

# 2016 Minerals Yearbook

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## SLOVAKIA

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# THE MINERAL INDUSTRY OF SLOVAKIA

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In 2016, Slovakia was estimated to rank 8th in the world in production of magnesite. The only metals mined in Slovakia were gold and silver. The metallurgical sector produced aluminum, crude steel, ferroalloys, pig iron, and secondary copper. The country produced several industrial minerals, such as cement, clays and shale, and stone, as well as limited amounts of mineral fuels that included coal, natural gas and crude petroleum as well as refined petroleum products. Slovakia depended on imports to meet its demand for bituminous coal, metal ores for the metallurgical sector, and most of its hydrocarbons (table 1; Balaz, 2015, p. 38; Balaz and Kusik, 2015, p. 20; Bray, 2018).

## Minerals in the National Economy

In 2016, Slovakia's real gross domestic product (GDP) grew at a rate of nearly 3.3% compared with 3.8% in 2015. The country's nominal GDP was \$86.13 billion<sup>1</sup> in 2016. The gross value added of the mineral sector, including mining support activities, was \$338.96 million at current prices, or 0.39% of the country's GDP in 2016 (International Monetary Fund, 2017; Statistical Office of the Slovak Republic, 2017a).

In 2016, Slovakia exported goods valued at \$74.5 billion, which was an increase of 3.5% compared with the value of exported goods in 2015. In 2016, mineral products accounted for 4% of the country's total exports. Slovakia imported goods valued at \$70.6 billion in 2016, which was an increase of 3.1% compared with the value of imported goods in 2015. Mineral products accounted for 7% of the country's total imports in 2016 (Statistical Office of the Slovak Republic, 2017b).

## Production

In 2016, the production of secondary copper increased by 277%; ferromanganese, by 40%; silicomanganese, by 32%; barite (mine production), by 25%; and kaolin, by nearly 14%. The production of talc decreased by 30%; nitrogen (N content of ammonia), by 25%; perlite, by 24%; bentonite and gypsum, by 21% each; gold (Au content of concentrate), by 20%; ferrosilicon, by 17%; silver (Ag content of mine production), by about 15%; magnesite, by 14%; and crude petroleum, by about 10%. Data on mineral production are in table 1.

## Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities in Slovakia.

## Commodity Review

### Metals

**Gold.**—Ortac Resources Ltd. of the British Virgin Islands owned 100% of the Sturec gold project in central Slovakia. A maiden reserve estimate, based on a prefeasibility study conducted in 2013, reported proven and probable reserves of 14 million metric tons grading 1.70 grams per metric ton (g/t) gold and 14.22 g/t silver; contained metal was 27,000 kilograms of gold equivalent. Gold production was anticipated to average more than 2,000 kilograms per year of gold equivalent during a mine life of 11 years (Arc Minerals, 2017; Ortac Resources Ltd., 2017, p. 6).

### Industrial Minerals

**Magnesite.**—In 2014 (the latest year for which data were available), SMZ, a.s. Jelsava owned an 88% share of the country's mine production of magnesite. In 2016, SMZ's total sales of burnt products decreased by 20% compared with that of 2015, to 195,000 metric tons. The company exported 95% of its products, by volume, mostly to Ukraine (52%), Germany (14%), Czechia (6%), and Austria (5%) (SMZ, a.s. Jelsava, 2016).

## Outlook

Slovakia's real GDP growth rate was anticipated to remain steady in 2017 at 3.3% and to increase to 3.7% in 2018. The country will most likely continue to be a significant world producer of magnesite but will remain reliant on imports of bituminous coal, hydrocarbons, and metal ores to meet its domestic demand (International Monetary Fund, 2017).

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<sup>1</sup>Where necessary, values have been converted from euro area euros (EUR) to U.S. dollars (US\$) at an annual average exchange rate of EUR0.94=US\$1.00 for 2016.

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

(Metric tons, gross weight, unless otherwise specified)

Commodity	2012	2013	2014	2015	2016
<b>METALS</b>					
Aluminum metal, products, primary	180,671	192,090	203,323	208,559	214,532
Copper, smelter production, secondary, Cu content	41,713	18,458	23,328	11,400 <sup>r</sup>	43,000
Gold, mine production, Au content, concentrate kilograms	546	533	582	611 <sup>r</sup>	490 <sup>e</sup>
Iron and steel:					
Pig iron thousand metric tons	3,520 <sup>r</sup>	3,617	3,838	3,738	3,987
Crude steel do.	4,403	4,511	4,705	4,562	4,808
Products, semimanufactured do.	4,391	4,499	4,694	4,551	4,800
Magnesite, concentrate	618,400	583,800	557,100	501,200 <sup>r</sup>	430,900
Manganese:					
Ferromanganese	12,862	2,119	20,554	25,376 <sup>r</sup>	35,589
Silicomanganese	50,089	26,794	29,643	27,036	35,719
Silicon, ferrosilicon	36,869	41,664	47,019	45,961	38,030
Silver, mine production, Ag content kilograms	441	508	437	532 <sup>r</sup>	450 <sup>e</sup>
<b>INDUSTRIAL MINERALS</b>					
Barite, mine production	21,000	24,000	21,000	20,000 <sup>r</sup>	25,000
Cement, hydraulic thousand metric tons	2,915	3,121	3,319	3,466	3,518
Clay and shale:					
Bentonite	129,930	129,877	134,131	163,877	128,681
Kaolin	3,000 <sup>e</sup>	6,000 <sup>e</sup>	6,000 <sup>e</sup>	10,502	11,923
Feldspar, mine production	--	5,000 <sup>e</sup>	6,000 <sup>e</sup>	4,000 <sup>r,e</sup>	4,000 <sup>e</sup>
Gypsum, including anhydrite, crude	88,000	60,000	65,000	67,000 <sup>r</sup>	53,000
Lime, hydrated and quicklime thousand metric tons	903	813	827	778	801
Nitrogen, N content, ammonia do.	300 <sup>r</sup>	400 <sup>r</sup>	300 <sup>r</sup>	400 <sup>r</sup>	300
Perlite	24,000	16,000	17,000	25,000 <sup>r</sup>	19,000
Stone, sand, and gravel:					
Sand and gravel, construction, unspecified thousand metric tons	4,238	4,350	4,331	5,031	5,319
Silica, mine production, unspecified do.	479	476	502 <sup>r</sup>	500 <sup>r,e</sup>	500 <sup>e</sup>
Stone, crushed:					
Aggregate do.	8,065	8,527	10,189	13,701	12,571
Basalt	96,000	101,000	98,000 <sup>r</sup>	100,000 <sup>e</sup>	100,000 <sup>e</sup>
Limestone, including other calcareous stone for cement thousand metric tons	5,228	5,425	4,333	4,913	5,221
Stone, dimension, dolomite do.	1,049	922	857	819	827
Talc	2,000	10,000	3,000	1,000 <sup>r</sup>	700
Zeolites	105,000	115,000	117,000 <sup>r</sup>	117,000 <sup>r,e</sup>	117,000 <sup>e</sup>
<b>MINERAL FUELS AND RELATED MATERIALS</b>					
Coal, lignite thousand metric tons	2,292	2,355 <sup>r</sup>	2,174 <sup>r</sup>	1,949 <sup>r</sup>	1,847
Coke, metallurgical do.	1,561 <sup>r</sup>	1,538 <sup>r</sup>	1,560 <sup>r</sup>	1,637 <sup>r</sup>	1,635
Natural gas million cubic meters	106	91 <sup>r</sup>	87	92 <sup>r</sup>	87
Petroleum:					
Crude thousand 42-gallon barrels	95	88	54 <sup>r</sup>	68 <sup>r</sup>	61
Refinery production do.	40,465 <sup>r</sup>	36,519 <sup>r</sup>	36,519 <sup>r</sup>	41,439 <sup>r</sup>	40,091

<sup>e</sup>Estimated. <sup>r</sup>Revised. do. Ditto. -- Zero.

<sup>1</sup>Table includes data available through December 15, 2017. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

TABLE 2  
SLOVAKIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2016

(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. (Hydro Aluminium AS, 55.3%, and Zavody Slovenskeho narodneho povstania, a.s., 44.7%)	Ziar nad Hronom, central Slovakia	174
Barite	Zelba a.s.	Spizzka Nova Ves	NA
Bentonite	Regos s.r.o.	Bratislava	NA
Brown coal and lignite	Hornonitrianske Bane Prievidza, a.s. (HBP)	Mines at Cigel, Handlova, and Novaky	2,200
Do.	do.	Mine at Cary, western Slovakia	500 <sup>e</sup>
Do.	Bana Dolina, a.s.	Mine east of Vel'ky Krtis	150 <sup>2</sup>
Cement	Povazska Cementaren, a.s. (Berger Slovakia a.s.)	Ladce, Ilava district, Trencin region	1,050
Do.	Cemmac a.s. (Asamer & Hufnagl Baustoff Holding Wien GmbH, 82.72%)	Horne Srnie, Trencin region	600
Do.	Vychodoslovenske stavebne hmoty a.s. (CRH plc)	Turna	1,300
Do.	CRH (Slovensko) a.s. (CRH plc, 99.7%)	Rohoznik, Bratislava region	2,200
Coke	U.S. Steel Kosice, s.r.o.	Kosice, eastern Slovakia	NA
Copper, smelter, secondary, Cu content	Kovohuty, a.s. (Umcors Holding GmbH)	Krompachy, central Slovakia	90
Ferroalloys <sup>3</sup>	Oravske Feroziliatnarske Zavody (OFZ), a.s. (ArcelorMittal S.A.)	Istebne, Silina region	170
Gold, in concentrate	Slovenska Banska, spol. s.r.o.	Hodrusa-Hamre, Banska Bystrica region	NA
Magnesite	SMZ, a.s. Jelsava	Jelsava, eastern Slovakia	370 <sup>e</sup>
Do.	SLOVMAG, a.s. Lubenik	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
Do.	do.	ENGAS, s.r.o.	Brno
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, Bratislava region	150
Pig iron	U.S. Steel Kosice, s.r.o.	Kosice, eastern Slovakia	4,500
Silver	Slovenska Banska, spol. s.r.o.	Hodrusa-Hamre, Banska Bystrica region	NA
Steel, crude	U.S. Steel Kosice, s.r.o.	Kosice, eastern Slovakia	4,900
Do.	Zelezarne Podbrezova, a.s.	Podbrezova, Banska Bystrica region	600 <sup>e</sup>
Zeolites	Zeocem, a.s.	Quarry near Nizny Hrabovec and processing plant near Bystre	NA
Do.	VSK Pro-Zeo Ltd.	Humenne, Presov region	NA

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

<sup>1</sup>Abbreviations used for types of companies include the following: a.s., joint stock company; s.r.o., limited company.

<sup>2</sup>Mine closed May 2015 through 2016.

<sup>3</sup>Includes calcium-silicon, ferromanganese, ferrosilicon, and silicomanganese.