

Canada remained the second largest gold producer in the Free World although output at 4,400,000 oz.t. was more than 4 p.c. below that of 1960. The industry's outlook improved in mid-1961 because of the reduction in value of the Canadian dollar in relation to the United States dollar. Lead-zinc producers continued to be confronted with over-supply in world markets and with the United States import quotas on unmanufactured lead and zinc that were imposed in September 1958. Despite marketing problems, production of both lead and zinc was sustained. Several large undertakings were announced so that future growth of lead-zinc industries appears assured.

Reflecting Canada's continuing industrial growth and construction activity, the value of industrial minerals output, embracing non-metallic minerals and construction materials, reached a record \$533,400,000, 2.5 p.c. above the previous record of \$520,100,000 set in 1960. New production records were established for asbestos, elemental sulphur, cement, sodium sulphate and titania (TiO_2). The industrial minerals sector of Canada's mineral industry contributes over 20 p.c. of the total value of mineral output. This proportion may increase later in the 1960's as several major developments now under way will greatly increase output of certain commodities, some of which have not yet been produced in significant amounts in Canada. These developments include the production of asbestos from deposits in the Baie Verte area of Newfoundland in 1963; the large-scale recovery of elemental sulphur as a by-product of gas processing plants in Western Canada; renewed production of potash in 1962 from the vast high-grade deposits in Saskatchewan; and greater production of certain other non-metallic minerals, notably titania and salt.

In the domestic manufacturing and construction industries of any country, industrial minerals are generally important as primary raw materials required for further processing, and as the industrial economy grows so grows the need of industrial minerals. Their production is not usually dependent upon exports nor affected by competition in world markets; although notable exceptions for Canada are asbestos, elemental sulphur and potash.

The value of mineral or fossil fuels production in 1961 increased to \$643,000,000 from \$566,000,000 in 1960; since 1950 this sector of the Canadian mineral industry has shown more rapid growth in value of output than have the other two sectors—the metallic minerals and industrial minerals. Crude oil production rose to 220,000,000 bbl., an 18-p.c. increase over 1960. Natural gas production was 646,000,000 Mcf., a 25-p.c. increase over 1960. Natural gas by-products, which include condensate, natural gasoline, propane, butane, etc., were valued at \$22,500,000. Coal output declined to 10,400,000 tons from 11,000,000 tons in 1960.

Petroleum continued to be the largest single contributor to Canada's mineral output. The industry gained considerable impetus early in 1961 when the Federal Government announced its 'national oil policy' by which, through voluntary means and the co-operation of producers and consumers, it was hoped that an average output of 640,000 bbl. a day of crude oil and natural gas liquids would be attained in 1961 and 800,000 bbl. a day in 1963. The 1961 objective was reached and considerable progress has been made toward the 1963 goal.

The modern era of petroleum production in Canada commenced with the discovery in 1947 of oil near Leduc, 18 miles south of Edmonton, Alta. Annual output of oil rose from less than 8,000,000 bbl. in 1947 to nearly 190,000,000 bbl. in 1960, about 70 p.c. of the production in that year coming from Alberta, 27 p.c. from Saskatchewan and the remainder from Manitoba, British Columbia, Ontario and the Northwest Territories. Natural gas production in the same period rose from 52,000,000 Mcf. to 522,972,000 Mcf., about 73 p.c. in 1960 coming from Alberta, 16 p.c. from British Columbia and 7 p.c. from Saskatchewan. Production increases in 1961 are evidence of continuing expansion in the industry. At the same time, resource development provided for reserve increases from the 1960 year-end totals of 4,217,000,000 bbl. of crude oil and natural gas liquids and 30,700,000,000 Mcf. of natural gas.