



2014 Minerals Yearbook

SLOVAKIA

THE MINERAL INDUSTRY OF SLOVAKIA

By Lin Shi

In 2014, Slovakia's gross domestic product (GDP) was about \$100 billion. The real GDP rate of growth was 2.5% compared with 1.4% in 2013. Slovakia was the world's fifth-ranked producer of magnesite in 2014 (Statistical Office of the Slovak Republic, 2015; World Bank, The, 2015; Bray, 2016).

Minerals in the National Economy

Slovakia's mining and quarrying sector was not a significant contributor to the country's economy. In 2014, the country's mining industry had modest mineral production. The metals produced included aluminum, copper, pig iron, and steel; industrial mineral products included cement and magnesite; and energy and mineral fuel products included coke and refined petroleum products (tables 1, 2; Statistical Office of the Slovak Republic, 2015, p. 435).

Government Policies and Programs

In June 2014, Slovakia's Parliament approved an amendment to the Geological Act to tighten regulation of the country's uranium mining. In November, the Government approved a long-term energy plan based on greater use of domestic nuclear power to reduce the use of coal for generating electricity. The Ministry of the Economy is responsible for mineral resource development and the issuance of mining permits (World Information Service on Energy, 2015; World Nuclear Association, 2015).

Production

In 2014, Slovakia's ferrosilicon production increased by 20% to 44,030 metric tons (t) from 36,763 t in 2013, ferrosilicomanganese production increased by 11% to 29,643 t from 26,794 t in 2013, and gold production increased by 9% to 582 kilograms (kg) from 533 kg in 2013. Silver production decreased by 14% to 437 kg from 508 kg in 2013 (table 1).

Structure of the Mineral Industry

Table 2 is a list of major mining and mineral facilities.

Mineral Trade

In 2014, Slovakia's total exports were valued at about \$76 billion. The country's exported mineral commodities included aluminum, iron and steel and mineral oils and fuels. Slovakia's major export destinations were Germany, which received about 23% of Slovakia's total exports, by value; the Czech Republic, about 14%; Poland, about 9%; Hungary and Austria, about 7% each; and the United Kingdom and France, about 5% each. Slovakia's total imports were valued at about \$72 billion in 2014. The imported mineral commodities included copper and mineral oils and fuels. The country's major import partners were Germany, which provided about 19% of

Slovakia's total imports, by value; the Czech Republic, about 17%; Austria, about 9%; Russia, about 8%; and Hungary and Poland, about 6% each. Slovakia exported about \$2,100 million worth of goods to the United States, of which aluminum was valued at about \$320,000 and refined iron and steel products were valued at about \$42 million. Slovakia imported about \$455 million worth of goods from the United States, of which coal was valued at about \$55,000; copper, about \$17 million; and petroleum products, about \$111,000 (U.S. Census Bureau, 2016a, b; U.S. Central Intelligence Agency, 2016).

Commodity Review

Metals

Aluminum.—Slovalco, a.s. was a fully consolidated aluminum smelter in Ziar nad Hronom, and had the capacity to produce approximately 200,000 metric tons per year of aluminum. Slovalco was 55.3% owned by Hydro Aluminum AS (a subsidiary of Norsk Hydro ASA of Norway) and 44.7% owned by ZSNP, a.s. of Slovakia. In 2014, Slovalco produced a total of 185,330 t of finished aluminum products, which included 117,205 t of aluminum ingots and 70,125 t of aluminum alloys. The company sold 185,537 t of finished aluminum products, which included 117,482 t of aluminum ingots and 68,055 t of aluminum alloys. Slovalco's aluminum exports in 2014 accounted for about 73% of the total volume of the company's annual sales. As of December, Slovalco employed 487 people. The company planned to focus on its two major products—aluminum ingots and aluminum alloys, and it expected to produce and sell about 114,000 t of aluminum ingots and about 69,000 t of aluminum alloys in 2015 (Slovalco a.s., 2015, p. 15).

Antimony, Copper, and Silver.—Global Minerals Ltd. of Canada was developing its fully owned Strieborna antimony-copper-silver project in Rožnava, Slovakia. In May 2014, the Strieborna project acquired a mine operating permit, which would allow Global Minerals to move quickly to production once feasibility work was completed and it secured the mine construction financing. Global Minerals's 2014 activity included dewatering of the mine followed by shaft and subsurface rehabilitation down to 300 meters; underground exploration to enhance and expand the resource; and metallurgical testing, mine engineering, and economic evaluations in advance of preliminary economic assessments, which are new requirements from the Canadian securities administrators for mining projects. Global Minerals planned to release the results of its feasibility study in 2015. Global Minerals's Strieborna deposit is a high-grade vein-type deposit in eastern Slovakia that occurs within a mineralized structure. The mineralization is characterized by antimony-, copper-, and silver-bearing minerals (mainly tetrahedrite) (Global Minerals Ltd., 2014a, b).

Gold.—In 2014, EMED Mining held discussions with interested parties on the possible sale of its interests or the formation of a joint venture in Slovakia. In September 2014, Slovakia's Parliament banned the use of cyanide in gold processing (the mining permit process had been suspended in December 2013). EMED Mining's fully owned subsidiary Slovenske Kovy s.r.o. held two exploration licenses in Slovakia. In December 2014, EMED Mining and Prospech Ltd. of Australia reached a conditional agreement to conduct exploration under the two licenses. Prospech Ltd. was a private exploration company (EMED Mining Public Ltd., 2015a, b).

In 2014, Ortac Resources Ltd. of the United Kingdom completed its Sturec project test (pilot sampling). The company intended to use cyanide-free processing at the Sturec project, and potentially other projects, based on the test results. The cyanide-free processing would enable the company to significantly reduce the toxic impact on the environment, which was already contaminated by manufactured fertilizers (ADVFN, 2015; Ortac Resources Ltd., 2015b).

Mineral Fuels and Related Materials

Coal, Natural Gas, and Petroleum.—Slovakia produced about 1.9 million metric tons of coal in 2014. The country was a member of the European Association for Coal and Lignite (Euracoal), which was focused on the security of the energy supply, price stability for energy, and protection of the environment. There was an insignificant coal deposit located in eastern Slovakia that was not exploitable; the country's reserves of mineral fuels were limited to lignite and brown coal. Slovakia imported most of its energy supply, which included crude oil, natural gas, and petroleum products, mainly from Russia (European Association for Coal and Lignite, 2015).

Uranium.—There were multiple exploration targets within the Kuriskova license area that had the potential to expand the country's uranium resources. European Uranium Resources, Ltd. (EUU) of Canada owned the Kuriskova deposit (which is located northeast of Kosice), the Novoveska Huta deposit, and several other deposits. In 2014, EUU continued with drill exploration and metallurgy test work at these deposits under separate licenses. The company appeared to be focused on the feasibility studies and environmental impact assessments for these projects, and also on engaging regional and local stakeholders. The company was seeking and evaluating possible mergers and acquisitions that could enable EUU to become Europe's premier uranium production company (European Uranium Resources, Ltd., 2015).

According to the new amendment to the Geological Act, any company interested in uranium mining in Slovakia would have to ask the six affected municipalities to hold a referendum. The uranium mine at Jahodna, near Kosice, was not affected by the new regulation, however, because an exploration permit had been issued in 2005 (World Information Service on Energy, 2015).

Outlook

No major increases in the production of mineral commodities, except for ferrosilicomanganese and ferrosilicon, are expected

to take place in Slovakia in 2015. Slovalco plans to increase the company's aluminum ingot and alloy production and exports. Ortac Resources plans to use cyanide-free processing of gold to ensure environmental protection. The country is likely to continue importing some metallic ores and concentrates to meet domestic demand and some mineral fuels for domestic consumption. Coal production is expected to remain at about the current level over the next few years, and EUU plans to seek new opportunities in uranium mining activities (Slovalco a.s., 2015, p. 15; European Association for Coal and Lignite, 2015; Ortac Resources Ltd., 2015a, p. 6; World Information Service on Energy, 2015).

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TABLE 1
SLOVAKIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2010	2011	2012	2013	2014
METALS					
Aluminum ingot, primary	190,029	187,138	180,671	163,000 ^r	168,000
Copper, smelter, secondary	46,531	48,806	41,713	18,500	18,500
Gold, Au content of concentrate	534	398	546	533 ^r	582
Iron and steel:					
Pig iron	3,649	3,346	3,519	3,617	3,838
Ferroalloys:					
Ferromanganese	35,449	18,180	12,862	12,000 ^e	12,000 ^e
Ferrosilicomanganese	34,960	25,023	50,089	26,794 ^r	29,643
Ferrosilicon	37,034	38,771	36,869	36,763 ^r	44,030
Steel:					
Crude	4,580	4,236	4,403	4,511	4,705
Semimanufactures	4,567	4,223	4,391	4,499	4,694
Silver	300	330	441	508 ^r	437
INDUSTRIAL MINERALS					
Asbestos	200	--	--	--	--
Barite: ^e					
Mine output	17,000 ³	18,000	21,000	24,000 ^{r,3}	21,000
Concentrate	13,000	14,000	15,000	17,000 ^r	15,000
Cement, hydraulic	2,888	3,219	2,915	3,121	3,319
Clays, bentonite	130,521	119,323	129,930	129,877	130,000
Feldspar ^e	10,000	--	--	5,000 ^{r,3}	6,000
Gypsum and anhydrite, crude ^e	87,000 ³	88,000	85,000	60,000 ^{r,3}	65,000
Lime, hydrated and quicklime	986	971	903	813	800 ^e
Magnesite, concentrate	1,112,000	751,700	618,400	583,800 ^r	557,100
Nitrogen, N content of ammonia	493,018	486,689	485,518	480,329	480,000 ^e
Perlite ^e	23,000	23,000	24,000	16,000 ^{r,3}	17,000
Sand and gravel	6,932	6,479	4,238	3,954 ^r	3,863
Silica sand (foundry and glass sands) ^e	620	600	600	600	600
Stone:					
Dolomite	895	952	1,049 ^r	922	900 ^e
Limestone and other calcareous stone for cement	4,952	5,630	5,228	5,425	5,000 ^e
Crushed ^e	11,904	9,855	8,065	8,527	10,189
MINERAL FUELS AND RELATED MATERIALS					
Coal, lignite and brown	2,378	2,376	2,292	2,009 ^r	1,885
Coke, unspecified	1,570	1,500	1,500	1,500	1,500 ^e
Natural gas	100	106	110 ^e	91 ^r	87
Petroleum: ^e					
Crude	130	125	105	95 ^{r,3}	95
Refinery products:					
Fuel oil, distillate	21,389	21,000	21,000	21,000	21,000
Fuel oil, residual	3,577	3,600	3,600	3,600	3,600
Gasoline, motor	2,811	3,614	3,395 ³	3,400	3,400
Jet fuel	465	365	365	365	365
Liquid petroleum gas	1,022	1,000	1,000	1,000	1,000
Other products	10,326 ³	10,000	10,000	10,000	10,000
Total	40,005 ³	39,590 ³	39,600 ^r	39,400	39,400

^eEstimated; estimated data are rounded to no more than three significant digits. ^rRevised. do. Ditto. -- Zero.

¹Table includes data available through December 3, 2014.

²In addition to commodities listed, basalt may have been produced, but available information was inadequate to make reliable estimates of output.

³Reported figure.

TABLE 2
SLOVAKIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2014

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners ¹	Location of main facilities	Annual capacity
Aluminum	Slovalco, a.s. (Hydro Aluminum AS, 55.3%, and ZSNP, a.s., 44.7%)	Ziar nad Hronom, central Slovakia	200
Cement	Povazska Cementaren, a.s.	Ladce	NA
Do.	Cemmac a.s. (Asamer & Hufnagl Baustoff Holding Wien GmbH, 82.72%)	Horne Srnie	NA
Do.	Vychodoslovenske staebe hmoty a.s.	Turna	1,300
Do.	Holcim (Slovensko), a.s.	Rohoznik	2,200
Coal, lignite and brown	Hornonitranske Bane Prievidza, a.s. (HBP)	Mines at Cigel, Handlova, and Novaky	2,200
Do.	Bana Dolina, a.s.	Mine east of V'lky Krtis, southern Slovakia	150
Do.	Bana Cary, a.s.	Mine at Cary, western Slovakia	500 ^c
Coke	U.S. Steel Kosice, s.r.o.	Kosice, eastern Slovakia	NA
Copper, smelter, secondary	Kovohuty, a.s. (Umcors Holding GmbH)	Krompachy, central Slovakia	90
Ferroalloys	Oravske Feroziliatinarske Zavody, a.s. (OFZ) (ArcelorMittal S.A.)	Istebne	170
Gold, in concentrate	Slovenska Banska, spol. s.r.o.	Hodrusa-Hamre	NA
Magnesite	SMZ, a.s. Jelsava	Jelsava, eastern Slovakia	370 ^c
Do.	Slovenske Magnezitove zavody a.s.	Lubenik, central Slovakia	NA
Do.	GE.NE.S., a.s.	Mutnik, near Hnusta in central Slovakia	NA
Natural gas	NAFTA, a.s.	Oilfields and natural gas fields in western and eastern Slovakia	NA
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 (Garantovana Group)	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 ^c
Uranium	European Uranium Resources Ltd. (EUU)	Kuriskova, Novoveska Huta, Jahodna, and several deposits near Kosice	NA
Zeolites	Zeocem, a.s.	Quarry near Nizny Hrabovec and processing plant near Bystre	NA
Do.	VSK Pro-Zeo Ltd.	Humenne	NA

^cEstimated. Do. Ditto. NA Not available.

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