

2019 Minerals Yearbook

MOLDOVA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF MOLDOVA

By Elena Safirova

In 2019, Moldova had a small mineral industry of limited regional significance that was engaged primarily in the mining and production of industrial minerals and mineral products, including cement, clay, gypsum, limestone, and sand and gravel. The only exception was the breakaway Transnistria region, which had a minimill metallurgical plant and a cement plant; the Moldovan statistical agency, however, did not report production in the Transnistria region in 2019. The country was completely dependent on imports for its coal, natural gas, and refined petroleum products, which came mainly from Russia and Ukraine. Moldova's main mineral resources were industrial minerals used to produce construction materials and as input for the cement, chemical, food processing, and glass industries. Small deposits of coal, iron ore, natural gas, and petroleum had been explored in the past but were not found to be economic to develop (tables 1, 2).

Minerals in the National Economy¹

In 2019, the nominal gross domestic product (GDP) of Moldova was \$11.96 billion;² the real GDP increased by 3.6% compared with that of 2018. Industrial production contributed 11.2% of the GDP; the share of mining and quarrying output in total industrial production was 2.7%. In 2019, industrial production increased by 2.0% compared with that of 2018; the output of the manufacturing sector increased by 3.1%, whereas the output of the mining and quarrying sector decreased by 1.9%, and that of the energy sector (specifically, supply of electricity and heat) decreased by 4.0%. The output of the chemical sector increased by 2.9%, and the production of other nonmetallic mineral products (such as cement, concrete, glass, and gypsum) decreased by 6.0% (National Bureau of Statistics of the Republic of Moldova, 2020a, p. 40, 67–68, 70–72; 2020b, p. 4–6).

In 2019, Moldova's trade deficit remained practically unchanged at \$3.06 billion; the value of exports increased by 2.7% to \$2.78 billion, and that of imports increased by 1.4% to \$5.84 billion. Moldova exported \$1.8 billion worth of goods to countries in the European Union (EU–28), which was a 1.7% increase compared with that of 2018. The share of goods exported to EU–28 countries in relation to total goods exported increased in 2018 to 65.9% from 65.8% in 2018. Moldova exported \$435 million worth of goods to the countries of the Commonwealth of Independent States (CIS), which was an increase of 4.6% compared with that of 2018. The share of goods exported to CIS countries in relation to total goods exported increased in 2019 to 15.6% from 15.4% in 2018.

Imports of goods from EU–28 countries increased by 1.4% to \$2.9 billion. The share of imports from EU–28 countries remained unchanged at 49.5% in 2018. Imports of goods from CIS countries decreased by 2.2% to \$1.4 billion. The share of imports from CIS countries decreased to 24.2% in 2019 from 25.2% in 2018. Chemical products contributed 4.3% to the value of Moldova's exports; metals and products made of them, 1.6%; and mineral products, 0.9% (National Bureau of Statistics of the Republic of Moldova, 2020a, p. 59–64; 2020b, p. 104–106).

Production

In 2019, sand production increased by 20% compared with that in 2018 and that of cement increased by an estimated 7.0%. Clay production decreased by an estimated 62%; that of raw steel and rolled steel, by an estimated 22% each; construction gravel, by 19%; gypsum, by an estimated 17%; and construction stone, by 8.0%. Data on mineral production are in table 1.

Structure of the Mineral Industry

Table 2 is a list of mineral industry facilities.

Commodity Review

Metals

Iron and Steel.—In 2019, the OAO Moldavian Metallurgical Plant (MMZ), which was located in the Transnistria region, was a minimill and produced an estimated 393,000 metric tons (t) of secondary raw steel and an estimated 382,000 t of rolled steel. Production of raw and rolled steel in 2019 was 22% lower than that in 2018. The plant's annual capacity, however, was 1.1 million metric tons per year of raw steel. The latest year in which output was close to full capacity was in 2005 (table 1; OAO Moldavskiy Metallurgicheskiy Zavod, 2020).

In May 2018, the Government of Ukraine issued a decree that introduced economic sanctions against more than 700 foreign enterprises, including MMZ and several individuals associated with the plant. The sanctions were expected to be in effect for a period of 3 years and included provisions for blocking assets, placing limitations on trade, banning state purchases from the plant and from individuals, and some other measures. In March 2019, however, the President of Ukraine updated the list of companies under sanction, and MMZ was not on the new list. In October 2019, Ukraine's Ministry for Temporarily Occupied Territories initiated reinstatement of Ukraine's sanctions against MMZ. By yearend, it was not known if Ukraine's Government intended to again impose sanctions against MMZ (Newsmaker.md, 2018; Ukraina.ru, 2018; RBC.ua, 2019).

¹The data cited in this section do not include the separatist region of Transnistria inclusive of Bender municipality.

²Where necessary, values have been converted from Moldovan lei (MDL) to U.S. dollars (US\$) at an annual average exchange rate of MDL17.5735=US\$1.00 for 2019 and MDL16.8021=US\$1.00 for 2018.

Industrial Minerals

Cement.—The two cement producers in Moldova were Lafarge Ciment Moldova SA (a subsidiary of LafargeHolcim Ltd. of Switzerland), which was located in the city of Rezina in the northern part of Moldova, and the ZAO Rybnitsa Cement Complex (RCK), which was located in the city of Rybnitsa in the Transnistria region. Cement production in Moldova in 2019 increased by an estimated 7.0% compared with that in 2018 to 1.32 million metric tons (Mt) from about 1.23 Mt in 2018 (tables 1, 2; Lafarge S.A. Moldova, 2020).

In May 2019, the Government of Ukraine introduced prohibitively high import tariffs on cement clinker and Portland cement from Belarus, Moldova, and Russia. The Interagency Committee for International Trade in the Government of Ukraine determined that during 2015–2018, these countries were exporting their cement to Ukraine at dumping prices. The tariff for cement produced in Moldova was set at a rate of about 94% and was expected to remain in effect for 5 years. The tariff was to apply to both Lafarge's cement plant in Rezina and the RCK. In 2018, the RCK plant shipped about \$2.2 million worth of cement to Ukraine, which amounted to about 20% of all the RCK's export sales. The company planned to appeal the tariff imposed by Ukraine. Prior to the imposition of the tariff, the Rezina plant offered to voluntarily stop exports to Ukraine at dumping prices, but the Association of Ukrainian Cement Producers declined the offer (Interfax.com.ua, 2019; Lavnikevich, 2019; Mysina, 2019; Point.md, 2019b).

Clay, Construction Stone, Gypsum, Limestone, and Sand and Gravel.—The Chisinau quarry, which was 92% owned by the city of Chisinau, was one of about 25 quarries in Moldova. The quarry produced a variety of stone materials and other industrial minerals. In 2019, the Chisinau quarry had financial difficulties. In June, the quarry had its power shut off because of debts to the power company. Later in the summer, the quarry was flooded and had to halt production, and because of the lack of power, the quarry employees were unable to use power to pump the water from the quarry. The flooding put in danger the environment of the surrounding city of Chisinau. In October, the quarry was reopened, and the water was pumped out by the quarry's employees. Reportedly, the quarry was operating at only about one-third of its capacity. At the time of construction in 1968, the quarry had resources of about 4.2 million cubic meters of stone material (about 6.7 Mt), which was enough for mining for about 200 years. Installation of a permanent water pump would reportedly cost about 5 million lei (about \$285,000) (Point.md, 2019a; Publica.md, 2019; Shmurgun, 2019).

Mineral Fuels

Natural Gas and Petroleum.—In July 2019, Moldova's Ministry for Agriculture, Regional Development, and Environment announced that it had sent a notice to Frontera Resources International LLC (Frontera) of the United States that it could annul the contract with the company unless Frontera begins production of petroleum in Moldova in accordance with the 2017 agreement. The Ministry stated that Frontera still had not registered with the Government Information Fund and had not provided information about resources, reserves,

and exploration works and, consequently, had not begun those works. The Ministry explained that, in accordance with the agreement, Frontera had to provide an annual work plan and a planned budget by February 15 of each year for each type of planned activity, but had failed to do that for 2017, 2018, and 2019. Earlier, in January 2017, Frontera signed a concession agreement with the Government, giving Frontera exclusive rights to explore for and develop hydrocarbon resources within an area of about 3 million acres in the Dobrogea region in the southern part of Moldova. The concession agreement had a term of 50 years, including up to 10 years for exploration. Frontera had been expected to invest about \$6 million in exploration activities during the next 5 years since signing the agreement (Frontera Resources International LLC, 2017; Moldpress.md, 2017; Point.md, 2017; Esp.md, 2019; Newsmaker.md, 2019).

Outlook

In the next few years, Moldova will likely continue to produce industrial minerals, cement, and a small amount of secondary steel. The country is expected to continue importing natural gas from Russia in the coming years. It remains to be seen if the country would be able to significantly diversify its energy sources and thus boost its economy. Regardless of the future economic growth, Moldova is likely to remain a minor producer of mineral commodities, specializing in production of industrial minerals used in construction.

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$\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{MOLDOVA: PRODUCTION OF MINERAL COMMODITIES}^1$

(Metric tons, gross weight)

Commodity ²	2015	2016	2017	2018	2019
METALS					
Iron and steel, steel:					
Raw steel, secondary	430,000	127,549	469,446	502,900	393,000 ^e
Products, rolled	324,000	210,800	459,700	488,300	382,000 e
INDUSTRIAL MINERALS					
Cement, hydraulic	1,044,712	975,078	1,115,595	1,233,172	1,320,000 e
Clay, unspecified ³	200,000 °	262,004	260,000 e	160,000 r, e	60,100
Gypsum ^{e, 3}	120,000	120,000	120,000	120,000	100,000
Lime	8,000	4,020	22,256	24,725	25,000 e
Stone, sand, and gravel: ³					
Sand and gravel:	<u></u>				
Gravel, construction	2,717,100	2,349,000	230,844	371,849	302,703
Sand	1,599,900	1,522,500	1,579,111	1,648,238	1,981,887
Stone, crushed:					
Construction stone ⁴	638,400	498,500	448,134	568,969	523,407
Limestone	279,437	188,830	154,439	139,600 ^r	140,000 e

^eEstimated. ^rRevised.

 ${\bf TABLE~2}$ MOLDOVA: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Metric tons unless otherwise specified)

		Major operating companies and		Annual
Commodity		major equity owners	Location of main facilities	capacity
Cement		Lafarge Ciment Moldova SA (LafargeHolcim Ltd.)	Plant in Rezina	1,400,000
Do.		ZAO Rybnitsa Cement Complex (RCK)	Rybnitsa, Transnistria region	1,100,000
Gypsum:				_
Stone		NA	About 25 quarries	NA
Unspecified		CMC-Knauf joint venture	Kirovskoye deposit	300,000
Lime		ZAO Rybnitsa Cement Complex (RCK)	Rybnitsa, Transnistria region	NA
Sand and gravel		NA	Throughout the country	NA
Steel:				
Raw steel, secondary		OAO Moldavian Metallurgical Plant (MMZ)	Rybnitsa, Transnistria region	1,100,000
		(Government, 98.5%, and		
		former workers, 1.5%)		
Products, rolled		do.	do.	NA
Stone, granite	thousand cubic meters	NA	Kosoutskoye quarry	150

Do., do. Ditto. NA Not available.

¹Table includes data available through August 3, 2020. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

²In addition to the commodities listed, granite, natural gas, peat, and petroleum may have been produced, but available information was inadequate to make reliable estimates of output.

³Does not include the Transnistria region

⁴Does not include granite