## Chapter 12 Mines and minerals

## 12.1 Canada's mineral industry

## 12.1.1 Review of the industry

The Canadian mineral industry experienced strong growth during 1973 following increased world demand for minerals and accelerating prices of most non-ferrous metals. The value of mineral production in 1973 increased 31% compared with an increase of 7% the previous year.

Canada's mineral production in 1973 was valued at \$8,365 million compared with \$6,405 million in 1972 and \$5,963 million in 1971. Metal mines output and mineral fuels production both showed large increases in value of \$900 million and \$860 million, respectively, in 1973; non-metal mines showed a moderate increase of about \$100 million.

Canada produces about 60 different minerals from domestic deposits. The 10 leading minerals comprised 83% of the total output by value in 1973 compared with 82% in 1972 and 83% in 1971. The 1973 value for the 10 leading minerals totalled \$6,965 million. Individual values were: petroleum \$2,247 million, copper \$1,158 million, nickel \$813 million, zinc \$653 million, iron ore \$606 million, natural gas \$452 million, natural gas by-products \$349 million, cement \$241 million, asbestos \$234 million and sand and gravel \$213 million. The first four accounted for 58% of the total value of mineral production in 1973 compared to 56% the previous year (Tables 12.1 - 12.5).

Canada produces nearly all the minerals needed for modern economies although a few, such as manganese, chromium, bauxite and tin, are imported from lower-cost sources.

The strength of Canada's mineral industry is based on export sales. About 87.7% of the total mineral production was exported with crude minerals comprising 53.8% of the total mineral exports. Apparent consumption of minerals in Canada ranged from 28.3% for copper to 9.8% for zinc.

Exports of minerals and fabricated mineral products have led to several periods of sustained expansion in the Canadian economy in the past and they have been a major factor in the recent increase in Canada's export trade. In 1973 these exports were valued at \$7,335.6 million or 29.8% of the \$24,644.0 million total of merchandise exports. This proportion is typical of the past decade and has been maintained despite the sharp increase in Canada's automobile trade with the United States in the late 1960s. Increased demand in the United States was the main factor in the increase in Canada's exports. The major consumers of Canada's exports of mineral products were: the United States 61.8%, Japan 12.5%, Britain 8.1%, and the European Economic Community 7.8%. Comparable percentages for 1972 were: United States 64%, Britain 9.7%, Japan 9.1% and EEC 7%. Exports to Japan increased markedly although the United States remained Canada's most important export customer.

Mineral production is divided into four sectors: metallics, non-metallics, mineral fuels and structural materials. The contribution of each of these groups to the total value of production in 1973 was as follows (1972 figures in parentheses): mineral fuels 38.6% (37%), metallics 46% (46%), non-metallics 7.3% (8%) and structural materials 8.1% (9%). The value of mineral fuels production increased with the continued rise in export sales. Structural materials are sold mainly in the domestic market where the demand is more stable.

Canada leads the world in mineral exports and ranks third in mineral production behind the United States and the Soviet Union. The mineral industry has always been a major factor in Canada's economic development and is still the main force in the northward advance of Canada's frontiers of population and economic activity.

The prices of most minerals, especially the non-ferrous metals, showed great strength in 1973. This is partly due to inflation and partly a result of a greater than anticipated economic expansion in the United States, Japan and Europe. The price index for ferrous metals, iron ore, ferro-alloys and additives showed an increase of 12.8% over 1972. Non-ferrous metals, after declining from their peak value in 1970, registered a 30% gain in 1973 and non-metallic