

National Mining Association



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2014 Coal Producer Survey • June 2015

THE NATIONAL MINING ASSOCIATION 2014 COAL PRODUCER SURVEY

June 2015

The U.S. Coal Industry In 2014

Overview

The year 2014 proved challenging for the U.S. coal industry with continuing competition from low natural gas prices, a growing saturation of renewable generating capacity (mostly solar and wind), along with both current and pending environmental regulations for coal-based electric generating plants. Coal consumption decreased, while coal generation increased marginally. In addition, the global economic downturn dampened demand for U.S. coal exports. The oversupplied coal market resulted in lower global coal prices, with the U.S. subjected to even greater competition from other key overseas suppliers. And strength in the U.S. dollar against other currencies made U.S. coal less competitive in the global markets relative to other supplying nations.

Based on preliminary Energy Information Administration (EIA) data, coal-based generation demand from all sectors increased 0.3 percent in 2014. Extreme winter temperatures at the end of 2013 and early 2014, along with rail congestion and capacity constraints, brought coal plant inventories down in the first quarter of the year, yielding to a gradual increase in inventories throughout the remainder of 2014.

Coal production increased as mines continued to produce coal in the midst of the rail bottlenecks earlier in the year.

Flooding in early October impacted western shipments from Wyoming and Montana.

In the East, some higher cost production from the Central Appalachian region was replaced by coal from the Illinois Basin and Northern Appalachian coal regions.

Like many industries, both coal and electric power demand are impacted by slow economic growth. The U.S. economy grew only modestly in 2014, with real GDP (preliminary) growing at 2.4 percent, up from 2.2 percent in 2013. Those factors, combined with the anticipation of further environmental regulations from the Environmental Protection Agency (EPA) and persistent low natural gas prices, had a dampening effect on the coal market. A number of power companies announced their intent to begin retiring and converting coal capacity to natural gas in future years to meet current and proposed regulatory requirements.

Coal Demand and Competition

Consumption/Inventories – Preliminary EIA data indicate that coal consumption totaled 916.9 million tons in 2014, a decrease of 0.8 percent from the prior year level of 924.4 million tons. This was primarily due to low natural gas prices that made coal electricity dispatch less competitive and coal plant closures as noted above. In addition, coal rail shipments experienced some shipping delays and weather-related congestion in the Midwest. A sudden rise in crude oil train traffic forced some power plants to make other arrangements to avoid congested rail lines transporting oil from regions like North Dakota's Bakken oil field.

Coal consumption by the electric power sector, coal's largest market, was down 0.8 percent to 851.4 million tons, some 6.5 million tons less than in 2013.

Coking coal consumption from coke plants decreased nearly 5.0 percent in 2014, to 20.4 million tons. Demand for metallurgical coal from coke plants was impacted by slowing global steel demand, particularly from China – a leading market driver. Other industrial demand, which includes cement kilns, agricultural processing, heavy industry and non-utility generation, decreased 0.6 percent to 42.8 million tons, while the commercial and residential sector was up slightly to 2.2 million tons due to weather-sensitive demand.

Consumer stockpile levels increased from 154.7 million tons to 158.5 million tons at year-end, marking a 2.5 percent increase in 2014. Power sector stockpiles ended 2014 at 151.4 million tons, up 2.4 percent. After coming off of very low levels at some plants during much of 2014, power sector inventory levels increased by the end of the year, particularly in the fourth quarter of the year. (Power sector coal stockpiles hit their lowest level of the year at 118.3 million tons in March 2014.) Producer and distributor stockpiles ended the year at nearly 44.8 million tons, down 2.0 percent from 2013, based on a forecast estimate from EIA.

Power Sector Generation – Coal-based generation from all sectors increased marginally at 0.3 percent from 1,581.1 billion KWh in 2013 to 1,585.7 billion KWh in 2014. Coal generation demand received an added boost in early 2014 from extreme cold temperatures associated with a southward shift from the Polar Vortex.

Similarly, power sector generation increased 0.3 percent in 2014 to 1,571.9 billion kilowatt hours (kWh). Natural gas generation increased only 0.04 percent to 1,029.4 billion kWh. Nuclear generation increased 1.0 percent from 789 billion kWh to 797 billion kWh. Conventional hydro generation decreased 3 percent to 256 billion kWh. Most of the growth in generation came from non-hydro renewables, especially wind and solar, up 8 percent and 104 percent respectively. However, wind and solar only represent 13 percent of total power sector generation.

In the power sector, coal's share of generation decreased slightly from 40.2 percent to just above 39.9 percent (see Figure 1 below).

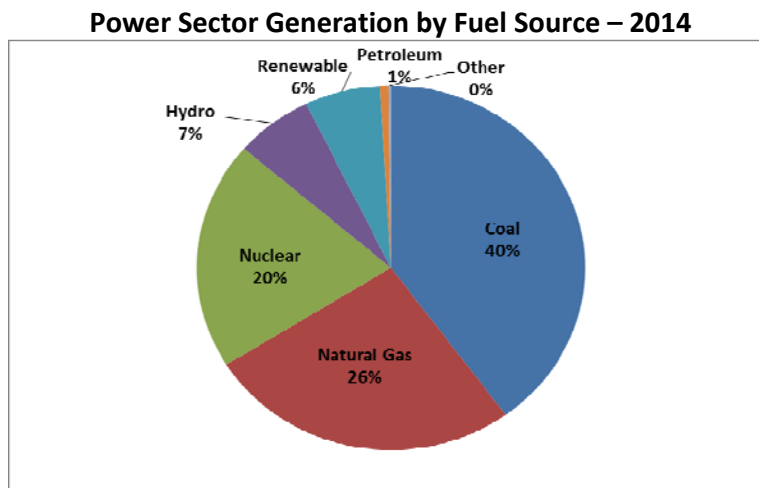


Figure 1

Fuel Prices - The average delivered price of coal to the electric power sector was \$2.37 per MMBtu in 2014, up 1.3 percent from \$2.34 per MMBtu in 2013.

The average delivered price of natural gas to the power sector was \$5.00 per MMBtu in 2014. That figure compares to \$4.33 per MMBtu in 2013. EIA expects delivered natural gas prices to drop in 2015, averaging \$3.84 per MMBtu, before rising to \$4.13 per MMBtu in 2016.

Average annual natural gas spot prices (Henry Hub) increased approximately 18 percent in 2014 to \$4.39 per MMBtu, fluctuating in the range of \$3.48-\$6.00 per MMBtu over the course of the year. The significant price spikes in New England in December 2013 and January/February 2014 abated over the remainder of 2014 and early 2015. Through June 8 of this year, spot prices have been trending lower in the \$2.55-3.32 per MMBtu range.

Natural Gas Storage – Underground natural gas inventories were lower in the beginning of 2014 at 1.925 trillion cubic feet (TCF), but ended the year at 3.141 TCF.

Nuclear Power - Coal and nuclear are competitors as suppliers of baseload power generation. Net generation from 99 U.S. nuclear reactors (61 commercially operating plants) in 2014 increased by 1.0 percent to 797 billion kWh. Nuclear plants contributed approximately 19.5 percent of total generation (20.3 percent of power sector). Despite a plant unit closure in 2014, the existing plants ran at slightly better capacity utilization, with a capacity factor of 91.7.

Nuclear Uprates/Utilization - The Nuclear Regulatory Commission (NRC) allows nuclear plants to increase their capacity and output through power uprates. According to the NRC, seven units totaling 1,164 MW thermal (MWt) received approval for power uprates in 2014, with one other plant unit projecting an uprate application totaling 58 MWt to be completed in September 2015.

At the end of 2014, the single reactor Vermont Yankee plant in Vermont was taken out of service. Six units remain under construction or are approved for construction - Vogtle 3 & 4, Summer 2 & 3, Watts Bar 2 (reactivation) and Fermi 3 (license for construction approved).

Coal Generating Capacity - EIA's 2015 *Annual Energy Outlook* forecasts 37.4 gigawatts (GW) of cumulative retirements for coal generating capacity by 2020. According to EIA, many of the coal plants slated for retirement are smaller, older (more than 50 years old), less efficient plants in the Southeast, Mid-Atlantic and Ohio Valley regions of the country. EIA's forecast, however, reflects only current laws and does not include potential impacts from EPA's proposed Clean Power Plan (CPP) rules. A separate analysis by EIA on potential impacts of the CPP rule estimates that 90 gigawatts (GW) of coal capacity would be retired, rather than 40 GW, between 2014 and 2040, but most by 2020.

New Coal Plants – Only one coal-based power plant entered commercial operation in 2014: Great River's 99 MW Spiritwood Station combined heat and power (CHP) plant in Spiritwood, North Dakota began operating in November 2014. Southern Company's long awaited Kemper County advanced integrated combined cycle (IGCC) 582 MW plant in Mississippi was placed in commercial operation using natural gas in August 2014. It is undergoing final testing and is expected to begin full operation with lignite coal in 2016.

Coal Supply and Trade

Production – According to preliminary EIA figures, total coal production in 2014 increased to nearly one billion short tons, marking a 14.8 million ton (1.5 percent) increase. The 999.7 million short tons produced improved coal inventories at many coal plants after rail shipping constraints left very low coal supplies early in the year in a number of cases. In addition, flooding in early October impacted some western shipments from Wyoming and Montana. Some production from the higher cost Central Appalachian region was picked up by the Illinois Basin and Northern Appalachian coal regions.

Coal production east of the Mississippi River was approximately 409 million tons (including production from refuse recovery) and accounted for 41 percent of total production. Eastern coal production increased 0.5 percent in 2014. The leading Eastern coal producing states of West Virginia and Kentucky experienced lower production levels, while production in Pennsylvania increased. In recent years the Central Appalachian region has been impacted by a combination of thinner coal seams and rising production and regulatory costs. That, combined with scrubber retrofits at coal plants, has led to a shift in demand in some cases toward higher sulfur, lower cost Illinois Basin and Northern Appalachian coals. In addition, the decline in U.S. export demand also reduced Central Appalachian demand.

The West produced 590 million tons of coal or about 59 percent of production, down 2.2 percent. Wyoming, the leading coal producing state, mined 396 million tons, up 2.0 percent from 2013.

Trade – U.S. coal exports fell 17.3 percent in 2014 to approximately 97 million tons. The 20 million ton drop from 2013 was driven by slowing demand for steam and metallurgical coal from all regions of the world. The weaker export market resulted from a combination of lower demand, lower prices and competition from other major global exporters. Even coal license issues in India and coal shortages in Ukraine failed to impact demand. China, the world's largest importer, has been importing less due to a slowing economy, increasing hydro generation and reducing coal use due to new environmental restrictions. Exports represented approximately 10 percent of total production in 2014.

The decrease in metallurgical coal export demand came primarily from Asia, particularly China, as well as Mexico. Conversely, metallurgical coal exports to Europe increased nearly 19 percent.

U.S. steam coal exports fell in all market regions, particularly into Europe. Steam coal exports to Canada dropped 30 percent, from 3.4 million tons to 2.4 million tons. Beginning in 2011, Canada began phasing out its coal plants in order to meet government CO₂ restrictions.

The average coal export price was about \$87.62 per short ton, down 7.8 percent from 2013. Metallurgical coal prices dropped 15 percent, from \$115.50 per ton to \$98.12. Steam coal prices were down 1.3 percent, dropping from \$69.23 per ton to \$68.30.

After six years of decline, U.S. coal imports increased in 2014, surging 27 percent to 11.3 million tons. The increase is attributed to higher demand from very low priced Colombian and Indonesian coals combined with a rise in Central Appalachian coal prices. The average price for imported coal was down 13 percent to \$80.83 per ton. Imports represented only about 1.0 percent of coal supply.

Other Market Factors

Thousands of megawatts of coal capacity are being retired by utilities to comply with EPA regulations, including the Mercury and Air Toxics Standards (MATS) rule that took effect in April 2015. Coupled with the EPA's proposed Clean Power Plan Rule (CPP), emissions regulations are taking a sharp toll on coal-based generation.

Air Emissions Regulations – EPA proposed New Source Performance (NSPS) and 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, between late 2011 and 2014, a large number of power companies announced their intent to retire coal plants, particularly their smaller, older or less efficient coal plants, due to uncertainty surrounding proposed regulations and the expectation of continued low natural gas prices.

Mercury and Air Toxics Regulations - EPA MATS rules set technology-based emissions limitation standards for mercury and other toxic air pollutants for plants currently operating. The District of Columbia Circuit upheld EPA's MATS for coal-fired power plants in April 2014. The court held that EPA properly explained why it concluded costs were not part of the "appropriate and necessary" determination under the law, and that EPA did not act arbitrarily or capriciously in setting any of the emissions standards in the rule and thus upheld EPA's actions in the final rule. The compliance deadline for MATS was in early 2015, so as a practical matter, the decision concluded the likelihood of any further challenges to EPA's rule despite the chance for an appeal. A decision in an NMA initiated appeal of the lower court ruling to the Supreme Court will be issued by the end of June 2015. If successful, some units that had been decommissioned to meet the 2015 deadline may be brought back on line.

Climate Action Plan/Clean Power Plan - Under the president's Climate Action Plan, EPA issued proposed regulations under Clean Air Act § 111(b) for new power plants and proposed guidelines, under § 111(d) for regulating existing sources. Both standards, described below, are expected to be finalized by mid-summer of 2015.

CO₂ Regulations for New Plants - In January 2014, EPA re-proposed a rule to regulate carbon dioxide (CO₂) emissions from new power plants by establishing New Source Performance Standards (NSPS). The rule, which had originally been proposed in April 2012, would limit emissions to 1,100 pounds of CO₂ per MW hour of electricity for new coal-fired plants, essentially precluding the building of any new coal plants unless they include the installation of non-commercially available and cost-prohibitive carbon capture and storage technologies. The rule is effective on proposal, although EPA must finalize the rule for new sources before it can regulate CO₂ emissions from existing sources.

CO₂ Regulations for Existing Sources – In June 2014, EPA published proposed guidelines that, once finalized, would be administered by states to reduce CO₂ emissions from electric generating units by 30 percent by 2030. The proposed guidelines contain four building blocks that are designed to reduce overall electricity demand, improve efficiency and increase use of natural gas and renewables. Once finalized, states are required to submit, within one-year, a state implementation plan with EPA approving or disapproving those plans within a year. Under the guidelines states that participate in regional consortiums will be granted an additional year to submit their compliance plans.

In a recent analysis, EIA estimated that passage of the Clean Power Plan rule for existing power plants would result, in combination with MATS, in the retirement of 90 GW of coal-based power capacity from 2014-2040, with most retiring before 2020.

In early June, the U.S. Court of Appeals for the District of Columbia dismissed, on procedural grounds, several consolidated challenges to EPA's proposed 111(d) guidelines. The court cited its lack of authority to review proposed rules. Despite that ruling it is anticipated that NMA, other industry groups and several states will again challenge the final rule and advance similar arguments when EPA issues the final guidelines later this summer.

CSAPR - EPA's Cross-State Air Pollution Rule (CSAPR) requires a total of 28 states to reduce annual SO₂ emissions, annual NO_x emissions and/or ozone season NO_x emissions to reduce ozone and fine particle and fine particle National Ambient Air Quality Standards (NAAQS). The rule was vacated in August 2012 by the District of Columbia Circuit, but was upheld by the U.S. Supreme Court in April 2014. The Supreme Court decision allowed implementation of CSAPR in January 2015.

Permitting/Geology/Safety Standards - Permitting delays and less desirable geology in the Central Appalachian region were an issue again in 2014. Compliance with more stringent safety standards and enforcement also impacted the region's competitiveness.

Asset Acquisitions, Sales and Restructuring Activity for Selected Companies

Recent U.S. coal company sales, acquisitions and restructuring activities are identified below:

Alliance Coal, LLC – In January 2015, Alliance announced it had acquired some of Patriot Coal's supply agreement rights. The agreement also included purchase of other Patriot assets including mining equipment and coal reserves.

Alpha Natural Resources – Alpha sold its Amfire Mining subsidiary to Rosebud Mining Co. in December 2014. (See Rosebud).

Ambre Energy – A deal announced in December 2012 between Ambre Energy and Cloud Peak for Ambre to acquire its 50 percent interest in the Decker mine was completed in September 2014. In December, Resource Capital Funds (RCF), one of Ambre Energy's investors, agreed to purchase Ambre's North American coal assets. Ambre changed its name to Lighthouse Resources in April 2015.

Arch Coal – In March 2014, Arch sold its Hazard mining complex to Blackhawk Mining. The sale included four surface mines, a prep plant and a Kentucky River loading facility. In February 2015, Arch sold its ADDCAR Systems, LLC subsidiary.

BHP Billiton – BHP agreed in principal to sell its San Juan Mine to Westmoreland Coal Company in May 2015. (See Westmoreland).

Birmingham Coal & Coke Co. – In May, 2015, Alabama producer Birmingham Coal & Coke, a subsidiary of CanAm Coal Corp., filed a voluntary petition to reorganize under Chapter 11.

Blackhawk Mining – Blackhawk purchased Arch Coal’s Hazard mine complex assets in March 2014 (See Arch). In August 2014, Blackhawk acquired the assets of nearly a dozen coal mine and related assets of James River Coal Company (See James River). In a quest to expand its metallurgical coal portfolio and to diversify, Blackhawk entered an agreement to buy most of Patriot Coal’s operating assets. (See Patriot).

Bluestone Resources – Two of Mechel Bluestone’s metallurgical coal mines were repurchased by the James Justice family under the company name Bluestone Resources. (See Mechel OAO).

Cliffs Natural Resources – In February 2015, in an effort to refocus on its iron ore business, Cliffs sold its Logan County coal mine and other West Virginia assets to Coronado Coal LLC. It is in the process of selling the remaining coal assets (Pinnacle and Oak Grove coking coal mines).

Cloud Peak Energy – Cloud Peak paid Westmoreland’s Coal Valley Resources subsidiary to terminate its existing shipping contract at Westshore Terminals in British Columbia in order to expand shipping at Westshore and extend its contract from 2012 to 2024. In September 2014, Cloud Peak sold Ambre Energy its 50 percent interest in the Decker mine. The deal included an option for Cloud Peak to have access to 7 million metric tons of annual throughput capacity at the proposed Millennium Bulk Terminal export facility.

Consol Energy – In October 2014, Consol sold 100 million short tons of coal reserves and other Illinois coal assets to Murray Energy. In December 2014, Consol announced its intent to form a master limited partnership (MLP) to own its thermal coal and related properties in Pennsylvania (Bailey, Enlow Fork, Harvey). It also announced it would form a subsidiary company for its metallurgical and related coal operations (for the Buchanan mine and its Western Allegheny Energy joint venture). Consol’s CNX Coal Resources LP (MLP) was formed in April 2015 and it launched its initial public offering in June 2015.

Corsa Coal – Corsa acquired PBS Coals Limited from OAO Severstal in August 2014.

Energy Future Holdings – Energy Future Holdings (formerly known as TXU Corp.) filed for Chapter 11 bankruptcy protection in April 2014 and is in the process of reaching a settlement.

Essar Minerals – Essar Minerals restructured its Trinity Coal assets in 2014. Trinity had been placed under bankruptcy protection in February 2013.

James River Coal – James River filed for Chapter 11 bankruptcy protection in April 2014. The company sold its Hampton, Hazard and Triad Mining assets to Blackhawk Mining in August 2014. It sold its idled McCoy Elkwood mine complex in Eastern Kentucky to Opes Resources and Marshall Resources in September 2014. The remainder of its Central Appalachian coal operations was sold to Revelation Energy LLC in February 2015.

JW Resources Inc. – JW Resources, owned by Bayside Capital, Inc., acquired Appollo Fuels, Inc.’s Bell County, Kentucky and Claiborne County, Tennessee thermal coal mining operations in March 2014. Its newly formed subsidiary is called Middlesboro Mining, Inc.

Lily Group - Lily filed for bankruptcy protection in September 2013. The Indiana coal company was acquired by LC Energy Holdings in February 2014.

Mechel OAO – In February 2015, Mechel sold two of its four Bluestone metallurgical coal assets back to the James Justice family under the company name Bluestone Resources. Justice had previously sold the mines to Mechel in 2009.

Murray Energy – Murray acquired Oxford Resource Partner’s Island Coal terminal in Western Kentucky in April 2014. In October 2014, Murray purchased some Illinois coal reserves and other assets from Consol. It acquired a major economic interest in Foresight Energy in April 2015.

Oxford Resource Partners – Oxford sold its Island Coal terminal to Murray Energy in April 2014 (see Murray Energy). In December 2014, Oxford was acquired by Westmoreland Coal.

Patriot Coal – Patriot and Rhino Resource Partners agreed to discontinue their Rhino Eastern joint venture in December 2014. Patriot sold its 49 percent interest. In January 2015, it agreed to sell its Highland mine and Dodge Hill complex to Alliance Resource Partners. Patriot filed for Chapter 11 bankruptcy protection in May 2015 (its second bankruptcy). In June 2015 is announced that was in the process of negotiating a sale of most of its coal assets to Blackhawk Mining.

Rosebud Mining – In December 2014, Rosebud acquired Alpha Natural Resources’ Amfire Mining Co. subsidiary, including its 10 mines and four preparation plants and loadouts in Pennsylvania.

Suncoke Energy Partners – Suncoke, a subsidiary of Jewell Resources, Inc., is in the process of divesting its coal business. In December, 2014 it announced the sale of its Harold Keen Coal Companies unit to Omega Holdings, LLC.

Sunrise Coal – Hallador Energy’s Sunrise Coal subsidiary acquired Sunrise’s Oaktown 1&2 and Prosperity mines from Vectren Fuels in late August, 2014. (See Vectren Fuels).

Teco Energy – Teco is in the process of selling its coal subsidiary and exiting the coal business.

U.S. Coal – U.S. Coal announced in February 2014 its intent to sell all its mining operations. It filed for bankruptcy protection for various assets in June 2014 and is currently in the process of selling off its remaining assets.

Vectren Fuels – In August 2014, Vectren sold its Prosperity and Oaktown 1&2 mines to Hallador Energy’s Sunrise Coal subsidiary.

Walter Energy – In August 2014, Walter completed the sale of its Blue Creek coal terminal in Mobile, Ala., to the Alabama State Port Authority.

Westmoreland Coal Company – Westmoreland completed acquisition of Sherritt International Coal’s Canadian operations in April 2014. It terminated its throughput agreement at Westshore Terminals in British Columbia and sold it to Cloud Peak in August 2014. It acquired Oxford Resource Partners in December 2014. In January, 2015 it acquired Ohio based Buckingham Coal Company. In May 2015, it announced an agreement with BHP Billiton to purchase BHP’s San Juan Mine in Farmington, NM. In June 2015, it announced that its affiliate (limited partnership), Westmoreland Resource Partners, would try to raise funds through an initial public offering to purchase the parent company’s Kemmerer mine in Wyoming. The acquisition is expected to be completed in the third quarter of 2015.

Xinergy Ltd. – Filed for bankruptcy protection in April 2015.

Major Coal Producing Companies, Mines and Mine Complexes in 2014 (Tables 1-4)

Table 1, compiled by the National Mining Association from data collected through a survey of major coal producers and government data, shows 2014 production for 44 coal producing companies in the United States. In 2014, Peabody Energy Corporation was the largest coal producer in the U.S., with output (including tons sold) of 191.4 million tons, representing 19.1 percent of total U.S. coal production. The second largest was Arch Coal, Inc., with 132.6 million tons, representing 13.3 percent of total U.S. coal production. Ranking third was Cloud Peak Energy, Inc., with 85.8 million tons, and 8.6 percent of production. The fourth largest coal producer, Alpha Natural Resources, Inc. had output of 83.5 million tons, or 8.4 percent of U.S. production. The fifth largest producer was Murray Energy Corporation, with 62.8 million tons, or 6.3 percent of production. The top five coal producing companies in the survey accounted for 56 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 12.3 million tons; CONSOL's Enlow Fork Mine in Pennsylvania, with 10.6 million tons; Murray Energy's Marshall County Mine in West Virginia (formerly known as the McElroy mine), with 10.4 million tons; Alliance Resource Partner's River View Mine in Kentucky, with 9.3 million tons; and Foresight Energy's MC Number 1 Mine in Illinois, with 9.1 million tons.

The five top producing surface mines (Table 3) in 2014 were: Peabody Energy's North Antelope Rochelle Mine, with 118.1 million tons; Arch Coal's Black Thunder Mine, with 101.1 million tons; Cloud Peak Energy's Cordero Rojo Mine with 34.8 million tons, and its Antelope Mine with 33.6 million tons; and Alpha Natural Resources' Eagle Butte Mine, with 20.7 million tons. All are located in Wyoming's Powder River Basin coal region.

Table 4 shows the 2014 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 operations in Illinois was the largest multi-mine complex, with 11.3 million tons; second was Arch Coal's Coal-Mac operation in West Virginia, with 2.8 million tons; third was Arch Coal's Laurel Mountain operation in West Virginia, with 2.7 million tons; fourth was Consol Energy's Miller Creek operation in West Virginia, with 2.1 million tons; and fifth was Arch Coal's Lone Mountain operation in Kentucky, with 1.9 million tons.

Major U.S. Coal Reserve Holders in 2014 (Table 5)

The U.S. government is the single largest reserve holder, with about one-third ownership of the nation's coal resources -- or 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 7.6 billion tons, and fourth and fifth were Arch Coal and Alpha Natural Resources with 5.1 billion and 4.0 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 2014. 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 (excluding prep plants). 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 2014. 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 Manuals*. The latest edition of NMA's *Coal Producer Survey* report is available in PDF format. NMA greatly appreciates the many contributors to this annual survey and report.

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Platts Coal Trader, various editions.

TABLE 1
Major U.S. Coal Producers - 2014
(Million Short Tons)

| Company | Production Tonnage | Percent of Total U.S. |
|---|-------------------------------|----------------------------------|
| 1. Peabody Energy Corporation ^{1/} | 191.4 | 19.1% |
| 2. Arch Coal, Inc. ^{2/} | 132.6 | 13.3% |
| 3. Cloud Peak Energy, Inc. | 85.8 | 8.6% |
| 4. Alpha Natural Resources, LLC | 83.5 | 8.4% |
| 5. Murray Energy Corporation | 62.8 | 6.3% |
| 6. Alliance Resource Partners | 40.7 | 4.1% |
| 7. CONSOL Energy Inc. | 32.2 | 3.2% |
| 8. North American Coal Corporation | 31.6 | 3.2% |
| 9. Luminant Mining Company (Energy Future Holdings) | 29.7 | 3.0% |
| 10. Westmoreland Coal Company ^{3/} | 28.3 | 2.8% |
| 11. The Cline Group (Foresight Energy/Coalfield Transport) ^{3/} | 22.8 | 2.3% |
| 12. Patriot Coal Corporation ^{3/} | 20.6 | 2.1% |
| 13. Kiewit Mining Group, Inc. | 19.5 | 2.0% |
| 14. Bowie Resource Partners, LLC ^{3/} | 13.8 | 1.4% |
| 15. Armstrong Energy Corporation ^{3/} | 9.3 | 0.9% |
| 16. Walter Energy Company | 9.2 | 0.9% |
| 17. BHP Billiton ^{3/} | 8.8 | 0.9% |
| 18. Signal Peak Energy, LLC (Boich/FirstEnergy/Gunvor) | 7.9 | 0.8% |
| 19. Ambre Energy North America, Inc. (now Lighthouse Resources) ^{3/} | 7.4 | 0.7% |
| 20. Interwest Mining Company (PacifiCorp) | 6.9 | 0.7% |
| 21. Cliffs Natural Resources Inc. ^{3/} | 6.9 | 0.7% |
| 22. Rosebud Mining Company | 6.6 | 0.7% |
| 23. Oxford Resource Partners, LP | 5.9 | 0.6% |
| 24. Sunrise Coal Company (Hallador) | 5.9 | 0.6% |
| 25. TECO Coal Corporation ^{3/} | 5.5 | 0.6% |
| 26. Western Fuels Association, Inc. | 5.4 | 0.5% |
| 27. Navajo Transitional Energy Co. (NTEC) | 4.7 | 0.5% |
| 28. Prairie State Energy Company ^{3/} | 4.6 | 0.5% |
| 29. Black Hills Corporation (Wyodak Resources) | 4.3 | 0.4% |
| 30. Knight Hawk Coal, LLC ^{3/} | 4.1 | 0.4% |
| 31. BNI Coal, LTD | 4.0 | 0.4% |
| 32. Booth Energy Group ^{3/} | 4.0 | 0.4% |
| 33. Rhino Energy LLC | 3.5 | 0.4% |
| 34. Western Fuels-Colorado (WFC), LLC. (WFC/Tri-state) | 3.2 | 0.3% |
| 35. Vigo Coal Company, Inc. | 2.9 | 0.3% |
| 36. Dana Mining Company (GenPower Holdings LP) ^{3/} | 2.6 | 0.3% |
| 37. Metinvest BV ^{3/} | 2.6 | 0.3% |
| 38. Dolet Hills Lignite Company (AEP) | 2.5 | 0.3% |
| 39. Solar Sources, Inc. ^{3/} | 2.2 | 0.2% |
| 40. ArcelorMittal ^{3/} | 2.0 | 0.2% |
| 41. Trapper Mining Inc. | 1.9 | 0.2% |
| 42. Drummond Company, Inc. | 1.8 | 0.2% |
| 43. Usibelli Coal Mine, Inc. | 1.5 | 0.2% |
| 44. Ranger Energy (Justice II) ^{3/} | 1.0 | 0.1% |
| Other Producers | 65.3 | 6.5% |
| Total U.S. Production ^{4/} | 999.7 | 100.0% |

Notes: Figures are rounded. 2014 data compiled from 2015 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. The U.S. production total for 2014 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 production, excluding trading and brokerage operations.

^{3/} Department of Labor, Mine Safety & Health Administration 2014 preliminary data.

^{4/} Department of Energy, Energy Information Administration 2014 preliminary data.

TABLE 2

**Major U.S. Underground Coal Mines - 2014
(Million Short Tons)**

| Mine Name | Location | Tonnage | Operating Company |
|--|-----------------|----------------|---|
| 1. Bailey | Pennsylvania | 12.3 | CONSOL Energy Inc. |
| 2. Enlow Fork | Pennsylvania | 10.6 | CONSOL Energy Inc. |
| 3. Marshall County | West Virginia | 10.4 | Marshall County Coal Co. (Murray) |
| 4. River View | Kentucky | 9.3 | River View Coal, LLC (Alliance) |
| 5. MC No. 1 ^{1/} | Illinois | 9.1 | M Class Mining LLC (Coalfield Transport/Foresight) |
| 6. Bull Mountain | Montana | 7.9 | Signal Peak Energy LLC (Global Mining Group) |
| 7. San Juan | New Mexico | 7.9 | BHP Billiton-New Mexico Coal |
| 8. Cumberland | Pennsylvania | 7.4 | Cumberland Coal Resources (Alpha) |
| 9. Twentymile (Foidel Creek) | Colorado | 7.1 | Peabody Energy Subsidiary |
| 10. Century | Ohio | 6.7 | American Energy Corp. (Murray) |
| 11. Harrison County | West Virginia | 6.7 | Harrison County Coal Co. (Murray) |
| 12. Ohio County | West Virginia | 6.6 | Ohio County Coal Co. (Murray) |
| 13. Marion County | West Virginia | 6.6 | Marion County Coal Co. (Murray) |
| 14. Mach No. 1 ^{1/} | Illinois | 6.5 | Mach Mining LLC (Coalfield Transport/Foresight) |
| 15. SUFCO ^{1/} | Utah | 6.5 | Bowie Resource Partners, LLC (Formerly Canyon Fuel) |
| 16. Tunnel Ridge | West Virginia | 6.3 | Tunnel Ridge, LLC (Alliance) |
| 17. West Elk | Colorado | 6.2 | Arch Coal, Inc. |
| 18. New Future | Illinois | 5.7 | American Coal Co. (Murray) |
| 19. Deer Run ^{1/} | Illinois | 5.6 | Patton Mining (Coalfield Transport/Foresight) |
| 20. New Era | Illinois | 5.5 | American Coal Co. (Murray) |
| 21. No. 7 | Alabama | 5.3 | Jim Walter Resources, Inc. |
| 22. Warrior (Cardinal) | Kentucky | 5.1 | Warrior Coal, LLC (Alliance) |
| 23. Powhatan No. 6 | Ohio | 4.7 | Ohio Valley Coal Co. (Murray) |
| 24. Lively Grove ^{1/} | Illinois | 4.6 | Prairie State Generating |
| 25. Monongalia County | West Virginia | 4.6 | Monongalia County Coal Co. (Murray) |
| 26. Skyline ^{1/} | Utah | 4.2 | Bowie Resource Partners, LLC (Formerly Canyon Fuel) |
| 27. Buchanan | Virginia | 4.0 | CONSOL Energy Inc. |
| 28. Emerald | Pennsylvania | 4.0 | Emerald Coal Resources (Alpha) |
| 29. Dotiki | Kentucky | 3.9 | Webster County Coal LLC (Alliance) |
| 30. Gibson | Indiana | 3.8 | Gibson County Coal, LLC (Alliance) |
| 31. Carlisle | Indiana | 3.7 | Sunrise Coal Co. (Hallador) |
| 32. Prairie Eagle ^{1/} | Illinois | 3.2 | Knight Hawk Coal, LLC (Bunn) |
| 33. Harvey | Pennsylvania | 3.2 | CONSOL Energy Inc. |
| 34. Francisco | Indiana | 3.1 | Peabody Energy Subsidiary |
| 35. Hopkins (Elk Creek) | Kentucky | 3.0 | Hopkins County Coal, LLC (Alliance) |
| 36. Bridger Underground | Wyoming | 2.9 | Bridger Coal Company (Interwest) |
| 37. Federal ^{1/} | West Virginia | 2.9 | Eastern Associated Coal Co., LLC (Patriot) |
| 38. Highland ^{1/} | Kentucky | 2.7 | Highland Mining Co., LLC (Patriot) |
| 39. Panther (American Eagle) ^{1/} | West Virginia | 2.7 | Panther LLC (Patriot) |
| 40. No. 4 | Alabama | 2.7 | Jim Walter Resources, Inc. |
| 41. Pinnacle ^{1/} | West Virginia | 2.7 | Pinnacle Mining Co. (Cliffs NR) |
| 42. Leer | West Virginia | 2.7 | Arch Coal, Inc. |
| 43. Pattiki | Illinois | 2.6 | White County Coal LLC (Alliance) |
| 44. Gateway | Illinois | 2.5 | Peabody Energy Subsidiary |
| 45. West Ridge | Utah | 2.5 | Utah American Energy, Inc. (Murray) |
| 46. Kronos ^{1/} | Kentucky | 2.5 | Armstrong Energy Corp. |
| 47. Paradise | Kentucky | 2.5 | KenAmerican Resources, Inc. (Murray) |
| 48. Bowie No. 2 ^{1/} | Colorado | 2.4 | Bowie Resource Partners, LLC |
| 49. Seebree-Onton | Kentucky | 2.4 | Seebree Mining, LLC (Alliance) |
| 50. Rockspring Deep | West Virginia | 2.3 | Rockspring Development (Alpha) |
| 51. Oak Grove ^{1/} | Alabama | 2.3 | Oak Grove Resources LLC (Cliffs NR) |
| 52. Deer Creek | Utah | 2.1 | Energy West Mining Co. (Interwest) |
| 53. Viper | Illinois | 2.1 | Arch Coal, Inc. |
| 54. Mountaineer II | West Virginia | 2.0 | Arch Coal, Inc. |
| 55. Oaktown Fuels No. 2 | Indiana | 1.9 | Sunrise Coal Co. (Hallador) |
| 56. Mettiki | West Virginia | 1.9 | Mettiki Coal LLC (Alliance) |
| 57. Wildcat Hills | Illinois | 1.9 | Peabody Energy Subsidiary |
| 58. Shoal Creek | Alabama | 1.8 | Drummond Company Inc. |
| 59. 4 West ^{1/} | Pennsylvania | 1.6 | Dana Mining Co. |
| 60. Shay No. 1 ^{1/} | Indiana | 1.6 | Maryan Mining LLC |
| 61. MC Mining | Kentucky | 1.6 | MC Mining, LLC (Alliance) |
| 62. Matrix Energy No. 1 ^{1/} | Kentucky | 1.3 | Matrix Energy LLC (Booth) |
| 63. EMC No. 9 | Kentucky | 1.2 | Enterprise Mining Co. (Alliance) |
| 64. BC No. 1 ^{1/} | West Virginia | 1.2 | Patriot Coal Corp. |
| 65. Parkway ^{1/} | Kentucky | 1.1 | Armstrong Energy Corp. |
| 66. Castle Valley | Utah | 1.1 | Rhino Energy LLC |
| 67. Alma | West Virginia | 1.1 | Aracoma Coal Co. (Alpha) |
| 68. Kielty | West Virginia | 1.1 | Delbarton Mining Co. (Alliance) |
| 69. Sentinel | West Virginia | 1.0 | Arch Coal, Inc. |
| 70. Prime No. 1 ^{1/} | West Virginia | 1.0 | Dana Mining Co. (GenPower Holdings, LP) |

Notes: Figures are rounded. Data compiled from 2014 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 2014 preliminary data.

TABLE 3
Major U.S. Surface Coal Mines - 2014
(Million Short Tons)

| | Mine Name | Location | Tonnage | Operating Company |
|-----|-------------------------------------|-----------------|----------------|--|
| 1. | North Antelope Rochelle | Wyoming | 118.1 | Peabody Energy Subsidiary |
| 2. | Black Thunder | Wyoming | 101.1 | Arch Coal, Inc. |
| 3. | Cordero Rojo | Wyoming | 34.8 | Cloud Peak Energy |
| 4. | Antelope | Wyoming | 33.6 | Cloud Peak Energy |
| 5. | Eagle Butte | Wyoming | 20.7 | Alpha Coal West |
| 6. | Belle Ayr | Wyoming | 15.8 | Alpha Coal West |
| 7. | Rawhide | Wyoming | 15.5 | Peabody Energy Subsidiary |
| 8. | Buckskin | Wyoming | 15.3 | Buckskin Mining Co. (Kiewit) |
| 9. | Spring Creek | Montana | 14.4 | Cloud Peak Energy |
| 10. | Freedom | North Dakota | 14.4 | Coteau Properties Co. (North American) |
| 11. | Coal Creek | Wyoming | 9.4 | Arch Coal, Inc. |
| 12. | Kosse | Texas | 9.2 | Luminant Mining |
| 13. | Rosebud | Montana | 9.0 | Westmoreland Resources Inc. |
| 14. | Bear Run | Indiana | 8.6 | Peabody Energy Subsidiary |
| 15. | Martin Lake ^{1/} | Texas | 8.4 | Luminant Mining |
| 16. | El Segundo | New Mexico | 8.2 | Peabody Energy Subsidiary |
| 17. | Kayenta | Arizona | 8.2 | Peabody Energy Subsidiary |
| 18. | Caballo | Wyoming | 8.0 | Peabody Energy Subsidiary |
| 19. | Falkirk | North Dakota | 8.0 | The Falkirk Mining Co. (North American) |
| 20. | Three Oaks | Texas | 7.7 | Luminant Mining |
| 21. | Absaloka | Montana | 6.6 | Westmoreland Resources Inc. |
| 22. | Dry Fork | Wyoming | 5.4 | Western Fuels-Wyoming, Inc. |
| 23. | Jewett | Texas | 5.3 | Texas Westmoreland Coal Co. |
| 24. | Navajo | New Mexico | 4.7 | Navajo Transitional Energy Co. (NTEC) |
| 25. | Sabine/South Hallsville | Texas | 4.5 | Sabine Mining (North American) |
| 26. | Kemmerer | Wyoming | 4.4 | Westmoreland Resources Inc. |
| 27. | Wyodak | Wyoming | 4.3 | Wyodak Resources Dev. Corp. (Black Hills) |
| 28. | Black Butte ^{2/} | Wyoming | 4.0 | Black Butte Coal Co. (Ambre/Anadarko) |
| 29. | Center | North Dakota | 4.0 | BNI Coal, Ltd. |
| 30. | Big Brown | Texas | 3.6 | Luminant Mining |
| 31. | Decker | Montana | 3.4 | Ambre Energy (Now Lighthouse Resources) |
| 32. | Red Hills | Mississippi | 2.9 | Mississippi Lignite (North American) |
| 33. | Equality ^{3/} | Kentucky | 2.8 | Armstrong Coal Co. |
| 34. | Beulah | North Dakota | 2.8 | Dakota Westmoreland Corp. |
| 35. | Corridor G (Hobet 21) ^{3/} | West Virginia | 2.8 | Patriot Coal Corp. |
| 36. | Holden No. 22 | West Virginia | 2.8 | Arch Coal, Inc. |
| 37. | Dolet Hills Lignite | Louisiana | 2.5 | Dolet Hills Lignite Co. (AEP/CLECO) |
| 38. | Samples | West Virginia | 2.5 | Patriot Coal Corp. |
| 39. | Colowyo | Colorado | 2.4 | Western Fuels-Colorado (WFC) (WFC/Tri-State) |
| 40. | San Miguel | Texas | 2.3 | Kiewit Mining Group |

Notes: Figures are rounded. Data compiled from 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/ Includes Oak Hill, Beckville and Tatum mines.

2/ Fifty percent ownership each.

3/ Department of Labor, Mine Safety & Health Administration 2014 preliminary data.

TABLE 4
Major Multi-Mine^{1/} Production Complexes - 2014
(Million Short Tons)

| Complex Name | Location | Tonnage | Company |
|------------------------------------|-----------------|----------------|------------------------------------|
| 1. American Coal (Galatia Complex) | Illinois | 11.3 | The American Coal Company (Murray) |
| 2. Coal-Mac | West Virginia | 2.8 | Arch Coal, Inc. |
| 3. Mountain Laurel | West Virginia | 2.7 | Arch Coal, Inc. |
| 4. Miller Creek | West Virginia | 2.1 | CONSOL of Kentucky |
| 5. Lone Mountain | Kentucky | 1.9 | Arch Coal, Inc. |
| 6. Somerville Central | Indiana | 1.8 | Peabody Energy Subsidiary |
| 7. Somerville North | Indiana | 1.6 | Peabody Energy Subsidiary |
| 8. Perry County | Kentucky | 1.5 | Perry County Coal Corp. (TECO) |
| 9. CAM Mining | Kentucky | 1.3 | CAM Mining, LLC (Rhino) |
| 10. Somerville South | Indiana | 1.3 | Peabody Energy Subsidiary |
| 11. Castle valley | Utah | 1.1 | Castle Valley Mining LLC (Rhino) |

Notes: Figures are rounded. 2014 data compiled from 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 - 2014
(Billion Short Tons)

| Holder | Estimated Reserves |
|---|--------------------|
| 1. U.S. Government | 86.000 |
| 2. Great Northern Properties Limited Partnership | 20.000 |
| 3. Peabody Energy Corporation | 7.550 |
| 4. Arch Coal, Inc. | 5.100 |
| 5. Alpha Natural Resources, LLC | 3.953 |
| 6. CONSOL Energy Inc. | 3.238 |
| 7. The Cline Group (Foresight Energy/Coalfield Transport) ^{1/} | 3.000 |
| 8. Natural Resource Partners LP | 2.330 |
| 9. North American Coal Corporation | 2.100 |
| 10. Murray Energy Corporation | 2.000 |
| 11. Pocahontas Land Corporation (Norfolk Southern) | 1.660 |
| 12. Alliance Resource Partners ^{2/} | 1.500 |
| 13. Patriot Coal Corporation | 1.200 |
| 14. Cloud Peak Energy, Inc. | 1.100 |
| 15. Kentucky River Properties LLC | 0.986 |
| 16. Penn Virginia Resource Partners, LP | 0.821 |
| 17. Luminant Mining Company (Energy Future Holdings) | 0.728 |
| 18. Usibelli Coal Mine, Inc. | 0.700 |
| 19. BNI Coal, LTD | 0.620 |
| 20. Armstrong Energy Corporation ^{1/} | 0.570 |
| 21. Rosebud Mining Company | 0.491 |
| 22. Rhino Energy LLC | 0.480 |
| 23. Westmoreland Coal Company | 0.472 |
| 24. Prairie State Energy Company ^{1/} | 0.400 |
| 25. Western Fuels Association, Inc. | 0.313 |
| 26. TECO Coal Corporation | 0.295 |
| 27. Kiewit Mining Group, Inc. | 0.294 |
| 28. Signal Peak Energy, LLC (Boich/FirstEnergy/Gunvor) | 0.292 |
| 29. Dolet Hills Lignite Company (AEP) | 0.274 |
| 30. Walter Energy Company | 0.269 |
| 31. Ambre Energy North America, Inc. (Now Lighthouse Resources) ^{1/} | 0.251 |
| 32. BHP Billiton | 0.238 |
| 33. Black Hills Corporation (Wyodak Resources) | 0.208 |
| 34. Metinvest BV ^{1/} | 0.135 |
| 35. Interwest Mining Company (PacifiCorp) | 0.123 |
| 36. Western Pocahontas Properties | 0.122 |
| 37. Sunrise Coal Company (Hallador) | 0.120 |
| 38. ArcelorMittal ^{1/} | 0.110 |
| 39. SunCoke Energy, Inc. | 0.100 |
| 40. Bowie Resource Partners, LLC ^{1/} | 0.092 |
| 41. Western Fuels - Colorado (WFC), LLC (WFC/Tri-state) | 0.091 |
| 42. Drummond Company, Inc. | 0.087 |
| 43. Oxford Resource Partners, LP | 0.052 |
| 44. Solar Sources, Inc. | 0.026 |
| 45. Trapper Mining Inc. | 0.021 |
| 46. Vigo Coal Company, Inc. ^{1/} | 0.019 |
| Booth Energy Group | N/A |
| Cliffs Natural Resources Inc. | N/A |
| Dana Mining Company (GenPower Holdings LP) | N/A |
| Knight Hawk Coal, LLC (Bunn) | N/A |
| Ranger Energy (Justice II) | N/A |

Notes: Data compiled from 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 258 billion short tons (Energy Information Administration, 2013). N/A = Not Available.

Reserves are estimated proven & probable. 1/ Company website and other public sources. 2/ includes tons leased to White Oak Res.