History of Coal in B.C.

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

In response to demand from the Japanese steel industry, large-scale open pit metallurgical coal mines opened in the 1960s. Coal is transported by dedicated rail service to port facilities such as Westshore Terminals (southeastern coalfields) and Ridley Terminals (northeastern coalfields).

In the 1970s and early 1980s, exploration surges identified numerous prospects, and producers diversified sales into Asian, European, and South American markets.

Coal production increased through the 1990s, when approximately 25 million tonnes of clean coal were produced annually. Another exploration surge (2005-2014) generated advanced projects and proposed mines.

Coal contributes significantly to the British Columbia economy. During the last five years, the average value of coal production has been over $4 billion, representing over half the total provincial mineral production.

Value of Mineral Production in B.C.
(Based on a 10 year average from 2004-2014)

Coal: 47.5%

Gold (4.7%)
Copper (27%)
Silver (1.5%)
Lead (0.1% *Not shown)
Molybdenum (5.7%)
Zinc (1.2%)
Aggregates (5.3%)
Industrial Minerals (7%)

For More Information

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British Columbia Geological Survey coal geology page
www.empr.gov.bc.ca/mining/geoscience/coal/Pages

British Columbia Coal Quality Survey (Bulletin 96)
www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/BulletinInformation/BulletinsAfter1940/Pages/Bulletin96.aspx

COALFILE
www.empr.gov.bc.ca/Mining/Geoscience/Coal/CoalBC/Pages/CoalDataReports.aspx

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

British Columbia Geological Survey
www.empr.gov.bc.ca/Mining/Geoscience
Coal in British Columbia

Coal Categories:

Coal is typically classified on the basis of contained carbon and volatiles (hydrogen, oxygen, nitrogen, sulphur, and phosphorus). High-rank coals are high in carbon (and therefore heat value), and low in volatiles; low-rank coals are low in carbon but high in volatiles.

**Anthracite** is the highest coal rank. In Canada, anthracite is found almost exclusively in remote regions of northern British Columbia (such as at the Groundhog project) and in the Yukon.

**Bituminous** coal includes high-, medium-, and low-volatile categories. Bituminous coal is the main type mined in the province. All bituminous varieties make excellent thermal coal, which is used mainly to generate electricity; some bituminous coals can be used to make coke for the steel industry. Such metallurgical coal accounts for 90% of coal production in British Columbia; the production forecast for 2014 was 29 million tonnes.

**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 for electric power generation. In British Columbia, it is found in local small depositional basins.

**Lignite** is a soft, brown or black coal found in southern Saskatchewan, southeastern Alberta, southwestern Manitoba and, locally, in British Columbia. Although currently not economic, one of the thickest accumulations in the world is at Hat Creek in south-central British Columbia.

Coal Reserves from Producing Mines

<table>
<thead>
<tr>
<th>Resource</th>
<th>Tonnage (Proven+Probable)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fording River</td>
<td>624,900,000</td>
<td>2014</td>
</tr>
<tr>
<td>Elkview</td>
<td>215,200,000</td>
<td>2014</td>
</tr>
<tr>
<td>Line Creek</td>
<td>78,700,000</td>
<td>2014</td>
</tr>
<tr>
<td>Greenhills</td>
<td>65,500,000</td>
<td>2014</td>
</tr>
<tr>
<td>Coal Mountain</td>
<td>7,200,000</td>
<td>2014</td>
</tr>
</tbody>
</table>

Note: Quinsam mine does not publish reserves.