The Mineral Industry of Singapore

By Pui-Kwan Tse

Singapore is a city-state located in the Strait of Malacca in Southeast Asia. Singapore is one of the world's busiest ports and identifies itself as “the place where Asia and the West meet.” The global financial crisis and the slowdown of industrial activities in the West hit the economy of the country hard during the past 2 years. The country’s gross domestic product (GDP) increased by only 1.1% in 2008 and contracted by 2.0% in 2009. Because it has limited mineral resources, Singapore must import most of the raw materials needed for manufacturing. The manufacturing sector contracted by 4.2% and 4.1% in 2008 and 2009, respectively. Owing to construction investment by the Government, the construction sector, however, increased by 20.8% and 16.0% in 2008 and 2009, respectively. Singaporean total trade was valued at S$927.6 billion (US$662.6 billion) and S$747.4 billion (US$553.8 billion) in 2008 and 2009, respectively. In 2009, the values of imports and exports decreased by about 21% and 18%, respectively, compared with those of 2008. In 2009, electronics remained the leading exported commodity and accounted for 36% of the total export value followed by mineral fuels, 20%, and chemical products, 12%. Manufactured ferrous, nonferrous, and nonmetallic products accounted for 3% of the total export value. The import value of electronics products accounted for 28% of the total import value followed by mineral fuels, 25%; chemical products, 6%; and manufactured ferrous, nonferrous, nonmetallic products, 6% (Department of Statistics, 2010, p. 38-48; Ministry of Trade and Industry, 2010).

Production

NatSteel Asia Pte Ltd. was the sole integrated melting, rolling, and fabricating steel producer in Singapore; it was owned by Tata Iron and Steel Co. of India. The company had a design output capacity of 720,000 metric tons per year (t/yr) of crude steel [from its 80-metric-ton (t) electric arc furnace and 80-t ladle furnace] and 720,000 t/yr of rolled steel. In 2008, the country produced about 750,000 t of crude steel. NatSteel intended to expand its steel production capacity to more than 2 million metric tons per year by 2010 through acquisition of steel plants in Indonesia, Thailand, and Vietnam (NatSteel Asia Pte Ltd., 2008).

Singapore Tin Industries Pte Ltd., which was a joint venture between KJP International Pte Ltd. and Yunnan Tin Co. Ltd. of China, was completed in 2006. The plant had a design capacity of 36,000 t/yr of refined tin. The initial production target was 1,500 metric tons per month of refined tin; owing to constraint in the supply of crude tin from Indonesia, however, the company reduced its output target to 12,000 t/yr at the end of June 2007. In 2007, the company’s refined tin output was 2,914 t. The refinery was idled for most of 2008. The company decided to shut down its refined tin operation at the end of 2008 and sold its assets in January 2009 (Malaysian Tin Bulletin, 2008, 2009).

Singapore is one of the major hubs for the international chemical sector. Chemicals, petroleum, and petroleum products were Singapore’s leading exports and reexports after electronics. The Government planned to increase the output share of petrochemical products in the manufacturing industry to 30% in 2010. Major multinational petrochemical companies, such as BASF Group (Germany), Chevron Corp. (United States), Exxon Mobil Corp. (United States), Mitsui Chemical Co. (Japan), Royal Dutch/Shell Group (Netherlands), and Sumitomo Chemical Co. (Japan), had set up plants on the island.

Outlook

Singapore is expected to recover slowly after the global financial crisis of the past 2 years. The global demand for electronics, which is the country’s major component of export revenue, is expected to improve during the next several years. The construction sector is likely to be the source of major demand for construction materials during the next 2 years. Several construction projects, including two casino resorts, the expansion of a financial center, and the development of new infrastructure, are in process. The demand for steel products is expected to increase during the next 2 to 3 years and Singapore may have to rely on steel imports to meet its domestic needs.

References Cited