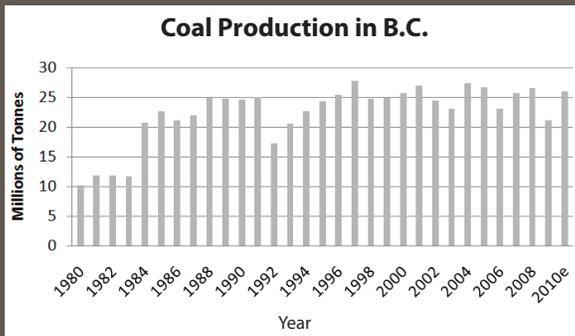


History of Coal in B.C.

Coal mining in B.C. commenced on Northern Vancouver Island in the mid 19th Century, soon moving south to the Nanaimo coalfields where underground mining continued until the 1960's. With the development of the railways, underground coal mining began in southeastern B.C. in the late 1800's.

The industry has gone through many economic cycles, re-emerging in the late 1960's in southeastern B.C. in the form of large-scale, open pit metallurgical coal mines in response to demand from the Japanese steel industry.

Simultaneous with development of large-scale mines has been construction of port facilities such as Westshore Terminals, serving the southeastern coalfields, and Ridley Terminals, serving the northeast. Rail carriers implemented unit train haulage whereby complete train sets are dedicated to the exclusive use of moving coal from the mine to the port.



Exploration surged in the 1970's and early 1980's resulting in many good development prospects being identified in northeastern and southeastern BC. Producers diversified into other Asian, European, South American markets, supplying customers in more than 20 countries.

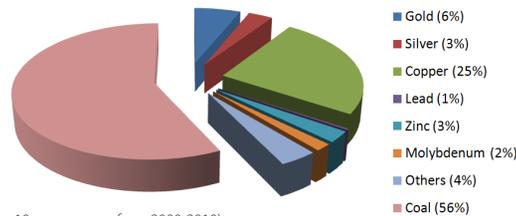
Production of coal continued to increase through the 1990's, when approximately 25 million tonnes of clean coal were produced annually. Today, companies are once again considering underground mining to recover coal in B.C., and the northeastern coalfields have also re-emerged as a focus of industry expansion.

B.C. Coal Production

Coal contributes a very significant amount of revenue to B.C.'s economy. The average annual value of coal production over the last 5 years has been just over \$3 billion, which represents over half the total value of mineral production in the province during that period.

More than 90% of the coal produced in British Columbia is metallurgical coal. B.C.'s metallurgical coal products generally have the following favourable characteristics: medium-volatile bituminous; clean coal ash < 9.5% (air dried); low sulphur (0.4% to 0.6%); low coke oven pressure; high coke stability and coke strength after reaction; low to moderate base/acid ratios; and excellent blending characteristics.

Value of Mineral Production in B.C.



(Based on a 10 year average from 2000-2010)

For More Information

Dave Grieve, Kootenay-Boundary Regional Geologist
250-426-1758 Dave.Grieve@gov.bc.ca

Bruce Madu, Director
Vancouver Mineral Development Office
604-660-3332 Bruce.Madu@gov.bc.ca

Coal in B.C.
www.empr.gov.bc.ca/Mining/Geoscience/Coal/Pages

British Columbia Coal Quality Survey (Bulletin 96)
by D.A. Grieve, M.E. Holuszko, and F. Goodarzi, 1995
www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/BulletinInformation/BulletinsAfter1940/Pages/Bulletin96.aspx

MINFILE
www.empr.gov.bc.ca/Mining/Geoscience/Minfile

MapPlace
www.empr.gov.bc.ca/Mining/Geoscience/MapPlace

BC Geological Survey
www.empr.gov.bc.ca/Mining/Geoscience



Coal in British Columbia

Information Circular 2011-4



Ministry of
Energy and Mines

Coal in British Columbia

Updated Sept 20, 2011; Contributors: AJ, BN, DL

Coal Categories

In addition to carbon, coal contains hydrogen, oxygen, nitrogen, and varying amounts of sulphur, phosphorus and various other major and trace elements. There are several methods of classifying coals, but some of the more common ones are based on the concept of rank (organic maturity). High-rank coals are high in carbon and therefore heat value, and low in volatile components. Low-rank coals are low in carbon but high in volatiles.

The highest rank, and generally the hardest coal, is **anthracite**. In Canada it is found almost exclusively in remote regions of northern British Columbia and the Yukon. Mount Klappan is a large anthracite deposit in northwest British Columbia.

Bituminous coal is found in Alberta, British Columbia and the Maritimes. It is sub-divided into high, medium, and low-volatile categories (lower to higher rank). Certain bituminous coals can be classed as metallurgical coal (used to make coke for the steel industry). All bituminous coals make excellent thermal coal, which is mainly used to generate electricity. In 2002, bituminous coal accounted for approximately 45% of Canada's total coal production, and bituminous coal is the primary category of coal produced in B.C.

Sub-bituminous coal is softer than bituminous and contains more moisture, making it less economic to transport long distances. Alberta is the only province where sub-bituminous coal is mined, and all of it is used to generate electricity. It is found in a few locations in B.C., but generally in relatively small sedimentary basins.

Lignite is a soft, brown or black coal found in southern Saskatchewan, southeastern Alberta, southwestern Manitoba, and a few locations in B.C., most notably Hat Creek.

Coal Reserves from Producing Mines

Resource	Tonnage (P+P)	Year	NI 43-101
Willow Creek	29,600,000	2010	Y
Brule	20,100,000	2010	Y
Wolverine	28,900,000	2009	Y
Trend Mine	22,800,000	2010	Y
Fording River	249,900,000	2009	Y
Greenhills	84,900,000	2009	Y
Line Creek	20,100,000	2010	Y
Elkview	231,700,000	2009	Y
Coal Mountain	19,500,000	2010	Y
Quinsam	22,073,000	2008	Y

East Kootenay Coalfields

- Primary coal producing region in British Columbia
- Underground mining started in the late 1800s
- Produces high quality, bituminous coal for steel making
- Teck Coal Limited operates five large open pit mines
- Supports communities of Elkford, Fernie, and Sparwood

Peace River Coalfield

- Major coal producing region in B.C.
- Production started in 1984 with the Quintette and Bullmoose open pit mines (past producers)
- Produces high quality, bituminous coal for steel making
- Currently four open pit mines operated by Walter Energy Inc. (Western Coal) and Peace River Coal Inc.
- Supports communities of Tumbler Ridge and Chetwynd

Vancouver Island Coalfields

- First region in B.C. that was mined for coal in the 1800s
- Long history of underground mining
- Currently produces predominantly thermal coal used on the west coast of North America
- Currently one underground mine operated by Hillsborough Resources Limited
- Supports the community of Campbell River
- Coking coal also exists and has been produced from the Comox Coal Basin

