



# 2009 Minerals Yearbook

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**SLOVAKIA [ADVANCE RELEASE]**

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# THE MINERAL INDUSTRY OF SLOVAKIA

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Slovakia produced a modest range of mineral products but was not a significant world or regional producer of any minerals. In 2009, Slovakia's real gross domestic product (GDP) decreased by 4.7% compared with that of 2008. In 2008 (the latest year for which data were available), mining and quarrying made up about 0.6% of the nominal GDP. The value of imports of crude petroleum and natural gas made up about 9% of the total value of all imports in 2009. The value of exports of refined petroleum made up about 4% of the total value of all exports, and the value of exports of iron, steel, and ferroalloys made up about 5% (Balaz and Kusik, 2010, p. 15; Statistical Office of the Slovak Republic, 2010a, b).

## Production

In 2009, production of mineral commodities generally decreased, mainly owing to lower market demand for mineral commodities as a result of the world financial crisis. Compared with 2008, production of ferrosilicon decreased by 20%; steel, by 16%; pig iron, by 14%; and primary aluminum, by 8%. Secondary copper smelter production increased by 26%. In table 1, production data for most industrial minerals were estimated, but reported production of cement and dolomite each decreased by 27%, and that of lime, by 20%. Coke production decreased by 9% (table 1).

## Structure of the Mineral Industry

Three notable changes were made to table 2. Ownership information for Kovohuty, a.s., which was the only copper producer in Slovakia, was changed to show better that Kovohuty was directly owned by Montanwerke Brixlegg AG of Austria, which was in turn owned by A-TEC Industries AG of Austria. A-TEC Industries was listed as the owner in the 2008 Minerals Yearbook. No actual change in ownership took place in 2009. Cementaren Lietavska Lucka was removed from the list of cement producers in table 2 because new information was found indicating that the company stopped cement production in the mid-1990s and focused on the production of crushed limestone. The name of the coal mining company listed as Bana Zhorie, a.s. in table 2 of the 2008 Minerals Yearbook has been changed to Bana Cary, a.s. It was not entirely clear when the name change took place but it seems to have been sometime in 2007 or 2008.

## Commodity Review

### Metals

**Copper.**—In late 2008, Kovohuty, which was Slovakia's only copper producer, began operating a new 60,000-metric-ton-per-year (t/yr) copper smelter that would process secondary scrap materials. Anode production capacity in table 2 was increased to 90,000 t/yr (from 30,000 t/yr in 2008) to show this change

(Robert Stibich, Member of the Board of Directors, Kovohuty, a.s., written commun., October 7, 2010).

**Gold.**—In February 2009, Tournigan Energy Ltd. reached an agreement with Ortac Resources Plc. of the United Kingdom for the sale of its Kremnica gold exploration property. In January 2010, a new purchase agreement was signed that gave Ortac Resources the right to purchase the remaining 80% of shares in the Kremnica project (Tournigan Energy Ltd., 2010, p. 7).

**Iron and Steel.**—Crude steel production declined significantly owing to lower market demand for steel products as a result of the world financial crisis. Production was also temporarily reduced in January owing to a reduction of gas supplies when gas transit through Ukraine was halted as Russian and Ukrainian gas companies failed to settle disagreements over debts owed for gas use and transit. U.S. Steel Kosice, s.r.o. reduced production of continuously cast steel slabs by 15% to about 3.5 million metric tons (Mt), and billet production at Zeleziarne Podbrezova a.s. decreased by 47.9% to 191,166 metric tons (t) in 2009 compared with production in 2008. Zeleziarne Podbrezova reduced its workforce by 726 employees in 2009 and finished the year with an average of 3,023 employees (U.S. Steel Kosice, s.r.o., 2009, p. 20; 2010, p. 18; Zeleziarne Podbrezova a.s., 2010, p. 14, 20).

### Mineral Fuels

**Coal.**—The coal industry in Slovakia is undergoing restructuring, which is likely to result in a decrease in production during the next decade. According to estimates by the Ministry of the Economy of the Slovak Republic, production in 2015 would be about 2 million metric tons per year (Mt/yr); in 2025, 1.5 Mt/yr; and in 2030, 1 Mt/yr. Hornonitranske Bane Prievidza, a.s. (HBP) was expected to close the mine at Cigel by 2015; the mine at Handlova was expected to produce about 300,000 t/yr until 2020 and was expected to close after that year. HBP's mine at Novaky was expected to produce 1.2 Mt in 2015 and 2020, 1 Mt in 2025, and 0.5 Mt/yr in 2030; the mine was expected to close after that year. Bana Cary, a.s. was expected to produce about 500,000 t/yr until about 2030 but was expected to continue to operate until 2050. The Bana Dolina, a.s. lignite mine had been expected to close in 2009, but it was reported that it would continue small amounts of production through 2011 or 2012 (Ministry of the Economy of the Slovak Republic, 2008, p. 33, 35; Rademaekers, Koen, and others, 2008, p. 83).

### Outlook

Slovakia will likely continue to produce modest amounts of mineral commodities, but no major increases in production are expected and decreased coal production is expected during the next several decades. The country is likely to continue to import the majority of its metallic ores and concentrates and mineral fuels.

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TABLE 1  
SLOVAKIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>	2005	2006	2007	2008	2009 <sup>e</sup>	
<b>METALS</b>						
Aluminum ingot, primary	159,203 <sup>r</sup>	158,289	160,461	162,995	149,604 <sup>3</sup>	
Copper, smelter, secondary	thousand metric tons	16	22	20	27	34 <sup>3</sup>
Gold, content of concentrate	kilograms	109	84	92	90 <sup>r, e</sup>	90
<b>Iron and steel:</b>						
<b>Iron ore:</b>						
Gross weight	do.	534	583	570	392	390
Metal content <sup>c</sup>	do.	180 <sup>r</sup>	200 <sup>r</sup>	190 <sup>r</sup>	130 <sup>r</sup>	130
Concentrate, gross weight	do.	259	311	349	182	180
<b>Metal:</b>						
Pig iron	do.	3,681	4,145	4,012	3,529	3,019 <sup>3</sup>
<b>Ferroalloys:</b>						
Ferrochromium		894	19	--	--	--
Ferromanganese		43,458	59,391	74,065	61,194 <sup>r</sup>	55,000
Ferrosilicomanganese		47,843	59,128	71,587	59,940 <sup>r</sup>	55,000
Ferrosilicon		16,512	16,155	8,583	10,844 <sup>r</sup>	8,622 <sup>3</sup>
Steel, crude	thousand metric tons	4,485 <sup>r</sup>	5,094	5,089 <sup>r</sup>	4,478 <sup>r</sup>	3,747 <sup>3</sup>
Semimanufactures	do.	4,470	4,800 <sup>e</sup>	5,069	4,477	3,740
<b>INDUSTRIAL MINERALS</b>						
Asbestos		1,000	1,000	400	200	200
<b>Barite:</b>						
Mine output		26,000	57,000	58,000	20,000	20,000
Concentrate		13,000	16,000	11,000	12,950	13,000
Basalt		100,000	79,000	69,000	63,000	60,000
Cement, hydraulic	thousand metric tons	3,499 <sup>r</sup>	3,593 <sup>r</sup>	3,718 <sup>r</sup>	4,157	3,021 <sup>3</sup>
<b>Clays:</b>						
Bentonite		97,000	136,000	149,000	145,000	145,000
Ceramic		39,000	58,000	47,000	47,000	47,000
Kaolin		31,000	58,000	46,000	44,000	44,000
Refractory		2,000	--	--	12,000	12,000
Feldspar		3,000	3,000	--	10,000	10,000
Gypsum and anhydrite, crude		107,000	126,000	151,000	152,000	150,000
Lime, hydrated and quicklime	thousand metric tons	946	1,104	1,123	1,082	867 <sup>3</sup>
Magnesite, concentrate	do.	920	941	957	807	800
Nitrogen, N content of ammonia <sup>c</sup>		236,040 <sup>3</sup>	241,383 <sup>3</sup>	260,000	260,000	260,000
Perlite		13,000	16,000	20,000	25,000	25,000
Salt		100,000	99,000	101,000	99,000 <sup>r</sup>	100,000
Sand and gravel <sup>c</sup>	thousand metric tons	6,900	8,000	8,200 <sup>r</sup>	9,300 <sup>r</sup>	8,500
Silica sand (foundry and glass sands)	do.	533	524	591	619	620
<b>Stone:</b>						
Dolomite	do.	1,021	990	1,057	1,249	908 <sup>3</sup>
Limestone and other calcareous stones for cement	do.	6,034	6,611	9,615	4,992	5,099 <sup>3</sup>
Quartzite		2,000	3,000	1,000	-- <sup>r</sup>	-- <sup>3</sup>
Crushed stone <sup>c</sup>	thousand metric tons	15,300	15,800	15,000	18,500 <sup>r</sup>	16,000
Zeolites		42,000	48,000	57,000	87,000	85,000
<b>MINERAL FUELS AND RELATED MATERIALS</b>						
Coal, brown and lignite	thousand metric tons	2,511	2,200	2,111	2,423	2,572 <sup>3</sup>
Coke, unspecified		1,846	1,857	1,856	1,737	1,573 <sup>3</sup>
Natural gas	million cubic meters	211	135	134	111	110
<b>Petroleum<sup>e, 4</sup></b>						
Crude	thousand 42-gallon barrels	240	200	160	140	140
Refinery products	do.	42,000	43,700	48,000	47,100	48,100

<sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits. <sup>r</sup>Revised. do. Ditto. -- Zero.

<sup>1</sup>Table includes data available through August 12, 2010.

<sup>2</sup>In addition to the commodities listed, a small amount of silver occurs in concentrate produced by gold ore processing on Banská Hôrka deposit.

<sup>3</sup>Reported figure.

<sup>4</sup>Figures were converted to barrels from production reported in thousand metric tons, which was reported as the following: Crude production: 2005—35; 2006—30; 2007—23; 2008—21; 2009—21 (estimated). Petroleum products: 2005—5,244; 2006—5,458; 2007—6,006; 2008—5,893; 2009—6,012.

TABLE 2  
SLOVAKIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2009

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners <sup>1</sup>	Location of main facilities	Annual capacity
Aluminum	Slovalco, a.s. (Norsk Hydro ASA, 55.3%, and ZSNP SCO, a.s., 44.7%)	Ziar nad Hronom, central Slovakia	165
Brown coal and lignite	Hornonitranske Bane Prievidza, a.s. (HBP)	Mines at Cigel, Handlova, and Novaky	2,200
Do.	Bana Dolina, a.s.	Mine east of V'lký Krtis, southern Slovakia	150
Do.	Bana Cary, a.s.	Mine at Cary, western Slovakia	500 <sup>e</sup>
Cement	Povazska Cementaren, a.s.	Ladce	NA
Do.	Cemmac a.s. (Asamer & Hufnagl Baustoff Holding Wien GmbH, 82.72%)	Horne Srnie	NA
Do.	VSH, a.s. Turna	Turna	1,300
Do.	Holcim (Slovensko), a.s.	Rohoznik	2,200
Coke	U.S. Steel Kosice, s.r.o.	Kosice, eastern Slovakia	NA
Copper, smelter, secondary	Kovohuty, a.s. [Montanwerke Brixlegg AG, 100% (A-TEC Industries AG)]	Krompachy, central Slovakia	90
Ferrous alloys	OFZ, a.s. (ArcelorMittal)	Istebne	170
Gold in concentrate	Slovenska Banska, s.r.o.	Hodrusa-Hamre	NA
Iron:			
Ore	SIDERIT, s.r.o. Nizna Slana	Nizna Slana, central Slovakia	600 <sup>e</sup>
Concentrate	do.	do.	400 <sup>e</sup>
Magnesite	SMZ, a.s. Jelsava	Jelsava, eastern Slovakia	370 <sup>e</sup>
Do.	Slovmag, a.s. Lubenik (Magnezit Group)	Lubenik, central Slovakia	NA
Do.	GE.NE.S., a.s.	Mutnik, near Hnusta in central Slovakia	NA
Natural gas	million cubic meters NAFTA, a.s.	Oilfields and natural gas fields in western and eastern Slovakia	NA
Do.	do. ENGAS, s.r.o.	Brno	NA
Petroleum:			
Crude	NAFTA, a.s.	Oilfields and natural gas fields in western and eastern Slovakia	NA
Refinery	SLOVNAFT, a.s. (MOL Plc., 98.5%)	Bratislava	6,000
Do.	Petrochema, a.s.	Dubova	150
Pig iron	U.S. Steel Kosice, s.r.o.	Kosice, eastern Slovakia	4,500
Salt	Solivary, a.s. Presov	Presov, eastern Slovakia	NA
Steel, crude	U.S. Steel Kosice, s.r.o.	Kosice, eastern Slovakia	4,900
Do.	Zeleziarne Podbrezova, a.s.	Podbrezova	600 <sup>e</sup>
Zeolites	Zeocem, a.s.	Quarry near Nižný Hrabovec and processing plant near Bystre	NA
Do.	PRO-ZEO, s.r.o.	Humenne	NA

Do., do. Ditto. NA Not available.

<sup>1</sup>Abbreviations used in company names include the following: a.s., joint stock company; s r.o., limited company