natural gas and sulphur, and because of new coal mine developments. In 1982 the value of mineral production increased 14.8% from 1981 to $20.2 billion. Elemental sulphur decreased 7.3% to $580 million. Coal rose 20.6% to $393 million despite production cutbacks and shut-downs at mines dependent on offshore markets. Alberta produces 87.1% of Canada's fossil fuels and 96.7% of its elemental sulphur.

British Columbia. Mineral production from 1978 to 1982 increased 50.9% in value because of price increases for natural gas and increased coal production from new mine developments and expansions. Mineral production rose to $2.8 billion in 1982, up 3.3% from 1981. The output value of copper fell 18.4% to $520 million as a result of extensive mine shut-downs forced by low prices. Higher prices caused coal values to increase 17.4% to $635 million, natural gas to increase to $337 million, and crude petroleum to increase to $325 million. British Columbia is Canada's largest producer of copper, coal, molybdenum and lead. Development of a northeast coal fields megaproject was nearing completion at a cost of over $2 billion, with two mines producing 8 million tonnes a year, a modern town, a 130-km electric railway, and port facilities at Prince Rupert. One new mine began production in the established coal fields in the southeast, but industry-wide the volume of coal production declined in 1982.

Yukon. From 1978 to 1982 the value of mineral production fell 23.3%. This decline occurred toward the end of the period, as production in 1982 fell 28.7% from 1981. Extended shut-downs of two of Yukon's three base-metal mines caused zinc production to decline 32.8% to $63 million, and lead to fall 52.6% to $26 million. The effect of the shut-downs on the Yukon economy was serious, because in recent years the mining industry has been the largest single contributor to Gross Territorial Product, wages and salaries, and total employment.

Northwest Territories. The value of mineral production increased 33.8% to $599 million, mainly because production of zinc increased 86.5% to $298 million and lead, 31.8% to $59 million. Gold increased 20.7% in value to $103 million. These sharp increases were largely because new mines came on stream; the most significant were the Polaris lead-zinc mine on Little Cornwallis Island and the Lupin gold mine at Contwoyto Lake north of Yellowknife.

10.3 Commodity summary

Mineral fuels. Oil, natural gas, coal and uranium are summarized in Chapter 11, Energy. Areas of production of other minerals and an explanation of changes in other sectors are outlined here.

10.3.1 Metals

Copper. Mine production of recoverable copper was 606 202 t in 1982, down 15% from 691 328 t in 1981 and down 15.4% from 716 363 t in 1980. British Columbia is the leading copper producing province with 44% of production in 1982, followed by Ontario with 28.5% and Quebec with 15%. With prices below production costs for nearly all Canadian copper producers, a number of mines were closed for weeks or months during 1982. By December, Canadian mine production rates were about 60% of normal.

Domestic consumption of copper was 96 694 t in 1982, 216 759 t in 1981 and 195 124 t in 1980. A substantial amount of "domestically consumed" copper is converted in Canadian plants to semifabricated forms such as sheet, tubing and wire and then exported.

Canada's largest copper refinery, in Montréal, was closed by a strike for 17 weeks in mid-1982. A copper refinery at Sudbury was shut down from May 1982 to year-end due to high inventories and poor markets for the associated nickel output.

Canadian copper ores were smelted at six locations: at Copper Cliff and Falconbridge in the Sudbury, Ont. district; at Noranda and Murdochville, Que.; at Flin Flon, Man.; and at Kamloops, BC. Initial production from a new copper smelter and refinery near Timmins, Ont. was achieved in November 1982.

Copper markets in 1981 were depressed and in 1982 abysmal, with copper prices having dropped (in constant dollar terms) to their lowest levels since the 1930s. Planned expansion or development of new orebodies were deferred indefinitely. Mines near Baie Verte, Nfld., St. Anne des Monts, Que., Pickle Lake, Ont., Ashcroft, BC, and Whitehorse, Yukon closed permanently. At the end of 1982, a number of mines remained closed pending improved markets. Many mines still in production were operating at reduced rates.

Iron ore production declined from a peak of 59.6 million tonnes in 1979 to 34.5 million tonnes in 1982 mainly because of depressed steel production in Canada's two major markets: the United States and western Europe.

In Quebec–Labrador, the Schefferville iron ore operation was closed permanently in November 1982 because of declining demand for direct shipping ore. Other producers reduced output to conform with lower sales contracts. The Quebec government was considering alternatives concerning the future of an iron ore company in which it owns 50.1%; this company has had large financial losses for several years.

Production capacity in Ontario was reduced by about 5.7 million tonnes a year when four companies permanently closed their mining operations. The four