

British Columbia lead in annual tonnage with production of approximately 28.6 m. tons with an estimated value of C\$583 m. The Maritime provinces of Nova Scotia and New Brunswick account mainly for the remaining coal production in the country with an annual production of approximately 2 m. tons valued at an estimated C\$87 m. In addition, there is also a minor amount of coal produced in the Yukon Territories.

Coal operations vary from small independent producers with as few as two employees to large companies with multiple mining operations, company sponsored towns, preparation plants and surface shops.

Investor-owned companies and private companies tend to dominate the industry in the coal-producing areas of British Columbia, Alberta and Saskatchewan while Crown-owned (government) corporations are the rule in Nova Scotia and New Brunswick.

The industry has enjoyed relatively few days of lost production due to strikes. On the average, only 1,000 man days per year during the last five years have been lost due to strikes. Since its inception, coal mining in Canada has never suffered from a high rate of work stoppage and loss of production due to strikes.

Mining methods

Coal mining methods are dependent upon the type of coal to be mined and the conditions under which it occurs. Soft or hard coal mining determines to some extent the end use of the product and its market value.

The lignites (soft coal) and sub-bituminous coals are used for thermal power generation and have a market value of less than C\$5 per short ton (2,000 pounds) for coal at the mine site. However, some of the low to medium volatile bituminous coals used for coke production have a market value of more than C\$50 per short ton for clean coal at the mine site.

The difference in price has a direct bearing on allowable mining expenditures and places a limit on the mining methods that may be used.

There are two methods of mining coal. These methods are by mining at the surface (strip mining) or by underground means. During 1976 surface extraction methods accounted for 86 per cent of the saleable coal. Thermal coal accounted for 53 per cent of the tonnage produced and represented only 15 per cent of the total value.

Strip (surface) mining is a viable method of mining 'soft' coal lying near the surface of the mining area. In the past, however, the unseemly scars left on the landscape proved to be unacceptable to the environmentalists. In recent years, land reclamation projects have achieved a great deal of success in their attempts to restore the damaged surfaces.



Surface mining at Hinton, Alberta: a mine worker measures the depth of a hole before filling with explosives.

Canadian coal has been mined for over 300 years. Deposits of coal are widely distributed. There is a wide disparity as to the age, quality and geological conditions under which coal deposits appear.

There are four basic classes of coal. These range from the soft lignites through the sub-bituminous and bituminous classes to the hard anthracite class.

As a rule, the lignites and most of the sub-bituminous coals are used for steam generation by electric-utility companies. The best metallurgical or coking coals (for making iron and steel) are usually of the low and medium volatile bituminous class.

Anthracite coal is commonly used for domestic heating purposes as it burns more cleanly than most coals and has the highest heat content.

As coal comes to occupy a larger place in the country's overall energy requirements, there are other major issues that will have to

be resolved by government and business planners. Among these public concerns are transportation costs, strip mining, air pollution and financing.

The long distances between mines and power plants in Canada have traditionally discouraged the use of coal as an energy source. It is imperative that long term stability in railway rates and improved facilities for the handling of coal be achieved.

Pollution control

Public utilities are under pressure from the public to control pollution by the sulphur content of the mineral as well as to regulate pollution from coal-fired plants.

Foreign investment in the coal industry will result in the development of new jobs and it is hoped that Canadian tax laws will reflect the fact that mining is a high risk business. Incentives will be needed to encourage

Miners changing shift at number 26 colliery in Lingan Mine, Nova Scotia; they are brought to the Hoist House by elevator.

