THE MINERAL INDUSTRY OF

BULGARIA

By Walter G. Steblez

Bulgaria was a regional producer of nonferrous metal ores and concentrates that met most of the country's domestic and export requirements. Small quantities of iron and manganese ores and a variety of industrial minerals also were mined (asbestos, barite, fluorspar, gypsum, and limestone), largely for domestic consumption. Most of Bulgaria's requirements for iron ore, steel, and mineral fuels, however, had to be met through imports.

After several years of declining performance, Bulgaria's economy appeared to have made a recovery in 1998 as the gross domestic product rose by about 4% compared with that of 1997. Major changes in mineral production were few, if any, and the output of most minerals in 1998 was within the range of levels in 1997. Among metals, gold, refined copper, and manganese ore showed the greatest increases in output, amounting to 19%, 17%, and 7%, respectively, compared with those of 1997. However, crude steel production declined by 16%. Among industrial minerals produced in 1998, only barite and salt displayed significant change as output increased by 59% and 50%, respectively. The output of mineral fuels remained steady. (See table 1.)

The Government remained committed to transforming the economy to a market-based system. The legal basis for this transformation was the Law on Transformation and Privatization of State and Municipal-Owned Enterprises, which was adopted by Parliament in 1992.

State-owned assets that were to remain entirely state-owned were the Bulgarian State Railroads, Bulgargas (gas industry), Bulgarian Posts, Education and Sciences Establishment,

Cartography Company, National Cadastral Company, National Geodesy Company, Geopribor (geological equipment production), Geozashchita, and Vodokanalenzhnir (water main engineering) (U.S. Department of Commerce, 1997). The major commercial enterprises in Bulgaria's minerals industry are listed in table 2.

To promote private enterprise and foreign investment, the Government adopted the Underground Resources Act in 1998. Although the act stipulates that underground mineral wealth is the property of the state, it provides for claims by domestic and foreign companies to be approved for the development and operation of mineral deposits for up to 35 years with additional 15-year extensions. Exploration rights to private companies could be granted for up to 3 years (Kousseff, 1999). In addition, the National Program for Sustainable Development of Mining in Bulgaria was drafted and approved during the year. The program's chief aim was to restructure the country's minerals industry and to complete the privatization of the industry by yearend 1999.

For more extensive coverage of the mineral industry of Bulgaria, see the 1997 Minerals Yearbook, Volume III, Europe and Central Eurasia.

References Cited

Kousseff, Vladimir, 1999, Bulgaria: Mining Journal Mining Annual Review, v. 332, no. 8537, June 25, p. 41.

U.S. Department of Commerce, 1997, Bulgaria Fiscal year 1998: U.S. Department of Commerce Country Commercial Guide, December, 50 p.

${\bf TABLE~1}\\ {\bf BULGARIA:~PRODUCTION~OF~MINERAL~COMMODITIES~1/~2/}$

(Metric tons unless otherwise specified)

Commodity		1994	1995	1996	1997	1998
METALS						
Aluminum, metal, secondary		4,412	4,519	4,417	4,500	4,500 e/
Bismuth, metal e/		40	40	40	40	40
Cadmium, metal, smelter		286	250	250	280	250
Copper:						
Ore:						
Gross weight	thousand tons	19,000	21,050	21,123	21,836	20,726
Cu content e/	do.	75	105	106	109	105
Concentrate:						
Gross weight	do.	370	378	444	463	438
Cu content	do.	74	76	89	93	88
Metal, primary and secondary:						
Smelter		80,400	95,900	104,398	114,630	119,500
Refined		26,500	28,800	22,301	34,530	36,800
Gold, metal	kilograms	2,000 e/	3,100	3,390	1,020	1,213
Iron and steel:	Kilogranis	2,000 0	3,100	3,370	1,020	1,213
Iron ore:	thousand tons	950 e/	959	1,000 e/	050	905
Gross weight				,	858	895
Fe content	do.	268	270	282	242	250 e/
Iron concentrates	do.	462	483	497	479	462
Metal:			4.504	4 404	1 - 1 0	1.000
Pig iron for steelmaking	do.	1,442	1,581	1,481	1,610	1,000 e/
Ferroalloys, ferrosilicon e/	do.	20	8	8	10	10
Steel, crude	do.	2,491	2,724	2,457	2,628	2,216
Semimanufactures, rolled	do.	2,120	2,250	1,901	2,242	1,800 e/
Lead:						
Mine output, Pb content		50,000	37,000	33,000	30,000	35,000 e/
Concentrate:						
Gross weight		65,000	46,466	40,681	39,800	34,595
Pb content		43,000	33,000	28,500	27,900	24,200 e/
Metal, refined, primary and secondary		61,950	72,150	74,690	72,580	72,975
Manganese ore:						
Gross weight			19,000	44,270	47,430	55,600
Mn content			5,600	13,100	14,000	17,000 e/
Silver, mine output, Ag content e/		35	30	49	32	24 3/
Tin, metal		22	13	8	10	10 e/
Uranium, oxide, U content e/		600	600	600	600	600
Zinc:		000	000	000	000	000
Mine output, Zn content		30,000	21,200	25,700	21,000	20,000 e/
Concentrate:		30,000	21,200	23,700	21,000	20,000 C/
Gross weight		54,000	40.200	29,000	29 420	22 600
		54,900	49,200	38,000	38,420	33,600
Zn content		29,000	26,000	19,800	20,000	17,000 e/
Metal, smelter, primary and secondary		64,005	79,700	68,018	70,420	72,755
INDUSTRIAL MINERALS		100	400	200	200	200 /
Asbestos fiber, all grades		100	400	300	300	300 e/
Barite		950,000	990,100	976,700	285,000	452,197
Cement, hydraulic	thousand tons	1,910	2,070	2,137	1,656	1,700 e/
Clays:						
Bentonite	do.	76	126	202	171	176
Kaolin, washed	do.	145	168	189	150	150 e/
Refractory	do.	60	61	67	62	62 e/
Feldspar	do.	50	74	30	36	40 e/
Fluorspar e/	do.	5	4 3/	2 3/	2	2
Gypsum and anhydrite:						
Crude	do.	161	163	169	156	185
Calcined	do.	62	64	64	60	65 e/
Lime, industrial	do.	665	952	991	1,000	1,000 e/
Limestone and dolomite	do.	10,000 e/		10,443	10,842	11,000 e/
Nitrogren, N content of ammonia	do.	995	1,203	1,194	1,200	1,000 e/
Perlite	do.	35 e/	33	26	20	20 e/
Pyrites, gross weight e/	do.	150	150	150	150	150
Salt, all types	do.	1,300	1,500	1,600	1,600	2,400
	thousand cubic meters	3,000 e/		3,075	2,140	2,400 e/
See footnotes at end of table	mousand cubic meters	3,000 e/		3,073	2,140	2,000 e/

See footnotes at end of table.

TABLE 1--Continued BULGARIA: PRODUCTION OF MINERAL COMMODITIES 1/2/

(Metric tons unless otherwise specified)

Commodity		1994	1995	1996	1997	1998
INDUSTRIAL MINE	ERALSContinued					
Silica (quartz sand)	thousand cubic meters	700 e/	707	832	557	593
Sodium carbonate, calcined	do.	451	796	800	800	800
Sulfur: e/						
Sulfur content of pyrite		50,000	50,000	50,000	50,000	50,000
Byproduct		50,000	50,000	50,000	50,000	50,000
Total		100,000	100,000	100,000	100,000	100,000
Sulfuric acid	_	427,959	453,827	524,714	500,000	500,000 e/
MINERAL FUELS AND R	ELATED MATERIALS					
Coal, marketable:						
Anthracite	thousand tons	29	24	23	16	16
Bituminous	do.	144	170	172	130	105
Brown	do.	3,155	3,187	3,961	3,491	3,692
Lignite	do.	25,429	27,449	28,101	26,929	27,435
Total	do.	28,757	30,830	32,257	30,566	31,248
Coke	thousand tons	1,116	1,240	1,157	1,200	1,200 e/
Natural gas, marketed	million cubic meters	8	60	42	38	33
Petroleum:						
Crude, reported	thousand tons	36	47	34	28	32
Refinery products e/	thousand 42-gallon barrels	25,000	25,000	25,000	25,000	25,000
/E (' + 1 /D ' 1						

e/ Estimated. r/ Revised.

 ${\bf TABLE~2} \\ {\bf BULGARIA:~STRUCTURE~OF~THE~MINERAL~INDUSTRY~IN~1998} \\$

(Thousand metric tons unless otherwise specified)

			Annual
Commodity	Major operating companies	Location of main facilities	capacity
Cement	Reka Devnia	Devnia	1,825.
Do.	Zlatna Panega	Panega	1,300.
Do.	Others	Temelkovo, Dimitrovgrad, Pleven, and Beli Izvor	1,590.
Coal:			
Bitiminous	Economic Mining and Power Combine	Balkan Coal Basin in central Bulgaria,	445.
	(Smek) Balkanbass	northwest of Silven	
Brown	G. Dimitrov	Pernik coal basin, southwest of Sofia	4,000.
Do.	Others	Bobov Dol and Pirin in western Bulgaria	3,100.
Lignite	SMEK East Maritsa	East Maritsa coal basin near Zagora	25,000.
Do.	Others	Marbas. Pernik, and Bobov Dol coal basins	5,300.
Copper (Cu):			
Concentrate, Cu content	Medet-Asarel Co.	Panagurishte, Pazardzhik District	25.
Do.	Chelopech Ltd.	Srednogorie, Sofia District	5.
Do.	Bradtze	Malko Turnovo	2.
Do.	Elatzite-Med Ltd.	Srednogorie, Sofia District	15.
Do.	Rosen	Burgas, near the Black Sea	1.
Do.	Tsar Asen	Srednogorie, Sofia District	2.
Do.	Burgaskii Mines Ltd., Zidorovo	Burgas, near the Black Sea	0.5.
Metal, refined	MDK SA Copper Smelter & Refinery	Srednogorie, Sofia District	120.
Iron ore	Kremikovtsi Iron and Steel Combine	Kremikovtsi	2,000.
Lead-zinc (Pb-Zn):			
Concentrate, Pb-Zn content	Gorubso Co.	Erma Reka, Kurdjali, Laki, and Rudozem, all in	59 Pb, 47 Zn
		Madan area near Greek border	
Do.	Madzharovo Ltd.	Near Plovdiv	3 Pb, 2 Zn.
Do.	Ossogovo Ltd.	Ossogovo Mountains, western Bulgaria	3 Pb, 2 Zn.
Do.	Ustrem Ltd.	Near Thundza River, eastern Bulgaria	3.5 Pb, 0.8 Z

See footnotes at end of table.

^{1/} Table includes data available through March 2000.

^{2/} In addition to commodities listed, chromite, magnesite, palladium, platinum, tellurium, and 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 levels.

^{3/} Reported figure.

TABLE 2--Continued BULGARIA: STRUCTURE OF THE MINERAL INDUSTRY IN 1998

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies	Location of main facilities	Annual capacity
Lead-zinc (Pb-Zn)Cor	ntinued:			
Metal:				
Pb, refined		KCM SA 1/	Plovdiv	44.
Do.		Lead and Zinc Complex, Ltd.	Kurdjali	60.
Zn, smelter		KCM SA 1/	Plovdiv	60.
Do.		Lead and Zinc Complex, Ltd.	Kurdjali	30.
Manganese ore		Mangan Ltd. (Obrotchishte)	Varna District	50.
Natural gas		Ministry of Power Supply	Chiren field, in northwest Bulgaria	(2/).
Petroleum:				
Crude		do.	do.	(2/).
Refined	barrels per day	Economic Trust for Petroleum Products	Refineries in Burgas, Pleven, and Ruse	260,000.
Steel, crude:		Kremikovtsi Iron and Steel Works	Near Sofia	2,300.
Do.		Stomana Iron and Steel Works	Pernik	1,300.

^{1/} Dimitur Blagoev became KCM SA following the country's transition to a market economy system.

^{2/} Insignificant capacity.