



2019 Minerals Yearbook

HUNGARY [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF HUNGARY

By Loyd M. Trimmer III

In 2019, Hungary was the sixth-ranked producer of perlite in the world and accounted for about 2% of global production. Hungary was also the 10th-ranked producer of zeolites (natural) and accounted for about 3% of world production in 2019. The country also produced other industrial minerals, including bentonite, diatomite, lime, nitrogen, and sulfur. Among metals, the country produced alumina, pig iron, raw steel, and steel products. Production of mineral fuels included that of coal, crude petroleum, natural gas, and refinery products (table 1; Crangle, 2021; Hatfield, 2021).

Minerals in the National Economy

Hungary's real gross domestic product (GDP) increased by 4.6% in 2019 from 5.4% in 2018; the nominal GDP was \$163.5¹ billion. Mining and quarrying contributed 0.3% of the GDP, whereas manufacturing accounted for 20.9%. The mining and quarrying sector employed, on average, 11,500 people, and the manufacturing sector, on average, 999,600 people. In 2019, total industrial production, by volume, increased by 5.6%. The value of mining and quarrying increased by 24% to \$635 million; that of the manufacture of nonmetallic mineral products, by 7.4% to \$10.1 billion; and base metals and fabricated metal products, by 1.2% to \$9.3 billion. The value of the manufacture of chemicals and chemical products decreased to \$5.6 billion, or by 5.1% compared with that in 2018, and that of coke and refined petroleum products decreased to \$5.2 billion, or by 2.5%. The main mining law in the country is Act. No. 48 of 1993 as amended by Act No. 86 of 2014 and Government Regulation No. 311 of 2014 (Hungarian Central Statistical Office, 2020a, c, e–g; World Bank Group, The, 2020).

In 2019, the value of the country's total exports increased by 6.2% to \$122 billion. Exports of nonmonetary gold were valued at \$89 million, which was an increase of 43.8% compared with the value in 2018; exports of manufactured natural gas were valued at \$581 million (a 16.8% increase); chemical products, \$1.15 billion (10.8% increase); coal and coke products, \$92 million (6.6% increase); and manufactured metals, \$2.75 billion (0.4% increase). Exports of petroleum and related products were valued at \$1.63 billion, which was a decrease of 17.2% compared with the value in 2018; exports of iron and steel were valued at \$1.44 billion (an 11.7% decrease); nonferrous metals, \$903 million (8.7% decrease); metalliferous ores and metal scrap, \$623 million (5.9% decrease); and manufactured fertilizers, \$124 million (4% decrease). The value of Hungary's total imports increased by 7.6% to \$117 billion in 2019. Imports of chemical products were valued at \$1.78 billion, which was an increase of 23.7% compared with the value in 2018; imports of manufactured natural gas were valued

at \$2.5 billion (a 14.3% increase); manufactured fertilizers, \$398 million (8.0% increase); manufactured metals, \$4.1 billion (6.3% increase); and petroleum and related products, \$5.0 billion (1.8% increase). Imports of coal and coke products were valued at \$303 million, which was a decrease of 6.7% compared with the value in 2018; nonferrous metals were valued at \$2.31 billion (a 6.1% decrease); iron and steel, \$2.97 billion (5.8% decrease); and metalliferous ores and metal scrap, \$426 million (1.6% decrease) (Hungarian Central Statistical Office, 2020b, d).

Production

The production of bituminous coal increased by 193% in 2019, although the increase in tons was insignificant. Other notable increases in production included that of diatomite, which increased by 41% (estimated); hydraulic cement, by 34% (estimated); gravel, by 30%; limestone, by 19%; and liquefied petroleum gas, by 16%. Notable decreases in production included that of crude petroleum, which decreased by 33%; common sand and natural gas, by 19% each; pig iron, by 15%; dolomite, by 14%; lignite coal, by 13%; and raw steel and semimanufactured steel products, by 11%. Data on mineral production are in table 1.

Structure of Mineral industry

Mineral and mineral fuel producers were privately owned apart from Government ownership in Hungarian Oil and Gas Co. plc. (MOL), Magyar Aluminium Ltd., and Magyar Villamos Muvek Zrt. Foreign ownership in the country's mineral sector was concentrated in the production of aluminum, cement, and iron and steel. Table 2 is a list of major mineral industry facilities.

Commodity Review

Metals

Aluminum.—Arconic-Köfém Kft (a subsidiary of Arconic Inc. of the United States) operated an aluminum ingot plant in Szekesfehervar. The company produced aluminum billets, plates, sheets, and slabs. By yearend 2019, the expansion of the Szekesfehervar ingot plant was fully operational. The company had begun the \$130 million expansion of the lightweight aluminum wheel manufacturing capacity in 2018. The plant's capacity of aluminum products was estimated to be 120,000 metric tons per year (table 2; Arconic Inc., 2019, p. 3; 2020, p. 6).

Iron and Steel.—In 2019, ISD Dunafer Co. Ltd. remained the sole raw-steel-producing company in Hungary. In October, the company announced that it would lay off 350 employees by yearend 2020, which it attributed to slowing global economic growth, unfavorable economics for the European steel industry, declining demand and price for finished steel products, and burdensome environmental regulations. The company employed 4,500 workers as of yearend 2019 (Budapest Business Journal, 2019; Szilagyi, 2020).

¹Where necessary, values have been converted from Hungarian forints (HUF) to U.S. dollars (US\$) at the annual average exchange rate of HUF290.65=US\$1.00 for 2019.

Cement.—Duna-Dráva Cement Kft. (a joint venture between HeidelbergCement AG of Germany and Schwenk Zement KG of Germany) was the leading cement producer in the country and operated two cement plants in Beremend and Vac. In 2019, Duna-Dráva Cement started to work on the modernization of the Vac cement plant, which was expected to include the use of alternative fuels. The combined annual cement production capacity of Duna-Dráva Cement was 1.4 million metric tons (Mt). The company reported that cement sales increased in 2019 compared with those in 2018 (HeidelbergCement AG, 2020a, p. 30, 202; 2020b).

Mineral Fuels and Related Materials

Coal.—Hungary’s production of lignite coal decreased by 13% from that in 2018 to about 6.79 Mt in 2019. The country’s production of bituminous coal increase by 193% to 6,095 metric tons (t) from 2,083 t in 2018. Lignite coal production decreased for the fifth consecutive year owing to environmental emissions rules targeting carbon neutrality. In 2019, Hungary’s total hard coal imports decreased to 1.4 Mt from 1.5 Mt in 2018. Matrai Eromu ZRt. produced coal at its opencast coal mines at Visonta and Bukkabrány to supply to the company’s coal-fired powerplant, the Matra powerplant, which provided 12% of the country’s total electricity production in 2019. The powerplant’s electricity generation decreased by about 15% compared with that in 2018 (table 1; Euracoal, 2019, p. 8; 2020, p. 7, 14).

Natural Gas, Petroleum, and Petroleum Products.—MOL produced about 15,100 barrels of oil equivalent per day (BOE/d) of crude petroleum and condensate gas in 2019 (the data in table 1 are for the real volume of output, not barrels of oil equivalent). MOL also produced about 22,700 BOE/d (about 3.86 million cubic meters per day) of natural gas. In 2019, MOL drilled and tested four exploration wells: Kaszaper-2, Mezöhegyes-Ny-9, Mezöhegyes-DK-4, and Mezöhegyes-21. The four wells were tied into the existing gas infrastructure. MOL was awarded two new hydrocarbon exploration licenses in the seventh bid round in the areas of Kisvarda and Nyirbator in northwestern Hungary (MOL Group, 2020, p. 15–16).

Outlook

Production of raw steel and steel products is expected to decrease in the short-term as ISD Dunaferri responds to declining steel demand and product prices. Although coal production will likely continue to decrease, petroleum and natural gas output is likely to remain relatively stable over the long term as the country supplements coal production with other mineral fuels for electricity production. The production of cement and other construction materials is expected to decrease in 2020 owing to declining economic activity as a result of the coronavirus disease 2019 (COVID-19) pandemic but could recover in 2021 and 2022 owing to public spending on public infrastructure projects. Production of aluminum products is expected to increase in the future owing to the expansion project at Arconic’s Szekesfehervar ingot plant (Budapest Business Journal, 2019; HeidelbergCement AG, 2020a, p. 30).

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TABLE 1
HUNGARY: PRODUCTION OF MINERAL COMMODITIES¹

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

Commodity ²	2015	2016	2017	2018	2019
METALS					
Aluminum:					
Bauxite metric tons	8,300 ^r	16,700	3,774	5,223	--
Alumina, calcined do.	255,274	273,612	273,329	265,500 ^r	264,964
Iron and steel:					
Pig iron	1,247	863	1,311	1,355	1,151
Steel:					
Raw steel	1,675	1,274	1,901	1,989 ^r	1,769
Products, semimanufactured	1,714	1,593	1,972	2,086 ^r	1,861
Manganese, mine:					
Gross weight metric tons	57,000	18,460	--	--	--
Mn content do.	15,000 ^e	5,000 ^e	--	--	--
INDUSTRIAL MINERALS					
Alginite metric tons	3,571 ³	3,415 ³	4,302	-- ^r	--
Cement, hydraulic ^c	1,570	1,280	1,660	1,670	2,240
Clay:					
Bentonite, raw metric tons	14,170 ^r	16,006 ^r	9,852 ^r	35,156 ^r	35,000 ^e
Kaolin, beneficiated do.	1,900	1,400	--	--	-- ^e
Diatomite do.	1,040	738 ^r	1,173	853 ^r	1,200 ^e
Lime, calcined	310 ^e	300 ^e	283	282	280 ^e
Nitrogen, ammonia, N content	330 ^e	370 ^e	430 ^e	369 ^r	382
Perlite metric tons	64,700 ³	76,254 ^r	71,412 ^r	80,396 ^r	80,000 ^e
Sand and gravel, industrial:					
Foundry sand do.	62,400 ³	66,400 ³	110,000 ³	110,000 ^e	110,000 ^e
Silica do.	65,600 ³	68,500 ³	66,400 ³	66,400 ^e	66,000 ^e
Stone, sand, and gravel, construction:					
Sand and gravel:					
Common sand	5,100	4,200	2,748	5,219	4,210
Gravel	23,800 ³	22,858 ³	26,032	29,288	38,152
Stone:					
Crushed, quartzite metric tons	220	407	291	290 ^e	300 ^e
Dimension:					
Dolomite	7,400 ³	5,800 ³	6,111	5,505 ^r	4,740
Limestone	6,700 ³	6,000 ³	7,041	5,320 ^r	6,334
Marl metric tons	3,011 ³	2,554 ³	5,683	5,500 ^{e,3}	5,500
Sandstone do.	43,609 ³	2,747 ³	3,079	-- ^r	--
Sulfur, byproduct, all sources, S content ^c	54	50	50	50	50
Zeolites metric tons	33,700 ³	29,600 ³	28,648	28,500 ^{e,3}	29,000 ^e
MINERAL FUELS AND RELATED MATERIALS					
Coal:					
Bituminous metric tons	5,687	748 ^r	789	2,083	6,095
Lignite ⁴	9,258	9,170	7,890	7,844	6,790
Coke, metallurgical	860	900 ^e	900 ^e	900 ^e	900 ^e
Natural gas, marketable million cubic meters	1,887	1,974	1,885	1,710 ^r	1,382
Peat, horticultural use:					
By volume cubic meters	302,298	218,624	269,490	214,000 ^{r,5}	205,000 ⁵
By weight metric tons	97,341	89,981	57,110	56,782	54,321
Petroleum:					
Crude thousand 42-gallon barrels	4,640	5,295	5,170	6,000	4,000
Refinery:					
Bitumen do.	2,966	3,191	2,647	3,267	3,085
Diesel, including heating oil do.	23,172	22,828	26,461	27,948	27,389
Fuel oil do.	87	38	6	19	--
Gasoline, motor do.	10,117	9,456	8,940	10,044	10,161

See footnotes at end of table.

TABLE 1—Continued
HUNGARY: PRODUCTION OF MINERAL COMMODITIES¹

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

Commodity ²	2015	2016	2017	2018	2019	
MINERAL FUELS AND RELATED MATERIALS—Continued						
Petroleum:—Continued						
Refinery:—Continued						
Kerosene	thousand 42-gallon barrels	1,475	1,493	1,818	2,306	2,339
Liquefied petroleum gas	do.	1,014	1,013	1,072	1,214	1,414
Naphtha	do.	7,457	8,117	7,728	9,223	8,434
Other fuels	do.	8,682	8,981	8,810	8,158	8,003
Total	do.	55,000	55,100	57,500	62,200 ^r	60,800

⁶Estimated. ^rRevised. do. Ditto. -- Zero.

¹Table includes data available through January 20, 2021. 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.

²In addition to the commodities listed, peat from paludal mud, talc, urea, and a variety of other industrial minerals and construction materials may have been produced, but available information was inadequate to make reliable estimates of output.

³Converted from cubic meters to metric tons.

⁴Includes brown coal output.

⁵Converted from metrics tons to cubic meters.

TABLE 2
HUNGARY: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity holders	Location of main facilities	Annual capacity	
Alumina	Silkem Hungary Ltd.	Ajka Timfoldgyar plant, about 120 kilometers southwest of Budapest, near Lake Balaton	300 ^e	
Aluminum, products	Arconic-Köfém Kft (Arconic Inc., 100%)	Szekesfehervar ingot plant	120 ^e	
Do.	Hydro Extrusion Hungary Kft (Norsk Hydro ASA, 100%)	Szekesfehervar extrusion plant	55 ^e	
Bauxite	Magyar Aluminium Ltd. (MAL) (Government, 100%)	Mine at Bakony, ¹ 5 kilometers south of Ajka, northwest Hungary	20 ^e	
Cement	Duna-Dráva 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	1,400	
Do.	Lafarge Cement Magyarország Kft. (LafargeHolcim Ltd., 70%, and STRABAG SE, 30%)	NOSTRA plant at Kiralyegyhaza, southwestern Hungary	1,000	
Clay:				
Bentonite	Bentonit Hungaria Kft (S&B Industrial Minerals S.A., 100%)	Mines and plant at Egyhazaskeszo	NA	
Unspecified	Agyag-Asvany Kft.	Two opencast mines at Felsopeteny	NA	
Coal, lignite	Energeticky A Prumyslovy Holding, a.s., 36.3%; Status Power Invest Kft., 36.3%; Magyar Villamos Muvek Zrt., 25.5%; other shareholders, 1.9%	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.	Pannon Thermal Power Plant Inc.	Pécs-Vasas opencast mine	NA	
Do.	Vertes Power Plant Ltd. (Magyar Villamos Muvek Zrt., 96.59%)	Markushegy Mine at Oroszlany, 55 kilometers west of Budapest	1,400	
Coke	ISD Kokszolo Ltd. (ISD Dunaferri Co. Ltd.)	Dunaujvaros, 60 kilometers south of Budapest	900	
Iron, pig iron	ISD Dunaferri Co. Ltd. (Industrial Union of Donbass Corp.)	do.	1,300	
Natural gas	million cubic meters	MOL Hungarian Oil and Gas Co. plc. (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	1,600 ^e
Perlite	Perlit 92 Kft	Opencast mine and processing plant at Palhaza, northeastern Hungary	NA	
Petroleum:				
Crude	42-gallon barrels per day	MOL Hungarian Oil and Gas Co. plc. (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	20,000 ^e
Refined	do.	Duna Refinery [Hungarian Oil and Gas Co. plc. (MOL Group), 100%]	Szazhalombatta, 25 kilometers southwest of Budapest	165,000
Silica		Uveg-Asvany Banyaszati Ipari Kft.	Mine and plant at Fehevaresugo	NA
Steel, raw:				
Primary		ISD Dunaferri Co. Ltd. (Industrial Union of Donbass)	Dunaujvaros, 60 kilometers south of Budapest	1,300
Secondary		Dam 2004 Acel-es Hengermu Kereskedelmi es Szolgaltato Ltd.	Diosgyor, 145 kilometers northeast of Budapest	550
Do.		OAM OZD Steelworks Ltd.	120 kilometers northeast of Budapest	360
Zeolites		Mineralholding Ltd.	Open pit mine in Hegyalla region	NA

^eEstimated. Do., do. Ditto. NA Not available.

¹Inactive in 2019.