



# 2008 Minerals Yearbook

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**SRI LANKA**

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# THE MINERAL INDUSTRY OF SRI LANKA

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Sri Lanka is endowed with a variety of industrial minerals, such as ball clay, kaolin, and other clays; calcite; dolomite; feldspar; gemstones; graphite; limestone; mica; mineral sands; phosphate rock; quartz; and silica sand. Mining and quarrying of industrial minerals were the main activities of its mineral industry. The country produced no metals or oil and imported more than \$2 billion per year of oil. The Government was seeking tenders for oil exploration, and the first foreign company was awarded an exploration license in 2008.

In 2008, the Government reduced fuel subsidies and let gasoline prices rise by 41%. The country's richer households received a disproportionate share of the benefits from price caps, and the bottom 40% received 15% to 25% of subsidies. To reduce the country's dependence on imported petroleum products needed for domestic use, the Government planned to expand its oil refining capacity.

## Production

In 2008, Sri Lanka's output level of industrial minerals was about the same as that of 2007. Production of cement, gemstones, and graphite increased slightly, and the output of scrap mica increased by 12%. The country produced 14% less feldspar than in 2007 and 30% less than in the peak year of 2006. Graphite was mined by underground methods and was destined for export (table 1).

## Structure of the Mineral Industry

The country's mineral industry is governed by the Mines and Minerals Act No. 33 of 1992 and the Mining (Licensing) Regulation No. 1 of 1993. The Geological Survey and Mines Bureau is the Government agency responsible for the development of mineral resources in Sri Lanka. Production of graphite, mineral sands, phosphate rock, and salt was controlled by state-owned companies; however, a German company owned a large stake in state-owned Bogala Graphite Lanka Ltd. Refining of crude oil was performed by Ceylon Petroleum Corp. under the Ministry of Petroleum and Petroleum Resources Development. Manufacturing of cement was mostly done by domestic private companies and foreign subsidiaries (table 2).

## Commodity Review

### *Industrial Minerals*

**Graphite.**—Bogala Graphite Lanka, which was 87% owned by Graphitwerke Kropfmuhl AG of Germany, produced 29 grades of graphite powders for export to markets in Europe and the United States. A new processing plant was relocated to Sri Lanka from the United Kingdom and commenced operations. Before that, Bogala Graphite Lanka exported raw graphite to be processed at Branwell Graphite Ltd. of the United Kingdom,

which was 100% owned by Graphitwerke. RS Products (Pvt) Ltd. of Sri Lanka was granted an exploration license by the Geological Survey and Mines Bureau. The license applied to three selected sites and referred to a 7-square-kilometer (km<sup>2</sup>) grid. Early finds of vein graphite of 99.7% carbon purity were reported. Plans were in place to mine these deposits at Matale, and the first shipment was expected in May 2008 (Industrial Minerals, 2008).

**Phosphate Rock.**—Lanka Phosphate Ltd. planned to produce 45,000 metric tons per year (t/yr) of single superphosphate (SSP) for farmers to cultivate short-term crops, such as rice and vegetables. SSP could be used as a substitute for triple superphosphate, of which Sri Lanka's imported 40,000 t/yr (its major fertilizer import). The company produced Eppawala rock phosphate and high-grade Eppawala rock phosphate, which had lower solubility and slightly higher acidity than the regular grade of rock phosphate. The apatite phosphate rock deposit is located at Eppawala in the Anuradhapura District of North Central Province. The deposit was estimated to contain 60 million metric tons of phosphate rock (Movement for National Land and Agricultural Reform, 2007).

### *Mineral Fuels*

**Petroleum.**—Saudi Arabia agreed to train Sri Lankans in the field of oil exploration, investment, and refining, and to help define the island's oil resources. Sri Lanka conducted seismic surveys in 2002 and 2005, which indicated that a 35,000-km<sup>2</sup> area in the Mannar Basin was prospective for oil. Seismic data indicated that an estimated 1 billion barrels of oil lie under the basin. Three plots in the basin were allocated for exploration, and exploration rights were awarded to companies from China and India. Six plots would be offered for tenders in 2008. Sri Lanka planned to increase its oil refining capacity to 100,000 barrels per day (bbl/d) from 50,000 bbl/d with Saudi expertise. The country was seeking to build an oil cracker at a cost of \$400 million to convert crude oil into diesel and gasoline and requested the assistance of the Organization of the Petroleum Exporting Countries Fund to help construct the plant. Sri Lanka bought 10% of its oil requirements from Saudi Arabia and 70% from Iran. The country planned to increase its oil imports from Saudi Arabia to 30% in the near future (Alexander's Gas & Oil Connections, 2008b).

In the application for exploration permits, the applicants had to pay signature bonds and production bonds to the Government, as well as a 10% loyalty fee during exploration. The permits would be for a period of 8 years and consist of three phases. If additional exploration is needed, a 2-year extension could be granted. Cairn Energy plc of the United Kingdom was awarded an exploration license in the SL 2007-01-001 Block, which covered 3,000 km<sup>2</sup> with water depths ranging from 220 to 1,800 meters (Rigzone.com, 2007).

In 2008, Sri Lanka started the construction of an oil refinery expansion project, which would increase the country's refining

capacity to 100,000 bbl/d and reduce imports of petroleum products. Iran provided assistance in the amount of \$1.5 billion for the country's infrastructure development projects. In addition to refinery expansion, a multipurpose hydropower project would add 100 megawatts of electricity generating capacity (Alexander's Gas & Oil Connections, 2008a).

## References Cited

Alexander's Gas & Oil Connections, 2008a, Ahmadinejad inaugurates refinery project in Sri Lanka: Alexander's Gas & Oil Connections. (Accessed June 4, 2008, at <http://www.gasandoil.com/goc/news/ntm82346.htm>.)

Alexander's Gas & Oil Connections, 2008b, Saudi Arabia to help Sri Lanka in oil exploration and refining: Alexander's Gas & Oil Connections. (Accessed April 15, 2008, at <http://www.gasandoil.com/goc/news/nts81689.htm>.)

Industrial Minerals, 2008, New plant lifts Bogala Graphite: Industrial Minerals, no. 491, April, p. 24.

Movement for National Land and Agricultural Reform, 2007, Production of single super phosphate from Eppawala apatite: Movement for National Land and Agricultural Reform. (Accessed July 9, 2008, at <http://www.monlar.org/toplink/monlarnews/homepagenews/>.)

Rigzone.com, 2007, Sri Lanka to offer three blocks in offshore Mannar Basin: Rigzone.com. (Accessed July 9, 2008, at [http://www.rigzone.com/news/article.asp?a\\_id=49781](http://www.rigzone.com/news/article.asp?a_id=49781).)

TABLE 1  
SRI LANKA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES<sup>1,2</sup>

(Metric tons unless otherwise specified)

Commodity <sup>3</sup>		2004	2005	2006	2007	2008
Cement, hydraulic	thousand metric tons	1,400	1,500	1,600	1,700	1,800
Clays:						
Ball clay		34,000	36,000	61,966 <sup>r,4</sup>	43,004 <sup>r,4</sup>	43,000
Kaolin		9,200	9,400	10,914 <sup>r,4</sup>	11,178 <sup>r,4</sup>	11,000
Brick and tile clay		8,000	8,000	8,000	8,000	8,000
Clays for cement manufacture		900	950	950	950	950
Feldspar, crude and ground		33,000	34,000	56,864 <sup>r,4</sup>	46,583 <sup>r,4</sup>	40,000
Gemstones, precious and semiprecious, other than diamond, value	thousands	\$99,000	\$101,000	\$103,000	\$105,000	\$108,000
Cat's eye	carats	46,000	47,000	48,000	49,000	50,000
Ruby	do.	15,000	17,000	19,000	21,000	23,000
Sapphire	do.	780,000	785,000	790,000	780,000	770,000
Other	do.	1,900,000	2,000,000	2,100,000	2,200,000	2,300,000
Graphite, all grades		3,400	3,000	5,756 <sup>r,4</sup>	9,593 <sup>r,4</sup>	10,000
Iron and steel, metal, semimanufactures		50,000	50,000	50,000	50,000	50,000
Mica, scrap		1,700	1,700	2,600 <sup>r,4</sup>	3,224 <sup>r,4</sup>	3,600
Petroleum refinery products:						
Gasoline	thousand 42-gallon barrels	2,100	2,200	2,200	2,300	2,300
Jet fuel	do.	650	650	700	700	750
Kerosene	do.	1,500	1,500	1,500	1,500	1,500
Distillate fuel oil	do.	5,100	5,200	5,300	5,400	5,500
Residual fuel oil	do.	5,100	5,100	5,000	5,000	4,800
Refinery fuel and losses	do.	720	720	730	730	740
Other	do.	2,100	2,200	2,300	2,400	2,500
Total	do.	17,300	17,600	17,700	18,000	18,100
Phosphate rock, gross weight		42,000	43,000	42,159 <sup>r,4</sup>	40,128 <sup>r,4</sup>	40,000
Salt		79,000	80,000	87,560 <sup>r,4</sup>	70,209 <sup>r,4</sup>	70,000
Stone:						
Limestone	thousand metric tons	1,000	1,010	1,095 <sup>r,4</sup>	1,095 <sup>r,4</sup>	1,100
Quartzite		20,000	22,000	25,539 <sup>r,4</sup>	35,066 <sup>r,4</sup>	35,000

<sup>r</sup>Revised. do. Ditto.

<sup>1</sup>Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Table includes data available through July 15, 2009.

<sup>3</sup>In addition to the commodities listed, crude construction materials, such as sand and gravel, sulfur, and varieties of stone, presumably are produced, but available information is inadequate to make reliable estimates of output.

<sup>4</sup>Reported figure.

TABLE 2  
SRI LANKA: STRUCTURE OF THE MINERAL INDUSTRY IN 2008

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>e</sup>
Cement	Holcim (Lanka) Ltd.	Puttalam	1,000
Do.	Sri Lanka Cement Corp.	Kankasanturai	1,000
Do.	do.	Puttalam	400
Do.	Tokyo Cement Co. (Lanka) Ltd.	Trincomalee	300
Clay, ball	Lanka Ceramic Ltd.	Dediyawala	NA
Graphite	Kahatagaha Graphite Lanka Ltd. (Ministry of Industrial Development)	Kahatagaha Mine	4
Do.	Bogala Graphite Lanka Ltd. (Graphit Kropfmul A, 87%)	Bogala Mine	7
Petroleum, refined	42-gallon barrels per day	Ceylon Petroleum Corp. (Ministry of Petroleum and Petroleum Resources Development)	51,000
Phosphate rock	Lanka Phosphate Ltd. (Ministry of Industrial Development)	Eppawala	40
Titanium, ilmenite sands	Lanka Mineral Sands Corp. (Ministry of Industrial Development)	Pulmoddai	180

<sup>e</sup>Estimated. Do., do. Ditto. NA Not available.

