

Pennsylvania

Coal Data 2007



Powering Pennsylvania's
Future
Coal IS Electricity



Coal Data 2007

The Pennsylvania Coal Association (PCA) is a trade organization representing surface and underground coal operators that produce bituminous coal mined in the Commonwealth. In addition, PCA represents companies whose livelihood depends in whole or in part on a robust coal industry by providing essential services to the coal industry, ranging from engineering and consulting to financial, insurance and the sale of mining equipment.

The Association's mission is to advance the mining and use of the state's most abundant and economical energy resource in an environmentally responsible manner through sound legislative and regulatory policies and judicial decisions.

While recognizing the need to balance an increasing demand for energy with assuring a safe and clean environment, PCA believes that prudent national or state energy policies can neither neglect nor penalize the use of coal but must promote it. Towards this goal, PCA strives to:

- Encourage the use of coal as an affordable, reliable and increasingly clean source of electricity and as an essential component of the Commonwealth's electric generation mix.
- Support wise energy policies that recognize coal's importance in decreasing the nation's dependence on foreign or unreliable energy sources.
- Promote environmentally sound mining, land reclamation and consumption practices, including clean coal technologies.
- Address legislative and regulatory issues of vital interest to the coal industry.

Pennsylvania Coal Data 2007 is the only publication that assembles all relevant information about the Commonwealth's bituminous coal industry from production and markets to employment and safety in a concise and convenient format. For a complete list of PCA members, refer to the final section of this booklet. Please contact us if you have further questions:

Pennsylvania Coal Association
212 North Third Street, Suite 102
Harrisburg, Pennsylvania 17101
(717) 233-7900 (FAX) (717) 231-7610
e-mail: pacoal1@aol.com

Cover: Removing "Gilhouser" Bituminous Coal in Indiana County (Photo courtesy of AMFIRE Mining Co., LLC)

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Chairman's Message

Coal, particularly Pennsylvania coal, has prominently figured in shaping the historic and economic profiles of both the nation and Commonwealth.

From winning the American Revolution to advancing the Industrial Revolution, from fighting two World Wars to serving as our best hedge against dependence on foreign energy, our political and industrial leaders have repeatedly turned to coal to help forge our war efforts and power the wheels of progress.

Throughout the years, coal has maintained its role as a primary energy source. The Commonwealth's 2006 coal production of 77 million tons ranks 4th among coal producing states.

Coal remains our most abundant and reliable source of electricity, accounting for 56 percent of the Commonwealth's electric generation and about half the nation's power output. It is also our most affordable resource, at a cost one-third that of natural gas and one-sixth that of oil.

Coal mining and the businesses that service the industry are significant contributors to the state's economy, totaling a combined direct and indirect gain of almost \$11 billion per year.

With recoverable coal resources in Pennsylvania sufficient to last another 250-300 years, coal should continue to play a critical role in any blueprint for energy security.

However, for coal's potential to be fully realized, there needs to be a change in the public's perception of coal and a better understanding of how it is mined and used. In addition, policymakers must make more of an effort in ensuring that environmental laws and regulations are balanced and based on sound science and common sense.

Here are a few steps that need to be taken in order to take full advantage of our coal resources.

First, we need to educate the public about the need for and use of coal. Outside the coalfields, coal's benefits as a low cost, reliable source of electricity are largely invisible. As coal declined as a home heating fuel, coal slipped from view in an absolute sense, and broad personal experience with coal's use declined as well. Today, coal has largely become an abstraction. (Unfortunately, few people know that coal generates the electricity that powers such daily actions as flipping a light switch or turning on a computer.) Further, the general public seldom hears about the positive aspects of coal usage, just the trumped-up negatives exaggerated by a biased and misinformed media, or a militant environmental group with an agenda to ban coal by reinforcing false stereotypes of a bygone era.

Second, the active mining industry's operations need to be judged within the context of existing mining practices and technology and under the terms of current environmental regulations and mine safety and health standards. Advancements in technology combined with strict regulatory standards and a rigorous permitting process have allowed mining to proceed without posing long-term environmental affects.

Postmining discharges from newly permitted mine sites have been virtually eliminated and the active mining industry has taken the lead in reclaiming abandoned mine lands and abating old acid mine drainage at no cost to the Commonwealth.

Most importantly, Pennsylvania operators individually and collectively have an excellent record of compliance with the mining laws and regulations while, by any standard of measurement, Pennsylvania mines are safer now than they have ever been.

Finally, environmental regulation must be balanced and driven by science and reason, not emotion and hyperbole. Everyone wants a "clean" environment but clean cannot be defined as pristine. While environmental protection should be on our priority list it is

not our only priority and must be measured within the context of other priorities, like having affordable and reliable electricity and economic growth.

There is a disconnect in our system that is as confusing to the coal industry as it is illogical. We cannot pay for government sponsored social programs, tax cuts or deficit reductions without a sound economy to provide the revenue. The availability of competitively priced electricity is a prerequisite for a sound economy. However, the more militant environmental agenda is specifically designed to limit or prohibit the development and use of our cheapest, most abundant source of electricity. Our public policy is burdened by this inherent conflict.

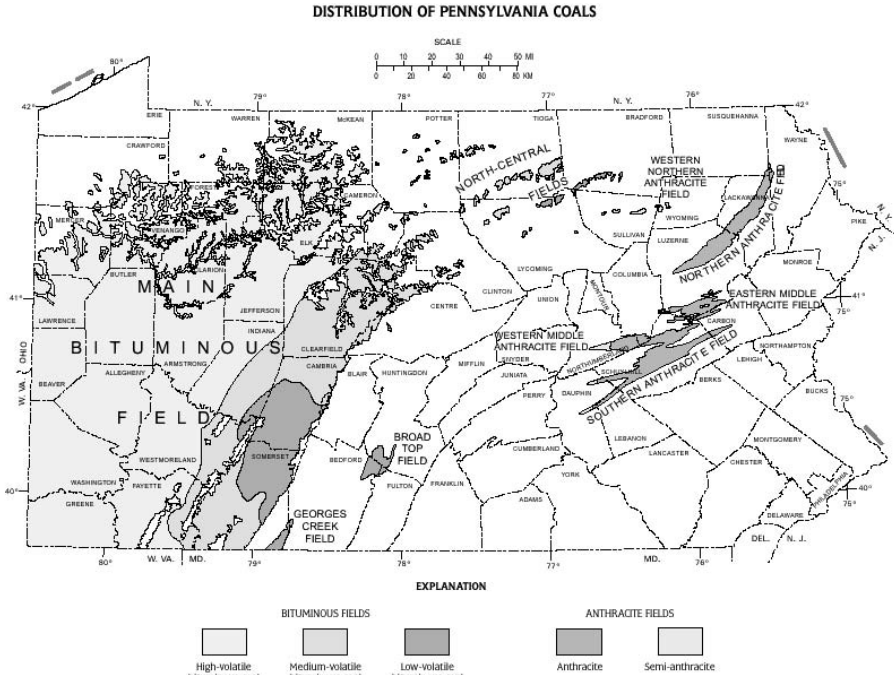
Further, if we are going to extricate ourselves from the worst economic crisis since the Great Depression, the federal government cannot continue the failed “borrow to spend” fiscal policies of the past – you simply cannot borrow your way out of debt. This would only fuel current economic volatility because it would increase the national deficit and expose us to additional debt payments.

A better and perhaps our only viable approach to an economic rescue is to allow and promote the exploitation of our nation’s vast natural resource base currently controlled by Federal, State and local government or those off limits due to ill conceived and unwarranted environmental constraints. The dollars generated to our government coffers would virtually be unlimited. All the while, significant job creation would occur along with a means to provide the most sound foundation to put our nation on a footing to at last become reasonably energy self sufficient. Perhaps it is time for a common sense solution to what seems to be such a complex problem.



John Stilley
PCA Chairman of the Board
President, Amerikohl Mining, Inc.

Pennsylvania Coal Field Geography



Pennsylvania lies at the northeastern end of the Appalachian Coal Basin. Bituminous coal underlies more than 13,000 square miles in coalfields reaching across the western and central portions of the state. They include the Main Bituminous Field, occupying most of western Pennsylvania, and three smaller fields in the center of the state: the Georges Creek, the Broad Top and the North Central.

The geology of the Commonwealth's bituminous coal deposits has resulted in excellent – and economical – mining conditions. Though mountain-building processes about 200 million years ago caused gentle folding in the western half of Pennsylvania, most coalbeds in the region lie in strata with little faulting.

Pennsylvania's coalbeds are interlaid with layers of sandstone, shale and limestone. About 25 beds are mined in the state. Major suppliers of coal include the Pittsburgh, the Upper and Lower Freeport, and the Upper and Lower Kittanning. These five beds, ranging from three to six feet thick or more, account for about 85 percent of the state's coal output.

Historically, the most important coalbed in the United States was the Pittsburgh, a seam of bituminous coal averaging more than five feet thick and mined not only in Pennsylvania, but also in Ohio, West Virginia and Maryland. Frequently called the most valuable mineral deposit in the world, the Pittsburgh Seam contributed significantly to the development of the iron and steel industry and until the 1970s, was the principal source of U.S. coal production. The Pittsburgh Seam coal alone still accounts for almost two-thirds of Pennsylvania's total bituminous coal production.

Table 1.

Pennsylvania Bituminous Coal Resources (million tons)

County	Resources
Allegheny	790
Armstrong	1,000
Beaver	680
Bedford	68
Blair	8
Bradford	5
Butler	1,100
Cambria	1,200
Cameron	18
Centre	90
Clarion	530
Clearfield	810
Clinton	7
Elk	130
Fayette	2,500
Fulton	8
Greene	4,100
Huntingdon	21
Indiana	1,900
Jefferson	1,100
Lawrence	140
Lycoming	15
McKean	130
Mercer	110
Somerset	1,900
Sullivan	4*
Tioga	10
Venango	100
Washington	4,000
Westmoreland	2,200
Total:	25,131**

* Semi-anthracite

Pennsylvania is blessed with a wealth of coal resources, assuring decades of reliable, low-cost energy for the Commonwealth. In addition to over 24 billion tons of bituminous coal, state resources include an additional 7 billion tons of potential anthracite resources.

If all recoverable resources were mined at the current rate of production, Pennsylvania would have enough coal to last over 300 years.

Source: Pennsylvania Bureau of Topographic and Geologic Survey

** As of 1999 – From 1999 to 2006, 577.2 million tons of bituminous coal were mined in Pennsylvania, leaving approximately 23.54 billion tons of recoverable resources.

Table 2.

Pennsylvania Coal Facts: 2006

2006 Production wit

Total Pennsylvania Coal Production	77,001,262
Bituminous Coal Production	69,484,318
Anthracite Coal Production	7,516,944
Percentage of U.S. Total Coal Production	7.0
National Production Rank	4 th
Number of Active Bituminous Mines	416
Surface (includes auger, refuse and GFCC)	378
Underground	38

Source: Pennsylvania Department of Environmental Protection

Economic Benefits – 2005 (Latest Available Data)

Value of coal mined in Pennsylvania:	\$6,270,000,000
Direct contribution to federal government revenues:	393,000,000
Direct economic benefit from coal mining:	2,460,000,000
Personal income benefit:	\$749,000,000
Business income gained in-state:	2,960,000,000
Business income gained from other states:	850,000,000
State and local government revenue gained:.....	70,000,000
Indirect benefits from the direct benefits:	\$3,810,000,000
Personal income benefit:.....	\$1,314,000,000
Business income gained:	4,481,000,000
Taxes on Production/Imports.....	135,000,000
State and Local government revenue gained.....	266,900,000
Combined Direct and Indirect Gain:	10,080,000,000
Personal income benefit:	\$2,063,000,000
Business income benefit:	8,291,000,000
State and local government revenue gained:	336,900,000
Federal Government funds gained*	529,000,000

**Includes AML and Black Lung Fund Contributions*

Jobs Provided Directly (inc. management and non-mine personnel):	29,200
Jobs Gained Directly and Indirectly:	6,800

Source: National Mining Association, updating a 1997 Western Economic Analysis Center study, with its 2007 Report on the Economic Contributions of the Mining Industry. .

Federal Government multipliers were applied for indirect business income and tax revenues. Computations were then made to determine the combined direct and indirect effects of coal mining to account for impacts in the relevant economic areas. A 1994 study of indirect economic impact, by Professors Adam Rose and Oscar Frias of Penn State University, found that nearly 10 jobs were indirectly supported for every person directly employed in the coal industry.

Table 3.

Pennsylvania Bituminous Coal Production, 1945-2006 (thousand tons)

Year	UNITED STATES			PENNSYLVANIA		
	Underground	Surface	Total	Underground	Surface*	Total
1945	417,605	43,167	460,772	108,608	2,809	111,417
1950	392,844	123,467	516,311	77,980	25,460	103,440
1955	343,465	121,168	464,633	65,544	19,499	85,043
1960	284,888	130,624	415,512	44,312	21,284	65,596
1965	332,661	179,427	512,088	55,787	24,332	80,120
1970	338,788	264,144	602,932	55,341	24,751	80,092
1975	292,826	355,612	648,438	45,113	39,366	84,479
1980	336,925	486,719	823,644	42,891	44,178	87,069
1981	315,875	502,477	818,352	33,957	44,126	78,083
1982	338,572	494,951	833,523	36,501	38,254	74,755
1983	298,019	474,866	772,885	37,308	31,425	68,733
1984	349,755	537,020	886,775	37,528	36,278	73,806
1985	350,800	532,838	883,638	36,077	29,458	65,535
1986	359,800	626,223	886,023	38,163	31,290	69,453
1987	372,238	542,963	915,201	38,340	28,524	66,864
1988	380,584	565,961	946,545	40,242	27,311	67,553
1989	392,618	584,929	977,547	40,271	28,079	68,350
1990	423,556	602,751	1,026,307	40,880	27,067	67,947
1991	407,225	588,759	995,984	41,583	21,219	62,802
1992	407,239	590,306	997,545	45,016	21,743	66,759
1993	351,053	594,371	945,424	37,852	20,052	57,904
1994	399,103	634,401	1,033,504	40,219	17,759	57,978
1995	396,249	636,725	1,032,974	45,144	15,690	60,834
1996	409,849	654,007	1,063,856	51,505	17,469	68,974
1997	419,657	669,274	1,089,932	55,344	16,463	73,491
1998	417,728	700,405	1,118,133	61,285	18,260	79,545
1999	408,928	685,065	1,093,993	58,438	13,141	73,436
2000	373,659	633,953	1,073,612	57,850	16,522	74,372
2001	380,804	746,881	1,127,685	58,675	18,402	77,077
2002	357,385	735,910	1,094,283	55,267	14,778	70,045
2003	352,785	718,968	1,071,753	54,120	15,485	69,605
2004	367,557	744,543	1,112,099	57,220	15,026	72,246
2005	368,612	762,886	1,131,498	54,979	18,101	73,081
2006	359,022	802,976	1,162,748	55,502	13,983	69,485

* Includes auger operations and reclamation of refuse piles.

Sources: U.S. figures, US Department of Energy. State figures, PA Department of Environmental Protection. US figures include anthracite, bituminous, sub-bituminous and lignite.

Pennsylvania reached its all-time high for bituminous coal production in 1918, with 177.2 million tons. The Commonwealth's total 1918 output of 277 million tons of anthracite and bituminous coal set a record for production by any state which stood until 1996, when Wyoming eclipsed the mark with 278 million tons.

After a four and half percent increase in 2004, Pennsylvania bituminous coal production increased in 2005 by 0.5 percent, then decreased by 4.9 percent in 2006. Underground production increased by almost 1 percent, surface production decreased by about 23 percent. Nationally, coal production increased by 2.2% percent in 2006.

Table 4.

Pennsylvania Anthracite Production, 1945-2006

Year	(thousand tons)				Total
	Underground	Refuse Reprocessing	Surface		
1945	35,926	9,454	10,521		55,901
1950	30,021	4,027	12,291		46,339
1955	14,491	3,618	7,826		25,935
1960	7,576	3,007	7,139		17,721
1965	5,622	2,611	5,997		14,230
1970	1,667	2,957	4,625		9,248
1980	583	1,945	3,455		5,983
1981	621	1,257	3,247		5,125
1982	475	992	2,526		3,993
1983	438	598	1,888		2,924
1984	642	544	2,708		3,894
1985	754	1,046	3,429		5,229
1986	629	686	2,433		3,748
1987	615	1,118	3,493		5,226
1988	554	674	2,953		4,181
1989	601	527	2,247		3,375
1990	529	997	1,909		3,415
1991	381	1,992	2,473		4,846
1992	456	2,374	2,050		4,880
1993	497	2,934	1,739		5,170
1994	359	5,453	2,162		7,974
1995	427	5,845	2,486		8,758
1996	395	8,437	2,741		11,574
1997	457	5,819	2,659		8,934
1998	457	4,735	2,388		7,536
1999	312	3,359	1,955		5,635
2000	220	1,352	2,333		3,905
2001	154	2,087	1,646		3,887
2002	203	1,894	2,165		4,263
2003	308	Not reported	2,093		2,402
2004	271	3,906	2,056		6,233
2005	190	4,224	2,049		6,463
2006					
	271	5,281	1,955	7,517	

Source: Pennsylvania Department of Environmental Protection

Almost all of the nation's anthracite, or hard coal, is found in eastern Pennsylvania. The last year anthracite output exceeded that of bituminous coal was 1896, when more than 50 million tons of each type was produced by Pennsylvania miners.

Anthracite production in the Commonwealth reached its all-time high in 1917, when more than 100 million tons were extracted from underground operations centered in the Wilkes-Barre/Scranton region. Anthracite industry employment peaked in 1914 with nearly 181,000 miners.

Anthracite production dropped sharply after World War II. Loss of transportation, industrial and residential fuel markets to oil, natural gas and electricity and competition from foreign sources – especially China – contributed to the decline. Anthracite production rebounded in the early and mid-1990s, only to decline each year from 1996 to 2001. In 2002, total anthracite production increased for the first time in six years. After a decline in 2003, anthracite production increased from 2004 through 2006.

Table 5.

At a Glance: Pennsylvania's Bituminous Coal industry

In the past decade, Pennsylvania's bituminous coal industry has undergone a vast transformation.

First, the shift from surface to underground mine production has become more pronounced. Deep mine production has dramatically increased, while surface mining decreased. There are a number of reasons for this. The most obvious is the fact that Pennsylvania's coal seams have been mined for centuries. Many coal deposits located close to the surface and accessible by surface mining already have been extracted. In addition, the thicker seams of coal have also been mined, and mining thinner seams is capital intensive.

The rise in underground mine production has also been spurred by the increased use of extremely efficient and productive longwall mining technology. Geologically, the Pittsburgh Coal Seam in Western Pennsylvania is ideally suited to longwalls, given its six to eight-foot seam height and relatively good roof and floor conditions. Longwall mines in Pennsylvania produced almost 45 million tons of coal in Pennsylvania in 2006, nearly 65 percent of the total bituminous coal production.

The trend toward industry consolidation also accelerated in Pennsylvania, with 167 companies reporting production in 2006, compared to 295 in 1993. Market concentration also increased, as the top five producers saw their collective share of total production rise from about 45 percent in 1993 to 60 percent of the 2006 total output.

In the 1980s and 1990s, intense competition, market changes affecting demand and overproduction combined to drive the price of coal down. Operators survived by improving efficiency and productivity through technological improvements, improved mine designs and economies of scale. Productivity rose steadily from 1978 to the late 1990s, increasing at an average rate of 6.7 percent per year. The need to boost efficiency and reduce overhead drove the trends toward consolidation and concentration. At the same time, these improvements helped to keep coal and electricity prices relatively low for consumers and businesses.

	2006	2005	2004	2003
Total Pa. Production (1,000 tons)	69,484	73,081	72,276	69,605
Underground	55,502	54,979	57,220	54,120
Surface	13,982	18,101	15,026	15,485
Total US Production	1,162,750	1,131,498	1,112,100	1,071,753
Pa. Percentage of U.S. Production*	4.8%	6.5%	6.5%	6.5%
Percentage of total Pa. Production by top 5 producing companies	60%	59%	67%	60%
Pa. Bituminous employment	6288	6537	6515	5869
Fatal accidents – bituminous	0	2	0	2
Number of active operators	157	175	188	180
Number of active deep mines	38	43	46	42
Number of active surface mines	378	388	347	358
Average mine price, Pa. bituminous coal	\$ 24.20	\$24.35	\$21.13	\$26.29
in 1990 dollars**				

* Bituminous only. Bituminous and anthracite accounted for 6.0 percent of the U.S. total.

** The price of bituminous Pennsylvania coal averaged \$25.77 in 1995, \$23.43 in 1999, \$36.39 in 2005, and \$37.32 in 2006.

Table 6.

U.S. Coal Production, By State

(thousand tons)

State	2006	2005	2004	2003
Wyoming	446,742	404,319	396,493	376,270
West Virginia	152,374	153,650	147,993	139,711
Kentucky	120,848	119,734	114,244	112,680
Pennsylvania *	66,029	67,494	65,996	63,725
Texas	45,548	45,939	45,863	47,517
Montana	41,823	40,354	39,989	36,994
Colorado	36,322	38,510	39,870	35,831
Indiana	35,119	34,457	35,110	35,355
Illinois	32,729	32,010	31,853	31,640
North Dakota	30,411	29,956	29,943	30,775
Virginia	29,740	28,519	27,250	26,389
Utah	26,018	27,743	31,420	31,596
New Mexico	25,912	28,519	27,250	26,389
Ohio	22,722	24,717	23,222	22,009
Alabama	18,829	21,339	22,271	20,118
Arizona	8,216	12,072	12,731	12,059
Maryland	5,054	5,183	5,225	5,056
Louisiana	4,114	4,161	3,805	4,028
Mississippi	3,797	3,555	3,586	3,695
Tennessee	2,804	3,217	2,887	2,564
Washington	2,580	5,266	5,653	6,232
Oklahoma	1,998	1,856	1,792	1,565
Alaska	1,425	1,454	1,512	1,081
Kansas	426	171	71	154
Kansas	394	598	578	533
Arkansas	23	3	7	8

Source: U.S. Department of Energy/Energy Information Administration

*Pennsylvania total, as computed by U.S. Department of Energy, includes bituminous and anthracite production. The Department of Energy total is less than the production reported by the PA Department of Environmental Protection due to differences in accounting methods.

Operators mined coal in the same 26 states in 2006 as in 2005. The United States total 2006 production for all types of coal (bituminous, sub-bituminous, anthracite and lignite) was 1.162 billion tons, an increase of 31 million tons over 2005. The national production set a new record exceeding the previous record of 1.131 billion tons in 2005.

Pennsylvania remains the fourth-leading coal producing state. The nation's top three coal producers – Wyoming, West Virginia and Kentucky – continued to dominate U.S. production, accounting for 62 percent of U.S. total production. Pennsylvania accounted for about 6 percent of the U.S. total.

Table 7.

Bituminous Coal Production Trends, 1986-2006 (thousand tons)

Year	PA Deep Production	PA Surface Production	PA Total Production	U.S. Total Production	PA % U.S. Production
1986	38,163	31,290	69,453	886,023	7.84
1987	38,340	28,524	66,864	915,201	7.31
1988	40,242	27,311	67,553	946,545	7.14
1989	40,271	28,079	68,350	977,574	6.99
1990	40,880	27,067	67,947	1,026,307	6.31
1991	41,583	21,219	62,802	995,984	6.31
1992	45,016	21,743	66,759	997,545	6.69
1993	37,852	20,052	57,904	945,424	6.12
1994	40,219	17,759	57,978	1,033,504	5.61
1995	45,144	15,690	60,834	1,032,974	5.90
1996	51,505	17,469	68,974	1,063,856	6.50
1997	55,344	18,463	73,491	1,089,932	6.74
1998	61,285	18,260	79,545	1,118,133	7.11
1999	58,438	15,002	73,436	1,093,993	6.71
2000	57,850	16,522	74,372	1,073,612	6.84
2001	58,675	18,401	77,077	1,127,689	6.83
2002	55,267	14,778	70,045	1,094,283	6.40
2003	54,120	15,485	69,605	1,071,753	6.50
2004	57,220	15,026	72,246	1,112,099	6.47
2005	54,979	18,101	73,672	1,131,498	6.51
2006	55,502	13,982	69,484	1,162,750	5.98

Sources: US figures: US Department of Energy. State figures: PA Department of Environmental Protection.

The share of national production mined by Pennsylvania's bituminous operators reflected a slight decrease in 2006 (5.98 percent as compared to 6.51 percent in 2005). National coal production increased in 2006. Pennsylvania continues to trail other leading coal-producing states by substantial margins. (See Table 6.) As in past years, West Virginia produced more than twice as much coal as Pennsylvania in 2006, with Kentucky producing approximately 1.55 times as much. Pennsylvania's bituminous output measured about 15 percent of Wyoming's 2006 production.

According to projections by the Energy Information Administration, coal production is predicted to increase by 1.1% per year through 2015 and by 1.8% per year from 2015 to 2030. By 2015, the coal share of electricity generation is expected to decrease from 50% to 49%, but by 2030, it is expected to increase to 57%.

The major challenge for the Pennsylvania coal industry in this period is the need for its electric utility customers to make necessary investments in pollution control and combustion technologies to allow them to continue to burn Pennsylvania coal at a competitive price in compliance with air quality standards. PCA supports efforts to invest in clean coal technology, to provide tax credits to encourage the installation of state-of-the-art pollution control technologies and other efforts that have seen emissions of EPA criteria pollutants decline sharply since the 1970s, even as coal has provided more energy during that period.

Table 8.

Pennsylvania's Top Producers, 2006

Rank	Company	Production	Type*	Employees
1	Consol PA Coal Co.	20,877,804	D	1140
2	Cumberland Coal Resources LP	7,515,984	D	533
3	Consolidation Coal Co.	7,012,713	D	485
4	Emerald Coal Resources LP.	5,922,161	D	516
5	Eighty-Four Mining Co.	3,504,521	D	487
6	Rosebud Mining Co.	3,454,531	D	294
7	Amfire Mining Co., LLC	2,943,473	D/S	516
8	Reading Anthracite.	1,329,810	A	38
10	Amerikohl Mining, Inc,	1,304,799	S	179
11	McVilleville Mining, Inc..	1,031,714	D	59
12	Parkwood Resources, Inc.	1,012,589	D	98
13	Derry Stone & Line, Inc.	764,177	S	20
14	Robindale Energy Services, Inc.	754,859	S	8
15	B D Mining, Inc.	702,607	A	30
16	TJS Mining, Inc.	678,780	D	60
17	Northampton Fuel Supply Co., Inc.	634,802	A	40
18	Pagnotti Enterprises, Inc.	629,709	A	36
19	QueCreek Mining, Inc.	594,779	D	95
20	Allegheny Minerals	593,152	S	30
21	Dana Mining Co. of Pa., Inc..	557,746	D	107
22	Cambria Reclamation Corp.	544,603	S	9
23	Croner, Inc,	544,109	S	57
24	Susquehanna Coal Co.	542,373	A	27
25	PBS Coals, Inc.	516,815	S	81
26	Sky Haven Coal Co.	508,227	S	56
27	Rox Coal Co.	497,647	D	133
28	Elk Lick Energy, Inc,	492,598	D/S	79
29	Mid-Valley Coal Sales, Inc.	430,944	A	4
30	Future Industries.	413,341	S	33
31	Hoffman Mining, Inc.	405,812	S	45
32	Penn View Mining, Inc.	348,980	D	22
33	No.1 Contracting Corp..	337,840	A	12
34	RFI Energy	313,399	S	80
35	Pioneer Aggregates, Inc.,.	287,650	A	9
36	Northeastern Power Co.	268,346	A	11
37	Phila. City Trustee Gerard Estate	266,314	A	24
38	River Hill Coal, Inc.	261,543	S	45
39	Svonavec, Inc.	259,678	S	13
40	Forcey Coal	244,335	S	30
41	Mulligan Mining, Inc.	234,726	S	24
42	Fisher Mining Co.	223,512	S	34
43	Maple Coal Co..	218,998	S	13
44	Thomas J. Smith, Inc.	215,210	S	16
45	Waroquier Coal Co.	207,618	S	41

Source: Pennsylvania Department of Environmental Protection

Table 9.

2006 Pennsylvania Bituminous Coal Distribution, By State (thousand tons)

State	Utilities	Coke	Industrial	Other	Total
Colorado	2	0	0	0	2
Connecticut	109	0	0	0	109
Delaware	0	0	62	.025	63
Florida	204	0	0	0	204
Indiana	475	0	66	0	541
Kentucky	8	0	0	0	8
Maryland	4024	0	210	0	4234
Michigan	727	0	122	0	849
Minnesota	0	0	47	0	47
New Hampshire	332	0	0	0	332
New Jersey	851	0	0	0	851
New York	1827	.26	617	33	2,478
North Carolina	0	0	0	.023	.023
Ohio	11,078	282	5	0	11,365
Pennsylvania	15,229	119	1118	436	16,902
South Carolina	2,686	0	106	0	2792
Tennessee	1145	0	0	0	1145
Texas	0	0	0	.044	.044
Virginia	122	0	.3	0	122
West Virginia	3048	0	108	.005	3156
Wisconsin	3.2	0	152	.016	155
Total	41,870	427	2,289	469	45,355

Electric utilities account for about 92 percent of Pennsylvania's 2006 bituminous coal distribution, with 36 percent of the total shipped to power generation plants within the state. Pennsylvania electric utilities consumed 55.9 million tons of bituminous coal in 2006.

The industrial sector continued as the second largest user of Pennsylvania bituminous coal. Worldwide competition in steelmaking has reduced demand for Pennsylvania metallurgical coal, which declined by more than 93 percent from 1970 to 2000, as the result of declining domestic steel production and increased steel imports. That trend has reversed with increased demand since 2004 for metallurgical coal for both domestic and import markets.

*Excludes coal exports. See Table 17.

Table 10.

Distribution: U.S. and PA Bituminous, 2006

	Utilities	Coke	Industrial	Other
United States	92%	2%	5.3%	.3%
Pennsylvania	92.3%	.94%	5.1%	1%

Table 11.

Average Mine Price of Coal, All Types

(dollar/ton f.o.b.)

State	2006	2005	2004	2003	2002
Alabama	48.39	53.63	41.73	33.75	34.28
Alaska	W	W	W	(w)	(w)
Arizona	W	W	W	(w)	(w)
Colorado	24.27	21.63	18.10	18.21	17.72
Illinois	31.17	29.67	25.72	24.13	24.04
Indiana	27.27	25.31	23.27	22.48	22.20
Kansas	W	W	W	(w)	(w)
Kentucky	42.73	39.68	32.74	28.15	27.77
Louisiana	W	W	W	(w)	(w)
Maryland	30.63	28.55	W	22.66	23.08
Mississippi	W	W	W	(w)	(w)
Missouri	W	W	W	(w)	(w)
Montana	10.42	9.74	W	9.42	9.27
New Mexico	29.15	25.82	W	23.18	22.47
North Dakota	10.70	10.45	9.67	8.76	8.46
Ohio	27.40	26.88	23.82	22.10	21.44
Oklahoma	30.75	28.24	28.36	28.32	27.86
Pennsylvania Total	37.42	36.39	30.77	26.75	25.87
Anthracite	43.61	41.00	39.74	49.55	47.78
Bituminous	37.30	36.28	30.54	26.29	25.46
Tennessee	41.37	42.50	34.70	29.00	29.56
Texas	18.61	17.39	15.39	14.76	17.02
Utah	24.98	21.45	17.39	17.08	18.30
Virginia	52.99	47.97	38.51	30.38	31.09
West Virginia	45.94	42.14	35.11	30.02	29.59
Wyoming	9.03	7.71	7.12	6.74	6.37
U.S. Total	25.16	23.59	19.93	17.85	17.98

Source: US Department of Energy

DOE calculates Average Mine Price by dividing the total free-on-board (f.o.b.) mine value of the coal produced by total production. Production excludes silt, culm, refuse bank, slurry, dam and dredge operations (except for Pennsylvania anthracite). The table also excludes mines producing less than 10,000 tons/year.

In 2006, the average price of Pennsylvania bituminous coal increased for the sixth consecutive year. Nationally, the average price of all coal increased by an average of \$1.57 per ton. Anthracite prices increased in 2005 and 2006 following a significant decrease in 2004. Reported anthracite production increased from 2005 to 2006.

When the price of coal is translated into energy costs, Department of Energy (DOE) data show that coal continues to maintain its economic edge over other fossil fuels for base load electrical generation by utilities. According to the NMA, fossil fuel prices in constant 2000 dollars per million Btus in 2006 were \$1.01 for coal, compared to \$5.01 for natural gas and \$8.87 for crude oil. The U.S. Energy Information Administration (EIA) projects this price advantage for coal to continue well into the foreseeable future.

Table 12.

Average Wages of Pennsylvania Industries

(dollars per week)

Industry	2006	2005	2004	2003	2002
Coal Mining	1257	1260	1145	1,076	1022
Durable Goods *	931	907	875	848	819
Food Manufacturing	777	738	728	710	682
Textile Mills	666	640	632	596	605
Printing	804	782	765	728	710
Stone, Clay & Glass **	855	953	804	874	801
Primary Metals	1086	1021	978	912	872
Industrial Machinery	1004	975	965	933	922
Construction	919	867	824	805	787

Source: U.S. Department of Labor, Bureau of Labor Statistics website, www.bls.gov.

* Average of ten goods manufacturing industries.

** Average of clay, glass and cut stone industries.

Coal is a creator of new wealth. Coal industry employees are among the highest paid industrial workers in Pennsylvania. With annual average earnings of \$65,366, coal mining employees bring home paychecks that are vital to the continuing health of state and local economies. In addition to their direct impact, wages and expenditures by coal companies have an indirect impact on the economy as those funds are recirculated.

A study by the Western Economic Analysis Center based on 1998 data reported that coal mining had an \$11.4 billion combined economic impact on the state's economy, while a 1994 Penn State University study found 10 jobs are indirectly supported by each mining job.

According to the National Mining Association, the average age of U.S. coal miners is 50; their median term of employment in the coal industry is 20 years. Average wages are about \$1,100 per week. Coal miners are among the best trained industrial workers in the United States, with an average of 17.5 hours of job-related specialized training each year. More than 77 percent claim a high school education or better, and about five percent hold college degrees.

Pennsylvania Department of Environmental Protection figures for 2006 show that 70 percent (4400) of the state's bituminous coal labor force (6288) worked in underground operations. Thirty percent (1888) worked at surface operations, including refuse processing, preparation plants and rail-loading facilities.

Table 13.

Pennsylvania Bituminous Coal Employment & Safety Trends

Year	Employees	Fatalities	Fatality Rate/ 1000 Employees
1960	33,396	26	0.78
1970	24,667	30	1.21
1980	35,071	13	0.37
1986	19,493	5	0.26
1988	15,175	2	0.13
1990	14,083	4	0.28
1991	12,610	2	0.16
1992	12,195	2	0.16
1993	10,336	3	0.29
1994	9,219	3	0.30
1995	7,986	4	0.50
1996	7,434	3	0.40
1997	7,985	4	0.50
1998	7,969	0	0.00
1999	7,581	1	0.14
2000	7,723	2	0.26
2001	7,720	1	0.13
2002	6,505	3	0.46
2003	5,869	2	0.34
2004	6,485	0	0.00
2005	6,537	2	0.31
2006	6,288	0	0.00

Source: Pennsylvania Department of Environmental Protection

Pennsylvania had no bituminous mine fatalities in 2006, after suffering two in 2005. In 2004, there were no bituminous mining fatalities. In 2005, the incidence of non-fatal, lost-time accidents decreased, following the first increase in six years in 2004. Technological advances and innovation have made mines safer and more productive. Intensive safety training and awareness programs, improved safety equipment, and a high degree of dedication to safety by miners and coal companies have reduced the opportunity for fatal accidents in an environment which involves the use of heavy equipment and explosives to move tons of rock and earth, most of it underground. As a result of the intensive focus on safety, the rate of fatal accidents in bituminous coal mines has been at or below .50 for every 1,000 miners for the past 21 years, and mining as a whole experiences fewer fatal accidents per thousand employees than almost any other industrial or agricultural activity. PCA member organizations firmly believe that a safe mine is a productive mine, and a productive mine is a safe mine.

Table 14.

Remining and Reclamation

	2006	2005	2004	2003*
Acres reclaimed by industry remining and no cost contracts	912.2	266.1*	179.3*	*
Acres reclaimed by government **	619.8	788	1139	1117
Remining/government reclamation ratio	2/3	1/3*	1/6*	*
Estimated dollar value of industry remining reclamation (\$ millions)	\$5.4	\$0.8*	\$0.54*	*

- *Because of the change to conventional bonding in 2001, and changes in the way DEP tracks lands reclaimed by remining, representative data on reclamation by industry is not tracked exactly; however, DEP believes that industry numbers for 2004 and 2005 may have been underestimated.
- **Includes private projects funded under Growing Greener.

“Remining” is the active mining of areas that were previously mined and abandoned without adequate reclamation. Under current law, mine operators engaged in remining must reclaim the area. Using modern environmental management practices, including contemporaneous reclamation, acid mine drainage prediction and prevention and other techniques to ensure compliance with today’s strict standards, remining results in considerable abandoned mine reclamation and pollution abatement at no cost to the taxpayers or the industry-supported Abandoned Mine Land Reclamation Trust Fund.

Remining has been a very effective tool in the reclamation of abandoned mine lands. During the last five years that data is available, operators provided an estimated \$95 million in reclamation work, returning land to productive use without using state or federal funds. PCA strongly supports additional incentives for remining, which provides significant public and private benefits, including cleaner water, safer and more attractive landscapes, family sustaining jobs and fuel for our modern economy.

PCA Year 2007 Reclamation Awards

In addition to their role in reclaiming abandoned mines through remining, today’s surface mine operators must meet strict environmental standards in returning their mine sites to productive, attractive postmining use. Operators regularly exceed these standards, and PCA and the Department of Environmental Protection recognize the best reclamation results each year with annual awards for outstanding reclamation.

The award winners provided significant environmental benefits, including substantial water quality improvements and the reclamation of 574.8 acres of abandoned mine lands (at an estimated cost of \$1.7 million (using DEP conservative estimate of \$3,000 per acre) and at no cost to the Commonwealth or taxpayers). Their efforts reflected exceptional performance in achieving environmental standards.

PCA’s Year 2007 award winners, in alphabetical order, were:

- Amerikohl Mining, Inc.
- AMFIRE Mining Company, LLC
- Energy Resources, Inc.
- Original Fuels, Inc.
- PBS Coals, Inc.
- Waroquier Coal Co.

Table 15.

2006 Pennsylvania Coal Production by County

<u>Bituminous</u>				
Rank	County	Total Production	Underground Production	Surface Production
1	Greene	41,886,408	41,886,408	
2	Somerset	4,627,803	1,560,302	3,067,501
3	Indiana	4,476,003	2,479,208	1,996,795
4	Armstrong	4,088,610	3,408,610	680,000
5	Washington	3,758,781	3,504,521	254,260
6	Clearfield	3,404,895	871,224	2,533,671
7	Cambria	1,745,026	892,775	852,251
8	Westmoreland	945,105		945,105
9	Allegheny	869,808		869,808
10	Elk	849,208	417,885	431,323
11	Fayette	641,187		641,187
12	Jefferson	495,378	185,117	310,261
13	Clarion	479,279		479,279
14	Butler	398,218		398,218
15	Beaver	295,828	295,828	
16	Lycoming	223,512		223,512
17	Venango	107,511		107,511
18	Centre	84,038		84,038
19	Lawrence	37,304		37,304
20	Cameron	25,605		25,605
21	Mercer	20,298		20,298
22	Bedford	16,331		16,331
23	Blair	8,182		8,182
	Total:	69,484,318	55,501,878	13,982,440
<u>Anthracite</u>				
1	Schuylkill	3,695,099	82,440	3,612,659
2	Luzerne	2,058,561		2,058,061
3	Northumberland	863,879	11,774	852,105
4	Columbia	665,088	173,448	491,640
5	Carbon	142,714		142,714
6	Lackawanna	48,364		48,364
7	Dauphin	43,329	3,111	40,128
	Total:	7,516,944	270,773	7,246,171

Source: Pennsylvania Department of Environmental Protection

Surface production includes refuse reprocessing. Sullivan County reported no bituminous coal production in 2006, and Tioga County reported no production while maintaining one surface mining site and 18 employees. Pennsylvania had one less county reporting production than in 2005. Anthracite coal was produced in the same seven counties in 2006 as in 2005.

Table 16.

2006 Pennsylvania Coal Industry Employment by County

Bituminous

Rank	County	Number of Operations	Employees			Total
			Underground	Surface*	Preparation Plant	
1	Greene	10	2629	8		2637
2	Somerset	63	325	387		712
3	Washington	5	487	31		518
4	Clearfield	107	87	410		497
5	Indiana	52	271	164		435
6	Armstrong	27	259	89		348
7	Cambria	21	113	105		218
8	Fayette	31		133		133
9	Elk	14	30	89		119
10	Jefferson	20	35	81		116
11	Clarion	13		115		115
12	Westmoreland	17		87		87
13	Butler	14		62		62
14	Lycoming	1		34		34
15	Allegheny	5		22		22
16	Tioga	1		18		18
17	Centre	4		14		14
18	Venango	5		13		13
19	Beaver	1	12			12
20	Mercer	1		10		10
21	Cameron	1		7		7
22	Blair	1		5		5
23	Bedford	1		3		3
24	Lawrence	1		1		1
	Total:	416	4248	1888		6288

Anthracite

1	Schuylkill	63	47	250		297
2	Luzerne	26		206		206
3	Columbia	7	46	51		97
4	Northumberland	9	18	50		68
5	Lackawanna	3		7		7
6	Carbon	2		14		14
7	Dauphin	2	3	3		6
	Total:	112	114	581		695

Source: Pennsylvania Department of Environmental Protection. * Surface includes refuse reprocessing, preparation plant and GFCC site employees.

Production Highlights

Bituminous underground mining accounted for about 90% of the total bituminous and anthracite output of 77 million tons. The top five bituminous coal producing counties – Greene, Somerset, Indiana, Armstrong and Washington – combined for almost 59 million tons of production, 85% of the total bituminous output. Schuylkill County led the anthracite region with 3,612,659 tons, about 50% of anthracite production.

Table 17.

U.S. and Pennsylvania Coal Exports

(thousand tons)					
UNITED STATES	2006	2005	2004	2003	2002
Overseas	29,750	30,400	30,200	28,325	19,649
Canada	19,900	19,500	17,800	15,689	20,098
Total	49,650	49,900	48,000	43,014	39,747
Pennsylvania					
Overseas	4,375	3,126	2,358	1,927	1,329
Canada	unavailable	1,584	254	6,893	8,966
Total	6,053	4,710	2612	8,820	10,295

Source: U.S. Department of Energy

US exports increased again in 2006, following significant increases in 2004 and 2005. Pennsylvania's overseas exports increased in 2006, but they were still much lower than in 2002.

Table 18.

2005 US Transportation Modes for Pennsylvania Coal

(thousand tons)						
Consumer	Rail	Truck	River	Mine Mouth	Great Lakes	Tidewater
Utilities	34,332	983	13,645	2,784	249	56
Coke Plants	283	25	94	0	-	-
Industrial	523	1,183	5	-	-	-
Other *		90	9	0	-	-
Totals:	35,138	2,281	13,753	2,784	249	56

* Commercial and residential

Source: U.S. Department of Energy – Totals are not precise due to rounding.

Rail accounted for 65 percent of Pennsylvania bituminous coal deliveries in 2006. River barges accounted for 25.3 percent of deliveries and trucks accounted for 4.2 percent. It should be noted that approximately 369,000 tons were reported as delivered by unknown means of transportation.

Pennsylvania Coal-Fuel Power Fact Sheet

- Pennsylvania has the 17th highest residential retail electricity prices in the nation. The 2006 state average retail price of \$8.70(cents per kilowatthour) was only slightly lower than the national average retail rate of \$8.77(cents per kilowatthour).
- Fifty-six percent of in-state utility generation comes from coal-fired stations. State utilities depend on coal for power because of its much lower delivered fuel cost. The cost of coal per million British thermal units (MMBtu) generated in Pennsylvania was \$1.72 in 2006, compared to \$7.72 for natural gas and \$7.62 for petroleum.
- Since 1970, the U.S. population grew by approximately 48% and economic output increased about fourteen fold. U.S. electricity consumption increased approximately 173% between 1970 and 2006.
- The use of coal to generate electricity nearly tripled during this same period. However, emissions of criteria air pollutants (those related to human health) decreased by over 50 percent in the same period. As reported by the government, the rate of emissions of sulfur dioxide (SO₂), nitrogen oxide (NO_x), and particulate matter (PM-10) from coal-generated electricity dropped sharply since 1970:
 - The SO₂ emission rate dropped approximately 70%
 - The NO_x emission rate dropped approximately 50%
 - The PM-10 emission rate dropped approximately 95%
- Substantial additional reductions of SO₂, NO_x, fine particulates and mercury will result over the next 5 to 15 years as states revise their implementation plans to meet reductions required under the federal Clean Air Interstate Rule and the federal Clean Air Mercury Rule.
- Technologies exist today that allow coal to be used in electricity generation at emission levels more stringent than those required by the Clean Air Act. In fact, some advanced coal technologies offer environmental performance that is equal to, or even better than, conventional natural gas-fired generation.
 - A prime example is Integrated Gasification Combined Cycle (IGCC) technology. In this process, coal undergoes a chemical process that converts it into a synthetic gas that is burned as a boiler fuel with very low emissions.
 - A number of utilities have announced plans to construct new IGCC plants.
- America's coal-based electricity industry is also aggressively working to voluntarily reduce so-called greenhouse gas emissions (either through emissions reductions, avoidance or sequestration). Utilities agreed to reduce their net emissions by over 170 million metric tons in the year 2000. That is more than four times the goal set by federal regulators when this program was launched in 1993. Also, the coal industry is working with the U.S. Department of Energy to develop innovative technologies for an emission free coal-fired power electricity plant.
- With rising prices for transportation fuels, coal to liquids(CTL) processes are being considered as a means to reduce our dependence on imported oil
- The 6,983 workers in Pennsylvania's anthracite and bituminous mines produced more than \$2.6 billion worth of coal in 2006.

Sources: Center for Energy and Economic Development; National Mining Association; Department of Energy

Table 20.

2005 Pennsylvania Utility Power Generation

Energy Source	Percent of Installed Generating Capacity*	Percent of Power Generated
Coal	41.7	56
Nuclear	20.5	34.4
Oil & Gas	31.4	6.9
Hydro	1.7	1.3
Other	1.4	1.6

Nationally, electricity generation increased by 2 percent in 2006, about equal to the average annual growth rate from 1994 to 2005. National consumption of coal for electricity generation decreased by 1 percent, from 1046 million short tons in 2005 to 1035 million short tons in 2006.

Coal-fired electricity accounted for 59 percent of the electric power generated in the U.S in 2006. No other primary fuel is close. Natural gas and petroleum combined powered about 12%, and nuclear powered about 17 percent of the electricity generated in the U.S. in 2005. Hydroelectric provided 11 percent, and all other renewables provided 2.9 percent.

Source: U.S. Department of Energy/Energy Information Administration

Table 21.

British Thermal Unit (BTU) Heat Values and Price for Utility Power Generation in 2005

Fuel	Market Unit	BTUs (x1,000)	U.S. \$/mm BTU	PA \$/mm BTU
Steam Coal	2,000 lb.	28,000	1.64	1.72
Natural Gas	1,000 cu. ft.	1,054	6.94	7.62
Petroleum	42 gal. barrel	574	6.23	7.72

Source: US Department of Energy/Energy Information Administration

Learn More About Coal

Coal helped build the industrial age, and its contribution to stable, low-cost electricity is now fueling the information age. You can learn more about coal on the internet. Check the following sites for information:

National Mining Association: <http://www.nma.org>

The National Mining Association is the national trade association for producers of coal and non-coal mineral resources.

US Department of Energy, Information Administration: <http://www.eia.doe.gov>

The Energy Information Administration is the federal government's clearinghouse for information about coal, other energy resources and energy use, production and consumption.

Energy and Mineral Law Foundation: <http://www.emlf.org>

The Energy and Mineral Law Foundation is a private educational organization dedicated to the study of mineral and natural resources law and policy.

Mining USA: <http://www.miningusa.com>

Mining USA is an industry-sponsored site with information about the mining industry.

PA Department of Environmental Protection: <http://www.dep.state.pa.us>

DEP is Pennsylvania's state regulatory authority with information about general environmental regulatory and policy topics and an on-line index of regulatory and policy documents.

Office of Surface Mining Regulation and Enforcement: <http://www.osmre.gov>

OSM is the federal agency with responsibility for oversight of regulation of environmental impacts of coal mining in the United States.

American Coal Foundation: <http://www.teachcoal.org>

ACF provides basic information about coal – its formation, production and use – to teachers across the U.S.

Pennsylvania Coal Association

Membership Directory

PRODUCING MEMBERS:

Action Mining, Inc.
Alliance Coal, LLC
Amerikohl Mining, Inc.
AMFIRE Mining Company, LLC
Ancient Sun Inc.
Berwind Natural Resources
Bradford Energy Co., Inc.
CONSOL Energy Inc.
E.M. Brown, Inc.
Fisher Mining Co., Inc.
Hepburnia Coal Co.
King Coal Sales, Inc.
Mepco LLC
Murray Energy Corp.
North American Coal Royalty Co.
Original Fuels, Inc.
P&N Coal, Inc.
Parkwood Resources, Inc.
PBS Coals Inc.
Penn View Mining, Inc.
Pennsylvania Services Corp. –
Foundation Coal
Rosebud Mining Co.
Thomas J. Smith, Inc.
State Industries, Inc.
TJS Mining, Inc.
Waroquier Coal Co., Inc.
Zubek, Inc.

ASSOCIATE MEMBERS:

Allegheny Energy
Alliance Consulting Inc.
Alpha Coal Sales Co., LLC
American Mining Insurance Co.
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Atlas Services Corp.
Babst, Calland, Clements & Zomnir, P.C.
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Group Inc.
CQ Inc.
CSE Corporation
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The EADS Group
Earthtech, Inc.
ESS Insurance Group
Evergreen Insurance Associates, LLC
Farnham & Pfile Construction
Fuel Recovery, Inc.
Geochemical Testing
GeoTech Engineering, Inc.
D.C. Guelich Explosives Co.
Hatch Mott MacDonald
Highway Equipment Co.
Jackson Kelly PLLC
Jennmar Corp.
Joy Mining Machinery
KaJon Materials, Inc.
Lincoln Contracting and
Equipment Co., Inc.
McLanahan Corp.
Micon

Bill Miller Equipment Sales, Inc.
Moody & Associates
Musser Engineering, Inc.
Natural Resource Partners LP
Norfolk Southern Corp.
Northampton Generating Plant
PA Mining Professionals
Patriot Coal Sales LLC
Penn Coal Land, Inc.
Penn Detroit Diesel-Allison, LLC
Penn Environmental & Remediation, Inc.
Penn Line Service Inc.
PFBC Environmental Energy
Technology, Inc.
Polito & Smock, P.C.
PPL EnergyPlus, LLC
Quality Aggregates Inc.
RFI Energy, LP
RRI Energy Services, Inc.
The Reschini Group
Robindale Energy Services, Inc.
Rockwood Casualty Insurance
Rudd Equipment Co.
Saul Ewing LLP
Skelly and Loy, Inc.
Standard Laboratories, Inc.
Stockdale Mine Supply, Inc.
Suez Energy Resources North America
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Target Drilling Inc.
TEREX SHM
Unionvale Coal Co.
Voto Sales Co.
Wallace & Pancher, Inc.
Wampum Hardware Co.
Xcoal Energy & Resources

PENNSYLVANIA COAL ASSOCIATION

212 North Third Street, Suite 102, Harrisburg, PA 17101

