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The Mineral Industry of Serbia

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Serbia was a modest producer of mineral commodities and continued to recover from the damage to its infrastructure and economy that resulted from the NATO bombing campaign aimed at ending fighting in Kosovo in 1999. The status of Kosovo remained an important political issue that could affect political and economic stability and mineral production in the region. Economic and mineral production data for Serbia in this report do not include data for Kosovo, as reliable data have not been available since 1999 (Statistical Office of the Republic of Serbia, 2008, p. 4).

Minerals in the National Economy

Serbia reported a 7.1% increase in the gross domestic product (GDP) in constant prices compared with the GDP in 2006 (Statistical Office of the Republic of Serbia, 2009). The overall value of mining and quarrying decreased by 0.2% and made up about 1.3% of the GDP. Within the category of mining and quarrying, the value of production of energy-producing materials decreased by 0.6% and the value of production of nonenergy-related mining increased by 2.5%. The value of exports from mining and quarrying increased by about 63% to $57 million and the value of imports increased by about 10% to $2.5 billion compared with 2006 trade figures. The large trade deficit in mining and quarrying was mainly owing to imports of crude petroleum and gas products, which were valued at about $2 billion in 2007 (Statistical Office of the Republic of Serbia, 2008, p. 129-30, 281-82).

Government Policies and Programs

Two main laws regulate mining activities in Serbia. The Mining Law, as amended, regulates mining activity and construction, and the use and maintenance of mining structures. The Law on Geological Explorations regulates geologic explorations (Ministry of Mining and Energy [Serbia], 1995a, b; 2006).

Production

Serbia was a modest producer of copper and lead and zinc ores, as well as gold, platinum-group metals, selenium, and silver. Reported production of such industrial minerals as cement, salt, and sand and gravel increased, although production of the majority of Serbia's industrial minerals was not reported and had to be estimated. Coal production in Serbia increased slightly compared with 2006 production figures mainly owing to a 1% increase in the production of lignite. Natural gas and crude oil output each decreased slightly (table 1).

Structure of the Mineral Industry

Table 2 presents information on Serbia's significant mineral facilities.

Commodity Review

Metals

Aluminum.—Serbia increased production of secondary aluminum by 26.7% to 1,544 metric tons (t). Serbia exported 70,843 t of aluminum and aluminum products and imported 118,023 t, which was an increase of 30.7% and 25%, respectively, compared with 2006 trade data (Statistical Office of the Republic of Serbia, 2008, p. 287, 291).

Copper.—Production of copper ore increased by 19% and that of all refined copper products decreased by 23% compared with 2006 production figures. Progress toward the privatization of Serbia's main copper producer, Rudarsko Topionicki Bazen Bor (RTB Bor), continued in early 2007 when Romanian copper producer Cuprom S.A. won the initial tender for the purchase of RTB Bor. The Romanian firm offered a bid of $400 million with an included obligation to invest about $180 million in the company, but the deal was canceled after Cuprom would not make financial guarantees toward the purchase. Cuprom claimed that the labor union at RTB Bor was opposed to the deal, but the failure to complete the purchase agreement may also have been the result of a reevaluation of the economics of the potential purchase (AFX News Ltd., 2007; Associated Press, The, 2007b). A second tender was held and Austria's A-Tec Industries AG was named the winner in November; final contract negotiations began in December. A-Tec bid $466 million[1] and agreed to make $180 million in investments to take control of RTB Bor's two open pit mines, one underground mine, and one smelting and refining facility. The Russian firm Strikeforce Mining and Resources Ltd. (the mining division of the Basic Element investment group) came in second with a bid of $370 million and stated that it was still interested in purchasing RTB Bor if A-Tec and the Serbian Government do not reach a final agreement (Reuters, 2007; Rudarsko Topionicki Bazen Bor, 2007).

Canadian companies Dundee Precious Metals Inc., Euromax Resources Ltd., and Reservoir Capital Corp. continued exploration for copper and precious metals in Serbia. Dundee Precious Metals had been exploring in Serbia since 2004, and by the end of 2007, it held 11 exploration licenses and 3 concession licenses that covered a total of 901 square kilometers (km^2) (348 square miles), with other license applications for exploration rights to an additional 1,000 km^2 (386 square miles) pending (Dundee Precious Metals Inc., 2008, p. 10, 34). Euromax operated exploration projects at five locations throughout Serbia (Euromax Resources Ltd., 2008, p. 4-5). In February 2007, Reservoir Capital purchased European Minerals Inc.'s six Serbian exploration permits and one exploration application for about $421,000 (Reservoir Capital Corp., 2008, p. 1).

Iron and Steel.—Serbia's steel and pig iron production decreased by 19.5% and 10%, respectively, compared with

[1]Where necessary, values have been converted from Canadian dollars (CAN$) to U.S. dollars at the rate of CAN$1.0748=US$1.00.

production in 2006. U.S. Steel Serbia d.o.o. was the only producer of pig iron and crude steel in Serbia and operated two blast furnaces and a three-furnace converter shop and continuous casting complex in Smederevo (U.S. Steel Serbia, d.o.o., 2009). The No. 2 blast furnace at the Smederevo plant was relined in 2007 and was most likely the reason for the decline in iron and steel production, although other factors may have affected output as well. U.S. Steel Serbia's output would be affected by disruptions in supply from Serbia's only natural gas pipeline, which delivered natural gas from Russia through Ukraine and Hungary. In early 2006, gas supplies were disrupted, causing reductions in production, but in 2007, the supply of natural gas was not cited as having affected iron and steel output (United States Steel Corp., 2008, p. 29, 34, 62).

Lead and Zinc.—Production of lead ore increased by 15.1% and production of zinc content of concentrate decreased by 50%. A clearer picture of future mine production of lead and zinc awaits the resolution of the final political status of Serbia's lead-and-zinc-rich Kosovo Province and definitive exploration results in the Bor region. Rudarsko-Metalursko-Hemijski Kombinat Olova i Cinka Trepca [Trepca Lead-Zinc Mining, Beneficiation, and Smelting Complex] (Trepca) remained under United Nations (UN) protectorate status.

Industrial Minerals

Serbia produced a broad range of industrial minerals in 2007, which included cement, crude magnesite, lime, quartz sand, and sand and gravel. The production of such major construction materials as cement and sand and gravel increased by about 4% and 1%, respectively, compared with output levels in 2006. Lime production decreased by about 15% compared with production in 2006.

Mineral Fuels

Total coal production increased by 0.8% in 2007, and natural gas and crude petroleum production decreased by 2.8% and 2.3%, respectively. Serbia was dependent on imports to supply its needs for mineral fuels and, in 2007, the country imported 2.6 million metric tons (Mt) of crude petroleum valued at $1.3 billion and 1.5 Mt of natural gas valued at $630 million. Imports of crude petroleum and natural gas increased by 3% in quantity and by 14% in value compared with imports in 2006. Serbia imported about 95% of its crude petroleum and 99% of its natural gas from Russia (Statistical Office of the Republic of Serbia, 2008, p. 290).

In October, the head of Russia's state oil and gas company (Gazprom) met with the Serbian President and Prime Minister in Belgrade to discuss cooperation on energy issues. During the meeting, the participants discussed the possible sale of a controlling share of Serbia's state-owned oil company [Naftna Industrija Srbije (NIS)] to Gazprom. In December, the Russian Government presented Serbia with an initial offer of about $550 million[2] in cash and $685 million worth of investments for a 51% stake in the company. The deal also included an offer to run a portion of Russia's proposed South Stream pipeline through Serbia and to construct a gas storage facility in Serbia. The initial offer was reportedly considered too low and would likely be renegotiated before the Serbian Government makes a decision on the deal (AFX News Ltd., 2008; Associated Press, The, 2007a; Southeast European Times, 2007).

[2]Where necessary, values have been converted from European Union euros (€) to U.S. dollars at the rate of 0.73€=US$1.00.

The Mineral Industry of the Serbian Province of Kosovo

The Serbian Province of Kosovo became a UN protectorate in 1999 under the provisions of UN Security Council Resolution 1244 following the Kosovo crisis that year. In 2005, the UN Interim Administration Mission in Kosovo (UNMIK) put into force UNMIK Regulations 2005/2 and 2005/3 to form the legal basis for mining activities in Kosovo. Regulation 2005/2 created the Independent Commission for Mines and Minerals (ICMM), which is responsible for the regulation of mining in Kosovo, including the issuance of exploration and mining licenses and the collection of royalties. Regulation 2005/3 provides Kosovo's mining law and defines the types of licenses that can be issued for exploration and mining projects in Kosovo. The Province of Kosovo's mineral deposits include such metals as bauxite, chromite, lead-zinc ores, and nickel; industrial minerals, including aggregates, dimension stone, and magnesite; and the mineral fuel lignite (Independent Commission for Mines and Minerals, 2009a, b).

Outlook

Serbia's economic recovery and mineral production output are dependent not only on economic factors, but also on political and social developments. The mineral production industries are expected to continue to recover slowly and to stabilize as general economic recovery continues. In 2008, the status of Kosovo and Serbia's dependence on Russian mineral fuels will be major issues that could affect the mineral industry.

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TABLE 1
SERBIA: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity[2]		2003	2004	2005	2006	2007
METALS						
Aluminum ingot, secondary		300 e	517 r	328	1,219	1,544
Copper:						
Mine and concentrator output:						
Ore:						
Gross weight	thousand metric tons	5,714	5,495	6,005	5,775	6,867
Cu content[e]		28,000	25,000	27,000	28,000	32,000 e
Concentrate, Cu content		21,300 r	12,200 r	12,900 r	12,000 r	16,500
Metal:						
Blister and anodes:						
Primary		15,100 r	13,900 r	30,000 r	40,000 r	30,200
Remelted		3,000 r	1,100	1,000 r	1,000 r	1,000
Total		18,100 r	15,000 r	31,000 r	41,000 r	31,200
Refined:						
Primary		11,000 r	10,900 r	30,100 r	40,000 r	30,600
Remelted		3,000 r	1,100 r	1,000 r	1,000 r	1,000
Total		14,000 r	12,000 r	31,100 r	41,000 r	31,600
Gold, refined	kilograms	295 r	176 r	335 r	450 r, e	500
Iron and steel, metal:						
Pig iron		635,481	959,019	1,115,195	1,529,177	1,377,478
Crude steel		569,199	1,167,000	1,286,000	1,837,000	1,478,000
Semimanufactures		947,191	1,543,453	1,890,330	2,379,918	2,431,380
Lead:						
Ore:						
Gross weight (Pb-Zn ore)		183,000	180,000	162,000	172,000	198,000
Pb content		2,000	1,000 r	1,000 r	1,000 r	1,000
Metal, primary and secondary, refined[e]		500	800	700	700	700
Magnesium, metal[e]		1,500	1,500	1,500	1,500	1,500
Platinum-group metals:						
Palladium	kilograms	30 r	19 r	19 r	15 r, e	15 e
Platinum	do.	-- r	-- r	3 r	2 r, e	2 e
Selenium	do.	7,201	5,170 r	8,315 r	7,500 r, e	7,500 e
Silver, mine output, Ag content	do.	2,028	1,036 r	2,648 r	2,200 r, e	4,150

See footnotes at end of table.

TABLE 1—Continued
SERBIA: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity[2]		2003	2004	2005	2006	2007
INDUSTRIAL MINERALS—Continued						
Zinc:						
Concentrator output, gross weight[e]		6,500	3,800	2,600	6,200	3,000
Zn content of concentrate		2,200 [e]	1,000 [r]	1,000 [r]	2,000 [r]	1,000
Refined		62	4,000	18,000 [r]	15,000 [r]	--
INDUSTRIAL MINERALS						
Asbestos, ore		2,860	7,300 [e]	4,080	4,500	--
Cement	thousand metric tons	2,075	2,240	2,276	2,565	2,677
Clays:[e]						
Ceramic clay		25,000	25,000	25,000	30,000	30,000
Fire clay:						
Crude		30,000	30,000	30,000	40,000	40,000
Calcined		10,000	10,000	10,000	10,000	10,000
Kaolin, crude		99,460 [3]	95,000	95,000	110,000	110,000
Feldspar, crude[e]		3,045 [3]	3,500	3,500	3,500	3,500
Gypsum, crude[e]		42,261 [3]	45,000	45,000	45,000	45,000
Lime	thousand metric tons	402	400 [e]	400 [e]	377 [r]	320
Magnesite:[e]						
Crude	do.	24 [3]	20	20	20	20
Caustic calcined		2,000	1,500	1,500	1,500	1,500
Mica, all grades[e]		185	200	200	200	200
Nitrogren, N content of ammonia		60,000	138,000	111,000	80,000	85,000
Pumice and related volcanic materials, volcanic tuff[e]		100,000	100,000	100,000	100,000	100,000
Salt, all sources		78,271	50,000 [r]	29,847 [r]	29,847 [r]	30,023
Sand and gravel, excluding glass sand	thousand cubic meters	1,507	1,500	7,556	8,633	8,732
Silica:[e]						
Quartz sand		260,880 [3]	260,000	260,000	260,000	260,000
Glass		65,000	80,000	80,000	80,000	80,000
Sodium compounds:[e]						
Caustic soda		7,450 [3]	6,000	7,000	7,000	7,000
Sodium sulfate		800	800	800	800	800
Stone, excluding quartz and quartzite, dimension, crude:[e]						
Ornamental	square meters	69,000	70,000	70,000	70,000	70,000
Crushed and broken, n.e.s.	thousand cubic meters	2,000	2,000	2,000	2,000	2,000
Other, stone blocks	cubic meters	500	500	500	500	500
Sulfur, byproduct:[e]						
Metallurgy	thousand metric tons	40	50	50	50	50
Petroleum	do.	1	1	1	1	1
Total	do.	41	51	51	51	51
MINERAL FUELS AND RELATED MATERIALS						
Coal:						
Bituminous	do.	54	50	65	65	66
Brown	do.	397	352	363	316	204
Lignite	do.	34,543	35,192	34,565	36,404	36,803
Total	do.	34,994	35,594	34,993	36,785	37,073
Natural gas, gross production	million cubic meters	364	317	320	282 [r]	274
Petroleum:						
Crude, as reported	thousand metric tons	671	652	648	654	639
Refinery products	do.	2,433 [r]	2,639 [r]	2,582 [r]	2,508 [r]	2,502

[e]Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. [r]Revised. do. Ditto. -- Zero.
[1]Table includes data available through March 2009.
[2]In addition to commodities listed, common clay and diatomite also are produced, and tellurium may be recovered as a copper refinery byproduct, but available information is inadequate to make reliable estimates of output.
[3]Reported figure.

TABLE 2
SERBIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2007

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies	Location of main facilities	Annual capacity
Antimony, ores and concentrates		Zajaca, Rudarsko Tapionicarski Bazen	Mines and mills near Zajaca, Serbia	80.
Do.		do.	Mines and mill at Rajiceva Gora, Serbia	300.
Antimony, metal		do.	Smelter at Zajaca, Serbia	4.
Cement		Becinska Fabrika Cementa	Plant at Beocin, Serbia	2,031.
Do.		Fabrika Cementa Novi Popovac	Plant at Popovac, Serbia	1,613.
Coal:				
Bituminous		Ibarski Rudnici Kamenog Uglja	Mines at Jarando and Usce, near Baljevac na Ibru, Serbia	250.
Lignite		SOUR Kolubara, Rudarsko Energetsko Industrijski Kombinat, RO	Opencast mines: Polje B and Polje D	10,000.
Do.		Kolubara Povrsinski Kopovi	Tamnavski Kopovi (also known as Kolubarski Rudnici Lignita), near Vreoci, Serbia	14,000.
Do.		SOUR Elektroprivreda Kosova, RO Kosovo, Proizvodnja Separacija i Transport Uglja	Opencast mines: Dobro Selo and Belacevac, near Obilic, Serbia	2,000.
Copper		Rudarsko Topionicki Bazen Bor (RTB Bor)	Smelter at Bor, Serbia	180.
Do.		do.	Electrolytic refinery at Bor, Serbia	180.
Do.		do.	Mine and mill at Bor, Serbia	5,000 ore.
Do.		do.	Mine and mill at Majdanpek, Serbia	15,000 ore.
Do.		do.	Mine and mill at Veliki Krivelj, Serbia	8,000 ore.
Lead, metal		Rudarsko-Metalursko-Hemijski Kombinat Olova i Cinka Trepca (Trepca)	Smelter at Zvecan, Serbia	180.
Do.		do.	Refinery at Zvecan, Serbia	90.
Lead-zinc ore		do.	Mines at Ajvalija, Kopanaonik, Badovac; Trepca, Blagodat, Lece; Veliki Majdan, Tisovak; and Kisnica, Rudnik, Suplja Stijena	5,000.
Do.		do.	Mills at Kriva Feja, Lece, Rudnik, Badovac, Leposavic, Zvecan, and Maravce, Suplja Stijena	3,160.
Do.		Veliki Majdan Rudnik Olova i Cinka	Mine at mill near Krupanj, Serbia	250.
Magnesite, concentrate		Rudnici Magnezita "Sumadija"	Mine and plant at Sumadija, 20 kilometers northwest of Cacak, Serbia	120.
Do.		Rudnik i Industrija Magnezita "Strezovce"	Opencast mine at Beli Kamen, Strezovce, near Itiova Metrovica, Serbia	300.
Do.		do.	Sinter plant at Strezovce	40.
Do.		Magnohrom, Rudnik Magnezita "Magnezit"	Mine at Bela Stena, Baljevac na Ibru, Serbia	30.
Natural gas	million cubic feet	Naftaplin (Naftagas), RO za Istrazivanje, i Prozvodnju Nafte i Gasa	Natural gasfields in Serbia: Kinkinda and others	30,000.
Petroleum:				
Crude	thousand 42-gallon barrels per day	Naftagas, Naftna Industrija Srbije (NIS)	Oilfields in Serbia: Kikinda and others	30.
Refined	do.	Naftagas, Naftna Industrija Srbije (NIS): Rafinerija Nafte Pancevo	Refinery at Pancevo, Serbia	110.
Do.	do.	Rafinerija Nafte Novi Sad	Refinery at Novi Sad, Serbia	28.
Pig iron		U.S. Steel Serbia, d.o.o.	Blast furnace at Smederevo, Serbia	720.
Steel, crude		do.	Plant at Smederevo, Serbia	2,200.
Zinc, metal		Rudarsko-Metalursko-Hemijski Kombinat Olova i Cinka Trepca, Metalurgija Cinka	Electrolytic plant at Titova Metrovica, Serbia	40.
Do.		Hemijska Industrija Zorka	Electrolytic plant at Sabac, Serbia	40.

Do., do. Ditto