

# THE MINERAL INDUSTRY OF SINGAPORE

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Singapore, which is known as the “Lion City,” has been transformed from an impoverished island in Southeast Asia with no natural resources into one of the richest economies in Asia and the Pacific region. The city-state sees itself as the place where Asia and the West meet. It is located at the entrance to the Strait of Malacca, which has become one of the most important transshipping centers in the world. Singapore also is a leader in the development of new biotechnologies, the manufacturing of electronic components, and petroleum refining.

Since its independence from Malaysia in 1965, Singapore has invested heavily in its people to keep its economy competitive and prosperous. Considered to be a politically stable and well-regulated place to do business, Singapore is consistently rated as having one of the best environments for investment in the world. After the country experienced a sharp economic downturn in 2001, its gross domestic product grew by 2.2% in 2002 and 1.1% in 2003. An outbreak of Severe Acute Respiratory Syndrome (SARS) in the first half of 2003 kept foreign visitors away; this severely affected the tourism and travel-related industries, which included airlines, hotels, retail outlets, and restaurants. Economic growth for the year was mainly the result of a modest recovery in the global electronics market; electronics exports accounted for about 40% of Singapore’s total trade. The construction sector declined for the fifth consecutive year, and public and private construction activities remained weak. The decline in construction largely resulted from weak demand for commercial and industrial projects. Cement production in Singapore ceased in early 2002, and all supplies were imported. In 2003, the financial services sector grew by 3.7% compared with a decrease of 6.3% in 2002 because of the economic recovery in the domestic and regional economies in the second half of the year. Owing to the contraction in the construction sector and the growth of labor productivity, the average unemployment rate rose to 4.7% in 2003 compared with 4.4% in 2002 (Singapore Department of Statistics, 2004, p. 109).

In late 2001, the Government established the Economic Review Committee to put into practice a strategy to restructure the country’s economy. The Committee recommended that the Government encourage the private sector to develop new business ideas and provide equal opportunities for all enterprises. It also recommended that the Government enact a law to regulate competition and to establish an independent agency to oversee the competitions within the next 2 to 3 years. The Committee urged Temasek Holdings, which the Government formed in 1974 to oversee its investments, to provide opportunities for Government-linked companies (GLCs) to become globally competitive and to sustain their development. Although Temasek was not involved in the daily operations of the GLCs, it supervised key appointments and had strategic authority.

In 2003, the Government enacted two off-budget packages to help Singaporeans and businesses cope with the economic downturn caused by the SARS outbreak. In fiscal year 2004, the corporate income tax rate could be reduced to 20% from 22%, and tax exemptions could be granted for newly incorporated companies and foreign-sourced income. To enhance Singapore’s ability to compete globally, the Government signed bilateral and multilateral trade agreements with countries in Asia and the Pacific region that would link Singapore’s economy closely to global economic networks. Singapore’s economy has been transformed from one based on low-technology manufacturing to one based on highly skilled commercial activities (Economic Survey of Singapore, 2002, p. 76-94).

NatSteel Ltd., which was the largest steel company in Singapore, decided to dispose of its entire equity stakes in National Cement Industry Pte Ltd. and Yangtze Cement Holdings Pte Ltd. to focus on its core business. The company had a design output capacity of 600,000 metric tons (t) of crude steel from its 80-t electric-arc furnace. Owing to the decline in the construction sector and the increase in production costs in Singapore, NatSteel planned to expand its steelmaking operations in China and other Southeast Asian countries.

Singapore has developed into a major hub for the international chemical sector. Chemicals, petroleum, and petroleum products were Singapore’s leading exports after electronics. In 2003, the export value of petroleum and petroleum products totaled more than \$16 billion, which was about 11% of the total value of exports. The Government planned to increase the output share of the petrochemical products in the manufacturing industry to 30% in 2010 compared with 25% in 2003. Petroleum refining accounted for 57% of the chemical sector’s production. The oil refiners Exxon Mobil Corp., Royal Dutch/Shell Co., Singapore Petroleum Co., and Singapore Refinery Co. had a combined output capacity of about 1.3 million barrels per day. Major multinational petrochemical companies, such as BASF, ChevronTexaco Corporation, ExxonMobil, Mitsui Chemical Co., Royal Dutch/Shell, and Sumitomo Chemical Co., had set up plants on the island.

Singapore’s Economic Development Board, which had overseen the development of the Jurong Island project to attract more investment to the country, established the Chemical Process Technology Center to provide on-the-job training for chemical workers. The primary goal was to train a high-quality labor force for the chemical sector. In 2003, the chemical sector accounted for 20% of total manufacturing fixed asset investment commitments. Most chemical products were for export, although some were used as critical raw materials for the electronics sector in Singapore (Asian Chemical News, 2004).

The Government planned to develop Singapore as an international center for the biomedical sciences industry, with expertise in such highly skilled activities as basic research, product discovery and development, clinical research, and

high-technology manufacturing. About \$500 million of fixed asset investments had been committed through 19 projects. Multinational biomedical companies, such as Baxter Co., Eli Lilly and Co., Merck Sharp & Dohme Ltd., and Novartis AG, had established research centers and manufacturing plants in Singapore (Washington Times, The, 2002).

Over time, the mineral industry is expected to become less important to the Singapore economy. Singapore, however, will continue to be a leader in the development of new biotechnologies and the manufacturing of electronic components.

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### Major Sources of Information

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