

2016 Minerals Yearbook

MOLDOVA

THE MINERAL INDUSTRY OF MOLDOVA

By Elena Safirova

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, clays, gypsum, limestone, and sand and gravel. The only exception was the breakaway Transnistria region, which had a minimill metallurgical plant, a cement plant, and some other industrial plants; the Moldovan statistical agency, however, did not report production in the Transnistria region in 2016. 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 an 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 still were not found to be economic to develop.

Minerals in the National Economy¹

In 2016, the nominal gross domestic product (GDP) of Moldova was \$6.75 billion² and real GDP increased by 4.1% compared with that of 2015. Total industrial production contributed 29.9% to the GDP, and the share of mining and quarrying output in total industrial production was 1.9%. In 2016, industrial production increased by 0.9% compared with that of 2015; mining and quarrying output increased by 15.8%, and manufacturing output, by 1.8%, whereas the output of the energy sector decreased by 1.0%. The output of the chemical sector increased by 17.2%, and production of other nonmetal mineral products (such as cement, concrete, glass, and gypsum) decreased by 9.0% (National Bureau of Statistics of the Republic of Moldova, 2017, p. 4–19).

In 2016, Moldova's trade deficit decreased by 2.2% to \$1.98 billion; the value of exports increased by 4.0% to \$2.04 billion, and the value of imports increased by 0.8% to \$4.02 billion. Exports of domestically produced goods amounted to \$1.35 billion, or 66.0% of total exports, and the other 33.7% was attributable to the reexport of goods. The major export categories were foodstuffs, machinery, and textiles. Moldova exported \$1.33 billion worth of goods to the countries of the European Union (EU–28), which was a 9.4% increase compared with that of 2015. The share of all goods exports from Moldova to the EU–28 increased to 65.1% in 2016 from 61.9% in 2015. Imports of goods from the EU–28 increased by 1.0% to \$1.97 billion. The share of imports from the EU–28 increased slightly to 49.1% in 2016 from 49.0% in 2015 (National Bureau of Statistics of the Republic of Moldova, 2017, p. 48–63).

Production

In 2016, crude (raw) steel production decreased by 70% and rolled steel production decreased by 35%. Cement production increased by an estimated 4.0%. Production of other industrial minerals was estimated to have increased by between 3.1% and 7.4%, excluding production of lime, which decreased by 8.3%. 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 2016, OAO Moldovan metallurgical plant (MMZ), which was located in the Transnistria region, produced 127,500 metric tons (t) of crude (raw) steel and 210,800 t of rolled steel. The plant's annual capacity was 1.1 million metric tons per year, but the last time that this level of output was reached was in 2005 (OAO Moldavskiy Metallurgicheskiy Zavod, 2017).

In January 2015, Metalloinvest MC LLC of Russia, which was the majority owner of MMZ, returned its share in MMZ to the regional government of Transnistria. In previous years, the plant had been idle intermittently and produced crude and rolled steel at only a fraction of the plant's capacity. The plant had not turned profit since 2008, and as of the beginning of 2015, had accumulated losses of \$4 million. At the same time, MMZ employed 2,500 people, and the regional government stated that it had a social obligation to support the plant. In 2016, the plant continued to operate intermittently. In May, the local government provided the plant with loan guarantees to enable MMZ to pay off existing loans. It was not clear if MMZ could become profitable in the near future (Regnum.ru, 2015; Gov-pmr.org, 2016; Newsmaker.md, 2016b; Sputnik Moldova, 2016; Tsv.md, 2016).

Industrial Minerals

Cement.—The two leading 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 Transnistria region (table 2). Cement production in Moldova in 2016 was estimated to have increased by 4.0% (Allmoldova.com, 2016; Lafarge S.A. Moldova, 2017).

In April 2016, the Government of Moldova introduced temporary tariffs on imports of cement and some foods from Ukraine and simultaneously introduced quotas on imports of those goods to protect domestic producers. The measure was a response to an unexpected increase in imports from Ukraine,

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¹The data cited in this section do not include the Transnistria region and the Bendery municipality.

²Where necessary, values have been converted from Moldovan lei (MDL) to U.S. dollars (US\$) at an annual average exchange rate of MDL19.92=US\$1.00 for 2016.

which had a larger scale of production and lower production costs. According to some observers, in some months of 2015 and 2016, the share of Ukraine-produced cement in Moldova reached 30% of the market. The Government stated that the temporary import restriction would help domestic producers adjust to new economic conditions. The tariffs and quotas were in effect until January 1, 2017. At the end of 2016, the Government announced that trade restrictions with Ukraine would not be extended. Instead, the Governments of the two counties agreed to restart the Moldova-Ukraine commission on trade (Allmoldova.com, 2016; Sputnik Moldova, 2017).

Mineral Fuels

Natural Gas and Petroleum.—In June, the Government announced an international tender for an exploration license for natural gas and petroleum in the southern part of the country. The licenses were expected to be issued for a period of 5 years and, after 5 years, would be replaced with mining licenses. The exploration licenses would be allowed to be extended by an additional 5 years, and the total period of licensing of any area was not to exceed 50 years. The Government emphasized that the tender participants were to have certain qualifications, such as have international experience in exploration for petroleum and natural gas and in hydrocarbon resource estimation of at least 20 years, have access to advanced technologies and equipment, be experienced in risk management, and be able to demonstrate that it had invested at least \$50 million in exploration for natural gas and petroleum prior to making an application (Gagauzinfo.md, 2016; Gagauzmedia.md, 2016; Newsmaker.md, 2016a).

In September, the Government announced that Frontera Resources Corp. of the United States was the winner of the tender. In November, Frontera began the process of signing a concession agreement with the Government for hydrocarbon exploration in the Dobrogea region in the south of the country. Frontera stated that its project in the country would be an extension of the company's existing work in the Black Sea region and was looking forward to becoming a part of the local energy infrastructure in Moldova. The company expected to complete the licensing process by yearend 2016 (Neftegaz.ru, 2016; Newsmaker.md, 2016a).

Outlook

In 2016, Moldova's economy increased by 4.1%, but the Transnistrian economic output continued to decrease. The country is expected to continue importing natural gas from Russia in the coming years. At the same time, if Frontera Resources succeeds in discovering significant petroleum resources, Moldova could make decisive steps toward domestic energy production and energy independence. It remains to be seen if the country would be able to diversify its energy sources significantly in order to boost its economy. Regardless of the

future economic growth, Moldova is likely to remain a small producer of mineral commodities and to specialize in production of industrial minerals used in construction.

References Cited

- Allmoldova.com, 2016, Rynitskiy tsementnyi kombinat odobryayet namereniye Moldovy vvesti poshliny na tsement iz Ukrainy [Rybnitsa cement plant supports Moldova's intent to introduce tariffs on cement from Ukraine]: Allmoldova.com, March 29. (Accessed July 14, 2017, at http://www.allmoldova.com/ru/news/rybnitskii-tsiemientnyi-kombinat-odobriaiet-namierieniie-moldovy-vviesti-poshliny-na-tsiemient-iz-ukrainy.)
- Gagauzinfo.md, 2016, Moldova ishet investora dlya razvedki na yuge mestorozhdeniy nefti i gaza [Moldova is looking for an investor to explore for oil and gas]: Gagauzinfo.md, July 22. (Accessed July 14, 2017, at http://gagauzinfo.md/index.php?newsid=26931.)
- Gagauzmedia.md, 2016, Ob'yavlen konkurs na razvedku i dobychu nefti i gaza v Moldove [A tender for exploration for and production of oil and gas is announced in Moldova]: Gagauzmedia.md, August 9. (Accessed July 14, 2017, at https://old.gagauzmedia.md/index.php?newsid=8031)
- Gov-pmr.org, 2016, Deyatel'nost' Moldavskogo metallurgicheskogo zavoda polnost'yu otkryta [The activity of the Moldavian metallurgical plant is completely transparent]: Gov-pmr.org, October 18. (Accessed July 14, 2017, at http://gov-pmr.org/item/7836.)
- Lafarge S.A. Moldova, 2017, About us: Lafarge S.A. Moldova. (Accessed July 14, 2017, at http://www.lafarge.md.)
- National Bureau of Statistics of the Republic of Moldova, 2017, Quarterly statistical bulletin: National Bureau of Statistics of the Republic of Moldova, 96 p. (Accessed July 14, 2017, at http://www.statistica.md/public/files/publicatii_electronice/Buletin_trimestrial/Buletin_trim_I_2017.pdf.)
- Neftegaz.ru, 2016, Frontera Resources rasschityvaet do kontsa 2016 g podpisat' kontsessionnoye soglasheniye o razvedke uglevodorodov na yuge Moldovy [Frontera Resources expects to sign a license agreement on hydrocarbon exploration in southern Moldova]: Neftegaz.ru, November 25. (Accessed July 14, 2017, at http://neftegaz.ru/news/view/155681-Frontera-Resources-rasschityvaet-do-kontsa-2016-g-podpisat-kontsessionnoe-soglashenie-o-razvedke-uglevodorodov-na-yuge-Moldovy.)
- Newsmaker.md, 2016a, Moldavskiye gaz i neft' sdali v contsessiyu. Pravo razvedki poluchili amerikantsy [Moldovan gas and oil are licensed out. The Americans got exploration and production rights.]: Newsmaker.md, November 14. (Accessed July 14, 2017, at http://newsmaker.md/rus/novosti/moldavskie-gaz-i-neft-sdali-v-kontsessiyu-pravo-razvedki-i-dobychi-poluchili-ameri-28372.)
- Newsmaker.md, 2016b, Moldavskiy metallurgicheskiy zavod vozobnovil proizvodstvo [The Moldavian metallurgical plant restarted production]: Mewsmaker.md, May 5. (Accessed July 14, 2017, at http://newsmaker.md/rus/novosti/moldavskiy-metallurgicheskiy-zavod-vozobnovil-proizvodstvo-24713.)
- OAO Moldavskiy Metallurgicheskiy Zavod, 2017, Home page: OAO Moldavskiy Metallurgicheskiy Zavod. (Accessed July 14, 2017, at https://www.aommz.com/.)
- Regnum.ru, 2015, Pereshedshiy v sobstvennost' PMR Moldavskiy metallurgicheskiy zavod zapustil proizvodstvo [The Moldavian metallurgical plant became property of the PMR]: Regnum.ru, March 12. (Accessed July 14, 2017, at https://regnum.ru/news/1904267.html.)
- Sputnik Moldova, 2016, Moldavskiy Metallurgicheskiy Zavod vozobnovil proizvodstvo [The Moldavian metallurgical plant restarted production]: Sputnik Moldova, May 6. (Accessed July 14, 2017, at https://ru.sputnik.md/economics/20160506/6433266.html.)
- Sputnik Moldova, 2017, S 2017 goda Moldova otmenyayet ogranicheniya na torgovlyu s Ukrainoy [From 2017, Moldova cancels restrictions on trade with Ukraine]: Sputnik Moldova, January 1. (Accessed July 14, 2017, at https://ru.sputnik.md/economics/20170101/10600802/ucraina-torgovlea.html.)
- Tsv.md, 2016, Kakaya sud'ba ozhidayet Mollavskiy Metallurgicheskiy Zavod [What destiny awaits the Moldavian metallurgical plant?]: Tsv.md, November 21. (Accessed July 14, 2017, at https://tsv.md/kakaya-sudba-ozhidaet-moldavskij-metallurgicheskij-zavod/.)

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

(Metric tons, gross weight)

Commodity ²	2012	2013	2014	2015	2016
METALS					
Iron and steel:					
Raw steel	316,682	190,086	344,470	430,000	127,500
Products, rolled	356,754	184,676	391,228	324,000	210,800
INDUSTRIAL MINERALS					
Cement, hydraulic ^e	1,200,000	1,150,000	1,300,000	1,250,000 ^r	1,300,000
Clay, unspecified ³	150,000	165,000	170,000	160,000	170,000 e
Gypsum ³	115,100	120,000 e	125,000 °	120,000 °	120,000 e
Lime ^{e, 3}	12,000	12,500	12,500	12,000	11,000
Stone, sand, and gravel: ³					
Sand and gravel, construction, gravel	2,013,500	2,492,500	2,871,100	2,717,100 ^r	2,800,000 e
Silica, mine production, unspecified	1,373,100 ^r	1,521,800 ^r	1,660,000 ^r	1,599,900 ^r	1,700,000 e
Stone, crushed:					
Construction stone ⁴	441,800	648,200	674,100	638,400 ^r	670,000 ^e
Limestone	316,400	286,500	317,000	279,400 ^r	300,000 e

^eEstimated. ^rRevised.

 ${\it TABLE~2} \\ {\it MOLDOVA: STRUCTURE~OF~THE~MINERAL~INDUSTRY~IN~2016} \\$

(Metric tons unless otherwise specified)

		Major operating companies and		Annual
Commodity		major equity owners	Location of main facilities	capacity
Cement		Lafarge Ciment Moldova [LafargeHolcim Ltd.]	farge Ciment Moldova [LafargeHolcim Ltd.] Rezina	
Do.		ZAO Rybnitsa Cement Complex (RCK)	Rybnitsa, Transnistria region	1,100,000
		(private owners)		
Granite	thousand cubic meters	NA	Kosoutskoye deposit	150
Gypsum		CMC-Knauf joint venture	Kirovskoye deposit	300,000
Natural gas	thousand cubic meters	Valiexchimp	Victorovca gasfield	NA
Petroleum		do.	Valeni oilfield	NA
Sand and gravel	do.	NA	Throughout the country	NA
Steel, crude		OAO Moldovan metallurgical plant	Rybnitsa, Transnistria region	1,100,000
		(Government, 98.5%, and		
		former workers, 1.5%)		

Do., do. Ditto. NA Not available.

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¹Table includes data available through November 29, 2017. 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 in Moldova, but available information was inadequate to make reliable estimates of output.

³Does not include the Transnistria region.

⁴Does not include granite.