A Concise Guide to Wyoming Coal 2005

An industry overview produced by the
Wyoming Coal Information Committee

Wyoming Mining Association

www.wma-minelife.com
Wyoming Coal Trends
Growing energy needs continue to stimulate Wyoming coal production. In the United States, coal supplies approximately 52 percent of the fuel needs for electric power generation. In 2004, Wyoming coal mines led the nation for the 18th consecutive year, producing 396 million tons of coal.

Tonnage increases were particularly pronounced in the Powder River Basin (PRB) for several reasons: world-class coal seams (some more than 80 feet thick), proximity of the coal to the surface; and a desirable low-sulfur composition. During 2004, more than 381 million tons of coal were shipped out of the PRB on unit trains. Unit trains consist of 120 to 150 cars, with each car carrying between 100 and 115 tons. Seventy to 80 unit trains leave the PRB every day for energy markets throughout the country.

Wyoming coal production (tons), 1969 to 2010 (projected)

Markets
The market for Wyoming coal continues to expand. Wyoming coal was shipped to 32 states in 2003. Closer to home, several coal-fired power plants are under construction or have been announced. There are also several coal conversion, enhancement and cogeneration projects under consideration.

Constantly Cleaner Coal
Recent advances in clean coal technology are making it possible for utilities to meet increasingly stringent air quality emissions standards. Commercial processes are available that significantly reduce sulfur dioxide and nitrogen oxide emissions. Current research is focused on reducing or eliminating carbon dioxide and mercury emissions, and increasing fuel efficiencies. It is worth noting that, although U.S. coal consumption has tripled since 1970, coal emissions have dropped 30 percent below historic levels during that same period.
The average price for Wyoming coal rose about 1.2 percent from 2003 to 2004—from $6.80 to $6.88 per ton.

Wyoming coal production increased five percent from 2003 to 2004. Production increased from 376 million tons to 396 million tons, an increase of 20 million tons.

The coal industry continues to be a stable source of employment for the people of Wyoming. Since 1990 the average annual variation in employment in the coal sector has been less than 3 percent. In 2005, Wyoming coal mines employed 4,903 people. It is estimated that each coal-mining job supports 3 related jobs in other sectors for a total of more than 18,700 coal related jobs statewide.

Coal industry jobs are also among the best paying in Wyoming. According to a Wyoming Mining Association survey, total labor earnings in the state were $440 million (including benefits). The average income in the Wyoming coal industry in 2004 was $64,000 in wages and an additional $18,000 in benefits. This wage level is twice the state average of $32,000 per job. The combination of both direct and secondary employment—jobs created by the coal industry—results in significant benefit for the state.

It is estimated that each coal-mining job supports 3 related jobs.

It is estimated that each coal-mining job supports 3 related jobs.

**Productivity**

Wyoming’s cost-effective mines continually increase productivity to maintain their positions in the market place. The productivity of Wyoming coal mines is truly remarkable. Based on tons per employee per year, productivity increased more than 700 percent between 1969 and 2004. A key aspect of Wyoming mining productivity is the large scale of industry operations—without it, Wyoming mines would not be competitive. However, increased stripping ratios and transportation concerns may adversely impact these gains in the future.

**The Role of Coal**

The importance of coal as a domestic fuel source cannot be overstated. This point has been underscored by recent world events. Wyoming’s role in providing this resource has not gone unnoticed in utility markets. Rising natural gas prices, the relatively low cost of coal, and new technology to control emissions mean more coal-fired plants will move from planning to construction.

**Wyoming Coal Mining Employment, 1990-2004**

Source: State Inspector of Mines of Wyoming
Wyoming Average Earnings Per Job, 2004

Source: U.S. Department of Labor, Bureau of Labor Statistics

For example, Black Hills Power has started construction on a 90 MW coal-fired power plant at the Neil Simpson Complex east of Gillette, and has announced construction on another unit at the same location. North American Power Group is planning a 310 MW power plant southeast of Wright, and Basin Electric is currently permitting a 376 MW powerplant north of Gillette. The Wyoming Infrastructure Authority is moving aggressively to broker its first bond-and-loan deal for a new electrical transmission line. The $50 million line will connect two substations in northern Wyoming.

KFx is in the final stages of erecting a 750,000 ton per year enhancement facility north of Gillette and has announced plans to construct two more facilities in the PRB with additional combined capacity of 12 million tons per year. The process increases the BTU value of the coal by reducing its inherent moisture content.

Local Impact

Coal is also an important source of revenue for state and local governments in Wyoming. It is estimated that in 2004 coal contributed $517 million to state and local governments. (Note: Not included in this analysis are the black-lung taxes, federal income taxes, AML fees and the federal portion of mineral royalties).


Data source: State Inspector of Mines of Wyoming
Federal Royalties: Payments by coal producers to the U.S. government for coal mined on federal leases (about 90% of all Wyoming production). Wyoming receives half of the federal royalties, less an administrative fee assessed by the U.S. Minerals Management Service. Rate: 12.5% of sales value.

Severance Tax: Levied by the state of Wyoming on mining activities in the state. Effective Rate: 7.0% of taxable valuation (surface).

Ad Valorem – Production: Levied by counties on value of production at the mine mouth. Average Rate: 60 mills (6 percent).


Sales and Use Taxes: Levied by the state and local government on purchases of goods and services. Rate: 4 to 6 percent depending on county.

Abandoned Mine Land: Fees assessed by the U.S. government to pay for the cleanup of abandoned mine lands (AML). Although Wyoming’s reclamation has long been completed, the fees continue. Originally, AML fees were designated to be split evenly between the federal government and the individual states where the money is generated. In practice, Wyoming receives only about half its share. In 2004, Wyoming coal producers paid $133.9 million in AML fees but the state only received $30.3 million in AML funds (23.1%). Currently, Wyoming’s undistributed balance in the AML fund is $467 million (as of 6/30/05).

Ad Valorem – Property: Levied by counties on assessed valuation of physical property, such as mining facilities and equipment. Average Rate: 60 mills (6 percent).

State Royalties and Rents: Similar to federal royalties but for coal mined on state leases. Rates: Royalties, 12.5% (surface) and rents, $1 to $4 per acre.

Note: Based on 2003 production. Percentages are percent of total mineral revenue attributable to the coal industry in Wyoming.

Wyoming Coal Production by County, 2004

Notes:
1. Triton Coal was purchased by Thunder Basin Coal Company (TBCC). TBCC incorporated the North Rochelle operations into the existing Black Thunder Mine and sold the Buckskin Mine to Kiewit Mining.
2. Bridger Coal Company opened a new underground mine, the only one currently operating in the state.

<table>
<thead>
<tr>
<th>Location/Operator</th>
<th>Mine</th>
<th>Employees</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campbell County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buckskin Mining Co.</td>
<td>Buckskin Mine</td>
<td>185</td>
<td>20,679,443</td>
</tr>
<tr>
<td>Foundation Coal West, Inc.</td>
<td>Belle Ayr</td>
<td>259</td>
<td>18,688,358</td>
</tr>
<tr>
<td>Foundation Coal West, Inc.</td>
<td>Eagle Butte</td>
<td>238</td>
<td>22,997,687</td>
</tr>
<tr>
<td>Kennecott Energy Co.</td>
<td>Cordero Rojo Complex</td>
<td>469</td>
<td>38,743,667</td>
</tr>
<tr>
<td>Kennecott Energy Co.</td>
<td>Jacobs Ranch</td>
<td>480</td>
<td>38,556,877</td>
</tr>
<tr>
<td>Powder River Coal Co.</td>
<td>N. Antelope/Rochelle</td>
<td>766</td>
<td>82,462,835</td>
</tr>
<tr>
<td>Powder River Coal Co.</td>
<td>Caballo</td>
<td>262</td>
<td>26,500,000</td>
</tr>
<tr>
<td>Powder River Coal Co.</td>
<td>Rawhide</td>
<td>69</td>
<td>6,869,989</td>
</tr>
<tr>
<td>Thunder Basin Coal Co. LLC</td>
<td>Black Thunder</td>
<td>860</td>
<td>87,455,110</td>
</tr>
<tr>
<td>Western Fuels of Wyoming Inc.</td>
<td>Dry Fork</td>
<td>61</td>
<td>4,533,621</td>
</tr>
<tr>
<td>Wyodak Resources Develop. Corp.</td>
<td>Wyodak</td>
<td>59</td>
<td>4,780,104</td>
</tr>
<tr>
<td><strong>Campbell County Total</strong></td>
<td></td>
<td>3,708</td>
<td>351,898,741</td>
</tr>
<tr>
<td><strong>Carbon County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arch of Wyoming LLC</td>
<td>Medicine Bow</td>
<td>14</td>
<td>148,859</td>
</tr>
<tr>
<td>Arch of Wyoming LLC</td>
<td>Seminoe II</td>
<td>25</td>
<td>157,316</td>
</tr>
<tr>
<td><strong>Carbon County Total</strong></td>
<td></td>
<td>49</td>
<td>206,175</td>
</tr>
<tr>
<td><strong>Converse County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kennecott Energy Co.</td>
<td>Antelope Coal</td>
<td>302</td>
<td>29,682,854</td>
</tr>
<tr>
<td>Glenrock Coal Co.</td>
<td>Dave Johnston</td>
<td>52</td>
<td>Reclamation</td>
</tr>
<tr>
<td><strong>Converse County Total</strong></td>
<td></td>
<td>352</td>
<td>29,682,854</td>
</tr>
<tr>
<td><strong>Lincoln County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittsburg &amp; Midway Coal Mining Co.</td>
<td>Kemmerer</td>
<td>271</td>
<td>4,490,573</td>
</tr>
<tr>
<td><strong>Lincoln County Total</strong></td>
<td></td>
<td>271</td>
<td>4,490,573</td>
</tr>
<tr>
<td><strong>Sweetwater County</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Butte Coal Co.</td>
<td>Black Butte and Lucite Hills</td>
<td>171</td>
<td>3,805,230</td>
</tr>
<tr>
<td>Bridger Coal Co.</td>
<td>Open pit mine</td>
<td>318</td>
<td>5,597,531</td>
</tr>
<tr>
<td>Bridger Coal Co.</td>
<td>Underground mine</td>
<td>34</td>
<td>44,174</td>
</tr>
<tr>
<td><strong>Sweetwater County Total</strong></td>
<td></td>
<td>523</td>
<td>9,446,935</td>
</tr>
<tr>
<td><strong>Wyoming Total</strong></td>
<td></td>
<td>4,903</td>
<td>395,725,278</td>
</tr>
</tbody>
</table>
**Safety**

Safety is paramount in the mining industry. Wyoming coal mines have been recognized as some of the safest operations in the United States. During 2004, twelve different Wyoming coal mines worked the entire year without a lost time accident (LTA). All 20 coal mine facilities worked a total of 9.5 million man-hours in 2004. Twenty-five LTA’s were reported during the year and the majority of these accidents were strains and sprains. Each miner must attend 40 hours of safety training before their first day of work. Miners must also attend an eight-hour annual refresher on safety training.

The Mine Safety and Health Administration (MSHA) and the National Mining Association recognize the safest surface coal mine in the nation each year with the “Sentinals of Safety” award. A Wyoming mine has won this award 12 times in the last 24 years.

**Bonus Bids**

Before a mining company can obtain new coal reserves on federal land, the company must nominate lands for lease. The Bureau of Land Management then reviews the proposed tract to ensure maximum coal recovery. It also requires completion of a detailed environmental assessment or an environmental impact statement, and then schedules a competitive lease sale. The process is known as Lease By Application or LBA.

To obtain the lease, the company must submit a sealed bid for the coal. The money is paid over and above any production taxes or royalties that must be paid when the coal is mined. The successful bidding company must pay one fifth of the total bonus bid at the time of the sale and then pay another fifth every year for the next four years. The federal government keeps one half of this money and the state of Wyoming gets the other half. Between 1992 and 2004, Wyoming received more $1.3 billion for its share of the bonus bid money.

Federal mineral bonus payments from coal leases to Wyoming declined in 2004 to $47 million, down from $74 million in 2003. However, this decline is due to the lag in timing of the payments to the state from the federal government and does not reflect any change in the actual amount. Coal lease sales were strong in calendar years 2004 and 2005 and will result in payments of $216 million in 2005.

**Reclamation**

Reclamation signals the end of mining and the return of the land to livestock grazing and wildlife habitat or other industrial uses. Wyoming coal mines collectively disturb about 5,000 new acres each year. Federal and state laws are strictly enforced to ensure that all disturbed land is reclaimed. Specialists supervise reclamation and ensure compliance with all applicable laws. The mines have to follow pre-approved reclamation plans that maintain and even improve land quality, water quality and wildlife habitat.

Relamtion goes beyond just restoring contours and reseeding native plant species. Some of the extraordinary steps are taken by mining companies during reclamation include: reclaiming wetlands, replacing rock outcroppings for raptor habitat, creating waterways, replacing sage grouse leks (mating grounds) and even reconstructing prairie dog towns.

Sage Grouse on reclaimed coal mine land
Wyoming Coal Information Committee Members

Arch Coal Inc./Arch of Wyoming: Greg Schaefer 307.464.2330 gschaefer@archcoal.com

Kennisott Energy Company: Dallas Scholes 307.687.6084 dallas.scholes@kennecottenregy.com

Kiewit Mining Group Inc: Bill Hill 420.271.2908 bhill@kmg.kiewit.com

PacifiCorp-Pacific Power: Bob Tarantola 307.577.6901 robert.tarantola@pacificorp.com

Pittsburg & Midway Coal Mining Co: Nick J. Bettas 307.828.2213 bdoj@chevrontexaco.com

Powder River Coal Co: Vic Svec 314.342.7768 vsvec@peabodyenergy.com

Foundation Coal West, Inc: Steven Laird 307.687.3240 slaird@foundationcoal.com

Wyodak Resources Development Corp: Steve Mueller 307.682.3410 smueller@wyodak.com
Randy Harris 605.716.3905 rgharris@bh-corp.com

Wyoming Mining Association: Marion Loomis 307.635.0331 loomis@vcn.com

References


Wyoming Mining Association
P.O. Box 866
Cheyenne, Wyoming 82003

www.wma-minelife.com