



2013 Minerals Yearbook

SRI LANKA [ADVANCE RELEASE]

THE MINERAL INDUSTRY OF SRI LANKA

By Karine M. Renaud

Sri Lanka hosts a variety of mineral resources, such as clays (including ball clay and kaolin), dolomite, feldspar, graphite, limestone, mica, mineral sands (including ilmenite, rutile, and zirconium), phosphate rock, quartzite, and salt. Sri Lanka is known for its unique type of graphite, which is called vein graphite. The mineral-processing industry produced cement, lead (secondary), iron and steel, and semimanufactures.

Minerals in the National Economy

In 2013, the real gross domestic product (GDP) increased by 7.3% compared with an increase of 6.3% in 2012 owing to increases in exports of goods and in tourism. In 2013, the industrial sector grew by 9.9% compared with growth of 10.3% in 2012, and the value of the sector's output accounted for 32% of the GDP. Within the industrial sector, the value of mining and quarrying increased by 11.5% compared with an increase of 18.9% in 2012 and accounted for 2.9% of the GDP. In 2013, 1.2% of the country's population was employed in the mining and quarrying subsector compared with 1.1% in 2012. Foreign direct investment (FDI) into the manufacturing sector, including the manufacturing of textiles, wearing apparel, and leather products; chemical, coal, and petroleum; industrial mineral products; and rubber products, accounted for more than 25% of the total FDI of \$1.4 billion (Ministry of Finance and Planning, 2013, p. 134–135; Asian Development Bank, 2014, p. 187; Central Bank of Sri Lanka, 2014a, p. 50, 145; 2014c, p. 1, 41, 44, 47).

Mineral Trade

The total value of exports and imports in 2013 was \$28.4 billion, of which exports totaled \$10.4 billion compared with \$9.8 billion in 2012, and imports totaled \$18 billion compared with \$19.2 billion in 2012. The total value of imports decreased by 6.3% compared with that of 2012, and the value of exports increased by 6.1% compared with that of 2012. In 2013, mineral exports were valued at about \$52 million, which accounted for 0.5% of total exports, and petroleum products exports were valued at about \$428 million, which accounted for 4% of total exports. The mineral commodities exported were ilmenite [15,806 metric tons (t)], graphite (3,083 t), gemstones [2,879 kilograms (kg)], and rutile (1,040 t). The main export partners were the United States (which received 24% of Sri Lanka's exports), the United Kingdom (10.4%), India (5.2%), Italy (4.9%), Germany (4.5%), Belgium and Luxembourg (4.3% combined), Russia (2.7%), the United Arab Emirates (UAE) (2.3%), Japan (2.2%), and France (1.9%) (Central Bank of Sri Lanka, 2014a, p. 11; 2014b, p. 57, 82; 2014c, p. 76, 78).

Sri Lanka's imports included crude oil (12.8 billion barrels), cement [4.1 million metric tons (Mt)], and fertilizer (600,000 t). Owing to international price fluctuations during 2013, the average price of crude oil imported by Ceylon Petroleum

Corp. (CPC) decreased by 3.6% to \$109.84 per barrel in 2013 from \$114.00 per barrel in 2012. The country's main import partners were India (which supplied 17.6% of Sri Lanka's imports), China (16.4%), Singapore (9.3%), the UAE (6.6%), Oman (4.3%), Japan (3.7%), Malaysia (3.2%), and Indonesia, Thailand, and Taiwan (less than 1% each) (Central Bank of Sri Lanka, 2014a, p. 80; 2014b, p. 57–58, 83; 2014c, p. 79).

Government Policies and Programs

In 2013, the Ministry of State Resources and Enterprise Development was tasked with improving the profitability of nonprofitable and low profitability state-owned enterprises, such as Lanka Mineral Sands Co. Ltd., Lanka Phosphate Co. Ltd., and Sri Lanka Cement Corp. (SLCC) and its subsidiary Lanka Cement Plc. In 2013, Lanka Mineral Sands Co. and Lanka Phosphate Co. had low profit margins, and Sri Lanka Cement and Lanka Cement Co. ran at a loss. Improvements and expansions by Lanka Mineral Sands Co. included the installation of new technologies for processing mineral sands at the Pulmoddai factory and the startup of a new factory in Yan Oya. Improvements and expansions by Lanka Phosphate Co. included the installation of a new machine for grinding phosphate rock and the construction of a triple superphosphate plant (Ministry of State Resources and Enterprise Development, 2013, p. 17, 19–20).

In June, Sri Lanka's Cabinet of Ministers developed a plan to ban new foreign investment in steelmaking and cement manufacturing, retail trade, and small-scale agriculture to protect domestic investors. The ban did not affect existing investors in these sectors. The Government continued to seek foreign investment in mining, other types of mineral processing, petroleum product refining, shipbuilding, and vehicle manufacturing, however (Lanka Business Online, 2013).

Structure of the Mineral Industry

The Government offered tax incentives and fewer regulations to encourage investors, particularly Chinese investors, to invest in upgrading Sri Lanka's mining and mineral-processing sectors and develop its infrastructure and powerplants. The Government was targeting foreign investment in the domestic downstream graphite industry (that is, value-added products); current investment, mainly from China, was focused on minerals other than graphite. A downstream processing industry would increase tax revenues and jobs and stimulate infrastructure development (Salwan, 2013, p. 11; Syrett and Ollett, 2013, p. 19; Wallop, 2013).

Production

In 2013, production of lead (secondary) increased by 81%; kaolin, by 18%; cement, by 25% (estimated); graphite, by

3% (estimated); and phosphate rock, by 2% (estimated). The production of zirconium decreased by 14% (estimated); rutile, by 12%; and ilmenite, by 4.1%. Data on mineral production are in table 1.

Commodity Review

Metals

Lead.—Navam Lanka Ltd., which was the country's leading lead producer, was 52% owned by Gravita India Ltd. through its subsidiaries Gravita Exim Ltd. of India (40%) and Gravita Netherlands B.V. (12%). In 2013, Navam Lanka produced 3,800 t of secondary lead ingots compared with 2,100 t in 2012 (Gravita India Ltd., 2013, p. 23).

Industrial Minerals

Cement.—In 2013, Holcim (Lanka) Ltd., SLCC, and Tokyo Cement Co. (Lanka) Plc. produced cement in Sri Lanka. Cement production increased by 25% to 3.0 Mt in 2013 from 2.4 Mt in 2012. In 2013, the three cement companies planned to construct new cement plants, increase the capacities of existing plants, and reopen previously closed cement plants.

In 2013, Tokyo Cement Co. planned to build a cement plant with a production capacity of 1 million metric tons per year (Mt/yr) at Trincomalee in Eastern Province at an estimated construction cost of \$50 million. The cement plant would be called Tokyo Eastern Cement. The project was to include construction of a 100-megawatt-capacity biomass-burning powerplant (Global Cement, 2013a).

Thatta Cement Co. Ltd. of Pakistan signed a 25-year agreement with the Sri Lanka Ports Authority to set up a cement grinding and bagging plant at the Port of Hambantota. The total investment was \$15 million, and the plant's capacity was expected to be 0.1 Mt/yr in the first year and later to increase to 0.3 Mt/yr. An additional expansion planned for later was expected to increase the capacity to 1 Mt/yr (Global Cement, 2013c).

SLCC submitted a proposal to the Ministry of State Resources and Enterprise Development to restart cement production at the Kankesan cement plant in Kankesanthurai, Northern Province. SLCC planned to invest \$11.4 million into renovating the entire 0.2-Mt/yr-capacity plant if the Government selects SLCC as the main cement supplier for the Northern Highway construction project. The Kankesan plant had not been in operation since 1990 because of the security situation in the northern part of the country (Global Cement, 2013a; Ministry of State Resources and Enterprise Development, 2013, p. 24).

Graphite.—Sri Lanka is known for its highly valued and high-purity vein graphite. In 2013, graphite was produced by Kahatagaha Graphite Lanka Ltd. and Bogala Graphite Lanka Plc. In 2013, the Kahatagaha Mine produced 1,018 t of graphite, which was an increase of 129 t compared with output in 2012. In 2013, such companies as Bora Bora Resources Ltd. (BBR) of Australia, MRL Corp. Ltd. (formerly Mongolian Resources Ltd. and Robe Australia Ltd.) of Australia, and Saint Jean Carbon Inc. (formerly Torch River Resources Ltd.)

of Canada entered into agreements to explore for and develop graphite deposits in Sri Lanka (Ministry of Industry and Commerce, 2013, p. 2).

Bogala Graphite, which was a subsidiary of AMG Mining AG (89.68%), received approval to explore for graphite deposits in Kaluthara [56 square kilometers (km²), including Matugama] and Kegalle (33 km², including Galigamuwa, Kohombagahawatte, and Rangala) for a total area of 89 km². In 2013, Bogala Graphite faced an electricity rate increase of 30% in April and a royalty rate increase of 2% in November (Bogala Graphite Lanka Plc., 2013, p. 6; ColomboPage, 2013).

In 2013, Saint Jean Carbon entered into an agreement with Han Tal Graphite (Pvt.) Ltd. for the acquisition of 113 lump-vein graphite mining claims that contained 56 historical mines and exploration and development licenses for a 113-km² area in southwestern Sri Lanka. The mines were to be reactivated within 12 to 24 months, pending the results of a resource estimate and economic feasibility study (Market Wired, 2013a, b).

In April, BBR acquired a 75% interest in tenements of the Matale vein graphite project near Kandy; the remaining 25% of the tenement holdings was held by Sri Lanka's Esna Holdings (Pvt) Ltd. In addition to the Matale project, BBR acquired 100% of Plumbago Mining (Pty.) Ltd.; Plumbago Mining held a 75% interest in Plumbago Lanka (Pvt.) Ltd., which owned a 24-km²-area tenement located 45 kilometers (km) southwest and 32 km north-northwest of Kandy in the Wannu Complex, as well as two other areas in the complex. The Matale project covers 114 km² of tenements and applications and surrounds an area that includes three state-owned Kahatagaha-Kolongaha graphite mines. BBR also has three projects in southern Sri Lanka—the Ambalangoda, the Baduralia, and the Neluwa projects (Asia Miner, 2013; Bora Bora Resources Ltd., 2012, p. 7; 2014).

In October, MRL reached agreement through its subsidiary MRL Investment (Pvt.) Ltd. with Supreme Solutions (Pvt.) Ltd. for the acquisition of all the holdings of MRL Graphite (Pvt.) Ltd. MRL Graphite held 45 exploration licenses for a high-potential graphite project that covers an area of 45 km². The projects were located in the Hikkaduwa, the Palinda Nuwara, and the Warakapola areas (Mongolian Resources Ltd., 2013a, p. 4; 2013b, p. 5; MRL Corporation Ltd., 2013).

Mineral Sands.—Iluka Resources Ltd. of Australia reached agreement to acquire PKD Resources (Pvt.) Ltd. and four associated mineral sand tenements and to explore mineral sand deposits in Sri Lanka. The total resources were estimated to be 689 Mt (214 Mt of measured, 70 Mt of indicated, and 405 Mt of inferred resources) at an average grade of 8.2% heavy minerals for 56 Mt of heavy minerals. In the concentrate, ilmenite, which is the dominant mineral, grades up to 67%, and rutile and zircon grade up to 4%. Current regulations require limiting the percentage that a foreign company can hold to 40%, although approval for up to 100% may be granted. Ilmenite contained in the deposits was suitable as a feedstock for sulfate-route titanium dioxide pigment production. The company also developed acid-soluble synthetic rutile, which could be sold as a high-grade feedstock for the sulfate pigment sector (Iluka Resources Ltd., 2012; 2013, p. 1, 5).

Salt.—In 2013, salt was extracted from the Bata-Atha and Puttalam salterns. The Kingdom of Raigam (which is a diversified group of companies incorporated in Sri Lanka) reported that it expected to stop importing salt within the next 2 to 3 years. The Kingdom of Raigam in cooperation with smaller companies invested 1 billion rupees (\$7.64 million¹) in the construction of the country's largest salt refinery in Puttalam. The Kingdom of Raigam expected to expand the pure vacuum dry salt plant in Puttalam and to increase the production of salt at the group's three refineries to 500,000 metric tons per year by 2015 (Ceylon Today, 2013; Raigam Wayamba Salterns Plc., 2013, p. 7).

Mineral Fuels

Refined Petroleum.—Up to 2012, Iran had been a major supplier of bitumen and oil to Sri Lanka's Ceylon Petroleum Corp. (CPC). In 2013, owing to international sanctions put in place in 2012 that prohibited the purchase of Iranian oil, CPC stopped purchasing light crude oil and bitumen from Iran and shifted to purchasing oil from other countries. CPC faced challenges finding an alternative crude oil mix, however. Although the blend of 80% Abu Dhabi Murban and 20% Oman crude oil was suitable for the Sapugaskanda refinery, the price of Murban crude oil was very high, so the mix of Murban and Oman crude oil was not an economical or practical choice for CPC.

In 2013, CPC refined 13.2 million barrels (Mbb) of crude oil, which was lower than the 15.4 Mbb refined in 2011 before the sanctions were put in place. The \$1.5 million modernization of CPC's Sapugaskanda oil refinery was also delayed owing to a decrease in production and an increase in the prices of the refined oil products that the facility sold (Ministry of Petroleum Industries, 2013, p. 16, 20–21; Central Bank of Sri Lanka, 2014a, p. 82).

In 2011, Cairn Lanka (Pty) Ltd., which was a subsidiary of CIG Mauritius Holdings (Pty) Ltd. of Mauritius, had discovered two gas and condensate basins in the Mannar District. In 2013, the Petroleum Resources Development Secretariat conducted a second round of international offshore exploration licensing on 13 blocks in the Cauvery and Mannar basins. In addition, six offshore ultradeepwater blocks from the southwest to the northeast were identified and were expected to be studied jointly (Central Bank of Sri Lanka, 2014a, p. 82).

Outlook

Sri Lanka's graphite production is expected to increase owing to investment and expansion. Mineral sands production is expected to increase owing to Government and foreign investment. The country is expected to expand its cement and salt output as a result of the construction of new cement plants and capacity expansions at existing plants.

¹Where necessary, values have been converted from Sri Lankan rupees (LKR) to U.S. dollars (US\$) at an average annual exchange rate of LKR 1=US\$0.00764 for 2013 and LKR 52,040=US\$0.00787 for 2012.

References Cited

- Asia Miner, 2013, Sri Lanka—Bora Bora gains additional land: Asia Miner News, Mining Media International, July 17. (Accessed October 15, 2014, at <http://www.asiaminer.com/news/archive/136-2013/july-2013/4766-sri-lanka-bora-bora-gains-additional-land.html>.)
- Asian Development Bank, 2014, Asian development outlook 2014—Fiscal policy for inclusive growth: Manila, Philippines, Asian Development Bank, 287 p. (Accessed October 29, 2014, at <http://www.adb.org/sites/default/files/pub/2014/ado-2014.pdf>.)
- Bogala Graphite Lanka Plc., 2013, Annual report 2013: Colombo, Sri Lanka, Bogala Graphite Lanka Plc., 59 p. (Accessed October 23, 2014, at https://www.cse.lk/cmt/upload_report_file/664_1394449662.pdf.)
- Bora Bora Resources Ltd., 2012, Graphite in Sri Lanka: Sydney, New South Wales, Australia, Bora Bora Resources Ltd. investor presentation, December, 22 p. (Accessed October 29, 2014, at <http://www.asx.com.au/asxpdf/20121217/pdf/42bzhg77qhnd7m.pdf>.)
- Bora Bora Resources Ltd., 2014, Southern Sri Lankan projects: Sydney, New South Wales, Australia, Bora Bora Resources Web page. (Accessed October 29, 2014, at <http://www.boraboraresources.com/home/index.php/projects/southern-sri-lankan-projects>.)
- Central Bank of Sri Lanka, 2014a, Annual report 2013: Colombo, Sri Lanka, Central Bank of Sri Lanka, part I, 250 p. (Accessed October 23, 2014, at http://www.cbsl.gov.lk/pics_n_docs/10_pub/_docs/efr/annual_report/AR2013/English/content.htm.)
- Central Bank of Sri Lanka, 2014b, Economic and social statistics of Sri Lanka 2014: Colombo, Sri Lanka, Central Bank of Sri Lanka, v. 36, April, 182 p. (Accessed October 23, 2014, at http://www.cbsl.gov.lk/pics_n_docs/10_pub/_docs/statistics/other/econ_&_ss_2014_e.pdf.)
- Central Bank of Sri Lanka, 2014c, Sri Lanka socioeconomic data 2014: Colombo, Sri Lanka, Central Bank of Sri Lanka, v. 37, June, 100 p. (Accessed October 23, 2014, at http://www.cbsl.gov.lk/pics_n_docs/10_pub/_docs/statistics/other/Socio_Econ_Data_2014_e.pdf.)
- Ceylon Today, 2013, Sri Lanka can stop salt imports in three years—Raigam: Ceylon Today, February 3. (Accessed October 23, 2014, at <http://www.ceylontoday.lk/22-23487-news-detail-sri-lanka-can-stop-salt-imports-in-three-years-raigam.html>.)
- ColomboPage, 2013, Sri Lanka's Bogala graphite to explore more land for deposits: ColomboPage [Sri Lanka], June 20. (Accessed July 8, 2014, at www.colombopage.com/archive_13A/Jun20_1371751617CH.php.)
- Global Cement, 2013a, Sri Lankan plant to be restarted: Global Cement News, July 29. (Accessed July 8, 2014, at <http://www.globalcement.com/news/item/1827-sri-lankan-plant-to-be-restarted>.)
- Global Cement, 2013b, Thatta Cement signs lease for Sri Lankan grinder: Global Cement News, April 10. (Accessed July 8, 2014, at <http://www.globalcement.com/news/item/1576-thatta-cement-signs-lease-for-sri-lankan-grinder>.)
- Global Cement, 2013c, Tokyo cement plans US\$50m plant in Sri Lanka: Global Cement News, July 24. (Accessed July 8, 2014, at <http://www.globalcement.com/news/item/1815-tokyo-cement-plans-us50m-plant-in-sri-lanka>.)
- Gravita India Ltd., 2013, Annual report 2012–2013—Growing global!: Jaipur, India, Gravita India Ltd., June 24, 109 p. (Accessed October 23, 2014, at <http://www.gravitaindia.com/wp-content/uploads/Gravita-Annual-Report-2012-13.pdf>.)
- Iluka Resources Ltd., 2012, Sri Lanka mineral sands project—Puttalam, Sri Lanka: Iluka Resources Ltd. Web page. (Accessed October 23, 2014, at <http://www.iluka.com/company-overview/projects/sri-lanka-mineral-sands-project>.)
- Iluka Resources Ltd., 2013, Australian securities exchange notice—Acquisition of Sri Lankan tenement and heavy mineral resource base: Perth, Western Australia, Australia, Iluka Resources Ltd., August 5, 32 p. (Accessed October 27, 2014, at <http://www.iluka.com/docs/default-source/asx-releases/acquisition-of-sri-lankan-tenement-and-heavy-mineral-resource-base-5-august-2013>.)
- Lanka Business Online, 2013, Sri Lanka to ban foreign investments in to steel, cement, retail trade: Lanka Business Online, June 13. (Accessed October 24, 2014, at <http://www.lankabusinessonline.com/news/sri-lanka-to-ban-foreign-investments-in-to-steel,-cement,-retail-trade/558211879>.)
- Market Wired, 2013a, Torch River Resources Ltd. to change name to Saint Jean Carbon Inc.: Market Wired, October 31. (Accessed October 23, 2014, at <http://www.marketwired.com/press-release/torch-river-resources-ltd-to-change-name-to-saint-jean-carbon-inc-tsx-venture-tcr-1846960.htm>.)

- Market Wired, 2013b, Torch River signs term sheet for 113 Sri Lankan lump graphite mining claims: Market Wired, October 9. (Accessed October 23, 2014, at <http://www.marketwired.com/press-release/torch-river-signs-term-sheet-for-113-sri-lankan-lump-graphite-mining-claims-tsx-venture-tcr-1839544.htm>.)
- Ministry of Finance and Planning, 2013, Annual report 2013—The 2013 macroeconomic review: Ministry of Finance and Planning: Colombo, Sri Lanka, 698 p. (Accessed October 23, 2014, at <http://www.treasury.gov.lk/images/depts/fpd/docs/reports/annualreport/2013/chapters/Chapter4.pdf>.)
- Ministry of Industry and Commerce, 2013, Annual report 2013—Kahatagaha Graphite Lanka Limited, fully Government owned company: Colombo, Sri Lanka, Ministry of Industry and Commerce, 33 p. (Accessed October 23, 2014, at http://www.parliament.lk/uploads/documents/paperspresented/annual_report_kahatagaha_graphite_lanka_limited_2012_2013.pdf.)
- Ministry of Petroleum Industries [Sri Lanka], 2013, Annual performance report 2013: Colombo, Sri Lanka, Ministry of Petroleum Industries, 48 p. (Accessed November 13, 2014, at http://www.parliament.lk/uploads/documents/paperspresented/performance_report_ministry_of_petroleum_industries_2013.pdf.)
- Ministry of State Resources and Enterprise Development [Sri Lanka], 2013, Progress report 2013: Colombo, Sri Lanka, Ministry of State Resources and Enterprise Development, October 12, 35 p. (Accessed October 23, 2014, at <http://sredmin.gov.lk/downloads/MSRED%20Progress%20Report%20-%20English.pdf>.)
- Mongolian Resources Ltd., 2013a, Annual report: Sydney, New South Wales, Australia, Mongolian Resources Ltd., June 30, 70 p. (Accessed November 6, 2014, at <http://www.asx.com.au/asxpdf/20130927/pdf/42jn199bthmsg1.pdf>.)
- Mongolian Resources Ltd., 2013b, Notice of general meeting—Mongolian Resources Limited (to be renamed MRL Corporation Limited): Sydney, New South Wales, Australia, Mongolian Resources Ltd., October 9, 73 p. (Accessed November 6, 2014, at <http://www.mrltd.com.au/attachments/article/88/20130830%20NOM%20final%20for%20release%20w%20alternative%20cover.pdf>.)
- MRL Corporation Ltd., 2013, Australian company acquires significant graphite project: Sydney, New South Wales, Australia, MRL Corporation Ltd. press release, October 22, 4 p. (Accessed October 23, 2014, at <http://hotcopper.com.au/documentdownload?id=tuE7JrfGm%2FOGe3mZXGZFm%2FzH0UO5Qy4yA2jhoAPkqsmH7rSEYkVDgpnb0%2FzVVOiWwra4pMcJq0p9fJB44wyeEjZA%3D%3D>.)
- Raigam Wayamba Salterns Plc., 2013, Annual report 2012/2013—Future: Palavi, Sri Lanka, Raigam Wayamba Salterns Plc., 74 p. (Accessed November 7, 2014, at http://www.wayambasalterns.lk/images/Raigam_Wayamba_Salterns_PLC-Annual%20Report_2012-2013.pdf.)
- Salwan, Shruti, 2013, Vein graphite prices frozen for 2013—Sri Lankan prices rooted at 2012 levels despite slowdown in demand: Industrial Minerals, no. 548, May 13–15, 74 p.
- Syrett, Laura, and Ollett, John, 2013, Sri Lanka looks to China for new minsands development: Industrial Minerals, Strandlines, no. 548, May 13–15, 74 p.
- Wallop, Clementine, 2013, Sri Lanka seeks investors for nascent mining industry: The Wall Street Journal, March 15. (Accessed October 23, 2014, at <http://online.wsj.com/articles/SB10001424127887324077704578361491643425354>.)

TABLE 1
SRI LANKA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Metric tons unless otherwise specified)

Commodity ³	2009	2010	2011	2012	2013	
METALS						
Iron and steel, metal, semimanufactures	72,000	75,000	76,000	75,000	76,000	
Lead, secondary ⁴	1,000	1,000	2,000	2,100	3,800	
Titanium mineral concentrates, gross weight:						
Ilmenite	122,424 ⁴	52,637 ^{r,4}	52,000 ^{r,4}	53,000 ^{r,4}	43,000	
Rutile	2,276 ⁴	2,568 ⁴	2,700 ^{r,4}	2,800 ^{r,4}	1,400	
INDUSTRIAL MINERALS						
Cement, hydraulic	1,900	2,600	2,200	2,400	3,000	
Clays:						
Ball clay	54,873 ⁴	47,826 ⁴	50,000	52,000	54,000	
Clays for cement manufacture	950	1,000	1,100	1,200	1,200	
Kaolin	9,538 ⁴	8,207 ⁴	8,000	8,500	10,000 ⁴	
Feldspar, crude and ground	73,365 ⁴	75,405 ⁴	53,000 ^{r,4}	55,000 ^{r,4}	57,000	
Gemstones:						
Precious and semiprecious, other than diamond	value, thousands	\$110,000	\$150,000	\$180,000	\$220,000 ^r	\$260,000
Cat's eye	carats	51,000	54,000	55,000	56,000	57,000
Ruby	do.	20,300 ⁴	31,336 ⁴	35,000	38,000	41,000
Sapphire	do.	986,500 ⁴	1,491,698 ⁴	1,600,000	1,500,000	1,500,000
Other	do.	2,400,000	2,500,000	2,400,000	2,500,000	2,500,000
Graphite, all grades		3,171 ⁴	3,437 ⁴	3,357 ^{r,4}	4,071 ^{r,4}	4,200
Mica, scrap		2,347 ⁴	2,095 ⁴	2,100	2,142 ^{r,4}	2,200
Phosphate rock, gross weight		41,589 ^{r,4}	49,680 ^{r,4}	50,674 ^{r,4}	52,000 ^{r,4}	53,000
Salt		10,500	10,400	11,000	12,000	13,000
Stone:						
Limestone	thousand metric tons	1,145 ⁴	1,192 ⁴	1,200	1,300	1,400
Quartzite		30,409 ⁴	34,437 ⁴	36,000	37,000	38,000
Zirconium, zircon, gross weight		10,267 ^{r,4}	9,200 ^{r,4}	30,000	35,000	30,000

See footnotes at end of table.

TABLE 1—Continued
SRI LANKA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Metric tons unless otherwise specified)

Commodity ³		2009	2010	2011	2012	2013
MINERAL FUELS AND RELATED MATERIALS						
Petroleum refinery products:						
Gasoline ⁴	thousand 42-gallon barrels	1,790 ^r	1,580 ^r	2,065 ^r	1,515 ^r	1,440
Jet fuel ⁴	do.	1,560 ^r	1,008 ^r	1,240 ^r	744 ^r	1,000
Kerosene ⁴	do.	654 ^r	736 ^r	737 ^r	594 ^r	454
Distillate fuel oil ⁴	do.	5,826 ^r	5,118 ^r	5,811 ^r	4,834 ^r	5,394
Residual fuel oil ⁴	do.	3,618 ^r	3,297 ^r	3,737 ^r	3,006 ^r	2,894
Refinery fuel and losses	do.	750	760	800	820	840
Other	do.	2,600	2,700	2,800	2,900	3,000
Total	do.	16,800	15,200	17,200	14,400	15,000

^rRevised. do. Ditto.

¹Estimated data are rounded to no more than three significant digits; may not add to totals shown.

²Table includes data available through November 21, 2014.

³In addition to the commodities listed, crude construction materials (such as calcite, clay for brick and tile, dolomite, sand and gravel), secondary aluminum, sulfur, and varieties of stone presumably are produced, but available information is inadequate to make reliable estimates of output.

⁴Reported figure.

TABLE 2
SRI LANKA: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity ^c
Aluminum, secondary		Castalloy	Colombo	1
Do.		Lanka Aluminium Industries	do.	NA
Do.		Zenith Aluminium Co.	do.	NA
Do.		Alumex Ltd.	Gonawala	1
Do.		Alumex (Pvt.) Ltd.	Makola	NA
Do.		Lanka Refractories Ltd.	Meepe, Padukka	8
Cement		Holcim (Lanka) Ltd. (part of Holcim Ltd.)	Puttalam	1,000
Do.		Lanka Cement Plc. [Sri Lanka Cement Corp. (SLCC), 62.41%, and Secretary to the Treasury (Ministry of Finance), 12.8%]	Kankesanthurai	200
Do.		do.	Puttalam	400
Do.		Tokyo Cement Co. (Lanka) Plc.	Trincomalee	300
Clay, ball		Lanka Ceramic Ltd.	Dediyawala	NA
Graphite		Kahatagaha Graphite Lanka Ltd. (Ministry of Industry and Commerce)	Kahatagaha Mine	6
Do.		Bogala Graphite Lanka Plc. (AMG Mining AG, 89.68%, and others, 10.32%)	Bogala Mine	7
Do.		Sakura Pvt. Ltd.	Ragedara Mine	NA
Lead, secondary		Navam Lanka Ltd. (Gravita India Ltd., 52%)	Marigama Export Processing Zone, Marigama, Gampha District	7,200
Limestone		Holcim (Lanka) Ltd. (part of Holcim Ltd.)	Arawakalu quarry	750
Petroleum, refined	42-gallon barrels per day	Ceylon Petroleum Corp. (Ministry of Petroleum and Petroleum Resources Development)	Sapugaskanda	50,000
Do.	do.	Lanka Indian Oil Co. (Indian Oil Corp. Ltd., 75%)	Colombo	NA
Phosphate rock		Lanka Phosphate Ltd. (Ministry of State Resources and Enterprise Development)	Eppawala	55
Salt		Puttalam Salt Ltd. (Raigam Wayamba Saltern Plc.)	Puttalam, Puttalam saltern	30
Do.		Southern Salt (Pvt.) Ltd. (Raigam Wayamba Saltern Plc.)	Ranna, Bata-Atha salterns	NA
Steel, semimanufactures		Ceylon Steel Corp. Ltd.	Oruwala, Athurugiriya	250
Do.		Melwire Rolling (Pvt.) Ltd.	Colombo	NA
Do.		GTB Colombo Corp. (Pvt.) Ltd.	do.	NA
Do.		Elsteel Pvt. Ltd.	Katunayake	NA
Do.		Melbourne Metal Industries Ltd.	Colombo	NA
Do.		Bhuwarka Steel Industries Ltd.	do.	25
Titanium, mineral sands		Lanka Mineral Sands Ltd. (Ministry of State Resources and Enterprise Development)	Pulmoddai	150
Do.		Mirama Minerals	Dambulla	NA

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