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Preface

The *Annual Coal Report* (ACR) provides information about U.S. coal production, number of mines, prices, productivity, employment, productive capacity, and recoverable reserves to a wide audience, including Congress, Federal and State agencies, the coal industry, and the general public. This report is published by the Energy Information Administration (EIA) to fulfill data collection and dissemination responsibilities as specified in the Federal Energy Administration Act of 1974 (Public Law 93-275), as amended.

This report presents annual data on coal production, prices, recoverable reserves, employment, productivity, productive capacity, consumption, and stocks. U.S. coal production, employment, and productivity are based on the U.S. Department of Labor's Mine Safety and Health Administration's Form 7000-2, "Quarterly Mine Employment and Coal Production Report." Prices, recoverable reserves, and productive capacity are based on EIA's annual survey form, EIA-7A, "Coal Production Report."

This report is the 32nd annual report on coal production published by EIA and continues the series formerly included in the *Minerals Yearbook* published by the Bureau of Mines.

The Office of Coal, Nuclear, Electric and Alternate Fuels acknowledges the cooperation of the respondents in supplying the information published in the *Annual Coal Report* and appreciates the valuable assistance of State coal mining agencies and the U.S. Department of Labor: Mine Safety and Health Administration.

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Executive Summary

Coal production in the United States in 2007 totaled 1,146.6 million short tons (Table ES1), a decrease of 1.4 percent, or 16.1 million short tons from the 2006 record level of 1,162.8 million short tons. Although coal production declined in 2007, U.S. total coal consumption increased for the year. Coal consumption in 2007 in the electric power sector was higher by 1.8 percent, while coking coal consumption decreased by 1.1 percent and the other industrial sector declined by 4.8 percent. (Note: All percentage change calculations are done at the short-tons level.) Total coal stocks increased during the year, as some consumers continued to rebuild their stockpiles that had been seriously depleted in 2005 due to transportation issues.

The growth in coal consumption during the year was primarily a result of the weather-related increases in the demand for electricity in 2007. Total generation in the electric power sector (electric utilities and independent power producers) in the United States grew in 2007 by 2.5 percent. Coal-based generation also increased, resulting in an 18.5-million-short-ton increase in coal consumed in the electric power sector. Coal use in the non-electricity sector decreased by 3.3 percent to a level of 82.9 million short tons.

Coal prices in 2007 increased for both the mine-level prices and the consumer prices. Although the average delivered price of coal increased for most users in the United States in 2007, the increases were smaller than what had been experienced in 2006. In the domestic markets, the electric utility price-per-short-ton increase was 5.3 percent, while the increase was only 1.5 percent for independent power producers. Coking coal prices increased by 2.3 percent, while the average price for the other industrial sector increased by 5.3 percent in 2007.

Production

U.S. coal production decreased in 2007 by 1.4 percent to a level of 1,146.6 million short tons (Figure ES1 and Table ES1), 16.1 million short tons lower than the 2006 production. Although total U.S. coal production was lower in 2007, only two of the three coal-producing regions had lower production while the other increased, but only marginally. Exclusive of refuse production, the Appalachian and Interior Regions had a decrease in their production levels in 2007 of 3.4 percent and 3.1 percent respectively, while the Western Region had an increase in coal production of 0.3 percent. In the amount of tons of coal produced, the decrease in the Appalachian Region production was 13.4 million short tons, while the decrease in Interior Region production in 2007 was 4.7 million short tons. Coal production in the Western Region increased by 1.6 million short tons.

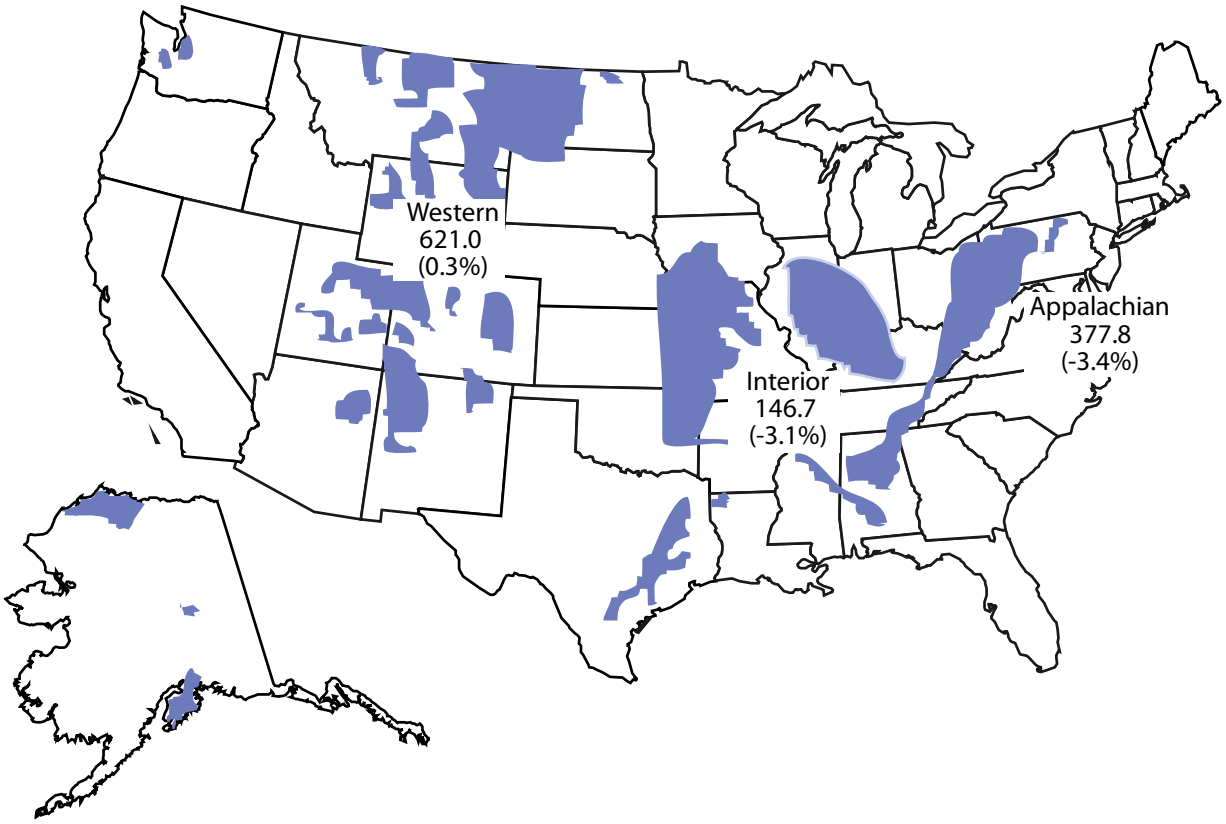
Appalachian Region

Coal production in the Appalachian Region declined for the second consecutive year in 2007, decreasing by 13.4 million short tons, to end the year at 377.8 million short tons (Table ES2), a decline of 3.4 percent, a level only slightly greater than the 2003 production total. The decrease in 2007 in coal production in the Appalachian Region was primarily driven by two different issues. One issue was the production problems at a few of the larger mines in the region; and the other was ongoing lawsuits, principally in the central portion of the Appalachian Region, concerning the issuing of Federal permits that regulate the excavation and discharge of dredged and fill material into the waters of the United States. As a consequence of these lawsuits, new permits have not been issued as quickly as they had in the past thereby limiting some possible additional production.

West Virginia, the largest coal-producing State in the Appalachian Region and the second largest in the United States, was one of the only two States in the region to have an increase in coal production in 2007. Total coal production increased slightly in West Virginia, by 0.7 percent, in 2007 to end the year with 153.5 million short tons of production, 1.1 million short tons above the 2006 level. Increases in coal production at Mettiki Coal's Mountain View mine (a replacement mine for Mettiki's depleted Maryland mine) of 2.2 million short tons and a full year's production from Frasure Creek Mining's new Mine No. 7 of 1.1 million short tons, helped to offset the declines in production experienced at Alpha Natural Resources' Mountaineer Alma A mine of 1.0 million short tons and Consol Energy's McElroy mine of 0.8 million short tons.

Eastern Kentucky produced 87.1 million short tons of coal in 2007, a decline of 7.0 percent or 6.5 million short tons, the largest tonnage decrease for any State in the Appalachian Region. Although the Locust Grove's Elm Lick mine had an increase in 2007 of 1.3 million short tons in its first full year of production and three other mines had increases of over a half-a-million short tons, production decreases by numerous other mines,

Figure ES1. Coal Production by Coal-Producing Region, 2007
(Million Short Tons and Percent Change from 2006)
Regional totals do not include refuse recovery
U.S. Total: 1,146.6 Million Short Tons (-1.4%)



Source: Energy Information Administration, *Annual Coal Report*, *2007*, DOE/EIA-0584(2007) (Washington, DC, February 2009).

including the 2007 idling of ICG's Blackberry and Nally & Hamilton Enterprises' Colliers Creek mines resulting in drops of 1.2 and 0.6 million short tons respectively, lead to the lower annual production in Eastern Kentucky for the year.

Pennsylvania produced 65.0 million short tons, a decrease of 1.5 percent from 2006, or 1.0 million short tons. There was no single mine that accounted for the majority of the decline in coal production in Pennsylvania for the year, but the slight decreases of less than 0.3 million short tons experienced by Consol's Bailey and Foundation's Cumberland and Emerald mines were more than enough to offset the increases in coal production experienced by Consol's Enlow Fork, Dana Mining's 4 West, and Rosebud Mining's Logansport mines.

Coal production in Virginia decreased in 2007 by 4.4 million short tons to a total of 25.3 million short tons, a decline of 14.8 percent. The decrease in coal production in Virginia was primarily a result of the lower production by Consol's Buchanan mine that experienced a roof fall in July and was closed for the remainder of the year, resulting in a production level for the mine that was 43.7 percent below the 2006 level. Ohio's coal production declined slightly in 2007 by 0.6 percent to end the year at 22.6 million short tons.

Besides West Virginia, Alabama was the only other State in the Appalachian Region to have increased coal production in 2007 with a total of 19.3 million short tons for the year. The increase of 0.5 million short tons, or 2.6 percent, was the result of higher coal production at the Jim Walter Resources' No. 4 mine that helped replace the lost coal production from its No. 5 mine, which was abandoned due to the depletion of its reserves, and increased production from Drummond Company's Shoal Creek mine. Tennessee had a slight decrease of 0.2 million short tons in coal production in 2007 from its prior year level, resulting in a total of 2.7 million short tons. With the closing of Mettiki Coal's Mettiki mine (the largest mine in the State) due to the depletion of coal reserves in 2007, total coal production in Maryland in 2007 decreased by 54.5 percent to end the year at 2.3 million short tons, the lowest level of any State in the Appalachian Region.

Table ES1. U.S. Coal Supply, Disposition, and Prices, 2006-2007
(Million Short Tons and Dollars per Short Ton)

Item	2006	2007
Production by Region		
Appalachian	391.2	377.8
Interior	151.4	146.7
Western	619.4	621.0
Refuse Recovery	0.8	1.2
Total	**1,162.8**	**1,146.6**
Consumption by Sector		
Electric Power	1,026.6	1,045.1
Coke Plants	23.0	22.7
Other Industrial Plants	59.5	56.6
Residential/Commercial	3.2	3.5
Total	**1,112.3**	**1,128.0**
Year-End Coal Stocks		
Electric Power	141.0	151.2
Coke Plants	2.9	1.9
Other Industrial Plants	6.5	5.6
Producers/Distributors	36.5	34.0
Total	**186.9**	**192.8**
Average Delivered Price		
Electric Utilities	$34.26	$36.06
Independent Power Producers	$33.04	$33.11
Coke Plants	$92.87	$94.97
Other Industrial Plants	$51.67	$54.42
Average U.S. Open Market Mine Price	$25.16	$26.20

Notes: Totals may not equal sum of components due to independent rounding. Sum of stock changes and consumption may not equal production, primarily because the supply and disposition data are obtained from different surveys.
Sources: Energy Information Administration, *Annual Coal Report 2007*, tables 1; 26; 27; 28; and 34; DOE/EIA-0584 (2007) (Washington, DC, February 2009).

Interior Region

The Interior Region experienced a decrease in coal production in 2007 of 4.7 million short tons, or 3.1 percent, to end the year at a total of 146.7 million short tons. The decline in coal production in the Interior Region was primarily a result of the lower coal production in Texas, the largest coal-producing State in the region. In 2007 coal production in Texas was 41.9 million short tons, a decline of 3.6 million short tons from the 2006 level. Although there was an increase in coal production at Luminant Mining's Tatum mine of 1.1 million short tons for the year, the decline of 2.6 million short tons at its Three Oaks mine and the suspension of coal production at its Winfield North mine resulted in lower coal production in Texas in 2007.

Of the two States to register increases in 2007 coal production in the Interior Region, Western Kentucky accounted for almost all of the regional increase. Coal production in Western Kentucky increased 0.9 million short tons in 2007 to end the year at 28.2 million short tons, an increase of 3.6 percent. Although Armstrong Coal's Big Run mine was idled at the end of 2006 with a resulting loss of over 1 million short tons of coal production, expansions at KenAmerican Resources' Paradise No. 9 mine of 0.6 million short tons and Hopkins County Coal's Elk Creek mine of 1.1 million short tons was more than enough to offset that loss. Arkansas, the Nation's smallest coal producing State, was the only other State in the Interior Region to have higher production in 2007. Coal production in Arkansas increased to reach a total of 83 thousand short tons, 60 thousand short tons higher than the 2006 level.

Indiana, the second-largest coal-producing State in the Interior Region, had a slight decrease of 0.3 percent in 2007 to end the year with a total of 35.0 million short tons, a level that was 0.1 million short tons below 2006. Declines of almost a half million short tons each experienced at Vigo Coal Company's Cypress Creek mine and Triad Mining's Patoka mine were balanced by Sunrise Coal's Carlisle mine, in its first year of coal production, which produced 1.0 million short tons in 2007.

Coal production in Illinois also declined slightly by 0.9 percent to end the year at 32.4 million short tons, a decrease of 0.3 million short tons. Increases in coal production by Mach Mining's No. 1 mine of 0.9 million short tons and Vigo Coal Company's Friendsville mine of 0.6 million short tons in 2007 were negated by the lower production levels of several mines, including Foundation Coal's Wabash mine which was abandoned early in 2007, and the idling of Monterey Coal's No. 1 mine and Springfield Coal's Crown II mine. The other States in the Interior Region (Kansas, Louisiana, Mississippi, Missouri, and Oklahoma), which together produced 8.9 million short tons of coal and accounted for a total of 6.1 percent of the entire region's production in 2007, all had lower coal production from their prior year levels.

Western Region

The Western Region was the only one of the three regions to show an increase in coal production in 2007. Coal production rose by 0.3 percent to reach a total of 621.0 million short tons, over 54 percent of total U.S. coal production for the year. The slight increase of 1.6 million short tons resulted in another record level for the region, the fourth year in a row. Even though there was a record level of coal production in 2007, only three States in the Western Region had higher production levels from the previous year, Colorado, Montana, and Wyoming.

Wyoming is the largest coal-producing State in the Nation, a position it has held since 1988. In 2007, Wyoming produced 453.6 million short tons of coal, an increase of 1.5 percent, or 6.8 million short tons for the year. Although nine of the twenty-one mines in Wyoming had decreases in coal production in 2007, the increased production levels at the rest of the mines pushed the State to a new production record for the year. Wyoming has dominated U.S. coal production since 1995 when it first accounted for more than one-quarter of total U.S. production. Examples of how much Wyoming dominated the U.S. coal supply include that for 2007, its production accounted for 73 percent of the Western Region production total; was 76.4 million short tons more than the entire Appalachian Region production; was more than three times the Interior Region production; and was only slightly less than 40 percent of the total U.S. coal production for the year. Also, if the 25 States that produced coal in 2007 were ranked by descending total production levels, Wyoming produced only 1.4 million short tons less than the sum of the next six largest coal-producing States (West Virginia, Kentucky, Pennsylvania, Montana, Texas, and Colorado) and 217.4 million short tons more coal than the summation of the States ranked 8th through 25th. Peabody's North Antelope Rochelle mine was the largest coal mine in Wyoming and the United States in 2007, producing a total of 91.5 million short tons, an increase of 3.0 million short tons. This one mine produced more coal than 22 of the 24 other coal-producing States in 2007. However, the one mine in Wyoming that had the largest tonnage increase in 2007 was Arch Coal's Coal Creek mine, which returned to production in mid-2006 after suspending coal production in 2000. Coal Creek increased production in 2007 by 7.1 million short tons to end the year at a total of 10.2 million short tons.

In 2007, Montana, the second largest coal-producing State in the Western Region, produced a total of 43.4 million short tons, an increase of 3.7 percent, displacing Texas as the fifth largest coal-producing State in the Nation. Although there were decreases in production at four of the six mines in Montana, the increase in coal production at Spring Creek Coal's Spring Creek mine of 1.2 million short tons in 2007, to reach a total of 15.7 million short tons, more than offset the declines. Colorado had a slight increase in coal production in 2007, ending the year with a total of 36.4 million short tons, an increase of 0.2 percent, or 62 thousand short tons.

Total coal production in North Dakota declined in 2007 by 2.6 percent to end the year at 29.6 million short tons. Declines in production at three of the four mines, Center, Falkirk, and Freedom mines, negated the increase in coal production by the Beulah mine. New Mexico had a decrease of 1.5 million short tons in 2007 to end the year with a total of 24.5 million short tons, a decline of 5.6 percent, and the second year in a row that production declined in the State. The majority of the decrease in coal production for New Mexico was attributable to the decreased production level at Chevron Mining's McKinley mine. Coal production in Utah in 2007 declined by 6.6 percent to a level of 24.3 million short tons. Although there was a 1-million-short-ton-plus increase in coal production at West Ridge Resources' West Ridge mine, decreases of over 1 million short tons at Arch Coal's Sufco mine and Andalex Resources' Aberdeen mine more than offset the increase. In 2007 coal production in Arizona decreased by 2.8 percent to end the year at 8.0 million short tons, while coal production in Alaska was 1.3 million short tons, slightly below the prior year total. There was no coal production in Washington in 2007 due to the closing of the State's

only mine, TransAlta's Centralia mine, in November of 2006.

Employment

The number of employees in U.S. coal mines decreased in 2007 by 1.6 percent to a level of 81,278. Decreases in the number of employees were experienced in both underground and surface mining in 2007 at the national level. The largest decrease in total employees in a State was in Kentucky, which had 973 fewer employees on the payroll. There were some States that had slight increases in the number of employees, while Washington, which closed its only mine in November of 2006, had no mine employees for 2007.

Productivity

Productivity at coal mines in 2007 increased slightly by 0.1 percent to a level of 6.27 tons per miner per hour. Total productivity increased as a result of an increase in surface productivity which grew in 2007 by 0.6 percent to a level of 10.25 short tons per miner per hour. Underground productivity dropped in 2007 by the same percentage, 0.6 percent to a level of 3.34 short tons per miner per hour resulting in the decrease in total productivity for the year. Part of the decline in underground productivity was a result of miners having increasing hours used in safety and health work in compliance with the MINER Act of 2006 that affected the ability to mine coal.

Changes in regional productivity varied across the U.S. in 2007, with the largest decline in the Interior Region while there was an increase in Western Region. Total productivity in the Appalachian Region decreased by 0.9 percent in 2007 to a level of 3.10 short tons per miner per hour. This drop was a reflection of the decrease in both underground productivity in the region, which declined by 1.3 percent and a decrease in surface productivity of 0.3 percent in 2007. Total productivity in the Interior Region declined by 4.8 percent to a level of 4.85 short tons per miner per hour in 2007, with declines in both underground and surface productivity. Underground productivity in the Interior Region decreased somewhat in 2007 by 0.8 percent to a level of 3.52 short tons per miner per hour while surface productivity decreased by 8.0 percent to a level of 6.76 short tons per miner per hour. Reflecting the large number of surface mines in the region, the Western Region actually had an increase in total productivity in 2007, 1.0 percent to 20.40 short tons per miner per hour. Productivity in underground mines in the Western Region dropped by 0.6 percent to 6.73 short tons per miner per hour, while surface productivity increased by 2.3 percent to a level of 26.28 short tons per miner per hour.

Consumption

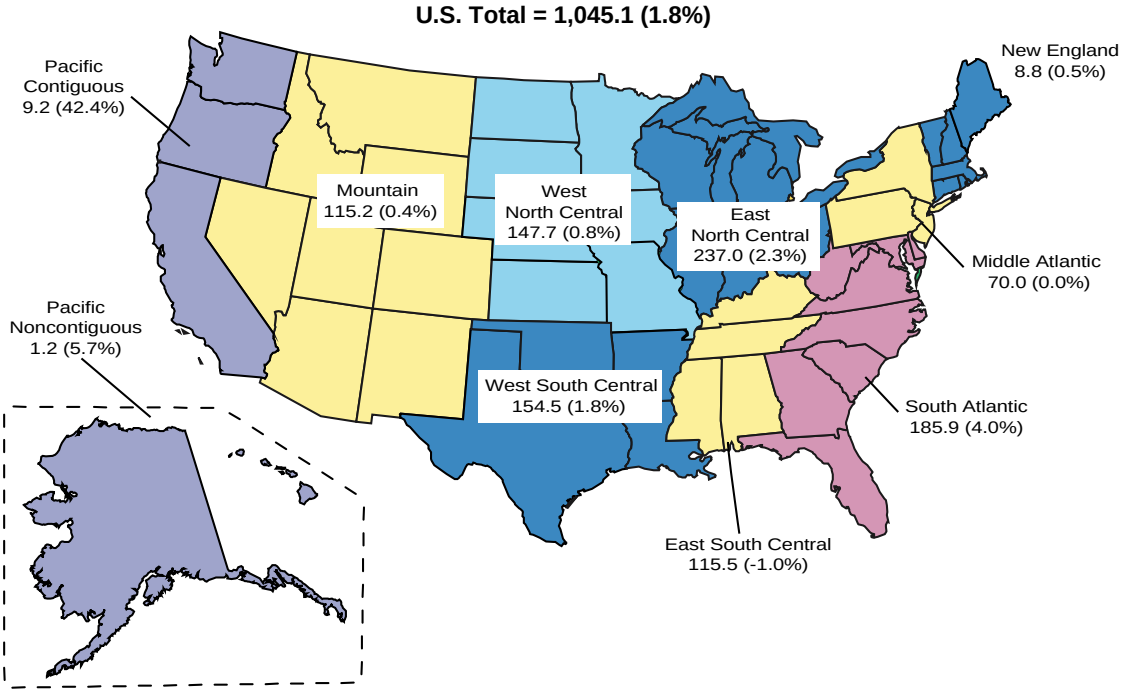
Total coal consumption rebounded in 2007, increasing by 1.4 percent over the 2006 level. Total U.S. coal consumption was 1,128.0 million short tons, an increase of 15.7 million short tons. Almost 93 percent of all coal consumed in the United States is in the electric power sector (electric utilities and independent power producers), making it the powerhouse for total coal consumption. Two of the three other coal-consuming sectors, other industrial and coking coal, had declines in their consumption totals, while the residential and commercial sector, which is the smallest of all coal consuming sectors, accounting for less than one third of one percent of total consumption, was slightly higher. The other industrial sector had a decrease in coal consumption in 2007 of 4.8 percent, while the coking coal sector had a decline of 1.1 percent.

Coal consumption in the electric power sector increased by 1.8 percent or 18.5 million short tons to end 2007 at 1,045.1 million short tons (Figure ES2). However, coal-based electricity generation increased at a slightly lower rate of 1.5 percent, reflecting increasing volumes of lower-Btu western coals (subbituminous and lignite) to generate electricity.

Coal consumption in the non-electric power sector (comprised of the other industrial, coking coal, and residential and commercial sectors) declined in 2007. Coal consumption at coke plants decreased by 0.2 million short tons to end the year at 22.7 million short tons, a decline of 1.1 percent. The decline in U.S. coke production in 2007 was a result of the decrease in pig iron production that occurred for the year combined with the slight drop in U.S. coke exports.

Although the Gross Domestic Product (GDP) grew by 2.7 percent, the economic growth did not extend into the entire manufacturing sector in 2007, and as a result, coal consumption in the other industrial sector declined by 2.9 million short tons to end the year at 56.6 million short tons. The broad range of products in the numerous North American Industry Classification System (NAICS) manufacturing plants showed varied changes in coal consumption for 2007. The nonmetallic minerals products and chemical manufacturing segments had no change in coal consumption for the year, while the food manufacturing segment had a slight increase in coal consumption. The decrease in coal consumption in 2007 in the other industrial sector was primarily a result of the large decrease in the primary metal manufacturing segment, a decline of 2.1 million short tons. The majority

Figure ES2. Electric Power Sector Consumption of Coal by Census Division, 2007
(Million Short Tons and Percent Change from 2006)



Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

of the decrease in coal consumption in this segment was the result of the closing of a dedicated plant at a primary metals facility at the end of 2006. The plant closed the old facility after securing the necessary power to run a smelter from an independent power source that burns coal to generate electricity. In essence, this is a shift of coal consumption from the other industrial sector to the independent power producers' portion of the electric power sector. Coal consumption in the residential and commercial sector increased slightly in 2007.

Generation

Nationally, total generation in the electric power sector from all fuels increased in 2007 by 2.5 percent with gains in electricity generation by all sources except the hydroelectric sector in the United States. The decline of 14.6 percent in electricity generation by hydroelectric facilities in the United States was a direct result of the drought conditions experienced across most the country during the year and resulted in a decrease of its share of total generation to 6.0 percent (Figure ES3). The increase in electric generation in 2007 by other fuel sources ranged from the aforementioned 1.5 percent for coal to 10.9 percent for natural gas. The large increase in electricity generation by natural gas for 2007 was due in part to the numerous new generating facilities that came on-line during the year that were natural gas-fired. In 2007, 48 percent of the new capacity to come on-line during the year was natural-gas-fired, while new coal-fired capacity was 10 percent. However, the average cost (in dollars per million Btu) of natural gas delivered to the electric utility portion of the electric power sector in 2007 compared to 2006 had increased by only 1.5 percent, while the cost of coal had increased by 5.3 percent in the same time period.

Total electricity generation in the United States is primarily driven by two factors: economic growth and weather (measured by heating and cooling degree-days), with both factors having a positive effect on total generation. Economic growth continued throughout 2007, with the gross domestic product (GDP) of the United States increasing by 2.7 percent for the year. Also in 2007, warmer-than- normal summer weather occurred across most of the country. According to data from the National Weather Service Climate Prediction Center of the National Oceanic and Atmospheric Administration (NOAA), cooling degree-days in 2007 were higher for the country as a whole than the 30-year average, by 17.9 percent. The warmer summer weather resulted in more electricity generation to power air conditioners across the country. In contrast, the winter weather was somewhat warmer than normal, with the heating degree-days 5.3 percent below normal, lowering the need for electricity for heating, but not enough to offset the generation needed for summer for cooling.

Table ES2. U.S. Coal Production by Coal-Producing Region and State, 2006-2007
(Million Short Tons)

Coal-Producing Region and State	2006	2007
Appalachian Total	**391.2**	**377.8**
Alabama	18.8	19.3
Kentucky, Eastern	93.6	87.1
Maryland	5.1	2.3
Ohio	22.7	22.6
Pennsylvania Total	66.0	65.0
Anthracite	1.5	1.6
Bituminous	64.5	63.5
Tennessee	2.8	2.7
Virginia	29.7	25.3
West Virginia	152.4	153.5
Northern	42.4	42.2
Southern	110.0	111.3
Interior Total	**151.4**	**146.7**
Arkansas	s	s
Illinois	32.7	32.4
Indiana	35.1	35.0
Kansas	0.4	0.4
Kentucky, Western	27.2	28.2
Louisiana	4.1	3.1
Mississippi	3.8	3.5
Missouri	0.4	0.2
Oklahoma	2.0	1.6
Texas	45.5	41.9
Western Total	**619.4**	**621.0**
Alaska	1.4	1.3
Arizona	8.2	8.0
Colorado	36.3	36.4
Montana	41.8	43.4
New Mexico	25.9	24.5
North Dakota	30.4	29.6
Utah	26.0	24.3
Washington	2.6	-
Wyoming	446.7	453.6
Refuse Recovery	**0.8**	**1.2**
U.S. Total	**1,162.8**	**1,146.6**

s Value is less than 0.5 of the table metric, but value is included in any associated totals.
Note: Totals may not equal the sum of the components due to independent rounding.
Sources: U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Of the nine Census Divisions, coal is a minor component (less than 20 percent) in the fuel mix for electricity generation in two divisions, New England and Pacific, and a major component (more than 50 percent) in five divisions, East North Central, West North Central, South Atlantic, East South Central, and Mountain. In the other two divisions, coal is one of two main fuel sources for the electric power sector. In the Middle Atlantic, coal competes with nuclear power for dominance, while in the West South Central coal competes with natural gas.

Seven of the nine Census Divisions had increases in coal consumption in the electric power sector in 2007, with five of those seven having an increase of at least a million short tons. For 2007, two of the Census Divisions accounted for the majority of the increase in total coal consumption in the electric power sector. The South Atlantic Census Division accounted for 39 percent of the increase, while the East North Central accounted for another 29 percent. Total generation in the South Atlantic Census Division increased in 2007 by 3.4 percent (Table ES3), while total generation in the East North Central Division increased by 2.6 percent. Coal is the primary fuel for electricity generation in both Census Divisions. Coal generated 53.8 percent of the electricity in the South Atlantic Division and 69.6 percent in the East North Central Division during 2007. The growth in generation from coal in the South Atlantic Division resulted in an increase in coal consumption of 7.1 million short tons, up 4.0 percent to end the year at 185.9 million short tons. Coal consumption in the electric power sector in the East North Central Division increased by 2.3 percent to 237.0 million short tons, an increase of 5.3 million short tons in 2007.

In the West South Central Census Division coal competes with natural gas as the primary source for electric power generation, both accounting for about 40 percent of the Division's generation. Total generation in 2007 in the electric power sector in the West South Central Census Division grew by 2.6 percent, while coal-based generation grew by 1.3 percent. Total coal consumption in 2007 for the electric power sector in the West South Central Census Division increased by 2.7 million short tons, or 1.8 percent, ending the year at a total of 154.5 million short tons. Although the Pacific Census Division was the only division to have a decrease (1.4 percent) in total generation in the electric power sector in 2007, it had the fourth largest increase in coal consumption for the year. Even though coal is such a small part of the total generation for the division (usually less than 5 percent), the increase in coal consumption for electric power sector was 2.8 million short tons to a level of 10.4 million short tons. The substantial decrease in the generation by hydroelectric facilities, which generally account for about 40 percent of total generation, in the Pacific Census Division of 16.5 percent in 2007 helped to increase the need for coal to generate electricity.

Table ES3. Electric Power Sector Net Generation, 2006-2007 (Million Kilowatthours)

Census Division	2006	2007	Percent Change
New England			
Coal	19,411	19,791	2.0
Total	125,708	126,059	0.3
Middle Atlantic			
Coal	152,445	152,607	0.1
Total	415,192	428,648	3.2
East North Central			
Coal	451,510	456,905	1.2
Total	639,456	656,142	2.6
West North Central			
Coal	228,066	230,004	0.8
Total	301,627	311,406	3.2
South Atlantic			
Coal	423,393	438,823	3.6
Total	788,587	815,153	3.4
East South Central			
Coal	246,311	244,504	-0.7
Total	369,837	376,578	1.8
West South Central			
Coal	226,940	229,930	1.3
Total	544,000	558,246	2.6
Mountain			
Coal	209,239	209,121	-0.1
Total	348,918	363,605	4.2
Pacific			
Coal	12,420	16,706	34.5
Total	374,753	369,508	-1.4
U.S. Total			
Coal	1,969,737	1,998,390	1.5
Total	3,908,077	4,005,343	2.5

Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

Coal accounts for about three-fourths of generation in the West North Central Census Division. In 2007 total generation increased by 3.2 percent, while generation from coal grew by 0.8 percent. Total coal consumption for the electric power sector in the West North Central Division rose to 147.7 million short tons, an increase of 1.1 million short tons. Over half of the electricity generated in the Mountain Census Division is derived from coal. In 2007 total generation in the Mountain Census Division increased by 4.2 percent, while coal-based generation decreased by 0.1 percent for the year. Even though coal-based generation was about level, coal consumption in the electric power sector in the Mountain Division increased slightly by 0.5 million short tons to end the year at 115.2 million short tons. In the Middle Atlantic Census Division coal competes with nuclear power for the largest share of total generation. In 2007 total generation in the Middle Atlantic Division increased by 3.2 percent, while nuclear power generation increased by 1.2 percent and coal-based generation increased by only 0.1 percent. Total coal consumption for the Middle Atlantic Census Division remained essentially unchanged at a level of 70.0 million short tons. Coal accounts for less than one-sixth of total generation in the New England Census Division, and in 2007 total coal consumption for electricity generation grew by 43 thousand short tons.

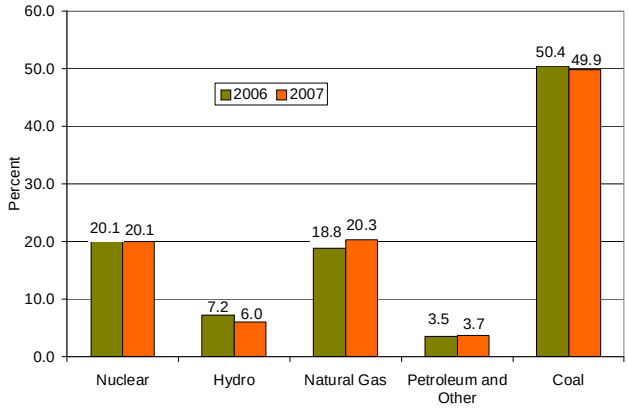
The East South Central Census Division was the only division to have lower coal consumption in the electric power sector in 2007. Coal is the dominant fuel for generation in the East South Central Division, typically accounting for about two-thirds of total generation in a year. Total electricity generation in the East South Central Division increased by 1.8 percent in 2007. Natural gas generation grew significantly in the Division, increasing by 28.0 percent while coal-based generation decreased by 0.7 percent. The slight decline in coal-based generation resulted in a decrease in coal consumption in the East South Central Census Division of 1.0 percent to end the year at a total of 115.5 million short tons.

Coal Prices

Domestic coal prices continued their increasing trend in 2007 rising for the fourth consecutive year. Although the average delivered prices in the consuming sectors increased for the year, it was at a slower rate than was experienced in 2006. The majority of coal sold in the electric power sector is through long-term contracts, in conjunction with spot purchases to supplement the demand. Coal prices in 2007 at electric utilities (a subset of the electric power sector) increased for a seventh consecutive year, to $36.06 per short ton ($1.78 per million Btu), an increase of 5.3 percent over the 2006 price. Coal prices at independent power producers in 2007 increased to $33.11 per short ton ($1.66 per million Btu), an increase of 0.2 percent. The average delivered price of coal to the other industrial sector increased by 5.3 percent to an average price of $54.42 per short ton in 2007. In 2007 the delivered price of coal to U.S. coke plants increased by 2.3 percent to reach an average price of $94.97 per short ton.

The average open market mine price of coal in 2007 increased 4.1 percent to a level of $26.20 per short ton. The average open market price of coal from underground mines rose by 5.3 percent to $40.29 per short ton while

Figure ES3. Share of Electric Power Sector Net Generation by Energy Source, 2006 vs. 2007



Source: Energy Information Administration, Form EIA-906, "Power Plant Report."

the average open market price of coal from surface mines increased by 2.8 percent to $19.41 per ton in 2007.

Coal Stocks

Total coal stocks at the end of 2007 were 192.8 million short tons, an increase of 3.8 million short tons from the prior year. Coal stocks held by producers and distributors were lower by 7.0 percent, as coal producers used stocks to supplement the increasing demand. Industrial users, including coke plants, held a total of 7.6 million short tons at the end of 2007, 1.9 million short tons less than the level at the start of the year. Coal stocks in the electric power sector continued to increase in 2007 as plants continued to rebuild stocks that had dropped substantially by the end of 2005 due to transportation problems. The electric power sector ended the year with a total of 151.2 million short tons, an increase of 10.3 million short tons, or 7.3 percent over the 2006 level.

Coal Production

Table 1. Coal Production and Number of Mines by State and Mine Type, 2007-2006

(Thousand Short Tons)

Coal-Producing State and Region[1]	2007		2006		Percent Change	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	**49**	**19,327**	**57**	**18,830**	**-14.0**	**2.6**
Underground	8	11,462	9	10,737	-11.1	6.7
Surface	41	7,865	48	8,092	-14.6	-2.8
Alaska	**1**	**1,324**	**1**	**1,425**	**-**	**-7.1**
Surface	1	1,324	1	1,425	-	-7.1
Arizona	**1**	**7,983**	**1**	**8,216**	**-**	**-2.8**
Surface	1	7,983	1	8,216	-	-2.8
Arkansas	**2**	**83**	**2**	**23**	**-**	**263.4**
Underground	1	80	1	18	-	357.0
Surface	1	2	1	5	-	-53.8
Colorado	**12**	**36,384**	**12**	**36,322**	**-**	**0.2**
Underground	8	27,610	7	26,659	14.3	3.6
Surface	4	8,774	5	9,663	-20.0	-9.2
Illinois	**21**	**32,445**	**22**	**32,729**	**-4.5**	**-0.9**
Underground	14	26,807	15	27,120	-6.7	-1.2
Surface	7	5,638	7	5,609	-	0.5
Indiana	**27**	**35,003**	**28**	**35,119**	**-3.6**	**-0.3**
Underground	7	10,604	7	10,736	-	-1.2
Surface	20	24,399	21	24,383	-4.8	0.1
Kansas	**2**	**420**	**2**	**426**	**-**	**-1.3**
Surface	2	420	2	426	-	-1.3
Kentucky Total	**417**	**115,280**	**442**	**120,848**	**-5.7**	**-4.6**
Underground	201	69,217	227	73,182	-11.5	-5.4
Surface	216	46,064	215	47,666	0.5	-3.4
Eastern	**394**	**87,068**	**416**	**93,607**	**-5.3**	**-7.0**
Underground	191	44,703	214	49,312	-10.7	-9.3
Surface	203	42,365	202	44,295	0.5	-4.4
Western	**23**	**28,212**	**26**	**27,241**	**-11.5**	**3.6**
Underground	10	24,513	13	23,870	-23.1	2.7
Surface	13	3,699	13	3,370	-	9.7
Louisiana	**2**	**3,127**	**2**	**4,114**	**-**	**-24.0**
Surface	2	3,127	2	4,114	-	-24.0
Maryland	**19**	**2,301**	**19**	**5,054**	**-**	**-54.5**
Underground	2	611	3	2,826	-33.3	-78.4
Surface	17	1,690	16	2,228	6.3	-24.1
Mississippi	**1**	**3,545**	**1**	**3,797**	**-**	**-6.6**
Surface	1	3,545	1	3,797	-	-6.6
Missouri	**2**	**236**	**2**	**394**	**-**	**-40.1**
Surface	2	236	2	394	-	-40.1
Montana	**6**	**43,390**	**6**	**41,823**	**-**	**3.7**
Underground	1	47	1	321	-	-85.3
Surface	5	43,343	5	41,502	-	4.4
New Mexico	**4**	**24,451**	**4**	**25,913**	**-**	**-5.6**
Underground	1	6,898	1	6,993	-	-1.4
Surface	3	17,553	3	18,919	-	-7.2
North Dakota	**4**	**29,606**	**4**	**30,411**	**-**	**-2.6**
Surface	4	29,606	4	30,411	-	-2.6
Ohio	**57**	**22,575**	**52**	**22,722**	**9.6**	**-0.6**
Underground	13	15,793	11	15,126	18.2	4.4
Surface	44	6,783	41	7,596	7.3	-10.7
Oklahoma	**9**	**1,648**	**10**	**1,998**	**-10.0**	**-17.5**
Underground	2	514	2	464	-	10.8
Surface	7	1,134	8	1,534	-12.5	-26.1
Pennsylvania Total	**264**	**65,048**	**270**	**66,029**	**-2.2**	**-1.5**
Underground	50	53,544	54	53,801	-7.4	-0.5
Surface	214	11,504	216	12,228	-0.9	-5.9
Anthracite	**72**	**1,564**	**74**	**1,529**	**-2.7**	**2.3**
Underground	15	224	17	272	-11.8	-17.8
Surface	57	1,340	57	1,256	-	6.7
Bituminous	**192**	**63,484**	**196**	**64,500**	**-2.0**	**-1.6**
Underground	35	53,320	37	53,529	-5.4	-0.4
Surface	157	10,164	159	10,972	-1.3	-7.4
Tennessee	**17**	**2,654**	**23**	**2,804**	**-26.1**	**-5.3**
Underground	5	892	10	1,191	-50.0	-25.1
Surface	12	1,763	13	1,613	-7.7	9.3
Texas	**11**	**41,948**	**12**	**45,548**	**-8.3**	**-7.9**
Surface	11	41,948	12	45,548	-8.3	-7.9
Utah	**10**	**24,307**	**13**	**26,018**	**-23.1**	**-6.6**
Underground	10	24,307	13	26,018	-23.1	-6.6

See footnotes at end of table.

Table 1. Coal Production and Number of Mines by State and Mine Type, 2007-2006 (Continued)

(Thousand Short Tons)

Coal-Producing State and Region [1]	2007		2006		Percent Change	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Virginia	**118**	**25,346**	**127**	**29,740**	**-7.1**	**-14.8**
Underground	71	15,731	76	18,681	-6.6	-15.8
Surface	47	9,615	51	11,059	-7.8	-13.0
Washington	**-**	**-**	**1**	**2,580**	**-100.0**	**-100.0**
Surface	-	-	1	2,580	-100.0	-100.0
West Virginia Total	**282**	**153,480**	**290**	**152,374**	**-2.8**	**0.7**
Underground	168	84,853	174	84,628	-3.4	0.3
Surface	114	68,627	116	67,746	-1.7	1.3
Northern	**43**	**42,219**	**49**	**42,398**	**-12.2**	**-0.4**
Underground	23	36,076	29	36,074	-20.7	*
Surface	20	6,144	20	6,324	-	-2.9
Southern	**239**	**111,260**	**241**	**109,976**	**-0.8**	**1.2**
Underground	145	48,777	145	48,554	-	0.5
Surface	94	62,483	96	61,421	-2.1	1.7
Wyoming	**20**	**453,568**	**21**	**446,742**	**-4.8**	**1.5**
Underground	1	2,822	1	519	-	443.5
Surface	19	450,746	20	446,223	-5.0	1.0
Appalachian Total	**1,200**	**377,800**	**1,254**	**391,159**	**-4.3**	**-3.4**
Underground	508	227,588	551	236,303	-7.8	-3.7
Surface	692	150,213	703	154,856	-1.6	-3.0
Northern	**383**	**132,144**	**390**	**136,203**	**-1.8**	**-3.0**
Underground	88	106,023	97	107,827	-9.3	-1.7
Surface	295	26,121	293	28,376	0.7	-7.9
Central	**768**	**226,329**	**807**	**236,127**	**-4.8**	**-4.1**
Underground	412	110,103	445	117,739	-7.4	-6.5
Surface	356	116,227	362	118,388	-1.7	-1.8
Southern	**49**	**19,327**	**57**	**18,830**	**-14.0**	**2.6**
Underground	8	11,462	9	10,737	-11.1	6.7
Surface	41	7,865	48	8,092	-14.6	-2.8
Interior Total	**100**	**146,668**	**107**	**151,389**	**-6.5**	**-3.1**
Underground	34	62,519	38	62,209	-10.5	0.5
Surface	66	84,149	69	89,180	-4.3	-5.6
Illinois Basin Total	**71**	**95,660**	**76**	**95,089**	**-6.6**	**0.6**
Underground	31	61,924	35	61,727	-11.4	0.3
Surface	40	33,736	41	33,362	-2.4	1.1
Western Total	**58**	**621,012**	**63**	**619,449**	**-7.9**	**0.3**
Underground	21	61,683	23	60,510	-8.7	1.9
Surface	37	559,329	40	558,939	-7.5	0.1
Powder River Basin	**17**	**479,496**	**18**	**472,202**	**-5.6**	**1.5**
Underground	-	-	-	-	-	-
Surface	17	479,496	18	472,202	-5.6	1.5
Uinta Region	**19**	**59,815**	**23**	**61,446**	**-17.4**	**-2.7**
Underground	16	51,446	19	52,189	-15.8	-1.4
Surface	3	8,368	4	9,257	-25.0	-9.6
East of Miss. River	**1,272**	**477,006**	**1,331**	**490,046**	**-4.4**	**-2.7**
West of Miss. River	**86**	**668,474**	**93**	**671,952**	**-7.5**	**-0.5**
U.S. Subtotal	**1,358**	**1,145,480**	**1,424**	**1,161,997**	**-4.6**	**-1.4**
Refuse Recovery	**16**	**1,156**	**14**	**752**	**14.3**	**53.6**
U.S. Total	**1,374**	**1,146,635**	**1,438**	**1,162,750**	**-4.5**	**-1.4**

[1] For a definition of coal producing regions, see the Glossary.

* Absolute percentage less than 0.05.

- = No data are reported.

Note: • Totals may not equal sum of components because of independent rounding.

Source: • U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 2. Coal Production and Number of Mines by State, County, and Mine Type, 2007

(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	**8**	**11,462**	**41**	**7,865**	**49**	**19,327**
Bibb	-	-	1	33	1	33
Cullman	-	-	1	503	1	503
Franklin	-	-	1	153	1	153
Jackson	-	-	3	247	3	247
Jefferson	2	2,362	8	1,232	10	3,594
Marion	-	-	2	60	2	60
Shelby	1	95	3	317	4	413
Tuscaloosa	4	8,903	6	1,778	10	10,681
Walker	1	102	13	2,804	14	2,906
Winston	-	-	3	738	3	738
Alaska	**-**	**-**	**1**	**1,324**	**1**	**1,324**
Yukon-Koyukuk Division	-	-	1	1,324	1	1,324
Arizona	**-**	**-**	**1**	**7,983**	**1**	**7,983**
Navajo	-	-	1	7,983	1	7,983
Arkansas	**1**	**80**	**1**	**2**	**2**	**83**
Sebastian	1	80	1	2	2	83
Colorado	**8**	**27,610**	**4**	**8,774**	**12**	**36,384**
Delta	1	5,481	-	-	1	5,481
Garfield	1	247	-	-	1	247
Gunnison	2	11,698	-	-	2	11,698
La Plata	2	470	-	-	2	470
Moffat	-	-	3	8,368	3	8,368
Montrose	-	-	1	406	1	406
Rio Blanco	1	1,424	-	-	1	1,424
Routt	1	8,290	-	-	1	8,290
Illinois	**14**	**26,807**	**7**	**5,638**	**21**	**32,445**
Gallatin	-	-	1	2,070	1	2,070
Jackson	1	19	2	1,579	3	1,598
Macoupin	3	4,488	-	-	3	4,488
Perry	1	447	3	1,051	4	1,498
Randolph	1	2,695	-	-	1	2,695
Saline	3	11,334	-	-	3	11,334
Sangamon	1	2,090	-	-	1	2,090
Vermilion	1	1,375	-	-	1	1,375
Wabash	1	386	1	938	2	1,324
White	1	2,897	-	-	1	2,897
Williamson	1	1,076	-	-	1	1,076
Indiana	**7**	**10,604**	**20**	**24,399**	**27**	**35,003**
Daviess	-	-	2	3,556	2	3,556
Dubois	-	-	1	674	1	674
Gibson	3	4,313	4	9,722	7	14,034
Knox	2	2,628	4	3,346	6	5,974
Pike	1	2,624	6	2,312	7	4,936
Sullivan	1	1,039	-	-	1	1,039
Vigo	-	-	2	4,063	2	4,063
Warrick	-	-	1	727	1	727
Kansas	**-**	**-**	**2**	**420**	**2**	**420**
Bourbon	-	-	1	211	1	211
Linn	-	-	1	209	1	209
Kentucky	**201**	**69,217**	**216**	**46,064**	**417**	**115,280**
Bell	5	1,179	14	2,362	19	3,541
Breathitt	2	1,029	7	1,141	9	2,170
Clay	-	-	2	24	2	24
Daviess	-	-	1	232	1	232
Floyd	28	1,613	13	2,880	41	4,493
Harlan	35	7,999	17	2,391	52	10,390
Henderson	1	1,357	2	1,217	3	2,574
Hopkins	3	7,702	2	306	5	8,007
Jackson	-	-	3	71	3	71
Johnson	2	210	4	332	6	542
Knott	25	5,329	13	2,699	38	8,028
Knox	7	65	7	167	14	232
Laurel	-	-	1	84	1	84
Lawrence	-	-	9	1,165	9	1,165
Leslie	6	2,522	9	2,028	15	4,550
Letcher	17	4,745	18	1,396	35	6,141
Magoffin	-	-	7	2,354	7	2,354
Martin	8	3,511	5	1,769	13	5,280

See footnotes at end of table.

Table 2. Coal Production and Number of Mines by State, County, and Mine Type, 2007 (Continued)

(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Kentucky (continued)						
Morgan	-	-	3	21	3	21
Muhlenberg	1	2,974	7	1,941	8	4,915
Owsley	-	-	3	25	3	25
Perry	8	3,551	26	12,750	34	16,301
Pike	45	12,811	41	8,614	86	21,426
Union	2	5,065	1	3	3	5,067
Webster	3	7,416	-	-	3	7,416
Whitley	3	138	1	92	4	230
Louisiana	-	-	**2**	**3,127**	**2**	**3,127**
De Soto	-	-	1	2,623	1	2,623
Red River	-	-	1	504	1	504
Maryland	**2**	**611**	**17**	**1,690**	**19**	**2,301**
Allegany	1	246	11	1,163	12	1,409
Garrett	1	365	6	527	7	892
Mississippi	-	-	**1**	**3,545**	**1**	**3,545**
Choctaw	-	-	1	3,545	1	3,545
Missouri	-	-	**2**	**236**	**2**	**236**
Bates	-	-	2	236	2	236
Montana	**1**	**47**	**5**	**43,343**	**6**	**43,390**
Big Horn	-	-	3	30,401	3	30,401
Musselshell	1	47	-	-	1	47
Richland	-	-	1	358	1	358
Rosebud	-	-	1	12,583	1	12,583
New Mexico	**1**	**6,898**	**3**	**17,553**	**4**	**24,451**
McKinley	-	-	2	9,023	2	9,023
San Juan	1	6,898	1	8,530	2	15,428
North Dakota	-	-	**4**	**29,606**	**4**	**29,606**
McLean	-	-	1	7,789	1	7,789
Mercer	-	-	2	17,923	2	17,923
Oliver	-	-	1	3,894	1	3,894
Ohio	**13**	**15,793**	**44**	**6,783**	**57**	**22,575**
Athens	1	288	-	-	1	288
Belmont	1	4,595	5	1,023	6	5,618
Carroll	1	246	1	141	2	387
Columbiana	-	-	4	294	4	294
Coshocton	-	-	2	172	2	172
Guernsey	-	-	1	4	1	4
Harrison	2	1,265	10	1,240	12	2,506
Jackson	-	-	1	349	1	349
Jefferson	4	826	4	165	8	991
Mahoning	-	-	2	11	2	11
Monroe	1	7,142	-	-	1	7,142
Muskingum	-	-	1	169	1	169
Noble	-	-	2	617	2	617
Perry	2	946	2	630	4	1,576
Stark	-	-	4	293	4	293
Tuscarawas	1	485	4	1,159	5	1,644
Vinton	-	-	1	516	1	516
Oklahoma	**2**	**514**	**7**	**1,134**	**9**	**1,648**
Craig	-	-	1	298	1	298
Haskell	-	-	1	139	1	139
Le Flore	2	514	3	469	5	983
Nowata	-	-	1	227	1	227
Okmulgee	-	-	1	1	1	1
Pennsylvania	**50**	**53,544**	**214**	**11,504**	**264**	**65,048**
Allegheny	-	-	3	98	3	98
Armstrong	8	3,532	13	889	21	4,422
Beaver	1	322	-	-	1	322
Bedford	-	-	1	8	1	8
Butler	-	-	4	499	4	499
Cambria	2	812	11	411	13	1,224
Cameron	-	-	1	28	1	28
Centre	-	-	1	18	1	18
Clarion	-	-	4	331	4	331
Clearfield	2	1,301	39	2,622	41	3,923
Columbia	-	-	3	136	3	136
Dauphin	1	3	-	-	1	3
Elk	1	283	6	289	7	572
Fayette	-	-	12	651	12	651
Greene	8	39,933	1	13	9	39,945

See footnotes at end of table.

Table 2. Coal Production and Number of Mines by State, County, and Mine Type, 2007 (Continued)

(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Pennsylvania (continued)						
Indiana	5	1,867	19	690	24	2,557
Jefferson	1	162	12	344	13	506
Lackawanna	-	-	2	23	2	23
Lawrence	-	-	2	20	2	20
Luzerne	-	-	8	235	8	235
Lycoming	-	-	1	248	1	248
Mercer	-	-	1	79	1	79
Northumberland	3	160	5	46	8	206
Schuylkill	11	60	39	901	50	961
Somerset	6	1,503	16	2,439	22	3,942
Tioga	-	-	1	8	1	8
Venango	-	-	2	38	2	38
Washington	1	3,606	2	286	3	3,892
Westmoreland	-	-	5	153	5	153
Tennessee	**5**	**892**	**12**	**1,763**	**17**	**2,654**
Anderson	-	-	2	121	2	121
Campbell	3	432	2	296	5	728
Claiborne	2	460	7	1,343	9	1,802
Fentress	-	-	1	3	1	3
Texas	**-**	**-**	**11**	**41,948**	**11**	**41,948**
Atascosa	-	-	1	3,121	1	3,121
Bastrop	-	-	1	4,121	1	4,121
Freestone	-	-	1	3,873	1	3,873
Harrison	-	-	1	4,153	1	4,153
Hopkins	-	-	1	2,134	1	2,134
Leon	-	-	1	6,779	1	6,779
Panola	-	-	2	8,330	2	8,330
Robertson	-	-	1	1,903	1	1,903
Rusk	-	-	1	4,109	1	4,109
Titus	-	-	1	3,425	1	3,425
Utah	**10**	**24,307**	**-**	**-**	**10**	**24,307**
Carbon	5	11,893	-	-	5	11,893
Emery	4	5,702	-	-	4	5,702
Sevier	1	6,712	-	-	1	6,712
Virginia	**71**	**15,731**	**47**	**9,615**	**118**	**25,346**
Buchanan	22	4,786	17	2,991	39	7,777
Dickenson	11	1,910	4	230	15	2,140
Lee	2	313	2	494	4	807
Russell	7	934	2	138	9	1,073
Tazewell	4	1,112	2	53	6	1,165
Wise	25	6,676	20	5,709	45	12,385
West Virginia	**168**	**84,853**	**114**	**68,627**	**282**	**153,480**
Barbour	4	1,522	2	152	6	1,674
Boone	25	12,732	17	20,348	42	33,080
Brooke	-	-	2	406	2	406
Clay	2	189	1	3,564	3	3,754
Fayette	8	2,210	13	3,634	21	5,844
Grant	1	125	-	-	1	125
Greenbrier	5	659	1	145	6	805
Harrison	3	6,584	5	375	8	6,959
Kanawha	11	6,253	9	4,879	20	11,133
Lincoln	3	1,084	-	-	3	1,084
Logan	11	4,219	11	9,938	22	14,157
Marion	1	6,642	2	52	3	6,694
Marshall	2	9,746	-	-	2	9,746
Mason	1	601	-	-	1	601
McDowell	30	2,990	17	2,693	47	5,683
Mineral	-	-	2	55	2	55
Mingo	16	5,491	12	7,918	28	13,409
Monongalia	3	5,188	3	655	6	5,843
Nicholas	3	1,104	5	3,389	8	4,493
Preston	1	1,470	1	1	2	1,471
Raleigh	16	4,817	3	2,741	19	7,557
Randolph	2	445	1	2	3	448
Tucker	1	2,786	-	-	1	2,786
Upshur	2	639	-	-	2	639
Wayne	3	3,643	2	1,120	5	4,763
Webster	3	928	2	4,446	5	5,374
Wyoming	11	2,784	3	2,114	14	4,899
Wyoming	**1**	**2,822**	**19**	**450,746**	**20**	**453,568**

See footnotes at end of table.

Table 2. Coal Production and Number of Mines by State, County, and Mine Type, 2007 (Continued)

(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Wyoming (continued)						
Campbell	-	-	12	402,037	12	402,037
Carbon	-	-	1	120	1	120
Converse	-	-	1	34,475	1	34,475
Hot Springs	-	-	1	s	1	s
Lincoln	-	-	1	5,190	1	5,190
Sweetwater	1	2,822	3	8,924	4	11,746
U.S. Subtotal	**563**	**351,790**	**795**	**793,690**	**1,358**	**1,145,480**
Refuse Recovery	**-**	**-**	**-**	**-**	**16**	**1,156**
U.S. Total	**563**	**351,790**	**795**	**793,690**	**1,374**	**1,146,635**

s Value is less than 0.05 of the table metric, but value is included in any associated total.

- = No data are reported.

Note: • Totals may not equal sum of components because of independent rounding.

Source: • U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 3. Underground Coal Production by State and Mining Method, 2007

(Thousand Short Tons)

Coal-Producing State and Region[1]	Continuous[2]	Conventional and Other[3]	Longwall[4]	Total
Alabama	197	s	11,264	11,462
Arkansas	80	-	-	80
Colorado	710	7	26,892	27,610
Illinois	17,664	-	9,143	26,807
Indiana	10,604	-	-	10,604
Kentucky Total	67,691	810	716	69,217
Eastern	43,177	810	716	44,703
Western	24,513	-	-	24,513
Maryland	611	-	-	611
Montana	47	-	-	47
New Mexico	-	-	6,898	6,898
Ohio	2,791	1,265	11,737	15,793
Oklahoma	514	-	-	514
Pennsylvania Total	10,740	60	42,745	53,544
Anthracite	171	52	-	224
Bituminous	10,568	7	42,745	53,320
Tennessee	892	-	-	892
Utah	635	-	23,671	24,307
Virginia	12,897	16	2,817	15,731
West Virginia Total	47,427	24	37,401	84,853
Northern	6,371	9	29,696	36,076
Southern	41,057	15	7,705	48,777
Wyoming	-	-	2,822	2,822
Appalachian Total	**118,732**	**2,176**	**106,679**	**227,588**
Northern	20,512	1,334	84,177	106,023
Central	98,023	842	11,238	110,103
Southern	197	s	11,264	11,462
Interior Total	**53,376**	-	**9,143**	**62,519**
Illinois Basin	52,781	-	9,143	61,924
Western Total	**1,392**	**7**	**60,284**	**61,683**
Powder River Basin	-	-	-	-
Uinta Region	882	-	50,564	51,446
East of Miss. River	**171,514**	**2,176**	**115,822**	**289,512**
West of Miss. River	**1,987**	**7**	**60,284**	**62,278**
U.S. Total	**173,500**	**2,184**	**176,106**	**351,790**

[1] For a definition of coal producing regions, see the Glossary.

[2] Mines that produce greater than 50 percent of their coal by continuous mining methods.

[3] Mines that produce greater than 50 percent of their coal by conventional mining methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous conventional split in mining methods, or mines that produce less than 10,000 short tons, which are not required to provide data.

[4] Mines that have any production from the longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

s Value is less than 0.05 of the table metric, but value is included in any associated total.

- = No data are reported.

Note: • Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 4. Coal Production by Coalbed Thickness and Mine Type, 2007

(Thousand Short Tons)

Coalbed Thickness (inches)	Underground	Surface	Total
< 7	-	274	274
7-12	-	3,426	3,426
13-18	252	6,311	6,563
19-24	731	13,535	14,266
25-30	3,797	20,461	24,258
31-36	16,998	29,016	46,014
37-42	24,733	19,221	43,955
43-48	35,786	29,982	65,767
49-54	27,886	23,577	51,463
55-60	41,122	25,184	66,306
61-66	34,433	10,378	44,811
67-72	58,805	25,183	83,988
73-78	7,390	1,291	8,681
79-84	18,853	27,025	45,878
85-90	7,927	3,114	11,041
91-96	13,667	11,760	25,427
97-102	13,016	6,191	19,208
103-108	7,375	8,265	15,640
109-114	4,872	13,363	18,235
115-120	640	2,715	3,354
> 120	33,322	512,689	546,011
Unknown[1]	**187**	**727**	**2,070**
U.S. Total	**351,790**	**793,690**	**1,146,635**

[1] Includes mines with production of less than 10,000 short tons, which are not required to provide data, and refuse recovery.

- = No data are reported.

Note: • Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 5. Coal Production and Coalbed Thickness by Major Coalbeds and Mine Type, 2007

Coalbed ID Number[1] Coalbed Name	Production (thousand short tons)			Thickness (inches)		
	Underground	Surface	Total	Average[2]	Low	High
1699 Wyodak	-	389,195	389,195	759	81	906
0036 Pittsburgh	82,448	3,149	85,598	72	20	108
0489 No. 9	38,917	9,399	48,317	61	24	73
0111 Coalburg	7,540	26,437	33,977	76	10	169
1697 Canyon	-	28,473	28,473	658	375	804
1569 Beulah-Zap	-	27,578	27,578	179	132	210
0484 Herrin (Illinois No. 6)	19,619	3,512	23,131	69	46	96
1696 Anderson-Dietz 1-Dietz 2	-	20,462	20,462	215	80	660
1787 Roland	-	18,844	18,844	486	382	660
0151 Upper Elkhorn No. 3	13,866	4,698	18,565	46	10	150
1808 Rosebud	-	16,898	16,898	261	219	276
0084 Lower Kittanning	8,365	8,204	16,569	49	11	96
1753 Somerset B	13,229	-	13,229	184	96	240
0135 Hazard No. 4	6,250	6,606	12,857	64	16	138
0168 Lower Elkhorn	10,215	1,975	12,190	53	11	84
0121 Winifrede	4,196	7,181	11,377	68	7	120
0103 Stockton-Lewiston	3,612	7,417	11,029	66	12	112
0176 Eagle	8,943	1,312	10,256	47	9	66
1488 Fruitland No. 8	6,898	3,327	10,225	167	136	199
0157 Alma	5,525	4,404	9,930	43	10	65
0071 Upper Freeport	6,613	3,055	9,669	53	15	84
0100 Hazard No. 8	1,302	7,819	9,121	43	11	74
0280 Blue Creek	7,876	752	8,627	61	8	200
0142 Williamson (Amburgy)	5,324	3,253	8,577	43	6	80
1750 Wadge	8,290	-	8,290	100	100	100
Major Coalbeds Total	**259,028**	**603,952**	**862,980**	**420**	**6**	**906**
Other Coalbeds	**92,575**	**189,010**	**281,585**	**78**	**4**	**413**
Unknown[3]	**187**	**727**	**2,070**	**NA**	**NA**	**NA**
U.S. Total	**351,790**	**793,690**	**1,146,635**	**336**	**4**	**1,272**

[1] The coalbed ID number is a unique code assigned by EIA to each correlated coalbed or to coal-bearing geologic formations, coal groups, or coal zones. See Coalbed name discussion in note below.

[2] Average thickness is the bed thickness weighted by bed production.

[3] Includes mines with production of less than 10,000 short tons, which are not required to provide data, and refuse recovery.

- = No data are reported.

NA = Not Available.

Notes: • Major coalbeds for this table are the top 25 producing coalbeds. The category "Other Coalbeds" includes all coalbeds from which less than 8.3 million short tons were produced during the year. In some regions, coalbeds are characteristically discontinuous or uncorrelatable from one location to another, and production is identified by the geological formations, coal groups, or coal zones of the native rock where the coalbeds occur. These types of coalbeds are found primarily in the Rocky Mountain States and even in the Gulf Coast lignite belt. Coalbeds of these types are also included in "Other Coalbeds," even though production may exceed 8.3 million short tons. Totals may not equal sum of components due to independent rounding. • The coalbed name given is the name most commonly used in the State having the greatest production from that coalbed. The States having greatest production for each coalbed are Alabama (coalbed 0280), Colorado (1750 and 1753); Illinois (0484); Eastern Kentucky (0100, 0135, 0142, 0151, and 0168); Western Kentucky (0489); Montana (1696 and 1808); New Mexico (1488); North Dakota (1569); Pennsylvania (0036 and 0071); West Virginia (0084, 0103, 0111, 0121, 0157, and 0176); and Wyoming (1697, 1699, and 1787). In some other States where these are major producing beds, the following alternative coalbed names are also used: 0084, No 5 (Ohio); 0111, Peach Orchard (Eastern Kentucky); 0121, Quakertown (Pennsylvania); 0135, Windrock (Tennessee); Phillips (Virginia); Chilton (West Virginia); 0142, Lower Splint (Virginia); 0151, Jellico (Tennessee); Taggert (Virginia); Cedar Grove (West Virginia); 0157, Elkhorn No. 1 (East Kentucky); Rich Mountain (Tennessee); 0168, Imboden (Virginia); No 2 Gas (West Virginia); 0176, Middle Eagle (West Virginia); 0484, No 11 (Western Kentucky); 0489, No 5 (Illinois and Indiana).

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 6. Coal Production and Number of Mines by State and Coal Rank, 2007

(Thousand Short Tons)

Coal-Producing State and Region[1]	Bituminous		Subbituminous		Lignite		Anthracite		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	49	19,327	-	-	-	-	-	-	49	19,327
Alaska	-	-	1	1,324	-	-	-	-	1	1,324
Arizona	1	7,983	-	-	-	-	-	-	1	7,983
Arkansas	2	83	-	-	-	-	-	-	2	83
Colorado	9	28,016	3	8,368	-	-	-	-	12	36,384
Illinois	21	32,445	-	-	-	-	-	-	21	32,445
Indiana	27	35,003	-	-	-	-	-	-	27	35,003
Kansas	2	420	-	-	-	-	-	-	2	420
Kentucky Total	417	115,280	-	-	-	-	-	-	417	115,280
Eastern	394	87,068	-	-	-	-	-	-	394	87,068
Western	23	28,212	-	-	-	-	-	-	23	28,212
Louisiana	-	-	-	-	2	3,127	-	-	2	3,127
Maryland	19	2,301	-	-	-	-	-	-	19	2,301
Mississippi	-	-	-	-	1	3,545	-	-	1	3,545
Missouri	2	236	-	-	-	-	-	-	2	236
Montana	-	-	5	43,031	1	358	-	-	6	43,390
New Mexico[2]	1	6,898	3	17,553	-	-	-	-	4	24,451
North Dakota	-	-	-	-	4	29,606	-	-	4	29,606
Ohio	57	22,575	-	-	-	-	-	-	57	22,575
Oklahoma	9	1,648	-	-	-	-	-	-	9	1,648
Pennsylvania Total	192	63,484	-	-	-	-	72	1,564	264	65,048
Anthracite	-	-	-	-	-	-	72	1,564	72	1,564
Bituminous	192	63,484	-	-	-	-	-	-	192	63,484
Tennessee	17	2,654	-	-	-	-	-	-	17	2,654
Texas	-	-	-	-	11	41,948	-	-	11	41,948
Utah	10	24,307	-	-	-	-	-	-	10	24,307
Virginia	118	25,346	-	-	-	-	-	-	118	25,346
West Virginia Total	282	153,480	-	-	-	-	-	-	282	153,480
Northern	43	42,219	-	-	-	-	-	-	43	42,219
Southern	239	111,260	-	-	-	-	-	-	239	111,260
Wyoming	1	120	19	453,448	-	-	-	-	20	453,568
Appalachian Total	**1,128**	**376,236**	**-**	**-**	**-**	**-**	**72**	**1,564**	**1,200**	**377,800**
Northern	311	130,580	-	-	-	-	72	1,564	383	132,144
Central	768	226,329	-	-	-	-	-	-	768	226,329
Southern	49	19,327	-	-	-	-	-	-	49	19,327
Interior Total	**86**	**98,047**	**-**	**-**	**14**	**48,620**	**-**	**-**	**100**	**146,668**
Illinois Basin	71	95,660	-	-	-	-	-	-	71	95,660
Western Total	**23**	**67,323**	**30**	**523,724**	**5**	**29,965**	**-**	**-**	**58**	**621,012**
Powder River Basin	-	-	17	479,496	-	-	-	-	17	479,496
Uinta Region	16	51,446	3	8,368	-	-	-	-	19	59,815
East of Miss. River	**1,199**	**471,897**	**-**	**-**	**1**	**3,545**	**72**	**1,564**	**1,272**	**477,006**
West of Miss. River	**38**	**69,710**	**30**	**523,724**	**18**	**75,040**	**-**	**-**	**86**	**668,474**
U.S. Subtotal	**1,237**	**541,607**	**30**	**523,724**	**19**	**78,585**	**72**	**1,564**	**1,358**	**1,145,480**
Refuse Recovery	**15**	**1,151**	**-**	**-**	**-**	**-**	**1**	**4**	**16**	**1,156**
U.S. Total	**1,252**	**542,758**	**30**	**523,724**	**19**	**78,585**	**73**	**1,568**	**1,374**	**1,146,635**

[1] For a definition of coal producing regions, see Glossary.

[2] One Mine in New Mexico periodically produces both bituminous and subbituminous coal. When this occurs, it is double counted as a subbituminous and bituminous mine, but is not double counted in the total.

- = No data are reported.

Note: • Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 7. Coal Production by State, Mine Type, and Union Status, 2007

(Thousand Short Tons)

Coal-Producing State and Region[1]	Union		Nonunion		Total	
	Underground	Surface	Underground	Surface	Underground	Surface
Alabama	11,264	-	197	7,862	11,462	7,862
Alaska	-	1,324	-	-	-	1,324
Arizona	-	7,983	-	-	-	7,983
Arkansas	-	-	80	-	80	-
Colorado	1,424	2,883	26,178	5,891	27,602	8,774
Illinois	8,352	-	18,455	5,638	26,807	5,638
Indiana	-	-	10,604	24,399	10,604	24,399
Kansas	-	-	-	420	-	420
Kentucky Total	5,627	1,080	63,486	44,779	69,113	45,859
Eastern	824	1,080	43,776	41,083	44,600	42,163
Western	4,803	-	19,710	3,696	24,513	3,696
Louisiana	-	-	-	3,127	-	3,127
Maryland	-	-	611	1,666	611	1,666
Mississippi	-	-	-	3,545	-	3,545
Missouri	-	-	-	236	-	236
Montana	-	27,631	47	15,712	47	43,343
New Mexico	6,898	12,194	-	5,359	6,898	17,553
North Dakota	-	6,861	-	22,745	-	29,606
Ohio	4,595	-	11,198	6,755	15,793	6,755
Oklahoma	-	-	514	1,133	514	1,133
Pennsylvania Total	21,695	614	31,814	10,500	53,509	11,114
Anthracite	-	305	196	895	196	1,199
Bituminous	21,695	310	31,618	9,605	53,313	9,915
Tennessee	-	-	892	1,750	892	1,750
Texas	-	25,992	-	15,957	-	41,948
Utah	5,300	-	19,007	-	24,307	-
Virginia	1,623	232	14,091	9,364	15,714	9,596
West Virginia Total	33,330	9,330	51,498	59,255	84,829	68,585
Northern	26,910	-	9,156	6,133	36,067	6,133
Southern	6,420	9,330	42,342	53,122	48,762	62,452
Wyoming	2,822	8,842	-	441,904	2,822	450,746
Appalachian Total	**73,330**	**11,256**	**154,078**	**138,235**	**227,408**	**149,492**
Northern	53,199	614	52,779	25,054	105,979	25,668
Central	8,867	10,642	101,101	105,319	109,968	115,961
Southern	11,264	-	197	7,862	11,462	7,862
Interior Total	**13,155**	**25,992**	**49,364**	**58,151**	**62,519**	**84,143**
Illinois Basin	13,155	-	48,770	33,733	61,924	33,733
Western Total	**16,444**	**67,718**	**45,232**	**491,610**	**61,676**	**559,328**
Powder River Basin	-	27,272	-	452,224	-	479,496
Uinta Region	6,724	2,478	44,723	5,891	51,446	8,368
East of Miss. River	**86,485**	**11,256**	**202,848**	**175,514**	**289,333**	**186,770**
West of Miss. River	**16,444**	**93,709**	**45,827**	**512,483**	**62,270**	**606,193**
Unknown[2]	**-**	**-**	**-**	**-**	**187**	**727**
U.S. Total	**102,929**	**104,966**	**248,675**	**687,997**	**351,790**	**793,690**

[1] For a definition of coal producing regions, see Glossary.

[2] Includes mines with production of less than 10,000 short tons, which are not required to provide data.

- = No data are reported.

Note: • Totals may not equal sum of components because of independent rounding. Excludes refuse recovery operations.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 8. Coal Disposition by State, 2007

(Thousand Short Tons)

Coal-Producing State	Open Market Sales[1]	Captive Sales/Transactions[2]	Total
Alabama	19,350	-	19,350
Alaska	W	-	W
Arizona	W	-	W
Arkansas	W	-	W
Colorado	W	W	35,961
Illinois	29,830	3,206	33,037
Indiana	30,556	6,227	36,783
Kansas	W	-	W
Kentucky Total	112,655	4,641	117,296
Eastern	W	W	89,122
Western	W	W	28,174
Louisiana	W	W	W
Maryland	2,179	-	2,179
Mississippi	W	-	W
Missouri	W	-	W
Montana	W	W	42,769
New Mexico	W	W	24,432
North Dakota	W	W	29,614
Ohio	21,909	1,222	23,130
Oklahoma	W	W	1,660
Pennsylvania Total	62,526	2,965	65,490
Anthracite	W	W	1,381
Bituminous	W	W	64,109
Tennessee	2,621	-	2,621
Texas	W	W	41,492
Utah	W	W	24,132
Virginia	17,789	8,048	25,837
West Virginia Total	138,738	14,428	153,166
Northern	38,796	3,746	42,541
Southern	99,942	10,683	110,625
Wyoming	375,775	75,462	451,237
U.S. Total[3]	**983,770**	**162,854**	**1,146,623**

[1] Open market sales include all coal sold on the open market to other coal companies or consumers.
[2] Captive sales transactions include all coal used by the producing company or sold to affiliated or parent companies.
[3] Excludes mines producing less than 10,000 short tons, which are not required to provide data, and refuse recovery.
- = No data are reported.
W = Data withheld to avoid disclosure.
Note: • Totals may not equal sum of components because of independent rounding.
Source: • Energy Information Administration Form EIA-7A, "Coal Production Report."

Table 9. Major U.S. Coal Mines, 2007

Rank	Mine Names/Company	Mine Type	State	Production (short tons)
1	North Antelope Rochelle Mine/Powder River Coal, LLC	Surface	Wyoming	91,523,280
2	Black Thunder/Thunder Basin Coal Company LLC	Surface	Wyoming	86,196,275
3	Cordero Mine/Cordero Mining Company	Surface	Wyoming	40,467,627
4	Jacobs Ranch Mine/Jacobs Ranch Coal Company	Surface	Wyoming	38,101,560
5	Antelope Coal Mine/Antelope Coal Company	Surface	Wyoming	34,474,682
6	Caballo Mine/Caballo Coal Company	Surface	Wyoming	31,172,396
7	Belle Ayr Mine/Foundation Coal West Incorporated	Surface	Wyoming	26,608,765
8	Buckskin Mine/Triton Coal Company	Surface	Wyoming	25,268,145
9	Eagle Butte Mine/Foundation Coal West Incorporated	Surface	Wyoming	24,985,991
10	Rawhide Mine/Caballo Coal Company	Surface	Wyoming	17,144,361
11	Spring Creek Coal Company/Spring Creek Coal Company	Surface	Montana	15,712,091
12	Freedom Mine/Coteau Properties Company	Surface	North Dakota	14,955,989
13	Rosebud Mine & Crusher/Conveyor/Western Energy Company	Surface	Montana	12,583,084
14	Enlow Fork Mine/Consol Pennsylvania Coal Company	Underground	Pennsylvania	11,222,052
15	Coal Creek Mine/Thunder Basin Coal Company LLC	Surface	Wyoming	10,216,194
16	Bailey Mine/Consol Pennsylvania Coal Company	Underground	Pennsylvania	9,827,946
17	McElroy Mine/McElroy Coal Company	Underground	West Virginia	9,667,258
18	Navajo Mine/BHP Navajo Coal Company	Surface	New Mexico	8,529,955
19	Foidel Creek Mine/Twentymile Coal Company	Underground	Colorado	8,290,117
20	Kayenta Mine/Peabody Western Coal Company	Surface	Arizona	7,982,584
21	Falkirk Mine/Falkirk Mining Company	Surface	North Dakota	7,788,852
22	Absaloka Mine/Westmoreland Resources Inc.	Surface	Montana	7,704,556
23	Cumberland Mine/Cumberland Coal Resources, LP	Underground	Pennsylvania	7,264,244
24	Century Mine/American Energy Corporation	Underground	Ohio	7,141,934
25	Galatia Mine/The American Coal Company	Underground	Illinois	7,009,160
26	Decker Mine/Decker Coal Company	Surface	Montana	6,984,546
27	San Juan Mine 1/San Juan Coal Company	Underground	New Mexico	6,898,040
28	West Elk Mine/Mountain Coal Company, L.L.C.	Underground	Colorado	6,874,101
29	Jewett Mine/Texas Westmoreland Coal Co.	Surface	Texas	6,779,166
30	Sufco/Canyon Fuel Company LLC	Underground	Utah	6,711,925
31	Loveridge No 22/Consolidation Coal Company	Underground	West Virginia	6,642,339
32	Robinson Run No 95/Consolidation Coal Company	Underground	West Virginia	6,502,004
33	Beckville Strip/Luminant Mining	Surface	Texas	6,172,298
34	Emerald Mine No 1/Emerald Coal Resources LP	Underground	Pennsylvania	5,674,111
35	Colowyo Mine/Colowyo Coal Company L P	Surface	Colorado	5,596,568
36	Bowie No 2 Mine/Bowie Resources LLC	Underground	Colorado	5,480,569
37	Lee Ranch Coal Company/Lee Ranch Coal Co. Div. Peabody	Surface	New Mexico	5,358,749
38	Dry Fork Mine/Western Fuels-Wyoming Inc	Surface	Wyoming	5,303,516
39	Kemmerer Mine/Chevron Mining Inc	Surface	Wyoming	5,190,147
40	Twilight MTR Surface Mine/Progress Coal	Surface	West Virginia	5,164,718
41	Blacksville No 2/Consolidation Coal Company	Underground	Pennsylvania	5,150,114
42	Wyodak/Wyodak Resources Development Co.	Surface	Wyoming	5,049,231
43	Elk Creek Mine/Oxbow Mining, LLC	Underground	Colorado	4,823,662
44	Cardinal/Warrior Coal LLC	Underground	Kentucky	4,650,696
45	Dotiki Mine/Webster County Coal	Underground	Kentucky	4,597,010
46	Powhatan No. 6 Mine/The Ohio Valley Coal Company	Underground	Ohio	4,594,616
47	West Ridge Mine/West Ridge Resources Inc	Underground	Utah	4,254,863
48	South Hallsville No 1 Mine/Sabine Mining Company	Surface	Texas	4,153,485
49	Hobet 21 Surface Mine/Hobet Mining LLC	Surface	West Virginia	4,145,752
50	Three Oaks/Luminant Mining	Surface	Texas	4,120,619
51	Oak Hill Strip/Luminant Mining	Surface	Texas	4,108,562
52	Federal No 2/Eastern Associated Coal LLC	Underground	West Virginia	4,020,116
	Subtotal			**706,840,621**
	All Other Mines			**439,794,724**
	U.S. Total			**1,146,635,345**

- = No data are reported.

Note: • Major mines are mines that produced more than 4 million short tons in 2007. The company is the firm operating the mine.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 10. Major U.S. Coal Producers, 2007

Rank	Company Name	Production (thousand short tons)	Percent of Total Production
1	Peabody Energy Corp	192,318	16.8
2	Rio Tinto Energy America	134,353	11.7
3	Arch Coal Inc	126,881	11.1
4	Foundation Coal Corp	71,828	6.3
5	CONSOL Energy Inc	65,178	5.7
6	Massey Energy Co	37,169	3.2
7	NACCO Industries Inc	34,069	3.0
8	Westmoreland Coal Co	30,392	2.7
9	Murray Energy Corp	27,571	2.4
10	Peter Kiewit Sons Inc	27,171	2.4
11	Energy Future Holdings Corp	25,992	2.3
12	Alliance Resource Operating Partners LP	24,237	2.1
13	Alpha Natural Resources LLC	21,592	1.9
14	Patriot Coal Corp	19,262	1.7
15	Intl Coal Group Inc (ICG)	17,856	1.6
16	Magnum Coal Co	16,112	1.4
17	BHP Billiton Ltd	15,428	1.3
18	Chevron Corp	11,991	1.0
19	PacifiCorp	11,776	1.0
20	Level 3 Communications	10,675	0.9
21	James River Coal Co	10,294	0.9
22	Trinity Coal Corp	8,710	0.8
23	Energy Coal Resources Inc	8,407	0.7
24	Walter Industries Inc	6,606	0.6
25	Wexford Capital LLC	6,504	0.6
26	Booth Energy Group	6,493	0.6
27	TECO Energy Inc	6,151	0.5
28	Western Fuels Association Inc	5,304	0.5
29	Rosebud Mining Co	5,104	0.4
30	Black Hills Corp	5,049	0.4
	Subtotal	**990,473**	**86.4**
	All Other Coal Producers	**156,162**	**13.6**
	U.S. Total	**1,146,635**	**100.0**

Note: • Major coal producers are companies that produced more than 5 million short tons in 2007. A controlling company of a mine is defined as the company "controlling the coal, particularly the sale of the coal." Most often, but not always, this is the owner of the mine.

Source: • COALdat, a product of RDI/Platts and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Productive Capacity

Table 11. Productive Capacity of Coal Mines by State, 2007, 2006

(Thousand Short Tons)

Coal-Producing State	2007			2006			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	14,870	12,511	27,381	16,540	9,888	26,428	-10.1	26.5	3.6
Alaska	-	W	W	-	W	W	-	W	W
Arizona	-	W	W	-	W	W	-	W	W
Arkansas	W	-	W	W	-	W	W	-	W
Colorado	W	W	41,369	32,836	11,099	43,935	W	W	-5.8
Illinois	36,813	7,826	44,639	35,560	7,914	43,473	3.5	-1.1	2.7
Indiana	12,219	29,171	41,390	12,122	27,821	39,944	0.8	4.9	3.6
Kansas	-	W	W	-	W	W	-	W	W
Kentucky Total	86,237	59,607	145,844	91,205	59,327	150,533	-5.4	0.5	-3.1
Eastern	56,022	54,645	110,668	63,278	54,664	117,942	-11.5	*	-6.2
Western	30,215	4,961	35,177	27,928	4,663	32,591	8.2	6.4	7.9
Louisiana	-	W	W	-	W	W	-	W	W
Maryland	W	W	3,105	W	W	5,891	W	W	-47.3
Mississippi	-	W	W	-	W	W	-	W	W
Missouri	-	W	W	-	W	W	-	W	W
Montana	W	W	47,323	W	W	45,546	W	W	3.9
New Mexico	W	W	28,250	W	W	29,400	W	W	-3.9
North Dakota	-	32,900	32,900	-	32,900	32,900	-	-	-
Ohio	18,491	15,802	34,293	17,810	16,667	34,477	3.8	-5.2	-0.5
Oklahoma	W	W	2,387	W	W	3,386	W	W	-29.5
Pennsylvania Total	59,130	15,890	75,020	59,830	16,143	75,973	-1.2	-1.6	-1.3
Anthracite	W	W	2,790	279	2,017	2,295	W	W	21.5
Bituminous	W	W	72,231	59,551	14,126	73,678	W	W	-2.0
Tennessee	896	3,416	4,313	1,738	2,109	3,846	-48.4	62.0	12.1
Texas	-	43,066	43,066	-	46,253	46,253	-	-6.9	-6.9
Utah	28,668	-	28,668	29,530	-	29,530	-2.9	-	-2.9
Virginia	19,827	11,256	31,083	20,716	11,784	32,500	-4.3	-4.5	-4.4
Washington	-	-	-	-	W	W	-	-100.0	-100.0
West Virginia Total	115,608	84,374	199,982	117,465	86,432	203,897	-1.6	-2.4	-1.9
Northern	40,853	7,446	48,299	39,587	6,394	45,982	3.2	16.4	5.0
Southern	74,755	76,928	151,683	77,878	80,037	157,915	-4.0	-3.9	-3.9
Wyoming	W	W	486,281	W	W	519,749	W	W	-6.4
U.S. Total	**438,336**	**900,142**	**1,338,478**	**448,895**	**941,432**	**1,390,327**	**-2.4**	**-4.4**	**-3.7**

* Absolute percentage less than 0.05.

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Excludes mines producing less than 10,000 short tons, which are not required to provide data and refuse recovery. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report."

Table 12. Capacity Utilization of Coal Mines by State, 2007, 2006

(Percent)

Coal-Producing State	2007			2006		
	Underground	Surface	Total	Underground	Surface	Total
Alabama	77.08	62.84	70.58	64.88	81.61	71.14
Alaska	-	W	W	-	W	W
Arizona	-	W	W	-	W	W
Arkansas	W	-	W	W	-	W
Colorado	W	W	87.93	81.19	87.06	82.67
Illinois	72.82	72.04	72.68	76.27	70.87	75.28
Indiana	86.78	83.64	84.57	88.57	87.61	87.90
Kansas	-	W	W	-	W	W
Kentucky Total	80.14	76.94	78.83	80.13	80.06	80.10
Eastern	79.61	77.16	78.40	77.77	80.75	79.15
Western	81.13	74.49	80.19	85.47	71.88	83.53
Louisiana	-	W	W	-	W	W
Maryland	W	W	73.32	W	W	85.34
Mississippi	-	W	W	-	W	W
Missouri	-	W	W	-	W	W
Montana	W	W	91.69	W	W	91.83
New Mexico	W	W	86.55	W	W	88.14
North Dakota	-	89.99	89.99	-	92.43	92.43
Ohio	85.41	42.75	65.75	84.93	45.40	65.82
Oklahoma	W	W	69.00	W	W	58.90
Pennsylvania Total	90.49	69.94	86.14	89.87	73.76	86.45
Anthracite	W	W	50.02	85.62	56.14	59.72
Bituminous	W	W	87.54	89.89	76.28	87.28
Tennessee	99.51	51.21	61.25	68.26	76.24	72.64
Texas	-	97.40	97.40	-	98.47	98.47
Utah	84.79	-	84.79	88.08	-	88.08
Virginia	79.26	85.26	81.43	90.02	93.58	91.31
Washington	-	-	-	-	W	W
West Virginia Total	73.38	81.29	76.71	72.01	78.32	74.68
Northern	88.28	82.37	87.37	91.11	98.30	92.11
Southern	65.23	81.18	73.32	62.30	76.72	69.61
Wyoming	W	W	93.27	W	W	85.95
U.S. Total	**80.21**	**88.09**	**85.51**	**79.93**	**85.22**	**83.51**

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Capacity utilization is the ratio of annual production to annual productive capacity. Excludes mines producing less than 10,000 short tons, which are not required to provide data and refuse recovery. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," for productive capacity, and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report," for annual production.

Table 13. Productive Capacity and Capacity Utilization of Underground Coal Mines by State and Mining Method, 2007

(Thousand Short Tons)

Coal-Producing State	Continuous[1]		Conventional and Other[2]		Longwall[3]		Total	
	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent
Alabama	W	W	-	-	W	W	14,870	77.08
Arkansas	W	W	-	-	-	-	W	W
Colorado	W	W	-	-	W	W	32,591	84.69
Illinois	W	W	-	-	W	W	36,813	72.82
Indiana	12,219	86.78	-	-	-	-	12,219	86.78
Kentucky Total	W	81.97	995	W	W	W	86,237	80.14
Eastern	W	82.45	995	W	W	W	56,022	79.61
Western	W	81.13	-	-	-	-	30,215	81.13
Maryland	W	W	-	-	-	-	W	W
Montana	W	W	-	-	-	-	W	W
New Mexico	-	-	-	-	W	W	W	W
Ohio	3,377	82.65	W	W	W	W	18,491	85.41
Oklahoma	W	W	-	-	-	-	W	W
Pennsylvania Total	13,945	77.01	W	W	W	W	59,130	90.49
Anthracite	W	W	W	W	-	-	W	W
Bituminous	W	W	-	-	W	W	W	W
Tennessee	896	99.51	-	-	-	-	896	99.51
Utah	W	W	-	-	W	W	28,668	84.79
Virginia	W	W	-	-	W	W	19,827	79.26
West Virginia Total	68,104	69.64	-	-	47,504	78.73	115,608	73.38
Northern	8,711	73.14	-	-	32,142	92.39	40,853	88.28
Southern	59,393	69.13	-	-	15,361	50.16	74,755	65.23
Wyoming	-	-	-	-	W	W	W	W
U.S. Total	**225,793**	**76.84**	**3,647**	**54.75**	**208,896**	**84.30**	**438,336**	**80.21**

[1] Mines that produce greater than 50 percent of their coal by continuous mining methods.

[2] Mines that produce greater than 50 percent of their coal by conventional mining methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous conventional split in mining method.

[3] Mines that have any production from the longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Productive capacity is the maximum amount of coal that can be produced annually. Capacity utilization is the ratio of total production to annual productive capacity. Excludes mines producing less than 10,000 short tons, which are not required to provide data and recovery operations. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," for productive capacity, and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report," for annual production.

Recoverable Reserves

Table 14. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State, 2007, 2006

(Million Short Tons)

Coal-Producing State	2007		2006		Percent Change Recoverable Coal Reserves
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	
Alabama	327	57.15	336	59.60	-2.6
Alaska	W	W	W	W	W
Arizona	W	W	W	W	W
Arkansas	W	W	W	W	-
Colorado	328	72.85	335	70.36	-2.1
Illinois	1,286	61.99	1,294	61.38	-0.7
Indiana	401	67.58	384	69.10	4.3
Kansas	W	W	W	W	W
Kentucky Total	1,182	59.91	1,134	54.76	4.3
Eastern	669	54.98	703	54.65	-4.8
Western	513	66.34	431	54.94	19.1
Louisiana	W	W	W	W	W
Maryland	24	61.75	28	60.48	-13.9
Mississippi	W	W	W	W	W
Missouri	W	W	W	W	W
Montana	1,251	88.01	1,211	87.33	3.3
New Mexico	483	90.64	504	90.56	-4.2
North Dakota	1,252	90.64	1,145	90.16	9.3
Ohio	333	73.00	291	73.10	14.5
Oklahoma	155	52.67	23	62.25	565.9
Pennsylvania Total	532	71.69	548	71.78	-2.8
Anthracite	28	62.59	16	66.86	73.3
Bituminous	504	72.19	531	71.93	-5.1
Tennessee	12	79.31	21	61.92	-40.9
Texas	737	90.04	730	90.79	1.1
Utah	211	57.92	243	57.80	-13.0
Virginia	256	56.25	273	55.85	-6.3
Washington	-	-	W	W	W
West Virginia Total	1,828	57.49	1,793	59.43	1.9
Northern	303	61.18	284	62.92	6.7
Southern	1,525	56.76	1,510	58.77	1.0
Wyoming	7,330	91.36	7,890	91.57	-7.1
U.S. Total	**18,584**	**79.92**	**18,880**	**80.28**	**-1.6**

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes mines producing less than 10,000 short tons, which are not required to provide data and refuse recovery. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 15. Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves, and Demonstrated Reserve Base by Mining Method, 2007

(Million Short Tons)

Coal-Resource State	Underground - Minable Coal			Surface - Minable Coal			Total		
	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
Alabama	275	485	963	52	2,264	3,178	327	2,749	4,141
Alaska	-	2,335	5,423	W	496	684	W	2,831	6,107
Arizona	-	-	-	W	-	-	W	-	-
Arkansas	W	127	272	-	101	144	W	228	417
Colorado	W	5,946	11,331	W	3,746	4,761	328	9,692	16,092
Georgia	-	1	2	-	1	2	-	2	4
Idaho	-	2	4	-	-	-	-	2	4
Illinois	1,253	27,893	87,811	33	10,064	16,536	1,286	37,957	104,347
Indiana	272	3,603	8,699	129	398	681	401	4,001	9,379
Iowa	-	807	1,732	-	320	457	-	1,127	2,189
Kansas	-	-	-	W	680	971	W	680	971
Kentucky Total	886	7,265	16,770	296	7,417	12,848	1,182	14,682	29,618
Eastern	503	553	990	166	5,154	9,229	669	5,707	10,219
Western	383	6,712	15,780	130	2,263	3,619	513	8,975	19,399
Louisiana	-	-	-	W	306	412	W	306	412
Maryland	W	313	571	W	41	60	24	354	631
Michigan	-	55	123	-	3	5	-	59	128
Mississippi	-	-	-	W	-	-	W	-	-
Missouri	-	689	1,479	W	3,157	4,509	W	3,846	5,988
Montana	W	35,922	70,957	W	38,934	48,166	1,251	74,856	119,123
New Mexico	W	2,788	6,128	W	4,156	5,929	483	6,944	12,057
North Carolina	-	5	11	-	-	-	-	5	11
North Dakota	-	-	-	1,252	6,849	8,978	1,252	6,849	8,978
Ohio	230	7,692	17,484	103	3,755	5,736	333	11,447	23,220
Oklahoma	W	573	1,229	W	224	320	155	797	1,549
Oregon	-	6	15	-	2	3	-	9	17
Pennsylvania Total	427	10,595	23,006	105	1,026	4,222	532	11,621	27,228
Anthracite	W	340	3,843	W	419	3,352	28	759	7,195
Bituminous	W	10,255	19,164	W	606	870	504	10,861	20,034
South Dakota	-	-	-	-	277	366	-	277	366
Tennessee	2	277	506	10	176	260	12	454	766
Texas	-	-	-	737	9,449	12,276	737	9,449	12,276
Utah	211	2,465	5,028	-	212	268	211	2,676	5,295
Virginia	208	596	1,062	48	171	536	256	767	1,598
Washington	-	674	1,332	-	6	8	-	681	1,340
West Virginia Total	1,285	15,395	28,845	543	2,274	3,605	1,828	17,669	32,450
Northern	271	NA	NA	32	NA	NA	303	NA	NA
Southern	1,014	NA	NA	511	NA	NA	1,525	NA	NA
Wyoming	W	22,946	42,493	W	16,728	20,198	7,330	39,674	62,692
U.S. Total	**5,827**	**149,457**	**333,277**	**12,757**	**113,232**	**156,118**	**18,584**	**262,689**	**489,395**

- = No data are reported.

W = Data withheld to avoid disclosure.

NA = Not Available.

Notes: • Recoverable coal reserves at producing mines represent the quantity of coal that can be recovered (i.e. mined) from existing coal reserves at reporting mines. • EIA's estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions or currently economically unattractive for mining, and after applying assumed mining recovery rates; see Glossary for criteria. • The effective date for the demonstrated reserve base, as customarily worded, is "Remaining as of January 1, 2008." These data are contemporaneous with the Recoverable Reserves at Producing Mines, customarily presented as of the end of the past year's mining, that is in this case, December 31, 2007. • The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations; see Glossary for criteria. • All reserve expressions exclude silt, culm, refuse bank, slurry dam, and dredge operations. • Reserves at Producing Mines exclude mines producing less than 10,000 short tons, which are not required to provide reserves data.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report," and EIA estimates.

Table 16. Recoverable Coal Reserves and Average Recovery Percentage at Producing Underground Coal Mines by State and Mining Method, 2007

(Million Short Tons)

Coal-Producing State	Continuous[1]		Conventional and Other[2]		Longwall[3]		Total	
	Recoverable Coal Reserves at Producing Mines	Average Recovery Percentage	Recoverable Coal Reserves at Producing Mines	Average Recovery Percentage	Recoverable Coal Reserves at Producing Mines	Average Recovery Percentage	Recoverable Coal Reserves at Producing Mines	Average Recovery Percentage
Alabama	W	W	-	-	W	W	275	52.75
Arkansas	W	W	-	-	-	-	W	W
Colorado	W	W	-	-	W	W	283	69.94
Illinois	W	W	-	-	W	W	1,253	61.57
Indiana	272	62.34	-	-	-	-	272	62.34
Kentucky Total	867	W	W	53.59	W	W	886	50.81
Eastern	483	W	W	53.59	W	W	503	46.23
Western	383	W	-	-	-	-	383	56.80
Maryland	W	W	-	-	-	-	W	W
Montana	W	W	-	-	-	-	W	W
New Mexico	-	-	-	-	W	W	W	W
Ohio	28	54.89	W	W	W	W	230	67.12
Oklahoma	W	W	-	-	-	-	W	W
Pennsylvania Total	120	61.03	W	W	W	W	427	70.16
Anthracite	W	W	W	W	-	-	W	W
Bituminous	W	W	-	-	W	W	W	W
Tennessee	2	44.98	-	-	-	-	2	44.98
Utah	W	W	-	-	W	W	211	57.92
Virginia	W	W	-	-	W	W	208	49.27
West Virginia Total	812	48.56	-	-	473	49.97	1,285	49.08
Northern	128	53.30	-	-	143	65.78	271	59.89
Southern	685	47.68	-	-	330	43.12	1,014	46.19
Wyoming	-	-	-	-	W	W	W	W
U.S. Total	**3,012**	**55.98**	**24**	**59.04**	**2,791**	**61.62**	**5,827**	**58.69**

[1] Mines that produce greater than 50 percent of their coal by continuous mining methods.

[2] Mines that produce greater than 50 percent of their coal by conventional mining methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous conventional split in mining method.

[3] Mines that have any production from the longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Recoverable coal reserves at producing mines represent the quantity of coal that can be recovered (i.e. mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes mines producing less than 10,000 short tons, which are not required to provide data and refuse recovery.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 17. Recoverable Coal Reserves and Average Recovery Percentage at Producing U.S. Mines by Mine Production Range and Mine Type, 2007

(Million Short Tons)

Mine Production Range (thousand short tons)	Underground		Surface		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
Over 1,000	3,825	60.73	11,791	90.60	15,616	83.29
500 to 1,000	715	47.79	201	85.16	917	56.00
200 to 500	491	52.91	368	73.52	860	61.74
100 to 200	165	53.49	103	76.95	267	62.49
50 to 100	153	48.98	115	59.63	268	53.53
10 to 50	477	69.50	64	78.56	542	70.58
U.S. Total	**5,827**	**58.69**	**12,757**	**89.61**	**18,584**	**79.92**

Note: • Recoverable coal reserves at producing mines represent the quantity of coal that can be recovered (i.e. mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes mines producing less than 10,000 short tons, which are not required to provide data and refuse recovery.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Employment

Table 18. Average Number of Employees by State and Mine Type, 2007, 2006

Coal-Producing State and Region[1]	2007			2006			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	2,458	1,392	3,850	2,621	1,574	4,195	-6.2	-11.6	-8.2
Alaska	-	99	99	-	96	96	-	3.1	3.1
Arizona	-	430	430	-	418	418	-	2.9	2.9
Arkansas	85	2	87	41	2	43	107.3	-	102.3
Colorado	1,729	520	2,249	1,682	547	2,229	2.8	-4.9	0.9
Illinois	3,488	458	3,946	3,507	470	3,977	-0.5	-2.6	-0.8
Indiana	1,291	1,677	2,968	1,231	1,627	2,858	4.9	3.1	3.8
Kansas	-	65	65	-	61	61	-	6.6	6.6
Kentucky Total	11,146	5,840	16,986	11,902	6,057	17,959	-6.4	-3.6	-5.4
Eastern	8,661	5,445	14,106	9,303	5,707	15,010	-6.9	-4.6	-6.0
Western	2,485	395	2,880	2,599	350	2,949	-4.4	12.9	-2.3
Louisiana	-	239	239	-	243	243	-	-1.6	-1.6
Maryland	131	244	375	205	285	490	-36.1	-14.4	-23.5
Mississippi	-	177	177	-	178	178	-	-0.6	-0.6
Missouri	-	14	14	-	20	20	-	-30.0	-30.0
Montana	16	970	986	58	884	942	-72.4	9.7	4.7
New Mexico	374	982	1,356	368	1,004	1,372	1.6	-2.2	-1.2
North Dakota	-	975	975	-	947	947	-	3.0	3.0
Ohio	1,481	1,015	2,496	1,384	1,029	2,413	7.0	-1.4	3.4
Oklahoma	84	153	237	73	151	224	15.1	1.3	5.8
Pennsylvania Total	5,206	2,443	7,649	5,099	2,427	7,526	2.1	0.7	1.6
Anthracite	192	718	910	226	643	869	-15.0	11.7	4.7
Bituminous	5,014	1,725	6,739	4,873	1,784	6,657	2.9	-3.3	1.2
Tennessee	220	346	566	333	327	660	-33.9	5.8	-14.2
Texas	-	2,216	2,216	-	2,138	2,138	-	3.6	3.6
Utah	2,006	6	2,012	2,030	6	2,036	-1.2	-	-1.2
Virginia	3,363	1,400	4,763	3,623	1,639	5,262	-7.2	-14.6	-9.5
Washington	-	-	-	-	673	673	-	-100.0	-100.0
West Virginia Total	13,441	6,608	20,049	13,190	6,886	20,076	1.9	-4.0	-0.1
Northern	3,889	651	4,540	3,982	639	4,621	-2.3	1.9	-1.8
Southern	9,552	5,957	15,509	9,208	6,247	15,455	3.7	-4.6	0.3
Wyoming	204	6,179	6,383	128	5,709	5,837	59.4	8.2	9.4
Appalachian Total	**34,961**	**18,893**	**53,854**	**35,758**	**19,874**	**55,632**	**-2.2**	**-4.9**	**-3.2**
Northern	10,707	4,353	15,060	10,670	4,380	15,050	0.3	-0.6	0.1
Central	21,793	13,145	34,938	22,467	13,920	36,387	-3.0	-5.6	-4.0
Southern	2,461	1,395	3,856	2,621	1,574	4,195	-6.1	-11.4	-8.1
Interior Total	**7,433**	**5,396**	**12,829**	**7,451**	**5,240**	**12,691**	**-0.2**	**3.0**	**1.1**
Illinois Basin	7,264	2,530	9,794	7,337	2,447	9,784	-1.0	3.4	0.1
Western Total	**4,329**	**10,161**	**14,490**	**4,266**	**10,284**	**14,550**	**1.5**	**-1.2**	**-0.4**
Powder River Basin	-	6,399	6,399	-	5,852	5,852	-	9.3	9.3
Uinta Region	3,668	497	4,165	3,657	525	4,182	0.3	-5.3	-0.4
East of Miss. River	**42,225**	**21,600**	**63,825**	**43,095**	**22,499**	**65,594**	**-2.0**	**-4.0**	**-2.7**
West of Miss. River	**4,498**	**12,850**	**17,348**	**4,380**	**12,899**	**17,279**	**2.7**	**-0.4**	**0.4**
U.S. Subtotal	**46,723**	**34,450**	**81,173**	**47,475**	**35,398**	**82,873**	**-1.6**	**-2.7**	**-2.1**
Refuse Recovery	**-**	**-**	**105**	**-**	**-**	**86**	**-**	**-**	**22.1**
U.S. Total	**46,723**	**34,450**	**81,278**	**47,475**	**35,398**	**82,959**	**-1.6**	**-2.7**	**-2.0**

[1] For a definition of coal producing regions, see Glossary.

- = No data are reported.

Note: • Includes all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Source: • U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 19. Average Number of Employees at Underground and Surface Mines by State and Mine Production Range, 2007

Coal-Producing State, Region[1], and Mine Type	Mine Production Range (thousand short tons)								Total Number of Employees
	1,000 and Greater	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Less Than 10	Zero[2]	
Alabama	**2,299**	**285**	**418**	**281**	**268**	**143**	**21**	**135**	**3,850**
Underground	2,298	-	-	35	60	-	15	50	2,458
Surface	1	285	418	246	208	143	6	85	1,392
Alaska	**99**	-	-	-	-	-	-	-	**99**
Surface	99	-	-	-	-	-	-	-	99
Arizona	**430**	-	-	-	-	-	-	-	**430**
Surface	430	-	-	-	-	-	-	-	430
Arkansas	-	-	-	-	**85**	-	**2**	-	**87**
Underground	-	-	-	-	85	-	-	-	85
Surface	-	-	-	-	-	-	2	-	2
Colorado	**2,111**	-	**126**	-	-	-	**7**	**5**	**2,249**
Underground	1,632	-	85	-	-	-	7	5	1,729
Surface	479	-	41	-	-	-	-	-	520
Illinois	**3,280**	**311**	**199**	-	-	**14**	-	**142**	**3,946**
Underground	3,029	224	131	-	-	12	-	92	3,488
Surface	251	87	68	-	-	2	-	50	458
Indiana	**2,250**	**405**	**155**	-	-	**10**	-	**148**	**2,968**
Underground	1,037	134	72	-	-	-	-	48	1,291
Surface	1,213	271	83	-	-	10	-	100	1,677
Kansas	-	-	**51**	-	-	-	-	**14**	**65**
Surface	-	-	51	-	-	-	-	14	65
Kentucky Total	**3,927**	**3,697**	**3,178**	**1,431**	**1,263**	**1,053**	**411**	**2,026**	**16,986**
Underground	3,150	2,578	1,704	835	849	620	190	1,220	11,146
Surface	777	1,119	1,474	596	414	433	221	806	5,840
Eastern	**1,715**	**3,411**	**3,090**	**1,389**	**1,222**	**1,039**	**405**	**1,835**	**14,106**
Underground	1,014	2,421	1,654	835	849	620	190	1,078	8,661
Surface	701	990	1,436	554	373	419	215	757	5,445
Western	**2,212**	**286**	**88**	**42**	**41**	**14**	**6**	**191**	**2,880**
Underground	2,136	157	50	-	-	-	-	142	2,485
Surface	76	129	38	42	41	14	6	49	395
Louisiana	**199**	**40**	-	-	-	-	-	-	**239**
Surface	199	40	-	-	-	-	-	-	239
Maryland	-	-	**209**	**15**	**50**	**41**	**11**	**49**	**375**
Underground	-	-	85	-	-	-	-	46	131
Surface	-	-	124	15	50	41	11	3	244
Mississippi	**177**	-	-	-	-	-	-	-	**177**
Surface	177	-	-	-	-	-	-	-	177
Missouri	-	-	-	**11**	**3**	-	-	-	**14**
Surface	-	-	-	11	3	-	-	-	14
Montana	**958**	-	**12**	-	-	**16**	-	-	**986**
Underground	-	-	-	-	-	16	-	-	16
Surface	958	-	12	-	-	-	-	-	970
New Mexico	**1,213**	-	-	-	-	-	-	**143**	**1,356**
Underground	346	-	-	-	-	-	-	28	374
Surface	867	-	-	-	-	-	-	115	982
North Dakota	**970**	-	-	-	-	-	-	**5**	**975**
Surface	970	-	-	-	-	-	-	5	975
Ohio	**1,040**	**282**	**509**	**223**	**101**	**121**	**74**	**146**	**2,496**
Underground	1,040	72	249	28	-	22	-	70	1,481
Surface	-	210	260	195	101	99	74	76	1,015
Oklahoma	-	-	**138**	**29**	**39**	**29**	**2**	-	**237**
Underground	-	-	55	-	-	29	-	-	84
Surface	-	-	83	29	39	-	2	-	153
Pennsylvania Total	**3,525**	**736**	**963**	**619**	**304**	**477**	**280**	**745**	**7,649**
Underground	3,525	521	509	265	13	23	59	291	5,206
Surface	-	215	454	354	291	454	221	454	2,443
Anthracite	-	-	**29**	**47**	**130**	**194**	**127**	**383**	**910**
Underground	-	-	-	47	-	23	49	73	192
Surface	-	-	29	-	130	171	78	310	718
Bituminous	**3,525**	**736**	**934**	**572**	**174**	**283**	**153**	**362**	**6,739**
Underground	3,525	521	509	218	13	-	10	218	5,014
Surface	-	215	425	354	161	283	143	144	1,725
Tennessee	-	**79**	**296**	**39**	**63**	**21**	**6**	**62**	**566**
Underground	-	-	132	39	14	7	-	28	220
Surface	-	79	164	-	49	14	6	34	346
Texas	**2,216**	-	-	-	-	-	-	-	**2,216**
Surface	2,216	-	-	-	-	-	-	-	2,216
Utah	**1,655**	**74**	**130**	-	-	-	-	**153**	**2,012**
Underground	1,655	74	130	-	-	-	-	147	2,006

See footnotes at end of table.

Table 19. Average Number of Employees at Underground and Surface Mines by State and Mine Production Range, 2007 (Continued)

Coal-Producing State, Region [1], and Mine Type	Mine Production Range (thousand short tons)								Total Number of Employees
	1,000 and Greater	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Less Than 10	Zero [2]	
Utah (continued)									
Surface	-	-	-	-	-	-	-	6	6
Virginia	**669**	**642**	**1,479**	**558**	**365**	**386**	**48**	**616**	**4,763**
Underground	669	510	638	458	287	315	31	455	3,363
Surface	-	132	841	100	78	71	17	161	1,400
West Virginia Total	**9,058**	**2,754**	**3,080**	**1,280**	**674**	**713**	**114**	**2,376**	**20,049**
Underground	5,111	2,069	2,511	1,127	546	506	61	1,510	13,441
Surface	3,947	685	569	153	128	207	53	866	6,608
Northern	**3,127**	**303**	**371**	**51**	**264**	**90**	**27**	**307**	**4,540**
Underground	2,800	265	325	24	221	52	12	190	3,889
Surface	327	38	46	27	43	38	15	117	651
Southern	**5,931**	**2,451**	**2,709**	**1,229**	**410**	**623**	**87**	**2,069**	**15,509**
Underground	2,311	1,804	2,186	1,103	325	454	49	1,320	9,552
Surface	3,620	647	523	126	85	169	38	749	5,957
Wyoming	**6,294**	**-**	**-**	**12**	**-**	**-**	**2**	**75**	**6,383**
Underground	204	-	-	-	-	-	-	-	204
Surface	6,090	-	-	12	-	-	2	75	6,179
Appalachian Total	**18,306**	**8,189**	**10,044**	**4,404**	**3,047**	**2,941**	**959**	**5,964**	**53,854**
Underground	13,657	5,593	5,778	2,787	1,769	1,493	356	3,528	34,961
Surface	4,649	2,596	4,266	1,617	1,278	1,448	603	2,436	18,893
Northern	**7,692**	**1,321**	**2,052**	**908**	**719**	**729**	**392**	**1,247**	**15,060**
Underground	7,365	858	1,168	317	234	97	71	597	10,707
Surface	327	463	884	591	485	632	321	650	4,353
Central	**8,315**	**6,583**	**7,574**	**3,215**	**2,060**	**2,069**	**546**	**4,576**	**34,938**
Underground	3,994	4,735	4,610	2,435	1,475	1,396	270	2,878	21,793
Surface	4,321	1,848	2,964	780	585	673	276	1,698	13,145
Southern	**2,299**	**285**	**418**	**281**	**268**	**143**	**21**	**141**	**3,856**
Underground	2,298	-	-	35	60	-	15	53	2,461
Surface	1	285	418	246	208	143	6	88	1,395
Interior Total	**10,334**	**1,042**	**631**	**82**	**168**	**67**	**10**	**495**	**12,829**
Underground	6,202	515	308	-	85	41	-	282	7,433
Surface	4,132	527	323	82	83	26	10	213	5,396
Illinois Basin	**7,742**	**1,002**	**442**	**42**	**41**	**38**	**6**	**481**	**9,794**
Underground	6,202	515	253	-	-	12	-	282	7,264
Surface	1,540	487	189	42	41	26	6	199	2,530
Western Total	**13,730**	**74**	**268**	**12**	**-**	**16**	**9**	**381**	**14,490**
Underground	3,837	74	215	-	-	16	7	180	4,329
Surface	9,893	-	53	12	-	-	2	201	10,161
Powder River Basin	**6,324**	**-**	**-**	**-**	**-**	**-**	**-**	**75**	**6,399**
Surface	6,324	-	-	-	-	-	-	75	6,399
Uinta Region	**3,766**	**74**	**167**	**-**	**-**	**-**	**-**	**158**	**4,165**
Underground	3,287	74	155	-	-	-	-	152	3,668
Surface	479	-	12	-	-	-	-	6	497
East of Miss. River	**26,225**	**9,191**	**10,486**	**4,446**	**3,088**	**2,979**	**965**	**6,445**	**63,825**
Underground	19,859	6,108	6,031	2,787	1,769	1,505	356	3,810	42,225
Surface	6,366	3,083	4,455	1,659	1,319	1,474	609	2,635	21,600
West of Miss. River	**16,145**	**114**	**457**	**52**	**127**	**45**	**13**	**395**	**17,348**
Underground	3,837	74	270	-	85	45	7	180	4,498
Surface	12,308	40	187	52	42	-	6	215	12,850
Subtotal	**42,370**	**9,305**	**10,943**	**4,498**	**3,215**	**3,024**	**978**	**6,840**	**81,173**
Underground	23,696	6,182	6,301	2,787	1,854	1,550	363	3,990	46,723
Surface	18,674	3,123	4,642	1,711	1,361	1,474	615	2,850	34,450
Refuse Recovery	**-**	**-**	**8**	**29**	**22**	**14**	**18**	**14**	**105**
U.S. Total	**42,370**	**9,305**	**10,951**	**4,527**	**3,237**	**3,038**	**996**	**6,854**	**81,278**

[1] For a definition of coal producing regions, see Glossary.

[2] Includes all employees at preparation plants and tipples not co-located with a mine.

- = No data are reported.

Note: • Includes all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Source: • U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 20. Average Number of Employees at Underground and Surface Mines by State and Union Status, 2007

Coal-Producing State and Region[1]	Union[2]		Nonunion[2]	
	Underground	Surface	Underground	Surface
Alabama	2,334	1	109	1,398
Alaska	-	99	-	-
Arizona	-	430	-	-
Arkansas	-	-	85	-
Colorado	141	202	1,581	318
Illinois	1,279	48	2,209	424
Indiana	-	-	1,291	1,677
Kansas	-	-	-	65
Kentucky Total	757	136	10,199	5,500
Eastern	166	136	8,305	5,101
Western	591	-	1,894	399
Louisiana	-	-	-	239
Maryland	-	-	131	233
Mississippi	-	-	-	177
Missouri	-	-	-	14
Montana	-	768	16	202
New Mexico	374	727	-	255
North Dakota	-	283	-	692
Ohio	512	15	969	926
Oklahoma	-	-	84	151
Pennsylvania Total	2,359	315	2,788	1,931
Anthracite	2	237	141	413
Bituminous	2,357	78	2,647	1,518
Tennessee	-	-	220	340
Texas	-	1,342	-	874
Utah	609	-	1,397	8
Virginia	429	71	2,903	1,322
West Virginia Total	4,446	976	8,934	5,586
Northern	2,531	-	1,346	636
Southern	1,915	976	7,588	4,950
Wyoming	204	518	-	5,659
Appalachian Total	**10,246**	**1,514**	**24,359**	**16,837**
Northern	5,402	330	5,234	3,726
Central	2,510	1,183	19,013	11,710
Southern	2,334	1	112	1,401
Interior Total	**1,870**	**1,390**	**5,563**	**4,020**
Illinois Basin	1,870	48	5,394	2,500
Western Total	**1,328**	**3,027**	**2,994**	**7,134**
Powder River Basin	-	756	-	5,643
Uinta Region	750	173	2,918	326
East of Miss. River	**12,116**	**1,562**	**29,753**	**19,514**
West of Miss. River	**1,328**	**4,369**	**3,163**	**8,477**
U.S. Total	**13,444**	**5,931**	**32,916**	**27,991**

[1] For a definition of coal producing regions, see Glossary.

[2] Includes all employees at preparation plants and tipples not co-located with a mine.

- = No data are reported.

Note: • Includes all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Productivity

Table 21. Coal Mining Productivity by State and Mine Type, 2007, 2006

Coal-Producing State, Region[1], and Mine Type	Number of Mining Operations[2]			Number of Employees[3]			Average Production per Employee per Hour (short tons)[4]		
	2007	2006	Percent Change	2007	2006	Percent Change	2007	2006	Percent Change
Alabama	**61**	**68**	**-10.3**	**3,850**	**4,195**	**-8.2**	**2.23**	**2.01**	**11.1**
Underground	13	14	-7.1	2,458	2,621	-6.2	2.08	1.74	19.2
Surface	48	54	-11.1	1,392	1,574	-11.6	2.49	2.51	-0.8
Alaska	**1**	**1**	**-**	**99**	**96**	**3.1**	**5.83**	**6.48**	**-10.0**
Surface	1	1	-	99	96	3.1	5.83	6.48	-10.0
Arizona	**1**	**2**	**-50.0**	**430**	**418**	**2.9**	**7.92**	**7.69**	**2.9**
Surface	1	2	-50.0	430	418	2.9	7.92	7.69	2.9
Arkansas	**2**	**2**	**-**	**87**	**43**	**102.3**	**0.42**	**0.24**	**76.1**
Underground	1	1	-	85	41	107.3	0.41	0.19	118.3
Surface	1	1	-	2	2	-	1.65	2.48	-33.4
Colorado	**13**	**13**	**-**	**2,249**	**2,229**	**0.9**	**7.51**	**7.90**	**-5.0**
Underground	9	8	12.5	1,729	1,682	2.8	7.36	7.72	-4.7
Surface	4	5	-20.0	520	547	-4.9	8.05	8.46	-4.9
Illinois	**29**	**33**	**-12.1**	**3,946**	**3,977**	**-0.8**	**3.67**	**3.70**	**-0.8**
Underground	19	21	-9.5	3,488	3,507	-0.5	3.48	3.52	-1.2
Surface	10	12	-16.7	458	470	-2.6	4.95	4.89	1.4
Indiana	**44**	**45**	**-2.2**	**2,968**	**2,858**	**3.8**	**4.55**	**4.81**	**-5.4**
Underground	15	15	-	1,291	1,231	4.9	3.18	3.46	-8.0
Surface	29	30	-3.3	1,677	1,627	3.1	5.60	5.82	-3.7
Kansas	**3**	**3**	**-**	**65**	**61**	**6.6**	**3.25**	**3.64**	**-10.9**
Surface	3	3	-	65	61	6.6	3.25	3.64	-10.9
Kentucky Total	**554**	**592**	**-6.4**	**16,986**	**17,959**	**-5.4**	**2.97**	**2.96**	**0.5**
Underground	266	300	-11.3	11,146	11,902	-6.4	2.69	2.68	0.3
Surface	288	292	-1.4	5,840	6,057	-3.6	3.53	3.51	0.6
Eastern	**521**	**556**	**-6.3**	**14,106**	**15,010**	**-6.0**	**2.75**	**2.78**	**-1.1**
Underground	251	280	-10.4	8,661	9,303	-6.9	2.31	2.37	-2.6
Surface	270	276	-2.2	5,445	5,707	-4.6	3.45	3.45	*
Western	**33**	**36**	**-8.3**	**2,880**	**2,949**	**-2.3**	**3.96**	**3.78**	**4.9**
Underground	15	20	-25.0	2,485	2,599	-4.4	3.86	3.69	4.6
Surface	18	16	12.5	395	350	12.9	4.83	4.54	6.3
Louisiana	**2**	**2**	**-**	**239**	**243**	**-1.6**	**6.08**	**7.84**	**-22.5**
Surface	2	2	-	239	243	-1.6	6.08	7.84	-22.5
Maryland	**22**	**22**	**-**	**375**	**490**	**-23.5**	**2.80**	**4.82**	**-41.9**
Underground	4	5	-20.0	131	205	-36.1	2.09	6.10	-65.7
Surface	18	17	5.9	244	285	-14.4	3.19	3.81	-16.1
Mississippi	**1**	**1**	**-**	**177**	**178**	**-0.6**	**9.99**	**10.38**	**-3.8**
Surface	1	1	-	177	178	-0.6	9.99	10.38	-3.8
Missouri	**2**	**2**	**-**	**14**	**20**	**-30.0**	**6.96**	**10.20**	**-31.8**
Surface	2	2	-	14	20	-30.0	6.96	10.20	-31.8
Montana	**6**	**6**	**-**	**986**	**942**	**4.7**	**22.20**	**21.98**	**1.0**
Underground	1	1	-	16	58	-72.4	1.46	2.65	-45.0
Surface	5	5	-	970	884	9.7	22.55	23.30	-3.2
New Mexico	**6**	**5**	**20.0**	**1,356**	**1,372**	**-1.2**	**9.03**	**8.62**	**4.7**
Underground	2	2	-	374	368	1.6	9.11	8.07	12.9
Surface	4	3	33.3	982	1,004	-2.2	9.00	8.85	1.7
North Dakota	**5**	**5**	**-**	**975**	**947**	**3.0**	**15.70**	**16.91**	**-7.2**
Surface	5	5	-	975	947	3.0	15.70	16.91	-7.2
Ohio	**73**	**71**	**2.8**	**2,496**	**2,413**	**3.4**	**4.05**	**4.04**	**0.4**
Underground	21	20	5.0	1,481	1,384	7.0	4.76	4.81	-1.0
Surface	52	51	2.0	1,015	1,029	-1.4	3.01	3.06	-1.7
Oklahoma	**9**	**10**	**-10.0**	**237**	**224**	**5.8**	**2.78**	**3.35**	**-16.9**
Underground	2	2	-	84	73	15.1	2.65	2.44	8.8
Surface	7	8	-12.5	153	151	1.3	2.85	3.78	-24.6
Pennsylvania Total	**349**	**358**	**-2.5**	**7,649**	**7,526**	**1.6**	**3.73**	**3.90**	**-4.3**
Underground	82	87	-5.7	5,206	5,099	2.1	4.39	4.52	-2.8
Surface	267	271	-1.5	2,443	2,427	0.7	2.20	2.44	-9.9
Anthracite	**120**	**124**	**-3.2**	**910**	**869**	**4.7**	**0.89**	**0.95**	**-6.6**
Underground	30	35	-14.3	192	226	-15.0	0.68	0.68	*
Surface	90	89	1.1	718	643	11.7	0.94	1.04	-10.2
Bituminous	**229**	**234**	**-2.1**	**6,739**	**6,657**	**1.2**	**4.05**	**4.21**	**-3.7**
Underground	52	52	-	5,014	4,873	2.9	4.50	4.65	-3.3
Surface	177	182	-2.7	1,725	1,784	-3.3	2.67	2.87	-7.2
Tennessee	**28**	**36**	**-22.2**	**566**	**660**	**-14.2**	**2.10**	**2.06**	**2.0**
Underground	9	16	-43.8	220	333	-33.9	1.92	1.97	-2.2
Surface	19	20	-5.0	346	327	5.8	2.21	2.14	3.3
Texas	**11**	**12**	**-8.3**	**2,216**	**2,138**	**3.6**	**8.82**	**9.90**	**-10.9**
Surface	11	12	-8.3	2,216	2,138	3.6	8.82	9.90	-10.9
Utah	**18**	**20**	**-10.0**	**2,012**	**2,036**	**-1.2**	**5.79**	**6.15**	**-5.8**
Underground	17	19	-10.5	2,006	2,030	-1.2	5.81	6.18	-5.9

See footnotes at end of table.

Table 21. Coal Mining Productivity by State and Mine Type, 2007, 2006 (Continued)

Coal-Producing State, Region [1], and Mine Type	Number of Mining Operations [2]			Number of Employees [3]			Average Production per Employee per Hour (short tons) [4]		
	2007	2006	Percent Change	2007	2006	Percent Change	2007	2006	Percent Change
Utah (continued)									
Surface	1	1	-	6	6	-	-	-	-
Virginia	**160**	**170**	**-5.9**	**4,763**	**5,262**	**-9.5**	**2.47**	**2.67**	**-7.4**
Underground	94	98	-4.1	3,363	3,623	-7.2	2.25	2.48	-9.4
Surface	66	72	-8.3	1,400	1,639	-14.6	2.96	3.07	-3.5
Washington	**-**	**1**	**-100.0**	**-**	**673**	**-100.0**	**-**	**2.03**	**-100.0**
Surface	-	1	-100.0	-	673	-100.0	-	2.03	-100.0
West Virginia Total	**418**	**419**	**-0.2**	**20,049**	**20,076**	**-0.1**	**3.32**	**3.32**	*****
Underground	239	247	-3.2	13,441	13,190	1.9	2.82	2.87	-1.5
Surface	179	172	4.1	6,608	6,886	-4.0	4.25	4.14	2.7
Northern	**65**	**70**	**-7.1**	**4,540**	**4,621**	**-1.8**	**4.08**	**4.12**	**-0.8**
Underground	34	41	-17.1	3,889	3,982	-2.3	4.05	4.02	0.9
Surface	31	29	6.9	651	639	1.9	4.26	4.78	-10.8
Southern	**353**	**349**	**1.1**	**15,509**	**15,455**	**0.3**	**3.10**	**3.09**	**0.4**
Underground	205	206	-0.5	9,552	9,208	3.7	2.30	2.36	-2.5
Surface	148	143	3.5	5,957	6,247	-4.6	4.25	4.08	4.1
Wyoming	**21**	**21**	**-**	**6,383**	**5,837**	**9.4**	**33.30**	**35.46**	**-6.1**
Underground	1	1	-	204	128	59.4	6.47	1.84	252.6
Surface	20	20	-	6,179	5,709	8.2	34.19	36.24	-5.7
Appalachian Total	**1,632**	**1,700**	**-4.0**	**53,854**	**55,632**	**-3.2**	**3.10**	**3.13**	**-0.9**
Underground	713	767	-7.0	34,961	35,758	-2.2	2.91	2.95	-1.3
Surface	919	933	-1.5	18,893	19,874	-4.9	3.44	3.45	-0.3
Northern	**509**	**521**	**-2.3**	**15,060**	**15,050**	**0.1**	**3.87**	**4.02**	**-3.7**
Underground	141	153	-7.8	10,707	10,670	0.3	4.29	4.40	-2.5
Surface	368	368	-	4,353	4,380	-0.6	2.76	3.02	-8.5
Central	**1,060**	**1,111**	**-4.6**	**34,938**	**36,387**	**-4.0**	**2.86**	**2.89**	**-0.8**
Underground	558	600	-7.0	21,793	22,467	-3.0	2.29	2.38	-3.6
Surface	502	511	-1.8	13,145	13,920	-5.6	3.74	3.67	2.0
Southern	**63**	**68**	**-7.4**	**3,856**	**4,195**	**-8.1**	**2.23**	**2.01**	**10.9**
Underground	14	14	-	2,461	2,621	-6.1	2.08	1.74	19.1
Surface	49	54	-9.3	1,395	1,574	-11.4	2.49	2.51	-1.0
Interior Total	**136**	**146**	**-6.8**	**12,829**	**12,691**	**1.1**	**4.85**	**5.10**	**-4.8**
Underground	52	59	-11.9	7,433	7,451	-0.2	3.52	3.54	-0.8
Surface	84	87	-3.4	5,396	5,240	3.0	6.76	7.35	-8.0
Illinois Basin	**106**	**114**	**-7.0**	**9,794**	**9,784**	**0.1**	**4.04**	**4.07**	**-0.7**
Underground	49	56	-12.5	7,264	7,337	-1.0	3.56	3.57	-0.3
Surface	57	58	-1.7	2,530	2,447	3.4	5.39	5.49	-1.8
Western Total	**71**	**74**	**-4.1**	**14,490**	**14,550**	**-0.4**	**20.40**	**20.19**	**1.0**
Underground	30	31	-3.2	4,329	4,266	1.5	6.73	6.77	-0.6
Surface	41	43	-4.7	10,161	10,284	-1.2	26.28	25.70	2.3
Powder River Basin	**18**	**18**	**-**	**6,399**	**5,852**	**9.3**	**35.30**	**37.57**	**-6.0**
Underground	-	-	-	-	-	-	-	-	-
Surface	18	18	-	6,399	5,852	9.3	35.30	37.57	-6.0
Uinta Region	**28**	**31**	**-9.7**	**4,165**	**4,182**	**-0.4**	**6.76**	**7.11**	**-4.9**
Underground	24	26	-7.7	3,668	3,657	0.3	6.60	6.92	-4.7
Surface	4	5	-20.0	497	525	-5.3	7.97	8.41	-5.2
East of Miss. River	**1,739**	**1,815**	**-4.2**	**63,825**	**65,594**	**-2.7**	**3.27**	**3.29**	**-0.7**
Underground	762	823	-7.4	42,225	43,095	-2.0	3.03	3.06	-1.0
Surface	977	992	-1.5	21,600	22,499	-4.0	3.73	3.74	-0.3
West of Miss. River	**100**	**105**	**-4.8**	**17,348**	**17,279**	**0.4**	**18.23**	**18.33**	**-0.5**
Underground	33	34	-2.9	4,498	4,380	2.7	6.52	6.62	-1.4
Surface	67	71	-5.6	12,850	12,899	-0.4	22.36	22.27	0.4
Subtotal	**1,839**	**1,920**	**-4.2**	**81,173**	**82,873**	**-2.1**	**6.27**	**6.27**	**0.1**
Underground	795	857	-7.2	46,723	47,475	-1.6	3.34	3.37	-0.6
Surface	1,044	1,063	-1.8	34,450	35,398	-2.7	10.25	10.19	0.6
Refuse Recovery	**20**	**15**	**33.3**	**105**	**86**	**22.1**	**5.77**	**4.33**	**33.3**
U.S. Total	**1,859**	**1,935**	**-3.9**	**81,278**	**82,959**	**-2.0**	**6.27**	**6.26**	**0.1**

[1] For a definition of coal producing regions, see Glossary.

[2] Mining operations that consist of a mine and preparation plant or preparation plant only processing both underground and surface coal are reported as two operations.

[3] Includes all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers.

[4] Calculated by dividing total coal production by the total labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers.

* Absolute percentage less than 0.05.

- = No data are reported.

Note: • Excludes preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 22. Underground Coal Mining Productivity by State and Mining Method, 2007

(Short Tons Produced per Employee per Hour)

Coal-Producing State and Region[1]	Continuous[2]	Conventional and Other[3]	Longwall[4]	Total
Alabama	0.84	-	2.15	2.09
Arkansas	0.41	-	-	0.41
Colorado	3.66	-	7.57	7.37
Illinois	3.76	-	3.06	3.49
Indiana	3.22	-	-	3.22
Kentucky Total	2.71	2.12	2.11	2.70
Eastern	2.32	2.12	2.11	2.31
Western	3.86	-	-	3.86
Maryland	2.09	-	-	2.09
Montana	1.46	-	-	1.46
New Mexico	-	-	9.59	9.11
Ohio	3.72	3.46	5.40	4.80
Oklahoma	2.65	-	-	2.65
Pennsylvania Total	3.05	0.40	5.00	4.41
Anthracite	0.78	0.40	-	0.70
Bituminous	3.20	-	5.00	4.50
Tennessee	1.92	-	-	1.92
Utah	1.99	-	6.13	5.81
Virginia	2.14	-	3.24	2.28
West Virginia Total	2.40	-	3.63	2.82
Northern	2.60	-	4.61	4.05
Southern	2.38	-	1.99	2.31
Wyoming	-	-	6.47	6.47
Appalachian Total	**2.39**	**2.63**	**3.88**	**2.92**
Northern	2.92	3.03	4.90	4.31
Central	2.31	2.12	2.22	2.30
Southern	0.84	-	2.15	2.09
Interior Total	**2.72**	**-**	**3.06**	**2.76**
Illinois Basin	3.68	-	3.06	3.57
Western Total	**2.55**	**-**	**7.04**	**6.74**
Powder River Basin	-	-	-	-
Uinta Region	2.30	-	6.82	6.60
East of Miss. River	**2.68**	**2.63**	**3.80**	**3.04**
West of Miss. River	**2.12**	**-**	**7.04**	**6.53**
U.S. Total	**2.67**	**2.63**	**4.51**	**3.36**

[1] For a definition of coal producing regions, see Glossary.

[2] Mines that produce greater than 50 percent of their coal by continuous mining methods.

[3] Mines that produce greater than 50 percent of their coal by conventional mining methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous conventional split in mining method.

[4] Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

- = No data are reported.

Note: • For each State, stand alone preparation plant hours are distributed across mining methods by the proportion of production for all stand alone mines. Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes mines producing less than 10,000 short tons of coal and preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 23. Coal Mining Productivity by State, Mine Type, and Mine Production Range, 2007

(Short Tons Coal Produced per Employee per Hour)

Coal-Producing State, Region[1], and Mine Type	Mine Production Range (Thousand Short Tons)							Total[2]
	1,000 and Greater	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Less Than 10	
Alabama	**2.19**	**2.86**	**3.10**	**2.46**	**1.25**	**1.09**	**0.09**	**2.23**
Underground	2.19	-	-	1.15	0.66	-	0.01	2.08
Surface	-	2.86	3.10	2.64	1.46	1.09	1.04	2.49
Alaska	**5.83**	-	-	-	-	-	-	**5.83**
Surface	5.83	-	-	-	-	-	-	5.83
Arizona	**7.92**	-	-	-	-	-	-	**7.92**
Surface	7.92	-	-	-	-	-	-	7.92
Arkansas	-	-	-	-	**0.41**	-	**1.65**	**0.42**
Underground	-	-	-	-	0.41	-	-	0.41
Surface	-	-	-	-	-	-	1.65	1.65
Colorado	**7.67**	-	**5.26**	-	-	-	**1.03**	**7.51**
Underground	7.59	-	3.68	-	-	-	1.03	7.36
Surface	7.95	-	9.31	-	-	-	-	8.05
Illinois	**3.76**	**4.35**	**3.94**	-	-	**1.59**	-	**3.67**
Underground	3.62	3.25	3.45	-	-	0.67	-	3.48
Surface	5.22	6.77	4.67	-	-	11.13	-	4.95
Indiana	**4.63**	**5.68**	**4.41**	-	-	**1.81**	-	**4.55**
Underground	3.23	4.49	1.77	-	-	-	-	3.18
Surface	5.85	6.22	5.94	-	-	1.81	-	5.60
Kansas	-	-	**4.02**	-	-	-	-	**3.25**
Surface	-	-	4.02	-	-	-	-	3.25
Kentucky Total	**4.23**	**3.21**	**3.42**	**2.74**	**2.10**	**2.08**	**1.07**	**2.97**
Underground	3.87	2.69	2.89	2.49	1.80	1.70	0.89	2.69
Surface	5.60	4.44	4.01	3.10	2.78	2.53	1.20	3.53
Eastern	**4.16**	**3.17**	**3.40**	**2.70**	**2.06**	**2.06**	**1.08**	**2.75**
Underground	3.16	2.71	2.86	2.49	1.80	1.70	0.89	2.31
Surface	5.55	4.28	3.99	3.01	2.70	2.49	1.21	3.45
Western	**4.28**	**3.82**	**4.34**	**4.67**	**3.62**	**4.70**	**0.66**	**3.96**
Underground	4.21	2.28	4.09	-	-	-	-	3.86
Surface	6.08	6.14	4.64	4.67	3.62	4.70	0.66	4.83
Louisiana	**6.11**	**5.90**	-	-	-	-	-	**6.08**
Surface	6.11	5.90	-	-	-	-	-	6.08
Maryland	-	-	**3.44**	**4.89**	**2.65**	**2.03**	**1.80**	**2.80**
Underground	-	-	3.18	-	-	-	-	2.09
Surface	-	-	3.61	4.89	2.65	2.03	1.80	3.19
Mississippi	**9.99**	-	-	-	-	-	-	**9.99**
Surface	9.99	-	-	-	-	-	-	9.99
Missouri	-	-	-	**6.38**	**8.90**	-	-	**6.96**
Surface	-	-	-	6.38	8.90	-	-	6.96
Montana	**22.64**	-	**15.49**	-	-	**1.46**	-	**22.20**
Underground	-	-	-	-	-	1.46	-	1.46
Surface	22.64	-	15.49	-	-	-	-	22.55
New Mexico	**9.69**	-	-	-	-	-	-	**9.03**
Underground	9.59	-	-	-	-	-	-	9.11
Surface	9.73	-	-	-	-	-	-	9.00
North Dakota	**15.77**	-	-	-	-	-	-	**15.70**
Surface	15.77	-	-	-	-	-	-	15.70
Ohio	**5.30**	**3.64**	**4.27**	**2.70**	**1.77**	**1.87**	**0.70**	**4.05**
Underground	5.30	4.44	4.37	2.21	-	1.83	-	4.76
Surface	-	3.46	4.20	2.77	1.77	1.88	0.70	3.01
Oklahoma	-	-	**3.44**	**1.86**	**2.15**	**0.43**	**0.11**	**2.78**
Underground	-	-	3.46	-	-	0.43	-	2.65
Surface	-	-	3.42	1.86	2.15	-	0.11	2.85
Pennsylvania Total	**5.10**	**3.43**	**3.97**	**2.25**	**2.31**	**1.88**	**1.46**	**3.73**
Underground	5.10	4.03	3.73	1.94	3.24	1.02	0.59	4.39
Surface	-	2.21	4.22	2.48	2.26	1.92	1.68	2.20
Anthracite	-	-	**4.95**	**1.48**	**1.44**	**1.21**	**1.18**	**0.89**
Underground	-	-	-	1.48	-	1.02	0.50	0.68
Surface	-	-	4.95	-	1.44	1.23	1.63	0.94
Bituminous	**5.10**	**3.43**	**3.93**	**2.31**	**2.98**	**2.38**	**1.73**	**4.05**
Underground	5.10	4.03	3.73	2.04	3.24	-	2.17	4.50
Surface	-	2.21	4.17	2.48	2.95	2.38	1.72	2.67
Tennessee	-	**2.30**	**2.37**	**2.36**	**1.80**	**3.10**	**4.48**	**2.10**
Underground	-	-	2.22	2.36	1.77	1.49	-	1.92
Surface	-	2.30	2.49	-	1.81	3.76	4.48	2.21
Texas	**8.82**	-	-	-	-	-	-	**8.82**
Surface	8.82	-	-	-	-	-	-	8.82
Utah	**6.63**	**4.68**	**2.16**	-	-	-	-	**5.79**
Underground	6.63	4.68	2.16	-	-	-	-	5.81

See footnotes at end of table.

Table 23. Coal Mining Productivity by State, Mine Type, and Mine Production Range, 2007 (Continued)

(Short Tons Coal Produced per Employee per Hour)

Coal-Producing State, Region [1], and Mine Type	Mine Production Range (Thousand Short Tons)							Total [2]
	1,000 and Greater	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Less Than 10	
Utah (continued)								
Surface	-	-	-	-	-	-	-	-
Virginia	**3.25**	**3.11**	**3.15**	**2.24**	**2.55**	**1.69**	**0.93**	**2.47**
Underground	3.25	3.07	2.56	2.09	2.38	1.68	0.82	2.25
Surface	-	3.25	3.59	2.85	3.04	1.73	1.05	2.96
West Virginia Total	**4.50**	**3.30**	**3.07**	**2.37**	**1.53**	**1.70**	**0.69**	**3.32**
Underground	4.01	2.73	2.79	2.17	1.35	1.44	0.78	2.82
Surface	5.10	4.85	4.21	3.71	2.27	2.22	0.65	4.25
Northern	**4.82**	**4.00**	**3.67**	**3.53**	**0.66**	**1.51**	**0.78**	**4.08**
Underground	4.71	3.75	3.52	2.97	0.30	1.10	1.59	4.05
Surface	5.73	5.43	4.51	3.91	3.10	2.15	0.55	4.26
Southern	**4.35**	**3.22**	**2.99**	**2.32**	**2.16**	**1.74**	**0.66**	**3.10**
Underground	3.16	2.60	2.68	2.15	2.22	1.50	0.60	2.30
Surface	5.05	4.82	4.19	3.66	1.95	2.23	0.69	4.25
Wyoming	**33.75**	**-**	**-**	**4.69**	**-**	**-**	**0.35**	**33.30**
Underground	6.47	-	-	-	-	-	-	6.47
Surface	34.66	-	-	4.69	-	-	0.35	34.19
Appalachian Total	**4.32**	**3.23**	**3.32**	**2.47**	**1.94**	**1.85**	**1.13**	**3.10**
Underground	4.00	2.88	2.92	2.21	1.71	1.59	0.69	2.91
Surface	5.17	3.91	3.83	2.87	2.27	2.06	1.34	3.44
Northern	**5.01**	**3.59**	**3.94**	**2.48**	**1.65**	**1.85**	**1.35**	**3.87**
Underground	4.98	3.97	3.76	2.03	0.48	1.25	0.68	4.29
Surface	5.73	3.02	4.15	2.70	2.28	1.94	1.49	2.76
Central	**4.23**	**3.17**	**3.17**	**2.47**	**2.16**	**1.90**	**1.01**	**2.86**
Underground	3.17	2.70	2.72	2.26	2.00	1.63	0.83	2.29
Surface	5.13	4.30	3.84	3.10	2.57	2.37	1.14	3.74
Southern	**2.19**	**2.86**	**3.10**	**2.46**	**1.25**	**1.09**	**0.09**	**2.23**
Underground	2.19	-	-	1.15	0.66	-	0.01	2.08
Surface	-	2.86	3.10	2.64	1.46	1.09	1.04	2.49
Interior Total	**5.20**	**4.83**	**3.98**	**3.68**	**1.54**	**1.35**	**0.50**	**4.85**
Underground	3.77	3.28	3.21	-	0.41	0.52	-	3.52
Surface	7.47	6.28	4.56	3.68	3.14	3.32	0.50	6.76
Illinois Basin	**4.18**	**4.79**	**4.20**	**4.67**	**3.62**	**2.10**	**0.66**	**4.04**
Underground	3.77	3.28	3.14	-	-	0.67	-	3.56
Surface	5.76	6.31	5.25	4.67	3.62	3.32	0.66	5.39
Western Total	**21.30**	**4.68**	**4.11**	**4.69**	**-**	**1.46**	**0.93**	**20.40**
Underground	7.30	4.68	2.76	-	-	1.46	1.03	6.73
Surface	26.79	-	10.77	4.69	-	-	0.35	26.28
Powder River Basin	**35.72**	**-**	**-**	**-**	**-**	**-**	**-**	**35.30**
Surface	35.72	-	-	-	-	-	-	35.30
Uinta Region	**7.22**	**4.68**	**3.12**	**-**	**-**	**-**	**-**	**6.76**
Underground	7.11	4.68	2.47	-	-	-	-	6.60
Surface	7.95	-	14.53	-	-	-	-	7.97
East of Miss. River	**4.31**	**3.39**	**3.36**	**2.48**	**1.96**	**1.86**	**1.12**	**3.27**
Underground	3.92	2.92	2.93	2.21	1.71	1.57	0.69	3.03
Surface	5.42	4.27	3.89	2.90	2.30	2.08	1.33	3.73
West of Miss. River	**19.37**	**5.17**	**3.86**	**3.37**	**1.11**	**0.83**	**0.68**	**18.23**
Underground	7.30	4.68	2.92	-	0.41	0.83	1.03	6.52
Surface	23.17	5.90	5.18	3.37	2.81	-	0.40	22.36
Subtotal	**9.59**	**3.41**	**3.38**	**2.49**	**1.92**	**1.84**	**1.11**	**6.27**
Underground	4.42	2.93	2.93	2.21	1.63	1.54	0.70	3.34
Surface	16.34	4.28	3.94	2.92	2.31	2.08	1.32	10.25
Refuse Recovery	**-**	**-**	**15.26**	**6.91**	**8.06**	**4.51**	**0.39**	**5.77**
U.S. Total	**9.59**	**3.41**	**3.39**	**2.53**	**1.95**	**1.85**	**1.09**	**6.27**

[1] For a definition of coal producing regions, see Glossary.

[2] Includes all employees at preparation plants and tipples not co-located with a mine.

- = No data are reported.

Note: • Productivity is calculated by dividing total coal production by the total labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 24. Coal Mining Productivity by State, Mine Type, and Union Status, 2007

(Short Tons Produced per Employee per Hour)

Coal-Producing State and Region[1]	Union		Nonunion	
	Underground	Surface	Underground	Surface
Alabama	2.15	-	0.74	2.49
Alaska	-	5.83	-	-
Arizona	-	7.92	-	-
Arkansas	-	-	0.41	-
Colorado	4.93	6.81	7.57	8.83
Illinois	3.06	-	3.71	5.48
Indiana	-	-	3.18	5.60
Kansas	-	-	-	3.25
Kentucky Total	3.18	3.29	2.66	3.57
Eastern	2.09	3.29	2.32	3.48
Western	3.50	-	3.96	4.85
Louisiana	-	-	-	6.08
Maryland	-	-	2.09	3.23
Mississippi	-	-	-	9.99
Missouri	-	-	-	6.96
Montana	-	18.40	1.46	37.36
New Mexico	9.11	8.81	-	9.45
North Dakota	-	13.13	-	16.68
Ohio	3.74	-	5.37	3.10
Oklahoma	-	-	2.65	2.89
Pennsylvania Total	3.97	0.93	4.77	2.41
Anthracite	-	0.63	0.71	1.03
Bituminous	3.98	1.78	4.94	2.75
Tennessee	-	-	1.92	2.20
Texas	-	8.94	-	8.63
Utah	4.53	-	6.32	-
Virginia	1.67	1.68	2.35	3.03
West Virginia Total	3.30	4.21	2.58	4.27
Northern	4.51	-	3.12	4.31
Southern	1.55	4.21	2.49	4.27
Wyoming	6.47	8.58	-	36.36
Appalachian Total	**3.13**	**3.34**	**2.82**	**3.48**
Northern	4.21	0.89	4.40	2.95
Central	1.61	3.97	2.39	3.74
Southern	2.15	-	0.72	2.49
Interior Total	**3.21**	**8.62**	**3.61**	**6.17**
Illinois Basin	3.21	-	3.67	5.49
Western Total	**6.20**	**11.11**	**6.96**	**32.37**
Powder River Basin	-	18.45	-	37.36
Uinta Region	4.61	6.72	7.06	8.65
East of Miss. River	**3.14**	**3.23**	**2.99**	**3.79**
West of Miss. River	**6.20**	**10.41**	**6.65**	**28.31**
U.S. Total	**3.41**	**8.41**	**3.32**	**10.69**

[1] For a definition of coal producing regions, see Glossary.

- = No data are reported.

Note: • Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes mines producing less than 10,000 short tons of coal and preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Domestic Markets

Table 25. Coal Consumers in the Manufacturing and Coke Sectors, 2007

Company Name	Plant Location
Top Ten Manufacturers	
Alcoa Inc (Aluminum Company of America)	(IN)(TX)
Archer Daniels Midland	(IA)(IL)(MN)(ND)
Cargill Incorporated	(AL)(GA)(IA)(MI)(NC)(NY)(OH)(TN)
Carmeuse Lime Inc	(AL)(IL)(IN)(KY)(MI)(OH)(PA)
Dakota Gasification Company	(ND)
Eastman Chemical Company	(TN)
Georgia-Pacific Consumer Products LP	(AL)(GA)(OK)(VA)(WI)
International Paper Co	(AL)(FL)(GA)(IN)(LA)(NC)(SC)(VA)
Lafarge North America	(AL)(IA)(IL)(KS)(MI)(MO)(NY)(OK)(PA)(SC)(WA)
Mittal Steel USA	(IN)
Other Major Manufacturers	
Abitibi Consolidated Sales Corp	(AZ)
Amalgamated Sugar Co, LLC	(ID)
American Crystal Sugar Co	(MN)(ND)
Ash Grove Cement Co	(AR)(KS)(MT)(NE)(UT)
Blue Ridge Paper Prod Inc	(NC)
Bowater Newsprint	(AL)(TN)
Buzzi Unicem USA	(IL)(IN)(KS)(MO)(OK)(TX)
California Portland Cement Co	(AZ)(CA)
Celanese Ltd	(TX)
Cemex Inc	(CO)(KY)(PA)(TN)
Central Power & Lime Inc	(FL)
Corn Products International	(IL)(NC)
ESSROC Materials Inc	(IN)(MD)(PA)
Eastman Kodak Company	(NY)
FMC Corporation	(WY)
General Chemical Corporation	(WY)
Holcim (US) Inc	(AL)(CO)(IA)(MI)(MS)(SC)(UT)
IMC Chemical Co	(CA)
International Steel Group Inc	(IN)(MD)
Kennecott Utah Copper	(UT)
Lehigh Cement Co	(AL)(IA)(IN)(MD)(PA)
Meadwestvaco Corporation	(VA)
NewPage Corporation	(MD)(MI)(SC)
North American Business Services (NABS)	(AL)(CO)(IA)(MI)(MS)(SC)(UT)
PPG Industries Inc	(WV)
Silver Bay Power Company	(MN)
Smurfit Stone Container Corp	(FL)(MI)(SC)(VA)
Stora Enso North America	(WI)
TXI Operations, LP	(TX)
Tate and Lyle Ingredients Americas Inc	(IL)(IN)(TN)
Top Ten Coke Producers	
AK Steel Corp	(KY)(OH)
DTE Energy Services	(MI)
Drummond Company Inc	(AL)
Jewell Coke Company	(IN)(VA)
Mittal Steel USA	(IN)
Mountain State Carbon	(WV)
Sloss Industries	(AL)
Sun Coke Company	(IN)(OH)(VA)
United States Steel Corporation	(IL)(IN)(PA)
Wheeling-Pittsburgh Steel Corporation	(WV)

- = No data are reported.

Note: • Major manufactures are the top 40 coal consumers in the manufacturing sector. Major coke producers are the top 10 coal consumers in the coke plant sector. Manufacturers and coke producers are listed in alphabetical order.

Source: • Energy Information Administration, Manufacturers: Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing Plants;" and, Coke Plants: Form EIA-5, "Quarterly Coal Consumption and Quality Report, Coke Plants."

Table 26. U.S. Coal Consumption by End Use Sector, by Census Division and State, 2007, 2006

(Thousand Short Tons)

Census Division and State	2007				2006				Total		
	Electric Power[1]	Other Industrial	Coke	Residential and Commercial	Electric Power [1]	Other Industrial	Coke	Residential and Commercial	2007	2006	Percent Change
New England	**8,818**	**197**	**-**	**36**	**8,775**	**W**	**-**	**W**	**9,051**	**8,991**	**0.7**
Connecticut	1,936	-	-	W	2,245	-	-	W	W	W	-13.8
Maine	136	W	-	W	147	W	-	W	251	259	-2.8
Massachusetts	5,120	W	-	W	4,750	W	-	W	5,229	4,843	8.0
New Hampshire	1,625	-	-	W	1,634	-	-	W	W	W	-0.6
Rhode Island	-	-	-	W	-	-	-	W	W	W	-20.5
Vermont	-	-	-	W	-	-	-	W	W	W	22.7
Middle Atlantic	**69,995**	**3,645**	**W**	**852**	**69,988**	**W**	**W**	**W**	**W**	**81,776**	**W**
New Jersey	4,669	-	-	W	4,635	W	-	W	W	4,642	W
New York	9,613	1,020	W	132	9,417	1,109	W	140	W	W	1.0
Pennsylvania	55,712	2,625	W	717	55,936	2,792	W	624	W	W	-0.7
East North Central	**237,049**	**14,715**	**10,486**	**707**	**231,753**	**14,657**	**11,100**	**338**	**262,957**	**257,848**	**2.0**
Illinois	56,488	3,673	W	162	53,939	3,608	W	134	W	W	4.4
Indiana	60,756	5,662	W	175	60,582	5,567	W	57	W	W	-0.3
Michigan	36,574	1,744	W	173	34,926	1,793	W	9	W	W	4.7
Ohio	59,452	1,874	W	142	58,604	1,931	W	110	W	W	1.4
Wisconsin	23,780	1,762	-	56	23,702	1,758	-	29	25,598	25,488	0.4
West North Central	**147,667**	**12,829**	**-**	**850**	**146,530**	**13,006**	**-**	**721**	**161,346**	**160,257**	**0.7**
Iowa	23,019	3,009	-	323	21,236	3,067	-	304	26,351	24,607	7.1
Kansas	22,780	241	-	-	20,874	237	-	s	23,020	21,110	9.0
Minnesota	19,178	1,354	-	64	19,573	1,271	-	91	20,596	20,935	-1.6
Missouri	44,094	1,086	-	196	45,603	1,065	-	217	45,376	46,884	-3.2
Nebraska	12,267	427	-	5	12,881	420	-	5	12,700	13,307	-4.6
North Dakota	24,639	W	-	W	24,298	W	-	W	31,341	31,073	0.9
South Dakota	1,691	W	-	W	2,064	W	-	W	1,964	2,340	-16.1
South Atlantic	**185,881**	**W**	**W**	**W**	**178,746**	**W**	**W**	**W**	**198,209**	**191,052**	**3.7**
Delaware	2,462	W	-	W	2,189	W	-	W	2,566	2,291	12.0
District of Columbia	-	-	-	W	-	-	-	-	W	-	W
Florida	28,826	1,099	-	1	27,755	1,128	-	s	29,925	28,883	3.6
Georgia	40,803	1,512	-	2	38,890	1,587	-	-	42,317	40,477	4.5
Maryland	11,884	1,221	-	36	11,638	1,259	-	42	13,142	12,939	1.6
North Carolina	32,412	1,148	-	45	30,456	1,225	-	117	33,606	31,797	5.7
South Carolina	16,524	1,270	-	s	15,761	1,439	-	88	17,794	17,288	2.9
Virginia	14,913	1,941	W	83	14,194	2,031	W	27	W	W	3.9
West Virginia	38,056	1,093	W	66	37,863	1,096	W	25	W	W	1.9
East South Central	**115,540**	**W**	**W**	**W**	**116,699**	**W**	**W**	**W**	**124,550**	**125,789**	**-1.0**
Alabama	37,233	1,705	W	1	37,168	1,800	W	26	W	W	*
Kentucky	41,064	1,347	W	136	41,938	1,322	W	131	W	W	-2.0
Mississippi	9,895	W	-	-	10,378	W	-	-	W	W	-4.6
Tennessee	27,348	2,993	-	71	27,216	3,018	-	41	30,413	30,275	0.5
West South Central	**154,545**	**W**	**-**	**W**	**151,800**	**W**	**-**	**W**	**157,631**	**157,075**	**0.4**
Arkansas	15,629	397	-	1	14,614	365	-	s	16,028	14,979	7.0
Louisiana	15,453	W	-	W	16,337	W	-	-	15,524	W	W
Oklahoma	20,547	747	-	s	21,188	732	-	3	21,295	21,923	-2.9
Texas	102,916	1,868	-	s	99,661	4,102	-	s	104,784	103,763	1.0
Mountain	**115,235**	**4,444**	**-**	**145**	**114,744**	**4,155**	**-**	**312**	**119,824**	**119,211**	**0.5**
Arizona	21,189	712	-	1	20,506	740	-	1	21,903	21,247	3.1
Colorado	19,533	W	-	W	19,707	W	-	W	19,779	20,059	-1.4
Idaho	-	459	-	45	-	391	-	12	504	403	25.1
Montana	11,929	W	-	W	11,302	W	-	W	12,041	11,531	4.4
Nevada	3,447	W	-	W	3,488	W	-	W	3,651	3,696	-1.2
New Mexico	15,959	W	-	W	16,961	W	-	W	16,039	17,044	-5.9
Utah	16,593	911	-	23	16,609	680	-	35	17,526	17,324	1.2
Wyoming	26,585	1,738	-	59	26,170	1,685	-	51	28,382	27,906	1.7
Pacific	**10,412**	**2,123**	**-**	**474**	**7,600**	**2,134**	**-**	**559**	**13,008**	**10,294**	**26.4**
Alaska	414	W	-	W	408	W	-	W	889	968	-8.1
California	961	1,818	-	-	899	1,870	-	1	2,779	2,771	0.3
Hawaii	778	W	-	-	720	W	-	-	W	W	9.2
Oregon	2,577	W	-	-	1,449	W	-	-	W	W	71.5
Washington	5,681	W	-	W	4,125	W	-	W	5,818	4,219	37.9
U.S. Total	**1,045,141**	**56,615**	**22,715**	**3,526**	**1,026,636**	**59,472**	**22,957**	**3,227**	**1,127,998**	**1,112,292**	**1.4**

[1] The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public -- i.e. NAICS 22 plants

s Value is less than 0.05 of the table metric, but value is included in any associated total.

* Absolute percentage less than 0.05.

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration, Form EIA-906, "Power Plant Report," Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing Plants," Form EIA-5, "Quarterly Coal Consumption and Quality Report, Coke Plants," Form EIA-6A, "Coal Distribution Report," Form EIA-7A, "Coal Production Report," and, Form EIA-920, "Combined Heat and Power Plant Report."

Table 27. Year-End Coal Stocks by Sector, by Census Division, 2007, 2006

(Thousand Short Tons)

Census Division	2007				2006				Total		
	Electric Power[1]	Other Industrial	Coke	Producer and Distributor	Electric Power [1]	Other Industrial	Coke	Producer and Distributor	2007	2006	Percent Change
New England	964	39	-	-	1,471	W	-	-	1,003	W	W
Middle Atlantic	5,147	389	W	2,558	6,702	421	W	3,277	W	W	-23.5
East North Central	39,382	1,632	1,186	1,556	39,551	1,941	1,785	3,169	43,755	46,446	-5.8
West North Central	26,827	1,267	-	1,806	20,455	1,539	-	712	29,900	22,706	31.7
South Atlantic	28,221	750	W	5,218	27,742	883	W	8,119	W	W	-6.8
East South Central	12,585	370	W	6,371	12,357	466	W	6,139	W	W	1.4
West South Central	23,144	421	-	2,675	17,628	406	-	3,033	26,240	21,068	24.6
Mountain	13,631	524	-	13,588	12,752	443	-	11,944	27,743	25,139	10.4
Pacific	1,320	232	-	205	2,305	358	-	154	1,756	2,817	-37.7
U.S. Total	151,221	5,624	1,936	33,977	140,964	6,506	2,928	36,548	192,757	186,946	3.1

[1] The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public -- i.e. NAICS 22 plants.

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Stocks data for residential and commercial sector are not collected by EIA. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration, Form EIA-906, "Power Plant Report," Form EIA-3, "Quarterly Coal Consumption and Quality Report, Manufacturing Plants," Form EIA-5, "Quarterly Coal Consumption and Quality Report, Coke Plants," and Form EIA-6, "Coal Distribution Report."

Average Mine Sales Price

Table 28. Average Open Market Sales Price of Coal by State and Mine Type, 2007, 2006

(Dollars per Short Ton)

Coal-Producing State	2007			2006			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	53.93	57.92	55.56	43.13	55.32	48.39	25.0	4.7	14.8
Alaska	-	W	W	-	W	W	-	W	W
Arizona	-	W	W	-	W	W	-	W	W
Arkansas	W	-	W	W	-	W	W	-	W
Colorado	W	W	24.91	24.10	24.70	24.27	W	W	2.6
Illinois	33.44	34.37	33.60	30.86	32.78	31.17	8.4	4.8	7.8
Indiana	33.84	26.79	28.79	33.70	24.66	27.27	0.4	8.7	5.6
Kansas	-	W	W	-	W	W	-	W	W
Kentucky Total	43.80	43.36	43.62	41.42	44.82	42.73	5.8	-3.3	2.1
Eastern	49.80	44.67	47.27	46.88	46.46	46.68	6.2	-3.8	1.3
Western	33.27	28.75	32.67	30.52	24.29	29.76	9.0	18.4	9.8
Louisiana	-	W	W	-	W	W	-	W	W
Maryland	W	W	33.02	W	W	30.63	W	W	7.8
Mississippi	-	W	W	-	W	W	-	W	W
Missouri	-	W	W	-	W	W	-	W	W
Montana	W	W	11.79	W	W	10.42	W	W	13.1
New Mexico	W	W	29.91	W	W	29.15	W	W	2.6
North Dakota	-	11.56	11.56	-	10.70	10.70	-	8.0	8.0
Ohio	28.32	30.17	28.79	26.72	28.93	27.40	6.0	4.3	5.1
Oklahoma	W	W	34.98	W	W	30.75	W	W	13.7
Pennsylvania Total	39.34	39.15	39.30	37.12	38.81	37.42	6.0	0.9	5.0
Anthracite	W	W	52.24	72.79	37.89	43.61	W	W	19.8
Bituminous	W	W	39.04	36.99	38.90	37.30	W	W	4.7
Tennessee	45.73	40.89	42.53	49.07	35.65	41.37	-6.8	14.7	2.8
Texas	-	19.47	19.47	-	18.61	18.61	-	4.6	4.6
Utah	25.69	-	25.69	24.98	-	24.98	2.9	-	2.9
Virginia	53.91	51.45	52.89	53.57	52.16	52.99	0.6	-1.4	-0.2
West Virginia Total	48.44	46.65	47.63	45.53	46.44	45.94	6.4	0.4	3.7
Northern	37.77	37.05	37.67	35.26	36.95	35.48	7.1	0.3	6.2
Southern	56.86	47.53	51.50	53.44	47.30	49.94	6.4	0.5	3.1
Wyoming	-	9.67	9.67	-	9.03	9.03	-	7.1	7.1
U.S. Total	**40.29**	**19.41**	**26.20**	**38.28**	**18.88**	**25.16**	**5.3**	**2.8**	**4.1**

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Open market includes all coal sold on the open market to other coal companies or consumers. An average open market sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the open market coal sold by the total open market coal sold. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 29. Average Open Market Sales Price of Coal by State and Underground Mining Method, 2007

(Dollars per Short Ton)

Coal-Producing State	Continuous[1]	Conventional and Other[2]	Longwall[3]	Total
Alabama	W	-	W	53.93
Arkansas	W	-	-	W
Colorado	W	-	W	25.11
Illinois	W	-	W	33.44
Indiana	33.84	-	-	33.84
Kentucky Total	43.73	W	W	43.80
Eastern	49.91	W	W	49.80
Western	33.27	-	-	33.27
Maryland	W	-	-	W
Montana	W	-	-	W
New Mexico	-	-	W	W
Ohio	28.83	W	W	28.32
Oklahoma	W	-	-	W
Pennsylvania Total	38.35	W	W	39.34
Anthracite	W	W	-	W
Bituminous	W	-	W	W
Tennessee	45.73	-	-	45.73
Utah	W	-	W	25.69
Virginia	W	-	W	53.91
West Virginia Total	54.06	-	42.02	48.44
Northern	39.20	-	37.58	37.77
Southern	55.68	-	64.20	56.86
Wyoming	-	-	-	-
U.S. Total	**44.22**	**38.52**	**36.68**	**40.29**

[1] Mines that produce greater than 50 percent of their coal by continuous mining methods.

[2] Mines that produce greater than 50 percent of their coal by conventional mining methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous conventional split in mining method.

[3] Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Open market includes all coal sold on the open market to other coal companies or consumers. An average open market sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the open market coal sold by the total open market coal sold. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 30. Average Open Market Sales Price of Coal by State, County, and Number of Mines, 2007

(Thousand Short Tons, Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Open Market Sales	Average Open Market Sales Price
Alabama	**47**	**19,350**	**55.56**
Bibb	1	W	W
Cullman	1	W	W
Franklin	1	W	W
Jackson	3	W	W
Jefferson	10	3,572	68.38
Marion	2	W	W
Shelby	4	309	63.79
Tuscaloosa	9	10,800	50.39
Walker	13	3,004	55.14
Winston	3	W	W
Alaska	**1**	**W**	**W**
Yukon-Koyukuk Division	1	W	W
Arizona	**1**	**W**	**W**
Navajo	1	W	W
Arkansas	**1**	**W**	**W**
Sebastian	1	W	W
Colorado	**11**	**34,410**	**24.91**
Delta	1	W	W
Garfield	1	W	W
Gunnison	2	W	W
La Plata	1	W	W
Moffat	3	W	W
Montrose	1	W	W
Rio Blanco	1	-	-
Routt	1	W	W
Illinois	**21**	**29,830**	**33.60**
Gallatin	1	W	W
Jackson	3	W	W
Macoupin	3	W	W
Perry	4	1,498	34.66
Randolph	1	W	W
Saline	3	W	W
Sangamon	1	W	W
Vermilion	1	W	W
Wabash	2	W	W
White	1	W	W
Williamson	1	W	W
Indiana	**27**	**30,556**	**28.79**
Daviess	2	W	W
Dubois	1	W	W
Gibson	7	12,260	28.42
Knox	6	4,331	34.37
Pike	7	W	W
Sullivan	1	W	W
Vigo	2	W	W
Warrick	1	W	W
Kansas	**2**	**W**	**W**
Bourbon	1	W	W
Linn	1	W	W
Kentucky	**357**	**112,655**	**43.62**
Bell	17	3,740	48.42
Breathitt	8	2,046	44.77
Clay	1	-	-
Daviess	1	W	W
Floyd	38	4,682	41.91
Harlan	48	10,474	46.50
Henderson	3	W	W
Hopkins	5	W	W
Jackson	2	W	W
Johnson	5	W	W
Knott	34	6,064	45.93
Knox	5	W	W
Laurel	1	W	W
Lawrence	4	W	W
Leslie	13	4,619	43.94
Letcher	28	4,440	46.54
Magoffin	6	W	W
Martin	12	5,076	47.41

See footnotes at end of table.

Table 30. Average Open Market Sales Price of Coal by State, County, and Number of Mines, 2007 (Continued)

(Thousand Short Tons, Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Open Market Sales	Average Open Market Sales Price
Kentucky (continued)			
Morgan	1	W	W
Muhlenberg	8	W	W
Owsley	2	W	W
Perry	32	16,633	45.73
Pike	75	22,148	51.76
Union	2	W	W
Webster	3	W	W
Whitley	3	W	W
Louisiana	**2**	**W**	**W**
De Soto	1	W	W
Red River	1	W	W
Maryland	**16**	**2,179**	**33.02**
Allegany	10	1,416	28.14
Garrett	6	763	42.06
Mississippi	**1**	**W**	**W**
Choctaw	1	W	W
Missouri	**2**	**W**	**W**
Bates	2	W	W
Montana	**6**	**41,400**	**11.79**
Big Horn	3	W	W
Musselshell	1	W	W
Richland	1	W	W
Rosebud	1	W	W
New Mexico	**4**	**19,706**	**29.91**
McKinley	2	W	W
San Juan	2	W	W
North Dakota	**4**	**25,770**	**11.56**
McLean	1	W	W
Mercer	2	W	W
Oliver	1	W	W
Ohio	**48**	**21,909**	**28.79**
Athens	1	W	W
Belmont	6	W	W
Carroll	2	W	W
Columbiana	3	W	W
Coshocton	1	W	W
Harrison	9	2,056	34.29
Jackson	1	W	W
Jefferson	7	1,028	29.43
Mahoning	1	W	W
Monroe	1	W	W
Muskingum	1	W	W
Noble	2	W	W
Perry	4	1,580	28.38
Stark	4	W	W
Tuscarawas	4	W	W
Vinton	1	W	W
Oklahoma	**8**	**1,637**	**34.98**
Craig	1	W	W
Haskell	1	W	W
Le Flore	5	W	W
Nowata	1	W	W
Pennsylvania	**168**	**62,526**	**39.30**
Allegheny	3	W	W
Armstrong	18	4,217	36.03
Beaver	1	W	W
Butler	2	W	W
Cambria	9	733	47.67
Cameron	1	W	W
Centre	1	W	W
Clarion	4	W	W
Clearfield	22	4,064	41.70
Columbia	2	W	W
Elk	5	W	W
Fayette	7	W	W
Greene	8	39,819	39.61
Indiana	18	1,226	31.36
Jefferson	8	379	37.29
Lackawanna	2	W	W
Lawrence	1	W	W

See footnotes at end of table.

Table 30. Average Open Market Sales Price of Coal by State, County, and Number of Mines, 2007 (Continued)

(Thousand Short Tons, Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Open Market Sales	Average Open Market Sales Price
Pennsylvania (continued)			
Luzerne	6	248	71.74
Lycoming	1	W	W
Mercer	1	W	W
Northumberland	3	W	W
Schuylkill	19	W	W
Somerset	20	3,865	37.04
Venango	1	W	W
Washington	3	W	W
Westmoreland	2	W	W
Tennessee	**15**	**2,621**	**42.53**
Anderson	2	W	W
Campbell	4	W	W
Claiborne	9	1,774	39.07
Texas	**11**	**12,884**	**19.47**
Atascosa	1	-	-
Bastrop	1	-	-
Freestone	1	-	-
Harrison	1	W	W
Hopkins	1	-	-
Leon	1	W	W
Panola	2	-	-
Robertson	1	W	W
Rusk	1	-	-
Titus	1	-	-
Utah	**10**	**18,908**	**25.69**
Carbon	5	10,305	27.31
Emery	4	W	W
Sevier	1	W	W
Virginia	**109**	**17,789**	**52.89**
Buchanan	36	5,995	57.50
Dickenson	13	767	49.11
Lee	3	W	W
Russell	8	W	W
Tazewell	6	W	W
Wise	43	9,222	52.01
West Virginia	**265**	**138,738**	**47.63**
Barbour	5	W	W
Boone	42	31,879	51.93
Brooke	2	W	W
Clay	3	W	W
Fayette	20	5,833	51.08
Grant	1	W	W
Greenbrier	6	793	65.34
Harrison	6	W	W
Kanawha	18	11,159	49.31
Lincoln	3	W	W
Logan	21	11,301	42.36
Marion	2	W	W
Marshall	2	W	W
Mason	1	W	W
McDowell	43	4,319	62.05
Mineral	2	W	W
Mingo	25	9,469	53.48
Monongalia	6	W	W
Nicholas	8	W	W
Preston	1	-	-
Raleigh	19	6,944	59.67
Randolph	2	W	W
Tucker	1	W	W
Upshur	2	W	W
Wayne	5	W	W
Webster	5	W	W
Wyoming	14	4,728	60.65
Wyoming	**19**	**375,775**	**9.67**
Campbell	12	332,950	9.28
Carbon	1	W	W
Converse	1	W	W
Lincoln	1	W	W
Sweetwater	4	3,658	16.72
U.S. Total	**1,156**	**983,770**	**26.20**

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Open market includes all coal sold on the open market to other coal companies or consumers. An average open market sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the open market coal sold by the total open market coal sold. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 31. Average Open Market Sales Price of Coal by State and Coal Rank, 2007

(Dollars per Short Ton)

Coal-Producing State	Bituminous	Subbituminous	Lignite	Anthracite	Total
Alabama	55.56	-	-	-	55.56
Alaska	-	W	-	-	W
Arizona	W	-	-	-	W
Arkansas	W	-	-	-	W
Colorado	W	W	-	-	24.91
Illinois	33.60	-	-	-	33.60
Indiana	28.79	-	-	-	28.79
Kansas	W	-	-	-	W
Kentucky Total	43.62	-	-	-	43.62
Eastern	47.27	-	-	-	47.27
Western	32.67	-	-	-	32.67
Louisiana	-	-	W	-	W
Maryland	33.02	-	-	-	33.02
Mississippi	-	-	W	-	W
Missouri	W	-	-	-	W
Montana	-	W	W	-	11.79
New Mexico	W	W	-	-	29.91
North Dakota	-	-	11.56	-	11.56
Ohio	28.79	-	-	-	28.79
Oklahoma	34.98	-	-	-	34.98
Pennsylvania Total	39.04	-	-	52.24	39.30
Anthracite	-	-	-	52.24	52.24
Bituminous	39.04	-	-	-	39.04
Tennessee	42.53	-	-	-	42.53
Texas	-	-	19.47	-	19.47
Utah	25.69	-	-	-	25.69
Virginia	52.89	-	-	-	52.89
West Virginia Total	47.63	-	-	-	47.63
Northern	37.67	-	-	-	37.67
Southern	51.50	-	-	-	51.50
Wyoming	W	W	-	-	9.67
U.S. Total	**40.80**	**10.69**	**14.89**	**52.24**	**26.20**

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Open market includes all coal sold on the open market to other coal companies or consumers. An average open market sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the open market coal sold by the total open market coal sold. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 32. Average Open Market Sales Price of Coal by Mine Production Range and Mine Type, 2007

(Dollars per Short Ton)

Mine Production Range (thousand short tons)	Underground	Surface	Total
Over 1,000	37.29	15.34	21.58
500 to 1,000	45.00	41.48	43.33
200 to 500	48.04	43.87	45.83
100 to 200	52.13	42.73	47.44
50 to 100	48.74	44.91	46.71
10 to 50	49.63	40.88	44.24
U.S. Total	**40.29**	**19.41**	**26.20**

Note: • Open market includes all coal sold on the open market to other coal companies or consumers. An average open market sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the open market coal sold by the total open market coal sold. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 33. Average Sales Price of U.S. Coal by State and Disposition, 2007

(Dollars per Short Ton)

Coal-Producing State	Open Market[1]	Captive[2]
Alabama	55.56	-
Alaska	W	-
Arizona	W	-
Arkansas	W	-
Colorado	24.91	W
Illinois	33.60	34.03
Indiana	28.79	34.83
Kansas	W	-
Kentucky Total	43.62	42.94
Eastern	47.27	W
Western	32.67	W
Louisiana	W	W
Maryland	33.02	-
Mississippi	W	-
Missouri	W	-
Montana	11.79	W
New Mexico	29.91	W
North Dakota	11.56	W
Ohio	28.79	26.60
Oklahoma	34.98	W
Pennsylvania Total	39.30	54.29
Anthracite	52.24	W
Bituminous	39.04	W
Tennessee	42.53	-
Texas	W	15.20
Utah	25.69	W
Virginia	52.89	60.83
West Virginia Total	47.63	52.78
Northern	37.67	49.52
Southern	51.50	53.92
Wyoming	9.67	13.62
U.S. Total	**26.20**	**23.57**

[1] Open market includes coal sold on the open market to other coal companies or consumers.

[2] Captive includes all coal used by the producing company or sold to affiliated or parent companies.

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • An average open market sales price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the open market coal sold, by the total open market coal sold. An average captive market sales price is calculated by dividing the total free on board (f.o.b.) rail/barge value of the captive market coal sold, by the total captive market coal sold. Excludes mines producing less than 10,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations.

Source: • Energy Information Administration Form EIA-7A, "Coal Production Report," and U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Average Consumer Prices

Table 34. Average Price of Coal Delivered to End Use Sector by Census Division and State, 2007, 2006

(Dollars per Short Ton)

Census Division and State	2007			2006			Annual Percent Change		
	Electric Utility Plants	Other Industrial Plants	Coke Plants	Electric Utility Plants	Other Industrial Plants	Coke Plants	Electric Utility Plants	Other Industrial Plants	Coke Plants
New England	**75.92**	**92.45**	**-**	**67.59**	**W**	**-**	**12.3**	**W**	**-**
Connecticut	-	-	-	-	-	-	-	-	-
Maine	-	W	-	-	W	-	-	-1.1	-
Massachusetts	-	W	-	68.02	W	-	-100.0	18.2	-
New Hampshire	75.92	-	-	67.49	-	-	12.5	-	-
Rhode Island	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-
Middle Atlantic	**60.20**	**59.86**	**W**	**55.69**	**W**	**W**	**8.1**	**W**	**9.8**
New Jersey	96.94	-	-	74.36	W	-	30.4	W	-
New York	58.98	72.36	W	58.48	74.79	W	0.9	-3.3	-3.4
Pennsylvania	-	54.81	W	39.35	52.46	W	-100.0	4.5	10.5
East North Central	**34.42**	**59.04**	**99.20**	**33.03**	**56.98**	**99.48**	**4.2**	**3.6**	**-0.3**
Illinois	27.44	37.49	W	25.16	36.95	W	9.1	1.5	-1.4
Indiana	33.89	61.79	W	31.94	59.83	W	6.1	3.3	0.1
Michigan	33.42	74.57	W	32.67	71.34	W	2.3	4.5	*
Ohio	39.56	68.75	W	39.92	64.81	W	-0.9	6.1	0.7
Wisconsin	29.75	68.39	-	26.14	64.32	-	13.8	6.3	-
West North Central	**20.28**	**27.71**	**-**	**17.95**	**28.18**	**-**	**13.0**	**-1.7**	**-**
Iowa	18.18	44.00	-	17.68	45.86	-	2.8	-4.1	-
Kansas	21.12	50.87	-	20.54	48.04	-	2.8	5.9	-
Minnesota	26.56	41.58	-	21.55	43.14	-	23.2	-3.6	-
Missouri	23.38	47.30	-	19.46	45.72	-	20.1	3.5	-
Nebraska	14.96	39.69	-	13.66	36.71	-	9.5	8.1	-
North Dakota	13.02	W	-	11.71	W	-	11.2	2.0	-
South Dakota	26.57	W	-	25.81	W	-	2.9	2.9	-
South Atlantic	**57.89**	**W**	**W**	**56.23**	**W**	**W**	**2.9**	**-0.1**	**8.1**
Delaware	-	W	-	-	W	-	-	-4.3	-
District of Columbia	-	-	-	-	-	-	-	-	-
Florida	61.13	82.60	-	61.22	84.16	-	-0.1	-1.9	-
Georgia	57.09	81.24	-	52.59	83.85	-	8.6	-3.1	-
Maryland	-	60.01	-	-	58.84	-	-	2.0	-
North Carolina	67.92	77.34	-	65.92	75.17	-	3.0	2.9	-
South Carolina	58.32	79.45	-	58.42	81.80	-	-0.2	-2.9	-
Virginia	59.81	69.95	W	59.88	67.13	W	-0.1	4.2	-6.4
West Virginia	43.80	66.80	W	41.85	67.95	W	4.7	-1.7	21.1
East South Central	**44.13**	**W**	**W**	**41.53**	**W**	**W**	**6.3**	**3.5**	**-3.7**
Alabama	43.74	75.76	W	45.86	68.27	W	-4.6	11.0	-1.7
Kentucky	41.49	70.01	W	40.29	70.68	W	3.0	-0.9	-6.7
Mississippi	67.22	W	-	54.62	W	-	23.1	4.3	-
Tennessee	42.61	67.83	-	36.22	66.90	-	17.6	1.4	-
West South Central	**26.00**	**W**	**-**	**23.46**	**W**	**-**	**10.8**	**47.1**	**-**
Arkansas	27.95	72.43	-	25.79	67.28	-	8.4	7.6	-
Louisiana	34.25	W	-	28.00	W	-	22.3	-7.2	-
Oklahoma	20.22	40.26	-	18.96	38.59	-	6.6	4.3	-
Texas	26.53	53.57	-	24.00	32.65	-	10.5	64.1	-
Mountain	**27.25**	**41.68**	**-**	**24.80**	**38.28**	**-**	**9.9**	**8.9**	**-**
Arizona	31.19	59.21	-	28.48	48.22	-	9.5	22.8	-
Colorado	24.59	W	-	25.18	W	-	-2.3	27.9	-
Idaho	-	41.27	-	-	40.57	-	-	1.7	-
Montana	14.77	W	-	14.54	W	-	1.6	2.7	-
Nevada	41.97	W	-	39.75	W	-	5.6	6.3	-
New Mexico	32.87	W	-	29.01	W	-	13.3	22.2	-
Utah	30.66	43.35	-	27.49	44.46	-	11.5	-2.5	-
Wyoming	18.53	29.68	-	17.61	27.08	-	5.2	9.6	-
Pacific	**23.06**	**66.46**	**-**	**21.62**	**58.12**	**-**	**6.7**	**14.3**	**-**
Alaska	-	-	-	-	-	-	-	-	-
California	-	66.58	-	-	57.63	-	-	15.5	-
Hawaii	-	W	-	-	W	-	-	7.7	-
Oregon	23.06	W	-	21.62	W	-	6.7	7.8	-
Washington	-	W	-	-	W	-	-	4.7	-
U.S. Total	**36.06**	**54.42**	**94.97**	**34.26**	**51.67**	**92.87**	**5.3**	**5.3**	**2.3**

* Absolute percentage less than 0.05.

- = No data are reported.

W = Data withheld to avoid disclosure.

Note: • Includes manufacturing plants only.

Source: • Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants, Energy Information Administration, Form EIA-3, "Quarterly Coal Consumption and Qualtiy Report, Manufacturing Plants," and Form EIA-5, "Quarterly Coal Consumption and Quality Report, Coke Plants."

Glossary

American Indian Coal Lease: A lease granted to a mining company to produce coal from American Indian lands in exchange for royalties and other revenues; obtained by direct negotiation with Indian tribal authorities, but subject to approval and administration by the U.S. Department of the Interior.

Anthracite: The highest rank of coal; used primarily for residential and commercial space heating. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million Btu per short ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per short ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). Note: Since the 1980's, anthracite refuse or mine waste has been used for steam electric power generation. This fuel typically has a heat content of 15 million Btu per short ton or less.

Appalachian Region: See Coal-Producing Regions.

Area (Surface) Mining: A method used on flat terrain to recover coal by mining long cuts or pits successively. The material excavated from the cut being mined is deposited in the cut previously mined.

Auger Mine: A surface mine where coal is recovered through the use of a large-diameter drill driven into a coalbed in a hillside. It usually follows contour surface mining, particularly when the overburden is too costly to excavate.

Average Number of Employees: The arithmetic mean number of employees working each day at a mining operation. Includes maintenance, office, as well as production-related employees.

Average Open Market Sales Price: The ratio of the total value of the open market sales of coal produced at the mine to the total open market sales tonnage.

Average Production per Miner per Hour: The ratio of the total production at a mining operation to the total direct labor hours worked at the operation.

Average Recovery Percentage: Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, averaged for all mines in the reported geographic area.

Bed, Coalbed: All the coal and partings lying between a roof and floor.

Bituminous Coal: A dense coal, usually black, sometimes dark brown, often with well-defined bands of bright and dull material, used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make coke. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million Btu per ton on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Capacity Utilization: Capacity utilization is computed by dividing production by productive capacity and multiplying by 100.

Captive Coal: Coal produced and consumed by the mine operator, a subsidiary, or parent company (for example, steel companies and electric utilities).

Census Divisions: The nine geographic divisions of the United States established by the Bureau of the Census, U.S. Department of Commerce for statistical analysis. The boundaries of Census divisions coincide with State boundaries. In some cases, the Pacific Division is subdivided into the Pacific Contiguous and Pacific Noncontiguous areas.

Central Appalachian Region: See Coal-Producing Regions.

CIF: See Cost, Insurance, Freight.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Coal Carbonized: The amount of coal decomposed into solid coke and gaseous products by heating in a coke oven in a limited air supply or in the absence of air.

Coal (coke): See Coke (coal).

Coal Mining Productivity: Coal mining productivity is calculated by dividing total coal production by the total direct labor hours worked by all mine employees.

Coal Preparation/Washing: The treatment of coal to reject waste. In its broadest sense, preparation is any processing of mined coal to prepare it for market, including crushing and screening or sieving the coal to reach a uniform size, which normally results in removal of some non-coal material. The term coal preparation most commonly refers to processing, including crushing and screening, passing the material through one or more processes to remove impurities, sizing the product, and loading for shipment. Many of the processes separate rock, clay, and other minerals from coal in a liquid medium; hence the term washing is widely used. In some cases coal passes through a drying step before loading.

Coal-Producing Regions: A geographic classification of areas where coal is produced.

Appalachian Region. Consists of Alabama, Eastern Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

Northern Appalachian Region. Consists of Maryland, Ohio, Pennsylvania, and Northern West Virginia.

Central Appalachian Region. Consists of Eastern Kentucky, Virginia, Southern West Virginia, and the Tennessee counties of: Anderson, Campbell, Claiborne, Cumberland, Fentress, Morgan, Overton, Pickett, Putnam, Roane, and Scott.

Southern Appalachian Region: Consists of Alabama, and the Tennessee counties of: Bledsoe, Coffee, Franklin, Grundy, Hamilton, Marion, Rhea, Sequatchie, Van Buren, Warren, and White.

Interior Region (with Gulf Coast). Consists of Arkansas, Illinois, Indiana, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Texas, and Western Kentucky.

Illinois Basin: Consists of Illinois, Indiana, and Western Kentucky.

Western Region. Consists of Alaska, Arizona, Colorado, Montana, New Mexico, North Dakota, Utah, Washington, and Wyoming.

Powder River Basin: Consists of the Montana counties of Big Horn, Custer, Powder River, Rosebud, and Treasure and the Wyoming counties of Campbell, Converse, Crook, Johnson, Natrona, Niobrara, Sheridan, and Weston.

Uinta Basin: Consists of the Colorado counties of Delta, Garfield, Gunnison, Mesa, Moffat, Pitkin, Rio Blanco, Routt and the Utah counties of Carbon, Duchesne, Emery, Grand, Sanpete, Sevier, Uintah, Utah, and Wasatch.

Coal-Producing States: The States where mined and/or purchased coal originates are defined as follows:
Alabama, Alaska, Arizona, Arkansas, Colorado, Illinois, Indiana, Kansas, Kentucky Eastern, Kentucky Western, Louisiana, Maryland, Mississippi, Missouri, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania anthracite, Pennsylvania bituminous, Tennessee, Texas, Utah, Virginia, Washington, West Virginia Northern, West Virginia Southern, and Wyoming. The following Coal-Producing States are split in origin of coal, as defined by:

Kentucky, Eastern. All mines in the following counties in Eastern Kentucky: Bell, Boyd, Breathitt, Carter, Clay, Clinton, Elliot, Estill, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Magoffin, Martin, McCreary, Menifee, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Rowan, Wayne, Whitley, and Wolfe.

Kentucky, Western. All mines in the following counties in Western Kentucky: Breckinridge, Butler, Caldwell, Christian, Crittenden, Daviess, Edmonson, Grayson, Hancock, Hart, Henderson, Hopkins, Logan, McLean, Muhlenberg, Ohio, Todd, Union, Warren, and Webster.

Pennsylvania Anthracite. All mines in the following counties: Carbon, Columbia, Dauphin, Lackawanna, Lebanon, Luzerne, Northumberland, Schuylkill, Sullivan, and Susquehanna. All anthracite mines in Bradford County.

Pennsylvania Bituminous. All mines located in the following counties: Allegheny, Armstrong, Beaver, Bedford, Butler, Cambria, Clarion, Clearfield, Elk, Fayette, Greene, Indiana, Jefferson, Lawrence, Lycoming, Somerset, Venango, Washington, and Westmoreland, and all bituminous mines in Bradford County.

West Virginia, Northern. All mines in the following counties (formerly defined as Coal-Producing Districts 1, 3, & 6): Barbour, Brooke, Braxton, Calhoun, Doddridge, Gilmer, Grant, Hancock, Harrison, Jackson, Lewis, Marion, Marshall, Mineral, Monongalia, Ohio, Pleasants, Preston, Randolph, Ritchie, Roane, Taylor, Tucker, Tyler, Upshur, Webster, Wetzel, Wirt, and Wood.

West Virginia, Southern. All mines in the following counties (formerly defined as Coal-Producing Districts 7 & 8): Boone, Cabell, Clay, Fayette, Greenbrier, Kanawha, Lincoln, Logan, Mason, McDowell, Mercer,

Mingo, Nicholas, Pocahontas, Putnam, Raleigh, Summers, Wayne, and Wyoming.

Coal Rank: The classification of coals according to their degree of progressive alteration from lignite to anthracite. In the United States, the standard ranks of coal include lignite, subbituminous coal, bituminous coal, and anthracite and are based on fixed carbon, volatile matter, heating value, and agglomerating (or caking) properties.

Coal Stocks: Coal quantities that are held in storage for future use and disposition. Note: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of this period.

Coalbed: A bed or stratum of coal. Also called a coal seam.

Cogenerator: A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, and cooling purposes. To receive status as a qualifying facility (QF) under the Public Utility Regulatory Policies Act (PURPA), the facility must produce electric energy and "another form of useful thermal energy through the sequential use of energy," and meet certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC). (See the Code of Federal Regulation, Title 18, Part 292.)

Coke (coal): A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees Fahrenheit so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke from coal is grey, hard, and porous and has a heating value of 24.8 million Btu per short ton.

Coke Plants: Plants where coal is carbonized in slot or beehive ovens for the manufacture of coke.

Coking Coal: Bituminous coal suitable for making coke. See Coke (coal).

Continuous Mining: A form of room-and-pillar mining in which a continuous mining machine extracts and removes coal from the working face in one operation; no blasting is required.

Conventional Mining: The oldest form of room-and-pillar mining which consists of a series of operations that involve cutting the coalbed so it breaks easily when blasted with explosives or high-pressure air, and then loading the broken coal.

Cost, Insurance, Freight (CIF): A type of sale in which the buyer of the product agrees to pay a unit price that includes the F.O.B. value of the product at the point of origin plus all costs of insurance and transportation. This type of transaction differs from a "delivered" purchase in that the buyer accepts the quantity as determined at the loading port (as certified by the Bill of Loading and Quality Report) rather than pay on the basis of the quantity and quality ascertained at the unloading port. It is similar to the terms of an F.O.B. sale, except that the seller, as a service for which he is compensated, arranges for transportation and insurance.

Culm: Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small-sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton.

Demonstrated Reserve Base: A collective term for the sum of coal in both measured and indicated resource categories of reliability which represents 100 percent of the coal in these categories in place as of a certain date. Includes beds of bituminous coal and anthracite 28 inches or more thick and beds of subbituminous coal 60 inches or more thick that occur at depths to 1 thousand feet. Includes beds of lignite 60 inches or more thick that can be surface mined. Includes also thinner and/or deeper beds that presently are being mined or for which there is evidence that they could be mined commercially at this time. Represents that portion of identified coal resources from which reserves are calculated.

Direct Labor Hours: Direct labor hours worked by all mining employees at a mining operation during the year. Includes hours worked by those employees engaged in production, preparation, development, maintenance, repair, shop or yard work, management, office workers, and technical or engineering work.

Dredge Mining: A method of recovering coal from rivers or streams.

Drift Mine: An underground mine that has a horizontal or nearly horizontal entry driven along to a coalbed exposed in a hillside.

Electric Power Sector: The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.

Estimated Recoverable Reserves: See recoverable reserves.

F.O.B. Rail/Barge Price: The free on board price of coal at the point of first sale. It excludes freight or shipping and insurance costs.

Federal Coal Lease: A lease granted to a mining company to produce coal from land owned and administered by the Federal Government in exchange for royalties and other revenues.

Hand Loading: An underground loading method by which coal is removed from the working face by manual labor through the use of a shovel for conveyance to the surface.

Illinois Basin: See Coal-Producing Regions.

Indicated Resources: Coal for which estimates of the rank, quality, and quantity have been computed partly from sample analyses and measurements and partly from reasonable geologic projections. Indicated resources are computed partly from specified measurements and partly from projection of visible data for a reasonable distance on the basis of geologic evidence. The points of observation are 0.5 to 1.5 miles apart. Indicated coal is projected to extend as a 0.5-mile-wide belt that lies more than 0.25 miles from the outcrop or points of observation or measurement.

Industrial Sector: The industrial sector is comprised of manufacturing industries which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in the sector range from steel mills, to small farms, to companies assembling electronic components.

Interior Region: See Coal-Producing Regions.

Lignite: The lowest rank of coal, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Longwall Mining: An automated form of underground coal mining characterized by high recovery and extraction rates, feasible only in relatively flat-lying, thick, and uniform coalbeds. A high-powered cutting machine is passed across the exposed face of coal, shearing away broken coal, which is continuously hauled away by a floor-level conveyor system. Longwall mining extracts all machine-minable coal between the floor and ceiling within a contiguous block of coal, known as a panel, leaving no support pillars within the panel area. Panel dimensions vary over time and with mining conditions but currently average about 900 feet wide (coal face width) and more than 8,000 feet long (the minable extent of the panel, measured in direction of mining). Longwall mining is done under movable roof supports that are advanced as the bed is cut. The roof in the mined-out area is allowed to fall as the mining advances.

Manufacturing (except coke plants): Those industrial users/plants, not including coke plants, that are engaged in the mechanical or chemical transformation of materials or substances into new (i.e., finished or semifinished) products. Includes coal used for gasification/liquifaction and coal used for coal synfuels.

Minable: Capable of being mined under current mining technology and environmental and legal restrictions, rules, and regulations.

Mine Type: See Surface Mine and Underground Mine.

Northern Appalachian: See Coal-Producing Regions.

Number of Mines: The number of mines, or mines collocated with preparation plants or tipples, located in a particular geographic area (State or region).

Number of Mining Operations: The number of mining operations includes preparation plants. Mining operations that consist of a mine and preparation plant, or a preparation plant only, will be counted as two operations if the preparation plant processes both underground and surface coal.

Open Market Coal: Coal sold in the open market, i.e., coal sold to companies other than the reporting company's parent company or an operating subsidiary of the parent company.

Operating Subsidiary: A company which is controlled through the ownership of voting stock, or a corporate joint venture in which a corporation is owned by a small group of businesses as a separate and specific business or project for the mutual benefit of the members of the group.

Other Industrial Plant: Industrial users, not including coke plants, engaged in the mechanical or chemical transformation of materials or substances into new products (manufacturing); and companies engaged in the agriculture, mining, or construction industries.

Parent Company: A company which solely or jointly owns the reporting company and which is not itself a subsidiary of, or owned by, another company.

Percent Utilization: The ratio of total production to productive capacity, times 100.

Powder River Basin: See Coal-Producing Regions.

Preparation Plant: A facility at which coal is crushed, screened, and mechanically cleaned.

Productive Capacity: The maximum amount of coal that a mining operation can produce or process during a period with the existing mining equipment and/or preparation plant in place, assuming that the labor and materials sufficient to utilize the plant and equipment are available, and that the market exists for the maximum production.

Recoverability: In reference to accessible coal resources, the condition of being physically, technologically, and economically minable. Recovery rates and recovery factors may be determined or estimated for coal resources without certain knowledge of their economic minability; therefore, the availability of recovery rates or factors does not predict recoverability.

Recoverable Coal: Coal that is, or can be, extracted from a coal bed during mining.

Recoverable Reserves at Producing Mines: The amount of in situ coal that can be recovered by mining existing reserves at mines reporting on Form EIA-7A.

Recoverable Reserves, Estimated Recoverable Reserves: Reserve estimates (broad meaning) based on a demonstrated reserve base adjusted for assumed accessibility factors and recovery factors. The term is used by EIA to distinguish estimated recoverable reserves, which are derived without specific economic feasibility criteria by factoring (downward) from a demonstrated reserve base for one or more study areas or regions, from recoverable reserves at active mines, which are aggregated (upward) from reserve estimates reported by currently active, economically viable mines on Form EIA-7A.

Recoverable Reserves of Coal: An estimate of the amount of coal that can be recovered (mined) from the accessible reserves of the demonstrated reserve base.

Recovery Factor: The percentage of total tons of coal estimated to be recoverable from a given area in relation to the total tonnage estimated to be in the demonstrated reserve base. For the purpose of calculating depletion factors only, the estimated recovery factors for the demonstrated reserve base generally are 50 percent for underground mining methods and 80 percent for surface mining methods. More precise recovery factors can be computed by determining the total coal in place and the total coal recoverable in any specific locale.

Recovery Percentage: The percentage of coal that can be recovered from the coal deposits at existing mines.

Refuse Bank: A repository for waste material generated by the coal cleaning process.

Refuse Recovery: A surface mine where coal is recovered from previously mined coal. It may also be known as a silt bank, culm bank, refuse bank, slurry dam, or dredge operation.

Remaining (Resources/Reserves): The amount of coal in the ground after some mining, excluding coal in the ground spoiled or left in place for which later recovery is not feasible.

Reserve(s): Root meaning: The amount of in-situ coal in a defined area that can be recovered by mining at a sustainable profit at the time of determination. Broad meaning: That portion of the demonstrated reserve base that is estimated to be recoverable at the time of determination. The reserve is derived by applying a recovery factor to that component of the identified resources of coal designated as the demonstrated reserve base.

Residential and Commercial Sector: Housing units; wholesale and retail businesses (except coal wholesale dealers); health institutions (hospitals); social and educational institutions (schools and universities); and Federal, State, and local governments (military installations, prisons, office buildings).

Royalties: Payments, in money or kind, of a stated share of production from mineral deposits, by the lessee to the lessor. Royalties may be an established minimum, a sliding-scale, or a step-scale. A step-scale royalty rate increases by steps as the average production on the lease increases. A sliding-scale royalty rate is based on average production and applies to all production from the lease.

Run-of-mine: The raw coal recovered from a mine, prior to any treatment.

Salable Coal: The shippable product of a coal mine or preparation plant. Depending on customer specifications, salable coal may be run-of-mine, crushed-and-screened (sized) coal, or the clean coal yield from a preparation plant.

Sales Volume: The reported output from Federal and/or Indian lands, the basis of royalties. It is approximately equivalent to production, which includes coal sold, and coal added to stockpiles.

Scoop Loading: An underground loading method by which coal is removed from the working face by a tractor unit equipped with a hydraulically operated bucket attached to the front; also called a front-end loader.

Seam: A bed of coal lying between a roof and floor. Equivalent term to bed, commonly used by industry.

Shaft Mine: An underground mine that reaches the coalbed by means of a vertical shaft. In addition to the passages providing entry to the coalbed, a network of other passages are also dug, some to provide access to various parts of the mine and some for ventilation.

Short Ton: A unit of weight equal to 2,000 pounds.

Shortwall Mining: A form of underground mining that involves the use of a continuous mining machine and movable roof supports to shear coal panels 150 to 200 feet wide and more than half a mile long. Although similar to longwall mining, shortwall mining is generally more flexible because of the smaller working area. Productivity is lower than with longwall mining because the coal is hauled to the mine face by shuttle cars as opposed to conveyors.

Silt: Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small-sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton. Synonymous with culm.

Silt, Culm Refuse Bank, or Slurry Dam Mining: A mining operation producing coal from these sources of coal. (See refuse recovery.)

Slope Mine: An underground mine in which the entry is driven at an angle to reach the coal deposit.

Slurry Dam: A repository for the silt or culm from a preparation plant.

Southern Appalachian: See Coal-Producing Regions.

Stocks: The supply of coal or coke at a mine, plant, or utility at the end of the reporting period.

Subbituminous Coal: A coal whose properties range from those of lignite to those of bituminous coal and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Surface Mine: A coal mine that is usually within a few hundred feet of the surface. Earth and rock above or around the coal (overburden) is removed to expose the coalbed, which is then mined with surface excavation equipment such as draglines, power shovels, bulldozers, loaders, and augers. Surface mines include: area, contour, open-pit, strip, or auger mine.

Tipple: A central facility used in loading coal for transportation by rail or truck.

Uinta Region: See Coal-Producing Regions.

Underground Mine: A mine where coal is produced by tunneling into the earth to the coalbed, which is then mined with underground mining equipment such as cutting machines and continuous, longwall, and shortwall mining machines. Underground mines are classified according to the type of opening used to reach the coal, i.e., drift (level tunnel), slope (inclined tunnel), or shaft (vertical tunnel).

Underground Mining: The extraction of coal or its products from between enclosing rock strata by underground mining methods, such as room and pillar, longwall, and shortwall, or through in-situ gasification.

Western Region: See Coal-Producing Regions.