

National Mining Association



2011 Coal Producer Survey • May 2012

2011 COAL PRODUCER SURVEY

May 2012

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The Coal Industry In 2011

The U.S. coal industry in 2011 was characterized by a number of significant market factors, beginning with an overall drop in total U.S. electricity generation, coal's largest demand sector. Preliminary Energy Information Administration (EIA) figures indicate that total generation was down 0.6 percent, as the winter of 2011 was one of the mildest on record. In addition, the U.S. economy is still not growing at pre-recession levels which limited electricity generation, since power generation in general and by all sectors are directly impacted by the rate of GDP growth. Also, coal lost market share to natural gas due to further reductions in natural gas prices, which led to natural gas-based power sources seeing more favorable dispatch economics over most bituminous coals. However, partially offsetting the lower demand in the electricity sector were very strong exports of both steam and metallurgical coal. U.S. coal exports in 2011 surged to a level unseen in several decades at 107.3 million short tons.

Coal Demand

Consumption/Inventories – Domestic coal consumption totaled 1,003.1 million tons in 2011, marking a decrease of 4.6 percent (48.2 million tons). As previously noted, this was primarily due to the combination of weather factors, competition from low natural gas prices and a continuing sluggish economy. The milder winter, as measured in heating-degree days (a relative measure of outdoor temperatures used as an index of energy use) finished the year 13 percent below normal nationally. Record July temperatures were not enough to offset the milder winter.

Electric power sector coal consumption was down 4.8 percent to 928.6 million tons, some 46 million tons less than consumed in 2010. (More than 90 percent of U.S. coal production is used to generate electricity.)

Demand for coking coal in the U.S. increased 1.6 percent in 2011, to nearly 21.4 million tons. Other industrial demand, which includes cement kilns, agricultural processing and heavy industry, along with non-utility generation, decreased 3.4 percent to 50.3 million tons, while the commercial and residential sector was down 9.9 percent to 2.8 million tons.

Consumer stock inventories ended the year at 184.3 million tons, marking a 0.3 percent stock increase in 2011. The build-up in stock inventories by consuming sectors was attributed primarily to milder than expected early winter temperatures. Producer and distributor stockpiles were 41.9 million tons, down 15.9 percent from 2010.

Power Sector Generation – Total coal-based power sector generation decreased 6 percent in 2011, to 1,714.9 billion kilowatt hours (kWh), while natural gas generation increased 3.2 percent to 930.6 billion kWh. Also, nuclear generation fell 2 percent due

to refueling and outages, in the first half of the year, dropping from nearly 807 kWh to approximately 790 kWh. Conversely, conventional hydro generation increased 25 percent to 323 billion kWh due to greater rainfall in the Pacific Northwest.

Generation Share – Electric power sector coal generation lost market share to natural gas and hydro, dropping from a 46 percent share in 2010 to 43 percent in 2011. Natural gas' share of generation increased from 23 percent to 24 percent in 2011. Conventional hydro power also increased its share of generation, from 6 percent to nearly 8 percent. Other renewable generation also increased its market share in 2011 as mandated renewable standards continued to drive wind, solar and other renewable generation higher.

Coal Supply and Trade

Production - According to preliminary EIA figures, total coal production stood at 1,094.3 million short tons in 2011, marking a nearly 10 million ton (0.9 percent) increase. Eastern coal production (east of the Mississippi River) was 455.8 million tons, including production from refuse recovery, and accounted for 42 percent of production. The West produced 638.5 million tons for a 58 percent share of production. Eastern coal production (including refuse) increased 2.6 percent in 2011, with increases occurring in many eastern states but particularly in the Illinois Basin states of Illinois and Indiana, along with Kentucky, Pennsylvania, Ohio and Virginia. The power generating industry's ongoing retrofitting of coal-based plants with scrubbers allows more plants flexibility to switch coal types to the Illinois Basin's lower cost, higher sulfur coals.

Production in the West was up only 0.1 percent, with increases occurring only in Colorado, Texas and New Mexico. Wyoming, the leading coal producing state mined 438.5 million tons, down 0.9 from 2010, primarily due to the flooding that occurred in the Midwest in the late spring and summer delaying shipments.

Trade - The decline in domestic coal consumption was partially offset by relatively strong global economic factors, particularly from Asia, driving demand for both metallurgical and steam coals. In addition, Australia - the world's largest coal exporter - had severe flooding in late 2010 and early 2011 that led to disruptions in production and upward pressure on coal prices. Supply disruptions also occurred in Indonesia and Colombia causing global supply channels to shift further and encourage greater demand for U.S. coal. U.S. exports surged in 2011 by 31 percent to 107.3 million short tons – the highest level in 20 years. The 25 million-ton gain over 2010 was primarily from increased global demand for steam coal going to Europe, Asia and Africa and for metallurgical coal exports to all regions including Canada. The average export price per ton of coal was about \$149, up 24 percent over 2010. Exports represented 9.8 percent of production in 2011. Key factors impacting the global coal market in 2011 were the combination of strong demand for coal to expand China's infrastructure and the needs of Japan following the Fukushima Daiichi and other nuclear plant shutdowns.

Exports of metallurgical coal finished the year 13 million tons above 2011 at 69.5 million tons. The 24 percent increase in U.S. coking coal going to international markets to make steel came from all regions of the world. Demand for metallurgical coal from Asia was up nearly 52 percent to 19.7 million tons, primarily due to increasing demand from

Japan, South Korea and India. Met coal exported to Europe was up nearly 17 percent to 34.3 million tons. In the North American market, met coal shipments to Canada were up 22 percent and shipments to Mexico were up 17 percent. Met coal exported to South America was up about 11 percent, while coal shipments to Africa increased 4 percent.

Steam coal exports, including lignite and anthracite, surged by 47.4 percent to 37.7 million tons in 2011, driven in large part by a 124.4 percent increase in shipments to Europe. The U.S. also shipped 59 percent more steam coal to Asia, 67 percent more to South America and 107 percent more to Africa. Conversely, Canada imported approximately 3 million tons, down 66 percent from 8 million tons in 2010.

Coal imports decreased 32 percent to about 13 million tons in 2011, with the U.S. receiving less coal from Colombia and Indonesia. As in past years, most imported coal - 75 percent of the total - came from Colombia. Other major U.S. coal import suppliers in 2011 were Canada and Indonesia. East Coast power generators located near port terminals with capacity to unload ships directly to stockpiles tend to be the biggest importers of coal. Coal imports currently only account for roughly 1.2 percent of total U.S. coal supply.

Other Issues Impacting Coal

Coal Generating Capacity Growth - According to EIA estimates, approximately 19 percent, or 4,873 MW, of new nameplate generating power capacity additions in 2011 were coal-based. That number is down considerably from 2010 and is expected to decrease slightly to 18 percent (4,304 MW) in 2012. The greatest percentage of electric power capacity additions in 2011 was natural gas-based, with 44 percent and 11,256 MW. Wind capacity additions amounted to 7,972 MW, a 31 percent share of the total.

At the same time, EIA's 2012 annual early release forecast expects 28.8 gigawatts (GW) of coal generating capacity to be retired by 2015. Going forward, it is assumed that some older, less efficient coal plants will be retired. Unfortunately, as further announcements mount-up, coal and energy industry analysts now expect an even greater number of coal plant retirements to occur as the multitude of proposed EPA environmental regulations are finalized and assuming natural gas prices remain low.

According to EIA, 64 percent of total generator retirements implemented in 2000-2010 were older, less efficient natural gas-based generators, rather than coal-based generators.

The National Energy Technology Laboratory (NETL) reports that the following five coal plants (totaling 2,343 MW) were commissioned in 2011 and January 2012: the 390 MW Dry Fork plant; the 615 MW Oak Creek plant; the 310 MW Point Comfort plant; the 220 MW Whelan plant; and the 808 MW Longview plant. In addition, the 300 MW Southwest plant listed as being commissioned in 2010 went in to commercial operation in January of 2011.

About 6,519 MW of capacity is still under construction and due to come on line by the end of 2014. Beyond 2014 very little, if any, coal plant construction is anticipated to

occur. Analysis by the American Public Power Association (APPA) indicates that only 16.5 percent of all power plants currently under construction is coal plants, putting coal behind natural gas at 41 percent and wind at 21 percent of new builds.

Key Competing Generation Sources – As mentioned above, 2011 saw an increase in natural gas and renewable electricity generation. Key factors were unprecedented and continuing decline in natural gas prices and increased state level renewable energy standards. EIA estimates the average cost of natural gas delivered to all power generating sectors was \$4.71 per MMBtu in 2011. That figure compares to \$5.09 per MMBtu in 2010, \$4.74 per MMBtu in 2009 and \$9.01 per MMBtu in 2008. Meanwhile, the average delivered price of coal was \$2.40 per MMBtu in 2011. EIA expects natural gas prices to remain low, averaging \$2.51 per MMBtu this year and \$3.40 per MMBtu in 2013.

Average annual natural gas spot prices (Henry Hub) decreased approximately 9 percent in 2011 to \$4.00 per MMBtu, fluctuating in the range of \$3.17-\$4.55 per MMBtu over the course of the year. In addition, natural gas storage remained at relatively high levels despite stronger demand, due to mild winter weather reducing residential heating consumption and strong shale gas production growth.

Net generation from 104 U.S. nuclear units decreased by 2.1 percent in 2011 to 790 billion kWh, with nuclear plants contributing approximately 20 percent of generation. The Tennessee Valley Authority's Watts Bar Unit 2 reactor, which was projected to begin operating by 2013, has now been pushed back to 2015 due to additional construction costs and mechanical issues. In general, the events surrounding Japan's Fukushima nuclear plant have slowed the pace of nuclear energy's capacity growth.

The Nuclear Regulatory Commission (NRC) allows nuclear plants to increase their capacity and output through power uprates. According to the NRC, 5 plants units totaling 1,155 MW (thermal) received approval for power uprates in 2011, with another 15 plant uprate applications with 2,486 MWt projected for 2012. Many nuclear plants are running longer between maintenance outages and have reduced the duration of each scheduled outage. However, the U.S. nuclear power fleet capacity utilization has remained fairly constant in recent years, currently averaging around a 90 percent capacity factor (89 percent in 2011), according to the Nuclear Energy Institute (NEI).

Economic Growth in 2011 – Power generation in general and coal consumption from all sectors is positively or negatively impacted when there is a rise or drop in Gross Domestic Product (GDP). GDP, as measured in real terms, increased only 1.7 percent in 2011, according to the Bureau of Economic Analysis (BEA) preliminary figures. The 1.7 percent growth rate in 2011 compares to a rate of 3.0 percent in 2010 and an average rate of 2.6 percent over the past twenty years (1992-2011).

Proposed Emissions Regulations - EPA's recent Cross-State Air Pollution Rule (CSAPR) and Utility Mercury and Air Toxics Standards (MATS) rules essentially prevent future coal plants from being built, as well as make it more costly to operate some plants long term. In late 2011 and early 2012, a large number of power companies announced their intent to retire some of their smaller, older or less efficient coal plants

as a result of the uncertainty surrounding proposed regulations, coupled with the expectation of continued low natural gas prices. It is hard to say with certainty which plants will ultimately be retired, but the announced retirements to date total more than 30 GW of coal generating capacity (about 10 percent of U.S. generating capacity).

Permit Delays, Geologic Constraints and Safety Standards – Permitting delays and less desirable geology in the Central Appalachian region were at issue again in 2011. Also in the East, compliance with new, more stringent safety standards and enforcement were factors for the industry to contend with.

Coal Export and Import Prices – Strong global demand for coal in 2011 drove up the coal price both in the U.S. and overseas. The average price for U.S. export coal was up 24 percent, rising from \$120.41 per ton in 2010 to \$148.86 per ton in 2011. Appalachian coal prices, particularly for metallurgical coal, escalated faster than other coals, resulting in Appalachian coal being less competitive than natural gas in the generation market. The average price for imported coal was up 44 percent to \$103.32 per ton.

Major Coal Company Asset Acquisitions

It was a very active year for coal industry mergers and acquisitions. Some of the recent U.S. coal company sales, acquisitions and other industry activities included:

Alliance Coal, LLC – Alliance Coal acquired the coal related assets of Kentucky's Green River Collieries, LLC in April 2012.

Alpha Natural Resources, Inc. - In June 2011, Alpha acquired Massey Energy Company.

Ambre Energy LTD – Ambre Energy acquired a 50 percent interest in the Decker Coal Company and Black Butte Coal Company mines in Montana and Wyoming in November 2011.

Arch Coal, Inc. – Arch Coal acquired an equity interest in Millennium Bulk Terminals in January 2011. In June 2011, Arch acquired International Coal Group (ICG).

James River Coal Co. – In April 2011, James River purchased International Resource Partners LP, including its subsidiary Logan & Kanawha Coal LLC.

Rhino Resource Partners – Rhino acquired the assets of Eastern Kentucky's Elk Horn Coal Company in June 2011. Also in June, Rhino acquired metallurgical coal resources and surface rights in Randolph and Upshur Counties in West Virginia. In August, the company sold some of its non-core mining assets in the Phelps, Ky. region.

Rosebud Mining Co. – In February 2011, Rosebud acquired Action Mining, Inc. and associated companies. Action mining was a small Pennsylvania steam and metallurgical coal producer.

SunCoke Energy – SunCoke purchased the coal assets of Harold Keene Coal Co. in February 2011.

Walter Energy, Inc. – In April 2011, Walter acquired Western Coal Corp. (Vancouver) and purchased Chevron Mining’s North River mine (Alabama) in May 2011.

Western Fuels Association, Inc. – Western Fuels acquired Rio Tinto’s Colowyo mine (Wyoming) in February 2012.

Westmoreland Coal Company – Westmoreland acquired the adjacent reserves to its Absaloka mine in Hardin, Mont., in December 2011. It completed its acquisition of Chevron Mining Inc.’s Kemmerer mine in Wyoming in January 2012.

Xinergy Ltd. – In January 2011, Xinergy’s South Fork Coal subsidiary acquired met coal property and reserves in the Little Raleigh and Fire Creek Beds in Greenbrier County, W.Va.

Major Coal Producing Companies, Mines and Mine Complexes in 2011 (Tables 1-4)

Table 1, compiled by the National Mining Association from data collected through a survey of major coal producers, shows 2011 production for 51 coal producing companies in the United States. In 2011, Peabody Energy Corporation was the largest coal producer in the U.S., with output (including tons sold) of 203.9 million tons, representing nearly 19 percent of total U.S. coal production. The second largest was Arch Coal, Inc., with 151.7 million tons (including tons sold), representing nearly 14 percent of total U.S. coal production. Ranking third was Alpha Natural Resources, Inc. with 102.3 million tons, 9.3 percent of U.S. production. The fourth largest coal producer, Cloud Peak Energy, Inc., had output of 97.2 million tons, 8.9 percent of U.S. production. The fifth largest producer was CONSOL Energy Inc., with 62.6 million tons, 5.7 percent of production. The top five coal producing companies in the survey accounted for approximately 58 percent of total U.S. production, while the top 10 accounted for nearly 72 percent.

Table 2 lists the top five underground mines in terms of production. They were CONSOL’s Bailey Mine in Pennsylvania, with 10.8 million tons; CONSOL’s Enlow Fork Mine in Pennsylvania, with 10.2 million tons; CONSOL’s McElroy Mine in West Virginia, with 9.3 million tons; Alliance Resource Partner’s River View Mine in Kentucky, with 7.6 million tons and Peabody Energy’s Twentymile Mine in Colorado, with 7.5 million tons.

The five top producing surface mines (Table 3) in 2011 were Peabody Energy’s North Antelope Rochelle Mine, with 109 million tons; Arch Coal’s Black Thunder Mine, with 104.9 million tons; Cloud Peak Energy’s Cordero Rojo Mine with 39.5 million tons, and its Antelope Mine with 37.1 million tons; and Alpha Natural Resources’ Eagle Butte Mine, with 25.4 million tons. All are located in Wyoming’s Powder River Basin coal region.

Table 4 shows the 2011 output of major multi-mine production complexes, which are operations or complexes that process coal production from several mines. Murray Energy’s American Coal Company Galatia complex in Illinois was the largest multi-mine complex, with 6.8 million tons; Peabody Energy’s Somerville Complex in Indiana was second, with 5.8 million tons; third was Patriot Coal Company’s Corridor G mining operation in West Virginia, with 3.6 million tons; fourth and fifth were Arch Coal’s Coal-

Mac operation in West Virginia and TECO Coal Corporation's Perry County operation in Kentucky, with 3.3 million and 3.1 million tons respectively.

Major U.S. Coal Reserve Holders in 2011 (Table 5)

With about one-third ownership of the nation's coal resources, the U.S. government is the single largest reserve holder, with approximately 87 billion tons of estimated recoverable coal reserves. Great Northern Properties Limited Partnership reported the second largest reserve holding with 20 billion tons. Third was Peabody Energy with 9 billion tons, and fourth and fifth were Arch Coal and Alpha Natural Resources with 5.6 billion and 4.7 billion tons respectively.

Companies General Outlook for Coal Production in 2012

Coal companies were asked for their views on the outlook for 2012 U.S. coal production. The coal industry was less optimistic about 2012 production than last year, with 39 percent of survey respondents expecting production to be the same or lower. Four percent expect higher production and 57 percent did not respond to this part of the survey.

Workforce Age Survey

NMA surveyed companies on the average age of their company's mine workforce in 2011. Of the 17 companies responding, 47 percent estimated the average age of their workforce to be in the 46–50 age range, 35 percent estimated it to be in the 41–45 year old range, and 18 percent in the 36–40 age range. The industry is experiencing a gradual rise in younger mine workers as some older workers retire. High wages and good benefits continue to entice a new generation of miners to enter the workforce. The nation's current unemployment situation reinforces the value of stable, high paying mining jobs.

Survey Methodology

Coal producers and reserve holders were asked to provide their company's total U.S. coal production and reserve holdings for 2011. They also were asked to name their mines and the production output of each mine using the following criteria: surface mines with production of 2 million tons or greater; underground mines with production of 1 million tons or greater; and any multi-mine production complex with output of more than 1 million tons. A multi-mine production complex is defined as an operation that is not a single mine, but processes production from more than one mine. As in past years, significant effort was made to include as many coal producers and reserve holders as possible.

Notes: The production figures reported in this survey are intended to reflect ownership of mine production as of the end of calendar year 2011. Companies not included in the list are encouraged to submit data for next year. The National Mining Association has conducted a survey of major coal producers since the 1980s. The results of prior surveys can be found in earlier editions of NMA's *Coal Producer Survey*, and prior to 1998, in NMA *Facts About Coal, and Facts About Coal & Minerals*, and Mining Media Publishing's *Keystone Coal Industry Manual*. The latest edition of NMA's *Coal Producer Survey* report is publically available in PDF format on the NMA website: <http://www.nma.org>. NMA greatly appreciates the many contributors to this annual survey and report.

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TABLE 1
Major U.S. Coal Producers - 2011
(Million Short Tons)

Company	Production Tonnage	Percent of Total U.S.
1. Peabody Energy Corporation ¹	203.9	18.6%
2. Arch Coal, Inc. ²	151.7	13.9%
3. Alpha Natural Resources, LLC ³	102.3	9.3%
4. Cloud Peak Energy, Inc. ⁴	97.2	8.9%
5. CONSOL Energy Inc.	62.6	5.7%
6. Luminant (Energy Future Holdings)	32.3	3.0%
7. Alliance Resource Partners	30.8	2.8%
8. Kiewit Mining Group, Inc.	30.0	2.7%
9. Patriot Coal Corporation	28.8	2.6%
10. North American Coal Corporation	27.9	2.5%
11. Murray Energy Corporation	26.5	2.4%
12. Westmoreland Coal Company	21.8	2.0%
13. BHP Billiton	11.9	1.1%
14. The Cline Group (Coalfield Transport, Foresight Energy) ⁵	10.9	1.0%
15. James River Coal Company	10.3	0.9%
16. Rosebud Mining Company	8.8	0.8%
17. Jim Walter Resources, Inc. ⁶	8.4	0.8%
18. Oxford Resource Partners LP (Ungurean) ⁵	8.1	0.7%
19. Interwest Mining Company (PacifiCorp)	7.3	0.7%
20. TECO Coal Corporation	7.1	0.6%
21. Armstrong Energy Corp. ⁵	6.5	0.6%
22. Western Fuels Association, Inc.	6.1	0.6%
23. Black Hills Corporation (Wyodak Resources)	5.7	0.5%
24. Booth Energy Group ⁵	5.5	0.5%
25. Essar/Frasure Creek Mining Co. ⁵	5.3	0.5%
26. Vectren Fuels, Inc. (Five Star)	5.1	0.5%
27. Signal Peak Energy, LLC ⁵	5.1	0.5%
28. Rhino Energy LLC	4.8	0.4%
29. Ranger Energy/Justice ⁵	4.6	0.4%
30. Chevron Mining Inc. ⁵	4.4	0.4%
31. Cliffs Natural Resources Inc. ⁵	4.3	0.4%
32. BNI Coal, LTD	4.3	0.4%
33. Dolet Hills Lignite Company (AEP)	4.3	0.4%
34. Knight Hawk Coal, LLC (Bunn) ⁵	4.1	0.4%
35. PBS Coals, Inc. (Severstal Oao) ⁵	4.1	0.4%
36. Metinvest BV/United Coal Co. ⁵	3.7	0.3%
37. Drummond Company, Inc.	3.5	0.3%
38. Mechel Oao ⁵	3.4	0.3%
39. Sunrise Coal Co. (Hallador) ⁵	3.3	0.3%
40. Oxbow Carbon & Minerals Inc. ⁵	3.0	0.3%
41. Solar Sources, Inc.	2.8	0.3%
42. Dana Mining Co. (First Reserve) ⁵	2.6	0.2%
43. Rio Tinto Energy America	2.5	0.2%
44. Trapper Mining Inc.	2.5	0.2%
45. ArcelorMittal ⁵	2.4	0.2%
46. Usibelli Coal Mine, Inc.	2.2	0.2%
47. Advent Mining LLC (Allied Resources) ⁵	2.1	0.2%
48. Springfield Coal Co. ⁵	1.9	0.2%
49. Ambre Energy LTD ⁵	1.9	0.2%
50. Xinergy Corp./Nix ⁵	1.8	0.2%
51. Vigo Coal Co. ⁵	1.5	0.1%
52. Prairie State Energy Co. ⁵	1.0	0.1%
Other Producers	89.4	8.2%
Total U.S. Production ⁷	1,094.3	100.0%

Notes: Figures are rounded. 2011 data compiled from 2012 NMA survey of major producers. May not be all-inclusive. Any companies not included in this listing are invited to submit data for the next edition. U.S. production total for 2011 is an EIA preliminary estimate.

¹ Peabody Energy Corp. production figure includes production plus tons sold, excluding trading and brokerage operations.

² Arch Coal, Inc. production figure includes tons sold. Excludes purchased tons. Includes ICG tons.

³ Alpha NR production figure includes Massey tons.

⁴ Cloud Peak production figure includes 50 percent interest in Decker Mine.

⁵ Department of Labor, Mine Safety & Health Administration 2011 preliminary data.

⁶ Jim Walter Resources production figure includes North River tons.

⁷ Department of Energy, Energy Information Administration 2011 preliminary data.

TABLE 2

**Major U.S. Underground Coal Mines - 2011
(Million Short Tons)**

Mine Name	Location	Tonnage	Operating Company
1. Bailey	Pennsylvania	10.8	CONSOL Energy Inc.
2. Enlow Fork	Pennsylvania	10.2	CONSOL Energy Inc.
3. McElroy	West Virginia	9.3	CONSOL Energy Inc.
4. River View	Kentucky	7.6	River View Coal, LLC (Alliance)
5. Twentymile	Colorado	7.5	Peabody Energy Subsidiary
6. Mach No. 1	Illinois	7.2	Williamson Energy, LLC (Foresight/Coal Transp.)
7. Century	Ohio	7.1	American Energy Corp. (Murray)
8. Powhatan No. 6	Ohio	6.3	The Ohio Valley Coal Co. (Murray)
9. Cumberland	Pennsylvania	6.2	Cumberland Coal Resources (Alpha)
10. SUFCO	Utah	6.1	Arch Coal, Inc.
11. Robinson Run	West Virginia	6.0	CONSOL Energy Inc.
12. West Elk	Colorado	5.7	Arch Coal, Inc.
13. Buchanan	Virginia	5.7	CONSOL Energy Inc.
14. Loveridge	West Virginia	5.6	CONSOL Energy Inc.
15. Warrior	Kentucky	5.4	Warrior Coal, LLC (Alliance)
16. Shoemaker	West Virginia	5.1	CONSOL Energy Inc.
17. Bull Mountain	Montana	5.1	Signal Peak Energy LLC
18. New Era	Illinois	5.0	American Energy Corp. (Murray)
19. Blacksville No. 2	West Virginia	4.3	CONSOL Energy Inc.
20. San Juan	New Mexico	4.0	BHP Billiton-New Mexico Coal
21. Highland	Kentucky	3.9	Highland Mining Co., LLC (Patriot)
22. Emerald	Pennsylvania	3.7	Emerald Coal Resources (Alpha)
23. Federal	West Virginia	3.7	Eastern Associated Coal Co., LLC (Patriot)
24. Dotiki	Kentucky	3.6	Webster County Coal LLC (Alliance)
25. Blue Creek No. 7	Alabama	3.6	Jim Walter Resources, Inc.
26. West Ridge	Utah	3.6	Utah American Energy, Inc. (Murray)
27. Gateway	Illinois	3.5	Peabody Energy Subsidiary
28. Gibson	Indiana	3.4	Gibson County Coal, LLC (Alliance)
29. Elk Creek	Kentucky	3.3	Hopkins County Coal, LLC (Alliance)
30. Carlisle ^{1/}	Illinois	3.3	Sunrise Coal Co. (Hallador)
31. Mountaineer	West Virginia	3.2	Arch Coal, Inc.
32. Skyline	Utah	3.2	Arch Coal, Inc.
33. Deer Creek	Utah	3.1	Energy West Mining Co. (Interwest)
34. Elkhorn 4-2	Kentucky	3.1	Perry County Coal Corp. (TECO)
35. Bridger Underground	Wyoming	3.0	Bridger Coal Company (Interwest)
36. Elk Creek ^{1/}	Colorado	3.0	Oxbow Mining, LLC
37. Francisco	Indiana	3.0	Peabody Energy Subsidiary
38. Rockspring Deep	West Virginia	3.0	Rockspring Development (Alpha)
39. North River	Alabama	2.7	Jim Walter Resources, Inc.
40. Oaktown Fuels	Indiana	2.7	Black Panther Mining, LLC (Vectren)
41. Prosperity	Indiana	2.5	Five Star Mining, Inc. (Vectren)
42. Mettiki	West Virginia	2.4	Mettiki Coal LLC (Alliance)
43. Willow Lake	Illinois	2.2	Peabody Energy Subsidiary
44. Dugout Canyon	Utah	2.2	Arch Coal, Inc.
45. Pattiki	Illinois	2.2	White County Coal LLC (Alliance)
46. Onton No. 9 ^{1/}	Kentucky	2.1	Advent Mining LLC
47. Blue Creek No. 4	Alabama	2.1	Jim Walter Resources, Inc.
48. Panther	West Virginia	1.9	Panther LLC (Patriot)
49. New Future	Illinois	1.8	American Energy Corp. (Murray)
50. Shoal Creek	Alabama	1.8	Drummond Company Inc.
51. Shay No. 1	Illinois	1.8	Macoupin Energy, LLC (Foresight/Coalfield Transp.)
52. Paradise	Kentucky	1.8	KenAmerican Resources, Inc. (Murray)
53. Matrix Energy No. 1 ^{1/}	Kentucky	1.6	Matrix Energy LLC (Booth)
54. MC Mining	Kentucky	1.5	MC Mining, LLC (Alliance)
55. Parkway ^{1/}	Kentucky	1.4	Armstrong Energy Corp.
56. Prime No. 1 ^{1/}	West Virginia	1.4	Dana Mining Co.
57. Deep Mine No. 26	Virginia	1.3	Paramont Coal Company, LLC (Alpha)
58. Hopedale	Ohio	1.3	Hopedale Mining LLC (Rhino)
59. Sentinel	West Virginia	1.2	Arch Coal, Inc.
60. Air Quality No. 1	Indiana	1.2	Peabody Energy Subsidiary
61. Pinnacle	West Virginia	1.2	Pinnacle Mining Co. (Cliffs NR)
62. Kimberly Run ^{1/}	Pennsylvania	1.2	Roxcoal Inc. (PBS)
63. 4 West ^{1/}	Pennsylvania	1.2	Dana Mining Co.
64. Viper	Illinois	1.1	Arch Coal, Inc.
65. Big Mountain	West Virginia	1.1	Pine Ridge Coal Co., LLC (Patriot)
66. Poplar Ridge	West Virginia	1.1	Brooks Run Mining (Alpha)
67. Crown III ^{1/}	Illinois	1.0	Springfield Coal Co.
68. Lively Grove ^{1/}	Illinois	1.0	Prairie State Generating
69. Pontiki	Kentucky	1.0	Pontiki Coal, LLC (Alliance)
70. Prairie Eagle ^{1/}	Illinois	1.0	Knight Hawk Coal, LLC (Bunn)
71. Prairie Eagle South ^{1/}	Illinois	1.0	Knight Hawk Coal, LLC (Bunn)
72. Wildcat Hills	Illinois	1.0	Peabody Energy Subsidiary

Notes: Figures are rounded. 2011 data compiled from 2012 NMA survey of major producers.

May not be all-inclusive. Any companies not included in this listing are invited to submit data for the next edition.

^{1/} Department of Labor, Mine Safety & Health Administration, 2011 preliminary data.

TABLE 3

**Major U.S. Surface Coal Mines - 2011
(Million Short Tons)**

	Mine Name	Location	Tonnage	Operating Company
1.	North Antelope Rochelle	Wyoming	109.0	Peabody Energy Subsidiary
2.	Black Thunder	Wyoming	104.9	Arch Coal, Inc.
3.	Cordero Rojo	Wyoming	39.5	Cloud Peak Energy
4.	Antelope	Wyoming	37.1	Cloud Peak Energy
5.	Eagle Butte	Wyoming	25.4	Alpha Coal West
6.	Buckskin	Wyoming	25.0	Buckskin Mining Co. (Kiewit)
7.	Belle Ayr	Wyoming	24.6	Alpha Coal West
8.	Caballo	Wyoming	24.2	Peabody Energy Subsidiary
9.	Spring Creek	Montana	19.1	Cloud Peak Energy
10.	Rawhide	Wyoming	15.0	Peabody Energy Subsidiary
11.	Freedom	North Dakota	13.6	Coteau Properties Co. (North American)
12.	Martin Lake	Texas	10.1	Luminant Mining
13.	Coal Creek	Wyoming	10.0	Arch Coal, Inc.
14.	Rosebud	Montana	8.8	Western Energy Co. (Westmoreland)
15.	Kosse	Texas	8.6	Luminant Mining
16.	El Segundo	New Mexico	8.0	Peabody Energy Subsidiary
17.	Navajo	New Mexico	7.9	BHP Billiton-New Mexico Coal
18.	Kayenta	Arizona	7.9	Peabody Energy Subsidiary
19.	Falkirk	North Dakota	7.5	The Falkirk Mining Co. (North American)
20.	Three Oaks	Texas	7.2	Luminant Mining
21.	Bear Run	Indiana	6.5	Peabody Energy Subsidiary
22.	Dry Fork	Wyoming	5.9	Western Fuels-Wyoming
23.	Wyodak	Wyoming	5.7	Wyodak Resources Dev. Corp. (Black Hills)
24.	Absaloka	Montana	5.6	Westmoreland Resources Inc.
25.	Beckville	Texas	4.5	Luminant Mining
26.	Kemmerer	Wyoming	4.4	Chevron Mining Inc.
27.	Center	North Dakota	4.3	BNI Coal, Ltd.
28.	Jewett	Texas	4.2	Texas Westmoreland Coal Co.
29.	Sabine/South Hallsville	Texas	4.0	Sabine Mining (North American)
30.	Dolet Hills Lignite	Louisiana	3.7	Dolet Hills Lignite Co. (AEP)
31.	Big Brown	Texas	3.7	Luminant Mining
32.	San Miguel	Texas	3.2	Kiewit Mining Group
33.	Twilight	West Virginia	3.2	Progress Coal Co. (Alpha)
34.	Oak Hill	Texas	3.2	Luminant Mining
35.	Decker ^{2/}	Montana	3.1	Cloud Peak Energy & Ambre Energy
36.	Coal-Mac	West Virginia	3.1	Arch Coal, Inc.
37.	Beulah	North Dakota	3.0	Dakota Westmoreland Corp.
38.	Somerville Central	Indiana	2.8	Peabody Energy Subsidiary
39.	Black Butte ^{2/}	Wyoming	2.8	Black Butte Coal Co. (Ambre & Anadarko)
40.	Black Castle	West Virginia	2.8	Black Castle Mining Co. (Alpha)
41.	Job 21	West Virginia	2.8	Patriot Coal Corp.
42.	Red Hills	Mississippi	2.7	Mississippi Lignite (North American)
43.	Monticello	Texas	2.7	Luminant Mining
44.	Logan County (Guyan)	West Virginia	2.6	Patriot Coal Corp.
45.	Colowyo	Colorado	2.5	Rio Tinto Energy America
46.	Trapper	Colorado	2.5	Trapper Mining Inc.
47.	Tatum	Texas	2.5	Luminant Mining
48.	Republic	West Virginia	2.3	Republic Energy Co. (Alpha)
49.	Frasure Creek No. 6 ^{1/}	Kentucky	2.2	Frasure Creek Mining, LLC (Essar)
50.	Usibelli	Alaska	2.2	Usibelli Coal Mine, Inc.
51.	Equality ^{1/}	Kentucky	2.0	Armstrong Coal Co.
52.	Lee Ranch	New Mexico	2.0	Peabody Energy Subsidiary

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May not be all-inclusive. Any companies not included in this listing are invited to submit data for the next edition.

1/ Department of Labor, Mine Safety & Health Administration, 2011 preliminary data.

2/ Fifty percent ownership each.

TABLE 4
Major Multi-Mine^{1/} Production Complexes - 2011
(Million Short Tons)

Complex Name	Location	Tonnage	Company
1. American Coal (Galatia Complex)	Illinois	6.8	The American Coal Company (Murray)
2. Somerville Complex	Indiana	5.4	Peabody Energy Subsidiary
3. Corridor G	West Virginia	3.6	Patriot Coal Corp.
4. Coal-Mac	West Virginia	3.3	Arch Coal, Inc.
5. Perry County	Kentucky	3.1	Perry County Coal Corp. (TECO)
6. Miller Creek	West Virginia	2.9	CONSOL of Kentucky
7. Wildcat Hills	Illinois	2.9	Peabody Energy Subsidiary
8. Wells	West Virginia	2.8	Patriot Coal Corp.
9. Triad	Indiana	2.5	Triad Mining, Inc. (James River)
10. Blue Grass	Kentucky	2.4	Patriot Coal Corp.
11. Lone Mountain	Kentucky	2.3	Arch Coal, Inc.
12. Premier Elkhorn	Kentucky	2.2	Premier Elkhorn Coal Co. (TECO)
13. Fola Complex	West Virginia	2.2	Fola Coal Co. (CONSOL)
14. Muhlenbuerg	Kentucky	2.2	Oxford Mining Co.- Kentucky, LLC
15. Cumberland River	Virginia	2.2	Arch Coal, Inc.
16. CAM Mining	Kentucky	2.0	CAM Mining, LLC (Rhino)
17. Clintwood	Kentucky & Virginia	1.8	Clintwood Elkhorn Mining (TECO)
18. Big Mountain	West Virginia	1.8	Patriot Coal Corp.
19. McCoy	Kentucky	1.8	McCoy Elkhorn Coal Corp. (James River)
20. Cadiz	Ohio	1.7	Oxford Mining Co., LLC
21. Bledsoe	Kentucky	1.5	Bledsoe Coal Corporation (James River)
22. Kanawha Eagle	West Virginia	1.4	Patriot Coal Corp.
23. Blue Diamond	Kentucky	1.4	Blue Diamond Coal Co. (James River)
24. Hopedale Mining	Ohio	1.3	Hopedale Mining, LLC (Rhino)
25. Leeco	Kentucky	1.2	Leeco, Inc. (James River)
26. Paint Creek	West Virginia	1.2	Patriot Coal Corp.
27. Hampden	West Virginia	1.1	IRP
28. Rocklick	West Virginia	1.1	Patriot Coal Corp.
29. Belmont County	Ohio	1.0	Oxford Mining Co., LLC

Notes: Figures are rounded. 2011 data compiled from 2012 NMA survey of major producers.

May not be all-inclusive. Any companies not included in this listing are invited to submit data for the next edition.

^{1/} A multimine complex is a mine operation that processes production from more than one mine.

TABLE 5
Major Holders of U.S. Coal Reserves - 2011
(Billion Short Tons)

Holder	Estimated Reserves
1. U.S. Government	87.000 *
2. Great Northern Properties Limited Partnership	20.000
3. Peabody Energy Corporation	9.000
4. Arch Coal, Inc.	5.600
5. Alpha Natural Resources, LLC	4.677
6. CONSOL Energy Inc.	4.500
7. Foresight Energy, LLC (Cline Group)	2.960
8. North American Coal Corporation	2.400
9. Natural Resource Partners LP	2.300
10. Patriot Coal Corporation	1.931
11. Pocahontas Land Corporation (Norfolk Southern)	1.690
12. Cloud Peak Energy, Inc.	1.367
13. Kentucky River Properties LLC	0.976
14. Alliance Resource Partners	0.911
15. Penn Virginia Resource Partners, LP	0.893
16. Murray Energy Corporation	0.851
17. Luminant Mining (Energy Future Holdings)	0.791
18. BNI Coal, LTD	0.770
19. Usibelli Coal Mine, Inc.	0.700
20. Rosebud Mining Company	0.544
21. Kiewit Mining Group, Inc.	0.445
22. Rhino Energy LLC	0.437
23. Westmoreland Coal Company	0.400
24. James River Coal Company	0.363
25. Western Fuels Association, Inc.	0.334
26. TECO Coal Corporation	0.325
27. Dolet Hills Lignite Company (AEP)	0.281
28. Black Hills Corporation (Wyodak Resources)	0.256
29. Jim Walter Resources, Inc.	0.239
30. BHP Billiton	0.233
31. Interwest Mining Company (PacifiCorp)	0.199
32. Metinvest BV/United Coal Co.	0.171
33. Vectren Fuels, Inc. (Five Star)	0.132
34. Western Pocahontas Properties	0.122
35. Jewell Smokeless Coal Corp. (Sunoco)	0.100
36. Drummond Company, Inc.	0.093
37. Oxford Resource Partners, LP (Ungurean)	0.088
38. Solar Sources, Inc.	0.033
39. Trapper Mining Inc.	0.021
40. Vigo Coal Co., Inc.	0.008
41. Advent Mining LLC (Allied Res.)	N/A
42. ArcelorMittal	N/A
43. Armstrong Energy Corp.	N/A
44. Booth Energy Group	N/A
45. Chevron Mining Inc.	N/A
46. Cliffs Natural Resources Inc.	N/A
47. Dana Mining Co. (First Reserve)	N/A
48. Essar/Frasure Creek Mining Co.	N/A
49. Knight Hawk Coal, LLC (Bunn)	N/A
50. Mechel Oao	N/A
51. Oxbow Carbon & Minerals Inc.	N/A
52. PBS Coals, Inc. (Severstal Oao)	N/A
53. Ranger Energy/Justice	N/A
54. Rio Tinto Energy America	N/A
55. Signal Peak Energy, LLC	N/A
56. Springfield Coal Co.	N/A
57. Sunrise Coal Co. (Hallador)	N/A
58. The Cline Group (Coalfield Transport, Foresight Energy)	N/A
59. Xinergy Corp./Nix	N/A

Notes: 2011 data compiled from 2012 NMA survey of major producers. May not be all-inclusive.

Any companies not included in this listing are invited to submit data for the next edition.

* U.S. Government total is an NMA calculation based on federal ownership of about one-third of the United States' coal resources (Bureau of Land Management, 1993) and estimated recoverable reserves of 260 billion short tons (Energy Information Administration, 2010). N/A = Not Available.