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The Mineral Industry of Belarus

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Belarus's mineral production enterprises included a potash mining company, three metallurgical steel plants, a nitrogen production enterprise, and two crude petroleum refineries. Belarus was the third-ranked country among the world's potash producers following Canada and Russia (Jasinski, 2018). The country's only mineral production enterprise that played a major role in world markets was its potash mining firm OAO Belaruskali. Belarus does not have significant resources of mineral fuels within its territory; however, its energy infrastructure includes an extensive network of oil pipelines and gas pipelines, which position the country as an important participant in the transportation of oil and natural gas to Europe from Russia.

In March 2016, Belarus adopted a new Government program for environmental protection and sustainable development of natural resources for 2016–20. A subprogram for the study of subsoil resources and development of minerals and raw materials included geologic research and exploration and had annual funding of 120 billion old (undenominated) rubles (about $6 million).[1] As the result of a similar program for 2011–15, resources of chalk during that period increased by about 6.8 million metric tons (Mt); dolomite, by about 531 Mt; marl for cement production, by about 755 billion metric tons (Gt); petroleum, by 4.2 Mt; potash, by about 324 Mt (in K_2O equivalent); rock salt, by about 513 Mt; and silica sand, by about 63 million cubic meters. In addition, a new deposit of basalt and tuff was discovered in Brestskaya Voblasts'. The level of future financing stated in the program, however, was not guaranteed by law and would depend on future Government budgets. Additionally, it was not clear how the environmental goals and the targets for mineral exploration and development would be reconciled (Aif.by, 2016; Belta.by, 2016a).

Minerals in the National Economy

In 2016, the country's real gross domestic product (GDP) decreased by 2.6% compared with that of 2015, and the nominal GDP amounted to $47.4 billion. The industrial production of Belarus contributed 24.9% to the country's GDP; the mineral sector accounted for 1.2% of industrial production. Total industrial production in constant prices decreased by 0.4% compared with that of 2015. In 2016, mineral industry output decreased by 0.8% compared with that of 2015; the combined output of metallurgical production and products made of metal increased by 0.1%; and production of coke and refinery products decreased by 17.0% (National Statistical Committee of the Republic of Belarus, 2017, p. 271–302).

The total value of foreign direct investment (FDI) in Belarus's economy in 2016 was $6.9 billion, which was a 4.3% decrease compared with the FDI in 2015. The mineral sector received only 2.3% of the total foreign investment. Russia provided 51.5% of the total FDI and was the main source of foreign investment in 2016 (National Statistical Committee of the Republic of Belarus, 2017, p. 423–438).

In 2016, Belarus exported $23.5 billion worth of goods, which was an 11.7% decrease compared with the total export revenue in 2015. Belarus also imported $27.6 billion worth of goods, which was an 8.9% decrease compared with the value of imports in 2015. In 2016, Belarus exported 13.0 Mt of refined petroleum products, 5.7 Mt of potash (in K_2O equivalent), 363,000 metric tons (t) of nitric fertilizers, 818,700 t of hot-rolled steel rods, and 85,600 t of steel cord. The major export partner of Belarus was Russia, which received 46.5% of all Belarusian exports, by value, followed by Ukraine (12.1%), the United Kingdom (4.6%), Germany (4.0%), the Netherlands (3.9%), Poland (3.5%), and Lithuania (3.3%). The main import categories were (in order of decreasing value) mineral products (including petroleum and natural gas), equipment and machinery, chemicals, agricultural products and food, and metals. The major import partner of Belarus was Russia, which supplied 55.4% of the imported goods, by value; other significant import partners were China (7.7%), Germany (4.8%), Poland (4.3%), and Ukraine (3.6%) (National Statistical Committee of the Republic of Belarus, 2017, p. 465–482).

Production

In 2016, Belarus sharply increased its gypsum production by 47% to 63,000 t; peat production for fuel use increased by 34% to about 1.36 Mt; and production of salt increased by almost 21% to about 2.48 Mt. At the same time, peat production for horticultural use decreased by 33% to about 165,000 t; the output of lime decreased by 24% to 474,000 t; production of dolomite decreased by about 21% to about 2.11 Mt; and output of petroleum refinery products decreased by 19% to about 148.8 million barrels. Among steel products, output of rolled steel decreased by 14.5% to about 2.05 Mt; raw steel, by 12% to 2.27 Mt; and steel pipe, by 9.6% to 191,800 t. These and other production data are in table 1.

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Commodity Review

Metals

Iron and Steel.—The OAO Byelorussian Steel Works (BMZ) was the predominant producer of iron and steel in Belarus. In 2016, BMZ produced 2.2 Mt of raw steel, about 2.1 Mt

[1]Where necessary, values have been converted from Belarusian rubles (BYR) to U.S. dollars (US$) at an annual average exchange rate of BYR19,885=US$1.00 for 2016 and euro area euros (EUR) at EUR0.94=US$1.00 for 2016. In July 2016, Belarus devalued its currency and, as a result 10,000 old Belarusian rubles became 1 new Belarusian ruble, which is abbreviated as BYN.

of rolled steel, 90,200 t of steel cord, and 83,300 t of steel pipe. Compared with that of 2015, the company's production of raw steel and steel pipe decreased, that of steel cord increased slightly, and rolled steel output remained practically unchanged. According to RIA Reiting, Belarus was among the top 10 countries in the world by export orientation of its steel industry (measured as a percentage of steel output that is exported) (Vesnin, 2016; OAO Byelorussian Steel Works, 2018).

On December 20, 2016, the European Commission (EC) announced that it would set a provisional 12.5% import tariff on steel rebar products, including reinforcement rod and bar, produced at BMZ or by any other producers in Belarus. [The initial investigation of Belarusian rebar product exports to the EU started in March 2016 following a complaint by the European Steel Association. The EC found that imports of rebar from Belarus almost tripled between 2012 and 2015 and reached 5% of the EU market and that prices fell by about 25%. According to the EC, imports of rebar from Belarus were worth about 180 million euros (about $191 million). During the same period, rebar production in the EU decreased by 25%. The EC was to make a decision about a definitive antidumping tariff on Belarusian rebar, which would be in effect for 5 years, by no later than June 20, 2017 (Belapan.com, 2016; Kornyushko and Zayats, 2016; Thomson Reuters, 2016).

A new metallurgical plant, which would be called Myory Steel, was under construction in Vitebskaya Voblasts' in 2016. The two major investors in the project were MMPZ GmbH of Austria and SMS Group of Germany. The plant would produce rolled steel and tinplate, and its design capacity was projected to be 240,000 metric tons per year (t/yr) of tinplate. Tinplate is used as a packaging material for food products, sprays, and paints. The domestic demand for tinplate in Belarus was estimated to be about 30,000 t/yr, and the remainder of Myory's output was planned to be exported. It was expected that the Myory plant would produce different products than the BMZ plant, and the two plants would not directly compete with each other. The total investment in the Myory plant would be 200 million euros (about $213 million), most of which would come as loans from banks in Germany and Russia. As of February 2016, investment amounted to 5.7 million euros (about $6.06 million) and 1.7 billion Belarusian rubles (about $89,000). The plant was expected to be commissioned in 2020 and to create 500 jobs (Yaroshevich, 2016; Veresk, 2017).

Industrial Minerals

Potash.—OAO Belaruskali (Belaruskali) was one of the world's leading producers of potash fertilizers, and, historically, potash was the leading export product from Belarus. The company was mining the Starobin potash deposit, which contains magnesium salt, rock salt, and sylvinite. In 2016, Belaruskali decreased production by 4.5% to about 6.18 Mt of potash (in K_2O equivalent). As of 2016, Belaruskali had total capacity of 12.6 million metric tons per year (Mt/yr) of potassium chloride (about 7.7 Mt/yr in K_2O equivalent) and became the world's leading potash company based on usable production capacity (Kuletski, 2017; OAO Belaruskali, 2018).

In 2016, Belaruskali continued with construction of the Petrikovskiy mining and beneficiation complex (GOK), which was the company's largest single investment project in its history. In particular, in March, Belaruskali began building infrastructure for the new mine, including an underground transportation network, rail transportation, and above-ground buildings. Construction of the two major shafts of the mine began in May and August 2016, respectively. Belaruskali planned to finance construction of the Petrikovskiy GOK with its own funds. According to the project plans, the first stage of the GOK would be completed in December 2019 and would reach full capacity by December 2021. The initial projected capacity of the Petrikovskiy GOK would be 1.5 Mt/yr of potassium chloride; by 2025, the GOK would increase its capacity to 3.0 Mt/yr of potassium chloride. The Petrikovskiy GOK was to be built on a new potash deposit located southeast of the Starobin deposit in Minskaya Voblasts'. The resources of the deposit were estimated to be 2,200 Mt of potash; the life of the mine was projected to be 90 years. When completed, the new mine was expected to provide a total of 2,500 jobs (Belta.by, 2016b; Ont.by, 2016).

In July 2016, Slavkali of Russia began drilling and additional exploration work for the Nezhinskiy GOK, a new potash GOK in the Lyubanskiy region of Minskaya Voblasts' that would use an undeveloped part of the Starobin potash deposit. Slavkali's portion of the Starobin deposit had identified resources of 3 Gt of mineralized material, and the design capacity of the GOK was 2 Mt/yr of potassium chloride. The total cost of the project was expected to be about $2 billion. The original investment agreement between Slavkali and the Government of Belarus was signed in 2011. In addition to the investment in the Nezhinskiy GOK, Slavkali promised to invest at least $250 million in infrastructure projects in Belarus. For the Nezhinskiy GOK, the company planned to invest about $600 million of its own funds. In June 2016, Slavkali obtained a credit line of $1.4 billion from the China Development Bank. Simultaneously, Slavkali signed a 25-year agreement to export the entire output of the Nezhinskiy GOK to China. Belarusian Potash Co. (BKK), which exported potash produced at Belaruskali, expressed its readiness to cooperate with Slavkali and to continue developing markets for potash throughout the world. The Nezhinskiy GOK was expected to be commissioned in 2020 and to provide about 2,000 jobs (Ont.by, 2015; Sputnik.by, 2016; Levinsky and Abakumova, 2017).

Outlook

Belarus is expected to continue to be a major supplier of potash to world markets. Potash production is expected to increase, especially after the Petrikovskiy and the Nezhinskiy GOKs come online. The future of Belarus's mineral sector, in line with the economy in general, is likely to depend on political relations with Russia and on the country's ability to develop and maintain a reliable business network all over the world.

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TABLE 1

BELARUS: PRODUCTION OF MINERAL COMMODITIES[1]

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

Commodity		2012	2013	2014	2015	2016
METALS						
Iron and steel:						
Raw steel		2,869	2,395	2,598 [r]	2,577 [r]	2,266
Products:						
Cord	metric tons	87,900	71,800	80,700	88,000	90,200
Pipe	do.	245,700	242,500	224,800	212,200 [r]	191,800
Rolled		2,599	2,159	2,376	2,392	2,047
INDUSTRIAL MINERALS						
Cement, hydraulic		4,906	5,057	5,617	4,638	4,503
Diamond, industrial, synthetic	carats	25,000,000 [e]	25,000,000 [e]	25,000,000 [e]	--	--
Gypsum		69	71	64	43	63
Lime		747	748	769	626	474
Nitrogen, ammonia, N content	metric tons	949,600	967,400	1,019,200	1,060,400	1,039,700
Potash, K_2O content		4,840	4,243	6,340 [r]	6,468	6,180
Salt[2]	metric tons	2,176,600	2,625,300	1,820,500 [r]	2,054,300	2,476,500
Stone, crushed, dolomite		NA	2,954 [r]	3,149	2,657	2,112
Sulfur compounds, sulfuric acid		777	710	699	699	700
MINERAL FUELS AND RELATED MATERIALS						
Natural gas	million cubic meters	218	228	222	225	215
Peat:						
Fuel use		2,679	2,269	1,433 [r]	1,015	1,362
Horticultural use		267	164	215 [r]	245	165
Petroleum:						
Crude[3]	thousand 42-gallon barrels	12,200	12,100	12,100	12,100	12,100
Refinery production[4]	do.	173,300	169,200	178,300	184,000	148,800

[e]Estimated. [r]Revised. do. Ditto. NA Not available. -- Zero.

[1]Table includes data available through January 8, 2018. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

[2]Includes byproduct salt from potash production.

[3]Production reported in thousand metric tons as follows: 2012—1,682; 2013—1,660; 2014—1,645; 2015—1,645; 2016—1,645.

[4]Production reported in thousand metric tons as follows: 2012—21,668; 2013—21,156; 2014—22,290; 2015—23,003; 2016—18,596.

TABLE 2
BELARUS: STRUCTURE OF THE MINERAL INDUSTRY IN 2016

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity[e]
Cement	OAO Krasnoselskstroymaterialy	Hrodzyenskaya Voblasts'	2,700,000
Do.	OAO Krichevtsementnoshifer	Mahylyowskaya Voblasts'	1,800,000
Do.	OAO Belarusian Cement Plant (BCZ)	do.	2,900,000
Diamond, synthetic	Gomel Production Association Kristall	Homyel'skaya Voblasts'	NA
Nitrogen	OAO Grodno Azot [Belneftekhim (Government)]	Hrodzyenskaya Voblasts'	950,000 [1]
Peat, fuel use	Production at 31 enterprises that produce mainly briquets	All regions of the country	2,000,000 [2]
Petroleum:			
Crude thousand 42-gallon barrels	NGDU Rechitsaneft [Belneftekhim (Government)]	Rechitskoye, Ostashkovichskoye, Vishanskoye, Tishkovskoye, and Yuzhno-Ostashkovichskoye deposits, southeastern part of the country	12,200
Refined	OAO Mozyr NPZ (Government, 42.76%; MNPZ Plyus, 12.25%; Slavneft, 42.58%)	Homyel'skaya Voblasts'	10,500,000 [3]
Do.	OAO Naftan (Novopolotsk NPZ)	Vitsyebskaya Voblasts'	12,500,000 [3]
Potash, K_2O equivalent	OAO Belaruskali (Government)	Starobin deposit, Minskaya Voblasts'	7,700,000
Steel:			
Raw	OAO Byelorussian Steel Works (BMZ) [Belarusian Metallurgical Co. Holding (Government), 100%]	Zhlobin, Homyel'skaya Voblasts'	2,700,000
Pipe	do.	do.	200,000
Rolled	do.	do.	2,300,000
Do.	OAO Mogilev Metallurgical Works [OAO Byelorussian Steel Works (BMZ)]	Mahylyowskaya Voblasts'	120,000
Do.	OJSC Rechitsa Metizny Plant [Belarusian Metallurgical Co. Holding (Government), 100%]	Homyel'skaya Voblasts'	NA

[e]Estimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto. NA Not available.
[1]N content of ammonia.
[2]Total peat for fuel use.
[3]Crude throughput.