Albania – Energy Country Profile

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General Secretary of Ministry of Energy and Industry
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Albania Energy Country Profile

- Its significant petroleum and natural-gas reserves, coal deposits, and hydroelectric-power capacity, allow Albania to produce enough energy to support domestic consumption, export fuels and electric power.

- Hydropower plants dominate the power generation sector of Albania with a total generation installed capacity of 1,541 MW out of which 1,444 MW is hydro based. Three of the main hydro plants are Komani, Fierza and Vau i Dejes MW with respective capacities of 600 MW, 500 MW and 250. Also the new Vlora Thermal Power Plant is foreseen to be operational by 2015.

- Small hydro power plants in operation with a total installed capacities around 25 MW.
## Energy and Natural Resources

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<th>Petroleum/Oil</th>
<th>Natural Gas</th>
<th>Mineral Resources</th>
<th>Coal</th>
<th>Chromite or Chromium</th>
<th>Cooper</th>
<th>Bitumen/Asphalt</th>
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<td><strong>Known petroleum reserves at existing Albanian drill sites totaled about 200 million tons, located in southwestern Albania, mainly in the triangle-shaped region delimited by Vlorë, Berat, and Durrës.</strong></td>
<td>Albania's known natural-gas reserves have been estimated at 22,400 million cubic meters and lie mainly in the Kuçovë and Patos areas.</td>
<td>Albania's mineral resources are located primarily in the mountainous northern half of the country.</td>
<td>Albania's unprofitable coal mines produced about 2.1 million tons in 1987.</td>
<td>Some production estimates placed Albania just behind South Africa and the former Soviet Union in the output of chromite, or chromium ore, which is vital to the production of stainless steel.</td>
<td>Albania also produced copper, iron, and nickel. The main copper deposits, estimated at about 5 million tons, were located near the northern towns of Pukë, Kukës, and Shkodër.</td>
<td>Albanian bitumen and asphalt deposits were located near the town of Selenicë and in the Vjosa River valley.</td>
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<td><strong>The local production of petroleum by-products and gas fulfills 12.5% of economy's needs, as a result of absence of processing of all the raw petroleum produced in the country.</strong></td>
<td>Fertilizer plants consumed about 40 percent of Albania's annual natural-gas production; power stations consumed about another 15 percent.</td>
<td>Albanian miners extract mainly chromite ore, ferronickel, copper, bitumen, and salt. Obsolete equipment and mining techniques have hampered Albania's attempts to capitalize on its mineral wealth.</td>
<td>The coal, mainly lignite with a low calorific value, was being mined mainly in central Albania near Valias, Manëz, and Krrabë; near Korçë at Mborje and Drenovë; in northern Tepelenë at Memalaj; and in Alarup to the south of Lake Ohrid.</td>
<td>Foreign studies estimated that Albania had more than 20 million tons of chromite reserves, located mainly near the towns of Korçë, Mat, Elbasan, and Kukës.</td>
<td>Albania's principal iron ore deposits, estimated at 20 million tons located near Pogradec, Kukës, Shkodër, and Peshkopi.</td>
<td>Bitumen and asphalt production rose significantly after World War II, and most of the output was used for paving and waterproofing materials and in the manufacturing of insulators and roofing shingles.</td>
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<td>Processed petroleum products in the country play a major role in the country’s market for industrial and services consumers, the level of raw petroleum in total (Albpetrol, Bankers Petroleum Albania Ltd and Stream Oil &amp; Gas) amounted in 1,030,723 toe, which is the highest level in the last 15 years.</td>
<td>Planners projected an increase in natural-gas production to about 1.1 million cubic meters per year by xxxx,</td>
<td>High extraction and smelting costs, as well as Albania’s overall economic collapse, have forced mine and plant closures.</td>
<td>Conditions inside Albania’s coal mines were deplorable, with much of the work done by manual labor.</td>
<td>Albania’s high-grade chromite reserves had been largely exhausted by the 1990. The poor quality of the remaining ore accounted for the country’s worsening position in world markets. Impurities present in Albania’s highest-grade chrome were largely the by-product of poor mining and smelting techniques and the use of antiquated Chinese equipment.</td>
<td></td>
<td>Albania also possessed abundant deposits of salt, found near Kavajë and Vlorë. Limestone, a principal raw material for Albania’s construction industry, was quarried throughout the country.</td>
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<td>Petroleum was the first industry to attract direct foreign investment after the communist economic system broke down.</td>
<td>The government repeatedly has promised to take steps to reopen mines.</td>
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<td>Albania used most of its coal to generate electric power.</td>
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Energy projects

• The generation capacity under construction or already committed by the Albanian Government is provided below:

• A) Hydro Power Plants
• (i) Ashta HPP (48 MW) in Drin River – 2009-2012 (160 M€uro - private fund), which is contracted with Verbund Austria as concessionaire;
• (ii) Kalivaci HPP (93 MW) in Vjosa River - 2008-2012 (120 M€uro - private fund), which is contracted with consortium BEG Italy – DBank Germany as concessionaire;
• (iii) Devolli River Cascade with three hydro power plants (3x15+2x20 +2x80 MW) in Devoll River - 2009 – 2015 (930 M€uro), which is contracted with consortium EVN Austria and Statkraft Norway as concessionaire;
(iv) Skavica HPP (350 MW) in Black Drin River,

Skavica HPP will be constructed in the upper side of the Drin river cascade. The installed capacity is about 350 MW and the electricity production is foreseen 1,05-1.1 TWh/year. The Skavica reservoir allows planning the electricity production through the optimization of the water recourse use. More electricity, 200-300 GWh, can be produced from the downstream power plants of Fierza, Komani and Vau Dejes;

(v) Vjosa River Cascade (Private fund)

Vjosa River is the second largest river system in Albania. Its upper catchments include areas in Greece’s Northern Mountains, with high precipitation; Until now, the hydroelectric potential has not yet been exploited, except Kalivaci HPP;

SOGREAH, a French company presented the final feasibility study for the assessment of production potential of Vjosa River, at the end of February 2013.
Energy projects

• B) Thermal Power Plants
• (i) Vlora THPP (distillate oil) (97 MW – 92 MEuro - public fund), financed by European Bank for Reconstruction and Development (EBRD), European Bank for Investment (EIB), World Bank (WB) and by KESH itself. The THPP is planned to be put in commercial operation in June 2010.
• (ii) Lezha Biomass (palm oil) TPP (140 MW; 150 MEuro – Private fund)), which is authorized to be constructed by Marseglia Group Italy
Energy projects

- C) Wind Farms
  - (i) Lezha Wind Farms (108 + 114 MW), which is authorized to be constructed by Marseglia Group Italy

- D) Small Hydro Power Plants (less than 15 MW)
  - As of December 31, 2011, the Albanian Government, based on the Concession Law (approved on December 2006), has issued up to about 120 concession contracts for building different categories of HPPs.
Legal Reform & Fiscal Framework Facilities

- Removal of VAT for imported machinery which will facilitate considerably major investments in Albania.
- Drafting a new law “On the Power Sector”, amending the existing law in accordance with EU Directives and 3-rd Package;
- Drafting a new law “On Renewable Energies” and “On Energy Efficiency”;
- Drafting of sub-legal and regulatory acts of these laws;
- Tariff reform.
The National Energy Strategy (2015-2030) is foreseen to be completed within 2014 and it includes:

- Fulfilling power demand according to the “lowest-cost” principle;
- Increasing RES/ EE in all sectors in compliance with EU directives and the Treaty of Energy Community;
- Using natural gas after implementing TAP project;
- Long-term progress of power tariffs and prices;
- Regional cooperation for establishing a regional market.
Thank You!