

# COAL PRODUCER SURVEY

National Mining Association

# 2017

# NATIONAL MINING ASSOCIATION 2017 COAL PRODUCER SURVEY

May 2018

## The U.S. Coal Industry in 2017

### Review

The 2017 coal market was a vast improvement over 2016, despite continuing fierce competition from low priced natural gas and rapid deployment of renewable generating sources. Competition and duplicative environmental regulations have taken a toll on coal in recent years. But a bright spot in 2017 was the coal export market, which had a banner year with global sales of both steam and metallurgical coal significantly higher. Total exports of 97 million short tons represented a 61 percent increase from 2016. Demand for U.S. coal increased in nearly all export regions. Gains in steam coal exports of a staggering 116 percent were combined with 35 percent higher metallurgical coal exports.

Production last year was 774.1 million short tons, up 6.3 percent, with increases in many regions of the country. Both consumption and imports were slightly lower.

### Demand and Fuel Competition

**Consumption/Inventories** – Coal consumption totaled 718 million tons in 2017, a decrease of 1.8 percent from the prior year level of 731.1 million tons. Sustained low natural gas prices have continued to make coal electricity dispatch less competitive and have been an added incentive for the closure of additional coal plants. Renewable generation sources like wind, solar and hydro have increased as a share of the generation mix. In addition, warmer winter temperatures resulted in lower heating demand and therefore lower generation from coal, while milder than expected summer weather slowed electric power cooling demand as well.

Consumption by the electric power sector, coal's largest market, was down 2 percent to 665 million tons, or almost 14 million tons less than in 2016. The largest declines in consumption occurred in the South Atlantic, East South Central and Middle Atlantic regions of the country.

Coking coal consumption by coke plants increased 13.8 percent in 2017, to 18.8 million tons. Blast furnace demand from coke plants moved upward last year.

Other industrial demand, which includes cement kilns, agricultural processing, heavy industry and non-utility generation, decreased 3.6 percent to 33.6 million tons, while the commercial sector decreased 17.6 percent to 975,000 tons.

EIA estimated consumer stockpile levels decreased from 167.7 million tons to 142 million tons at year's end, marking a 15.3 percent drop in 2017. Power sector stockpiles ended 2017 at 137.2 million tons, down 15.3 percent. EIA estimates producer and distributor stockpiles ended the year at nearly 21.1 million tons, down 16.6 percent from 2016.

**Electric Power Generation** – Coal-based generation in all sectors decreased 2.5 percent, from 1,239.1 billion kilowatt hours (kWh) in 2016 to 1,207.9 billion kWh in 2017.

Similarly, power sector coal generation decreased 2.5 percent in 2017 to 1,199.5 billion kWh. In the same period, natural gas generation decreased 8.1 percent to 1,176.2 billion kWh. Nuclear generation held relatively flat at 805 billion kWh. Conventional hydro generation increased 12 percent to 298.4 billion kWh. Non-hydro renewable generation grew a hefty 14.6 percent to 354.8 billion kWh, especially wind and solar, which were up 12 percent and 47.4 percent respectively. Despite rapid growth, wind and solar combined represent less than 8 percent of total power sector generation.

In the power sector, coal’s share of generation remained at about 31 percent in 2017 (see Figure 1 below). Natural gas lost market share, decreasing from 33 percent to 31 percent of generation.

### Power Sector Generation by Fuel Source – 2017

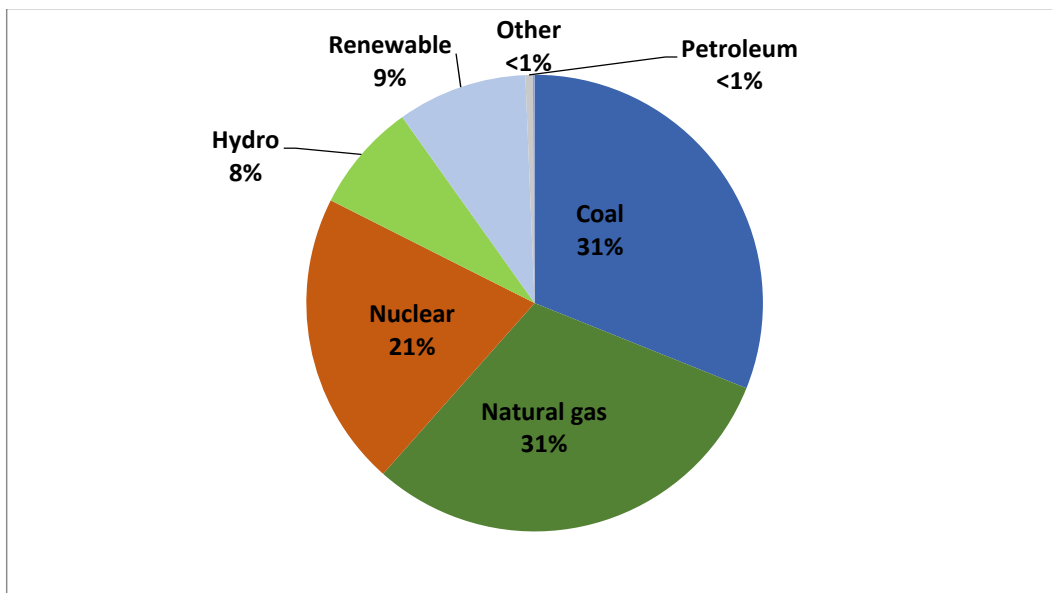


Figure 1

Source: Energy Information Administration

**Fuel Prices** – Both coal and natural gas prices have been falling in recent years. EIA estimates that the average cost of coal to electric power plants was \$2.08 per million Btu (MMBtu) in 2017, down from \$2.11 per MMBtu in 2016 and \$2.22 per MMBtu in 2015. In comparison, natural gas prices are marginally higher than coal with an average cost of \$3.39 per MMBtu in 2017 compared to \$2.87 per MMBtu in 2016 and \$3.23 per MMBtu in 2015. Figure 2 below shows trends in natural gas spot prices on the Henry Hub, including the price volatility that ensued during the “bomb cyclone” cold snap impacting much of the eastern half of the U.S. at the end of December 2017 and early January 2018.

## Natural gas spot prices (Henry Hub)



 Source: Natural Gas Intelligence

Figure 2

Source: Energy Information Administration, *Natural Gas Weekly Update*

**Coal Generating Capacity** – There were about 380 power industry coal plants totaling 267 thousand megawatts of coal capacity in service (EIA, 2016). Both plant capacity and the number of coal plants have dropped in recent years as older and less efficient plants have retired.

Coal retirements constituted about 50 percent of retiring electric generating capacity in 2017, according to the American Public Power Association. About seven thousand megawatts of coal capacity were retired. Through 2022, plants with another 24,000 megawatts of capacity have publicly announced they will be retiring. In past years, many of the coal plants retiring were smaller, older (more than 50 years old), less efficient plants in the Southeast, Mid-Atlantic and Ohio Valley regions of the country. However, newer, more efficient coal plants are now being considered for retirement in some states as competing fuel prices have remained low.

**New Coal Plants** – Southern Company’s new Kemper County advanced integrated combined cycle (IGCC), 582 - megawatt lignite coal plant in Mississippi encountered operational and financial challenges throughout construction. The IGCC project was terminated in June 2017.

A clean coal test plant in Wyoming is expected to be permitted later this year and operational in 2019.

The University of Alaska Fairbanks’ new combined heat and power plant was 76 percent complete in December 2017 and is expected to be commissioned later this year.

There are currently no other new coal-based plants or units under construction.

## **Coal Supply and Trade**

**Production** – With a significant number of coal companies having restructured and streamlined operations in recent years, the coal market seemed to turn the corner last year. According to preliminary EIA figures, total coal production in 2017 increased to 774.1 million short tons, marking a 46 million ton (6.3 percent) increase. Coal production east of the Mississippi River was approximately 305 million tons (including production from refuse recovery), an 8.2 percent increase and accounted for 39 percent of total production.

The region west of the Mississippi River produced 469 million tons of coal, or about 61 percent of total production, up 5.1 percent. Wyoming, the leading coal producing state, mined 316 million tons, a 6.5 percent increase from 2016.

EIA reported in March that U.S. coal mining productivity increased 26 percent over the past five years, reaching 6.8 tons per miner hour in 2017. EIA attributes the increase to technology and process improvements, but also to the fact that the challenging market environment resulted in the closure of less productive/higher cost mines.

**Trade** – U.S. coal exports increased 61 percent in 2017 to approximately 97 million tons (see Figure 3). The surge of nearly 37 million tons was driven by a combination of rising demand, supply chain issues, labor problems and weather related mine outages of foreign competitors. U.S. coal benefitted from higher demand for coal from most regions of the world.

China's domestic production curbs in summer/fall 2016 led to higher coal imports into 2017 and the first quarter of 2018. Additionally, Australia's Cyclone Debbie in March 2017 and a labor strike that summer resulted in curtailed coal operations and shipping. And finally, Colombia pursued higher value steam coal sales in Asia rather than Europe last year. The global coal market turned to U.S. coal to fill the supply voids.

U.S. metallurgical coal exports of 55 million tons increased 35 percent in 2017. A significant increase in demand came from Europe (up 36 percent and 6.5 million tons) and Asia (up 45 percent and 4.8 million tons). Metallurgical coal exports to Canada increased by 9.8 percent to 4.1 million tons.

U.S. steam coal exports surged in most major overseas regions, up 115.6 percent. Increases were particularly significant in Asia and Europe. However, steam coal exports to Canada dropped nearly 8 percent, from 1.2 million tons to 1.1 million tons. Since 2011, Canada has been phasing out its coal-based power plants to meet government CO<sub>2</sub> restrictions.

The average coal export price was \$101.75 per ton, up 38 percent from 2016. Metallurgical coal prices surged 59 percent, from \$84.48 per ton to \$134.55. Steam coal prices were up 14.8 percent, increasing from \$50.76 per ton to \$58.29.

U.S. exports represented nearly 13 percent of total production in 2017, according to U.S. Census and EIA data.

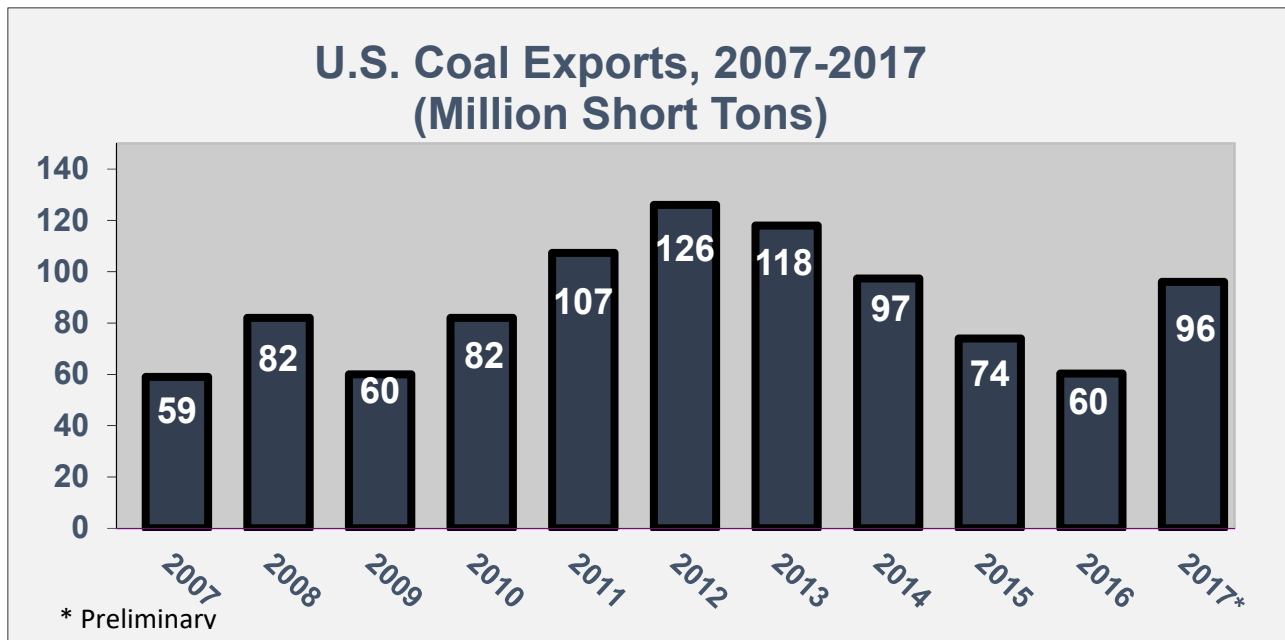


Figure 3

Sources: Energy Information Administration; NMA *International Coal Review* (U.S. Census Bureau trade data)

U.S. coal imports decreased 21 percent to 7.8 million tons, with decreases from Colombia and Canada. The average price for imported coal was up 21.1 percent to \$79.62 per ton.

### Outlook for 2018

The Trump administration’s strong economic and job growth policies, including actions toward less burdensome regulations on fossil fuels, is proving more favorable to the domestic coal market – or at least more conducive to business and industrial growth than the previous administration. Evidence of a strengthened economy can be seen in the form of higher U.S. GDP growth rates, higher employment and lower unemployment, as well as greater business and consumer confidence. The recent enactment of tax reform legislation is encouraging investment. And finally, a proposal for modernizing infrastructure holds the promise of boosting coal demand.

Preliminary estimated weekly coal production numbers from the EIA show coal production about even year-over-year through the first quarter of 2018. With the bulk of coal company bankruptcies behind them, many U.S. coal companies produced more coal than in 2016. Some opened new mines, others reopened mines or increased production at existing mines. Mines were able to rehire some workers.

According to EIA’s April 2018 *Short-term Outlook* report, lower coal-based electricity generation could result in a 4.6 percent decrease in coal production (748.2 million tons) in 2018, but then increase 1.3 percent in 2019 to 738.3 million tons. The delivered coal price averaged \$2.08/MMBtu in 2017 and is forecast to increase in 2018 and 2019 to \$2.19/MMBtu and \$2.21/MMBtu, respectively. Natural gas prices (Henry Hub) are expected to remain the same in 2018 at \$3.10/MMBtu and then rise to \$3.19/MMBtu in 2019.

Steam and met coal exports should remain relatively strong much of this year due to a continuing supply imbalance in China late last year leading to further domestic imports. It is difficult to predict China's future policies and influence on the U.S. and global market. Similarly, weather impacting our competitors is difficult to predict. For example, the flooding associated with Australia's Tropical Cyclone Debbie in March 2017 resulted in significant disruption of mine operations, export terminals and rail lines for several weeks. Then this year, Cyclones Linda and Iris, in March and April, resulted in suspended or reduced port operations for over a week. The U.S., as a swing producer, is currently still experiencing higher export demand and higher prices in response to the tighter supply.

### **Asset Acquisitions, Sales and Restructuring Activity for Selected Companies – as of May 2018**

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

**Alpha Natural Resources, LLC** – In February 2017, Alpha sold its Harlan County, Kentucky, mines and reserves to JRL Coal LLC of Marietta, Georgia. It sold its Green Valley mining assets to Quinwood Coal Company in May 2017. In October 2017, it transferred some of its idled mine assets in Kentucky, Tennessee and West Virginia to Lexington Coal Company. Alpha entered into a definitive merger agreement with Contura Energy in April 2018. The resulting organization would operate under the Contura Energy name and with Contura's existing management team.

**American Resources Corp** – In April 2018, American Resources' Quest Energy Inc. and McCoy Elkhorn Subsidiaries entered into an agreement to acquire some coal assets from Empire Coal Processing, LLC.

**Arch Coal, Inc** – In March 2017, Arch expanded its equity share interest in the Dominion Terminal Associates (DTA) coal export terminal in Newport News, Virginia, from 22 percent to 35 percent (see Peabody). Arch sold its Lone Mountain Complex, as well as two other idled properties in Central Appalachia, to Revelation Energy, LLC in September 2017.

**Armstrong Energy Corp** – Armstrong filed for Chapter 11 bankruptcy protection in October 2017. In mid-February 2018, Armstrong completed the sale of a majority interest (51 percent) in its mines, processing plants and some river dock coal handling facilities to a new company, Western Kentucky Coal Resources LLC, jointly owned by Murray Energy and Armstrong. The transaction occurred shortly after Armstrong received approval from the U.S. bankruptcy court. In late February 2018, Murray Energy acquired 100 percent interest in Western Kentucky.

**Blackjewel LLC** – In December 2017, Blackjewel acquired Contura Energy's Belle Ayr and Eagle Butte mines in Wyoming's Powder River Basin.

**CONSOL Energy, Inc** – CONSOL separated from its former parent company CNX Resources Corporation in November 2017 and is now operating as an independent publicly traded coal company.

**Contura Energy, Inc** – In March 2017, Contura bought part of Peabody's interest in the DTA coal export terminal, increasing its share of ownership from 41 percent to 65 percent (see Arch and Peabody). Contura filed for an initial public offering in May 2017. In December 2017, Contura sold its Eagle Butte and Belle Ayr mines in the Powder River Basin to Blackjewel LLC (see Blackjewel above). In April 2018, Contura entered into a merger agreement with ANR Inc. and Alpha Natural Resources Holdings, Inc. (see Alpha above).

**Corsa Coal Corp** – In March 2018, Corsa transferred its thermal coal assets in Central Appalachia to Industrial Minerals Group, LLC, an investment group led by current management.

**Covington Coal Co., LC** – Covington Coal of West Virginia emerged from its February 2015 Chapter 11 bankruptcy in February 2017.

**Foresight Energy LP** – In March 2017, Foresight completed the refinancing of a portion of its previously outstanding debt with the completed transaction also resulting in a new revolving credit facility. At the same time, Murray Energy exercised its option to acquire an additional 46 percent of the general partner of Foresight increasing its voting interest to 80 percent.

**Murray Energy Corp** – In March 2017, Murray exercised its option to acquire an additional 46 percent of the general partner of Foresight Energy, increasing its voting interest in the general partner to 80 percent (see Foresight above).

In February 2018, Murray purchased a majority interest in Armstrong Energy's former mines, processing plants and some river dock coal handling facilities to be held by newly formed Western Kentucky Coal Resources LLP. Later in February, Murray acquired 100 percent ownership interest in Western Kentucky Resources (see Armstrong above).

**Peabody** – In March 2017, Peabody sold its interest in the DTA coal terminal to Arch Coal and Contura Energy. Peabody re-emerged from bankruptcy in April 2017.

**Ramaco Resources, Inc** – Ramaco completed its initial public offering (IPO) in February 2017. It bought coking coal reserves from Jewell Ridge Coal Corporation in March 2017.

**Revelation Energy, LLC** – In September 2017, Revelation acquired some of Arch Coal's Central Appalachian coal assets (see Arch above).

**Rhino Resource Partners LP** – In November 2017, Rhino divested its partnership in Sands Hill Mining LLC to a third party.

**Warrior Met Coal, Inc** – Newly formed in 2016 from former Walter Energy assets, Warrior launched its IPO in April 2017.

### **Major Coal Producing Companies and Mines in 2017 (Tables 1-3)**

Table 1, compiled by the National Mining Association (NMA) from data collected through a 2018 survey of major coal producers and government data, shows 2017 production for 46 U.S. coal producing companies. Peabody was the largest coal producer in the U.S., with output (including tons sold) of 156.7 million tons, which represented 20.2 percent of total U.S. coal production. The second largest was Arch Coal, with 98.3 million tons sold, representing 12.7 percent of total coal production. Ranking third was Cloud Peak Energy, with 57.4 million tons and 7.4 percent of production. The fourth largest coal producer, Murray Energy, with output of 45.7 million tons and 5.9 percent of production. The fifth largest producer was Contura Energy, with an output of 41.6 million tons and 5.4 percent of production. The top five coal producing companies in the survey accounted for 52 percent of total U.S. production, while the top 10 accounted for 71 percent.

Table 2 lists the top underground mines in terms of production. The top five mines were Foresight Energy's M Class Number 1 mine in Illinois, with 12.8 million tons; CONSOL Energy's

Bailey mine in Pennsylvania, with 12.1 million tons; Murray Energy’s Marshall County mine in West Virginia, with 11.7 million tons; CONSOL Energy’s Enlow Fork mine in Pennsylvania, with 9.2 million tons; and Alliance Resource’s River View mine in Kentucky, with nine million tons.

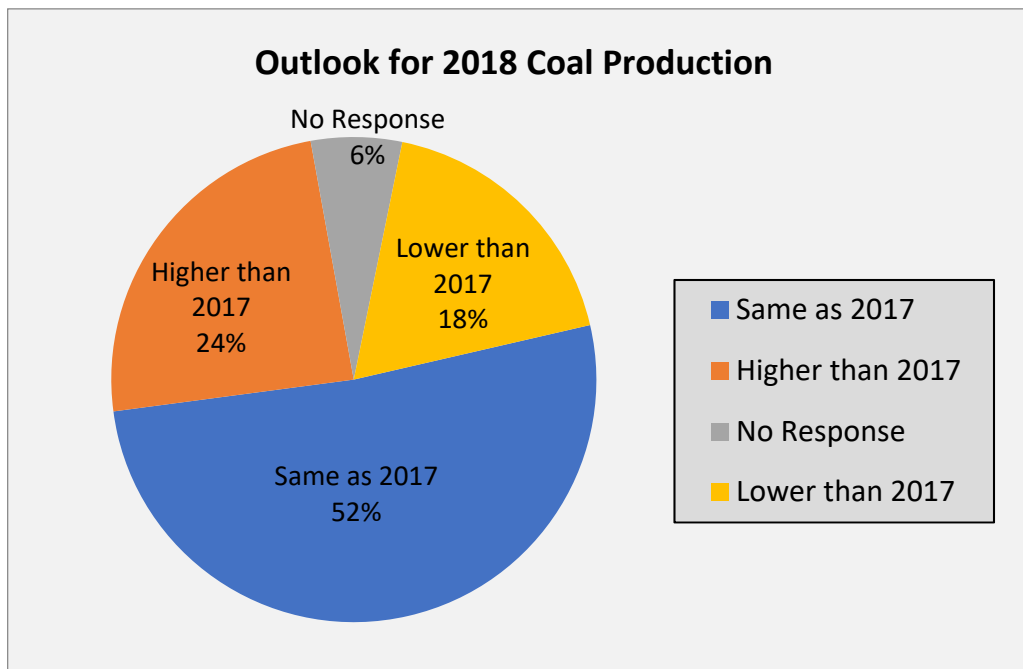
The five top producing surface mines (Table 3) in 2017 were: Peabody’s North Antelope Rochelle mine, with 101.6 million tons; Arch Coal’s Black Thunder mine, with 70.5 million tons; Cloud Peak Energy’s Antelope mine with 28.4 million tons; Contura’s Eagle Butte mine (now owned by Blackjewel Mining, LLC) with 17.3 million tons; and Cloud Peak’s Cordero Rojo mine with 16.4 million tons. All are located in Wyoming’s Powder River Basin coal region.

### Major U.S. Coal Reserve Holders in 2017 (Table 4)

The U.S. government is the single largest reserve holder, with about one-third ownership of the nation’s coal resources – or approximately 85 billion tons of estimated recoverable coal reserves. Great Northern Properties Limited Partnership reported the second largest reserve holding with 21 billion tons. Third was Peabody with 5.2 billion tons, and fourth and fifth were Foresight Energy LP and CONSOL Energy with 3.0 billion and 2.3 billion tons respectively.

### Coal Companies’ Outlook for 2018

A slight majority (52 percent) of this year’s survey respondents reported they expected the 2018 coal production outlook to be about the same as 2017 as the industry adjusts to a new normal. Recent years have marked a structural shift in the coal market with production and demand now in better alignment. The new administration is more supportive of coal and its role in providing affordable, reliable electricity and living wage jobs. Conversely, the industry faces steep competition from low priced natural gas as well as subsidized wind and solar generation sources.



## Survey Methodology

Coal producers and reserve holders were asked to provide their company's total U.S. coal production and reserve holdings for 2017. 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; and underground mines with production of one million tons or greater. Due to limited response, NMA discontinued reporting multi-mine complex production this year. 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 mine production as of the end of calendar year 2017 where possible. Companies not included in the list are encouraged to submit data for next year. The National Mining Association (NMA) 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's *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.

### Sources:

Energy Information Administration, *Short-term Outlook*, April 2018, available at <http://www.eia.gov>

Energy Information Administration, *Electric Power Monthly*, February 2018, (December 2017 data) report available at [http://www.eia.gov/electricity/monthly/current\\_year/february2018.pdf](http://www.eia.gov/electricity/monthly/current_year/february2018.pdf)

Energy Information Administration, *Monthly Energy Review*, March 2018, available at <http://www.eia.gov/totalenergy/data/monthly/?ref=bookshelf>

Energy Information Administration, *Natural Gas and Coal Prices*, available at [https://www.eia.gov/electricity/monthly/current\\_year/february2018.pdf](https://www.eia.gov/electricity/monthly/current_year/february2018.pdf) and <https://www.eia.gov/naturalgas/weekly/>

Energy Information Administration, *Quarterly Coal Report October – December 2017*, April 2018, available at <https://www.eia.gov/coal/production/quarterly/>

National Mining Association, *International Coal Review, February 2018 Edition*.

News releases and annual reports of various coal companies.

*Argus Coal Daily*, *E&E News* and *S&P Global Platts*, various editions.

**TABLE 1**  
**Major U.S. Coal Producers - 2017**  
**(Million Short Tons)**

<b>Company</b>	<b>Production Tonnage</b>	<b>Percent of Total U.S.</b>
1. Peabody Corporation <sup>1/</sup>	156.7	20.2%
2. Arch Coal, Inc. <sup>2/</sup>	98.3	12.7%
3. Cloud Peak Energy, Inc.	57.4	7.4%
4. Murray Energy Corporation	45.7	5.9%
5. Contura Energy, Inc. <sup>3/</sup>	41.6	5.4%
6. Alliance Resource Partners, LP	37.6	4.9%
7. North American Coal Corporation	37.2	4.8%
8. CONSOL Energy, Inc.	26.1	3.4%
9. Westmoreland Coal Company	25.5	3.3%
10. Luminant Mining Company (Vistra Energy)	23.9	3.1%
11. Foresight Energy LP <sup>4/</sup>	21.2	2.7%
12. Kiewit Mining Group, Inc.	19.8	2.6%
13. Alpha Natural Resources, LLC	14.0	1.8%
14. Black Hawk Mining, LLC (JMP) <sup>4/</sup>	13.1	1.7%
15. Revelation Energy, LLC and Black Jewel, LLC (J. Hoops) <sup>4/</sup>	11.7	1.5%
16. Bowie Resource Partners, LLC	10.9	1.4%
17. Coronado Coal LLC <sup>4/</sup>	8.6	1.1%
18. Lighthouse Resources Inc. (Resource Capital Funds)	6.8	0.9%
19. Warrior Met Coal, Inc.	6.7	0.9%
20. Sunrise Coal Company (Hallador)	6.6	0.9%
21. Prairie State Energy Company	6.2	0.8%
22. Western Fuels Association	6.0	0.8%
23. Signal Peak Energy, LLC (Global Mining Group/Boich/FirstEnergy/Gunvor)	5.9	0.8%
24. Armstrong Energy Corporation <sup>4/</sup>	5.3	0.7%
25. Booth Energy Group <sup>4/</sup>	4.7	0.6%
26. Knight Hawk Coal, LLC (Bunn)	4.6	0.6%
27. BNI Coal, LTD (Allete)	4.6	0.6%
28. Rosebud Mining Company	4.3	0.6%
29. Rhino Energy LLC	4.3	0.6%
30. Black Hills Corporation (Wyodak Resources)	4.2	0.5%
31. Interwest Mining Company (PacifiCorp)	4.2	0.5%
32. Navajo Transitional Energy Co. (NTEC) <sup>4/</sup>	3.7	0.5%
33. ERP Compliant Fuels LLC <sup>4/</sup>	3.6	0.5%
34. Solar Sources, Inc.	3.5	0.5%
35. White Stallion Energy (formerly Vigo Coal Co.) <sup>4/</sup>	2.4	0.3%
36. ArcelorMittal <sup>4/</sup>	2.3	0.3%
37. Colowyo Coal Co. LP (Elk Ridge Mining & Reclamation)	2.2	0.3%
38. Drummond Company, Inc.	2.1	0.3%
39. Metinvest BV (United Coal Co.) <sup>4/</sup>	2.1	0.3%
40. Dolet Hills Lignite Company (AEP) <sup>4/</sup>	1.7	0.2%
41. Dana Mining Company (GenPower Holdings LP/MEPCO, LLC)	1.7	0.2%
42. Trapper Mining Inc.	1.6	0.2%
44. Quintana Capital Group <sup>4/</sup>	1.1	0.1%
45. Justice Energy Companies <sup>4/</sup>	1.0	0.1%
46. Usibelli Coal Mine, Inc.	1.0	0.1%
47. Other Producers	20.4	2.6%
<b>Total U.S. Production <sup>5/</sup></b>	<b>774.1</b>	<b>100.0%</b>

Notes: Figures are rounded. 2017 data compiled from 2018 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 2017 is an EIA preliminary estimate.

<sup>1/</sup> Peabody production figure includes tons sold, excluding trading and brokerage operations.

<sup>2/</sup> Arch Coal, Inc. production figure includes production, excluding trading and brokerage operations.

<sup>3/</sup> Contura Energy Inc. figure includes Eagle Butte and Belle Ayr mines to Dec. 9, 2017.

<sup>4/</sup> Department of Labor, Mine Safety & Health Administration 2017 preliminary data.

<sup>5/</sup> Department of Energy, Energy Information Administration 2017 preliminary data.

**TABLE 2**  
**Major U.S. Underground Coal Mines - 2017**  
**(Million Short Tons)**

<b>Mine Name</b>	<b>Location</b>	<b>Tonnage</b>	<b>Operating Company</b>
1. M Class No. 1 <sup>1/</sup>	Illinois	12.8	M Class Mining LLC (Foresight Energy)
2. Bailey	Pennsylvania	12.1	CONSOL Pennsylvania Coal Co.
3. Marshall County	West Virginia	11.7	Marshall County Coal Co. (Murray)
4. Enlow Fork	Pennsylvania	9.2	CONSOL Pennsylvania Coal Co.
5. River View	Kentucky	9.0	River View Coal, LLC (Alliance)
6. Harrison County	West Virginia	7.1	Harrison County Coal Co. (Murray)
7. Tunnel Ridge	West Virginia	6.8	Tunnel Ridge, LLC (Alliance)
8. Cumberland	Pennsylvania	6.8	Cumberland Contura, LLC
9. Mach No. 1 <sup>1/</sup>	Illinois	6.3	Mach Mining LLC (Foresight Energy)
10. Lively Grove	Illinois	6.2	Prairie State Generating Co.
11. Hamilton County No. 1	Illinois	6.1	Hamilton County Coal (Alliance)
12. Marion County	West Virginia	6.1	Marion County Coal Co. (Murray)
13. Ohio County	West Virginia	6.0	Ohio County Coal Co. (Murray)
14. Bull Mountain	Montana	5.9	Signal Peak Energy LLC (Boich/FirstEnergy/Gunvor)
15. Gibson South	Indiana	5.9	Gibson County Coal, LLC (Alliance)
16. Century	Ohio	5.7	American Energy Corp. (Murray)
17. Buchanan <sup>1/</sup>	Virginia	5.4	Coronado Coal, LLC
18. San Juan	New Mexico	5.3	San Juan Coal Co. (Westmoreland)
19. No. 7	Alabama	4.9	Warrior Met Coal
20. West Elk	Colorado	4.8	Mountain Coal Co. (Arch)
21. Harvey	Pennsylvania	4.8	CONSOL Pennsylvania Coal Co.
22. Skyline	Utah	4.4	Canyon Fuel Co., LLC (Bowie Resource Partners)
23. SUFCO	Utah	3.9	Canyon Fuel Co., LLC (Bowie Resource Partners)
24. Monongalia County	West Virginia	3.9	Monongalia County Coal Co. (Murray)
25. Twentymile (Foidel Creek)	Colorado	3.8	Peabody Subsidiary
26. Oaktown Fuels No. 1	Indiana	3.7	Sunrise Coal Co. (Hallador)
27. Prairie Eagle Underground	Illinois	3.6	Knight Hawk Coal, LLC (Bunn)
28. Warrior (Cardinal)	Kentucky	3.6	Warrior Coal, LLC (Alliance)
29. Leer	West Virginia	3.4	ACI Tygart Valley (Arch)
30. Dotiki	Kentucky	2.6	Webster County Coal LLC (Alliance)
31. Oaktown Fuels No. 2	Indiana	2.5	Sunrise Coal Co. (Hallador)
32. Gateway North	Illinois	2.5	Peabody Subsidiary
33. Kronos <sup>1/</sup>	Kentucky	2.3	Armstrong Coal Co.
34. Francisco	Indiana	2.2	Peabody Subsidiary
35. Shoal Creek	Alabama	2.1	Drummond Company Inc.
36. Mettiki (Mountain View)	West Virginia	2.1	Mettiki Coal LLC (Alliance)
37. New Future	Illinois	2.1	American Coal Co. (Murray)
38. Shay No. 1 <sup>1/</sup>	Illinois	2.0	MaRyan Mining LLC (Foresight Energy)
39. American Eagle <sup>1/</sup>	West Virginia	1.9	Panther Creek Mining (Blackhawk)
40. Deserado <sup>1/</sup>	Colorado	1.9	Blue Mountain Energy, Inc. (Deseret Power)

**Continued .....**

**TABLE 2 (Continued)**

**Major U.S. Underground Coal Mines - 2017  
(Million Short Tons)**

<b>Mine Name</b>	<b>Location</b>	<b>Tonnage</b>	<b>Operating Company</b>
41. No. 4	Alabama	1.8	Warrior Met Coal
42. Bridger Underground	Wyoming	1.7	Bridger Coal Company (Interwest/Pacificorp)
43. 4 West	Pennsylvania	1.7	Dana Mining Co.(MEPCO Mining)
44. Lila Canyon	Utah	1.6	Utah American Energy, Inc. (Murray)
45. Deep Mine #41	Virginia	1.6	Paramont Contura, LLC
46. Viper	Illinois	1.6	ICG Illinois (Arch)
47. Paradise	Kentucky	1.5	KenAmerican Resources, Inc. (Murray)
48. Wildcat Hills	Illinois	1.5	Peabody Subsidiary
49. Mountain Laurel (Mountaineer II)	West Virginia	1.5	Mingo Logan Coal Co. (Arch)
50. MC Mining #4	Kentucky	1.5	Excel Mining, LLC (Alliance)
51. Sentinel	West Virginia	1.5	Wolf Run Mining Co. (Arch)
52. Oak Grove <sup>1/</sup>	Alabama	1.4	ERP Compliant Fuels LLC
53. Servant <sup>1/</sup>	Kentucky	1.3	Thoroughfare Mining LLC (Armstrong)
54. Riveredge	Kentucky	1.3	Pennyrile Energy LLC (Rhino)
55. Pinnacle <sup>1/</sup>	West Virginia	1.2	Pinnacle Mining Co. (ERP)
56. Slabcamp Stockton	West Virginia	1.2	Mammoth Coal Co. (Alpha)
57. Federal <sup>1/</sup>	West Virginia	1.1	ERP Compliant Fuels LLC
58. Kielty (Ruby Energy)	West Virginia	1.1	Delbarton Mining Co., LLC (Alpha)
59. Powellton No. 1 <sup>1/</sup>	West Virginia	1.1	Greenbrier Minerals, LLC (Coronado)
60. Beckley Pocahontas	West Virginia	1.0	ICG Beckley (Arch)

Notes: Figures are rounded. 2017 data compiled from 2018 NMA survey of major producers.

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

<sup>1/</sup> Department of Labor, Mine Safety & Health Administration 2017 preliminary data.

**TABLE 3**

**Major U.S. Surface Coal Mines - 2017  
(Million Short Tons)**

	<b>Mine Name</b>	<b>Location</b>	<b>Tonnage</b>	<b>Operating Company</b>
1.	North Antelope Rochelle	Wyoming	101.6	Peabody Subsidiary
2.	Black Thunder	Wyoming	70.5	Arch Coal, Inc.
3.	Antelope	Wyoming	28.4	Cloud Peak Energy
4.	Eagle Butte <sup>1/</sup>	Wyoming	17.3	Contura Coal West (sold to Blackjewel Mining Dec. 2017)
5.	Cordero Rojo	Wyoming	16.4	Cloud Peak Energy
6.	Belle Ayr <sup>1/</sup>	Wyoming	15.8	Contura Coal West (sold to Blackjewel Mining Dec. 2017)
7.	Freedom	North Dakota	14.7	Coteau Properties Co. (North American)
8.	Buckskin	Wyoming	14.6	Buckskin Mining Co. (Kiewit)
9.	Spring Creek	Montana	12.6	Cloud Peak Energy
10.	Caballo	Wyoming	11.1	Peabody Subsidiary
11.	Rawhide	Wyoming	10.4	Peabody Subsidiary
12.	Kosse	Texas	10.1	Luminant Mining
13.	Coal Creek	Wyoming	9.0	Arch Coal, Inc.
14.	Rosebud (Colstrip)	Montana	8.6	Western Energy Co. (Westmoreland)
15.	Bear Run	Indiana	7.3	Peabody Subsidiary
16.	Falkirk	North Dakota	7.2	The Falkirk Mining Co. (North American)
17.	Three Oaks	Texas	7.2	Luminant Mining
18.	Kayenta	Arizona	6.2	Peabody Subsidiary
19.	Dry Fork	Wyoming	6.0	Western Fuels-Wyoming, Inc.
20.	Martin Lake <sup>2/</sup>	Texas	5.4	Luminant Mining
21.	El Segundo	New Mexico	4.9	Peabody Subsidiary
22.	Center	North Dakota	4.6	BNI Coal, Ltd. (Allele)
23.	Kemmerer	Wyoming	4.2	Westmoreland Kemmerer, LLC
24.	Decker	Montana	4.2	Lighthouse Resources (formerly Ambre Energy)
25.	Wyodak	Wyoming	4.2	Wyodak Resources Dev. Corp. (Black Hills)
26.	Sabine/South Hallsville	Texas	3.8	Sabine Mining (North American)
27.	Navajo <sup>3/</sup>	New Mexico	3.7	Navajo Transitional Energy Co. (NTEC)
28.	Absaloka	Montana	3.6	Westmoreland Resources Inc.
29.	San Miguel <sup>4/</sup>	Texas	3.1	Kiewit Mining Group
30.	Wild Boar	Indiana	2.7	Peabody Subsidiary
31.	Black Butte <sup>5/</sup>	Wyoming	2.6	Black Butte Coal Co. (Lighthouse/Anadarko)
32.	Bridger Surface	Wyoming	2.5	Bridger Coal Co. (Interwest/Pacificorp)
33.	Coal-Mac	West Virginia	2.5	Arch Coal, Inc.
34.	Eagle Pass	Texas	2.4	Camino Real Fuels (North American)
35.	Oxford	Ohio	2.4	Oxford Mining Co. (Westmoreland)
36.	Red Hills	Mississippi	2.4	Mississippi Lignite (North American)
37.	Somerville Central	Indiana	2.2	Peabody Energy Subsidiary
38.	Colowyo	Colorado	2.2	Elkridge Mining and Reclamation
39.	Coyote Creek	North Dakota	2.1	Coyote Creek Mining (North American)
40.	Calvert/Walnut Creek Lignite <sup>4/</sup>	Texas	2.1	Kiewit Mining Group
41.	Dolet Hills Lignite <sup>3/</sup>	Louisiana	1.8	Dolet Hills Lignite Co. (AEP/Cleco)

Notes: Figures are rounded. 2017 data compiled from 2018 NMA survey of major producers.  
May not be all-inclusive. Any companies not included in this listing are encouraged to submit data for the next edition.

1/ Mine sold to Blackjewel Mining Dec. 9, 2017.

2/ Includes Oak Hill, Tatum and Liberty mines.

3/ Department of Labor, Mine Safety & Health Administration 2017 preliminary data.

4/ Mine managed and operated, but not owned by Kiewit.

5/ Fifty percent ownership each.

**TABLE 4**  
**Major Holders of U.S. Coal Reserves - 2017**  
**(Billion Short Tons)**

Holder	Estimated Reserves
1. U.S. Government *	85.000
2. Great Northern Properties Limited Partnership	21.000
3. Peabody	5.200
4. Foresight Energy LP <sup>1/</sup>	3.000
5. CONSOL Energy Inc.	2.298
6. Arch Coal, Inc.	2.100
7. Natural Resource Partners LP	1.936
8. North American Coal Corporation	1.900
9. Murray Energy Corporation	1.800
10. Alliance Resource Partners	1.670
11. Pocahontas Land Corporation (Norfolk Southern)	1.640
12. Alpha Natural Resources, LLC	1.300
13. Cloud Peak Energy, Inc.	1.000
14. Kentucky River Properties LLC	0.979
15. Penn Virginia Resource Partners, LP	0.772
16. Contura Energy, Inc.	0.743
17. Usibelli Coal Mine, Inc. <sup>2/</sup>	0.600
18. BNI Coal, LTD (Allele)	0.600
19. Rosebud Mining Company <sup>2/</sup>	0.480
20. Armstrong Energy Corporation <sup>1/</sup>	0.445
21. ERP Compliant Fuels LLC	0.400
22. Prairie State Energy Company <sup>1/2/</sup>	0.390
23. Luminant Mining Company (Energy Future Holdings/Vistra) <sup>3/</sup>	0.372
24. Westmoreland Coal Company	0.360
25. Signal Peak Energy, LLC (Global Mining/Boich/FirstEnergy/Gunvor)	0.300
26. Western Fuels Association	0.295
27. Dana Mining Company/MEPCO (GenPower Holdings LP/MEPCO, LLC) <sup>2/</sup>	0.289
28. Western Pocahontas Properties	0.276
29. Dolet Hills Lignite Company (AEP) <sup>2/</sup>	0.270
30. Kiewit Mining Group, Inc.	0.269
31. Rhino Energy LLC	0.253
32. Warrior Met Coal, Inc.	0.244
33. Coronado Coal LLC <sup>1/ 4/</sup>	0.223
34. Black Hills Corporation (Wyodak Resources)	0.195
35. Bowie Resource Partners, LLC	0.194
36. Sunrise Coal Company (Hallador/Bisland)	0.158
37. Metinvest BV (United Coal Co.) <sup>2/</sup>	0.130
38. ArcelorMittal <sup>1/</sup>	0.120
39. Colowyo Coal Co. LP (Elk Ridge Mining & Reclamation)	0.120
40. Lighthouse Resources Inc. (Resource Capital Funds)	0.112
41. Knight Hawk Coal, LLC (Bunn)	0.093
42. Solar Sources, Inc.	0.089
43. Drummond Company, Inc.	0.080
44. Interwest Mining Company (PacifiCorp)	0.039
45. Trapper Mining Inc.	0.020
46. White Stallion Energy (formerly Vigo Coal Co.) <sup>1/</sup>	0.017
47. Black Hawk Coal, LLC (JMP) <sup>1/</sup>	0.012
Navajo Transitional Energy Co. (NTEC)	N/A
Booth Energy Group	N/A
Revelation Energy, LLC and Blackjewel Mining (Hoops)	N/A
Justice Energy Companies	N/A
Blue Mountain Energy, Inc (Deseret Power)	N/A

Notes: Data compiled from NMA survey of major producers and reserve holders. May not be all-inclusive.

Any companies not included in this listing are encouraged 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 254 billion short tons (Energy Information Adm.)

N/A = Not Available. Reserves are estimated proven & probable. 1/ Company website and/or other public and private sources.

2/ Estimated from 2016 figures. 3/ Active and under study lignite deposits. 4/ Assigned recoverable reserves.

National Mining Association  
101 Constitution Avenue, NW  
Suite 500 East  
Washington, D.C. 20001  
(202) 463-2600 | [www.nma.org](http://www.nma.org)