

# 2009 Minerals Yearbook

**ALBANIA [ADVANCE RELEASE]** 

### THE MINERAL INDUSTRY OF ALBANIA

### By Mark Brininstool

Albania's important mineral deposits included chromium, copper, limestone, and petroleum. Production of mineral commodities was limited, but the number of exploration projects increased as Albania continued to attract international exploration companies.

#### Minerals in the National Economy

In 2009, Albania's gross domestic product (GDP) increased by 2.8% and the rate of inflation was 2.2%. In 2008 (the most recent year for which data were available), industrial production made up about 9% of the GDP, and the mineral extraction industry accounted for about 10% of the value of industrial production and almost 1% of the GDP (Institute of Statistics of the Republic of Albania, 2010; International Monetary Fund, 2010, p. 159, 165).

#### **Production**

Production data for mineral commodities in 2009 were entirely estimated with the exception of ferrochromium, chromite, and crude steel production. Production of chromite and crude steel increased by 24%, and 16%, respectively, compared with that of 2008. Rolled steel production was estimated to have increased by about 16% and crude petroleum production was estimated to have increased by 5%. Production of ferrochromium decreased by about 37%. Revised figures for 2008 show that a number of significant production increases and decreases occurred between 2007 and 2008. In 2008, silica sand production increased by 174% compared with that of 2007; limestone production increased by 124%; gypsum production, by 68%; bitumen production, by 33%; crude steel production, by 44%; rolled steel production, by 43%; natural gas production, by 20%; and crude petroleum production, by 12%. Lignite production decreased by 63%; refined fuels production, by 30%; coke production, by 20%; and cement production, by 17% in 2008 compared with production in 2007 (table 1).

#### **Structure of the Mineral Industry**

Mining activities in Albania are regulated by the Mining Law of Albania, No. 7796, dated February 17, 1994. Privatization of Albanian mineral resources is accomplished through the granting of prospecting permits, exploration concessions, and mining concessions to Albanian and foreign companies. As of December 2009, 832 outstanding permits for prospecting, exploration, and mining were reported; 680 of these permits were for mining. Out of the 832 outstanding permits, the largest number were for limestone (282 permits), chromite (262 permits), and iron-nickel and nickel-silicate (37 permits). Table 2 is a list of major mineral industry facilities. Previously listed copper ore and metal production facilities, iron ore mines, and lignite mines were removed from table 2 owing to a lack of

information about these facilities (Parliament of Albania, 1994, p. 6-12; National Agency of Natural Resources of Albania, 2010, p. 9).

#### **Commodity Review**

#### Metals

Chromium.—In August, Albanian Chrome, Sh.p.k. (ACR) restarted production at its 1,500-metric-ton-per-month (t/mo)-capacity high-carbon ferrochromium smelter. ACR halted production in December 2008 owing to low demand and falling prices for ferrochromium. Total ferrochromium production capacity increased to 36,000 metric tons per year (t/yr) in October when ACR began production at its new 1,500-t/mo-capacity low-carbon ferrochromium smelter. Also, DCM Decometal obtained the 50% share of ACR that was formerly held by Terwingo Ltd. of Russia. The date and details of the share exchange were unknown (Metal Bulletin, 2009a, p. 9; 2009b, p. 9).

Although the gross weight of chromite output is reported in table 1, figures for marketable chromite ore and concentrate that were reported in the the 2008 Minerals Yearbook were removed owing to a lack of information on production of these products. The National Agency of Natural Resources of Albania reported chromite ore reserves of 36.9 million metric tons (Mt) (National Agency of Natural Resources of Albania, 2010, p. 14).

In January, Empire Mining Corp. received exclusive exploration and development rights to four licenses located near Bulqiza. The area of the licenses covered 64.5 square kilometers (km²) (24 square miles). JAB Resources Ltd. held three exploration permits that covered 120 km² in northeastern Albania. The company's target was to mine 22 Mt of ore containing an average of 14% chromium oxide during the life of the mine; the ore would be processed into concentrate consisting of greater than 40% chromium oxide. The company expected initial production to be about 700,000 t/yr of crude ore and 120,000 t/yr of concentrate. No dates were given for the expected start of production (Empire Mining Corp., 2009; JAB Resources Ltd., 2010).

#### **Industrial Minerals**

No data were available on the production of industrial minerals. Production is estimated to have remained near the 2008 production levels.

Cement.—Antea Cement Sh.a. (a subsidiary of Titan Cement Company S.A. of Greece) continued construction of a 1.5-million-metric-ton-per-year (Mt/yr)-capacity cement plant in the Kruje region. The plant was expected to begin operating in March 2010. Cementos Aquila sh.p.k. (a subsidiary of Grupo Empresarial Aricam S.L.) planned to construct a cement plant in Mamurras with an initial capacity of 1.3 Mt/yr and an eventual

capacity of 2.6 Mt/yr. The company expected the plant to be operational in 2010. The Spacelift Cement Group cement plant was removed from table 2 because it now appears that the plant has not yet been built. The unidentified cement plant located in Vlore that appeared in table 2 in the Albania report of the 2008 Minerals Yearbook has also been removed because the plant seems to have closed in 1994. Two other cement plants in Balldre and in Lezha were also thought to be in the construction stage, but details on these plants were unavailable (Grupo Empresarial Aricam, 2008; Titan Cement Company S.A., 2010, p. 31, 47).

#### Mineral Fuels

Crude Petroleum.—Crude petroleum production was estimated to have increased by about 5% compared with production in 2008. The increase in production was attributed to an average daily output increase to 6,438 barrels per day (bbl/d) from 5,875 bbl/d in 2008 by Bankers Petroleum Ltd. at the Patos Marinza oilfield in southwestern Albania. Bankers Petroleum also reported an increase of proved reserves at its Patos Marinza license to 92.8 million barrels (Mbbl) from 69.4 Mbbl in 2008. Proved and probable reserves increased to 213.9 Mbbl from 180 Mbbl in 2008 (Bankers Petroleum Ltd., 2010, p. 8). The state-owned company Albpetrol sh.a. was the only other producer of crude oil, but production data were not available for 2009, so production was estimated to have remained at about 1.9 Mbbl.

#### Outlook

Albania has the potential to increase its production of metals and mineral fuels as exploration projects continue and as foreign companies increase investments in Albania. Further investment will depend on economic and social stability as well as on the improvement of infrastructure.

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### TABLE 1 ALBANIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>		2005	2006	2007	2008	2009 <sup>e</sup>
META						
Chromite, gross weight (18-42% Cr <sub>2</sub> C	162,772 <sup>r</sup>	212,581 <sup>r</sup>	199,771 <sup>r</sup>	207,104 <sup>r</sup>	$256,000^{-3}$	
Copper:						
Ore, gross weight		68,312 <sup>r</sup>	35,071 <sup>r</sup>	98,000 <sup>r</sup>	105,000 <sup>r</sup>	105,000
Cu content or ore (1.3-2.5%) <sup>e</sup>		1,300	670	1,900	2,000 e	2,000
Iron and steel:						
Metal, ferroalloys, ferrochromium	34,400	17,040		11,916	$7,556^{-3}$	
Steel:						
Crude steel, secondary		179,524	205,534	263,271	380,000 <sup>r</sup>	440,000 3
Rolled steel		100,000	114,000	136,000	194,000 <sup>r</sup>	226,000
Iron-nickel and nickel-silicate ores <sup>4</sup>		800	79,000	369,559	353,290	350,000
INDUSTRIAL N	MINERALS					
Cement, hydraulic	thousand metric tons	489	525	889	737	740
Clay, kaolin <sup>e</sup>	do.	310	300	300	300	300
<u>Dolomite</u> <sup>e</sup>		1,000,000 3	1,000,000	1,000,000	1,000,000	1,000,000
Gypsum		14,770	19,683	46,200	77,633	78,000
Limestone	cubic meters	1,337,373	1,339,440	1,716,122	3,837,529	3,800,000
Salte		25,000	25,000	25,000	25,000	25,000
Silica sand	cubic meters	3,200	3,200	4,400	12,077	12,000
MINERAL FUELS AND RI	ELATED MATERIALS					
Coal, lignite		2,640 <sup>r</sup>	3,800 <sup>r</sup>	4,000 <sup>r</sup>	1,500 <sup>r</sup>	1,500
Gas, natural, gross production	thousand cubic meters	11,347	11,091	11,089	13,295	13,300
Petroleum:						
Crude, gross weight	thousand 42-gallon barrels	2,301	2,084	3,580 <sup>r, e</sup>	4,000 r, e	4,200
Refinery products:						
Bitumen		86,000	83,000	69,000	92,000	92,000
Coke		60,000	64,000	59,000	47,000	47,000
Fuels <sup>e</sup>	thousand 42-gallon barrels	1,820	2,060	2,010	1,400	1,400

<sup>&</sup>lt;sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. <sup>r</sup>Revised. do. Ditto. -- Zero.

<sup>&</sup>lt;sup>1</sup>Table includes data available through May 19, 2010.

<sup>&</sup>lt;sup>2</sup>In addition to the commodities listed, a variety of industrial minerals and construction materials (common clay, lime, olivinite, sand and gravel, and stone) were believed to have been produced, but output is not reported quantitatively, and available information is inadequate to make reliable estimates of output. Also, a small amount of bauxite for use in the cement industry was believed to have been produced.

<sup>&</sup>lt;sup>3</sup>Reported figure.

<sup>&</sup>lt;sup>4</sup>Iron-nickel and nickel-silicate ore production were not reported separately. Estimates of metal content of ores were not made owing to the significant variations of the iron and nickel content of the ores, which depend not only on the type of ore, but also on the region in which it was mined. Iron-nickel ores were reported to contain from 37.22% to 44.72% Fe and from 0.97% to 1.07% Ni; nickel-silicate ores were reported to contain from 16.6% to 21.73% Fe and from 1.06% to 1.2% Ni.

## ${\it TABLE~2}$ ALBANIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2009

(Thousand metric tons unless otherwise specified)

	Commodity	Major operating companies	Location of main facilities	Annual capacity <sup>e</sup>
Cement		Fushe Kruje Cement Factory, Sh.p.k. (Seament Holding)	Fushe Kruje, 35 kilometers northwest of Tirana	1,320
Do.		Elbasan Cement Factory (Seament Holding)	Elbasan, 32 kilometers southeast of Tirana	775
Chromite		Albanian Chrome, Sh.p.k. (ACR) (DCM DECOmetal, 100%)	Mine in Bulquize, 40 kilometers northwest of Tirana	85
Do.		do.	Pogradec (including Katjiel and Pojske Mines)	NA
Do.		Numerous small producers	Mostly concentrated near Bulquize	NA
Ferrochromiu	ım	Albanian Chrome Sh.p.k. (ACR) (DCM DECOmetal, 100%)	Elbasan, 32 kilometers southeast of Tirana	36
Lime		Kurum International Sh.p.k.	Elbasan	36
Natural gas	million cubic meters	Albpetrol sh.a.	Gasfields in southwest Albania between Ballsh and Fier	NA
Petroleum:				
Crude	42-gallon barrels per day	do.	Oilfields at Marineza, Ballsh, Sheqishte, Patos, Gorrisht, and others	NA
Do.	do.	Bankers Petroleum Ltd.	Oilfields at Kucova and Patos Marinza, east of Fier in south-central Albania	6,500
Refined	do.	Albanian Refining and Marketing Organization Sh.a. (ARMO)	Refineries at Ballsh and Fier	NA
Steel		Kurum International Sh.p.k.	Electric arc furnace plant at Elbasan	600

<sup>&</sup>lt;sup>e</sup>Estimated. Do., do. Ditto. NA Not available.