# Mines and minerals

# Chapter 12

### Canada's mineral industry

Canada leads the world in value of mineral exports and ranks third among the diversified mineral producers in non-fuel mineral production behind the United States and the Soviet Union. The mineral industry has 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 overall demand for Canadian non-fuel minerals in 1978 was up from 1977. Market conditions, however, varied widely among commodities. The value of mineral production in 1978 increased 6.4% compared with a 19.9% increase in 1977.

Canada's mineral production in 1978 was valued at \$19.7 billion compared with \$18.5 billion in 1977. Shipments of metals declined by 7.8%; however, non-metals shipments increased 14%, and structural materials 8% during 1978.

Canada produces about 60 different minerals from domestic deposits. The 10 leading minerals comprised 79% of the total output by value in 1978 compared with 81% in 1977. The 1978 value for the 10 leading minerals totalled \$15.6 billion. Individual values were: petroleum \$5.7 billion, natural gas \$3.9 billion, iron ore \$1.2 billion, copper \$1.1 billion, zinc \$791 million, coal \$733 million, nickel \$652 million, asbestos \$602 million, uranium \$589 million and potash \$493 million. The first four accounted for 60% of the total value of mineral production in 1978 compared to 59% in 1977 (Tables 12.1 - 12.5). Details on uranium production are given in Chapter 13.

Canada produces many minerals needed for modern economies although a few, such as manganese, chromium, bauxite and tin, are imported.

#### Sectors of production

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 1978 was as follows (1977 figures in brackets): mineral fuels 57.1% (53.4%), metallics 28.1% (32.4%), non-metallics 7.9% (7.4%) and structural materials 6.9% (6.6%). Value of mineral fuels production increased with the continued rise in energy prices. Structural materials are sold mainly in the domestic market where demand is more stable.

Price changes for minerals were mixed in 1978. Some declined because of reduced demand brought about by the relatively depressed state of the industrial economies; these included copper, nickel and zinc. Aluminum and lead prices rose during the year, as did those of the precious metals, iron ore in North America and several of the additive minerals, including molybdenum and cobalt. Canada's two major non-metals, asbestos and potash, both experienced price increases.

#### **Export** sales

Exports from the mineral industry have traditionally contributed a substantial proportion, more than a third, to Canada's total merchandise exports. Historically these mineral exports were predominantly of non-fuel materials, 80% or more in the mid-1960s. As energy prices increased in the early 1970s, energy exports became more significant, and in 1975 exceeded non-fuel mineral exports, accounting for 52% of total mineral exports. Since then the value of energy exports has declined, and in 1978 they amounted to about 47% of the total.

Exports of crude and fabricated mineral products in 1978 amounted to \$14.5 billion, of which 69.9% went to the United States, 14.5% to the European Economic Community (EEC) and 9.4% to Japan. Of the total, \$8.3 billion were crude minerals; 67.2% of these were shipped to the US, 11.2% to the EEC and 12.8% to Japan. The remaining \$6.2 billion mineral exports were fabricated materials, of which 73.6% went to the US, 9.0% to the EEC and 4.8% to Japan.

## 12.1.1

12.1.2

12.1