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2016 Minerals Yearbook

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The Mineral Industry of Hungary

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The mineral industry of Hungary produced mainly industrial minerals and mineral fuels; in recent years, the output of metals remained substantially below past levels. In 2016, Hungary was estimated to be the sixth-ranked producer of perlite in the world and to have accounted for about 0.6% of global production. In the metal sector, only steel and minor amounts of manganese and bauxite ore were produced. Coal production was substantially lower than in the past, whereas crude petroleum production continued to increase (table 1; Bennett, 2018).

Minerals in the National Economy

In 2016, Hungary's real gross domestic product (GDP) increased by 2.2% and the nominal GDP was $125.8 billion.[1] Mining and quarrying contributed only 0.1% of the gross value added, whereas manufacturing accounted for 23.5%. The value of mining and quarrying output decreased by 17.8%. Base metals and fabricated metal products output increased by 4%, and that of nonmetallic mineral products, by 3%, whereas the output of coke and refined petroleum products decreased by 0.7%. Mining and quarrying exports decreased in value by 30.2% and accounted for 0.03% of the total exports of goods and services, which were valued at $102.9 billion in 2016. Exports of nonmetallic mineral products made up 4.9% of total exports, by value, and increased in amount (tonnage) by 3.8%; base metals and fabricated metal products accounted for 4% of the value of total exports and increased in tonnage by 2.2% ; and coke and refined petroleum products accounted for 1% of the value of total exports and decreased in tonnage by 0.8% (Hungarian Central Statistical Office, 2017a–f).

Production

The production of various minerals showed significant changes in Hungary in 2016. Among metals, the production of bauxite increased by 113%, albeit from a very low base. The production of manganese decreased by 67%; pig iron, by 31%; and raw steel, by 24%. Among industrial minerals, the production of quartzite increased by 85%; bentonite, by 42%; perlite, by 16%; cement, by 14%; and nitrogen, by 10%. The production of sandstone decreased by 93%; diatomite, by 32%; kaolin, by 24%; common sand, by 18%; and gravel, by 14%. Among mineral fuels and related materials, crude petroleum output increased by 14%. Fuel oil output decreased by 57%, and peat, by 28% (table 1).

Commodity Review

Metals

Bauxite and Alumina.—Magyar Aluminium Ltd. (MAL), which had been Hungary's sole producer of bauxite and alumina, produced only insignificant amounts of bauxite at its Bakony Mine in 2016. The Government was in the process of liquidating the company. MAL's alumina assets had been acquired by IC Profil in October 2014. It was not known when, or whether, IC Profil would restart alumina production at the Ajka Timfoldgyar plant (NOL, 2015; Than, 2017).

Iron and Steel.—ISD Dunaferr Zrt., which was one of the leading industrial producers in Hungary, began operating its renovated blast furnace in Dunaujvaros in July 2016. The new blast furnace was expected to allow the fulfillment of smaller size orders and to increase the quality of steel products. ISD Dunaferr aimed to increase its crude steel production capacity to about 2.0 million metric tons per year (Mt/yr) from 1.7 Mt/yr. The company had been operating at a financial loss for many years before achieving profitability since 2015 (Daily News Hungary, 2016; Budapest Business Journal, 2017).

Industrial Minerals

Cement.—Hungary had three active cement plants with a total production capacity of 3.5 Mt/yr. The 0.3-Mt/yr-capacity Labatlan cement plant had been idle since 2012 owing to a lack of demand. The integrated 1.7-Mt/yr-capacity Hejocsabai Cement es Meuszmu plant in Miskolc was closed in 2011 owing to a dispute concerning its ownership. Both of these plants were sold to CRH plc. of Ireland by LafargeHolcim Ltd. of Switzerland in 2015. In June 2016, CRH announced that it would resume cement production in Miskolc in the first quarter of 2017 after receiving the requisite Government permit (International Cement Review, 2017, p. 164).

Mineral Fuels and Related Materials

Coal.—Hungary's production of coal, which consisted largely of lignite, decreased by less than 1% to about 9.2 million metric tons (Mt) in 2016. Two new small coal mines were reportedly opened in 2016 to meet increased household consumption for heating purposes. A new coal company used its lignite output in a mix as fertilizer, which was exported primarily to Italy, although its lignite production was small in scale. The lignite-fired Matra powerplant planned to continue operations until 2030 provided two of the companies with ownership interests, RWE AG and EnBW AG, both of Germany, approved the plan. Electricity generated from lignite coal accounted for 17% of the electricity generated in Hungary in 2016 (Euracoal, 2017, p. 9).

Natural Gas, Petroleum, and Petroleum Products.—MOL Group's production of crude petroleum and condensate increased by 15.8% to 13,300 barrels of oil equivalent (BOE) per day in 2016. The company produced about 4,100 cubic meters per day of natural gas in 2016, which was an increase of 4.4% compared with that of 2015. In 2016, MOL acquired six new licenses through the fourth bidding round in Hungary, doubling its total exploration acreage. As a result, the company

[1]Where necessary, values have been converted from Hungarian forints (HUF) to U.S. dollars (US$) at an annual average exchange rate of HUF281.56=US$1.00 for 2016.

planned to undertake exploration in Bazakerettye, Bucsa, Jaszarokszallas, Mezotur, Okany-West, and Zala-West (MOL Group, 2017, p. 43, 45, 49).

Outlook

Hungary's bauxite output is likely to remain low, and alumina production is not expected to resume in the near future. Crude steel and steel products output may increase owing to ISD Dunaferr's ongoing steel production capacity expansion. The production of coal is expected to increase slightly with the opening of new mines. The production of cement and other construction materials may increase as a result of increased public infrastructure spending.

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TABLE 1
HUNGARY: PRODUCTION OF MINERAL COMMODITIES[1]

(Thousand metric tons, gross weight, unless otherwise specified)

Commodity[2]		2012	2013	2014	2015	2016
METALS						
Aluminum:						
Bauxite		144	94	14	8	17 e
Alumina, calcined		110	81	61	--	--
Gallium	kilograms	4,600	1,713	260	-- r	--
Iron and steel:						
Pig iron		1,229	628	801	1,247	863
Raw steel		1,542	883	1,152	1,675	1,274
Products, semimanufactured		1,928	1,936	1,823	1,714 r	1,593
Manganese, mine production:						
Gross weight		147	35	51	57	19
Mn content		13	9	13	15	5
INDUSTRIAL MINERALS						
Alginite (complex soil aggregate)	metric tons	2,817	4,002	3,983	3,571	3,415
Cement, hydraulic		1,870 r	2,022 r	1,610 r	1,750 r	2,000 e
Clay and shale:						
Bentonite, raw	metric tons	476 r	4,144 r	5,557 r	5,667 r	8,026
Chamotte, refractory clays	do.	330	820	470	480	480 e
Kaolin, beneficiated	do.	--	36 r	196 r	1,119 r	850
Other	do.	1,170	870	900	900	900 e
Diatomite	do.	1,229	434	524	1,040	703
Lime, calcined		230	250 e	272 e	310 e	300 e
Nitrogen, N content, ammonia		348 r	285 r	394 r	332 r	365
Perlite	metric tons	34,624 r	31,024 r	32,750 r	31,275 r	36,247

See footnotes at end of table.

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

(Thousand metric tons, gross weight, unless otherwise specified)

Commodity[2]		2012	2013	2014	2015	2016
INDUSTRIAL MINERALS—Continued						
Stone, sand, and gravel:						
Sand and gravel, construction:						
Common sand[3]		5,600	6,800	7,800	5,100 [4]	4,200
Gravel[3]		14,000	16,800	27,500	23,800	20,400
Sand and gravel, industrial:						
Foundry sand		56 [3]	52 [3]	63 [3]	62 [3]	60 [e]
Glass sand		--	--	58 [3]	66 [3]	64
Silica, mine production:						
Quartzite	metric tons	213	196	588	220 [r]	407
Unspecified	do.	35,087 [r]	32,520 [r]	75,405 [r]	80,000 [r]	80,000 [e]
Stone, dimension:[3]						
Dolomite		4,092	4,862	6,668	7,362	6,907
Limestone		5,616	5,798	6,420	6,654	6,366
Marl		52	3	3	3	3
Sandstone		11	23	37	44	3
Sulfur, elemental, byproduct, all sources, S content		65	58	54	54	50 [e]
Zeolites	metric tons	24,562	22,446	31,302	33,701	29,548
MINERAL FUELS AND RELATED MATERIALS						
Coal:						
Bituminous		--	--	--	--	1
Lignite[5]		9,297 [r]	9,581 [r]	9,554 [r]	9,258 [r]	9,244
Total		9,300 [r]	9,600 [r]	9,600 [r]	9,300 [r]	9,300
Coke, metallurgical		1,026 [r, 6]	924 [r, 6]	923 [r, 6]	860	900 [e]
Natural gas, marketable, net	million cubic meters	2,286	2,065	1,934	1,887	1,974
Peat:						
Horticultural use:						
By volume	cubic meters	205,388	297,127	166,234	302,298	218,624
By weight	metric tons	69,813 [r]	100,997 [r]	58,396 [r]	97,379 [r]	70,425
Paludal mud	do.	28,000	19,974	11,200	20,300	20,000 [e]
Petroleum:						
Crude	thousand 42-gallon barrels	4,144	3,817	3,875	4,640 [r]	5,295
Refinery production:						
Diesel, including heating oil	do.	26,562 [r]	26,771 [r]	27,330 [r]	23,172 [r]	22,827
Fuel oil	do.	402 [r]	793 [r]	79 [r]	91 [r]	39
Gasoline, motor	do.	9,922 [r]	9,443 [r]	9,661 [r]	10,117 [r]	9,456
Kerosene	do.	1,328 [r]	1,388 [r]	1,427 [r]	1,475 [r]	1,493
Liquefied petroleum gas	do.	600 [r]	722 [r]	930 [r]	1,014 [r]	1,013
Bitumen	do.	2,505	2,428	2,850	2,966	3,191
Naphtha	do.	8,001 [r]	7,344 [r]	7,424 [r]	7,457 [r]	8,117
Other fuels	do.	7,138	7,622	8,911	8,682	8,981
Total	do.	56,500 [r]	56,500 [r]	58,600 [r]	55,000 [r]	55,100

[e]Estimated. [r]Revised. do. Ditto. -- Zero.

[1]Table includes data available through February 20, 2018. All data are reported unless otherwise noted. Totals and estimated data are rounded to no more than three significant digits; may not add to totals shown.

[2]In addition to the commodities listed, talc, urea, and a variety of other industrial minerals may have been produced in Hungary, but available information was inadequate to make reliable estimates of output.

[3]Converted from cubic meters to metric tons.

[4]Original data reported in cubic meters was revised before conversion to metric tons.

[5]Includes brown coal output.

[6]Source: U.S. Energy Information Administration.

TABLE 2
HUNGARY: STRUCTURE OF THE MINERAL INDUSTRY IN 2016

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity holders	Location of main facilities	Annual capacity
Alumina	IC Profil	Ajka Timfoldgyar plant, about 120 kilometers southwest of Budapest, near Lake Balaton	NA [1]
Aluminum	Arconic-Köfém Kft (Arkonic Inc., 100%)	Szekesfehervar ingot plant	NA
Bauxite	Magyar Aluminium Ltd. (MAL) (Government, 100%)	Bakony and Halimba Mines, 5 kilometers south of Ajka, northwestern Hungary	20 [2]
Bentonite	Bentonit Hungaria Kft (S&B Industrial Minerals S.A., 100%)	Mines and plant at Egyhazaskeszo	NA
Cement	Duna-Drava Cement Kft. (HeidelbergCement AG, 50%, and Schwenk Zement KG, 50%)	Plants at Beremend, 30 kilometers south of Pecs, and Vac, 35 kilometers north of Budapest	2,500
Do.	CRH Magyarorszag Zrt. (CRH plc., 100%)	Plant at Labatlan	300 [3]
Do.	do.	Plant at Miskolc	1,700
Do.	Lafarge Cement Magyarorszag Kft. (LafargeHolcim Ltd., 70%, and STRABAG SE, 30%)	NOSTRA plant at Kiralyegyhaza, southwestern Hungary	1,000
Clays	Agyag-Asvany Kft.	Two opencast mines at Felsopeteny	NA
Coal, lignite	Vertes Power Plant Ltd. (Magyar Villamos Muvek Zrt., 96.59%)	Markushegy Mine at Oroszlany, 55 kilometers west of Budapest	1,400 [4]
Do.	NA	Bakonyoszlop Mine in Veszprem	NA
Do.	NA	Farkaslyuk Mine in Borsod-Abauj-Zemplen	NA
Do.	Mátrai Erömü Zrt. (MÁTRA) (RWE AG, 50.9%; Magyar Villamos Muvek Zrt., 25.5%; EnBW AG, 21.7%)	Thorez opencast mine at Visonta, 80 kilometers northeast of Budapest	4,700 e
Do.	do.	Opencast mine at Bukkabrany, 130 kilometers northeast of Budapest	4,000 e
Do.	NA	Vasas opencast mine in Pecs	NA
Coke	ISD Kokszolo Ltd. (ISD Dunaferr Co. Ltd.)	Dunaujvaros, 60 kilometers south of Budapest	900
Iron, pig iron	ISD Dunaferr Co. Ltd. (Industrial Union of Donbass Corp.)	do.	1,300
Manganese	Mangán Mining and Processing Ltd.	Urkut manganese mines, 120 kilometers southwest of Budapest	NA
Natural gas, million cubic meters	Hungarian Oil and Gas Co. plc. (MOL) (Foreign investors, 25.2%; Government, 25.2%; CEZ MH B.V., 7.5%; OmanOil Ltd., 7.1%; others, 35%)	Oil and gas fields in southern and southwestern Hungary	2,100 e
Perlite	Perlit 92 Kft	Palhaza, northeastern Hungary; opencast mine and processing plant	NA
Petroleum:			
Crude, 42-gallon barrels per day	Hungarian Oil and Gas Co. plc. (MOL) (Foreign investors, 25.2%; Government, 25.2%; CEZ MH B.V., 7.5%; OmanOil Ltd., 7.1%; others, 35%)	Oil and gas fields in southern and southwestern Hungary	30,000 e
Refined, do.	Duna Refinery [Hungarian Oil and Gas Co. plc. (MOL), 100%]	Szazhalombatta, 25 kilometers southwest of Budapest	165,000
Do.	Tisza Refinery [Hungarian Oil and Gas Co. plc. (MOL), 100%]	Tiszaújváros in northeastern Hungary	NA
Do.	Zala Refinery [Hungarian Oil and Gas Co. plc. (MOL), 100%]	Zalaegerszeg in western Hungary	NA
Silica	Uveg-Asvany Banyaszati Ipari Kft.	Mine and plant at Fehevaresugo	NA
Steel, crude:			
Primary	ISD Dunaferr Co. Ltd. (Industrial Union of Donbass)	Dunaujvaros, 60 kilometers south of Budapest	1,700
Secondary	OAM OZD Steelworks Ltd.	120 kilometers northeast of Budapest	360
Do.	Dam 2004 Acel-es Hengermu Kereskedemi es Szolgaltato Ltd.	Diosgyor, 145 kilometers northeast of Budapest	550

[e]Estimated. Do., do. Ditto. NA Not available.

[1]Stopped most production activity in October 2014.

[2]Halimba Mine was closed in February 2013.

[3]Inactive since 2012.

[4]Closed in December 2014.