

In 1954 the industry recorded its fourth consecutive substantial decrease in production, recording a decline of over 987,094 tons from the 1953 level to 14,914,000 tons valued at \$96,600,000. Nova Scotia contributed about 39 p.c. of the total production, Alberta 33 p.c., Saskatchewan 14 p.c., British Columbia 9 p.c. and New Brunswick 5 p.c. The decline was greatest in Alberta where it amounted to 18 p.c., British Columbia being next with 13 p.c. Output in Nova Scotia, New Brunswick and Saskatchewan was slightly higher than in 1953.

Canada's consumption of coal in 1954 declined 5,352,000 tons to 32,788,000 tons mainly because of the continued substitution of fuel oil, diesel oil and natural gas for coal in domestic and building heating, for railway use and power production. About 56 p.c. of the coal consumed was imported compared with 60 p.c. in 1953. The reduction was mainly in bituminous coal imported from the United States. Coal sales made by retail fuel dealers decreased 4 p.c., coal used for industrial purposes decreased 9 p.c. and railway consumption 22 p.c. The latter decline was partly the result of less traffic but was mainly attributable to the conversion of steam locomotives from coal to oil and to the steadily increasing use of diesel locomotives. In 1954 the CNR reported the delivery of 100 additional diesel electric locomotives and the CPR had 44 on order. The CPR also ordered an additional 100 units which, when delivered, will bring its total number of diesel locomotives in use to 509.

The use of oil for domestic and building heating purposes has increased by over 140 p.c. since 1947 while the consumption of coal and coke has decreased by about 32 p.c. for the same period on a weight basis. During 1947 the oil consumed estimated as the heat equivalent in terms of coal amounted to 20.3 p.c. of the total fuel used; by 1954 this amounted to over 42 p.c.

The consumption of briquettes increased from 836,000 tons in 1953 to 962,000 tons in 1954, of which 72 p.c. was for railway use. However the steady changeover from coal to oil burning locomotives led to the closing of one of the major locomotive briquette producers in Alberta.

The coal industry is endeavouring to maintain its present market position by reducing costs of production and by producing better coal. Underground operations have been mechanized to a great extent and eastern collieries particularly have been assisted by the use of the Dosco Miner, a machine developed by the Dominion Steel and Coal Corporation of Nova Scotia which is capable of cutting coal from the longwall face without the aid of explosives and of loading it onto conveyors at the rate of 500 tons per eight hour shift. The more extensive use of strip mining methods is also a cost saver. Strip mining is practised in all provinces except Nova Scotia and about 34 p.c. of the 1954 output was produced by this method. Practically all of the output in Saskatchewan was strip mined, 44 p.c. in Alberta, 76 p.c. in New Brunswick and 18 p.c. in British Columbia. On an average the output per man-day in strip mining was 12.5 tons compared with 2.6 tons for underground.

In its efforts to produce better quality coals the industry continued to direct its attention to the use of modern methods of beneficiation such as cleaning, drying, dust-proofing, freeze-proofing and the briquetting of fines. The beneficiation of fines continues to be a major problem and during 1954 additional equipment for the cleaning and drying of fines was installed at certain western collieries.

The federal Department of Mines and Technical Surveys assists the industry by carrying out a group of research projects directed at developing uses for the finer sizes of western Canadian bituminous coals that are particularly friable. One such project relates to the use of coal fines in the metallurgical industry. The Department also is continuing the study of the phenomena of bumps and outbursts occurring in certain coal mines in western Canada and in the Maritimes with the long range objective of evaluating the causes of these phenomena so that mining at depth may be made safe and economical. Detailed stratigraphic and palæontological studies have been conducted in or near coal-fields of Nova Scotia and New Brunswick to assist in the precise correlation of coal bearing