



2007 Minerals Yearbook

BULGARIA

THE MINERAL INDUSTRY OF BULGARIA

By Mark Brininstool

Bulgaria's mineral industry included mine output of ferrous and nonferrous metals, mineral fuels (mainly coal), and such industrial minerals as clays, gypsum, and rock salt. Additionally, the metallurgical sector smelted and refined copper, gold, iron and steel, lead, silver, and zinc. Cement, dimension stone, and other construction materials also were produced. On a world scale, however, Bulgaria's mineral industry was small and mainly of regional importance. On January 1, 2007, Bulgaria joined the European Union (EU).

Minerals in the National Economy

In 2007, Bulgaria's GDP increased by about 6.2% compared with the country's GDP in 2006. The total value of industrial production increased by 12.7% in 2007 and accounted for about 26.5% of the GDP. In terms of output value, mining and quarrying of mineral fuels increased by 3.8%, whereas the mining and quarrying of metals and industrial minerals decreased by 1.1%. Mining and quarrying activities made up 4.4% of the value of industrial production. The value of the manufacture of industrial minerals increased by 10.7% compared with that of 2006, and the manufacture of basic metals and metal products increased by 8.2% (National Statistical Institute of the Republic of Bulgaria, 2008a; 2008b, p. 114-115).

Production

Within the metals sector, production increases were seen for cadmium (26.4%), refined lead (14.4%), refined copper (6.7%),

refined zinc (4.9%), and gold (3.8%). Decreases in production were seen for silver (15.4%), lead content of ore (14.3%), zinc content of concentrate (9.6%), lead concentrate (7.8%), pig iron (6.8%), and crude steel (3.5%). Significant increases in industrial mineral production were reported for silica sand (120.4%), sand and gravel (14.7%), and crude gypsum (8.3%). Bentonite production decreased by 26.1%. Total coal production increased by 11.1% and natural gas production decreased by 43.2% compared with production in 2006.

Outlook

Bulgaria's membership in the EU is expected to result in the modernization and improvement of industrial facilities as the country works to reach EU standards for environmental protection and to attract foreign investment. The development of the industrial sector and expected benefits of EU membership, such as greater access to European markets, could result in a general increase in mineral production and exploration activity.

References Cited

- National Statistical Institute of the Republic of Bulgaria, 2008a, Gross domestic product—Fourth quarter of 2007 and 2007: Sofia, Bulgaria, National Statistical Institute of the Republic of Bulgaria. (Accessed March 26, 2009, via http://www.nsi.bg/SiteMap_e/SiteMap.htm.)
- National Statistical Institute of the Republic of Bulgaria, 2008b, Statistical reference book of the Republic of Bulgaria 2008: Sofia, Bulgaria, National Statistical Institute of the Republic of Bulgaria, 193 p.

TABLE 1
BULGARIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2003	2004	2005	2006	2007
METALS					
Aluminum, metal, secondary	2,420 ^r	3,762 ^r	5,107 ^r	12,825 ^r	12,800 ^e
Bismuth, metal ^e thousand metric tons	40	30	35	30	30
Cadmium, metal, smelter	307	356	350	363 ^r	459
Copper:					
Ore:					
Gross weight thousand metric tons	26,415	23,879	24,807	29,572	29,674
Cu content ^e do.	116	107 ³	112	124 ^r	116
Concentrate:					
Gross weight do.	458	398	470	502	502
Cu content do.	92	80	94	101	100
Metal, primary and secondary:					
Smelter	215,300	227,200 ^r	240,000 ^r	238,500 ^r	229,100
Refined, electrolytically	45,900 ^r	55,300 ^r	60,500	65,500	69,900
Gold, metal kilograms	2,142	2,431	3,868	3,818	3,964
Iron and steel:					
Iron ore:					
Gross weight thousand metric tons	466	83	--	--	--
Fe content do.	127	27	--	--	--
Iron concentrates do.	248	52 ^e	--	--	--
Metal:					
Pig iron for steelmaking do.	1,386	1,158	1,081	1,147 ^r	1,069
Ferroalloys, ferrosilicon ^e do.	10	10	10	10	10
Steel, crude do.	2,317 ^r	2,106	1,969	2,124 ^r	2,050 ^e
Semimanufactures, rolled do.	1,206	1,391	1,452	1,400 ^e	1,400 ^e
Lead:					
Mine output, Pb content	31,000	25,000	32,000	28,000	24,000 ^e
Concentrate:					
Gross weight	35,200	29,900	31,500	25,387	23,395
Pb content	24,600 ^e	19,000 ^e	22,050 ^r	17,771 ^r	16,377
Metal, refined, primary and secondary	69,000 ^r	65,968 ^r	80,824 ^r	76,028 ^r	86,956
Manganese ore:					
Gross weight	4,000	28,000	39,000	20,000	28,000
Mn content ^e	1,100	7,600	10,900	5,600	7,840
Silver, metal ^e	60 ^r	45 ^r	55 ^r	65 ^r	55
Tin, metal ^e	10	10	10	10	10
Uranium oxide, U content ^e	600	600	600	600	NA
Zinc:					
Mine output, Zn content ^e	31,000	19,000	22,000	17,000	16,000
Concentrate:					
Gross weight	26,000	29,900	33,700	25,917	23,474
Zn content ^e	18,800	15,500	17,500	13,500	12,200
Metal, refined, primary and secondary	86,800	102,110 ^r	95,077 ^r	95,341 ^r	99,992
INDUSTRIAL MINERALS					
Asbestos, fiber, all grades ^e	300	237	--	--	--
Barite ore, run-of-mine ^e	91,200 ^r	75,400 ^r	--	--	--
Cement, hydraulic thousand metric tons	2,406 ^r	2,939 ^r	3,618 ^r	4,093 ^r	4,100 ^e
Clays:					
Bentonite do.	146	225	181	134 ^r	99
Kaolin, raw do.	1,137	1,291	1,381	1,658	1,631
Refractory do.	40	30	30	15	15 ^e
Feldspar do.	35 ^{r,e}	87 ^r	73 ^r	93 ^r	93 ^e
Fluorspar ^e do.	2	2	2	2	2
Gypsum and anhydrite:					
Crude do.	168	176	188	216	234
Calcined ^e do.	50	60	65	75	75

See footnotes at end of table.

TABLE 1—Continued
BULGARIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2003	2004	2005	2006	2007
INDUSTRIAL MINERALS—Continued					
Lime, industrial thousand metric tons	1,246 ^r	1,289 ^r	1,352 ^r	1,409 ^r	1,500 ^e
Limestone and dolomite do.	3,500 ^e	3,500 ^e	3,265	3,340	3,335
Nitrogen, N content of ammonia do.	321	320	320	309	310 ^e
Perlite do.	17	8	15	5	14
Pyrites, gross weight ^e do.	150	150	150	150	150
Salt, all types do.	1,882	1,900	1,900	2,000	2,000
Sand and gravel thousand cubic meters	2,098	3,333	3,628	4,293	4,925
Silica, quartz sand thousand metric tons	412	545	583	250	551
Sodium carbonate, calcined ^e do.	800	800	800	800	800
Sulfur: ^e					
S content of pyrites do.	30,000	25,000	25,000	25,000	25,000
Byproduct do.	289,000	301,000	300,000	300,000	300,000
Total do.	319,000	326,000	325,000	325,000	325,000
Sulfuric acid do.	891,600 ^r	976,500 ^r	1,020,000 ^r	1,009,500 ^r	1,010,000 ^e
Zeolite ^e do.	15,000	15,000	15,000	15,000	15,000
MINERAL FUELS AND RELATED MATERIALS					
Coal, marketable:					
Anthracite thousand metric tons	9	--	--	--	--
Bituminous do.	44	170	96	52	18
Brown do.	3,044	3,071	2,620	2,557	2,834
Lignite do.	24,597	23,385	22,193	22,750	25,325
Total do.	27,694	26,626	24,909	25,359	28,177
Coke ^e do.	1,200	1,200	1,200	1,200	1,200
Natural gas, marketed million cubic meters	11	333	537	519	295
Petroleum:					
Crude, reported thousand metric tons	27	30	27	25	24
Refinery products ^e thousand 42-gallon barrels	25,000	25,000	25,000	25,000	25,000

^eEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. do. Ditto. NA Not available. -- Zero.

¹Table includes data available through March 31, 2009.

²In addition to the commodities listed, chromite, magnesite, palladium, platinum, tellurium, uranium, and a variety of crude construction materials (common clays, dimension stone, and crushed stone) are produced, but available information is inadequate to make reliable estimates of output.

³Reported figure.

TABLE 2
BULGARIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2007

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies	Location of main facilities	Annual capacity
Bentonite, mine output	S&B Industrial Minerals A.D.	Kardzali	280.
Cadmium	KCM S.A.	Plovdiv	320.
Do.	Lead and Zinc Complex Plc. (LZC)	Kurdjali	150.
Cement	Reka Devnia	Devnia	1,825.
Do.	Titan Zlatna Panega	Panega	1,300.
Do.	Other companies	Temelkovo, Dimitrovgrad, Pleven, and Beli Izvor	1,590.
Coal:			
Bituminous	Economic Mining and Power Combine (SMEK) Balkanbass	Balkan coal basin in central Bulgaria, northwest of Silven	445.
Brown	G. Dimitrov	Pernik coal basin, southwest of Sofia	4,000.
Do.	Other companies	Bobov Dol and Pirin in western Bulgaria	3,100.
Lignite	SMEK East Maritsa	East Maritsa coal basin near Zagora	25,000.
Do.	Other companies	Marbas, Pernik, and Bobov Dol coal basins	5,300.
Copper:			
Concentrate, Cu content	Asarel-Medet AD	Panagurishte, Pazardzhik District	55.
Do.	Dundee Precious Metals Inc.	Chelopech	15.
Do.	Bradtze	Malko Turnovo	2.
Do.	Elatsite-Med Ltd.	Elatsite	40.
Do.	Rosen	Burgas, near the Black Sea	1.
Do.	Tsar Asen	Srednogie, Sofia District	2.
Do.	Burgaskii Mines Ltd., Zidoroovo	Burgas, near the Black Sea	0.5.
Metal:			
Smelter	Cumerio Med S.A.	Pirdop	275.
Refined	do.	do.	70.
Iron ore	Kremikovtzi A.D.	Kremikovtzi	2,000.
Kaolin, mine output	Kaolin AD	Senovo, Rousse District	250.
Lead-zinc:			
Concentrate, Pb-Zn content	Gorubso Co.	Erma Reka, Kurdjali, and Laki, all in Madan area near Greek border	59 lead, 47 zinc.
Do.	Madzharovo Ltd.	Near Plovdiv	3 lead, 2 zinc.
Do.	Osogovo Ltd.	Osogovo Mountains, western Bulgaria	3 lead, 2 zinc.
Do.	Ustrem Ltd.	Near Thundza River, eastern Bulgaria	3.5 lead, 0.8 zinc.
Do.	Rudmetal JSC	Rudozem	3 lead, 2 zinc.
Metal:			
Pb, refined	KCM S.A.	Plovdiv	65.
Do.	Lead and Zinc Complex Plc. (LZC)	Kurdjali	33.
Zn, smelter	KCM S.A.	Plovdiv	60.
Do.	Lead and Zinc Complex, Plc. (LZC)	Kurdjali	33.
Manganese ore	Mangan Ltd. (Obroschishte)	Varna District	50.
Natural gas	million cubic meters	Ministry of Power Supply	Chiren field, in northwest Bulgaria
Perlite, mine output	S&B Industrial Minerals A.D.	Kardzali	30.
Petroleum:			
Crude	do.	do.	(1)
Refined	42-gallon barrels per day	Economic Trust for Petroleum Products	Refineries in Burgas, Pleven, and Ruse
Silver	KCM S.A.	Plovdiv	100.
Steel, crude	Kremikovtzi A.D.	Near Sofia	2,300.
Do.	Stomana Industry S.A. (Sidenor, 90%)	Pernik	1,400.
Zeolite, mine output	S&B Industrial Minerals A.D.	Kardzali	15.

Do., do. Ditto
¹Insignificant capacity.