Silver. Canadian silver production in 1986 was estimated at 1 219 050 kg valued at $310 million, compared with 1 197 072 kg valued at $334 million in 1985 and 1 326 720 kg valued at $462 million in 1984. Unlike the price of gold, silver prices did not recover during 1986 and this explains the higher production but lower value in 1986 when compared with 1985.

Canada is the world's fifth largest producer of silver after Mexico, Peru and the Soviet Union. Other major producers include Australia, United States and Poland.

The main source of Canadian silver production is as a byproduct of base metal mining operations which account for 75%. The remainder comes from silver and gold mines.

Ontario, the leading silver-producing province, accounted for 35% of Canadian production. Its silver comes mainly from base metal mines but a significant portion comes from the silver mines near Cobalt. British Columbia is also an important silver producer, accounting for 33% of Canadian production. Its production comes mainly from lead-zinc mines and one large silver mine. New Brunswick and Yukon are the next most important of the Canadian producers, accounting for 17% and 5% of production, respectively.

Most mine production of silver is recovered and refined at plants at Trail, BC, Sudbury and Cobalt, Ont. and Montreal, Que. However, some is exported as a constituent of nonferrous metal concentrates for processing in other countries.

Silver prices remained depressed in 1986, averaging US$5.47 (Cdn$7.57) per ounce, down from US$6.17 in 1985 and US$8.14 in 1984.

Lead. Lead is mined mainly as a co-product of zinc at polymetallic mines in Canada. Canada is the third largest mine producer of lead and fifth largest lead metal producer in the western world, with 11% and 6% of mine and metal production, respectively. Mine production of lead in concentrates rose to over 296 000 t in 1986 compared with levels of around 250 000 t to 285 000 t from 1983 to 1985, partly because of the reopening of the large lead-zinc mine at Faro, Yukon. Exports of lead in concentrates, mainly to Europe, Japan and the US, were also boosted as a result, from 20-35% to approximately 40% of mine production. The remainder was processed at Canada's two primary lead smelters/refineries with nominal production capacities of 145 000 tonnes per year (tpy) and 72 000 tpy of lead metal, respectively, at Trail, BC and Belledune, NB.

Annual production of refined lead from concentrates consistently remained just over 170 000 t between 1983 and 1986. Lead metal production from recycled batteries and other lead scrap contributed a further 70 000 tpy. Domestic consumption of lead metal, as measured by producers' shipments, ranges from 100 000 to 120 000 tpy. Some two-thirds of lead is used in lead-acid batteries. Other uses include solder, tetraethyl lead and semi-fabricated products. The major export markets for refined and alloyed metal are the US and Europe.

Aside from the reopening of the Faro, Yukon mine in June 1986, two major recent developments are notable. The Little River Joint Venture of Heath Steele Mines Limited in New Brunswick has been closed since 1983, and modernization of the lead smelter at Trail, BC began in 1986. The first phase, installation of a new 160 000 tpy furnace, is scheduled for completion in 1989.

In 1986 there were six major mine producers of lead, located in New Brunswick, British Columbia, Yukon and Northwest Territories. Eight polymetallic mines which produced minor amounts of lead are located in Ontario, Manitoba, British Columbia and Yukon.

Platinum group metals. The platinum group, which includes platinum, palladium, rhodium, ruthenium, iridium and osmium, occur in nature in close association and are chemically similar in many respects. Platinum and palladium are the most important members of the group in terms of both production and variety of uses.

Canada, the third largest producer of platinum group metals (PGMs) behind South Africa and the Soviet Union, accounts for about 4% of total world production. Canadian production in 1986 was estimated at 8.8 million grams, down from 10.5 million grams in 1985.

Platinum group metals are produced in Canada by two companies as byproducts from the mining of nickel-copper ores. Although the bulk of the PGMs are recovered from operations in the Sudbury, Ont. basin, small amounts of these metals are also produced at Thompson, Man.

The residue from the refining of nickel-copper matte, which contains platinum group metals, is shipped by one company to its refinery at Acton in the United Kingdom for the extraction and refining of PGMs. The other company ships a nickel-copper matte containing PGMs to its refinery at Kristiansand, Norway.

While the use of the PGMs, particularly platinum, in jewellery is important, their principal applications are industrial in nature. The