



2014 Minerals Yearbook

LITHUANIA

THE MINERAL INDUSTRY OF LITHUANIA

By Lin Shi

In 2014, the nominal gross domestic product (GDP) of Lithuania was valued at about \$48.2 billion. The country's real GDP increased by 2.9% in 2014 compared with that of 2013. The share of mining and quarrying in the GDP was about 21% in 2014. The gross value added from mining and quarrying production increased by 1.1% compared with that of 2013, whereas the gross value added from industrial production increased by 2.3%. The country's inflation rate was about 0.3% compared with 1% (revised) in 2013, and the unemployment rate was 11.1% compared with 11.8% (revised) in 2013. The country's mining sector employed about 4,000 people compared with about 3,700 (revised) people in 2013. Lithuania was a member of the European Union (EU), the North Atlantic Treaty Organization (NATO), and the World Trade Organization (WTO). The country was a significant trading partner with Central and Eastern European countries, especially Russia. In January 2014, Lithuania assumed a nonpermanent seat on the United Nations Security Council for the 2014–15 term. The Government expected to meet the criteria set forth in the Treaty of Maastricht to join the euro area by 2015 (Statistics Lithuania, 2015; U.S. Central Intelligence Agency, 2015).

Production

In 2014, Lithuania produced approximately 7.5 million metric tons (Mt) of refined petroleum products, approximately 7.2 Mt of sand and gravel, approximately 1.4 Mt of limestone, approximately 0.9 Mt of cement, approximately 0.8 Mt of ammonia, and approximately 0.5 Mt of peat. Data on mineral production are in table 1.

Structure of the Mineral Industry

AB Akmenes Cementas was the only cement producer in Lithuania. The company was privatized in 1997, and since then had been majority owned by domestic investors. Akmenes had the capacity to produce about 1.5 million metric tons per year (Mt/yr) of cement at its Naujoji Akmene plant. Orlen Lietuva, which was a subsidiary of PKN Orlen S.A. Group of Poland, owned and operated the Mazeikiai oil refinery and oil processing plant in Lithuania. The Mazeikiai refinery had a design capacity of 15 Mt/yr of crude oil and was the only refinery in the Baltic States. It was located near the town of Mazeikiai, which is about 90 kilometers west of the petroleum terminals at Butinge, Klaipeda, and Ventspils. Mazeikiai's crude oil was supplied by the Butinge oil terminal, and most of its production was exported to other European countries (Matuliauskas, 2014; AB Akmenes Cementas, 2015a; Mazeikiai District Municipality, 2015).

Mineral Trade

In 2014, Lithuania's total exports, including mineral fuels, were valued at about \$32 billion, and total imports, including metals, crude oil, and natural gas, were valued at about \$35 billion. The country's major export destinations were Russia, which accounted for about 20% of the total value of exports; Latvia, about 10%; Estonia and Poland, about 8% each; Germany, about 7%; and Belarus and the United Kingdom, about 5% each. The country's imports came mainly from Russia, which accounted for about 29% of the total value of imports; Germany and Poland, about 10% each; Latvia, about 6%; and the Netherlands, about 5%. In 2014, Lithuania's total exports to the United States were valued at about \$1.09 billion compared with \$1.55 billion in 2013 and included petroleum products valued at about \$0.7 billion; fuel oil, about \$37 million; coal and related fuels, about \$2 million; iron and steel products, about \$208,000; and aluminum and bauxite, about \$80,000. Lithuania's total imports from the United States were valued at about \$681 million compared with \$854 million (revised) in 2013 and included fuel oil valued at about \$26 million; aluminum or alumina, about \$454,000; petroleum products, about \$293,000; nonferrous metals, about \$292,000; nonmetallic minerals, \$197,000; iron and steel mill products, about \$138,000; nonmonetary gold, about \$14,000; and copper, about \$13,000 (U.S. Census Bureau, 2015a, b; U.S. Central Intelligence Agency, 2015).

Commodity Review

Industrial Minerals

Cement.—In 2014, Akmenes Cementas produced about 0.9 Mt of cement compared with about 1.07 Mt in 2013, and exported about 0.4 Mt of cement compared with about 0.6 Mt in 2013. Akmenes Cementas' cement production for domestic consumption was about 0.54 Mt compared with about 0.47 Mt in 2013. Akmenes Cementas also sold cement dust, which was used to produce silicate bricks and mineral wool. In 2014, Akmenes Cementas replaced the wet-process production line with a new dry-process clinker (or cement) production line. Because the dry cement production process has a much lower energy requirement than the wet cement production process, the new cement production line would enable Akmenes Cementas to reduce its fuel consumption and its carbon-dioxide emissions during the cement-manufacturing process. This new production line was the biggest production modernization project in the company's history. Akmenes Cementas' cement-testing laboratory was able to conduct chemical, mechanical, and physical testing on the cement production process and provide services regarding the measurement of parameters, such as the calorific capacities of elemental carbon and solid fuels

(AB Akmenes Cementas, 2013; 2015a, b; Matuliauskas, 2014; Mazeikiai District Municipality, 2015).

Nitrogen.—AB Achema was a leading producer of nitrogen fertilizers and chemical products in Lithuania. The company employed more than 1,400 people and had the capacity to produce about 2.7 Mt/yr of fertilizer. In 2014, Lithuania produced about 0.8 Mt of ammonia (AB Achema, 2015).

Mineral Fuels

Petroleum.—AB Orlen Lietuva's products included bitumen, diesel fuels, fuel oil, jet fuel, liquefied petroleum gas, and unleaded gasolines. As the demand for conventional oil products significantly decreased during the past few years, Orlen Lietuva was under pressure by the market to lower its oil production margins and decrease its oil product exports. In 2014, the company was affected by the rapidly declining prices of crude and refined products in the last quarter of the year, which negatively affected the value of the company's inventories. Orlen Lietuva planned to improve its operational efficiency by directing its petroleum exports to focus mainly on the Ukrainian market (Matuliauskas, 2014; AB Orlen Lietuva, 2015a, p. 39–40, p. 58; 2015b; 2015c).

Outlook

Production of cement and refined petroleum products and exports are expected to increase in 2015 as the country's dominant producers strive to invest in modernization projects. Akmenes Cementas is expected to increase its use of alternative fuels in its cement production process and to increase waste burning to reduce the amount of fossil fuels used in its production process by 50% in 2015 (AB Akmenes Cementas, 2015a).

References Cited

- AB Achema, 2015, About AB "ACHEMA": AB Achema. (Accessed May 6, 2016, at <http://www.achema.com/>.)
- AB Akmenes Cementas, 2013, News—Constructions of new dry process clinker production line is finished: AB Akmenes Cementas, October 17. (Accessed July 31, 2015, at <http://www.cementas.lt/index.php?id=300>.)
- AB Akmenes Cementas, 2015a, About us: AB Akmenes Cementas. (Accessed July 31, 2015, at <http://www.cementas.lt/en/apie-mus>.)
- AB Akmenes Cementas, 2015b, Production: AB Akmenes Cementas. (Accessed July 31, 2015, at <http://www.cementas.lt/en/produkcija>.)
- AB Orlen Lietuva, 2015a, Annual report 2014—Consolidated financial statements: AB Orlen Lietuva, 96 p. (Accessed July 31, 2015, at http://www.orlenlietuva.lt/EN/Company/Reports/Documents/ORLEN%20Lietuva%20CIFRS%20EN%202014%20_FINAL.pdf.)
- AB Orlen Lietuva, 2015b, News—Revaluation of inventories affected results of Orlen Lietuva: AB Orlen Lietuva. January 23. (Accessed July 31, 2015, at <http://www.orlenlietuva.lt/EN/PressCenter/News/Pages/Revaluation-of-inventories-affected-results-of-ORLEN-Lietuva.aspx?pageNumber=1>.)
- AB Orlen Lietuva, 2015c, Products: AB Orlen Lietuva. (Accessed July 31, 2015, at <http://www.orlenlietuva.lt/EN/ForBusiness/Products/Pages/default.aspx>.)
- Matuliauskas, Andrius, 2014, Orlen Lietuva—Till death do us part: DELFI by the Lithuania Tribune, August 13. (Accessed July 31, 2015, at <http://en.delfi.lt/lithuania/energy/orlen-lietuva-till-death-do-us-part.d?id=65543324>.)
- Mazeikiai District Municipality, 2015, Mazeikiai District: Mazeikiai District municipality. (Accessed July 31, 2015, at <http://www.mazeikiai.lt/go.php/lit/English>.)
- Statistics Lithuania, 2015, Gross domestic product by production, by expenditure, by income approach, 2004–2015: Statistics Lithuania. (Accessed July 31, 2015, at <http://osp.stat.gov.lt/en/temines-lenteles39>.)
- U.S. Census Bureau, 2015a, U.S. exports to Lithuania from 2005 to 2014 by 5-digit end use code: U.S. Census Bureau. (Accessed July 31, 2015, at <http://www.census.gov/foreign-trade/statistics/product/enduse/exports/c4510.html#questions>.)
- U.S. Census Bureau, 2015b, U.S. imports to Lithuania from 2005 to 2014 by 5-digit end use code: U.S. Census Bureau. (Accessed July 31, 2015, at <http://www.census.gov/foreign-trade/statistics/product/enduse/imports/c4510.html#questions>.)
- U.S. Central Intelligence Agency, 2015, Lithuania, *in* The world factbook: U.S. Central Intelligence Agency. (Accessed July 28, 2015, at <https://www.cia.gov/library/publications/the-world-factbook/geos/lh.html>.)
- World Bank, The, 2015, Data—Lithuania GDP growth (annual %): The World Bank. (Accessed July 28, 2015, at <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries/LT?display=graph>.)

TABLE 1
LITHUANIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons)

Commodity	2010	2011	2012	2013	2014
INDUSTRIAL MINERALS					
Cement	834,000	996,300	1,014,977	1,069,593	902,733
Clays	250,000	282,400	300,075	318,733	294,386
Dolomite, crushed	2,293,400	3,312,300	2,284,900	2,687,400	2,633,800
Granite, crushed	307,100 ^r	374,100 ^r	295,800 ^r	457,500 ^r	487,400
Limestone	928,000	1,179,000	1,354,004	1,465,455	1,368,423
Nitrogen, N content of ammonia	434,100	869,500	918,406	693,195	815,394
Peat:					
Agricultural use	326,800	384,700	325,902	432,602	417,638
Fuel use	15,000 ^e	15,000 ^e	60,254	84,060	100,640
Sand and gravel:					
Construction sand	3,104,000	3,405,000 ^r	2,893,087	4,211,405	4,083,783
Gravel, pebbles, shingle, and flint	2,551,000	2,372,000	2,188,079	2,719,511	3,080,300
Silica sand, industrial	67,300	53,400	53,909	57,007	53,924
Sulfur	73,500	76,700	73,040	81,449	76,595
MINERAL FUELS AND RELATED MATERIALS					
Petroleum:					
Crude	114,500	113,900	101,644	86,054	80,862
Refinery products	8,579,400	8,796,600	8,458,568	8,961,551	7,463,152

^eEstimated; estimated data are rounded to no more than three significant digits. ^rRevised.

¹Table includes data available through July 23, 2015.

TABLE 2
LITHUANIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2014

(Thousand metric tons)

Commodity	Major operating companies and major equity owners	Location of main facility	Annual capacity
Cement	AB Akmenes Cementas (CEMEX S.A.B. de C.V., 33.95%)	Plant in Naujoji Akmene	1,500
Nitrogen, N content of ammonia	AB Achema	Jonava	2,700
Petroleum, refined	AB Orlen Lietuva (PKN Orlen S.A. Group)	Plant in Mazeikiai	15,000