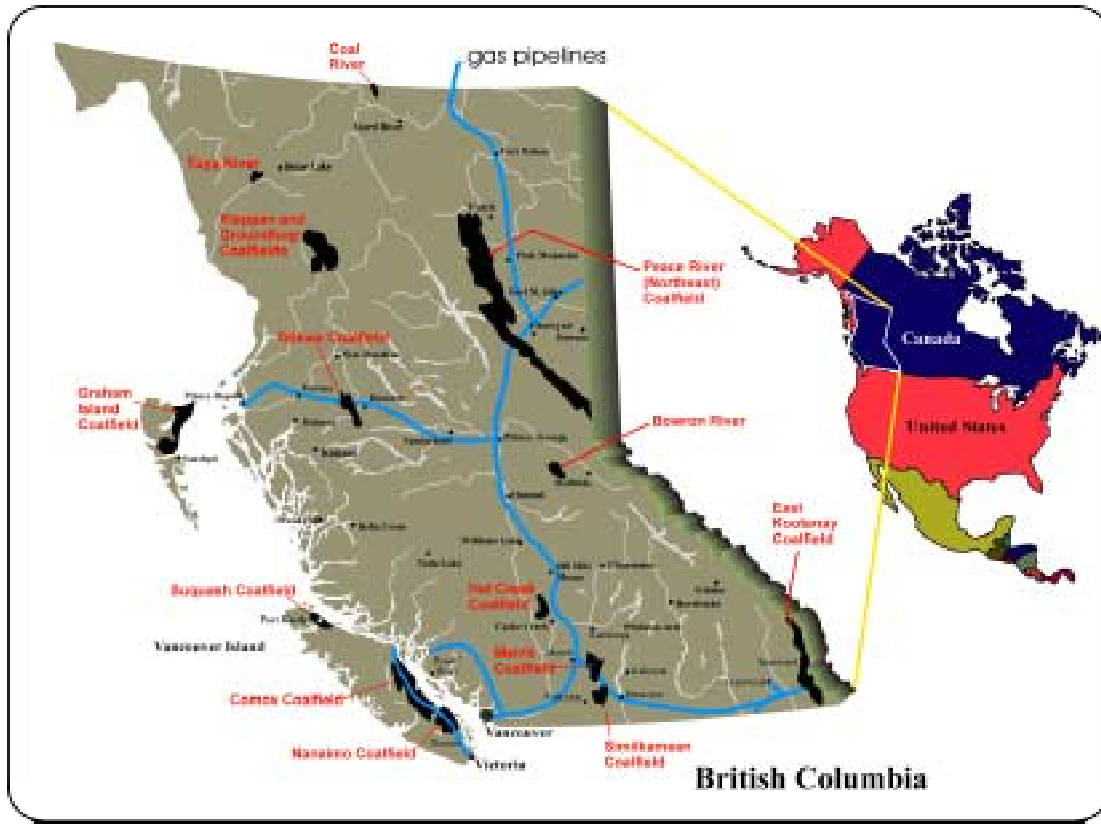


# COAL IN BRITISH COLUMBIA

## 1. BRITISH COLUMBIA'S COAL RESOURCES

British Columbia's coal resources are estimated at more than 255 billion tonnes. Coalfields of varying quality, quantity and accessibility are distributed throughout the province, as shown on the following map.



Over 600 million metric tonnes (mmt) of coal have been mined in British Columbia in the since 1836. About 140 mmt of this total was produced prior to 1970. Since 1970, as a number of new mines in the Peace River and East Kootenay coalfields were opened, production climbed gradually to 25.8 mmt in 1989. Production in 2000 was about 26.2 mmt, a slight increase from 24.2 tonnes in 1999.

In 2000, British Columbia's coal production represented approximately 26 percent (\$0.79 billion) of the total value of total provincial solid mineral production (\$2.8 billion). In the 2000/01 fiscal year, the Provincial Government collected \$17.9 million in direct taxes from the coal industry. The coal industry also contributes provincial corporate income taxes, provincial sales tax, fuel tax and property taxes to local governments. In addition, the coal industry in British Columbia is responsible for approximately 6,000 direct and indirect jobs.

Coal production comes from three regions in the province. In the southeast East Kootenay coalfields metallurgical and thermal coal is mined at five large open pit mines. Metallurgical coal is mined from one open pit mine in the Peace River coalfield and thermal coal is mined at one underground mine in the Comox coalfield on Vancouver Island.

The following map shows the locations of British Columbia's operating coal mines.



## 2. British Columbia Coal Industry Structure

British Columbia's coal industry consists of seven operating mines controlled by four companies: Fording Inc.; Teck-Cominco Corporation; Luscar Coal Ltd.; and, Hillsborough Resources. Six of the mines sell coking coal to steel mills in the export market, primarily to Japan, and one producer (Hillsborough's Quisam Mine) ships thermal coal to cement plants in the Pacific Northwest industrial market. The following table shows the ownership, location and type of coal production.

<b>Company/Mine</b>	<b>Region</b>	<b>Coal Type</b>
<b>Fording</b>		
Fording River	Kootenay	Hard Coking
Greenhills	Kootenay	Hard Coking
Coal Mtn.	Kootenay	Blended Coking
<b>Teck Cominco</b>		
Elkview	Kootenay	Hard Coking
Bullmoose	Peace River	Hard Coking
<b>Luscar</b>		
Line Creek	Kootenay	Hard Coking
<b>Hillsborough</b>		
Quinsam	Vancouver Island	Thermal

British Columbia's coal industry is concentrated in a small group of well-capitalized firms with many coal interests in British Columbia and other locations, principally Alberta. Industry concentration increased rapidly in 1990's after a significant market price decline made several operations uneconomic at existing productivity levels. The continued economic viability of British Columbia's coal mines is largely due to increasing of fewer , larger volume mines.

### **3. COAL MARKETS AND PRICES**

Virtually all of British Columbia's coal production is exported into two international markets: the foreign metallurgical coal markets and the thermal coal market located in the Pacific Northwest.

#### **Metallurgical Coal Market**

British Columbia's metallurgical coal production in 2000 was 24.8 million metric tonnes mmt, or about 95 percent of the province's total coal production. All metallurgical coal production is export. Japan is the primary export destination, however several companies have diversified their exports to other Asian, South American and European countries to reduce dependency on the Japanese Steel Industry.

Metallurgical coal is used in the production of coke for blast furnaces to produce iron for steel making. Global demand for iron is forecast to increase by just 0.48 percent by 2010. The near zero growth of demand for metallurgical coal is the result of:

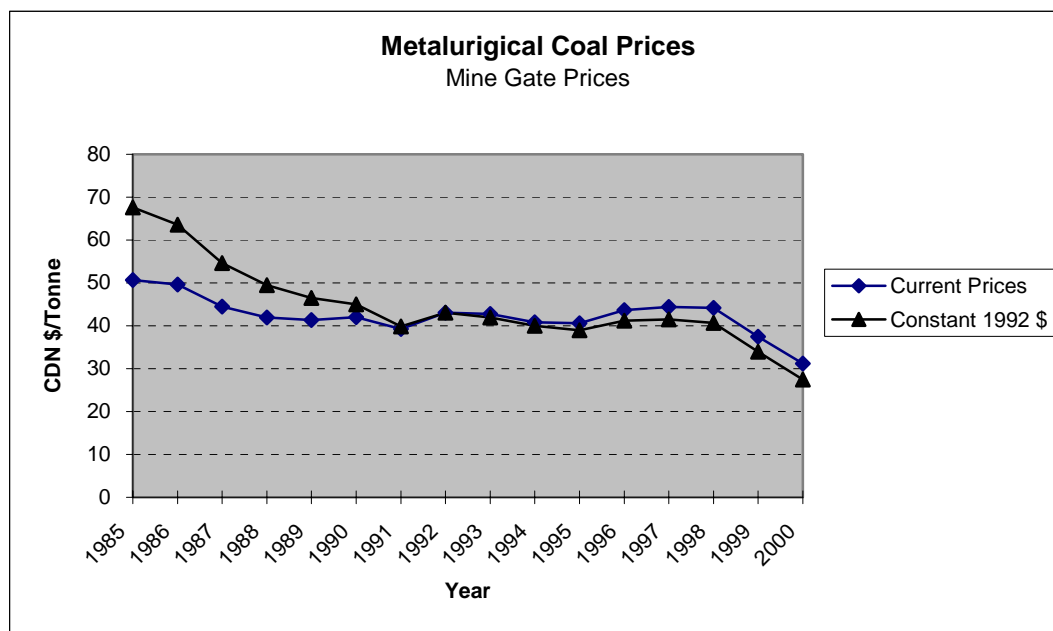
- flat growth in the global demand for steel as a result of material substitution;

- increased use of pulverized coal injection blast furnace technology which uses low grade metallurgical and thermal coal; and
- expansion of the use of electric arc furnace steel production, which requires no metallurgical coal.

The metallurgical coal production sector is highly competitive and has significant long-term excess capacity. This is primarily the result of the development of new, high quality, low cost Australian mines. Australian exports account for 50 percent of the world seaborne metallurgical coal supply and enjoy a 20 percent cost advantage over Canadian producers. The development of mines in China is also expected to contribute to the excess global supply in the long-run.

The world metallurgical coal market is dominated by Japan, the largest buyer, and by two large exporters - Australia (supplying the Pacific market) and the United States (supplying the European market). World metallurgical coal prices are set annually, based on benchmark price settlements in the Japanese metallurgical coal market.

Since 1985, the price of British Columbia metallurgical coal at the mine gate has decreased from CDN \$50.65 (\$67.62 constant 1992\$) to CDN \$31.21 (\$27.50 constant 1992\$) in 2000.



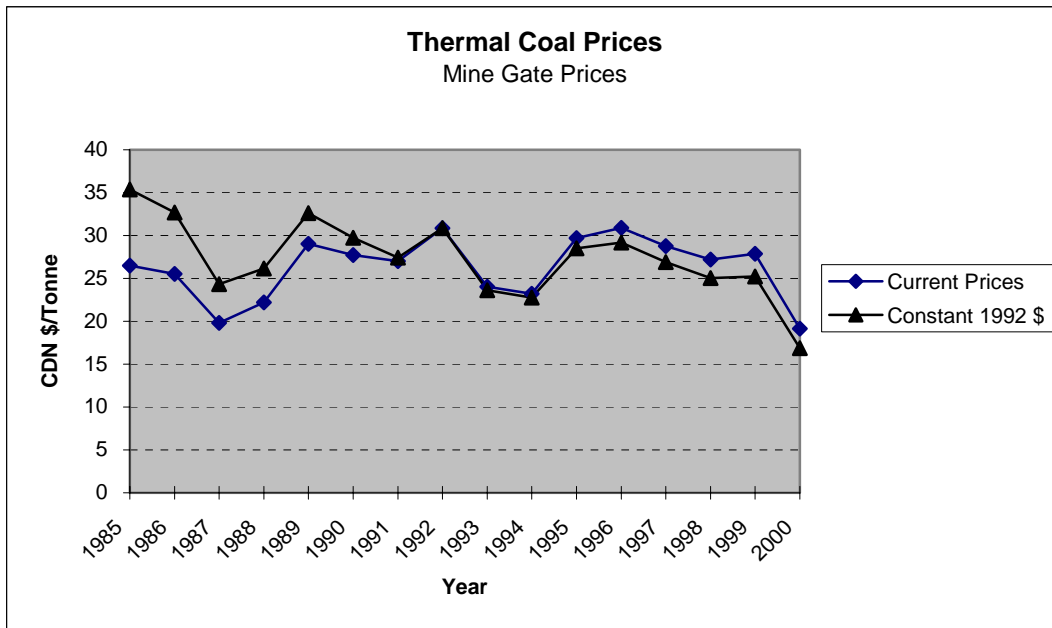
Source: Ministry of Energy and Mines

## Thermal Coal Market

Despite large reserves British Columbia is not a significant producer or exporter of thermal coal. Thermal coal exports represent approximately 5 percent (1.3 mmt) of the total province's total coal production (26.2 mmt). British Columbia does not currently use coal for electricity generation whereas Alberta relies on coal for 79% of electricity generation.

The low price of thermal coal and the long rail distances from mines to port have limited British Columbia's ability to compete in the export market. While Alberta relies extensively on coal for electricity generation, opportunities for British Columbia coal producers to export to Alberta are limited because Alberta coal companies operate the majority of coal-fired generating stations in Alberta at the mine mouth.

Since 1985, the price of thermal coal at the mine gate has decreased from CDN \$26.50 (\$35.38 constant 1992\$) to CDN \$19.16 (\$16.88 constant 1992\$). The development of coal-fired electricity generating facilities, particularly in the United States may increase the demand for thermal coal and thus moderate prices over the longer term.



Source: Ministry of Energy and Mines