezhan	1972	1,068,019	9196
8	Priska	1949	525,057	15466
9	Manze	1967	1,305,993	8193
10	Gerdec	1978	293,200	9196
11	Verdove	1978	895,800	9489
12	Podgozhan	1986	105,030	9196
13	Homeshi	1986	137,951	10450
14	Mezez	1968	1,435,320	8669
15	Dardhas	1972	941,947	9489
16	Pretushe	1968	909,300	9447
17	Selce	1984	253,563	8214
18	Krosnisht	1978	1,342,174	8653
19	Qenske	1983	1,173,489	8193
20	Babien	1986	90,236	8239
21	Totali		38,484,193	

Producton by regions



Note: From the start-up to 1944, Memaliaj, M. Drenova and Kerraba Mines produced roughly 45000 tons of coal

THIRD STAGE, YEAR 1994 - TODAY

The mining industry in general and that of coal production in particular after 1994 years of the last century faced the consequences of geopolitical, political, socio-economic transformations. At this moment, like the entire economy, it had to respect the rules of the market economy, suffering a drastic reduction in production, investments and income.

- Close of Ineffective mines and their monitoring.
- Realization of Privatization process (1994-ongoing);
- New legal and administrative framework based on free market rules (Albanian Mining Law 1994)
- Mining Permits Liberalization ;
- All of mines assets evaluation ;

CLOSURE OF FORMER COAL MINES AND THEIR MONITORING

Nr	Name of Deposit	Start exploitation	Government Order for closing coal mines	No. of project (AKBN technical archive)
1	Valias	1978	Nr.139 dt.20.03.1995	Nr.2978 / 2001
2	Mëzez	1968	Nr.824 dt.04.12.1996	Nr.2978 / 2001
3	Mushqeta	1968	Nr.550 dt.26.08.1996	Nr.2978 / 2001
4	Kërrabë	1938	Nr.101 dt.02.03.2001	Nr.2748 / 2000
5	Priska 2	1980	Nr.550 dt.26.08.1996	Nr.2978 / 2001
6	Priskë	1980	Nr.101 dt.02.03.2001	Nr.2978 / 2001
7	Gërdec	1978	Nr.550 dt.26.08.1996	Nr.2978 / 2001
8	Manëz	1967	Nr.232 dt.15.05.1995	Nr.2978 / 2001
9	Mborje-Drenovë	1930	Nr.349 dt.07.07.2000	Nr.2978 / 2001
0	Selcë	1984	Nr.233 dt.15.05.1995	Nr.2978 / 2001
1	Babjen	1984	Nr.233 dt.15.05.1995	Nr.2871 / 2003
2	Krosnisht	1978	Nr.500 dt.13.08.1998	Nr.2682 / 1999
3	Qenckë	1978	Nr.349 dt.07.07.2000	Nr.2682 / 1999
4	Bezhan	1972	Nr.233 dt.15.05.1995	Nr.2978 / 2001
5	Alarup	1959	Nr.500 dt.13.08.1998	Nr.2978 / 2001
6	Pretushë	1968	Nr.233 dt.15.05.1995	Nr.2809 / 2002
7	Dardhas	1972	Nr.349 dt.07.07.2000	Nr.2978 / 2001
8	Vërdovë	1978	Nr.349 dt.07.07.2000	Nr.2978 / 2001
9	Potgozhan	1985	Nr.233 dt.15.05.1995	Nr.2978 / 2001
0	Homezh	1986	Nr.233 dt.15.05.1995	Nr.2978 / 2001
1	Memaliaj 1 dhe 2	1916	Nr.268 dt.08.06.1999	Nr.2978 / 2001
2	Memaliaj 3	1980	Nr.29 dt.15.01.1996	Nr.2978 / 2001
Shuma				

REVITALIZATION OF FORMER COAL MINES,

The challenges facing today's world, such as energy and the coal industry in particular, are becoming more and more complex, the interest and revitalization of former coal mines is becoming higher and higher....

- What are the coal reserves in the Republic of Albania?
- What role does coal play in energy needs?
- What are the perspectives of using coal in our country?

COAL DEPOSITS IN ALBANIA



The history of coal production in Albania includes mines and beneficiation plants. This industry is mainly located in the central, southeastern and southern part of Albania.

In our country, the coal reserves according to the closure projects are about 100 million tons of usable reserves and they are located in the following 3 main regions:

About 86% of the reserves are located in the Tirana area.

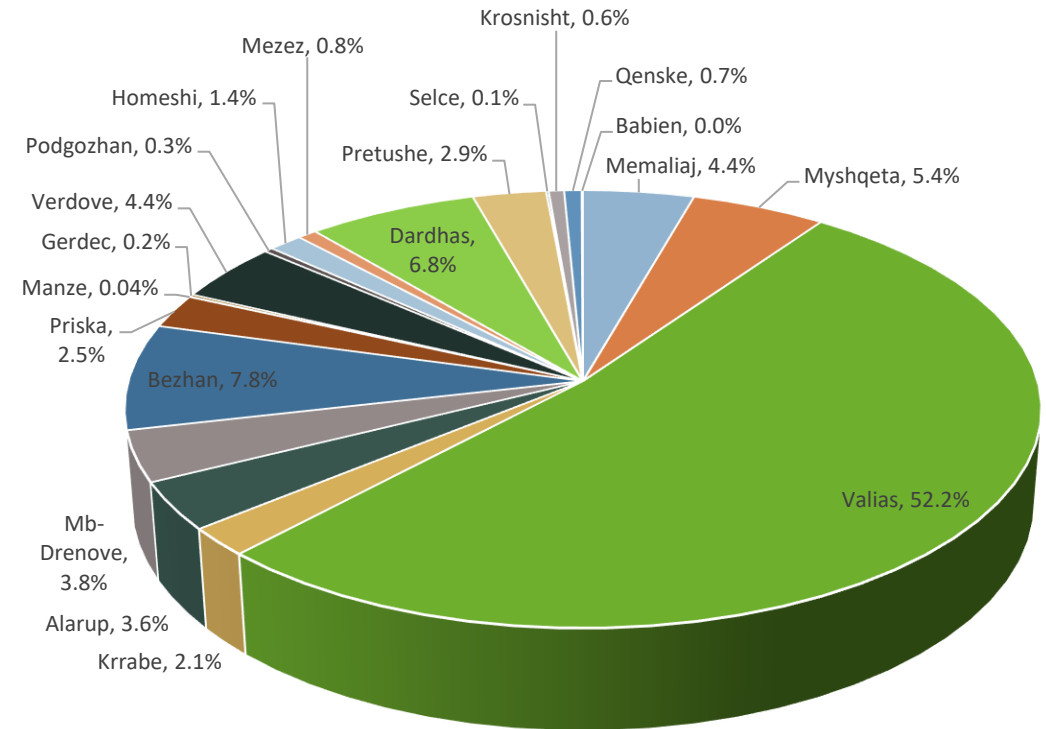
About 10% of the reserves are located in the Korça-Pogradeci area.

About 4.4% of the reserves are located in the area of Memaliaj.

Our coals are generally of the lignite type with an analytical calorific power of 8360–22572 kJ/kg (average 13376–13794kJ/kg). Some of the coal can be enriched after mining, producing concentrates with a calorific power up to 18810–22990 kJ/kg.

Coal reserves in former coal mines of Albania.

No	Deposit	Current reserves, tons	Calorific power, kJ/kg
1	Memaliaj	4359434	15884
2	Myshqeta	5300000	18183
3	Valias	51448000	16302
4	Krrabe	2078580	22865
5	Alarup	3500000	12540
6	Mb-Drenove	3698335	15466
7	Bezhan	7707974	9029
8	Priska	2460570	16168
9	Manze	35000	9614
10	Gerdec	180000	9196
11	Verdove	4288630	12766
12	Podgozhan	340330	12247
13	Homeshi	1352545	13376
14	Mezez	760000	13794
15	Dardhas	6700000	12766
16	Pretushe	2885427	12582
17	Selce	98289	9585
18	Krosnisht	604113	8360
19	Qenske	686333	9112
20	Babien	45881	9112
21	Totali	98529441	



PEATS:

Peats are another source of energy and are located in the Maliqi deposit, about 156 million m³

The characteristics of the peats of this place are:

- Calorific value: 12373 kJ/kg
- Humidity: 11%
- Volatile matter: 39%
- Sulfur content: 1.1%

Bitumen and other bituminous matters

- In Albania, there are numerous occurrences of natural bitumen that are related to the oil transformations .
- There is natural bitumen of very high quality in the deposit of Selenica, in the district of Vlora. Its geological reserves are estimated to be 520,000 tons.
- Bituminous coal is associated with natural bitumen at the deposit of Selenica.
Reserves estimated to be around 3-4 million tons.
- Tar sands have been explored in Patos, Treblovë-Selenica, Selishtë, Kuçovo, Murriz, Kreshpan, Belishovë, Greshicë, Makaresht, Thumanë-Milot, etc. Estimated reserves are around 246 million tons.



POSSIBILITIES OF COAL INDUSTRY DEVELOPMENT

- ❑ To meet the energy needs of industrialized countries, world demand for coal has increased and is expected to increase.
- ❑ Historically, the increase in demand for coal has been linked to the increase in demand for electricity, which is the "engine" for GDP growth.
- ❑ Seeing the difficult energy situation of the country, the difficulties created by supplying consumers with only one source of energy, the need for coal mineral will be increasing starting from the fact that coal deposits in Albania are in suitable positions will compete with coal imports.
- ❑ We also emphasize that the reactivation of these mines mitigates to a considerable extent the social problems, which are acute in those areas where there are coal deposits.
- ❑ Actual the during the 2013-2023 years period an annual production of energetic matter of 200 000-350 000 tons/year was realized.

Scenario Of the possibility of building small TPP that use coal as fuel

NO	Items	UNit	Value according the place		
			Memaliaj	Pogradec	Tirane
1	Installed Power	MW	25	20	20
2	Annual working hours	hour	12960	12960	12960
3	Investments per installed unit	USD/kW	3664	3344	4304
4	Total investments	mil/USD	91.6	66.88	103.3
5	Longevity	vjet	25	25	25
6	Productivity	%	42	35	40
7	Electricity produced	mil/kW	180	144	180
8	Coal calorific power	KJ/kg	9202	6099	7469
9	Coal Price	USD/ton	69	62	68
10	Coal consumption	kg/kWh	0.52	0.785	0.64
11	Annual coal consumption	ton	93600	112977	115324
12	Annual expenses for coal	mil/USD	6.46	7.00	7.84
13	Annual expenses for operation, maintenance, etc	mil/USD	3.9	3.335	3.48
14	Annal amortisation	mil/USD	3.66	2.68	4.13
15	A lot of annual expenses	mil/USD	14.02	13.01	15.45
16	Cost of electricity production	cent/kWh	7.79	9.04	8.59

Thank's for your attention