

A concise Guide to Wyoming Coal 2003



An industry overview produced by the
Wyoming Coal Information
Committee

Wyoming
COAL

Wyoming Mining Association

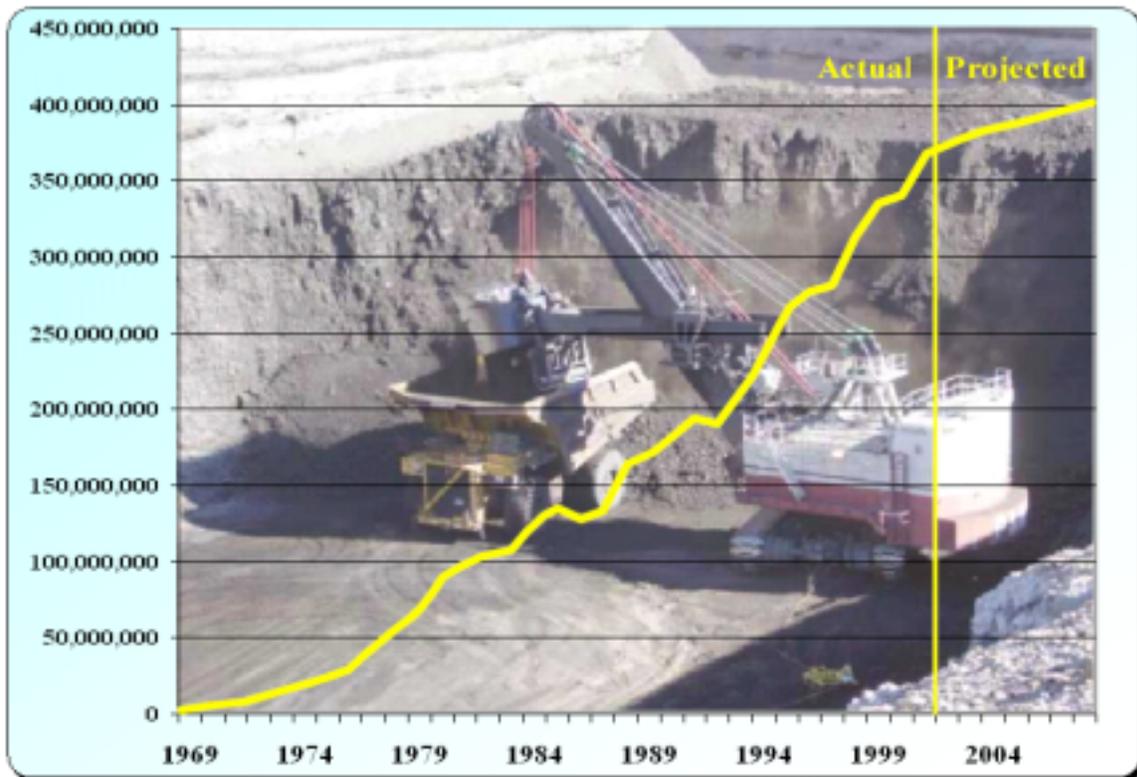
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Wyoming Coal Trends

Wyoming coal mines led the nation in 2002 for the 15th consecutive year producing 373 million tons of coal. Even though total U.S. production declined by 34 million tons, Wyoming had yet another record-setting year, outpacing the previous year's production by nearly four million tons. Despite the recession, total coal consumption remains stable with electric utilities in the U.S. increasing coal consumption by 1.7 percent. Coal continues to serve as the largest component fuel of base-load generating capacity, supplying 50 percent of total U.S. electrical power.

Wyoming COAL

Wyoming coal production (tons), 1969 to 2008 (projected)

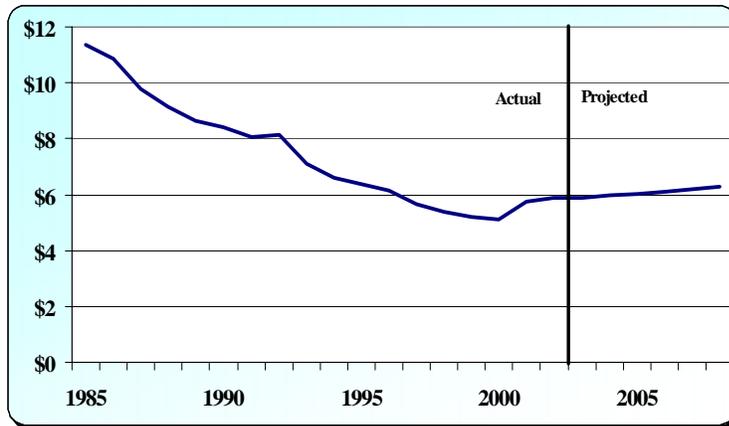


Source: Wyoming State Geological Survey

**Wyoming supplies
34 percent
of the nation's
coal production.**

Growing energy needs continue to stimulate Wyoming coal production. While tonnage at mines in Appalachia and the Midwest is declining, Wyoming coal production, particularly in the Powder River Basin, is increasing. This is for several reasons: world-class coal seams, some over 80 feet thick; proximity of the coal to the surface; and a desirable low-sulfur composition. On average, 65 unit trains leave the Powder River Basin each day. Weighing between 11,000 and 15,000 tons, the 120 to 150 car trains carry coal to energy markets throughout the country.

Price Per Ton, Wyoming Coal, 1985 to 2008



Source: Wyoming State Geological Survey

The coal industry continues to be a stable source of employment for Wyoming. Since 1990 the average annual variation in employment in the coal sector has been less than 3 percent. In 2002, Wyoming coal mines employed 4,684 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. The U.S. Department of Commerce reports total labor earnings of \$312.7 million for coal mining in Wyoming, representing average

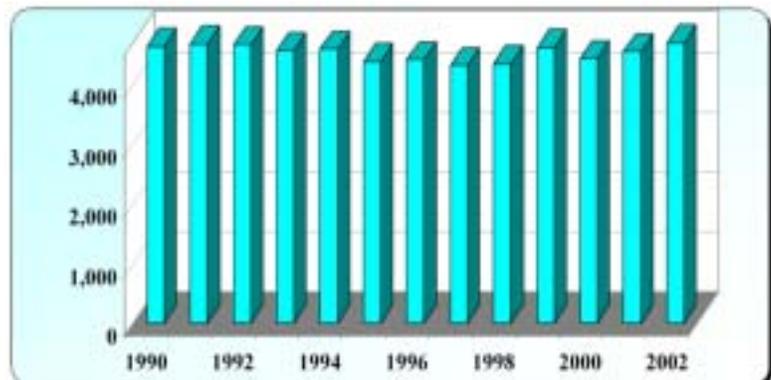
earnings per job in the coal industry of more than \$66,700. This wage level is nearly 2.5 times the state average of \$27,000 per job. The combination of both direct and secondary employment—jobs created by the coal industry—results in significant benefit for the state. In 2000, for example, total payroll generated by direct and secondary employment exceeded \$634 million.

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

Coal mining is an extremely competitive industry. Even Wyoming's cost-effective mines must continually increase productivity in order to maintain their position in the market place. The productivity of Wyoming coal mines is truly remarkable. Based on tons per employee per year, productivity increased over 700 percent between 1969 and 2001. Productivity only slightly decreased in 2002 due to additional employees added by the mines. A key aspect of Wyoming mining productivity is the large scale of industry operations—without it, Wyoming mines would not be competitive.

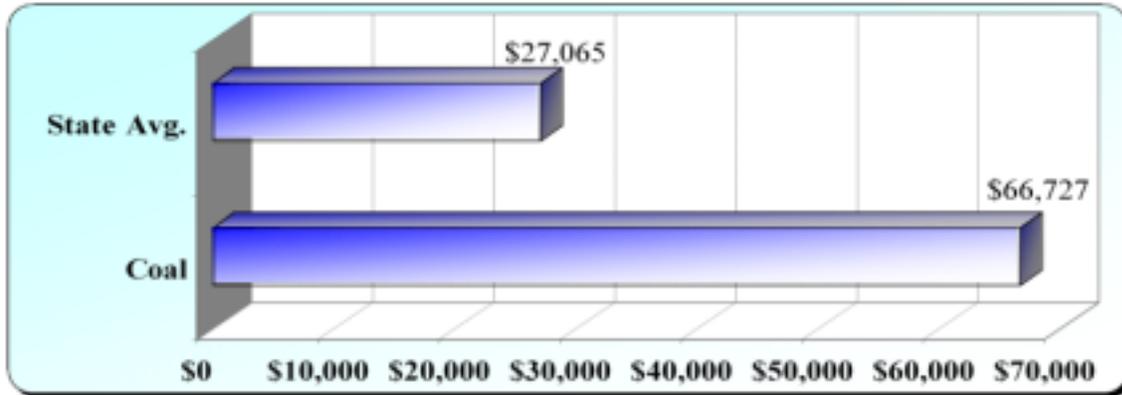
Wyoming Coal Mining Employment, 1990-2002

The importance of coal as a domestic fuel source cannot be understated. This point has been underscored by world events of the last several years. 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 "zero-emission" coal-fired power plants, mean more coal plants will move from planning to construction.



Source: State Inspector of Mines of Wyoming

Wyoming Average Earnings Per Job, 2000



Source: U.S. Department of Commerce, Bureau of Economic Analysis

For example, Wisconsin Public Service has announced its intentions to construct a 500-megawatt power plant using clean coal technology and Powder River Basin coal.

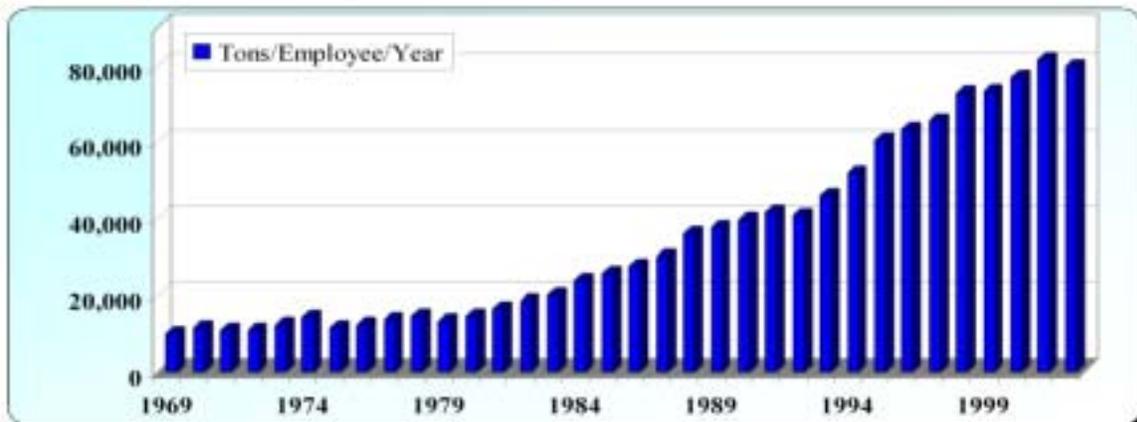


Wildlife habitat on reclaimed coal mine land

Another sign of the positive attitude toward future coal use is reflected in the longer term coal purchase contracts with utility companies. Several years ago, buyers opted for shorter term contracts as they tried to capture lower costs in the spot market. Now, however, utilities are locking in fuel sources for longer periods of time as a reflection of their need and commitment to coal.

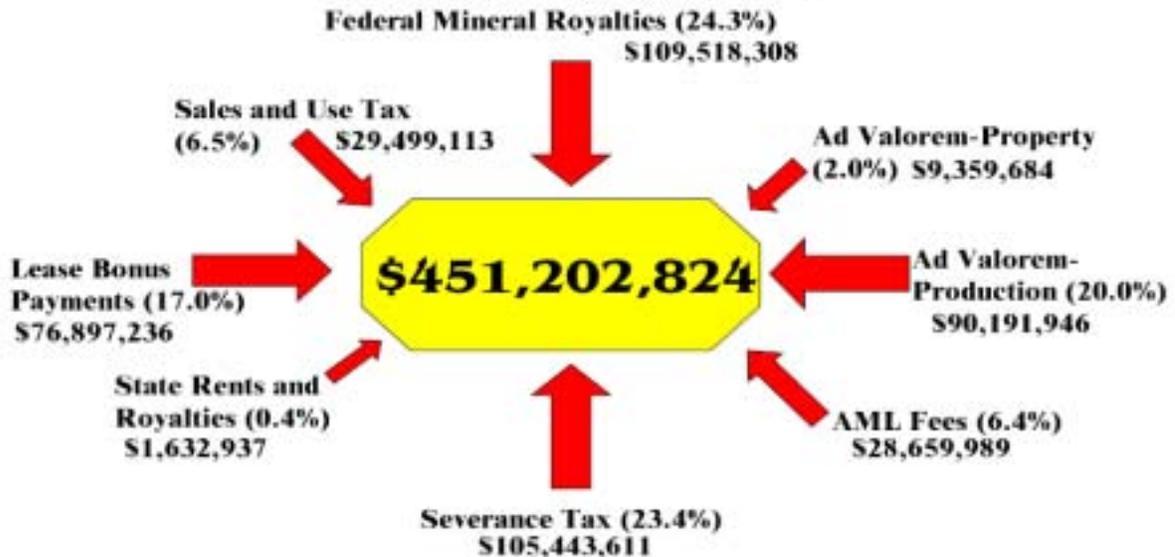
Coal is also an important source of revenue for state and local governments in Wyoming. It is estimated that in 2002 coal contributed \$451 million to state and local governments. This amount includes the following taxes that generate revenue for state and local governments in Wyoming. (Note: the coal industry also pays federal taxes that are not included in this analysis).

Wyoming Coal Mining Productivity, 1969-2002.



Data source: State Inspector of Mines of Wyoming

State and Local Government Revenue from Wyoming Coal, 2002



Note: Based on 2001 production. Percentages are percent of total mineral revenue attributable to the coal industry in Wyoming.

Sources: WY Dept. of Revenue, U.S. Minerals Management Service, Equality State Almanac, WY Office of State Lands and Investment, Office of Surface Mining, Bureau of Land Management

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).

Lease Bonus Payments: Fee paid by bidders for the right to purchase leases to mine federal coal (“Bonus payments” are, in effect, signing bonuses). Like production royalties, Wyoming and the federal government split the bonuses 50-50. Rates: Average bid price 1989-2000 was \$0.22 per ton.

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.

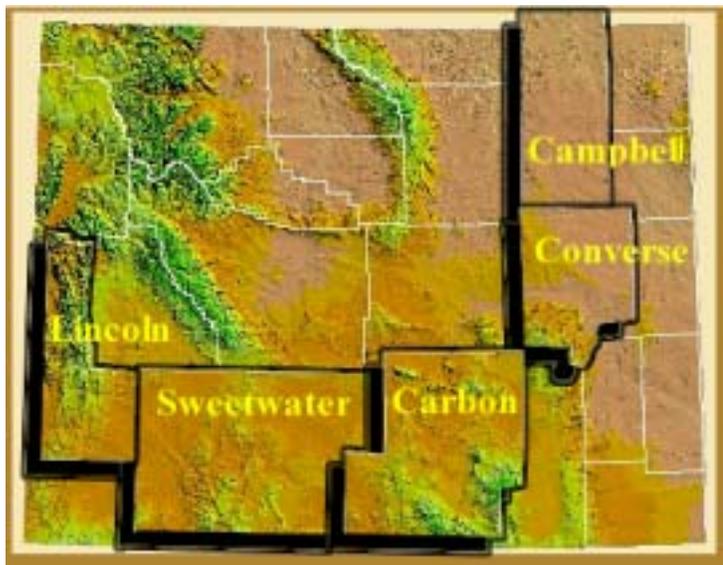
Abandoned Mine Land: Fees assessed by the U.S. government to pay for the cleanup of abandoned mine lands (AML). Although Wyoming’s cleanup has long been completed, the fees continue. Originally, AML fees were designated to be split evenly between the federal government and the individual states where the money is generated. In practice, Wyoming receives only about half its share. In 2002, Wyoming coal producers paid \$126.1 million in AML fees but the state only received \$28.7 million in AML funds (22.7%). Currently, Wyoming’s undistributed balance in the AML fund is \$358.5 million.

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.

Wyoming Coal Production by County, 2002

Note: All operating mines in Wyoming are surface mines. Idled mines and employees working at idled mines are not included.



Location/Operator	Mine	Employees	Production
Campbell County			
Kennecott Energy Co.	Cordero Rojo Complex	407	38,231,961
Kennecott Energy Co.	Jacobs Ranch	433	31,728,341
Powder River Coal Co.	Caballo	276	25,965,042
Powder River Coal Co.	Rawhide	23	3,484,619
Powder River Coal Co.	N. Antelope/Rochelle	811	74,792,642
RAG Coal West	Belle Ayr	239	17,452,445
RAG Coal West	Eagle Butte	236	24,888,124
Thunder Basin Coal Co. LLC	Black Thunder	583	65,125,564
Triton Coal LLC	Buckskin	196	18,334,186
Triton Coal LLC	North Rochelle	254	23,883,760
Western Fuels of Wyoming Inc.	Dry Fork	65	4,891,403
Wyodak Resources Develop. Corp.	Wyodak	55	4,052,374
Campbell County Total		3,578	332,830,461
Carbon County			
Arch of Wyoming LLC	Medicine Bow	23	455,872
Arch of Wyoming LLC	Seminole II	21	258,705
Carbon County Total		44	714,577
Converse County			
Kennecott Energy Co.	Antelope Coal	251	26,808,504
Glenrock Coal Co.	Dave Johnson	64	Reclamation
Converse County Total		315	26,808,504
Lincoln County			
Pittsburg & Midway Coal Co.	Kemmerer	272	4,242,456
Lincoln County Total		272	4,242,456
Sweetwater County			
Black Butte Coal Co.	Black Butte and Lucite Hills	115	2,817,419
Bridger Coal Co.		357	5,782,014
Sweetwater County Total		472	8,599,433
Wyoming Total		4,681	373,195,431

Source: Annual Report of the State Inspector of Mines of Wyoming, 2002

Wyoming Coal Summary 2002

Production: 2002 was another record year for Wyoming coal production. Wyoming coal mines produced 373,195,431 tons of coal. This was a 1.2 percent increase over 2001. Wyoming coal production is expected to top 400 million tons annually by 2008 (page 2).

Prices: The average price of Wyoming coal increased 2.6 percent in 2002 to an estimated average statewide price of \$5.90 per ton (page 2).

Employment: Employment in Wyoming coal mines continues to be an important component of the state's economy. Coal industry employment rose 3.4 percent in 2002 to 4,684. Coal industry employment in Wyoming has risen about 9 percent since 1998. Although intense competition in the industry will not result in broad gains, it is projected that employment will remain relatively stable for the foreseeable future. Coal industry jobs are some of the highest paying jobs in Wyoming. Average earnings per job in 2000 was \$66,727 (page 2).

Mines: Wyoming's cost-efficient surface coal mines set the standard in the industry. In 2002, the 19 mines in Wyoming averaged about 79,675 tons per employee. Production efficiency has been steadily increasing for about the last 25 years due to competition in the industry and technological advancement (page 3).

Markets: The market for Wyoming coal, particularly from the Powder River Basin appears to be growing as electric utilities search for lower cost and cleaner fuel alternatives. Several utilities in the past year have either switched to Powder River Basin coal or are considering a switch (page 3).

Reclamation: All Wyoming coal mines combined disturb only 5,000 new acres per year. Federal and state laws are strictly enforced to ensure that all disturbed land is reclaimed. Topsoil is removed and stored separately from the overburden. Specialists at the mines supervise reclamation and ensure that all applicable laws have been followed. Mined land is reclaimed to its natural state and used for agriculture and wildlife habitat.

Taxes: The coal industry in Wyoming contributed over \$450 million to state and local government in 2002 in the form of taxes and royalties. Coal industry tax dollars are a major component of the state's annual budget and are used to fund education, highways and social services. Without coal tax dollars, Wyoming would face a serious budget shortfall (page 4).

Future: Coal mining is a highly competitive business. In order for mines to stay open, they must continually increase their efficiency. The industry faces many challenges from alternative energy sources, such as natural gas, wind and eventually, hydrogen. Yet today, nearly 50 percent of the electrical generating capacity of the U.S. is still powered by coal. The cost structure of coal is such that until these alternative fuels become cost effective, coal, and especially Wyoming coal, will have a significant role to play.



World-class coal seam in the Powder River Basin

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400 ton capacity coal truck

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