

10.1 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 population and economic activity.

The industry is highly diversified, with over 60 different mineral commodities produced. It is also widely distributed with exploration and mining activities being carried out in all regions of Canada.

Representing almost 10% of Gross National Product the value of production of the mineral industry grew steadily from \$26.1 billion in 1979 to \$33.1 billion in 1982. The strongest growth took place in 1979 when the value of non-fuel production increased 33.4% and fuels 25.5% over the previous year. However, by early 1982 the effects of a worldwide economic recession were strongly felt. Value of non-fuel mineral production dropped 18.1% in 1982 compared with 1981. The fuel sector continued to show improvement but metal mining declined 18.8%, non-metal mining 20.4% and structural materials 11.0% from the previous year.

The 10 leading minerals represented from 77.0% to 79.0% of the total output by value over the four-year period from 1979 to 1982. They included petroleum, natural gas, coal, iron ore, copper, zinc, nickel, uranium, gold and silver.

Except for a few minerals such as tin, manganese, chromium, phosphate and bauxite, Canada produces most of its mineral requirements.

The mining sector performed strongly in 1979 and 1980 in terms of both output and level of employment, but as the economy moved into the recession, the combination of reduced demand and falling prices for mineral commodities weakened the sector's impact.

10.1.1 Sectors of production

Mineral production is divided into four sectors: metallics, non-metallics, mineral fuels and structural materials. The percentage contribution of each of these groups to the total value of production in 1982 was as follows (1979 figures in brackets): mineral

fuels 60.4% (50.5%), metallics 21.0% (30.0%), non-metallics 6.2% (7.0%) and structural materials 4.7% (6.4%). The value of mineral fuels including coal, natural gas and petroleum represented an increasing share while the metallic sector dropped significantly over the four-year period. Key industrial sectors such as housing, construction and the automobile industry, the principal consumers of mineral products, were severely affected by the general economic recession by late 1980. As a result a widespread reduction in the demand for almost all mineral commodities in Canada and abroad forced production cutbacks and many temporary or permanent mine closures.

This downturn was reflected in the volume index of mineral production, which measures the mining industry's real output based on constant 1971 prices. In 1979 the index for total mines, quarries and oil wells measured 104.3, increasing to 108.1 in 1980 and dropping to 89.9 in 1982. The index for metal mines decreased 22% over the four-year period from 76.4 in 1979 to 59.5 in 1982.

Mineral prices showed wide fluctuation over the period. The most dramatic changes occurred in the gold market where the price (in Canadian funds) moved from an average of \$360 an ounce in 1979 to \$716 in 1980. It dropped to an average of \$460 in 1982, well below the high of 1980 but still high enough to make exploration and production profitable. The price of silver followed suit, approaching \$50 (Canadian) an ounce early in 1980 but dropping to an average of \$9.78 in 1982. Copper fluctuated from a high of \$1.30 a pound in September 1980 to an average of 88.24 cents a pound in 1982. Plagued with declining demand, prices of most major commodities fell, including nickel, zinc, lead, molybdenum and aluminum.

Capital expenditures on machinery and equipment and construction in the mineral extraction industries totalled \$5.6 billion in 1979, rose sharply to \$10.0 billion in 1981 and then dropped to \$9.5 billion in 1982. Investment in the fuel sector took by far the largest share of the total reaching \$6.6 billion in 1982. Investment in metal mines reached \$1.3 billion. All investment in mining including repair expenditures was \$12.0 billion in 1982, 12.3% of total Canadian investment in the economy.