

National Mining Association



2012 Coal Producer Survey • May 2013

2012 COAL PRODUCER SURVEY

May 2013

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The U.S. Coal Industry In 2012

The coal industry experienced a challenging year in 2012, beginning with an overall drop in total U.S. electricity generation, coal's largest demand sector. Based on preliminary Energy Information Administration (EIA) data, total generation to all sectors was down 1.1 percent as the winter of 2012 was mild, the U.S. economy was still not growing at pre-recession levels and natural gas prices fell to extremely low levels. Those factors, combined with the anticipation of further environmental regulations from the Environmental Protection Agency (EPA), resulted in coal's loss of market share to natural gas. Partially offsetting the lower demand in the electricity sector were record coal exports of both steam and metallurgical coal. U.S. coal exports in 2012 surged to an unprecedented 125.7 million short tons.

Coal Demand and Competition

Consumption/Inventories – Domestic coal consumption totaled 890.5 million tons in 2012, marking a decrease of 11.2 percent (112.5 million tons) from the prior year. As previously noted, this was primarily due to the combination of weather factors, competition from low natural gas prices, looming regulations 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 9 percent below normal nationally. Record July temperatures that were partly responsible for a high number of cooling-degree days – 22 percent above normal and 1 percent above 2011 -- were nevertheless not enough to offset the milder winter.

Coal consumption by the electric power sector was down 11.6 percent to 824.8 million tons, some 108 million tons less than consumed in 2011. (About 90 percent of U.S. coal production is used to generate electricity.)

Coking coal demand in the U.S. decreased 3.2 percent in 2012, to nearly 20.8 million tons. Other industrial demand, which includes cement kilns, agricultural processing and heavy industry and non-utility generation, fell 7.2 percent to 42.9 million tons, while the commercial and residential sector was down 26.8 percent to about 2 million tons.

The year ended with consumer stock inventories at 192.5 million tons, marking a nearly 7 percent increase in 2012. The build-up in stock inventories by consuming sectors was attributed to milder than expected early winter temperatures which drove natural gas prices to extremely low levels (below \$2/MMBtu in April of 2012) thereby driving significant coal-to-gas switching in power markets. Producer and distributor stockpiles were 47.4 million tons, down 8.6 percent from 2011. Early indications are that stockpile levels are falling in 2013, down by more than 20 million tons as of the end of March 2013 compared to the same period in 2012.

Power Sector Generation – Total coal-based power sector generation decreased 12.5 percent in 2012, to 1,502.7 billion kilowatt hours (kWh), while natural gas generation increased 22.9 percent to a record 1,138.1 billion kWh. Also, nuclear generation fell 2.6 percent due to refueling and outages, dropping from 790 kWh to approximately 769 kWh. Conventional hydro generation decreased 13.5 percent to 275 billion kWh.

Key Competing Generation Sources - As mentioned above, continuing low natural gas prices resulted in power generation fuel switching to natural gas. In addition, increased state-level renewable energy standards continued to result in greater wind, solar and other renewable power generation.

Electric power sector coal generation lost market share primarily to natural gas, dropping from nearly 44 percent share in 2011 to nearly 39 percent in 2012. Natural gas' share of generation increased from 24 percent to 29 percent in 2012, while nuclear's share decreased slightly from 20 percent to 19.7 percent. The combination of forced and planned outages at four nuclear reactors had an impact. Conventional hydro power dropped slightly from 8 percent to 7 percent. Other renewable generation continued to increase market share in 2012 as mandated renewable standards continued to drive wind, solar and other renewable generation higher. Excluding conventional hydro, renewable power's share of generation was 4.8 percent in 2012, up from 4.2 percent the previous year. EIA and other analyses indicate that coal will regain some of its lost market share from natural gas this year.

Coal and Natural Gas Prices - The average cost of natural gas delivered to all power generating sectors was \$3.40 per MMBtu in 2012, according to EIA data. That figure compares to \$4.72 per MMBtu in 2011, \$5.09 per MMBtu in 2010 and \$4.74 per MMBtu in 2009. Meanwhile, the average delivered price of coal was \$2.40 per MMBtu in 2012. EIA expects natural gas prices to rise somewhat this year, averaging \$3.80 per MMBtu and then reaching \$4.00 per MMBtu in 2014.

Average annual natural gas spot prices (Henry Hub) decreased approximately 31 percent in 2012 to \$2.75 per MMBtu, fluctuating in the range of \$1.82-\$3.66 per MMBtu over the course of the year.

Natural Gas Storage - Despite natural gas demand growth, natural gas inventories remained at relatively high levels due to strong shale production growth in the Marcellus and Eagle Ford basins and the mild winter of 2011/2012.

Nuclear Power - Coal and nuclear are competitors as suppliers of baseload power generation. Net generation from 103 U.S. nuclear units in 2012 fell by 2.6 percent to 769 billion kWh. Nuclear plants contributed nearly 20 percent of generation, down slightly from 2011. As mentioned above, a greater number of forced and planned nuclear reactor outages impacted nuclear generation last year.

Nuclear Upgrades/Utilization - The Nuclear Regulatory Commission (NRC) allows nuclear plants to increase their capacity and output through power upgrades. According to the NRC, six units totaling 1,886 MW thermal (MWt) received approval for power upgrades in 2012, with another four units

projecting uprate applications for 401 MWt for 2013. 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 (86 percent in 2012), according to the Nuclear Energy Institute (NEI).

Generating Power Capacity Changes - According to EIA estimates, approximately 15 percent, or 4,196 MW, of planned additions to electric generating capacity in 2012 were coal-based. That number is down from 2011 and is expected to decrease to 10 percent (1,568 MW) in 2013. The greatest percentage increase in electric power capacity in 2012 was from wind, with 44 percent or 11,913 MW added. Natural gas-based capacity additions amounted to 8,242 MW, a 30 percent share of the total.

At the same time, EIA's 2013 annual energy outlook forecasts 23.2 gigawatts (GW) of coal generating capacity to be retired by 2015 and a total of nearly 48 GW by 2020. According to EIA, the coal plants slated for retirement are primarily older (over 50 years old), less efficient plants in the Southeast, Mid-Atlantic and Ohio Valley regions of the country.

New Coal Plants - The following coal-based power plants entered commercial operation in 2012: the Cliffside 800 MW plant; the John W. Turk 600 MW plant; the Prairie State Energy 1,600 MW plant; and the Virginia City Hybrid Energy 600 MW plant.

Analysis by the American Public Power Association (APPA), using the Velocity Suite database, indicates that only 9.2 percent of all power plants currently under construction are coal plants, putting coal behind natural gas at 41 percent and wind at 19 percent of new builds. About 3,700 MW of coal capacity is still under construction and due to come on line by the end of 2015. Another 4,354 MW of coal capacity has been permitted but is not yet under construction.

Coal Supply and Trade

Production - Total coal production stood at 1,016 million short tons in 2012, according to preliminary EIA figures, marking a nearly 79 million ton (7.2 percent) decrease. Eastern coal production (east of the Mississippi River) was 424 million tons, including production from refuse recovery, and accounted for 42 percent of production. Eastern coal production decreased 7.1 percent in 2012, with decreases occurring in eastern states except for Alabama, Illinois and Mississippi. The power generating industry's retrofitting of coal-based plants with scrubbers is allowing more plants flexibility to switch coal types to the Illinois Basin's lower cost, higher sulfur coals.

The West produced 592.4 million tons of coal and 58 percent of production, down 7.3 percent. Wyoming, the leading coal producing state, mined 401.4 million tons, down 8.5 percent from 2011 due to lower steam coal demand from power generators. However, production increases occurred in Colorado and New Mexico.

Trade – By far the brightest spot in the 2012 U.S. coal market was record coal exports. The decline in domestic coal consumption was partially offset by relatively strong global economic factors, particularly coal demand from Europe and Asia that drove demand for both steam and metallurgical coals. Exports represented 12.3 percent of production in 2012.

U.S. exports surged in 2012 by 17 percent to a record 125.7 million short tons. The 18.5 million-ton gain over 2011 was primarily from increased global demand for steam coal going to Europe, Asia and Africa and for metallurgical coal exports going to Asia. Strong demand for U.S. coal from Europe resulted in gas to coal switching due to high natural gas prices on the Continent, low CO₂ prices and lower coal prices.

Increases in metallurgical coal export demand came from Asia, particularly China and India, and from Canada. Conversely, metallurgical coal exports to Europe, South America and Europe decreased.

The average export price was about \$118.43 per short ton, down 20 percent over 2011. Metallurgical prices dropped 18 percent from \$185.99 per ton to \$152.23. Steam coal prices were down 5 percent, dropping from \$80.42 per ton to \$76.16.

U.S. coal imports decreased 30 percent in 2012 to about 9.2 million tons, with the U.S. receiving less coal from all of its major suppliers - Colombia, Indonesia and Canada. Coal imports peaked in 2007 and have been decreasing since then. They now account for slightly less than 1 percent of total U.S. coal supply. As new U.S. emissions rules mandate scrubbers to reduce sulfur emissions, the value of imported compliance coals has waned.

The average price for imported coal was down 6 percent to \$96.78 per ton.

Other Market Factors

Proposed Emissions Regulations – EPA’s proposed Cross-State Air Pollution Rule (CSAPR) and Utility Mercury and Air Toxics Standards (MATS) rules effectively prevent future coal plants from being built, as well as make it more costly to operate some existing plants long term. As a result, in late 2011 and 2012, a large number of power companies announced their intent to retire some of their smaller, older or less efficient coal plants because of uncertainty surrounding proposed regulations coupled with the expectation of relatively low natural gas prices.

CSAPR was vacated in August 2012 with the District of Columbia Circuit finding that the agency violated federal law by exceeding its authority in setting emissions limits for states. EPA’s Clean Air Interstate Rule (CAIR) remains in effect, with phase 2 reductions scheduled to begin in 2015.

In April 2013, EPA missed a statutory deadline to issue a final rule, New Source Performance Standards (NSPS) to regulate carbon dioxide (CO₂) emissions from new power plants. The rule, proposed in April 2012, would limit emissions to 1,000 pounds of CO₂ per MW hour of electricity for new “fossil-fuel fired” plants, essentially precluding the building of any new coal plants unless they include the

installation of non-commercially available carbon capture and storage technologies with an averaging provision over a 30-year window. The rule is effective on proposal, although EPA must finalize the rule for new sources before it can regulate CO₂ emissions from existing sources.

Permitting/Geology/ Safety Standards - Permitting delays and less desirable geology in the Central Appalachian region were at issue again in 2012. Compliance with new, more stringent safety standards and enforcement also harmed the region's competitiveness.

Surface Mining Permits – Restrictions on surface mining permits continue to constrain Central Appalachian surface mining operations and growth. In April 2013, the U.S. Court of Appeals for the District of Columbia Circuit ruled in *Mingo Logan Coal Company v. EPA* that EPA can lawfully veto Clean Water Act section 404 (c) permits after they have been issued.

Major Coal Company Asset Acquisitions

Some recent U.S. coal company sales, acquisitions and other industry activities are identified below:

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

Ambre Energy Limited – In December 2012, Ambre announced that it had reached a deal with Cloud Peak Energy to acquire Cloud Peak's 50 percent interest in their jointly owned Decker Mine and its related assets. The acquisition will give Ambre 100 percent interest in the Montana mine.

America West Resources – America West entered bankruptcy protection in February 2013.

Chevron Mining Inc. – Chevron divested its coal assets, selling its Kemmerer (Wyoming) mine to Westmoreland Coal Company in January 2012 and later selling its 50 percent interest in the Young's Creek Mining Company to Cloud Peak Energy (see Cloud Peak).

Cline Mining Corporation – Cline entered an agreement in May 2012 to acquire additional property associated with its Elk Run Mine in Colorado.

Cloud Peak Energy, Inc. – Cloud Peak acquired the Youngs Creek and associated coal and land assets in June 2012 from Chevron USA Inc. and CONSOL Energy Inc. A deal was announced in December 2012 between Cloud Peak and Ambre Energy for Cloud Peak to sell its 50 percent interest in the Decker mine to Ambre Energy. The sale is expected to close in the first half of this year.

Hartshorne Mining Group – Hartshorne acquired Buck Creek Resources' coal assets in April 2013.

Patriot Coal – Patriot entered bankruptcy protection in July 2012.

Western Fuels Association, Inc. – Western Fuels-Colorado acquired Rio Tinto's Colowyo mine (Colorado) in February 2012.

Westmoreland Coal Company – Westmoreland acquired Chevron Mining Inc.’s Kemmerer mine in Wyoming in January 2012.

Essar Minerals – India based Essar Minerals’ Trinity Coal Company subsidiary was placed under bankruptcy protection in March of 2013.

Xinergy Ltd. – Xinergy sold its Straight Creek and Red Bird (Kentucky) coal properties to JW Resources Inc. in February 2013.

Major Coal Producing Companies, Mines and Mine Complexes in 2012 (Tables 1-4)

Table 1, compiled by the National Mining Association from data collected through a survey of major coal producers, shows 2012 production for 48 coal producing companies in the United States. In 2012, Peabody Energy Corporation was the largest coal producer in the U.S., with output (including tons sold) of 192.6 million tons, representing 18.9 percent of total U.S. coal production. The second largest was Arch Coal, Inc., with 137 million tons (including tons sold), representing 13.5 percent of total U.S. coal production. Ranking third was Alpha Natural Resources, Inc. with 105.9 million tons, 10.4 percent of U.S. production. The fourth largest coal producer, Cloud Peak Energy, Inc., had output of 92.1 million tons, 9.1 percent of U.S. production. The fifth largest producer was CONSOL Energy Inc., with 56.5 million tons, 5.6 percent of production. The top five coal producing companies in the survey accounted for nearly 58 percent of total U.S. production, while the top 10 accounted for 72 percent.

Table 2 lists the top five underground mines in terms of production. They were CONSOL’s Bailey Mine in Pennsylvania, with 10.1 million tons; CONSOL’s Enlow Fork Mine in Pennsylvania, with 9.5 million tons; CONSOL’s McElroy Mine in West Virginia, with 9.4 million tons; Alliance Resource Partner’s River View Mine in Kentucky, with 8.6 million tons and Murray Energy’s Century Mine in Ohio, with 8.4 million tons.

The five top producing surface mines (Table 3) in 2012 were: Peabody Energy’s North Antelope Rochelle Mine, with 107.7 million tons; Arch Coal’s Black Thunder Mine, with 92.9 million tons; Cloud Peak Energy’s Cordero Rojo Mine with 39.2 million tons, and its Antelope Mine with 34.3 million tons; and Alpha Natural Resources’ Belle Ayr Mine, with 24.2 million tons. All are located in Wyoming’s Powder River Basin coal region.

Table 4 shows the 2012 output of major multi-mine production complexes, which are mine 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 9.3 million tons; Peabody Energy’s Somerville Complex in Indiana was second, with 5.1 million tons; third was Peabody Energy’s Wildcat Hills/Cottage Grove mining operation in Illinois, with 3.6 million tons; fourth was Arch Coal’s Coal-Mac operation in West Virginia. Tied for fifth were Patriot Coal Corporation’s Corridor G operation in West Virginia with 2.8 million tons and CONSOL Energy’s Miller Creek operation also in West Virginia, with 2.8 million tons.

Major U.S. Coal Reserve Holders in 2012 (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 86 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 9.3 billion tons, and fourth and fifth were Arch Coal and Alpha Natural Resources with 5.5 billion and 4.6 billion tons respectively.

Survey Methodology

Coal producers and reserve holders were asked to provide their company's total U.S. coal production and reserve holdings for 2012. They also were asked to name their mines and the production output of each mine using the following criteria: surface mines with production of two million tons or greater; underground mines with production of one million tons or greater; and any multi-mine production complex with output of more than one 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 2012. 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 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 - 2012
(Million Short Tons)

Company	Production Tonnage	Percent of Total U.S.
1. Peabody Energy Corporation ¹	192.6	18.9%
2. Arch Coal, Inc. ²	137.0	13.5%
3. Alpha Natural Resources, LLC	105.9	10.4%
4. Cloud Peak Energy, Inc. ³	92.1	9.1%
5. CONSOL Energy Inc.	56.5	5.6%
6. Alliance Resource Partners	34.8	3.4%
7. Luminant Mining Company (Energy Future Holdings)	30.8	3.0%
8. Murray Energy Corporation	29.3	2.9%
9. North American Coal Corporation	28.5	2.8%
10. Patriot Coal Corporation	24.3	2.4%
11. Kiewit Mining Group, Inc.	22.7	2.2%
12. Westmoreland Coal Company	21.7	2.1%
13. The Cline Group (Foresight Energy/Coalfield Transport) ⁴	16.3	1.6%
14. BHP Billiton	12.6	1.2%
15. Walter Energy Company	11.1	1.1%
16. James River Coal Company	9.5	0.9%
17. Interwest Mining Company (PacifiCorp)	8.8	0.9%
18. Armstrong Energy Corporation ⁴	8.8	0.9%
19. Western Fuels Association, Inc. r/	8.6	0.8%
20. Rosebud Mining Company	7.6	0.7%
21. Knight Hawk Coal, LLC ⁴	7.3	0.7%
22. Cliffs Natural Resources Inc. ⁴	6.9	0.7%
23. Oxford Resource Partners, LP	6.8	0.7%
24. TECO Coal Corporation	6.3	0.6%
25. Signal Peak Energy, LLC (Boich/FirstEnergy/Gunvor)	5.7	0.6%
26. Booth Energy Group ⁴	5.2	0.5%
27. Vectren Fuels, Inc. (Five Star)	4.8	0.5%
28. BNI Coal, LTD	4.4	0.4%
29. Black Hills Corporation (Wyodak Resources)	4.4	0.4%
30. Rhino Energy LLC	4.3	0.4%
31. Ambre Energy North America, Inc. ⁴	4.3	0.4%
32. Dolet Hills Lignite Company (AEP)	3.5	0.3%
33. Ranger Energy/Justice ⁴	3.2	0.3%
34. Sunrise Coal Company (Hallador) ⁴	3.0	0.3%
35. Metinvest BV ⁴	3.0	0.3%
36. Oxbow Mining, LLC	3.0	0.3%
37. Prairie State Energy Company ⁴	2.8	0.3%
38. Dana Mining Company (GenPower Holdings LP) ⁴	2.8	0.3%
39. PBS Coals, Inc. (Severstal Oao) ⁴	2.6	0.3%
40. Drummond Company, Inc.	2.4	0.2%
41. ArcelorMittal ⁴	2.3	0.2%
42. Trapper Mining Inc.	2.3	0.2%
43. Mechel Oao ⁴	2.1	0.2%
44. Usibelli Coal Mine, Inc.	2.0	0.2%
45. Vigo Coal Company, Inc. ⁴	1.9	0.2%
46. Solar Sources, Inc.	1.8	0.2%
47. Essar/Frasure Creek Mining Company ⁴	1.6	0.2%
48. SunCoke Energy, Inc.	1.5	0.1%
Other Producers	57.3	5.6%
Total U.S. Production ⁵	1,016.4	100.0%

Notes: Figures are rounded. 2012 data compiled from 2013 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 2012 is an EIA preliminary estimate.

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

² Arch Coal, Inc. production figure includes sales, excluding brokered tons.

³ Cloud Peak production figure includes 50 percent interest in Decker Mine.

⁴ Department of Labor, Mine Safety & Health Administration 2012 preliminary data.

⁵ Department of Energy, Energy Information Administration 2012 preliminary data.

r/ Revised 6/5/13 to include Colorado operations

TABLE 2
Major U.S. Underground Coal Mines - 2012
(Million Short Tons)

Mine Name	Location	Tonnage	Operating Company
1. Bailey	Pennsylvania	10.1	CONSOL Energy Inc.
2. Enlow Fork	Pennsylvania	9.5	CONSOL Energy Inc.
3. McElroy	West Virginia	9.4	CONSOL Energy Inc.
4. River View	Kentucky	8.6	River View Coal, LLC (Alliance)
5. Century	Ohio	8.4	American Energy Corp. (Murray)
6. Twentymile	Colorado	8.3	Peabody Energy Subsidiary
7. Mach No. 1 ^{1/}	Illinois	7.6	Coalfield Transport (Foresight)
8. West Elk	Colorado	6.7	Arch Coal, Inc.
9. Cumberland	Pennsylvania	6.4	Cumberland Coal Resources (Alpha)
10. Warrior	Kentucky	5.9	Warrior Coal, LLC (Alliance)
11. Loveridge	West Virginia	5.9	CONSOL Energy Inc.
12. SUFCO	Utah	5.8	Arch Coal, Inc.
13. Bull Mountain	Montana	5.7	Signal Peak Energy LLC
14. Powhatan No. 6	Ohio	5.7	The Ohio Valley Coal Co. (Murray)
15. New Era	Illinois	5.7	American Energy Corp. (Murray)
16. Shoemaker	West Virginia	5.3	CONSOL Energy Inc.
17. Robinson Run	West Virginia	5.0	CONSOL Energy Inc.
18. San Juan	New Mexico	5.0	BHP Billiton-New Mexico Coal
19. No. 7	Alabama	4.8	Jim Walter Resources, Inc.
20. MC No. 1 ^{1/}	Illinois	4.7	Coalfield Transport (Foresight)
21. Bridger Underground	Wyoming	4.6	Bridger Coal Company (Interwest)
22. Emerald	Pennsylvania	4.4	Emerald Coal Resources (Alpha)
23. Highland	Kentucky	4.0	Highland Mining Co., LLC (Patriot)
24. Federal	West Virginia	4.0	Eastern Associated Coal Co., LLC (Patriot)
25. New Future	Illinois	3.6	American Energy Corp. (Murray)
26. Buchanan	Virginia	3.5	CONSOL Energy Inc.
27. Dotiki	Kentucky	3.4	Webster County Coal LLC (Alliance)
28. Gibson	Indiana	3.4	Gibson County Coal, LLC (Alliance)
29. Deer Creek	Utah	3.3	Energy West Mining Co. (Interwest)
30. Blacksville No. 2	West Virginia	3.2	CONSOL Energy Inc.
31. Hopkins	Kentucky	3.1	Hopkins County Coal, LLC (Alliance)
32. Carlisle ^{1/}	Indiana	3.0	Sunrise Coal Co. (Hallador)
33. Elk Creek	Colorado	3.0	Oxbow Mining, LLC
34. Mountaineer 2	West Virginia	2.9	Arch Coal, Inc.
35. Rockspring Deep	West Virginia	2.9	Rockspring Development (Alpha)
36. Lively Grove ^{1/}	Illinois	2.8	Prairie State Generating
37. Gateway	Illinois	2.8	Peabody Energy Subsidiary
38. Francisco	Indiana	2.8	Peabody Energy Subsidiary
39. Oaktown Fuels	Indiana	2.8	Black Panther Mining, LLC (Vectren)
40. West Ridge	Utah	2.6	Utah American Energy, Inc. (Murray)
41. Mettiki	West Virginia	2.5	Mettiki Coal LLC (Alliance)
42. Pinnacle ^{1/}	West Virginia	2.4	Pinnacle Mining Co. (Cliffs NR)
43. Pattiki	Illinois	2.4	White County Coal LLC (Alliance)
44. Deer Run ^{1/}	Illinois	2.4	Coalfield Transport (Foresight)
45. Panther	West Virginia	2.3	Panther LLC (Patriot)
46. Oak Grove ^{1/}	Alabama	2.2	Oak Grove Resources LLC (Cliffs NR)
47. North River	Alabama	2.2	Jim Walter Resources, Inc.
48. Paradise	Kentucky	2.2	KenAmerican Resources, Inc. (Murray)
49. Onton No. 9	Kentucky	2.1	Sebree Mining, LLC (Alliance)
50. Viper	Illinois	2.1	Arch Coal, Inc.
51. Prosperity	Indiana	2.1	Five Star Mining, Inc. (Vectren)
52. Willow Lake	Illinois	2.1	Peabody Energy Subsidiary
53. Tunnel Ridge	West Virginia	2.0	Tunnel Ridge, LLC (Alliance)
54. Skyline	Utah	2.0	Arch Coal, Inc.
55. No. 4	Alabama	1.9	Jim Walter Resources, Inc.
56. Prairie Eagle ^{1/}	Illinois	1.9	Knight Hawk Coal, LLC (Bunn)
57. Kronos ^{1/}	Kentucky	1.8	Armstrong Energy Corp.
58. Dugout Canyon	Utah	1.7	Arch Coal, Inc.
59. Shay No. 1 ^{1/}	Illinois	1.7	Coalfield Transport (Foresight)
60. Parkway ^{1/}	Kentucky	1.6	Armstrong Energy Corp.
61. Wildcat Hills	Illinois	1.5	Peabody Energy Subsidiary
62. 4 West ^{1/}	Pennsylvania	1.5	Dana Mining Co.
63. Matrix Energy No. 1 ^{1/}	Kentucky	1.3	Matrix Energy LLC (Booth)
64. MC Mining	Kentucky	1.3	MC Mining, LLC (Alliance)
65. Shoal Creek	Alabama	1.3	Drummond Company Inc.
66. Hopedale	Ohio	1.2	Hopedale Mining LLC (Rhino)
67. Sentinel	West Virginia	1.1	Arch Coal, Inc.
68. Prime No. 1 ^{1/}	West Virginia	1.1	Dana Mining Co.
69. Poplar Ridge	West Virginia	1.1	Brooks Run Mining (Alpha)
70. Pocahontas D	West Virginia	1.1	Arch Coal, Inc.
71. Castle Valley	Utah	1.0	Castle Valley, LLC (Rhino)
72. Deep Mine No. 26	Virginia	1.0	Paramont Coal Company, LLC (Alpha)

Notes: Figures are rounded. 2012 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, 2012 preliminary data.

TABLE 3

**Major U.S. Surface Coal Mines - 2012
(Million Short Tons)**

	Mine Name	Location	Tonnage	Operating Company
1.	North Antelope Rochelle	Wyoming	107.7	Peabody Energy Subsidiary
2.	Black Thunder	Wyoming	92.9	Arch Coal, Inc.
3.	Cordero Rojo	Wyoming	39.2	Cloud Peak Energy
4.	Antelope	Wyoming	34.3	Cloud Peak Energy
5.	Belle Ayr	Wyoming	24.2	Alpha Coal West
6.	Eagle Butte	Wyoming	22.5	Alpha Coal West
7.	Buckskin	Wyoming	18.0	Buckskin Mining Co. (Kiewit)
8.	Spring Creek	Montana	17.2	Cloud Peak Energy
9.	Caballo	Wyoming	16.8	Peabody Energy Subsidiary
10.	Rawhide	Wyoming	14.7	Peabody Energy Subsidiary
11.	Freedom	North Dakota	13.0	Coteau Properties Co. (North American)
12.	Martin Lake	Texas	9.9	Luminant Mining
13.	El Segundo	New Mexico	8.4	Peabody Energy Subsidiary
14.	Rosebud	Montana	8.0	Western Energy Co. (Westmoreland)
15.	Kosse	Texas	8.0	Luminant Mining
16.	Falkirk	North Dakota	7.9	The Falkirk Mining Co. (North American)
17.	Bear Run	Indiana	7.7	Peabody Energy Subsidiary
18.	Navajo	New Mexico	7.7	BHP Billiton-New Mexico Coal
19.	Three Oaks	Texas	7.6	Luminant Mining
20.	Coal Creek	Wyoming	7.5	Arch Coal, Inc.
21.	Kayenta	Arizona	7.5	Peabody Energy Subsidiary
22.	Dry Fork	Wyoming	6.0	Western Fuels-Wyoming
23.	Center	North Dakota	4.4	BNI Coal, Ltd.
24.	Beckville	Texas	4.3	Luminant Mining
25.	Kemmerer	Wyoming	4.3	Chevron Mining Inc.
26.	Sabine/South Hallsville	Texas	4.3	Sabine Mining (North American)
27.	Wyodak	Wyoming	4.2	Wyodak Resources Dev. Corp. (Black Hills)
28.	Jewett	Texas	4.2	Texas Westmoreland Coal Co.
29.	San Miguel	Texas	3.3	Kiewit Mining Group
30.	Oak Hill	Texas	3.1	Luminant Mining
31.	Coal-Mac	West Virginia	3.0	Arch Coal, Inc.
32.	Big Brown	Texas	3.0	Luminant Mining
33.	Dolet Hills Lignite	Louisiana	3.0	Dolet Hills Lignite Co. (AEP)
34.	Red Hills	Mississippi	3.0	Mississippi Lignite (North American)
35.	Black Butte ^{1/}	Wyoming	2.9	Black Butte Coal Co. (Ambre & Anadarko)
36.	Equality ^{2/}	Kentucky	2.9	Armstrong Coal Co.
37.	Decker ^{1/}	Montana	2.8	Cloud Peak Energy & Ambre Energy
38.	Absaloka	Montana	2.7	Westmoreland Resources Inc.
39.	Twilight	West Virginia	2.7	Progress Coal Co. (Alpha)
40.	Hobet 21	West Virginia	2.5	Patriot Coal Corp.
41.	Somerville Central	Indiana	2.5	Peabody Energy Subsidiary
42.	Monticello	Texas	2.4	Luminant Mining
43.	Tatum	Texas	2.4	Luminant Mining
44.	Black Castle	West Virginia	2.4	Black Castle Mining Co. (Alpha)
45.	Trapper	Colorado	2.3	Trapper Mining Inc.
46.	Logan County (Guyan)	West Virginia	2.3	Patriot Coal Corp.
47.	Beulah	North Dakota	2.3	Dakota Westmoreland Corp.
48.	Colowyo	Colorado	2.3	Western Fuels-Colorado
49.	Republic	West Virginia	2.2	Republic Energy Co. (Alpha)
50.	Frasure Creek No. 6 ^{2/}	Kentucky	2.2	Frasure Creek Mining, LLC (Essar)
51.	Cottage Grove	Illinois	2.1	Peabody Energy Subsidiary
52.	Usibelli	Alaska	2.0	Usibelli Coal Mine, Inc.
53.	Wild Boar	Indiana	2.0	Peabody Energy Subsidiary

Notes: Figures are rounded. 2012 data compiled from a 2013 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/ Fifty percent ownership each.

2/ Department of Labor, Mine Safety & Health Administration, 2012 preliminary data.

TABLE 4
Major Multi-Mine^{1/} Production Complexes - 2012
(Million Short Tons)

Complex Name	Location	Tonnage	Company
1. American Coal (Galatia Complex)	Illinois	9.3	The American Coal Company (Murray)
2. Somerville Complex	Indiana	5.1	Peabody Energy Subsidiary
3. Wildcat Hills/Cottage Grove	Illinois	3.6	Peabody Energy Subsidiary
4. Coal-Mac	West Virginia	3.3	Arch Coal, Inc.
5. Corridor G	West Virginia	2.8	Patriot Coal Corp.
6. Miller Creek	West Virginia	2.8	CONSOL of Kentucky
7. Perry County	Kentucky	2.3	Perry County Coal Corp. (TECO)
8. Triad	Indiana	2.3	Triad Mining, Inc. (James River)
9. Hazard	Kentucky	2.1	Arch Coal, Inc.
10. Lone Mountain	Kentucky	2.0	Arch Coal, Inc.
11. Premier Elkhorn	Kentucky	2.0	Premier Elkhorn Coal Co. (TECO)
12. Clintwood	Kentucky & Virginia	2.0	Clintwood Elkhorn Mining (TECO)
13. Wells	West Virginia	1.6	Patriot Coal Corp.
14. McCoy	Kentucky	1.6	McCoy Elkhorn Coal Corp. (James River)
15. Paint Creek	West Virginia	1.6	Patriot Coal Corp.
16. Midland Trail	West Virginia	1.6	Patriot Coal Corp.
17. Blue Grass	Kentucky	1.5	Patriot Coal Corp.
18. Cumberland River	Virginia	1.5	Arch Coal, Inc.
19. CAM Mining	Kentucky	1.4	CAM Mining, LLC (Rhino)
20. Sentinel	West Virginia	1.2	Arch Coal, Inc.
21. Buckeye	Kentucky	1.2	Leeco, Inc. (James River)
22. Fola Complex	West Virginia	1.2	Fola Coal Co. (CONSOL)
23. Hopedale Mining	Ohio	1.2	Hopedale Mining, LLC (Rhino)
24. Bledsoe	Kentucky	1.1	Bledsoe Coal Corporation (James River)
25. Leatherwood	Kentucky	1.1	Blue Diamond Coal Co. (James River)
26. Castle Valley	Utah	1.0	Castle Valley, LLC (Rhino)

Notes: Figures are rounded. 2012 data compiled from 2013 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 - 2012
(Billion Short Tons)

Holder	Estimated Reserves
1. U.S. Government	86.000 *
2. Great Northern Properties Limited Partnership	20.000
3. Peabody Energy Corporation	9.300
4. Arch Coal, Inc.	5.500
5. Alpha Natural Resources, LLC	4.571
6. CONSOL Energy Inc.	4.270
7. Natural Resource Partners LP	2.400
8. North American Coal Corporation	2.300
9. Patriot Coal Corporation	1.844
10. Pocahontas Land Corporation (Norfolk Southern)	1.690
11. Cloud Peak Energy, Inc.	1.300
12. Kentucky River Properties LLC	0.976
13. Alliance Resource Partners	0.920
14. Drummond Company, Inc.	0.900
15. Penn Virginia Resource Partners, LP	0.871
16. Murray Energy Corporation	0.867
17. Luminant Mining Company (Energy Future Holdings)	0.736
18. Usibelli Coal Mine, Inc.	0.700
19. BNI Coal, LTD	0.640
20. Westmoreland Coal Company	0.553
21. Rosebud Mining Company	0.544
22. Rhino Energy LLC	0.464
23. Western Fuels Association, Inc. r/	0.414
24. Signal Peak Energy, LLC (Boich/FirstEnergy/Gunvor)	0.400
25. Kiewit Mining Group, Inc.	0.348
26. James River Coal Company	0.342
27. TECO Coal Corporation	0.310
28. Walter Energy Company	0.295
29. Dolet Hills Lignite Company (AEP)	0.278
30. BHP Billiton	0.260
31. Black Hills Corporation (Wyodak Resources)	0.232
32. Metinvest BV	0.171
33. Interwest Mining Company (PacifiCorp)	0.154
34. Vectren Fuels, Inc. (Five Star)	0.127
35. Western Pocahontas Properties	0.122
36. SunCoke Energy, Inc.	0.100
37. Oxford Resource Partners, LP	0.062
38. Solar Sources, Inc.	0.031
39. Trapper Mining Inc.	0.025
40. Oxbow Mining, LLC	0.010
Ambre Energy North America, Inc.	N/A
ArcelorMittal	N/A
Armstrong Energy Corp.	N/A
Booth Energy Group	N/A
Cliffs Natural Resources Inc.	N/A
Dana Mining Company (GenPower Holdings LP)	N/A
Essar/Frasure Creek Mining Company	N/A
Knight Hawk Coal, LLC (Bunn)	N/A
Mechel Oao	N/A
PBS Coals, Inc. (Severstal Oao)	N/A
Prairie State Energy Company	N/A
Ranger Energy/Justice	N/A
Sunrise Coal Company (Hallador)	N/A
The Cline Group (Coalfield Transport/Foresight Energy)	N/A
Vigo Coal Company, Inc.	N/A

Notes: 2012 data compiled from 2013 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 259 billion short tons (Energy Information Administration, 2011). N/A = Not Available. Reserves are estimated proven & probable. r/ Revised 6/5/13 to include company's Colorado operations.